

**THE FĀRIS PROJECT: SUPPLEMENTARY REPORT
ON THE 1986 AND 1988 SEASONS
THE COINS AND THE GLASS**

by
Jeremy Johns and Alison McQuitty

1. Introduction

The Fāris Project is the study of a medieval (i.e. post-Umayyad) Islamic village within its environment. The project was begun in 1986 and in March-April 1988 a preliminary season of excavation and survey was held at Khirbet Fāris. A full report on the work of the Project to date has been published elsewhere (Johns *et al.*, 1989); this supplementary report provides a brief introduction to the Fāris Project as a whole, and presents the evidence of the coins and the glass.

The archaeology of Jordan in the post-Umayyad period is still largely unstudied; even in those areas where field-work has been relatively intensive, many basic problems remain to be solved. In the Ard al-Karak, for example, where extensive regional survey has been conducted (Miller 1979a; Miller 1979b; Worschech 1985a; Worschech 1985b), there is now sufficient data to suggest:

1. an overall decline in settlement in the Abbasid to Ayyubid periods (mid 8th-mid 13th centuries);
2. a significant increase in settlement in the Mamluk period (mid 13th-mid 15th centuries), which, in some areas, was sustained in the early Ottoman period (mid 15th-18th centuries);
3. and a marked decline in settlement in the later Ottoman period (19th-early 20th centuries).

However, a recent study of late Islamic settlement patterns on the Karak Plateau (Brown 1975), which relies heavily upon settlement statistics extrapolated from Ottoman fiscal records (Amiran 1953; Hüttheroth 1975; Hüttheroth and Abdulfattah 1977), dates the decline in settlement from at least the mid 15th century, and, using archaeological data derived from a regional survey of Central Moab (Miller

1979a), detects corresponding changes in settlement strategy and land exploitation.

The problem is that, for a variety of reasons, regional survey has failed to provide the data which can be used to test such hypotheses, be they derived from historical or archaeological data. In particular, the sequence of post-Umayyad indigenous pottery has yet to be established, making the dating of sites identified by survey no more than very approximate. Also, there is an almost total lack of palaeo-environmental evidence, on the basis of which one could begin to reconstruct the organisation of past rural economies. Moreover, not a single medieval rural settlement has yet been excavated, meaning that there is no proper source of analogy for the interpretation of settlements located by field survey. Similarly, the absence of modern ethnographic studies of rural life in the Karak plateau and, specially, of the interaction between the nomadic and the sedentary, and the pastoral and the agricultural elements of the local economy, means that the archaeologist lacks suitable ethnographic sources of analogy.

It seemed, therefore, that the most appropriate strategy for further research on the archaeology of medieval Jordan was the excavation and thorough investigation of one or more carefully selected rural sites. With this objective, a short reconnaissance was organized in December 1986 and after visiting a number of sites selected from those identified by regional survey, Kh. Fāris (and the contiguous Kh. Tadūn) was identified as the site which, on the basis of the surface evidence, seemed most suitable for the successful attainment of the following long term research objectives:

1. the excavation of a sample representative of Islamic occupation of the site;
2. the study and analysis of all artefacts, with the specific objective of estab-

- lishing the sequence of Islamic ceramics;
3. the recovery, analysis and study of a representative sample of palaeo-environmental data, on the basis of which it should be possible to propose a model for the reconstruction of past economies of the site;
 4. the study of the architecture of the settlement;
 5. the survey of the archaeology, soils and modern land use of the immediate surrounding area, in order to place the medieval Islamic site within its topographical context;
 6. the study of all relevant written sources, both literary and documentary;
 7. the ethnographic study of the local community.

Kh. Fāris lies in the northern Ard al-Karak (Fig. 1), some 25 km north of Karak and 15 km south of Wadi Mujib, on the western edge of the plateau, where the land breaks up into a succession of deep wadis running down into the Ghor. Kh. Fāris lies just within the western limit of the 300 mm isohyet, on the western edge of the dry farming area. The King's Highway runs 2 km to the east of Kh. Fāris and passes through the nearest large villages, Qaṣr and Rabba.

Nothing is yet known of the early history of the site. It is not mentioned in the fiscal register of 1596, where Sirfā (Sarmā) and Rabba are the only registered villages (Hütteroth and Abdulfattah 1977, 171); needless to say, this does not demonstrate that the settlement did not then exist. The first description of the site is given by Musil. On 15 September 1896 he rode from Yarūt to Imra', through what he calls 'an arable plain', and passed Kh. Tadūn on his left. He describes the site as consisting of 'a fairly well-preserved tower and the ruins of houses' (1907-1908, I.87). Musil also mentions Kh. Tadūn in his discussion of the tribes of Karak and their lands. He lists Tadūn as the 'watering-place' of two branches of the Majālī: the B. Ghabn and the B. Sulaymān. Of the former there seems to be no trace, but the

Sulaymānī families (*'iyāl*) of Muṣṭafā, Salāma and Dā'ūd (1907-1908, III.97) can be followed further. The first two of these names appear as father and son in Peake's genealogy of the Majālī (1958: 246; also 188-192), and Dā'ūd would seem to have been another of Muṣṭafā's many children; Salāma's son was Fāris, after whom the site is named. It seems, therefore, that the whole site was originally known as Kh. Tadūn, and it was only recently that the name Kh. Fāris came to be applied to the western area; the eastern mound is still popularly known as Kh. Tadūn. Musil's account may give a *terminus post quem* of 1896 for Fāris' reoccupation of the site.

In March-April 1988, a season of five weeks was held at Kh. Fāris: a preliminary reconnaissance of the immediately surrounding area was made; the site was surveyed, gridded and sherded; and four small test excavations were dug (Fig. 2). The results of this fieldwork have been published elsewhere (Johns *et al.*, 1989): here, the briefest of summaries must suffice.

The site was first extensively and permanently occupied in the Iron Age. The pottery from the surface sherding suggests that at least parts of the site were occupied during all subsequent periods until the present. The densest and most extensive occupation of the site seems to have occurred in the Classical (1st cent. B.C. to 8th cent. A.D.) and in the Ayyubid/Mamluk to Ottoman (post-12th cent. A.D.) periods. Excavation has confirmed these broad conclusions.

The excavation in the 1988 season was a reconnaissance to determine the depth of stratigraphy on the site and the nature of its depositional history. For this purpose three small trenches, marked Far I, Far II and Far IV on the plan (Fig. 2), were excavated and a machine cut, Far III, was trimmed. In addition, because one of the major aims of the project is to reconstruct as fully as possible a picture of the medieval economy, flotation samples were taken of every context with the aim of retrieving palaeobotanical evidence.

Area Far I was a trench measuring 5

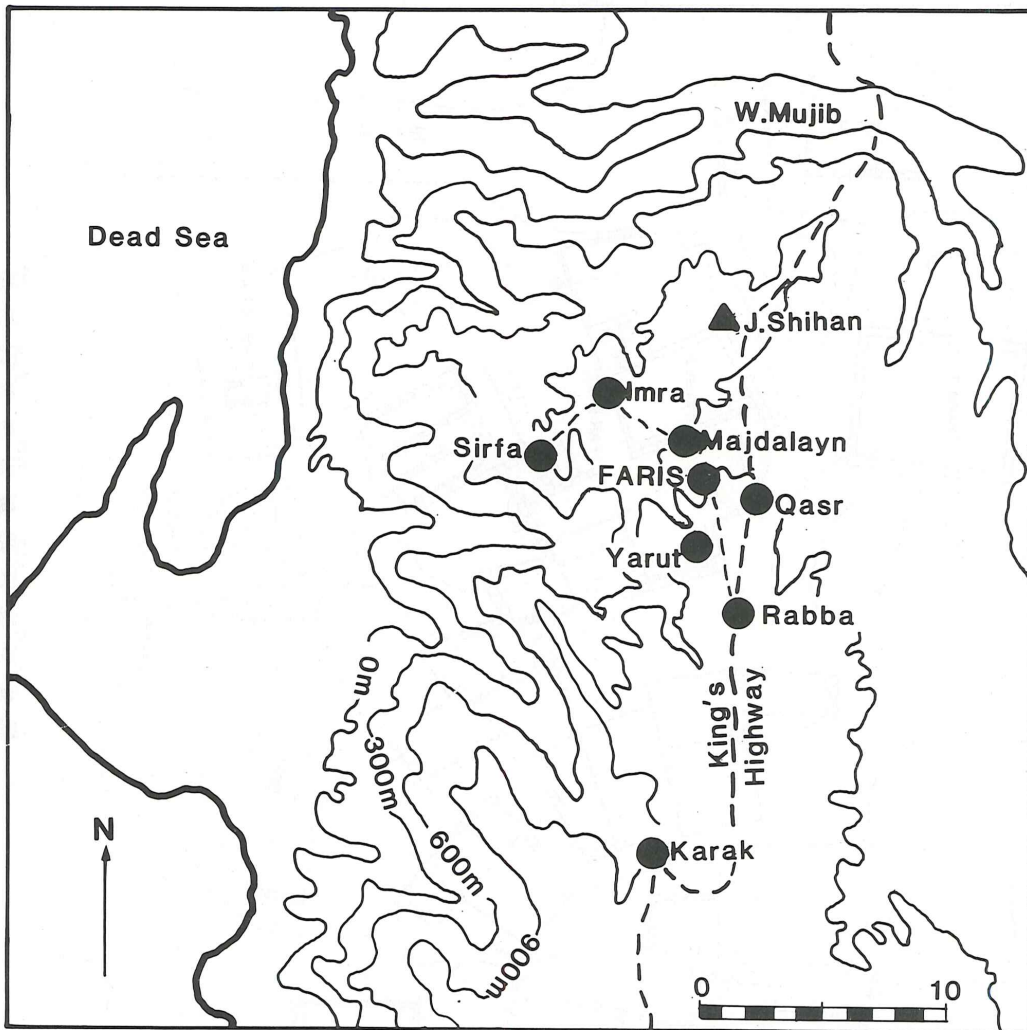


Fig. 1. Map of the northern Arḍ al-Karak

metres north-south and 2 metres east-west. Two walls, one running east-west and another running north-south, were visible before the start of excavation. There was a 0.25-0.50 metre top level of wind-blown fill and stone tumble which was removed to reveal on the north side of the cross wall a succession of ash levels associated with a *ṭabun* (clay oven). A doorway within the east-west wall was filled with the same material, which suggests that it was *not* in use at the same time as the *ṭabun*. It became evident that the portion of the trench to the south of the wall represented an external area. It appears that the doorway was originally associated with a room distinguished by mud surfaces and benches built of stone and mud on the north and east sides of the northern part of the trench. There was slight evidence for a matching external surface to the south of

the east-west wall. Well stratified Ottoman pottery including hand-painted and glazed wares came from this area. Both the room and the east-west wall seemed to be founded on a stone feature, possibly a drain, of earlier sixth century A.D. date. The southern portion of the trench gave way to a thick level of rubble containing a mixed ceramic group ranging from hand-painted wares that did not contain chaff temper, to mainly sixth/seventh century A.D. material. However, a larger corpus is needed before further conclusions can be drawn.

Area Far II, measuring 2 metres north-south by 3 metres east-west, was set against the south wall of House 2 (Fig. 2). From preliminary observation it was clear that there were several construction phases for House 2 and the vaulted structure to which it was connected. The aim of the

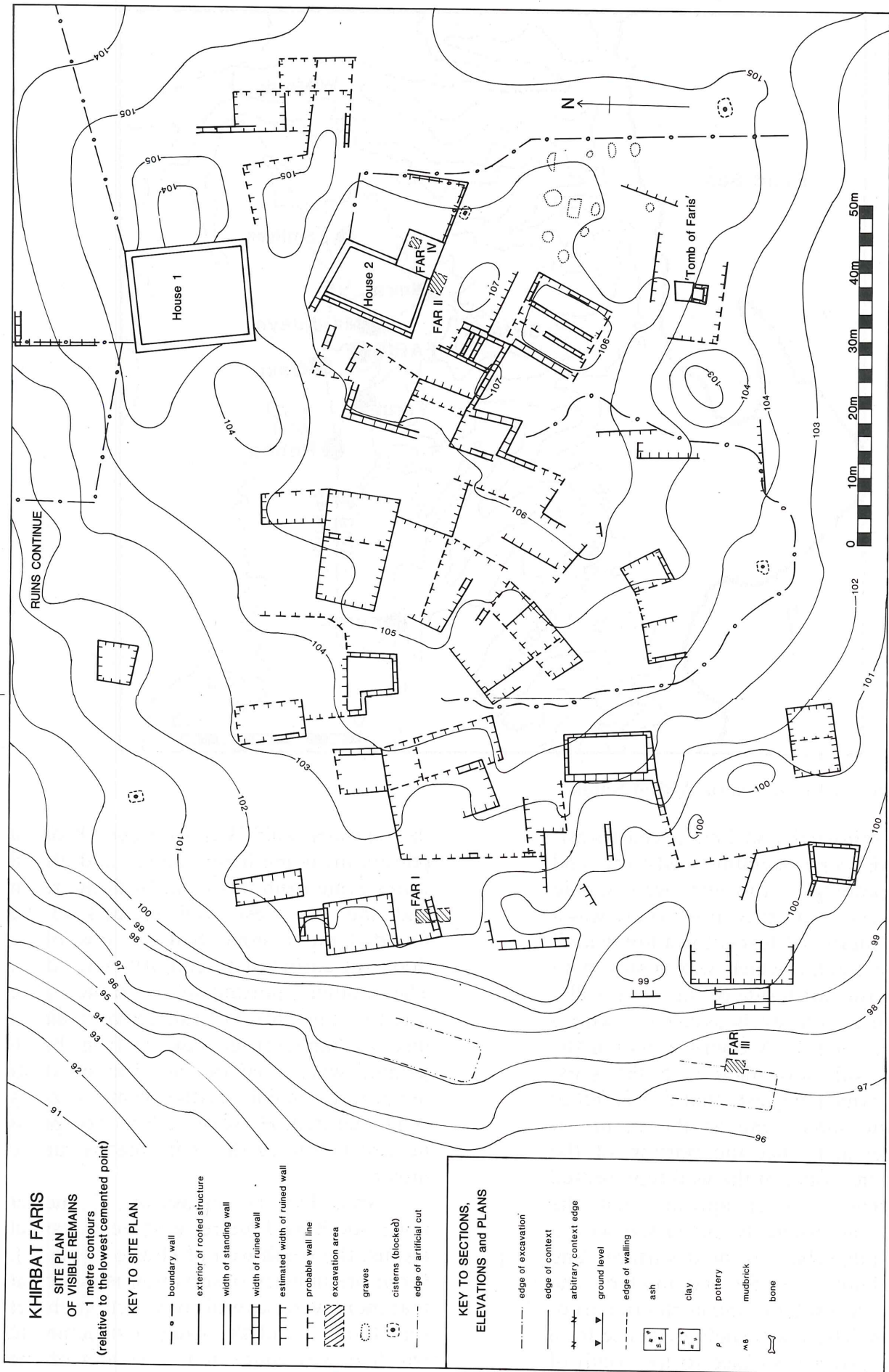


Fig. 2. Plan of the southern part of Khirbat Faris

trench in area II was to establish the relationship of these various construction phases. The first metres of the trench were filled with rubble of very large dressed stones within a matrix of loose soil containing ceramics of fourteenth/sixteenth century A.D. date. The trench was cut by a wall running north-south, which seemed to be a continuation of the west wall of the vaulted structure. For logistical purposes excavation was confined to the west of this north-south wall. A door soon appeared in this wall, which probably corresponds in date to the door in the west wall of the vaulted structure. It may be that there was a series of vaults in this area on a north-south alignment, of which only the one to which House 2 is attached survives. Further excavation will confirm or refute this theory. Certainly the north-south wall exposed in area II was visible when the south wall of House 2 was constructed, because the House 2 wall is founded above the level of the north-south wall foundation. The House 2 wall rests on footings of irregular stones beneath which was a relatively compact soil level containing thirteenth/fourteenth century A.D. ceramics. However, no obvious external surface was found in association with the use of House 2. A rough stone paving was found at the level of the door threshold in the north-south wall. Beneath this, and all the walls in area II, a large stone feature, probably another wall, was exposed. The area of the trench was too small to allow further excavation. The few ceramics obtained from the area beneath one of the stones of this feature were of ninth/twelfth century A.D. date.

A 1.50 metre square trench was laid out in the northeast corner of the vaulted structure to which House 2 was attached, Far IV. The aim of the excavation here was both to elucidate the relationship between the vault and the east wall of this vaulted structure, i.e. to determine whether they were contemporaneous, and to reveal the occupational history of the vault interior. The first level excavated in this trench consisted of loosely packed chaff and humic material and a series of small pits. These levels gave way to a series of floors

of varying construction — cobbles and clay to large flat limestone slabs and brick. Five floors were identified, each divided by soil levels containing pottery from the first century B.C./first century A.D. to the sixteenth/seventeenth century A.D. It is clear that the vault had a long history of use and the excavation of this trench has provided a useful ceramic sequence for the occupation of the vault. Both walls, i.e. the north-south and the east-west walls of the vault, seem to be contemporary, although this cannot be conclusively proved until excavation is carried out on the exterior of this corner. The pottery from the primary floor was of first century B.C./first century A.D. date and this and the walls were founded on a jumble of uncut blocks and possible outcrops of bedrock. Further excavation may reveal earlier occupation below the vault. The exterior and interior of the vault were drawn, and preliminary architectural analysis suggests that subsequent to the construction of the vault, its west face was damaged and replaced by a new west wall which also appeared in area II as the north-south running wall. House 2 was abutted to this.

Area Far III was a 3 metre north-south by 1.25 metre east-west trench that mainly involved the cutting-back of a north-south baulk present in a machine trench. Far III was positioned on the west edge of the site, and the aim of its excavation was to determine the depositional history of this area of the site. An 0.30 metre overburden of loose soil containing mixed ceramics gave way to a one-course thick dense scatter of uncut stone rubble which covered the entire excavation area. These stones were presumably tumble from further up the slope, i.e. eastwards. The ceramics from amongst the stones were of all periods. Below the stones a relatively horizontal layer of clay soil containing an homogenous group of sixth century A.D. pottery represents an *in situ* deposit rather than hill wash. This level lay above the flat tabular limestone bedrock of the region.

We are still very much at the beginning of the Fāris project, but the potential

of the site has been amply demonstrated. Preliminary historical and (most amateurish) ethnographic enquiry has raised a series of broad questions concerning the nature of settlement and land-use in the region, of particular relevance to the study of nomad/sedentary-pastoralist/agriculturalist interaction. A small and unsystematic field survey has identified new sites and has posed a number of interesting problems concerning the history of the landscape around Kh. Fāris, thereby demonstrating the potential for further intensive, systematic survey. The surface sharding survey has confirmed the tentative conclusion of the 1986 reconnaissance, that at least parts of the site were occupied in every Islamic century. Three test trenches, in two widely separated areas of the site, have revealed a deep and undisturbed stratigraphy. The study of the pottery from these small trial excavations suggests that future and more extensive excavation will yield pottery groups which should establish, for the first time, a clear ceramic sequence for the long Islamic period from the 8th century to recent times. Study of the bones has yielded a rich and intriguing species list and suggests a clear difference between the Roman and Islamic animal economies. Study of the archaeobotanical remains has demonstrated that exceptionally well-preserved organic material is present in sufficient quantity to justify the formulation of an elaborate sampling strategy designed to investigate the crop economies and crop husbandries of the site.

It is still far too early to solve the many, but still dimly perceived problems which surround the rural society and economy of the region in Islamic times. But the preliminary results from Kh. Fāris give us hope that, within the near future, we shall at least be able to formulate the questions that we need to ask. A full season, including excavation and study and analysis of finds, architectural survey, field survey and ethnographic survey is planned for Spring 1989.

2. The Coins

Fourteen coins and possible coins

were recovered in 1986-1988, only two of which (Cat. Nos. 6 and 7) came from stratified contexts; the remainder were surface finds. Of these, eleven are sufficiently well-preserved to be identified and are catalogued below.

The chronological range — from 1st to 19th cent. A.D. — with a pronounced concentration of small Late Roman coins is typical of sites in the region and complements well the ceramic assemblage from Fāris. There are no rarities amongst the collection, although the Crusader denier (Cat. No. 9) is an intriguing find at a village site so far away from a major Crusader centre. The reverse doublestruck *Gloria Exercitus* of Constantine II (Cat. No. 4) is something of a numismatic curiosity.

CATALOGUE OF COINS

1. Æ, Nabataean, Malichus II (40-70 A.D.) and Shulayqat II.

Date: 70-76 A.D. Mint: Petra.

Coin No: C011. Context: FAR 360/710 Surface.

Diam: 27.2mm. Weight: 2.45g. Axis: ↑

Obv: Jugate portraits of Malichus II and his sister Shulayqat II, r., laureate.

Rev: Two cornucopiae, crossed. Three lines of inscription as follows:

above cornucopiae;

[M]LK[W]

SL[YQT]

below cornucopiae;

illegible.

Comments: Very worn: obv. corroded above portraits; rev. struck off centre and corroded so that only lower part of field is legible.

Reference: Meshorer (1975), No. 140, Pl. 8.

2. Æ, Roman, Assarion of Septimius Severus (193-211 A.D.).

Date: 193-211 A.D. Mint: Rabbath-Moab (mod. Rabba).

Coin No: C009. Context: FAR 460/630 Surface.

Diam: 25.8mm. Weight: 13.06g. Axis: ↙

ADAJ XXXIII (1989)

Obv: Margin: missing [AVTK CEN
CEOVHPOC].

Centre: bust of emperor, right;
laurel wreath; beard; undraped.

Rev: Border: circular line.

Margin: [RAB]BAΘMW[AB].

Centre: Ares, standing facing, on
square base decorated with 4 pilas-
ters placed on lower base with 6
pilasters; wearing helmet, cuirass
and boots; holding, in right, sword
erect, and in left, spear and round
shield.

Comments: Rather worn, but very legible.

Reference: Spijkerman (1978) pp. 266-267,
no. 12.

**3. Æ, Late Roman, Fourth Century, Prob-
ably *Gloria Exercitus* (2 Standards), House
of Constantine.**

Date: ca. 330-337 A.D. Mint: illegible.

Coin no: C002. Context: FAR 417/669
Surface.

Diam: 13.5mm. Weight: 1.16g. Axis: ?

Obv: illegible.

Rev: Margin: [GLOR IA]EXERC [ITUS]

Field: very obscure, but probably 2
soldiers standing; between them 2
standards.

Comments: Extremely worn and obscure.

Reference: LRBC.

**4. Æ, Late Roman, *Gloria Exercitus* (Single
Standard) of Constantine II (337-341 A.D.),
with Double-Struck Reverse.**

Plate XLIII, 1

Date: 337-341 A.D. Mint: Constantinople.

Coin No: C007. Context: FAR 450/730
Surface.

Diam: 16.7mm. Weight: 1.28g. Axis: (i) ↙
(ii) ↑

Obv: Border: dotted line

Margin: DN CONSTAN TINUS [P]
F AUG

Centre: Bust of emperor, right.

Rev: Border: dotted line

Margin: GLOR IA EXERC ITUS

Centre: 2 helmeted soldiers facing,
heads turned towards each other;
each holds inverted spear and rests

on shield; between them a standard.

Exergue: CONSA

Comments: The reverse is double-struck
from the same die. It is presumed that the
coin adhered to the obverse die after the
first striking and was subsequently struck a
second time, with the die rotated through
90°.

Reference: Kent (1981) p. 450, Pl. 21.

**5. Æ, Late Roman, Late Fourth or Early
Fifth Century, *Salus Reipublicae*, Type 1 or
2, Probably Theodosius, Arcadius or
Theodosius II.**

Date: ca. 390-410 A.D. Mint: illegible.

Coin No: C004. Context: FAR General
Surface.

Diam: 11.2mm. Weight: 1.05g. Axis: ↓

Obv: illegible.

Rev: Victory with captive, going left.

Comments: Extremely worn and obscure.

Reference: LRBC

**6. Æ, Late Roman, Extremely Worn and
Obscure, but Probably 1st half of 5th
Century A.D.**

Date: 1st half of 5th century A.D. Mint:
illegible.

Coin No: C014. Context: FAR I [099].

Diam: 10mm. Weight: 0.66g. Axis: ?

Obv: illegible.

Rev: illegible.

**7. Æ, Late Roman, *Salus Reipublicae*
(Type 1 or 2).**

Date: 5th Century A.D. Mint: illegible.

Coin No: C013. Context: FAR III [027].

Diam: 11mm. Weight: 1.12g. Axis: ↑

Obv: Diademed bust, right.

Rev: Probably Victory with captive, going
left.

Comments: Extremely worn and obscure.

Reference: LRBC.

**8. Æ, Byzantine, Half-Follis of Justin II
(565-578 A.D.) and Sophia.**

Date: Regnal year gives 570-571 A.D.

Mint: Constantinople.

ADAJ XXXIII (1989)

Coin No: C005. Context: FAR General Surface.

Diam: 24.3mm. Weight: 5.49g. Axis: ↗

Obv: Justin and Sophia nimbate, on double throne; between heads, cross.

Rev: K; above, cross; left, ANNO; pendant from upper arm of K, r (= regnal year 6); at end of lower arm, intersecting border, a large Δ (*officina* 4).

Comments: Very worn and rather obscure, specially obv.

Reference: Bellinger (1966) p. 215, 49c, Pl. LI.

9. Billon, Crusader, Denier of Baldwin III (1143-1163 A.D.), or of Baldwin II and his Successors. (Smooth Series, Group 4.)

Plate XLIII, 2;3

Date: (?) 1143-1163 A.D. Mint: (?) Jerusalem.

Coin No: C010. Context: FAR 430/610 Surface.

Diam: 15.4mm. Weight: 0.79 g. Axis: ↙

Obv: Margin: *Rex Baldwinus*

Centre: cross pattè enclosed by circular dotted line.

Rev: Margin: + *DE IERUSALEM*

Centre: Tower of David, enclosed by circular dotted line.

Comments: Worn, but well preserved and very legible. Edges slightly clipped. Reverse has suffered light blow across whole face.

Reference: Metcalf (1983) pp. 14-16 and nos. 90-92, esp. no. 91.

10. Æ, Mamluk, Fils of 1st Reign of al-Malik al-Nāṣir Badr al-Din Ḥasan (748-752 A.H. = 1347-1351 A.D.).

Date: 749 A.H. = 1348-1349 A.D. Mint: Damascus.

Coin No: C006. Context: FAR General Surface.

Diam: 19.3mm. Weight: 3.05g. Axis: ↖

Obv: Border: plain circular line

Field: divided into 3 segments by 2 horizontal lines.

Upper: *'bn Muḥammad*

Central: *al-malik al-nāṣir Ḥasan*

Lower: missing [*ḍuriba Dimashq sanat*]

Rev: Border: missing [circular line].

Field: 2 interwoven tetralobes with pointed arches; between and outside the two arches, pellets.

Centre: *tis'ah wa-'arba'in*.

Comments: Very worn and corroded, but legible.

Reference: Balog (1964) p. 187, no. 327.

11. Æ, Ottoman, 'Sequin' in Imitation of Çifte Hayriye Alten of Mahmud II (1223-1255 A.H. = 1808-1839 A.D.).

Date: after 1223 A.H./1808 A.D. Mint: not applicable.

Coin No: C001. Context: FAR 420/620 Surface.

Diam: 25mm. Weight: 1.87g. Axis: ↘

Obv: Border; plain line, enclosing dotted line.

Field: central circle surrounded by three ovoid cartouches separated by sprigs of foliage.

Centre: *Tughra* and *'adli*.

Beneath, in place of the regnal year, a strange and barbaric mark, possibly the jeweler's own.

In the cartouches; *sulṭān salāt zamān*.

Rev: Border and field as obverse.

Centre: *ḍuriba fī Qusṭantīniyya 1223*.

In the cartouches: *ghāzī Maḥmūd khān*.

Comments: Pierced and rather battered, but otherwise clean and easily legible. A well-engraved example. No trace of gilding. The production of base metal imitations of gold coinage or 'sequins' is well-attested both amongst collectors and dealers and in archaeological contexts. For the latter see in particular the Athenian Agora (Miles 1962, No.277, p. 48) and Sardis (Buttrey 1975, p. 273). Miles' contempt for these sequins now seems excessive and the absence of a good study of such imitations is remarkable.

References: In addition to those cited above, compare with Pere (1968) No. 745, p. 243 and Pl. 50; Ghalib (1889-90) Nos. 1019-1022.

Table 1: Glass corpus from Khirbet Fāris.

KHIRBET FARIS - GLASS

TRENCH/ CONTEXT	RIM	BASE	B/SHERD	DECORATED B/SHERD	?WINDOW GLASS	OTHER	TOTAL FRAGS.
FAR I							
c.012					1		1
c.014			1				1
c.019						bead	1
c.080		1					1
c.095		1	3				4
c.096				1			1
c.099					1		1
c.131			8				
FAR II							
c.032	4		1	1			6
c.042		1	1	4	1	slag&tessera	9
c.043			2				2
c.102	3		2				5
c.103		1	6			bead&tessera	9
FAR IV							
c.066				1		bead	2
c.067			1				1
c.068	1			1			2
c.074			1				1
c.075	1						1
c.142	1		4				5
c.144	1						1
c.145			2				2
FROM EXCAVATION	11	4	32	8	3	6	56
FROM SURVEY							124
TOTAL							180

3. Notes on the Glass

The glass from Khirbet Fāris came from both survey and excavation. Table 1 gives the details of the quantity retrieved. In the following report only the excavated glass fragments are considered and merely a preliminary catalogue has been outlined which will be expanded and altered as the size of the sample grows. Each fragment or collection of glass fragments in one context was given a small-find number (sf.) and entered into the separate glass catalogue (GL). Only those fragments that were large enough for the rim diameter to be reconstructed, or were decorated, were drawn.

Almost all of the glass from both survey and excavation was in excellent condition. The glass fabric ranged in colour from clear blue/green, green, clear, olive yellow, brown to opaque purple. The majority of the identifiable fragments came from bowls or bottles and ranged in date from the fifth to the nineteenth century A.D. Parallels to these forms can be found at Jerash for the earlier periods (Meyer 1988) and for the post-Umayyad periods at 'Aqaba (Meyer in Whitcomb n.d.), the Red Tower (Pringle 1986), Hama (Riis 1957) and Quseir al-Qadim (Whitcomb in Whitcomb & Johnson 1980). Many of the fragments were decorated with trails of another colour glass and the opaque purple / blue body fragment (colour impossible to distinguish because of the lamination) was decorated with white enamel trails. One piece (9 on Fig. 3) seemed to have come from a mould-blown decorated bowl. Several fragments of probable window glass were distinguished (for an explanation of the technique of manufacture and the various types of window-glass see Meyer 1988: 207). In addition the excavation produced glass tesserae and glass beads and from survey, glass bangles.

All of the glass came from domestic contexts although the glass tesserae and late Byzantine pieces (Nos. 1, 2 and maybe 3 in Fig. 3) came from a context of rubble that may represent the destruction of an earlier building and not be *in situ*. In the

catalogue the date range of the ceramics (CD) is indicated for those contexts for which preliminary ceramic analysis had been carried out at the time of writing. In general it can be said that the blue/green glass fragments came from Byzantine vessels while all the rest, i.e. the clear; the olive-yellow, badly pitted and patinated; the thicker green; the delicate brown and the opaque fragments are later.

Key to Fig. 3 (sf. small-find no.; GL glass catalogue no.)

1. (sf.198/GL095) Fragment of folded rim (d. 0.11 m). Blue-green. Far II. Context 032.
2. (sf.166/GL083) Fragment of folded rim (d. 0.04 m) with handle attached. Blue-green. *cf.* Meyer 1988: Fig. 11.dd. Far II. Context 032.
3. (sf.330/GL142) Fragment of flask rim (?) (d. unknown) with trace decoration on body. Clear blue body and turquoise tracing. *cf.* Meyer 1988: Fig. 10.H, Meyer in Whitcomb n.d.: Fig. 19/k. Far IV. Context 142.
4. (sf.2031/GL147) Fragment of vertical rim (d. 0.10 m). Blue-green with trace decoration — not possible to determine colour because of patination. *cf.* Meyer in Whitcomb n.d.: Fig. 25. Far II. Context 102.
5. (sf.4018/GL161) Fragment of slightly inverted rim (d. 0.12 m). Clear green with some bubbles. Far IV. Context 075.
6. (sf.4015/GL158) Fragment of vertical rim (d. 0.14 m.) Blue-green. Far IV. Context 144.
7. (sf.4013/GL159) Fragment of vertical flask rim (d. 0.04 m). Green with yellow and black patination and pitting. *cf.* Meyer in Whitcomb n.d.: Fig. 27/c. Far IV. Context 144.
8. (sf.1021/GL139) Fragment of coiled base (d. 0.06 m). Blue-green. *cf.* Pringle 1986:161 no. 6. Far I. Context 095. CD 6th century-13th century onwards.
9. (sf.4001/GL128) Decorated body-*sherd* — mould blown. Clear green

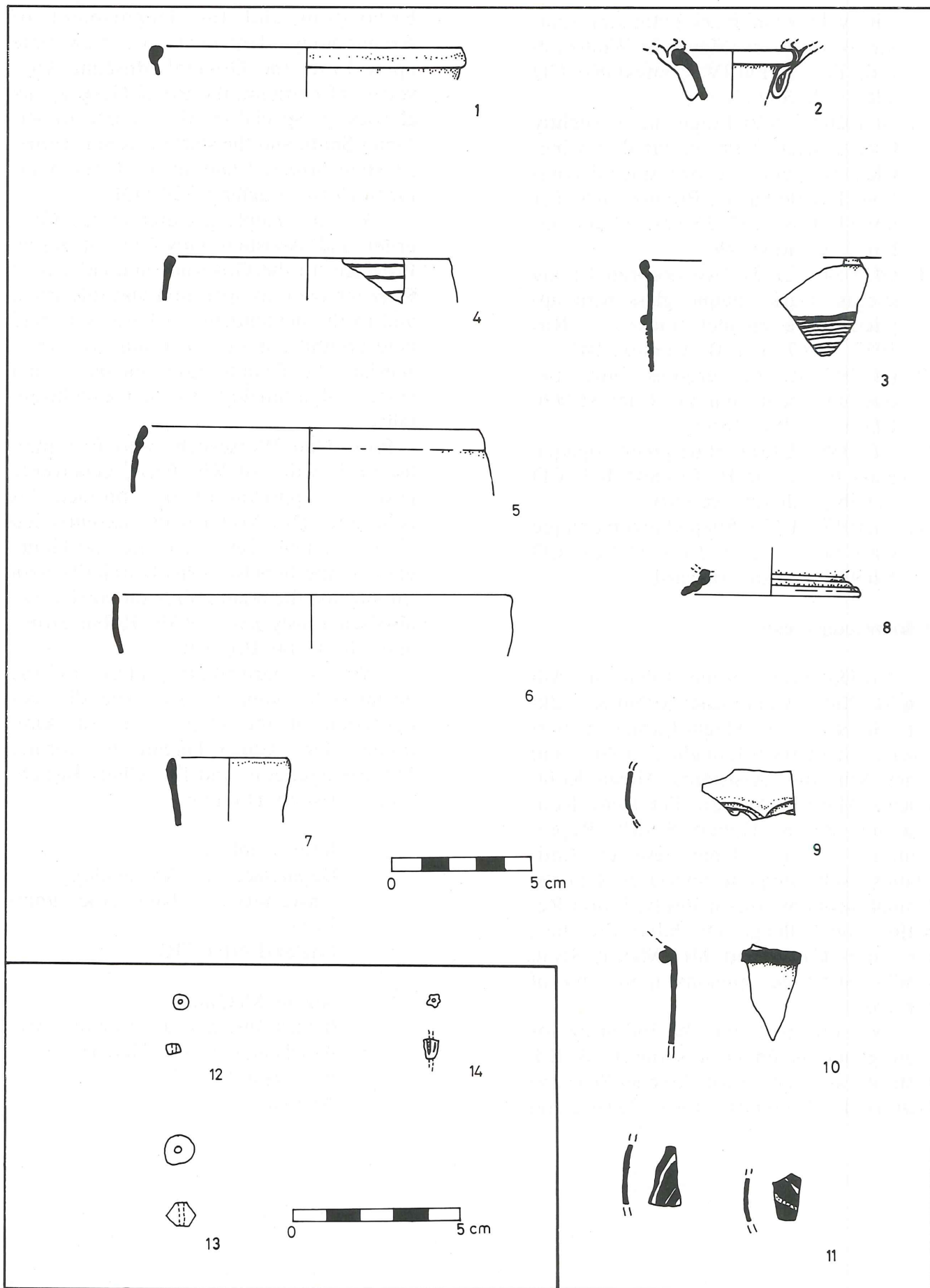


Fig. 3. Glass from Khirbet Fāris.

with yellow and black patination similar to no. 7. *cf.* Meyer in Whitcomb n.d.: Fig. 28. Far IV. Context 066. CD 12th-13th century.

10. (sf.1026/GL149) Fragment of slightly flaring neck with external tracing. Clear with amber brown trace decoration. For design *cf.* Pringle 1986: 161 no. 11, Riis 1957: 35 nos. 42 and 43. Far I. Context 096.
11. (sf.2024/GL123) Two decorated body sherds. Dark opaque glass with applied white enamel traces. *cf.* Riis 1957: 63-67. Far II. Context 042.
12. (sf.4012/GL066) Turquoise blue opaque glass bead. Far IV. Context 066. CD 12th-13th century.
13. (sf.2035/GL151) Blue-green opaque glass bead. Far II. Context 103. CD possibly 9th-12th century.
14. (sf.1017/GL120) Shaped green opaque glass bead. Far I. Context 019. CD 6th-13th century onwards.

Acknowledgements

Co-Directors: Jeremy Johns and Alison McQuitty. Ceramicist: Robin K. Falkner. Surveyor: R. Hugh Barnes. Supervisors: Nicoletta Momigliano-Johns and Mark Whittow. Assistants: Helga Kohl, Louise Martin, Andrew Petersen, Konstantinos Politis, Robert Schick. Representative of the Department of Antiquities: Nabil Beqa'in. Specialist Reports: Faunal Remains, Kevin Reilly; Floral Remains, Sue Colledge. Dr. Julian Bowsher, Dr. John Casey and Mr. Martin Styan kindly gave their opinions upon some of the coins.

We wish to thank the following for their generous financial support: British Institute at Amman for Archaeology and History; the Committee for Fieldwork and

Excavation and the Department of Archaeology, University of Newcastle upon Tyne; the Oriental Museum, University of Durham; the Royal Geographical Society. Special thanks are due to Mr. James Smith and the staff of Jasmin Tours, 23 High Street, Chalfont St. Peter, Gerrards Cross, England S29 9QE.

We are deeply grateful to the Governor and Assistant Governor of Karak Province, to the Governor and citizens of Qaşr for their co-operation and tolerance, and to the descendents of Fāris who hold land around our site, to whom we owe a special debt. Thanks also to the mayor and citizens of al-Smakiya for their kind hospitality.

Prof. Udo Worschech, who first published a notice of Kh. Fāris, generously gave his approval of our project: his colleague, Dr. Axel Knauf, accompanied us on our first visit to the site and kindly gave us the benefit of his familiarity with the site and the region. Precious advice was also generously given by Ms. Robin Brown and Mr. Colin Brooker.

We are particularly grateful for the enthusiastic support and friendly co-operation of the Department of Antiquities, Dr. Adnan Hadidi, the former Director General, and Dr. Ghazi Bisheh, then Assistant Director.

Jeremy Johns
Department of Archaeology
University of Newcastle upon
Tyne
England NE1 7RU

Alison McQuitty
British Institute at Amman for
Archaeology and History
P.O. Box 925 071
Amman

Bibliography

- Amiran, D.K.H.
 1953 'The Pattern of Settlement in Palestine', *IEJ* 3: 65-78, 192-209, 250-260.
- Balog, P.
 1964 *The Coinage of the Mamluk Sultans of Egypt and Syria*. New York: American Numismatic Society, Numismatic Studies No. 12.
- Bellinger, A.R.
 1966 *Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection and in the Whittemore Collection. Volume One. Anastasius I to Maurice. 491-602.* (General eds. A.R. Bellinger and P. Grierson) Washington.
- Brown, R.M.
 1984 *Late Islamic Settlement on the Kerak Plateau, Trans-Jordan*. Unpublished M.A. thesis, Binghamton, New York.
- Buttery, T.V. et al.
 1975 *Greek, Roman and Islamic Coins from Sardis. Archaeological Exploration of Sardis, 7.* Harvard University Press.
- Ghalib, I.
 1889-90 *Taqvîm-i Meskâkat-i 'Osmânîye*. Constantinople.
- Hütteroth, W.-D.
 1975 'The Pattern of Settlement in Palestine in the Sixteenth Century: Geographical Research on the Turkish *Defter-i Mufassal*', in M. Ma'oz (ed.), *Studies on Palestine during the Ottoman Period*. Jerusalem.
- Hütteroth, W.-D. and Abdulfattah, K.
 1977 *Historical Geography of Palestine, Transjordan and Southern Syria in the Late 16th Century*. Erlangen: Fränkischen Geographischen Gesellschaft.
- Johns, J., McQuitty, A., Falkner, R. and Project Staff
 1989 'The Fâris Project: Preliminary Report upon the 1986 and 1988 Seasons', *Levant* 21: 63-95.
- Kent, J.P.C.
 1981 *The Family of Constantine I A.D. 337-364*. Vol. VIII of C.H.V. Sutherland and R.A.G. Carson, *The Roman Imperial Coinage*. London.
- LRBC = Carson, R.A.G., Hill, P.V. and Kent, J.P.C.
 1960 *Late Roman Bronze Coinage A.D. 324-498*. London.
- Meshorer, Y.
 1975 *Nabataean Coins*. Qedem: Monographs of the Institute of Archaeology, The Hebrew University of Jerusalem 3.
- Meyer, C.
 1988 'Glass from the North Theater, Byzantine Church, and Soundings at Jerash, Jordan, 1982-1983', *BASOR Supplement* no. 25: 175-222.
- Miles, G.C.
 1962 *The Athenian Agora, IX: The Islamic Coins*. Princeton.
- Miller, J.M.
 1979a 'Archaeological Survey of Central Moab: 1978', *BASOR* 234: 208-223.
- Miller, J.M.
 1979b 'Archaeological Survey South of Wadi Mujib: Glueck's Sites Revisited', *ADAJ* 23: 79-92.

Musil, A.

1907-8 *Arabia Petraea*. 4 vols. Vienna: Österreichische Akademie der Wissenschaften.

Peake, F.

1958 *History and Tribes of Jordan*. Coral Gables: Miami University Press.

Pere, N.

1968 *Osmanlılarda Madenî Parlar*. Istanbul.

Pringle, D.

1986 *The Red Tower*. London: British School of Archaeology in Jerusalem Monograph Series 1.

Riis, P.J. & Poulsen, V.

1957 *Hama: IV/2 Les Verreries et Poteries Medievales*. Copenhagen.

Spijkerman, A.

1978 *The Coins of the Decapolis and Provincia Arabia*. Ed. M. Picirillo. Jerusalem.

Whitcomb, D.

n.d. *Excavations in 'Aqaba: Preliminary Report on the 1986 Season*. Unpublished M.S..

Whitcomb, D. & Johnson, J.H.,

1982 *Quseir al-Qadim 1980*. American Research Center in Egypt Reports 7.

Worschech, U.F.C.

1985a *Northwest Ard el-Kerak 1983 and 1984. A Preliminary Report*. Munich.

Worschech, U.F.C.

1985b 'Preliminary Report on the Third Survey Season in the North-West Ard el-Kerak, 1985', *ADAJ* 29: 161-174.

SEPT GRAFFITI ARABES AU PALAIS DE MUŠATTĀ

par
F. Imbert et S. Bacquey

Les prospections que nous menons depuis deux ans dans la région de la Balqā' afin de procéder à une recension systématique de toutes les inscriptions arabes, nous ont amené à constater que les murs du palais de Mušattā (40 km. au Sud d'Amman), étaient couverts de graffiti et de dessins (plus de 90% d'entre eux étant récents). Pendant les quatre journées de prospection au palais (septembre 87), nous avons recensé 33 graffiti anciens sur les murs du palais, sur l'enceinte extérieure et près du *mihrab* de la mosquée. Tous ne sont pas d'une grande valeur paléographique; cependant ils attestent le passage au palais de plusieurs personnages dont les noms se répètent.

Nous nous proposons de présenter ici sept de ces graffiti parmi les plus dignes d'intérêt. Tous mentionnent un personnage. Les recherches onomastiques que nous avons entreprises ne nous ont pas encore permis d'identifier ces personnages; pour cette raison, la paléographie reste encore notre seul moyen de datation.

Mušattā 1 Graffito s.d.

Localisation: sur un mur en demi-cercle, dans l'aile ouest de la grande salle en abside. Le graffito est gravé à 130 cm. du sol et s'étend sur trois blocs.

Description: les blocs en calcaire sont très érodés et couverts de graffiti modernes, d'entailles et de cavités.

Dimensions: longueur du graffito: 170 cm.

Etat du texte: ce graffito est tout à fait remarquable par la finesse et la profondeur de la gravure. Le texte est déchiffrable; seule une partie en a été effacée (trois lettres). Par chance, aucune inscription moderne n'est venue saccager cette ligne d'écriture.

TEXTE (Fig. 1: 1 et 3)

— [اللهم] اغفر ل محمد بن يوسف بن محمد

ô Dieu, pardonne à Muḥammad b. Yūsuf b. Muḥammad.

Commentaire: la lecture du premier *nasab*, Yūsuf, nous a posé des problèmes. le ductus très abîmé semble laisser apparaître un *sīn*, et de surcroît, seules 1 ou 2 lettres peuvent tenir dans l'espacement entre le mot بن et les deux lettres سف. De ce fait nous avons opté pour la lecture de يوسف.

FICHE D'IDENTITE PALEOGRAPHIQUE

- Ligne de base: horizontale, cependant, notons une rupture de niveau après le mot بن—
- Gravure: en creux, d'un trait fin et profond.
- Ligatures: par segments rigides.

CARACTERES A PARTICULARITE

- ا : vertical avec retour orthogonal.
- ح ح ح : médian: un segment à courbure et contre courbure coupe la ligne de base.
- ذ : quadrangulaire avec hampe oblique; un spécimen très allongé.
- م : semi-circulaire.
- ن : final: segment qui descend et remonte au niveau de la ligne de base.

Il y a trop peu de caractères pour pouvoir approfondir cette analyse. La rigidité de cette ligne d'écriture nous porte à croire qu'il s'agit d'une gravure coufique de la fin de l'époque umayyade (il existe en effet des registres de caractères plus archaïques); c'est pourquoi nous datons ce graffito du 2^{ème}/ 8^{ème} s. ap. J.C.

Mušattā 2
Graffito s.d.

Localisation: sur le mur d'une petite cour intérieure, au Sud-Est de la grande salle en abside, à 118 cm. du sol.

Description: les deux blocs sur lesquels est gravée l'inscription sont érodés. Un gros graffito moderne recouvre plus de la moitié de l'inscription.

Dimensions: surface écrite: 57 x 24 cm.

Etat du texte: les deux premières lignes de ce graffito sont à peu près lisibles, la troisième est totalement recouverte par un large graffito moderne. Du fait de la finesse de la gravure, la moindre érosion ou la moindre entaille rend impossible toute lecture.

TEXTE (Fig. 1: 2 et 4)

- 1- اللهم اغفر [فر] .. لك ا
2- بن مشافع / مشافع ذنبه كله

- 1- ô Dieu, pardonne à Mālik ?
2- b. Mušāfi'/Mušāqi' tous ses péchés.

Commentaire: le nom de Mālik b. Mušāfi'/Mušāqi' apparaît sur deux autres graffiti de Mušattā. Cependant, le ductus est peu clair ici, et ne laisse pas apparaître la م de Mālik.

FICHE D'IDENTITE PALEOGRAPHIQUE

- Ligne de base: horizontalité rigoureuse.
- Gravure: en creux, d'un trait fin et profond.
- Ligatures: segments horizontaux rigides. Un étirement (L.2).

CARACTERES A PARTICULARITE

- ا : disproportionné dans le mot اللهم ; vertical avec retour orthogonal.
- د د : quadrangulaire.
- ب : médian: petite pointe (dent de scie).
- ك : quadrangulaire.
- ل : disproportion dans le mot اللهم
- م : triangulaire.
- ه : médian: triangulaire à deux cavités.

Ce type d'écriture appartient à la catégorie du coufique archaïque. Nous proposons comme datation la dernière moitié du 2 ème/8 ème s.

Mušattā 3
Graffito s.d.

Localisation: sur un mur de la cour intérieure, au Nord-Ouest de la salle en abside. Le graffito est très lisible, à 123 cm. du sol.

Description: le bloc de calcaire sur lequel est gravée l'inscription n'est pas recouvert d'enduit, comme ceux qui l'entourent. La partie inférieure a été martelée, laissant des cavités et des entailles profondes.

Dimensions: surface écrite: 37 x 17 cm.

Etat du texte: il demeure lisible malgré une grosse cavité au milieu de la première ligne. Le début de la troisième ligne est très abîmé.

TEXTE (Fig. 2: 1 et 3)

- 1- اللهم [م] اغفر .. لما
2- لك بن [م] شا
3- فع / مشافع ذنبه كله

- 1- ô Dieu, pardonne à Mā-
2- lik b. Mušā-
3- fi'/Mušāqi' tous ses péchés.

Commentaire: il s'agit du même personnage et du même formulaire que dans l'inscription précédente.

FICHE D'IDENTITE PALEOGRAPHIQUE

- Ligne de base: les trois lignes remontent nettement vers la gauche.
- Gravure: en creux, le trait de gravure est profond.
- ligatures: segments horizontaux rigides. De nombreux étirements.

CARACTERES A PARTICULARITE

- ا : vertical: avec retour orthogonal.
- د د : quadrangulaire.
- ر : segment courbe se développant sous

la ligne de base.

ع : médian: triangulaire.

ك : quadrangulaire; final: très étiré.

ه : médian: forme arrondie à deux cavités superposées.

Cette écriture se rattache au coufique archaïque. Nous la datons de la seconde moitié du 2^{ème} / 8^{ème} s.

**Mušattā 4
Graffito s.d.**

Localisation: dans la salle de gauche, au fond de la salle en abside, sur le mur de droite, à 73 cm. du sol.

Description: l'inscription est gravée sur un bloc, à même le mur. Le bloc est très peu érodé. On remarque un trou très profond sur la partie gauche de l'inscription, entre les lignes 2 et 3.

Dimensions: surface écrite: 36 x 71 cm.

Etat du texte: tout à fait lisible, si ce n'est que le trou rend indéchiffrable la *kunya* du personnage.

TEXTE (Fig. 3: 1 et 2)

- | | |
|----|----------------------------------|
| 1- | اللهم اغفر لا |
| 2- | بو (sic) ... [ب-] من فرقد (?) ما |
| 3- | تقد [م] من ذنبه و |
| 4- | ما تأخر آمين |

- 1 ô Dieu, pardonne à Abū...
- 2 b. Farqad ?
- 3 tous ses péchés.
- 4 Amen!

Commentaire: nous avons préféré traduire l'invocation par "tous ses péchés", préférable à "son péché, ce qui a précédé et ce qui a suivi."

FICHE D'IDENTITE PALEOGRAPHIQUE

- Ligne de base: horizontalité rigoureuse.
- Gravure: en creux, très profonde.
- Ligatures: par segments rigides. Deux étirements, ligne 1 et 4 (تأخر / اللهم)

CARACTERES A PARTICULARITE

ل : vertical avec retour orthogonal.

د : quadrangulaire avec petite hampe verticale ou oblique.

ز : final: segments courbes semi-circulaires à cheval sur la ligne de base.

ق : initial: de forme ovale, placé au-dessus de la ligne de base.

م : initial: généralement triangulaire; un spécimen rond.

لا : base triangulaire très anguleuse.

Nous sommes en présence d'un type d'écriture coufique anguleux: il possède certaines particularités de l'écriture archaïque; mouvement d'ensemble rigide, étirement de certains caractères, espacement entre les lettres. Nous proposons de dater ce graffito de la fin du 2^{ème} / 8^{ème} s.

**Mušattā 5
Graffito s.d.**

Localisation: sur le mur Sud de la pièce située directement au Nord-Ouest de la salle en abside, à 56 cm. du sol.

Description: l'inscription de trois mots sur trois lignes est gravée sur toute la longueur d'un petit bloc de calcaire. Le bloc a été en plusieurs endroits martelé ou rongé par l'érosion.

Dimensions: surface écrite: 19.5 x 17 cm.

Etat du texte: très effacé, malgré un large trait. Il est lisible par soleil rasant.

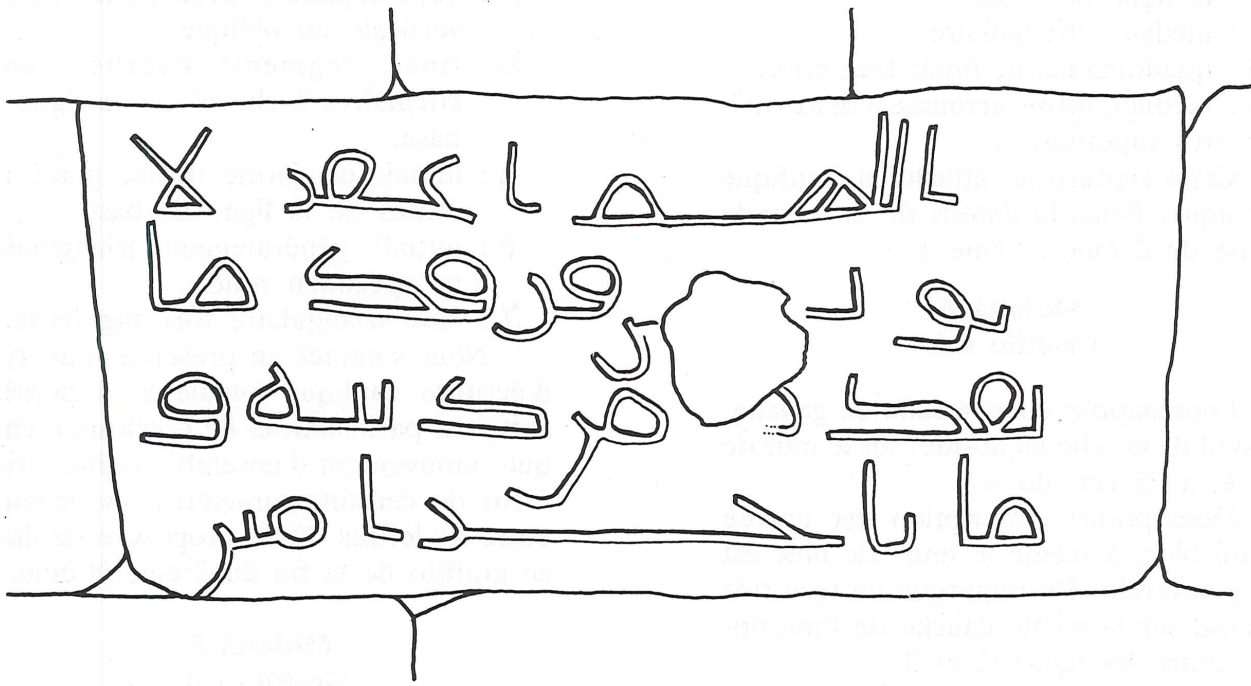
TEXTE (Fig. 2: 2 et 4)

- | | |
|---------------------|--------------|
| 1- ô Dieu | اللهم |
| 2- pardonne | اغفر |
| 3- à Ġumayd/Ĥumayd. | لجميد / حميد |

Commentaire: nous retrouvons le même ductus sur trois autres inscriptions de Mušattā, à la place du *ism* ou du *nasab*. Peut-être s'agit-il du père et du fils, ayant désiré laisser une trace de leur passage en ce château. Cependant, l'on constate qu'ici l'impératif اغفر est écrit correctement, tandis que sur le graffito n°6 (signé يوسف بن حميد), le *alif* de l'impératif a été omis.

FICHE D'IDENTITE PALEOGRAPHIQUE

- Ligne de base: horizontale.



1.

FINALE	MEDIAINE	INITIALE	ISOLEE	
lll		lll	lll	1
lll	1	lll	lll	2
lll		lll	lll	3
lll		lll	lll	4
lll		lll	lll	5
lll		lll	lll	6
lll		lll	lll	7
lll		lll	lll	8
lll		lll	lll	9
lll		lll	lll	10
lll		lll	lll	11
lll		lll	lll	12
lll		lll	lll	13
lll		lll	lll	14
lll		lll	lll	15
lll		lll	lll	16
lll		lll	lll	17
lll		lll	lll	18
lll		lll	lll	19
lll		lll	lll	20
lll		lll	lll	21
lll		lll	lll	22
lll		lll	lll	23
lll		lll	lll	24
lll		lll	lll	25
lll		lll	lll	26
lll		lll	lll	27
lll		lll	lll	28
lll		lll	lll	29
lll		lll	lll	30
lll		lll	lll	31
lll		lll	lll	32
lll		lll	lll	33
lll		lll	lll	34
lll		lll	lll	35
lll		lll	lll	36
lll		lll	lll	37
lll		lll	lll	38
lll		lll	lll	39
lll		lll	lll	40
lll		lll	lll	41
lll		lll	lll	42
lll		lll	lll	43
lll		lll	lll	44
lll		lll	lll	45
lll		lll	lll	46
lll		lll	lll	47
lll		lll	lll	48
lll		lll	lll	49
lll		lll	lll	50
lll		lll	lll	51
lll		lll	lll	52
lll		lll	lll	53
lll		lll	lll	54
lll		lll	lll	55
lll		lll	lll	56
lll		lll	lll	57
lll		lll	lll	58
lll		lll	lll	59
lll		lll	lll	60
lll		lll	lll	61
lll		lll	lll	62
lll		lll	lll	63
lll		lll	lll	64
lll		lll	lll	65
lll		lll	lll	66
lll		lll	lll	67
lll		lll	lll	68
lll		lll	lll	69
lll		lll	lll	70
lll		lll	lll	71
lll		lll	lll	72
lll		lll	lll	73
lll		lll	lll	74
lll		lll	lll	75
lll		lll	lll	76
lll		lll	lll	77
lll		lll	lll	78
lll		lll	lll	79
lll		lll	lll	80
lll		lll	lll	81
lll		lll	lll	82
lll		lll	lll	83
lll		lll	lll	84
lll		lll	lll	85
lll		lll	lll	86
lll		lll	lll	87
lll		lll	lll	88
lll		lll	lll	89
lll		lll	lll	90
lll		lll	lll	91
lll		lll	lll	92
lll		lll	lll	93
lll		lll	lll	94
lll		lll	lll	95
lll		lll	lll	96
lll		lll	lll	97
lll		lll	lll	98
lll		lll	lll	99
lll		lll	lll	100

2.

Fig. 3. 1: Fac similé graffito 4
 2: Anaylse paléo. graffito 4

- Gravure: en creux, d'un trait large et peu profond.
- Ligatures: coexistence de segments courts et étirés, toujours rigides.

CARACTERES A PARTICULARITE

- ا : vertical avec retour orthogonal.
- د : quadrangulaire avec hampe verticale.
- ذ : 3/4 de cercle.
- ع غ : médian: triangulaire.
- ف : médian: triangulaire; final: triangulaire avec petit appendice horizontal.
- ه : médian: triangulaire à double cavité.

Ce graffito est de facture archaïque, nous le datons du 3^{ème}/ 9^{ème} s.

Mušattā 6 Graffito s.d.

Localisation: sur le mur Nord de la grande cour à l'Ouest de la salle en abside. Le graffito est bien visible à 52 cm. du sol.

Description: la première ligne s'étend sur 2 blocs, alors que le reste du texte est gravé sur un seul. Le bloc est en très bon état.

Dimensions: surface écrite: 71 x 30 cm.

Etat du texte: quelques traces d'érosion. Le texte est parfaitement lisible.

TEXTE (Fig. 4: 1 et 3)

- | | |
|----|------------------------|
| 1- | بسم الله الرحمن الرحيم |
| 2- | اللهم (أ) غفر (sic) |
| 3- | ليوسف بن / حميد |
| 4- | بن حميد / جميد |

- 1- Au nom de Dieu, le Bienfaiteur le Miséricordieux;
- 2- ô Dieu, pardonne
- 3- à Yūsuf
- 4- b Ḥumayd/Ġumayd

Commentaire: à la ligne 2, le lapicide a commis une erreur, en oubliant le *alif* devant *غفر*. En effet, après l'invocation

اغفر. غَفَرَ il est attendu l'impératif *غَفَرَ* il est attendu l'impératif *غَفَرَ* utilisé dans les invocations du type: ... *غَفَرَ* 'Que Dieu pardonne à'.

FICHE D'IDENTITE PALEOGRAPHIQUE

- Ligne de base: horizontalité recherchée.
- Gravure: en creux, d'un trait large et profond.
- Ligatures: segments horizontaux rigides.

CARACTERES A PARTICULARITE

- ا : retour orthogonal.
- ح ح خ : avec hampe oblique ne coupant la ligne de base que dans un seul exemplaire.
- د : quadrangulaire avec hampe oblique, étirement général de la lettre.
- س : dents écartées.
- ف : médian: carré; final: corps circulaire.
- ف : médian: un exemplaire circulaire, un autre semi-circulaire; final: avec appendice, un seul sans appendice.
- ه : médian: triangulaire à double cavité; final: corps arrondi.
- و : final: corps carré et appendice remontant vers la ligne de base.

Nous constatons la coexistence de lettres anguleuses et d'autres moins rigides, mais l'ensemble reste encore très archaïque. Le graffito peut être daté du 3^{ème}/9^{ème} s.

Mušattā 7 Graffito s.d.

Localisation: sur le mur Nord d'une chambre au Sud-Est de la salle en abside. Ce graffito, situé à 102 cm. du sol, est aujourd'hui rendu illisible par un graffito gravé depuis la découverte. Heureusement, une photographie avait été prise alors qu'il était encore déchiffrable.

Description: l'inscription est gravée à l'angle droit supérieur d'un gros bloc de calcaire encore intact au moment de la découverte. Un dessin rupestre récent était gravé sous l'inscription.

Dimensions: surface écrite: 60 x 12 cm.

Etat du texte: très clair au moment de la lecture.

TEXTE (Fig. 4: 2 et 4)

حضر خليل في هذه (sic) المكان المبارك

Halil est venu (a été présent) dans ce lieu béni.

Commentaire: nous remarquons ici une faute très fréquente: le démonstratif au féminin devant le mot مكان masculin.

FICHE D'IDENTITE PALEOGRAPHIQUE

- Ligne de base: horizontale avec de nombreuses ruptures de niveau.
- Gravure: en creux, d'un trait assez fin et régulier.
- Ligatures: segments courts moins rigides que les précédentes gravures.

CARACTERES A PARTICULARITE

- ا : vertical sans retour orthogonal.
- دذ : en angle aigu.
- رز : en ligne ondulante.
- ص : semi-circulaire sans dent.
- ك : quadrangulaire.
- م : circulaire.
- هـ : isolé: circulaire prolongé vers le haut par 2 petites hampes obliques: initial: triangulaire à 2 cavités.
- ى : final: à courbure et contre courbure formant 2 angles aigus.

Cette écriture est dans l'ensemble très souple, avec cependant des réminiscences anguleuses (ك). Nous datons ce graffito approximativement du 7^{ème}/ 13^{ème} s. sans plus de précision.

F. Imbert
S. Bacquey
G.R.E.P.O.
Aix-en-Provence
France.

**MAHESH WARE:
EVIDENCE OF EARLY ABBASID OCCUPATION
FROM SOUTHERN JORDAN**

by
Donald Whitcomb

The proper dating of artifacts for the first three centuries after the Islamic conquest holds a special significance as a body of evidence which may provide clarification for this relatively poorly documented period in Islamic history. The excellent stratigraphy preserved at the site of Aqaba (medieval Ayla) is hardly unique for this purpose; nevertheless, the recent excavations have produced a corpus of artifacts which may lead to reassessments of data from other Islamic sites. The assemblage of ceramic forms under discussion here, called Mahesh ware,¹ follows ceramics of late Byzantine style and precedes and presumably overlaps the earliest Islamic glazed wares. This corpus is characterized by cream wares and comb incising (Figs. 2-5) and occurs in layers datable to 750-800 A.D. or later at Aqaba. Mahesh ware may be shown to be a regional variation of an early Abbasid ceramic tradition, only recently being defined in other archaeological sites. Implications of the Mahesh corpus are manifold: primarily, that it is possible to isolate a distinct beginning of the Abbasid tradition, antecedent to the advent of

typical (but often rare) glazed ceramics; further, that early Abbasid period sites have been unrecognized in surveys and older excavations and reanalysis would yield a more accurate view of early medieval settlement patterns.

This study of Mahesh ware complements the data and develops hypotheses explained in two previous articles, "Evidence of the Umayyad Period" and "Coptic Glazed Ware" (Whitcomb 1989a, 1989b). The first of these papers outlines the earliest assemblages from excavated contexts in the 1987 season. The 1988 excavations confirmed these results, adding a few more types (and eliminating others, here transferred to the Mahesh corpus). For reasons explained in that paper, the earliest ceramic phase is late Byzantine in style and datable *in the context of Aqaba* from ca. 650 A.D. to at least 700 A.D. or on into the early 8th century. This first phase of the early Islamic 1 period may have further subdivisions, more properly the subject of statistical analyses of gradual stylistic change.²

The second paper, on Coptic glazed

1. This name is taken from an inscription found on a juglet of this ware (Fig. 5a). This is an Aramaic execration text, written in Hebrew letters, which reads:

"(As for) Māhiš ('Troublemaker'), this *de-mon*, and any (demon) that is angry at me -- overturn!"

I am indebted to Mark J. Geller, University College, London, for the translation of this text; responsibility for further invocation as a pottery label is solely the author's.

This inscribed vessel may belong to a larger corpus of juglets with painted inscriptions, often in Arabic. A particularly close parallel was found at Susa, in Iran, on a vessel with comb decoration and dated to the 9th century (Koechlin 1928, 36, Pl. 5, 41A). Likewise from Iran are two cream ware juglets from Qasr-i Abu Nasr, old Shiraz (Whitcomb 1985, 54, Fig. 19a,b). Further parallels with the more famous Arabic

incantation bowls may be noted. The preliminary identification in Khouri and Whitcomb (1988, 26) should be amended with the above information.

2. Most archaeologists divide the Islamic archaeology of Jordan into periods using the chronological dates of the ruling dynasty. Because not one of these dynasties was directly centered in Jordan, this obscures regional cultural changes and confounds cultural change with political changes, which are rarely synchronous. Period designations in arbitrary centuries are adopted here; thus:

Early Islamic 1 = 600-800 A.D. = Umayyad
Early Islamic 2 = 800-1000 A.D. = Abbasid
Middle Islamic 1 = 1000-1200 A.D. = Fatimid

Since this is descriptively awkward, dynastic labels are retained but with a chronological caveat that the subject is archaeological not historical periods.

ware, investigates the earliest Islamic glazed ceramics appearing in the Aqaba excavations. Based on the results of excavations in Alexandria, these earliest glazed ceramics appear to form a tight stylistic corpus of late Byzantine forms with the addition of lead glazes, often painted in designs reminiscent of Coptic painted wares. The probability of an original manufacture in Egypt suggests the term "Coptic". Distribution seems confined to the Nile valley (as far as Upper Egypt) and to Palestine, especially the coast. Part of the problem in identifying this ceramic type is the descriptive similarity to later lead-glazed traditions; once isolated at Alexandria, Aqaba and elsewhere, Coptic glazed ware appears to belong to the 8th century, probably the latter half. At Aqaba this glazed ware occurs after the first phase tradition described above and before the introduction of the Classic Samarran and other Abbasid ceramics. This glazed ware has an art historical interest but constitutes less than 1% of the contemporary ceramic inventory; rather, it is the contemporary and antecedent ceramics, the Mahesh ware, which will prove the more important archaeological data.

Contexts in Aqaba

The excavations at the Islamic city of Ayla, located in the center of the modern city of Aqaba, have completed three seasons (Fig. 1). The first of these investigations was a very fortunate series of soundings in 1986 (Whitcomb 1987). The excavations in 1987 were very extensive, uncovering the north half of the city wall, the Egyptian (NW) city gate, the Central Pavilion and other structures (partially reported in Whitcomb 1987, 1988a). The

third season was more limited in scope, concentrating on the eastern portion of the site on land belonging to the Royal Yacht Club.³ This most recent season produced two more gates, the Sea (SW) gate and the Hijaz (SE) gate, and several other structures in this quadrant of the city.

Preliminary assessment of the stratigraphic information has been presented in the above mentioned reports, though a comprehensive treatment must await the final publications. The information presented in this paper is intended to indicate the character of the depositions used for the ceramic sequences. While the Mahesh corpus should not be taken as necessarily complete or free from misattributions, the consistency of this assemblage over this site indicates an important advance in ceramic sequencing for southern Jordan and Palestine, with broader implications for early Islamic archaeology. Seven stratigraphic columns in Table 1 (numbered in the following section to key with the site plan, Fig. 1) are presented to illustrate the relative position of Mahesh ware in these excavations. These are not, of course, the only loci with Mahesh sherds but the clearest instances of a discrete ceramic phase.

1. A section of the southeast wall, north of the Hijaz gate, was investigated in 1988 (area G).⁴ In addition to several rooms located immediately within the city wall, one of the towers (tower 12) was partially excavated. This was only a small portion of the tower, most of which had been destroyed by an underground bunker of the Coast Guard camp. Directly beneath surface debris was a stratum of multiple fill layers, H14d-4...9. The Mahesh ware sherds in locus 6 were particularly varied.
2. Area J seems to be part of a residential

3. We are indebted to the officials of the Royal Yacht Club, particularly Mr. Hassan Aweidah, and to Mr. Mohammad Balqar of the Aqaba Region Authority for assistance in this season. As in previous seasons, we are grateful for the cooperation and participation of Dr. Ghazi Bisheh and Dr. Khairieh 'Amr of the Department of Antiquities and Dr. Bert de Vries of the

American Center of Oriental Research.

4. Area G was excavated in 1988 under the supervision of Khairieh 'Amr. The loci discussed here were 1.1-2.4 m below the sloping surface of the tower. Depths below surface are presented as a relative indication of depositional character; absolute heights from sea level will be presented in the final reports.

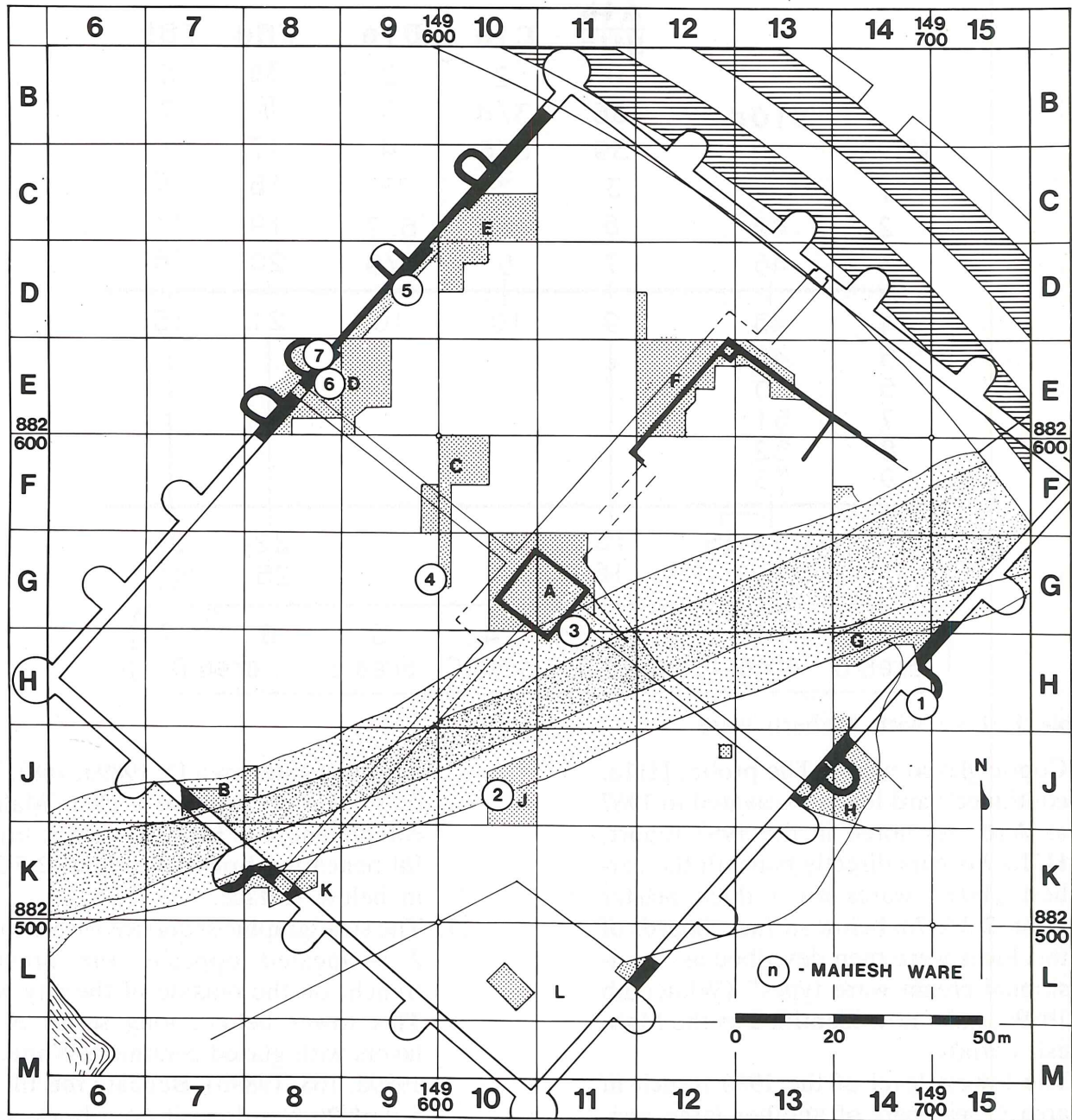


Fig. 1

unit, similar to the Pavilion building (area A). Due to dissection of the immediate area, by the wadi on the north and by the sand-filled cut to the south, there appeared little hope of horizontal expansion for a general architectural plan. Rather, certain rooms were excavated for a maximum depth to give a stratigraphic continuity of artifacts in architectural context. Loci J10d-48...53 contained Mahesh wares;

loci 48, 49, 50 produced very clear assemblages, while the lower loci, 51, 52, 53 had significant admixture of earlier "Umayyad" wares (as defined in Whitcomb 1989a). Two loci were floors (J10d-49 and 52), each with a make-up fill below and further deposits above.⁵

3. The deep probe on the southeast exterior wall of the Pavilion building (area A; Whitcomb 1987, 252-4; 1989a, 167) was briefly discussed concerning the

5. The Mahesh level in Area J was excavated in 1988 under the supervision of Robin Brown.

Each of these tripartite sequences was about 60 cm, from 2.0-3.2 m below surface.

		A1b H11a	C1a	D1a	E8d	E8b
		19	2	2	3a	5
	J10d	36	3/4	3	5	7
H14d	1	39	5/6	4	17	9
1	8	3	7	5	18	10
2	42	6	8	6/7	19	14
3	46	7	9	8/9	20	16
4	48	9	10	10	21	18
5	49					
6	50					
7	51					
8	52					
9	53					
10	54 55	15			22	26
	56	16			25	27

1	2	3	4	5	6	7
area G	area J	area A	area C	area E	area D	

Table 1: Loci with Mahesh ware

- Coptic glazed wares. The probe, H11a, continued yard levels excavated in 1987 as A1b. As noted in the 1987 report, H11a-9 occurs directly beneath the earliest glazed wares on a thick plaster floor, 2.3-2.7m below surface. Sherds of this locus were then described as “transitional cream ware types” (Whitcomb 1989b, n.3), now identified as the Mahesh corpus.
- The lowest level of the 1986 trench in area C was part of another large residence (1987, 257-9). This locus, C1a-10, was characterized as sand and midden, 2.6-3.0 m below surface; there was some suggestion that a floor lay immediately beneath this locus. Further explorations of this building in 1987 failed to reach layers containing Mahesh ware.
 - Along the northwest wall (area E; 1987, 260), another 1986 probe encountered Mahesh wares in its lowest layer, D1a-10. This locus was a dark brown silt and brick detritus, about 1.8-2.2 m below surface.
 - Deeper trenches along this northwest wall were located in the vicinity of the

Egyptian gate (area D; 1989a, 168). The only locus to produce a clear Mahesh component was E8d-21, a dark brown fill beneath a brick pavement, 2.5-2.75 m below surface.

- The stratigraphic sequence within tower 2 is located opposite the previous trench, on the outside of the city wall. This tower held a long series of fill layers with glazed ceramics (Whitcomb 1989a, 168; 1989b). Beneath this fill was a dark brown deposit on a brick pavement, E8b-18. The Mahesh wares in this locus were about 3.2-3.4 m below surface.

Though it is premature to draw generalizing implications from this stratigraphy, some suggestions might be offered. The depth of occupation bearing Mahesh wares is usually between 2.5-3.0 m below archaeological deposits on the surface. If a uniform rate of deposition were posited for the site as a whole, one might suggest a late 8th or early 9th century date. Perhaps more interesting (and rational) is the observation of new floors laid in conjunction with Mahesh ceramics. The clustering

of innovations (here only ceramics and architecture and based on too few examples) is a pattern which may be sought in other artifacts and then used for a more significant cultural boundary, here possibly between the early Islamic 1 and 2 periods.

Mahesh ware and its Relatives

The pottery identified as Mahesh ware at Aqaba finds parallels elsewhere. The primary characteristics of Mahesh ware are the prevalence of cream-colored fabric (often bordering on a greenish grey), comb incising, and specific vessel forms. The relevant forms are:

Fig. 2: Large basins and bowls. These vessels form a type with gradual variations, ranging from a flattened, vertical rim to ones more triangular in section. No bases have been associated with these apparently deep vessels. Comb-incised basins form part of the Umayyad tradition in north Jordan, though the latter have differing rims and are usually in grey ware. The flattened, vertical rims (Fig. 2a-d) are not found in Jordan but have close parallels at Samarra, as do other bowls in this series.⁶

Fig. 3: Bowls. These bowls are characterized by comb-incising and triangular section or overhanging rims. In addition to numerous parallels from north Jordan, one might note the occurrence on sites of the same period in the Hijaz and southwest Arabia.⁷

Fig. 4: Bowls, bases and lids. These bowl forms, especially with an inner bevel on the rim, recall the painted bowls of early Abbasid tradition in Palestine and

north Jordan (so-called "palace ware", see A.J. Amr 1986). These are associated with small painted cups (4i-k) and fine hardware cups with horizontal burnishing (4e-h). Bases seem usually to be flat. Lids with a raised and solid handle are present.

Slip burnished cups (and other forms) comprise a style which has often been considered Byzantine (Gichon 1974). The association of this ware with Abbasid materials has been recognized at Abu Gosh and other sites and, more recently, securely placed in the Abbasid stratum at Pella (Walmsley 1988). Occurrence of this ware at Aqaba is likewise in layers with Mahesh and later wares. The ware defined by Gichon must be reviewed in order to separate Islamic from Byzantine and Nabataean components. Another example of ceramic recidivism has recently been noted for cream wares (Kh. 'Amr n.d.), where a range of Nabataean forms is segregated from Islamic ceramics of very similar ware.

Fig. 5: Juglets and jars. Large jars, so-called 'bag-shaped' amphorae, with two loop handles are typical of numerous sites in Palestine and north Jordan. Smaller loop-handled jars have an indented base more typical of Umayyad tradition. Many of these jars have a turned-out vertical rim (5b, g, h). Each of these forms may be seen in Pella for the late Umayyad period (Walmsley 1988, 9.1-3). Smaller solid-footed vessels (5e-f) recall piriform unguentaria of much earlier traditions.⁸

Redefining Abbasid Ceramics

Ports such as Aqaba are marginal by definition, not usually locations of pottery

6. The results of recent work at Samarra are only beginning to be available. See Northedge and Falkner (1987), [2a = 11.39; 2c = 10.38; 2e = 10.36].

7. The kilns at Jerash may have produced much of the ceramics found on north Jordanian sites (Walmsley 1988, 153). Parallels may be found in a number of reports, especially Gawlikowski 1986, Pl. XII; Schaefer and Falkner 1986, Fig. 10-14; Walmsley 1986a, Fig. 1. [3b = 10.2; 3d = 1.2; 3f = 1.1, 10.10; 3h = 10.3; 3i = 10.5; 3l = 10.9; 3m = 1.3; 4b ≈ 1.4, 11.10, XII; 4k = XII; 4o ≈ XII; 4s = 14.16; 4v = 13.3; 4w = 13.5;

51 ≈ 13.7, 9].

Sites in the Hijaz include Ma'abiyat (Parr *et al.* 1968-69, 3.7), and those found by Hamed (1988) and Zarins (1979). From Aden and the Hadhramaut are the sites of Jebelain and HDR 48 (Whitcomb 1988c, 1b, f, g, 3b).

8. These "unguentaria" have parallels from Ma'abiyat (Parr *et al.* 1968-9, 3.16), Abu Gosh (de Vaux and Steve 1950, C9), and Samarra (Iraq 1940, 15.9). The out-turned vertical rims find parallels at Samarra (Northedge and Falkner 1987, 11.46, and Falkner, pers. com.).

manufacture, and therefore hardly suitable sites for definition of a ceramic ware. This character of Aqaba, recognized in the 10th century by Muqaddasi, suggests that Mahesh ware should spring from Egyptian, Hijazi or Syrian influence (Whitcomb 1987). Muqaddasi decided that the primary association of Aqaba (Ayla) was with the Bilad al-Sham, just as appears to be the case for Mahesh wares two centuries earlier.

The postulated role of Mahesh wares as part of a set of innovations associable with the early Abbasid period is even more problematic for a marginal site. It has been suggested here that this ware assists in defining this archaeological period and provides a key for historical implications for Islamic archaeology in Jordan and Palestine. Formulation of the Abbasid period from archaeological materials has been slow, hampered by historical misconceptions. The earthquake of 747/8 A.D. and the change of dynasties (and shift toward centers in Iraq) have signalled a period break and rapid cultural decline (if not complete lacuna) to many archaeologists in the Levant. Recent field research is not simply refining this scenario but overturning its basic assumptions.

The Samarra excavations are the inevitable beginning point for defining Abbasid ceramics. The effect is clearly seen in the classic report of Abu Gosh, the clearest instance of Samarran influence in southern Bilad al-Sham. Even more direct is the range of Samarran imports found at Aqaba (reported in Whitcomb 1988a). Surprisingly, the old verities of a closed 9th century corpus from Samarra are only slowly being discarded. In their place, the recent work by Northedge is beginning to isolate earlier Sasanian and Umayyad materials and later 10-12th century phases in the vast ruins of Samarra (Northedge and Falkner 1987).

The Abbasid period in Jordan has

been defined for numerous surveys and excavations through readings by J.A. Sauer and his students. The ceramic diagnostics are not available for Hesban (Sauer 1973) but implied in reviews of Dhiban and Deir 'Alla (1975, 1976). Sauer has more recently assigned the following diagnostics to Abbasid period ceramics: white, yellow-white, tan, black ware; band combed, thumb-impressed, cut-ware; "there is no painting"; polychrome glazed (green, yellow, purple) plates; flat bases, neck filters, turban handles (1982, 333). Though hampered by the lack of drawings of ceramic forms, these attributes would seem generally accurate. What is apparent from these definitions, which have been used by most archaeologists, is an excessive reliance on attributes derivative from the Samarran type series, masking continuities from the Umayyad tradition and intermediate developments of the local early Abbasid, of which Mahesh ware is one aspect.

Study of the full assemblage of Abbasid period ceramics, and indications of the developmental place of the Mahesh corpus, may be seen from recent work at other sites in Jordan and Palestine. Abbasid elements at Pella (Fihl), first outlined by Smith (1973, 236-43), have now been augmented by a new corpus in specific architectural setting (Walmsley 1986b). This material illustrates two phenomena: continuities from the late Umayyad (1988, 10.1-15) and introduction of features (cream wares, burnished cups, flat bases, etc.) correlating with Mahesh features. Interestingly the few glazed sherds are Coptic glazed ware or a close relative (Walmsley 1988, 9.18).⁹ This corpus should be comparable to Abbasid evidence from Jerash, recognized most emphatically by Gawlikowski (1986, 115) but as yet unpublished. A third Jordanian site which must be mentioned in this context is Khirbet Faris, a new site north of Karak

9. I am grateful to Alan Walmsley for showing these materials to me at Pella. The early Islamic periods at Pella have now been treated in a

masterful summary of the history and archaeology by Walmsley (1988).

(Johns *et al.* 1989). The first published work from this site includes a locus (Far. IV, 068) which has ceramics closely comparable to Mahesh ware (1989, 24.18-24). Though this pottery is labelled 11th-12th century, Falkner correctly draws a number of Abbasid (9th century) parallels (1989, 86).

Among the many Palestinian corpora pertinent to this period,¹⁰ the pottery of Khirbet al-Mafjar, excavated and described by Baramki (1942), has received the most attention and is the subject of a recent "stratigraphic" sequencing (Whitcomb 1988b). The Mahesh corpus compares most closely to Mafjar phase 2: A. large jars are "greyish green" with comb incising; C. large basins are made of cream, buff or "drab" ware and also have comb incised decoration (1988b, 56). Some further parallels with phase 1 include beakers and perhaps the painted wares (1988b, Fig. 1). Most of the early wares as well as cut decorations (2D) are red and "metallic", a tradition which is represented at Aqaba only by the cups (Fig. 4e-h). The two phases at Khirbet al-Mafjar were provisionally dated to 750-800 and 800-850 (1988b, 63), which would accord well with Aqaba and suggest some overlap into the early 9th century.

Conclusions

The early 9th century witnessed the end of one cultural tradition and the

beginning of another in southern Bilad al-Sham. The Umayyad (early Islamic 1) period represents the transition from "Late Roman" to Islamic material culture.¹¹ The Abbasid (or early Islamic 2) period presents a cluster of innovative attributes, many of which will carry on into later periods and, like glazed ceramic decoration, come to be identified as "Islamic". The strong identification of Abbasid culture with the Samarran style in Iraq is seriously misleading as one moves further away from this center. The absence or rarity of readily identifiable "Samarran Abbasid" ceramics has led, in southern Bilad al-Sham, to assertions of cultural decline (abandonment of towns, the rise of nomadism). At present this problem is being addressed by a number of projects: Pella, Jerash, Khirbet Faris and Aqaba.¹² Mahesh ware will play a small part in the definition of indigenous development out of the Umayyad tradition. More importantly, the compilation of these ceramic diagnostics is essential for research on settlement patterns and, on a more general level, for establishing Islamic archaeology as an accepted tool in the study of the history of Jordan.

Donald Whitcomb
The Oriental Institute
Chicago, Illinois 60637
U.S.A.

10. Sites with Umayyad and early Abbasid ceramics of Palestine include Ramla (where cream wares form a large majority; Rosen-Ayalon and Eitan 1969), Tell Yoqne'am (Qaimun; Ben-Tor and Rosenthal 1978), Abu Ghosh (Qaryat al-'Anab; de Vaux and Steve 1950), Kursi (Tsiferis 1983) and Khirbet al-Karak (Deloughaz and Haines 1969).

11. The identification of clusters of attributes which may be defined as "Islamic" is a complex problem clearly outlined by Grabar (1973; see also, Allen 1988). The present enquiry is confined to the narrow field of ceramics in which the criteria of art historians will naturally differ from those of a field archaeologist due to the range of materials (with attendant differences in manufacture, distribution and function) utilized

for making judgements. Archaeological typologies derived from stratigraphic contexts will eventually corroborate sound stylistic analyses.

12. In a similar manner, very little has been done with the ceramics of the late Abbasid or Fatimid (Middle Islamic 1) period. It is clear that assumptions on the nature of the ubiquitous Ayyubid/Mamluk period must be reexamined. Fortunately, there is a growing corpus of published drawings and descriptions from major sites (Pella, Amman, Aqaba), as well as important smaller sites (Wu'eira, Khirbet Faris). At risk of sounding trite, there are more than enough ceramics published as Umayyad and Ayyubid/Mamluk to fill in the Abbasid/Fatimid period and make it quite a respectable occupation in Jordan's history.

POTTERY DESCRIPTIONS

Fig. 2: Large bowls and basins

a	H14d-6	88-129	---	cream ware, comb incised, common medium sand, diameter unknown.	[-] refers to the 1986 ceramic corpus
b	J10d-48	88-657	[≈14g]	cream ware, comb incised, common coarse grit.	
c	H14d-6	88-129	[≈14f]	cream ware, comb incised, abundant medium sand.	
d	D1a-10	86-367	[=14h]	cream ware, incised, common coarse grit.	
e	D1a-8	86-270	[=13c]	orange ware, cream surfaces, comb incised, common medium sand, diameter 36 cm.	
f	J10d-50	88-651	---	cream ware, comb incised, common coarse grit, diameter unknown.	
g	H11a-9	87-155	[≈13e]	greenish cream ware, incised, common coarse grit, diameter 46 cm.	
h	H11a-9	87-155	---	cream ware, light grey core, comb incised, common medium sand, diameter 36 cm.	
i	H11a-4	87-150	[≈13b]	orange-tan ware, blackened rim, comb incised, common medium sand and chaff, diameter 40 cm.	
j	E8b-18	87-343	[≈13a]	cream ware, greenish core, comb incised, repair holes, common medium sand.	

Fig. 3: Bowls

a	D1a-10	86-271	[=13n]	cream ware, light orange core, comb incised, common medium sand and mica.
b	C1a-10	86-148	[=13o]	cream ware, moderate medium sand and mica.
c	J10d-42	88-667	[≈13g]	orange-red ware, cream surface on exterior, comb incised, moderate medium sand.
d	H14d-9	88-134	[≈13h]	buff-orange ware, cream surfaces, comb incised, common medium sand.
e	H14d-4	88-149	---	orange-buff ware, cream surfaces, comb incised, moderate medium sand and chaff.
f	H14d-6	88-130	---	cream ware, comb incised, common medium sand, diameter unknown.
g	B1d-4	86-50	[=13i]	red-orange ware, cream surfaces, comb incised, moderate medium sand and chaff, diameter unknown.
h	H14d-7	88-131	---	cream ware, comb incised, common medium sand.
i	J10d-48	88-657	[≈13l]	greenish cream ware, comb incised, common coarse grit, diameter unknown.
j	B1d-10	86-57	[=13j]	cream ware, comb incised, moderate medium sand.
k	C1a-6	86-139	[=13f]	cream-tan ware, cream surfaces, incised, moderate medium sand.
l	J10d-48	88-647	---	red ware, buff-cream surfaces, moderate coarse grit and mica, diameter unknown.
m	J10d-48	88-657	---	red-orange ware, cream-grey surfaces, common medium sand.
n	J10d-48	88-657	[≈14b]	red ware, common coarse grit, diameter unknown.
o	F9d-13	87-106	---	buff ware, greenish cream core, cream surfaces, comb incised, common coarse grit, diameter 44 cm.

Fig. 4: Small bowls, lids, and bases

a	D1a-10	86-272	[=16e]	cream-light orange ware, cream surfaces, moderate medium sand.
b	J10d-49	88-661	---	cream ware, black paint on exterior, moderate medium sand.
c	J10d-48	88-657	[≈16t]	buff-cream ware, cream surfaces, moderate coarse grit.
d	J10d-12	88-157	[≈16s]	orange-red ware, cream surfaces, moderate medium and coarse sand and chaff.
e	D1a-2	86-262	[=11g]	grey ware, orange surfaces, brown horizontal streaks, fine.
f	J10d-49	88-649	---	tan-orange ware, grey core, tan-grey horizontal streaks, fine.
g	J10d-16	88-149	---	tan ware, grey core, red-orange slip on exterior, spiral incision on base, fine.
h	H11a-6	87-151	---	orange ware, grey core, burnished exterior, spiral incision on base, fine.
i	J10d-49	88-661	---	orange-tan ware, red, black paint on exterior, fine.
j	J10d-49	88-661	---	tan ware, tan-orange surface, red slip and traces of brown paint on exterior, repair hole, fine.
k	H11a-7	87-153	---	orange, brown core, traces of black paint on exterior, fine.
l	J10d-49	88-662	---	grey ware, brown surface and orange slip on exterior, orange-brown horizontal streaks on interior, fine.
m	H14d-9	88-139	---	buff-cream ware, cream surfaces, common medium sand.
n	H10d-10	88-137	---	buff-cream ware, cream surfaces, common medium sand and mica.
o	H14d-9	88-134	[≈16r]	buff-cream ware, greenish cream surfaces, moderate medium sand and mica.
p	H11a-9	87-155	---	grey-brown ware, fine.
q	J10d-50	88-650	---	cream-buff ware, cream slip on interior and exterior, common medium sand.
r	J10d-48	88-657	---	cream ware, common medium and coarse sand.
s	H14d-6	88-130	---	cream ware, common coarse grit.
t	J10d-48	88-657	---	cream ware, abundant medium sand.
u	J10d-50	88-664	---	cream-grey ware, common medium and coarse sand.
v	H14d-7	88-131	---	cream ware, grey surfaces on interior (blackened), common medium sand.
w	H14d-7	88-131	[≈12h]	orange-red ware, cream surfaces, blackened rim, moderate medium sand.
x	D1a-10	86-272	[=12i]	orange ware, cream surfaces, blackened rim, common medium and coarse sand, diameter 40 cm.

Fig. 5: Jars and juglets

a	B1d-25	87-1468	---	cream ware, comb incised, black paint on base, moderate medium sand.
b	D1a-10	86-275	[=18t]	cream ware, common medium sand.
c	J10d-50	88-651	---	buff-cream ware, cream surfaces, common medium sand.
d	J10d-53	88-654	---	red-orange ware, cream surfaces, common medium sand.
e	E8b-23	87-1481	[≈24v]	orange ware, moderate medium sand.
f	E8b-23	87-31	---	orange ware, moderate medium sand. "Spindle-shaped unguentarium".
g	J10d-46 50	88-645 651	[≈18r]	buff-cream ware, cream surfaces, moderate medium sand.
h	H14d-7	88-132	[≈18s]	cream ware, common medium sand.
i	J10d-27	88-195	---	cream ware, common medium sand.
j	D1a-6	86-265	[=18w]	buff-tan ware, cream surfaces, common medium sand.
k	J10d-50	88-666	---	cream ware, common medium sand.
l	H14d-6	88-141	[≈18g]	cream ware, cream slip on interior and exterior, common medium sand.

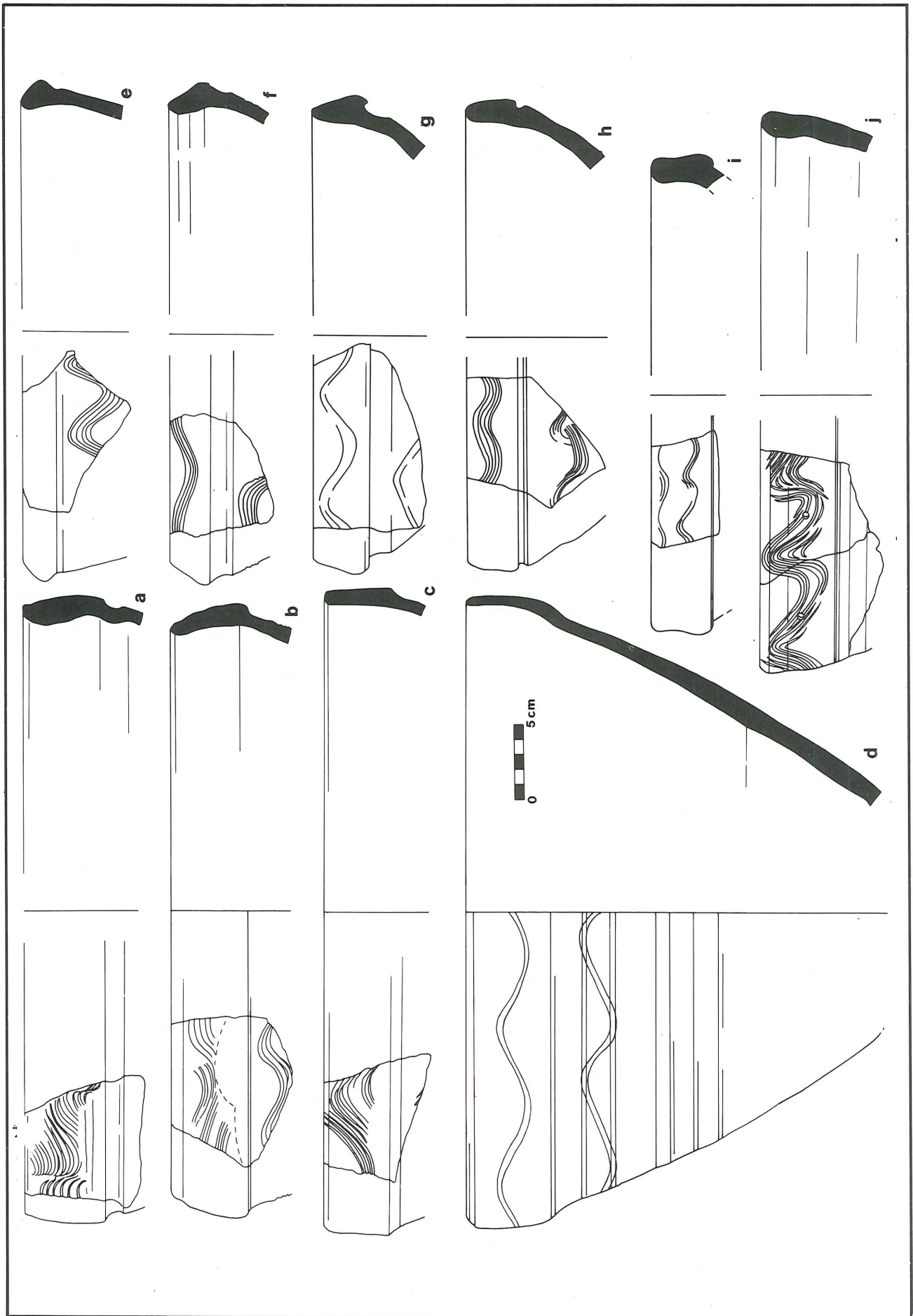


Fig. 2.

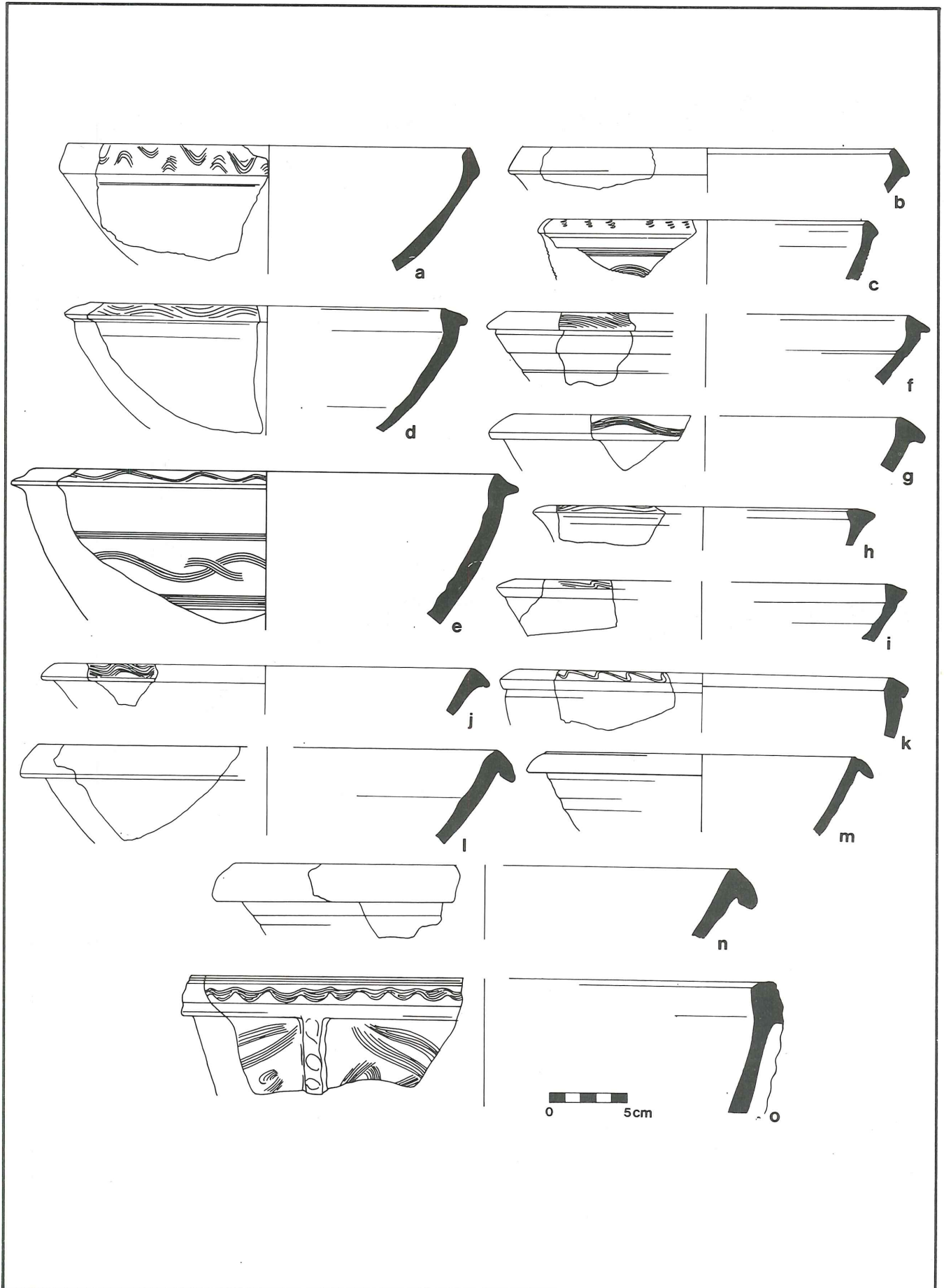


Fig. 3.

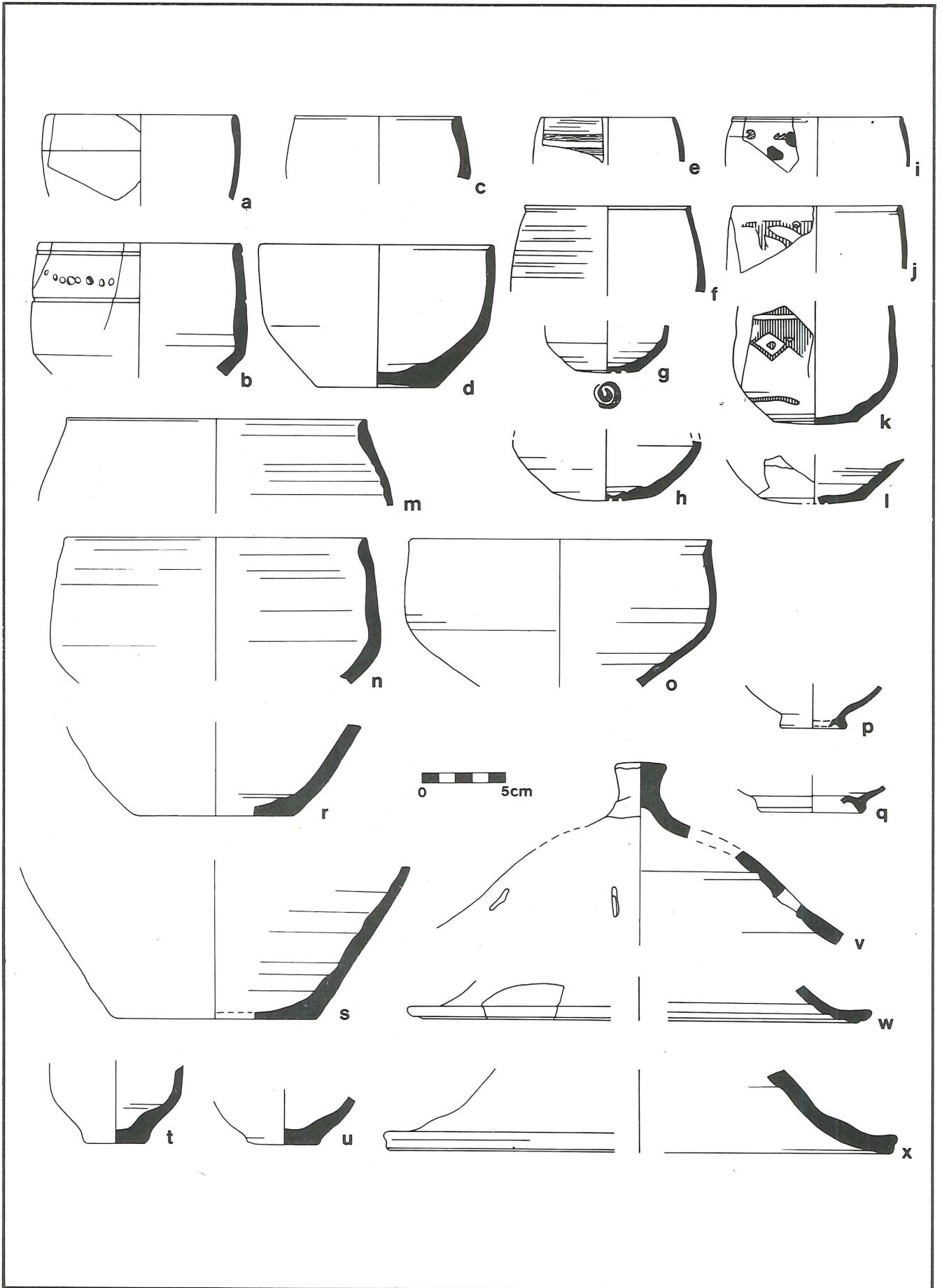


Fig. 4.

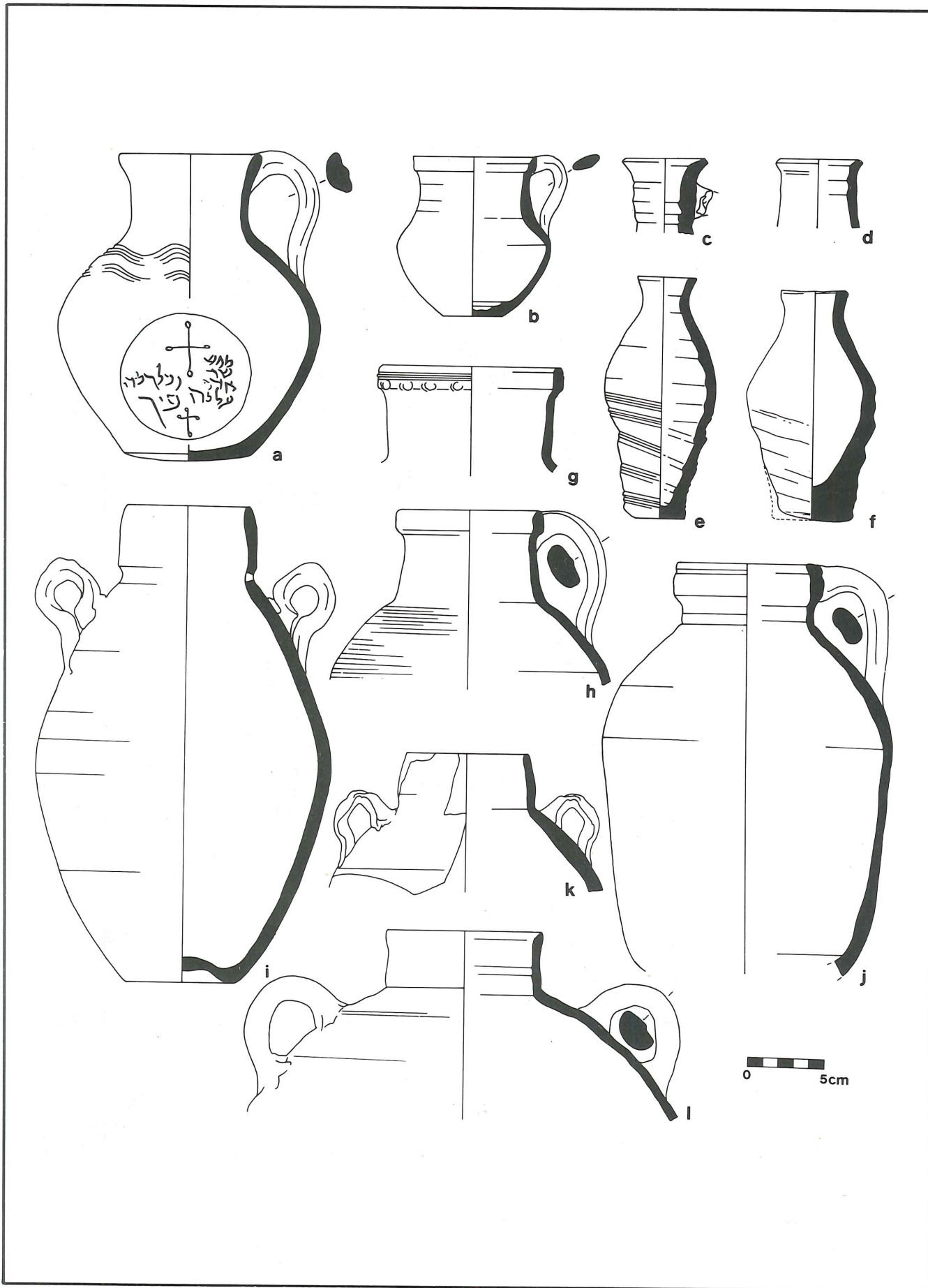


Fig. 5.

References

- Allen, T.
1988 *Five Essays on Islamic Art*. Solipsist: n.p.
- Amr, A.J.
1986 Umayyad Painted Pottery Bowls from Rujm al-Kursi, Jordan. *Berytus* 34: 145-159.
- 'Amr, Kh.
n.d. Islamic or Nabataean? The Case of a First to Early Second Century A.D. Cream Ware. Paper presented to the Fourth Congress on the History and Archaeology of Jordan, Lyon, 1989.
- Baramki, C.C.
1942 The Pottery from Khirbat al-Mafjar. *QDAP* 10: 65-103.
- Ben-Tor, A., and R. Rosenthal
1978 The First Season of Excavations at Tel Yoqne'am, 1977: Preliminary Report. *IEJ* 28: 57-82.
- Brown, R.
1987 A 12th Century A.D. Sequence from Southern Transjordan: Crusader and Ayyubid Occupation at el-Wu'eira. *ADAJ* 31: 267-288.
- Clark, V.A.
1986 The Jerash North Theatre: Part II, The Archaeology of the Roman Theatre. In: *Jerash Archaeological Project 1981-1983*, I. F. Zayadine, ed. Amman: Department of Antiquities. 231-239.
- Delougaz, P., and R.C. Haines
1960 *A Byzantine Church at Khirbet al-Karak*. Chicago: Oriental Institute.
- Gawlikowski, M.
1986 A Residential Area by the South Decumanus. In: *Jerash Archaeological Project 1981-1983*, I. F. Zayadine, ed. Amman: Department of Antiquities. 107-136.
- Gichon, M.
1974 Fine Byzantine Wares from the South of Israel. *PEQ* 106: 119-39.
- Grabar, O.
1973 *The Formation of Islamic Art*. New Haven: Yale University.
- Hamed, A.I.
1988 *Introduction a l'étude archéologique des deux routes syrienne et égyptienne de pèlerinage au nord-ouest de l'Arabie saoudite*. Ph.D, Université de Provence.
- Iraq, Directorate-general of Antiquities
1940 *Excavations at Samarra, 1936-1939*: pt. 1, *Architecture and Mural Decoration*; pt. 2, *Objects*. Baghdad: Government Press.
- Johns, J., A. McQuitty, and R. Falkner
1989 The Fāris Project: Preliminary Report upon the 1986 and 1988 Seasons. *Levant* 21: 63-95.
- Khouri, R.G., and D. Whitcomb
1988 *Aqaba: "Port of Palestine on the China Sea"*. Amman: Al Kutba Jordan Guides.
- Koechlin, R.
1928 *Les céramiques musulmanes de Suse au Musée du Louvre*. Paris: Ernest Leroux.
- McNicoll, A., and A. Walmsley
1982 Pella/Fahl in Jordan During the Early Islamic Period. In: *Studies in the History*

ADAJ XXXIII (1989)

and *Archaeology of Jordan*, I. A. Hadidi, ed. Amman. Department of Antiquities. 339-345.

McNicoll, A., R.H. Smith and B. Hennessey

1982 *Pella in Jordan I: An Interim Report on the Joint University of Sydney and the College of Wooster Excavations at Pella 1979-1981*. Canberra: Australian National Gallery.

Northedge, A.

1984 *Qal'at 'Amman in the Early Islamic Period*. Ph.D., University of London (SOAS).

Northedge, A., and R. Falkner

1987 The 1986 Survey Season at Sāmarrā'. *Iraq* 49: 143-173.

Parr, P.J., et al.

1968-69 Preliminary Survey in N.W. Arabia, 1968. *Bulletin of the Institute of Archaeology, University of London* 8-9: 193-242.

Rosen-Ayalon, M., and A. Eitan

1969 *Ramla Excavations: Finds from the VIIIth Century C.E.* Jerusalem: Israel Museum Catalogue 66.

Sarre, F.

1925 *Die Ausgrabungen von Samarra, II: Die Keramik von Samarra*. Berlin: Dietrich Reimer.

Sauer, J.A.

1973 *Heshbon Pottery, 1971*. Berrien Springs, MI: Andrews University.

1974 rev. of R.H. Smith, *Pella of the Decapolis I*. *ADAJ* 19: 169-172.

1975 rev. of A.D. Tushingham, *The Excavations at Dibon (Dhībân)*. *ADAJ* 20: 103-109.

1976 Pottery Techniques at Tell Deir 'Alla. *BASOR* 224: 91-94.

1982 The Pottery of Jordan in the Early Islamic Periods. In: *Studies in the History and Archaeology of Jordan*, I. A. Hadidi, ed. Amman: Department of Antiquities. 329-337.

Schaefer, J., and R.K. Falkner

1986 An Umayyad Potters' Complex in the North Theatre, Jerash. In: *Jerash Archaeological Project 1981-1983, I*. F. Zayadine, ed. Amman: Department of Antiquities. 411-459.

Smith R.H.

1973 *Pella of the Decapolis*, vol. I: *The 1967 Season of the College of Wooster Expedition to Pella*. Wooster, MA.

Tzaferis, V.

1983 The Excavations of Kursi — Gergesa. *'Atiqot* 16: 1-65.

de Vaux, R., and A.M. Steve

1950 *Fouilles à Qaryat-el-'Enab, Abu Gosh, Palestine*. Paris.

Walmsley, A.G.

1986a Area JNT-C: The Portico of the North Theatre. In: *Jerash Archaeological Project 1981-1983, I*. F. Zayadine, ed. Amman: Department of Antiquities. 351-357.

1986b The Abbasid Occupation in Area XXIX, Preliminary Report on the University of Sydney's Seventh Season of Excavations at Pella (Ṭabaqat Faḥl) in 1985. *ADAJ* 30: 182-195.

ADAJ XXXIII (1989)

- 1987 *The Administrative Structure and Urban Geography of the Jund of Filastīn and the Jund of al-Urdunn*. PhD, University of Sidney.
- 1988 Pella/Fiḥl After the Islamic Conquest (AD 635-c.900): A Convergence of Literary and Archaeological Evidence. *Mediterranean Archaeology* 1: 142-159.

Whitcomb, D.

- 1985 *Before the Roses and Nightingales: Excavations at Qasr-i Abu Nasr, Old Shiraz*. New York: The Metropolitan Museum of Art.
- 1987 Excavations in Aqaba: First Preliminary Report. *ADAJ* 31: 247-266.
- 1988a A Fatimid Residence in Aqaba, Jordan. *ADAJ* 32: 207-224.
- 1988b Khirbet al-Mafjar Reconsidered: The Ceramic Evidence. *BASOR* 271: 51-67.
- 1988c Islamic Archaeology in Aden and the Hadhramaut. In: *Araby the Blest: Studies in Arabian Archaeology*. D.T. Potts, ed. Copenhagen: Carsten Niebuhr Institute 7. 176-263.
- 1989a Evidence of the Umayyad Period from the Aqaba Excavations. In: *The Fourth International Conference on the History of Bilād al-Shām during the Umayyad Period*. M.A. Bakhit and R. Schick, eds. Amman: University of Jordan. vol. 2, 164-184.
- 1989b Coptic Glazed Ceramics from the Excavations at Aqaba, Jordan. *JARCE* 26 (in press).

Zarins, J., *et al.*

- 1979 Saudi Arabian Archaeological Reconnaissance 1978: The Preliminary Report on the Third Phase of the Comprehensive Archaeological Survey Programme — The Central Province. *Atlat* 3: 9-42.

EXCAVATIONS IN THE 14TH CENTURY A.D. MAMLUK PALACE AT KERAK

by
Robin M. Brown

Introduction

As part of a broader archaeological study of southern Transjordan during the Late Islamic periods (Ayyubid 1174-1263, Mamluk 1263-1516, Ottoman 1516-1918), a brief excavation was conducted at Kerak Castle in June 1987. It has long been recognized that the ruins of the *qal'a* (castle) at Kerak (Figs. 1-2) include major constructions that can be attributed to the Ayyubid-Mamluk period in addition to the remains of the original Crusader fortress. The first systematic attempt to distinguish the Crusader and Ayyubid-Mamluk architectural features of the *qal'a* was carried out by Deschamps in 1929. Deschamps identified, in addition to numerous restorations of the 'Arab' period, some of the most significant Late Islamic components of the fortress, including the lower court or bailey and the massive *donjon* that flanks the southern end of the upper court (1939). Among the features that Deschamps assigned to the Crusader occupation is a complex located in the upper court between the Crusader church and the *donjon*, which he described as a *logis* or the private apartments of the Frankish *seigneur* of Kerak (1939: 88). In re-evaluating Deschamps' observations it is clear that this complex (Fig. 2: 6) reflects the plan of an Islamic palace (T. Allen, C.H. Brooker) and as such it represents the most significant aspect of civil architecture within the Late Islamic *qal'a*. As a result of the 1987 investigation this complex can be dated specifically to the Mamluk period and thus, it now stands as the only known Mamluk palace in Transjordan.

The immediate objective of the one-week excavation in Kerak was to sample Late Islamic occupation sequences for comparative purposes. The Palace Complex, initially examined and identified by

architect C.H. Brooker, was selected for excavation in the hope of obtaining data with which to determine whether it was an Ayyubid or Mamluk construction. As the objectives of the project were met during excavation of a single trench, the investigation was not expanded to include additional archaeological units, though it is hoped that further excavations will be carried out in the future.

I am indebted to Dr. Adnan Hadidi, former Director-General of the Department of Antiquities for his approval for this project. I also wish to thank Dr. Ghazi Bisheh, then Assistant Director of the Department of Antiquities, Mr. Nabil Beqa'in, the Department of Antiquities inspector for the Kerak office, and Dr. David McCreery, former Director of the American Center of Oriental Research for their kind support and advice. Several other scholars contributed their expertise and assistance and I extend my appreciation to: Terry Allen (architectural historian), Khairieh 'Amr (pottery sections), John Betlyon (numismatics), Colin Brooker (architect), Mark Campbell (draftsman), Patricia Crawford (mollusk analysis), Ruba Kanaan (architect), Frank Koucky (geologist), Jonathan Mabry (topographic map), and Kevin Rielly (faunal analysis). The project was conducted by the writer and two hired laborers from Kerak.

SUMMARY HISTORY OF KERAK CASTLE DURING THE LATE ISLAMIC PERIODS

A detailed account of the long and varied history of the *qal'a* lies beyond the scope of this preliminary report. However, a brief introduction may be useful in evaluating the relationship between historical events and trends, and the pattern of deposition. In A.D. 1142 Pagen the Butler,

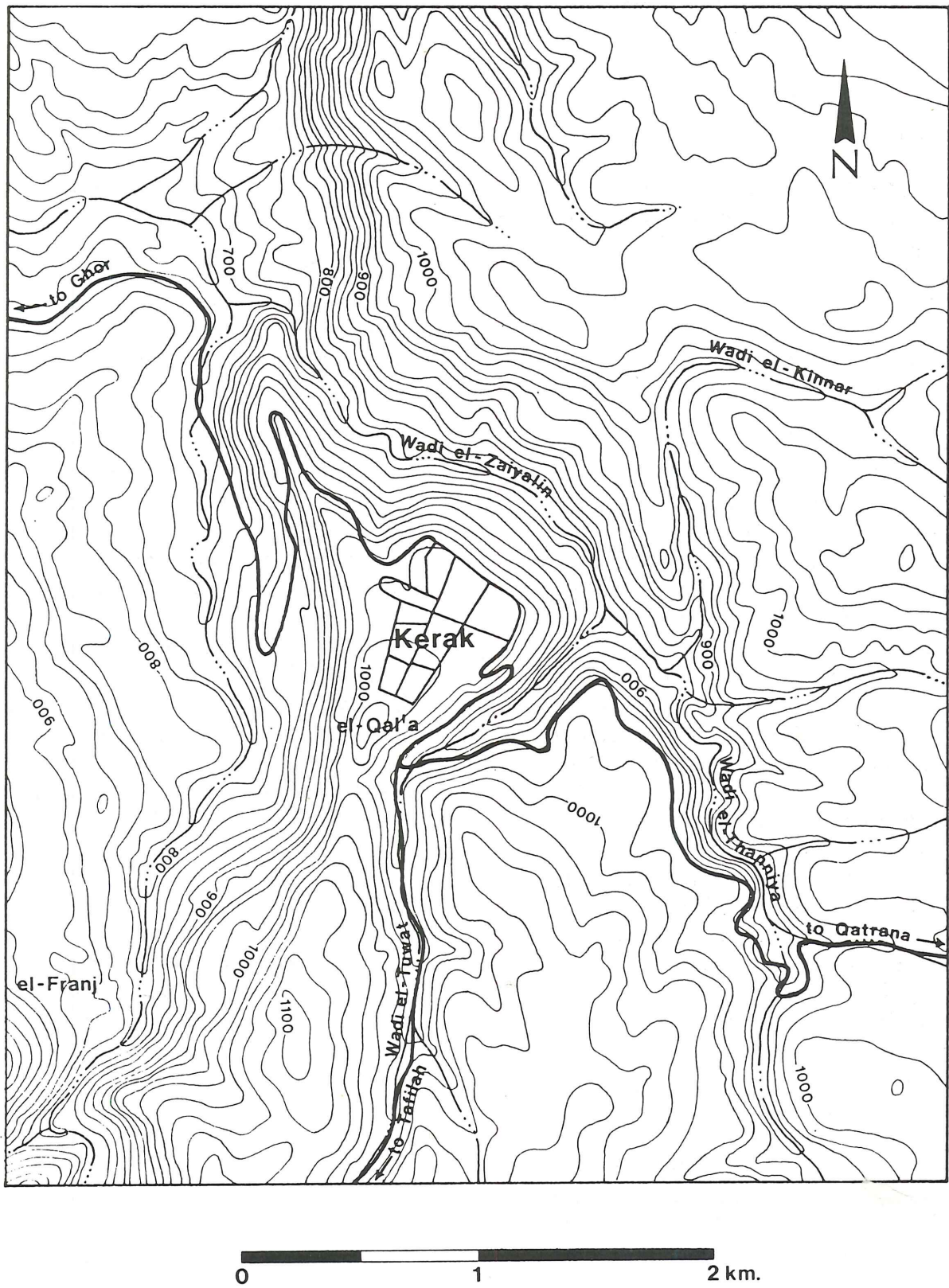


Fig. 1. Map of Kerak and its vicinity.

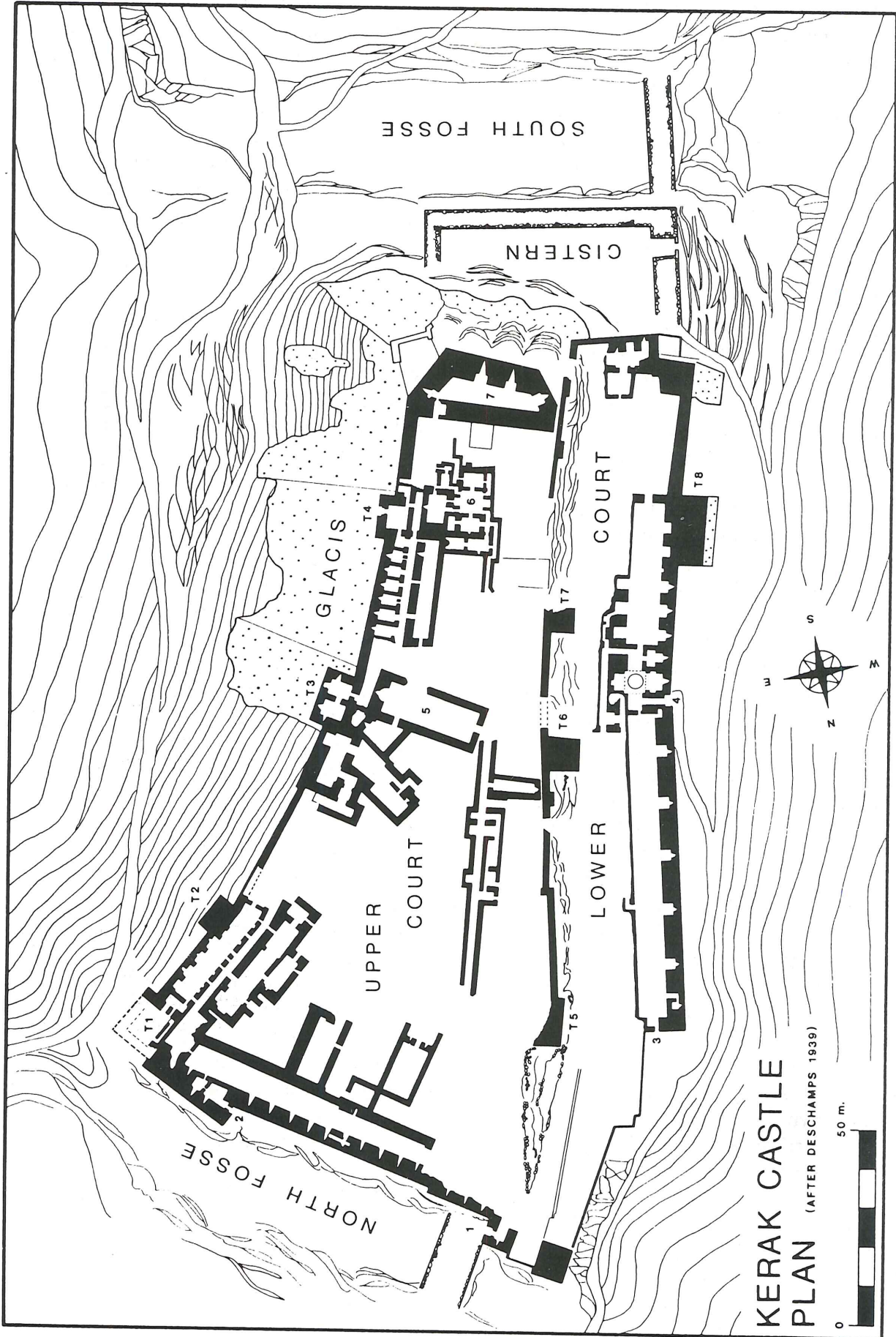


Fig. 2. Key: T1-8 = Towers; 1 = Entrance; 2-4 = Gates; 5 = Crusader Church; 6 = Palace Reception Hall; 7 = Donjon.

seigneur of the Oultre-Jourdain province of the Latin Kingdom of Jerusalem, received permission from King Fulk to begin construction of a new Crusader stronghold that was to take the name of *Crac* or *Crac de Montreal*. Despite tremendous investments and energies devoted to the construction of the immense walls of the castle and the central role of this site in the administration and defense of Oultre-Jourdain, *Crac* was destined to serve only a very brief interlude in the history of the Frankish colonization of the Levant. The capitulation of *Crac* to Ṣalah al-Din's forces in 1188 marks the beginning of seven centuries of Late Islamic history in Kerak. Throughout this period, Kerak served as the administrative and economic center of its district.

As an Ayyubid principality, Kerak was ruled by a succession of princes, several of whom were responsible for constructions at Kerak Castle. Al-'Adil (1192) 'improved' the fortress (Beha' al-Din, cited in Deschamps 1939: 75); al-Mu'azzam 'Isa rebuilt the towers of the citadel after the 1211 earthquake (Ghawanmah 1979: 211 ff.); al-Nasir Da'ud 'fortified' Kerak (Maqrizi, cited in Deschamps 1939: 77); and al-Mughith 'Umar repaired damages following the 1261 earthquake (Ghawanmah 1979: 211 ff.). Aside from these efforts to sustain the defenses of the Ayyubid fortress, additional constructions were also undertaken. Most notably, al-Nasir Da'ud built a *Dar al-Ṣaltana* or 'residence of authority' within the fortress, which later served as the residence for following governors (Ghawanmah 1979: 211 ff.).

Mamluk records of constructions at Kerak also focus largely on the defenses of the city and town, which suffered heavily from periodic earthquakes. Sulṭan al-Zahir Rukn al-Din Baybars (Baybars I) carried out a refortification campaign at Kerak in 1264 and included among his works Burj al-Zahir and Burj al-Banawy (Deschamps 1939: 96), towers which were linked to the defenses of the walled city of Kerak adjacent to the *qal'a*. The fortifications of the town and castle were subsequently

damaged by tremors in 1293, 1302, and 1458 as well as during Sulṭan Isma'il Ṣalih's assault on his brother al-Nasir Aḥmad, the ruler of Kerak, events that resulted in a series of reconstruction programs (Ghawanmah 1979: 211 ff.).

With respect to civil architecture, the most concentrated period of Mamluk public works constructions at Kerak occurred during the reign of Sultan al-Nasir Muḥammad, who in 1311 embellished the town by providing institutions characteristic of the sophisticated urban centers of the period, including a palace, mosque, bath, school, *khan*, hospital, and public park (al-'Asqalani 1348-50: 317). While it can be assumed that most of these facilities were located in the city of Kerak, the palace was most certainly constructed within the fortress.

The Palace Reception Hall

The Palace Complex lies on the subterranean level of the upper courtyard (Fig. 2: 6). Presently, a staircase south of the Crusader church leads directly into the corridor that skirted the Palace Reception Hall (Fig. 3) along its west and south sides. This corridor was later blocked by masonry and earthen fill rendering most of it inaccessible. Two entrances lead from the corridor to rooms flanking the Reception Hall. In the center of the hall is the courtyard joined to the north and south by barrel vaulted chambers, forming a tripartite linear arrangement of rooms. Smaller shallow bays or niches project to the east and west of the courtyard. As there is no evidence that this central space was vaulted, it must have remained an open courtyard, as it appears today. Other rooms in this part of the Palace Complex lie adjacent to the Reception Hall, though blockage has obscured the area to the south of the hall. The large room directly to the east of the hall was probably a mosque, for a *miḥrab* was set into its obliquely angled south wall.

The plan of the Reception Hall is derived from a *qa'a* arrangement in which a central space, or *qa'a*, was either linked

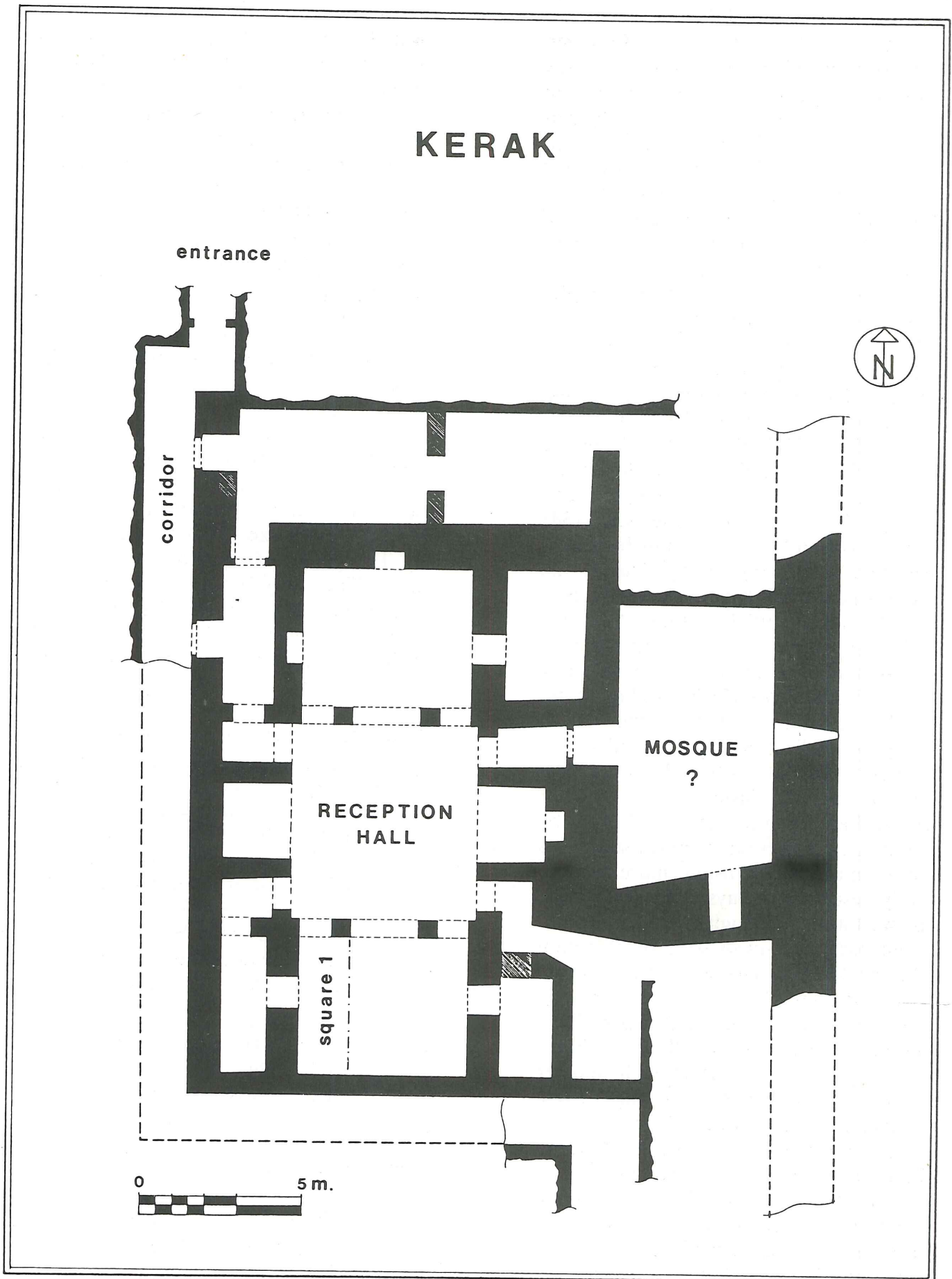


Fig. 3. The Palace Reception Hall.

to a linear series of adjoining chambers or functioned as the central court of a cruciform plan in which four *iwans* typically opened upon the *qa'a*. The development of the *qa'a* as a popular form of secular architecture embodying numerous variations is reflected in both domestic and palace architecture. Early examples include residences in the Fatimid city of Fuṣṭaṭ and Qa'at al-Dardin, a 12th century structure in Cairo (Hoag 1977: 150, Pls. 186-7). Among a wide range of examples illustrating this theme in Late Islamic palace architecture are: the Seljukid Qaṣr al-Banat in Raqqa, which has been attributed to Nur al-Din Maḥmud ibn Zenki during the second half of the 12th century (Toueir 1985: 318); the A.D. 1241 palace of the Ayyubid Sulṭan al-Ṣaliḥ Najam al-Din Ayyub on Rawḍa Island in Cairo (Hoag 1977: Pl. 218); and the A.D. 1388 Mamluk Dar al-Sitt Tunshuq in Jerusalem (Burgoyne 1987: Fig. 48.5). During the Mamluk period this type of Reception Hall was also an essential feature of private residences of the *amirs*, as illustrated by al-Tashtamuriyya in Jerusalem (Kessler 1979: 145; Burgoyne 1987: 474, Fig. 45.5).

The closest parallel to the Palace Reception Hall at Kerak is found in the Ayyubid palace at Shobak (Brown 1988a: Fig. 4). In both instances the *qa'a* or central chamber of the hall was flanked by adjoining chambers on the north-south axis and by small shallow *iwans*, more appropriately described as bays or niches, on the east-west axis. Although this plan expresses the basic four-*iwan* style of reception hall, the flanking chambers are not true *iwans* for they are separated from the central chamber or courtyard by partitions. At both Kerak and Shobak these partitions have large central portals with smaller doorways to either side forming triple entrances. This style of partitioning is also found in the reception hall of the Ayyubid Citadel at Buṣra (Abel 1956: Pl. VII).

The historical sources cited above refer to the construction of two palaces at Kerak in the Late Islamic periods, one raised by the Ayyubid prince al-Naṣir Da'ud during the first half of the 13th

century and the other sponsored by the Mamluk Sulṭan al-Naṣir Moḥammad at the beginning of the 14th century. While it is clear that this generic reception hall plan was incorporated within palaces of both the Ayyubid and Mamluk periods, the stratigraphic, numismatic, and ceramic data presented below provide solid evidence for a 14th century construction date. Thus, it appears reasonable at present to suggest that this is indeed the reception hall of Sulṭan al-Naṣir Moḥammad's palace at Kerak.

The Excavation in the Reception Hall Square 1

Square 1 was located in the south chamber of the Reception Hall, adjacent to the west wall (Fig. 3). The unit measured 4.20 m north-south x 2.0 m east-west, and was excavated to bedrock (Fig. 4). Two phases of deposition were encountered. The lower Phase I occupation dates to the Mamluk period and the upper Phase II can be assigned to Ottoman occupation. Table 1 provides a list of the excavated loci.

Table 1: Square 1 locus descriptions.

Phase	Locus	Description
I	K1:11	South Chamber South Wall
	K1:10	South Chamber West Wall
	K1:9	South Chamber North Wall
	K1:8	Leveling Fill
	K1:7	Leveling Fill
	K1:6	Plaster Floor Bedding
	K1:4	Occupation Layer
II	K1:5	Pit
	K1:3	Occupation Layer
	K1:2	Pit
	K1:1	Cobblestone Pavement (Floor Bedding)

Phase I: The Mamluk Period

The Phase I features include: (1) two sub-floor layers of leveling fill, (2) the original plaster floor or floor bedding of the south chamber, and (3) occupation

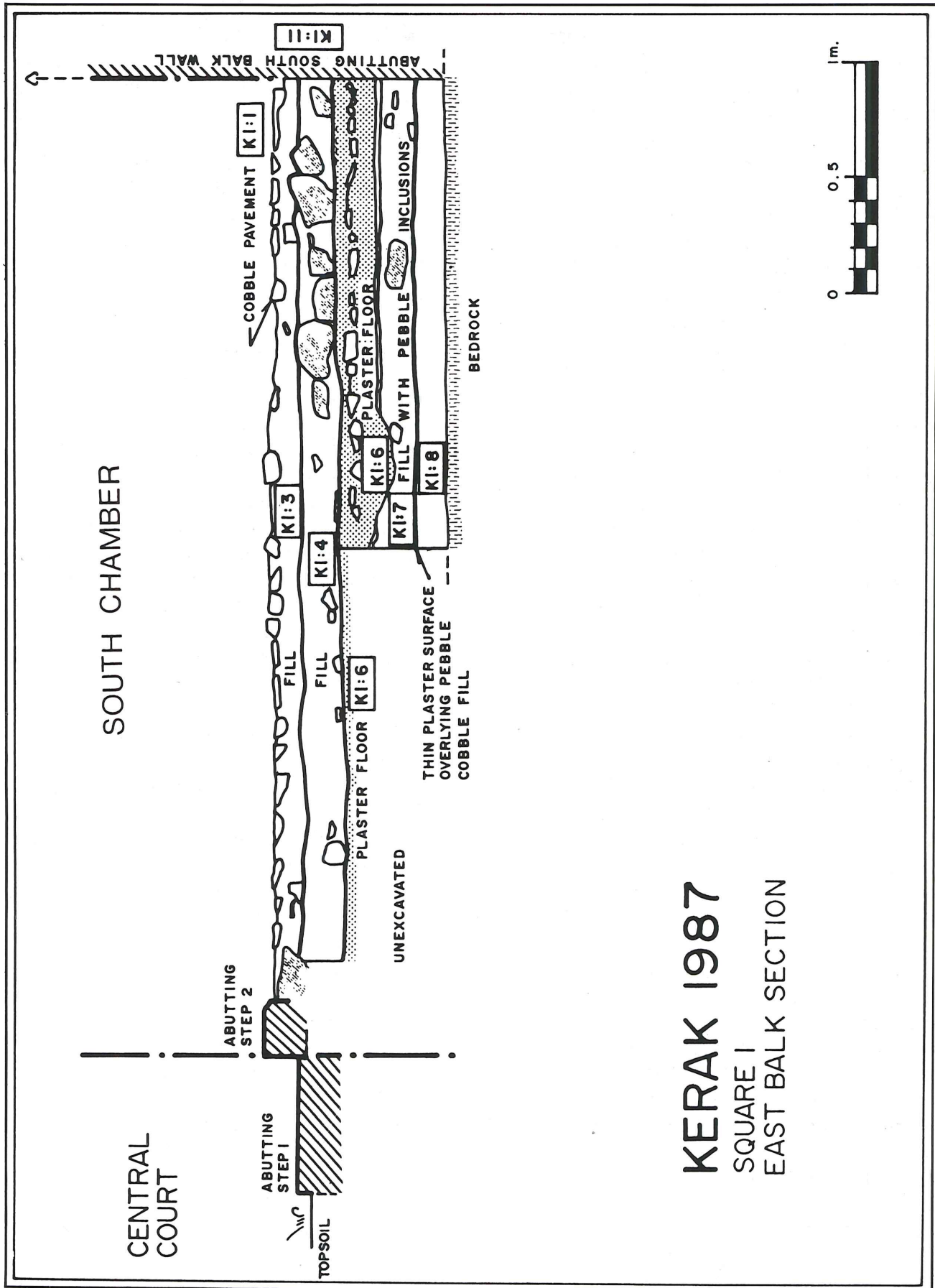


Fig. 4.

debris overlying the floor. The walls of the south chamber were founded directly upon the limestone bedrock scarp exposed at the bottom of Square 1. Overlying bedrock was locus K1:8, a fill 0.14 m deep, consisting of beige soil mixed with a high proportion of flint and limestone pebbles and cobbles. The upper surface of K1:8 was covered with a thin layer of plaster. The overlying locus K1:7 was also a fill layer, 0.16 m deep, containing numerous pebbles mixed with a dark brown earth matrix.

The artefacts from these sub-floor fills consisted mostly of very small ceramic fragments that predate the construction of the *qal'a*, though sherds associated with the Mamluk occupation were also present. Most critical however, is the coin from locus K1:7. Although the exact date of issue is illegible, the coin has been identified as the product of a 14th century Mamluk mint (J. Betlyon, pers. com.). As K1:7 was sealed by the plaster floor, this date determines that the Palace Reception Hall was built during, or possibly after, the 14th century.

The K1:6 plaster floor bedding averaged 0.25 m in thickness. A thin plaster layer was first applied over the K1:7 fill, and then a layer of pebbles mixed with light brown soil and plaster was set. Upon this layer a bed of cobblestones was laid and over them a 0.06-0.08 m thick solid white plaster bedding. This bedding was presumably paved or covered in some manner, though no impressions of an overlying flagstone floor could be detected.

The last feature in the Phase I sequence was K1:4, a ca. 0.20 m thick layer of occupation debris, K1:4, which accumulated over the K1:6 plaster bedding. This layer of light brown soil included a relatively large quantity of animal bone, and a substantial amount of pottery, including types that also occurred in the K1:7 fill beneath the floor bedding. The pottery from K1:4 included a number of types common during the Mamluk period.

In summary, the excavation of the Phase I loci indicates the following construction sequence. The site selected was

either without prior occupation debris or thoroughly cleaned before the construction of the Reception Hall. Leveling fills (K1:7 and K1:8) were inserted to raise the ground level above the foundation course. The plaster floor bedding, dated to the 14th century (or possibly later) was inserted but no indication of the actual floor surface survives, unless for some reason the upper plaster provided the actual floor. The deposition (K1:4) above the floor bedding, which contained a high density of both ceramics and faunal remains, attests to Phase I refuse accumulation after the floor was abandoned. This accruing of domestic debris from the Mamluk period in the Reception Hall demonstrates that this portion of the Palace was occupied much more informally than initially intended, though the reasons for this are not apparent. Earthquake activity during the 15th century is known to have damaged Kerak, yet the Reception Hall remains remarkably intact to this day. However, if other portions of the palace suffered more heavily, it is possible that the entire complex was abandoned as a royal palace or governor's residence.

Phase II: The Ottoman Period

The Phase II features in Square 1 include: (1) a packed earth surface, (2) an overlying fill, (3) two pits, and (4) at the uppermost level, a cobble pavement that lay just a few centimeters beneath topsoil. The Phase I K1:4 debris layer was covered by a packed earth surface a few centimeters in depth. In the southeast corner of the square, pit K1:5 was cut from this surface. Measuring 0.45 m north-south x 0.90 m east-west, it cut through the underlying Phase I K1:4 layer and K1:6 plaster bedding. The overlying K1:3 fill, 0.10-0.12 m in depth, was a layer of dark gray-brown soil. The wide range of ceramic types included in the K1:3 deposit reflect the general occupational history of the site from the Iron Age through the Ottoman period.

The most recent feature of the Phase II occupation is the cobblestone pavement

K1:1. Although the pavement lay immediately beneath the thin dusty topsoil of the south chamber, it was for the most part very well preserved. A large tract of plaster covered the cobbles in the southern portion of the square, while a smaller patch of plaster remained *in situ* along the north wall K1:9. Thus the pavement originally served as a cobble bedding that supported a plaster floor. A second Phase II pit, K1:2, was located beneath the cobble pavement in the northwest corner of the unit, where it cut through both the Phase II locus K1:3 and the underlying Phase I locus K1:4. As in the case of pit K1:5, this intrusive deposit was easily defined and removed.

In summary, the attribution of Phase II to the era of Ottoman rule in Transjordan needs some qualification, for none of the artefacts from the Phase II loci bear any direct relationship to points of absolute chronology. However, the ceramic distribution shows a marked increase in the number of fragments from handmade vessels. While handmade vessels of this type were produced from the 12th to 20th centuries, a proportional increase in handmade coarse wares is generally characteristic of the Ottoman period, during which time wheel-thrown pottery was extremely rare. Furthermore, some of the technological aspects of this pottery are also characteristic of assemblages from the Ottoman

period in Transjordan. This interpretation is supported by historical data as well. The *qal'a* was the headquarters for the Ottoman garrison from the time of Sultan Suleiman I (1520-1566) until the overthrow of Ottoman rule in 1918. During the long periods of tribal rule when the Ottoman Empire lost its authority in southern Transjordan, the tribes of Kerak also utilized the *qal'a*, as documented in historical sources (Rafeq 1966: 228) and among the numerous travelers' reports. Elders from Kerak recall the 20th century occupation of the Reception Hall, which apparently served as a prison. Thus the archaeological and historical data support an Ottoman period date for the Phase II occupation.

The Phase I Ceramics

The pottery sections presented in Figs. 5-7 illustrate most of the diagnostic Phase I sherds from the excavation. Only the Mamluk Phase I ceramics are included in this discussion. The overall distribution of pottery from Phases I and II is presented in Table 2. Table 3 specifically summarizes the distribution of the Phase I Late Islamic ceramic groups.

Imported Glazed Wares

Three varieties of imported underglaze painted wares were present in the

Table 2: The distribution of ceramics from Square 1.

Loc/ PB	Phase	HMCW	HMCW PNT	Cream	WDPW	Zir	Glaze	Glaze IMP	Byz/Rom	Nab	Hel	Iron	Other	Total
K1:1.1	II	22	1	7	1	3			5	8		2	10	59
K1:2.2	II	7	4	6						2			3	22
K1:3.3	II	17	6	33		3	8	2	28	32		2	18	149
K1:3.4	II			1					1					2
K1:5.5	II	2	1	3		2		1	2	1			5	17
K1:4.6	I	5	2	120		77	15	6	15	12		5	24	281
K1:4.7	I	1		41		24	6	1	1	2			7	83
K1:4.8	I			10		10	1							21
K1:6.10									2	5			9	16
K1:7.11	I	10		17		17		3	22	68		17	90	244
K1:7.12	I									6	1	2	16	25
K1:8.13	I	1							7	6			3	17

Key: HMCW = Handmade Coarse Ware; HMCW/PNT = Painted Handmade Coarse Ware; WDPW = Wheel-thrown Drainpipe Ware; Glaze IMP = Imported Glazed Ware.

Table 3: The distribution of Late Islamic ceramics: Phases I and II*.

Phase	Ceramic Types							Total
	HMCW	HMCW PNT	Cream	WDPW	Zir	Glaze	Glaze IMP	
I	17	2	188		128	22	10	367
II	46	11	47	1	6	8	2	121
Totals	63	13	235	1	134	30	12	488

* Excluding pit K1:5

Abbreviations: HMCW = Handmade Coarse Ware; HMCW PNT = Painted Handmade Coarse Ware; WDPW = Wheel-thrown Drainpipe Ware; Glaze IMP = Imported Glaze.

assemblage. The first is illustrated in No. 1; a bowl base fragment reconstructed from three adjoining sherds. This piece has a brown underglaze painted decoration and a pale green tinted glaze. This type of pottery is unusual in Transjordan, though similar types occur in Syria at Terqa (Mahmoud 1978: Pl. 3: 10, Abb. 12b) and Qaṣr al-Ḥayr (Grabar *et al.* 1978: F-1: 11, F-2: 5-6). The contexts for these pieces have been attributed to the 12th century (from a kiln) and the 12th to 13th centuries, respectively.

The second type of imported ware, commonly known as 'Syrian Blue and White' pottery, is illustrated by bowl fragments shown in Nos. 4-5. These fragments are characterized by blue paint upon a white slip and a clear glaze covering. Base No. 5 is decorated with a floral representation and bears an S-shaped potter's autograph on the underside. Syrian Blue and White ware is well-attested and a number of examples from Ḥama have been described and dated from the 14th century, Hama Type XII (Riis and Poulsen 1957: 224-30). The broad flaring bowl rim shown in No. 6 represents the third category of imported ware, which features blue and black paint over a white slip with a clear glaze finish. This decorative style correlates with Hama Type XI (*ibid.*: 202-24), which has been attributed to the late 13th and 14th centuries. Additional examples have occurred in Phase D (*ca.* 1265 - *ca.* 1390) at Burj al-Aḥmar in Palestine (Pringle 1986: 150). As both the blue painted and

blue and black painted pottery appear in Syria and in Egypt (Jenkins 1984), it may be misleading to suggest a definite Syrian origin for the pieces from Kerak.

Glazed Wares

Locally common monochrome glazed wares from Phase I are presented in Nos. 2-3. Such bowls, typically with yellow or green glazes and displaying a wide range of variation in rim profile, were part of the ceramic repertoire of Transjordan from the 12th century to at least the 15th century, as demonstrated by assemblages from el-Wu'eira (Brown 1987: Fig. 10:28); Ḥesban (Sauer 1973: 52-3, 56-63); and Tell Abu Qa'dan (Franken and Kalsbeek 1975: 131-141; Sauer 1976: 94). Similarly, monochrome glazed wares are attested in Phases B (*ca.* 1100 - *ca.* 1150) and C (*ca.* 1191 - *ca.* 1265) at Burj al-Aḥmar, but become much more common in Phase D (*ca.* 1265- *ca.* 1390) (Pringle 1986: 147). These and other distributions show that the monochrome glazed wares achieved their highest popularity from the second half of the 13th century through the 14th century.

Cream Ware

The corpus of wheel-thrown cream wares from Phase I is relatively large. This assemblage is characterized by unslipped fabrics with colours ranging from shades of white, cream, greenish-white, buff, and pink, which have been subsumed under the

designation 'cream ware'. With respect to form, surface collections from Kerak castle indicate that *ibriqs*, jugs, jars, and occasionally bowls constituted most of the vessel types produced with this fabric. Examples are illustrated in Nos. 7-24. This genre of pottery is also attested at Shobak in the Phase III Mamluk deposits (Brown 1988a: Fig. 15: 34-9). Although mold-made, lamp fragment No. 25 can also be included in this category on the basis of its fabric. The cream wares generally lack paint, though it may be noted that the jug/jar rim shown in No. 12 has some red paint on the interior of the neck, a feature that is puzzling. The bowl fragment shown in No. 11 also shows very faint traces of paint along the rim. However, the inclusion of this sherd in the Phase I corpus should be regarded as tentative, for the form, as well as the paint, indicate that it could be an Iron Age product. The well-known sugar pot form, shown in No. 15 is also included in this category because it shares similar attributes of technology and ware as found among the other cream wares. Examples of sugar pots have occurred at Tell Abu Qa'dan in Phases H-T (Franken and Kalsbeek 1975: 143-54), which Sauer suggests encompass the Ayyubid and Mamluk periods (1976: 94). Fragments from two vessels with punctured and incised decorations are represented in Nos. 23 and 24. Similar pieces from Burj al-Aḥmar first occur during the Phase D (ca. 1265-1390) Mamluk occupation (Pringle 1986: 145, Fig. 48).

Phase I: Handmade Coarse Wares

The only handmade coarse wares from Phase I that are suitable for illustration are the painted pieces shown in Nos. 26-7. Although these fragmentary pieces provide only a limited and inadequate representation of the original painted designs, they do suggest that the vessels were decorated in the geometric style of painting or in a style derived from it. Handmade painted pottery is documented in Transjordan from the 12th century (Brown 1988b) to the 20th century (Mershen 1985: Fig. 2). The speci-

fically geometric style of painting that is commonly referred to as "Ayyubid-Mamluk" appears particularly widespread in Transjordan from the 13th to the 15th centuries, as shown by assemblages from Hesban (Sauer 1973: 53-63, Pl. 4) and Tell Abu Qa'dan (Franken and Kalsbeek 1975: 167-203; Sauer 1976: 94). Because of chronological longevity and the tremendous variability in materials and techniques of production, the chronological interpretation of these wares is still almost completely dependent upon their stratigraphic context.

Zir Ware

This term has been applied to the assemblage of sherds belonging to large handmade *zirs*, storage jars, and bowls, examples of which are shown in Nos. 28-31. A very large quantity of these sherds was present in the Phase I loci, though very few diagnostic pieces were among them. A rim similar to those of the tall-necked jars shown in Nos. 28-29 occurred at Shobak (Brown 1988a: Fig. 15: 46) but not from a stratified context. Bowl fragments comparable to those shown in Nos. 30-31 are also known from the surface at Shobak.

Concluding Remarks

In both its architectural features and material culture attributes, the palace at Kerak provided a symbol of royal prestige designed to reinforce elite status. As such it stood in sharp contrast to the socio-economic environment of the rural hinterland. This distinction of the royal enclave can be described in terms of patterns of consumption. Pottery, an ubiquitous feature of any household of the Mamluk period, provides a measure of this contrast between the ruling Mamluk elite and the population at large.

The pottery from Phase I constitutes a very different assemblage than would be expected from the average Mamluk site in the Kerak region. Generally, Mamluk assemblages from surface surveys of rural sites on the Kerak plateau (Miller 1979)

contain two types of pottery: a large proportion of handmade coarse ware, often painted with geometric motifs, and a lesser presence of locally common monochrome glazed wares (Brown forthcoming). Other ceramic types do occur but in much smaller proportions. For example, very few cream wares occur among these assemblages and imported wares are rare. An inverse situation is evident in the Phase I corpus from the Palace. In this context handmade coarse wares and local glazed wares are represented to a much lesser extent while wheel-thrown cream wares dominate the assemblage and there is a notable presence of imported glazed wares as well. From these contrasting distributions, which characterize on the one hand the rural settlements of the Kerak plateau and on the other the royal palace at Kerak Castle, there emerges a distinct pattern of ceramic taste that can be attributed to the elite nature of the palace residence and its resources.

As bowls and other serving vessels have high social visibility, it is not surprising to find that almost a third of the glazed wares in the Phase I assemblage from the

Palace are imported pieces that were clearly not widely available to the general population, which relied upon the local southern Levantine monochrome glazed serving vessels. Typically, utilitarian forms bearing less social display value, such as *ibriqs*, jugs and jars were made by hand during the Ayyubid-Mamluk period and their remains, constituting the handmade coarse ware group, are prevalent among the rural sites of this era. Yet an entirely different industry provided these same vessel types for palace use, as noted in the specialized wheel-thrown cream wares. Again it can be inferred that cost or other restrictions made these wheel-thrown utilitarian vessels less available to rural households. These features of the Phase I assemblage characterize a repertoire of 'palace pottery' that reflects the distinctly elite pattern of consumption among the Mamluk ruling class.

Robin Brown
Department of Anthropology
State University of New York
Binghamton N.Y. 13901
USA

WARE DESCRIPTIONS

Introduction to the ware descriptions: W = ware; S = slip; P = paint; G = glaze; I = interior; E = exterior; C = core; D = diameter; (m) = mottled; (H) = handmade. Numerical color values from: Munsell (1975) and Kornerup and Wanscher (1981).

<i>Sherd No.</i>	<i>Unit/Loc/PB Reg. No.</i>	<i>Phase</i>	<i>Description: Form/Ware/Surface/Core</i>
1	K1:7.11 242-4	I	Base: W = 10YR 8/2 White; IP = 5/E5 Brown; IG = 25/3B Pale Green; C = none.
2	K1:4.6 238	I	Bowl: W = 10YR 7/4 V. Pale Brown; I&EG = 4/E7 Yellow-Brown; C = none; D = 21.
3	K1:4.6 145	I	Bowl: W = 7.5YR 8/4 Pink; IG = 4/B6 Yellow; C = none; D = 25.
4	K1:4.6 111	I	Bowl: W = 10YR 8/2 White (Frit); I&ES = White; I&EP = 21/E5 Blue; I&EG = Clear; C = none; D = 22.
5	K1:4.6 234-6	I	Base: W = White (Frit); IS = White; I&EP = 21/D7 Blue; IG = Clear; C = none.
6	K1:4.6 237	I	Bowl: W = White (Frit); I&ES = White; IP = 21/D7 Blue, N3/0 V. Dark Gray; EP = 21/D7 Blue; I&EG = Clear; C = none; ID = 19; ED = 25.

ADAJ XXXIII (1989)

7	K1:4.6 143	I	Bowl: W = 2.5Y 8/2 White; Self Slip; C = 70%; D = 9.
8	K1:4.6 70	I	Bowl: W = 10YR 8/2 White; Self Slip; C = 99%; D = 18.5.
9	K1:4.7 29	I	Bowl: W = 10YR 8/3 V. Pale Brown; Self Slip; C = none; D = 16.
10	K1:4.6 264	I	Bowl: W = 5YR 7/6 Reddish Yellow; Self Slip; C = none; D = 20.5
11	K1:4.6 31	I	Bowl: W = 7.5YR 7/4 Pink; Self Slip; EP = 10R 6/4 Pale Red; C = none; D = 17.
12	K1:4.6 86	I	Jug/Jar: W = 7.5YR 7/4 Pink; Self Slip; IP = 10R 6/4 Pale Red; C = none; D = 6.
13	K1:4.6 199	I	Hole Mouth Jar: W = 10YR 8/2 White; Self Slip; C = none; D = 11.
14	K1:4.6 270	I	Jug/Jar: W = 10YR 8/3 V. Pale Brown; Self Slip; C = none; D = 11.
15	K1:4.6 231	I	Sugar Pot: W = 10YR 8/2 White; Self Slip; C = none; D = 12.
16	K1:4.6 190	I	Base: W = 10YR 8/3 V. Pale Brown; Self Slip; C = none.
17	K1:4.6 126	I	Base: W = 10R 6/6 L. Red; ES = 10YR 8/2 White; C = none.
18	K1:4.6 24	I	Base: W = 7.5YR 7/2 Pinkish Gray; Self Slip; C = none.
19	K1:4.7 35	I	Base: W = 7.5YR 7/2 Pinkish Gray; Self Slip; C = none.
20	K1:4.6 84	I	Handle: W = 10YR 8/2 White; Self Slip; C = 99%.
21	K1:4.6 116	I	Handle: W = 10YR 8/2 White; Self Slip; C = 99%.
22	K1:4.6 85	I	Handle: W = 10YR 8/2 White; Self Slip; C = 99%.
23	K1:4.7 16	I	Body Sherd: W = 5Y 8/2 White; Self Slip; C = 99%.
24	K1:4.6 30	I	Body Sherd: W = 5Y 8/2 White;; Self Slip; C = 99%.
25	K1:4.7 51	I	Lamp: W = 2.5Y 8/2 White, 5YR 6/4 L. Reddish Brown; Self Slip; C = 99%.
26	K1:4.6 95	I	Body Sherd: W = 5YR 7/4 Pink; ES = 5YR 6/4 L. Reddish Brown; EP = 10R 4/1 D. Reddish Gray; C = 99%; (H).
27	K1:4.6 271	I	Body Sherd: W = 5YR 7/2 Pinkish Gray; IS = 10R 6/4 Pale Red; ES = 5YR 7/4 Pink (m); EP = 5YR 4/2 D. Reddish Gray; C = 90%; (H).
28	K1:4.7 21	I	Zir: W = 2.5Y 8/2 White; Self Slip; C = 99%; D = 19; (H).
29	K1:4.8 1,5	I	Zir: W = 10YR 7/2 L. Gray; Self Slip; C = none; D = 18; (H).
30	K1:4.6 120, 232	I	Bowl/Vat: W = 10YR 8/2 White; Self Slip; C = none; D = 38; (H).
31	K1:4.6 6	I	Bowl/Vat: W = 10YR 8/2 White; Self Slip; C = none; D = 40; (H).

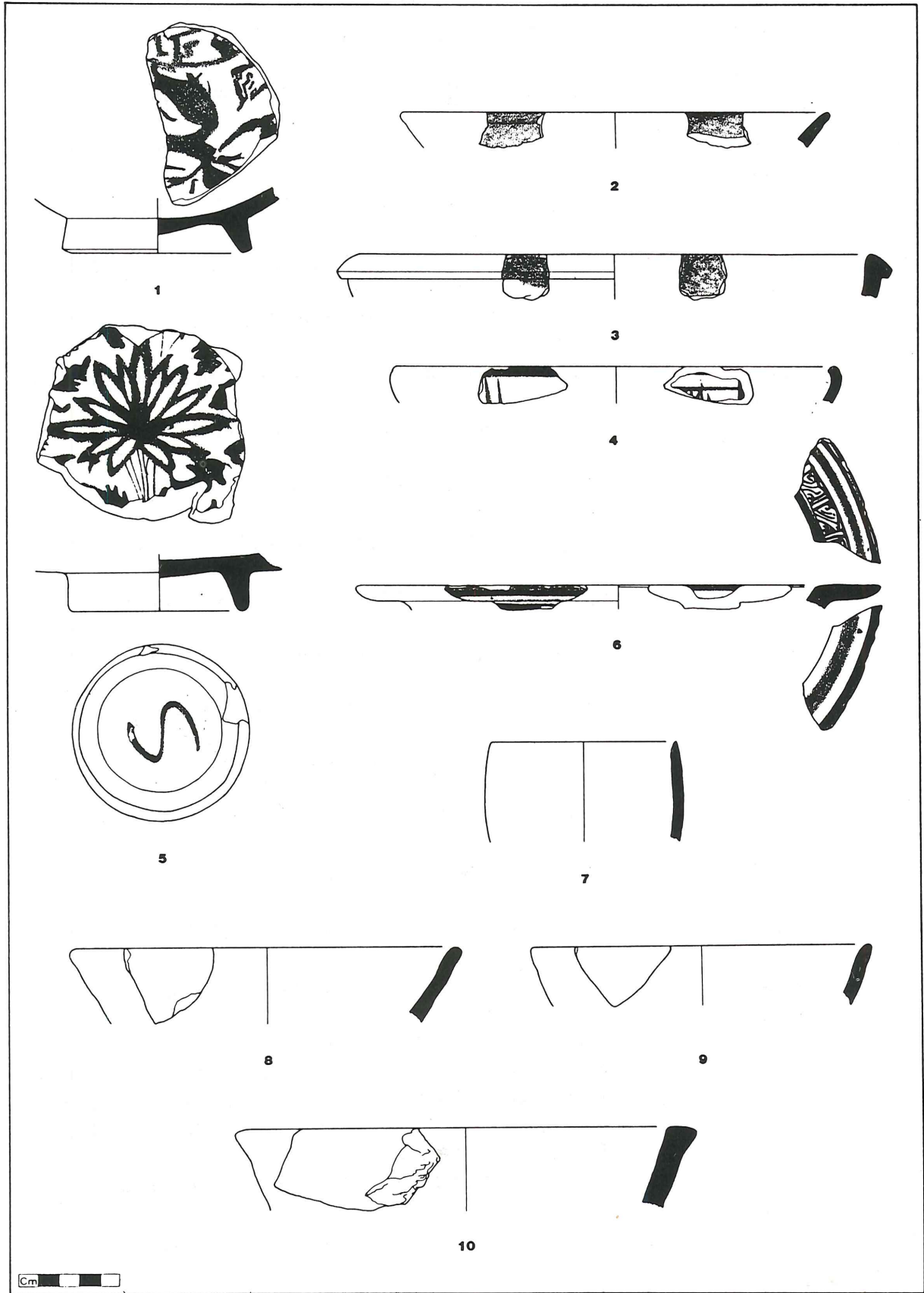


Fig. 5. Phase I ceramics.

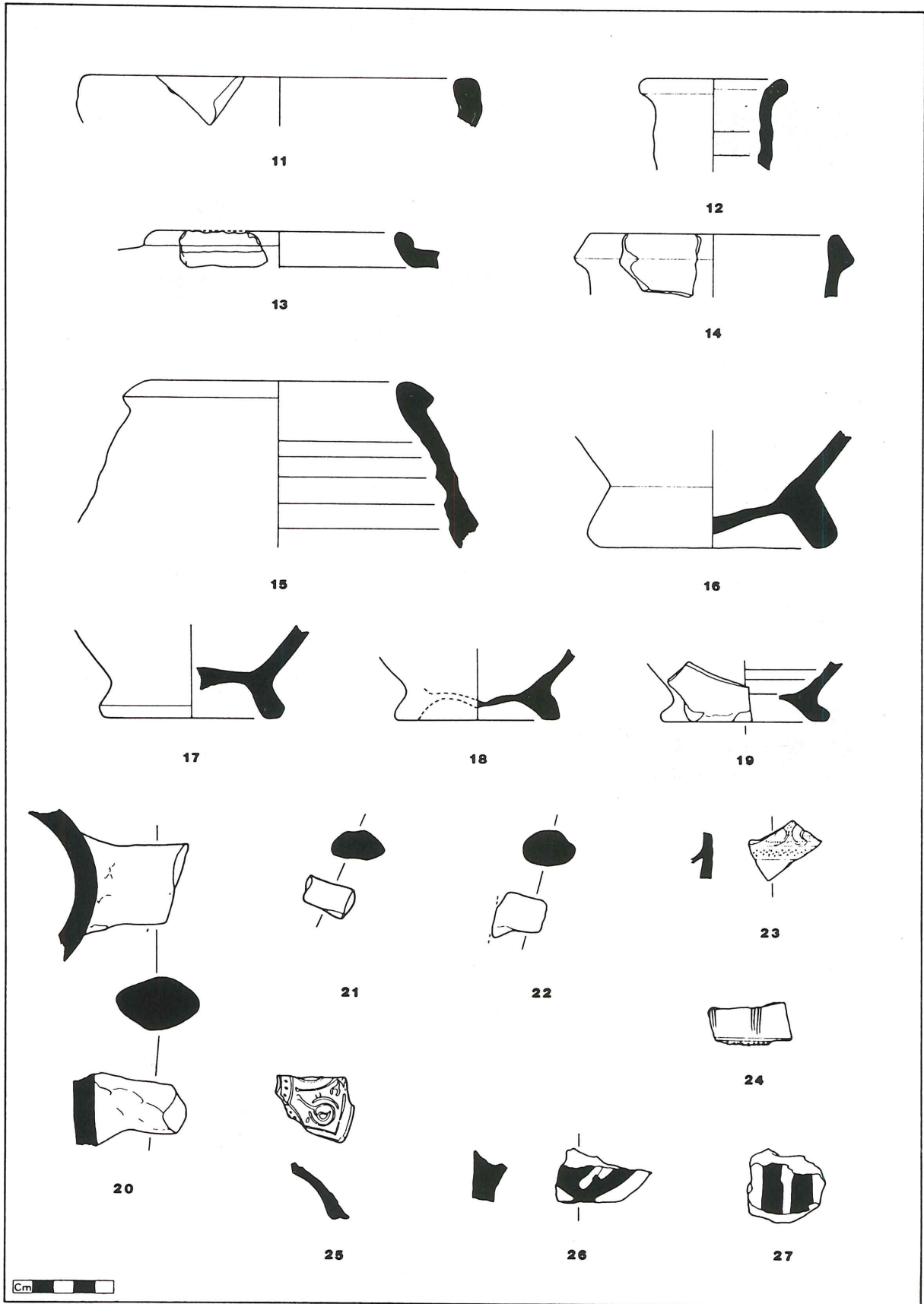


Fig. 6. Phase I ceramics.

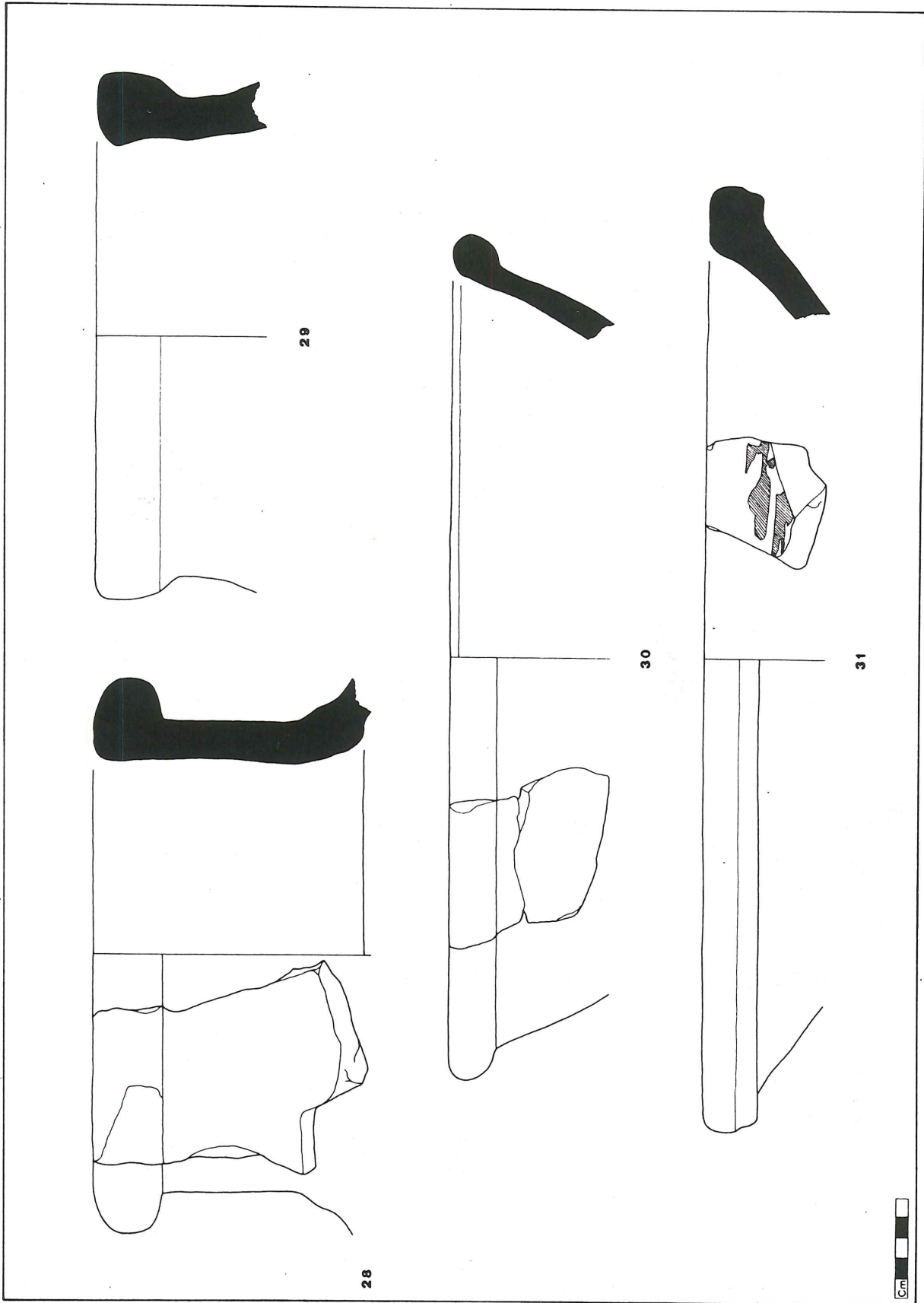


Fig. 7. Phase I ceramics.

References

- Abel, A.
 1956 La citadelle eyyubite de Bosra Eski Cham. *Les Annales Archéologiques de Syrie* 6: 95-138.
- Al-'Asqalani
 1348-50 *Ad-Durar al-Kāmina fi A'yān al-Mā'at ath-Thāmina*. Vol. II. Hyderabad: Osmania Oriental Publications Bureau (1973).
- Brown, R.
 1984 *Late Islamic Settlement Patterns on the Kerak Plateau, Trans-Jordan*. Unpublished M.A. Thesis. Department of Anthropology, State University of New York — Binghamton.
 1987 A 12th Century A.D. Sequence from Southern Transjordan: Crusader and Ayyubid Occupation at el-Wu'eira. *ADAJ* 31: 267-288.
 1988a Report of the 1987 Excavations at el-Wueira. Ms. on file: Department of Antiquities Registration Centre, Amman.
 1988b Report of the 1986 Excavations at Shobak. Ms. on file: Department of Antiquities Registration Center, Amman.
- forth- Ceramics from the Kerak Plateau: The Chalcolithic Through the Modern Eras.
 coming In J.M. Miller (ed.), *Central Moab Survey*, Vol. I.
- Burgoyne, M.
 1987 *Mamluk Jerusalem: An Architectural Study*. Essex: Scorpion Publishing.
- Deschamps, P.
 1939 *Les chateaux des croisés en Terre Sainte*, Tome II. Paris: Paul Geuthner.
- Franken, H.J. and J. Kalsbeek
 1975 *Potters of a Medieval Village in the Jordan Valley*. Amsterdam and New York: North-Holland Publishing Co.
- Ghawanmah, Y.D.
 1979 *Tārīkh Sharqī al-Urdunn fi 'Aṣr Dawlat al-Mamālīk al-'Ula (al-Qism al-Ḥaḍari)*. Amman: Wizarat al-Thaqafa wa-al-Shabab.
- Grabar, O. et al.
 1978 *City in the Desert: Qasr al-Hayr East*. Cambridge MA: Harvard University Press.
- Hoag, J.D.
 1977 *Islamic Architecture*. New York: Abrams.
- Jenkins, M.
 1984 Mamluk Underglaze-painted Pottery: Foundations for Future Study. *Muqarnas* 2: 95-114.
- Kessler, C.
 1979 The Tashtimuriyya in Jerusalem in the Light of a Recent Architectural Survey. *Levant* 11: 138-161.
- Kornerup, A. and J.H. Wanscher
 1981 *Taschenlexikon der Farben*. Zürich and Göttingen: Muster-Schmidt.
- Mahmoud, A.
 1978 Die Industrie der Islamischen Keramik aus der zweiten Season. Terqa Preliminary Reports, No. 5. *Syro-Mesopotamian Studies* 2/5: 1-15.
- Mershen, B.
 1985 Recent Hand-made Pottery from Northern Jordan. *Berytus* 33: 75-87.

Miller, J.M.

1979 Archaeological Survey of Central Moab: 1978. *BASOR* 234: 43-52.

Munsell

1975 *Munsell Soil Color Charts*. Baltimore: Munsell Color Co.

Pringle, D.

1986 *The Red Tower (al-Burj al-Ahmar): Settlement in the Plain of Sharon at the Time of the Crusaders and Mamluks, A.D. 1099-1516*. Monograph Series I. London: British School of Archaeology in Jerusalem.

Rafeq, A.

1966 *The Province of Damascus 1723-1783*. Beirut: Khayats.

Riis, R.J. and V. Poulsen

1957 *Hama fouilles et recherches 1931-1938, IV, 2: les verreries et poteries médiévales*. Copenhagen: Nationalmuseet.

Sauer, J.A.

1973 *Heshbon Pottery 1971*. Andrews University Monographs Vol. VII. Berrien Springs: Andrews University.

1976 Pottery Techniques at Tell Deir 'Alla. *BASOR* 224: 91-94.

Toueir, K.

1985 Der Qaşr al-Banāt in ar-Raqqa: Ausgrabung, Rekonstruktion und Wiederaufbau (1977-1982). *Damaszener Mitteilungen*, 2: 298-319.

ABBASID POTTERY FROM EL-MUWAQQAR

by
Mohammad Najjar

Between March 6th and April 13th 1989 a short season of excavations was conducted by the Department of Antiquities at el-Muwaqqar.¹

El-Muwaqqar is situated approximately 30 km to the southeast of Amman. The site is recorded by Yaqut el-Ḥamawi in *Mu'jam al-Buldan*². During the last century and the beginning of this century the site was visited by many explorers and plans were made of the Palace.³

During the 1970s-80s the site was revisited by various scholars,⁴ who mentioned the Palace at el-Muwaqqar within the wide framework of Umayyad Palaces in Jordan.

The main goal of the excavations was to check the state of preservation of the site in order to study the possibility of carrying out conservation work at the Palace.

A grid was set up at the site, with the main vertical and horizontal axes dividing it into four areas, designated by Roman numerals. Each area was then subdivided into 5 x 5 m squares. Seven squares in different areas were completely or partially excavated.

A. ARCHITECTURE

Area I

Sq. D5, D6 (Fig. 1)

One wall (W.11: exposed length 5 m, width 1.3 m, height 0.70 m) was uncovered. It had been founded on bedrock. The upper section of its inner face was coated with plaster which was decorated with dark red paint. A cement floor, 15 cm thick, is associated with this wall, which is probably the southern wall of the Palace.

Sq. A2, B2, C2 (Fig. 2)

Some walls were uncovered in these squares, but due to the limited area of the excavations it is difficult to explain the function of these walls at this stage. The most characteristic feature is a flagstone pavement, associated with the first occupational phase (Umayyad).

Area II

Sq. D3 (Fig. 3)

A large wall was found in this square

1. The excavation staff consisted of Mohammad Najjar (director), Hanan Azar and Rula Qusous (supervisors), Sami Abbadi (surveyor), Ali Da'jeh (draftsman), Bughos Darkejian and Khalil Abd el-Hadi (photographers).
2. Yaqut el-Ḥamawi, *Mu'jam al-Buldan*, Vol. V, Beirut, 1986, p. 226.
3. Brünnow & von Domaszewski, *Die Provincia Arabia*, Strassburg 1904-1909, Vol. II, p. 182-189, Figs. 757-771 and Pl. XLIX; A. Musil *Kuseir Amra*, Wien, 1907, I, p. 27-37, Figs. 20-30, 87 and 88 and p. 102; R.W. Hamilton 'An Eighth Century Water-gauge at al-Muwaqqar', *QDAP* XII (1946), p. 70-72; *idem* 'Some Eighth Century Capitals from al-Muwaqqar', *QDAP* XII (1946), p. 63-69; L.A. Mayer, 'Note on the Inscription of al-Muwaqqar', *QDAP* XII (1946),

p. 73-74.

4. Gh. Bisheh, 'Qasr al-Hallabat: An Umayyad Desert Retreat or Farm-Land', in A. Hadidi (ed.), *Studies in the History and Archaeology of Jordan*, Vol. II, Amman, 1985, p. 263-267; P. Carlier, 'Qastal al-Balqa: An Umayyad Site in Jordan', in M.A. Bakhit and R. Schick (eds.), *The Fourth International Conference on the History of Bilad al-Sham During the Umayyad Period*, English Section, Vol. II, Amman, 1989, p. 104-139; G.R. King, 'The Umayyad Qusur and Related Settlements in Jordan', in M.A. Bakhit and R. Schick (eds.), *The Fourth International Conference on the History of Bilad al-Sham During the Umayyad Period*, English Section, Vol. II, Amman, 1989, p. 76; F. Zayadine, *Kuseir Amra*, Amman, 1977, p. 1-21.

AL_MUWAQQAR.89

Area.I

Sq. D.5.6

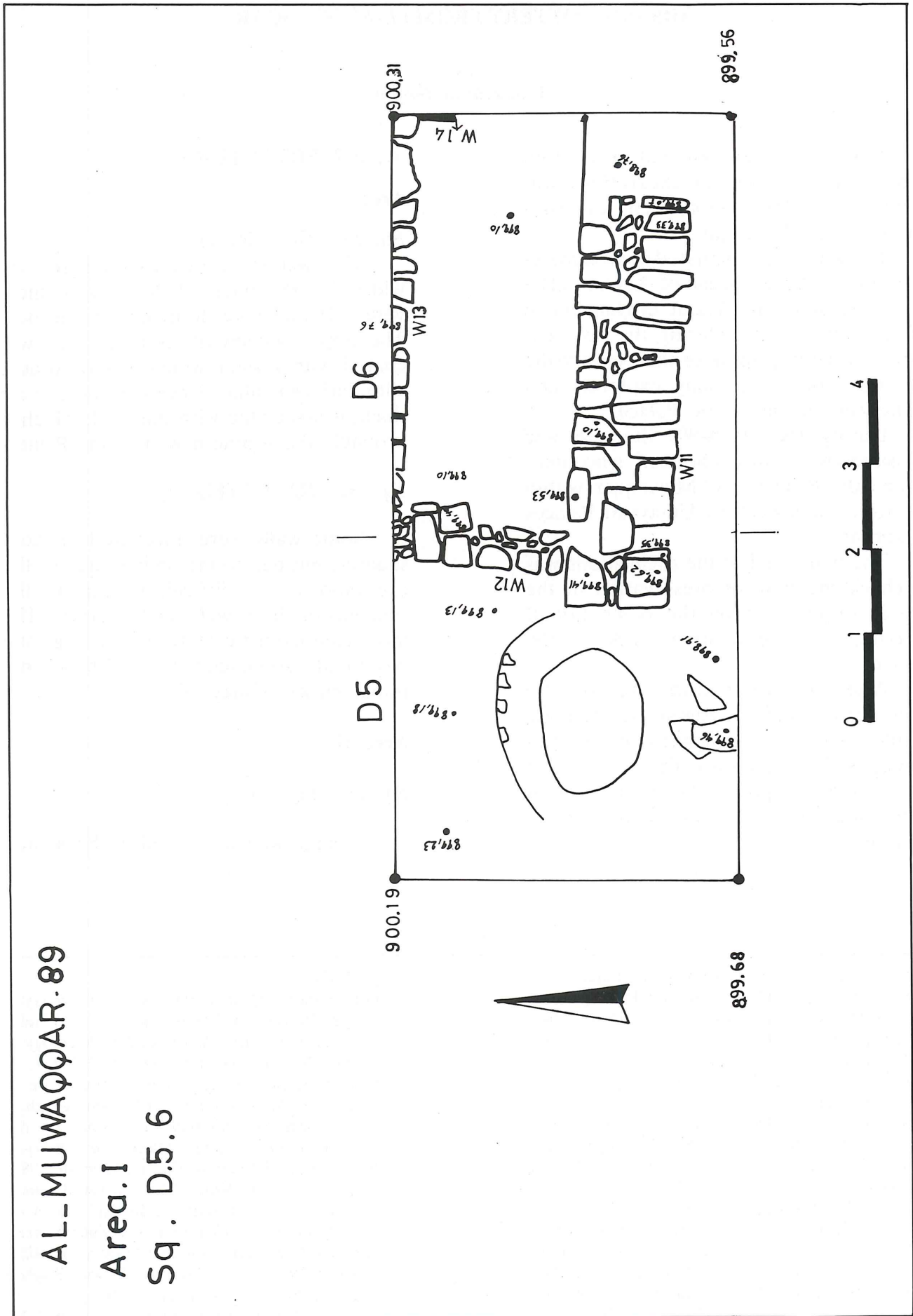


Fig. 1

AL— MUWAQQAR. 89

Area 1

Sq. A2, B2, C2

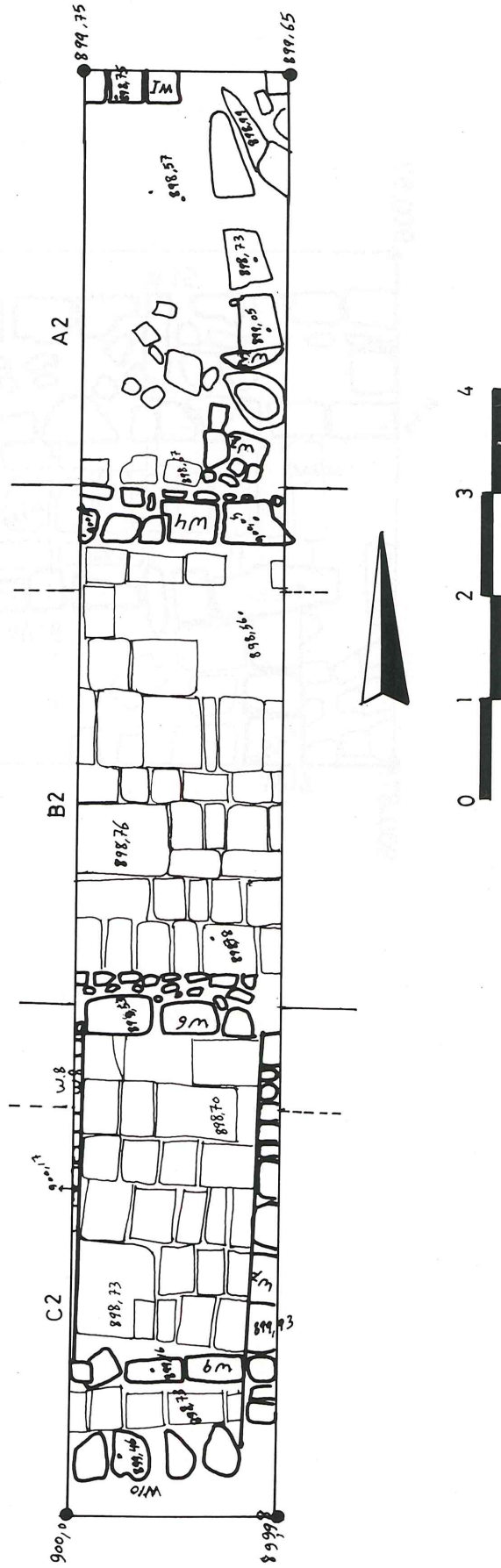


Fig. 2

AL.MUWAQQAR 89
Area II
Sq • D3

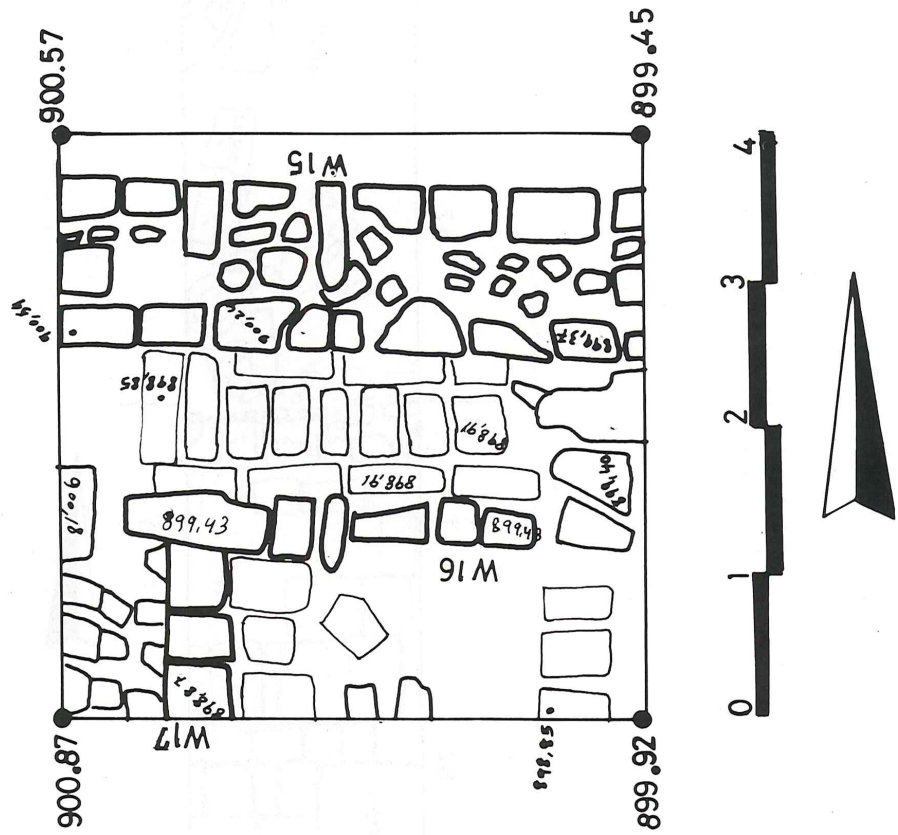


Fig. 3

(W.15: exposed length 4 m, width 1.1 m, height 1.6 m). It was built with two parallel rows of ashlar filled with small cobbles fixed by mortar in between. Thin layers of fine plaster were used to bind the stones (average thickness 3 cm). The wall was coated on the interior with two rough inner coats and one fine outer coat of plaster. A flagstone pavement is associated with this wall, which could be the northern wall of the Palace.

Area IV

Sq. H14 (Fig. 4).

This square is located outside the Palace. Two small walls (W.18 and W.19) were found associated with a beaten earth floor. The most striking pottery finds came from this square.

B. POTTERY

Fifty six potsherds and four complete vessels, excavated mainly in two squares, H14 and C2, are published here.

The pottery from Sq. H 14 will be, in my opinion, the key for understanding and distinguishing the Abbasid pottery from el-Muwaqqar.

Unfortunately the dating of the pottery is not based on coins, but on comparative architectural and typological evidence. Beside the differences in shape and decoration we were fortunate enough to find some datable material in stratified deposits (small glazed jar and typical Abbasid lamps).

Architecturally the walls in Sq. H14 and the beaten earth floor are quite different from the Umayyad walls and floors of the Palace and they could not have been built against the front of the Umayyad Palace while it was still in use as a palace. These walls should be contemporary with the second phase of occupation in the Palace itself.

Twenty eight potsherds were chosen from Sq. C2 inside the Palace in order to show the correlation between the pottery inside and outside the Palace.

Concluding Remarks

1. It has been thought for a long time that the Palace at el-Muwaqqar is completely destroyed. The excavations showed that a large part of the building is still *in situ* (especially the northern part, where the wall is still standing to a height of 1.6 m and probably higher in the north-eastern corner). The flagstone pavements of the Palace were found in almost all the squares. In this case the plan of the Palace could be easily reconstructed if excavations were continued for around three more seasons.

A large part of the Palace could be exposed and conserved and more detailed studies of the decorations and stucco in the Palace, which were protected for a long time by the destruction layer, could be undertaken. Besides, ten vaults of the basement are still in a relatively good condition and need only be cleaned.

To the west of the Palace the outline of a niche or tower is still visible at the surface, and a mosaic floor was found there. (See Arabic section in this volume, Pl. 5, p. 30).

2. A second architectural phase and occupation was excavated in the Palace. It is obvious from Sq. D5 (W.12), A2 (W.4) and oven (*tannur*) loc.4, D3 (W.16, 17) and H 14 (W.18, 19) that all these walls belong to a second phase of occupation. It seems that after a partial destruction of the Palace by the earthquake of A.D. 747, the remains of the Palace were used by the local population. The destruction layer was cleared (the walls of the second phase were built directly above the flagstone pavement of the Umayyad Palace) and the Palace and its surrounding area (Sq. H14) were reoccupied.

After one century and probably slightly later the Palace was abandoned after another destruction (earthquake?) later in the 9th century (during this period Jordan was struck by earthquakes three times in 847, 853-54,

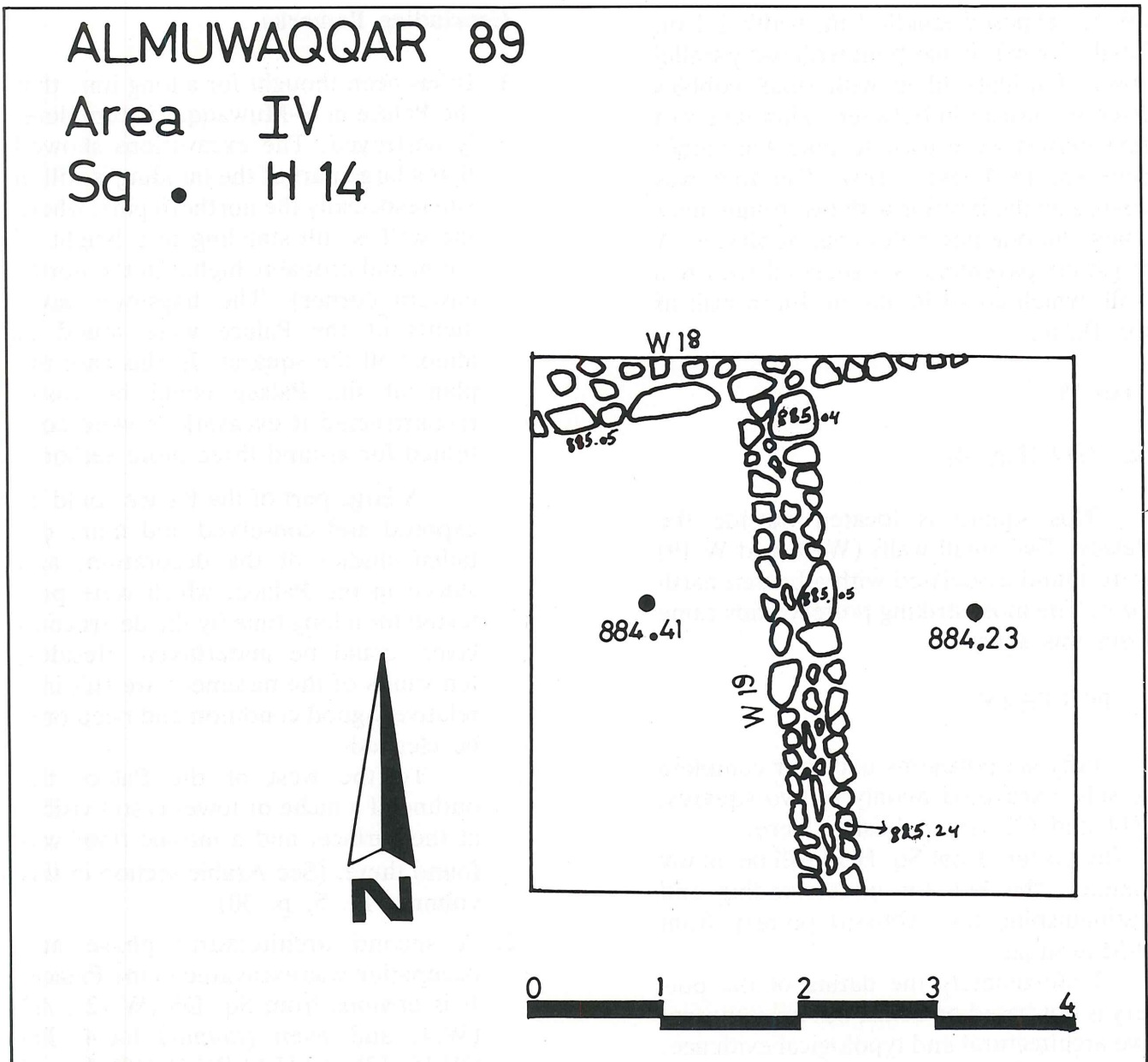


Fig. 4

859-60).⁵

3. Early Abbasid pottery is clearly distinct both from the preceding Umayyad pottery and from the succeeding late Abbasid pottery, but of course there are some characteristics which presented the continuity in the material culture. As in the Umayyad period, Abbasid pottery was mainly wheelmade, but handmade pots such as basins are attested. Some forms (lamps) are

mouldmade. Combined hand/wheel-made techniques are found (pithoi, where the body is handmade, while the rim is wheelmade). The clay is well-levigated and the inclusions are small to medium-sized lime, chert and sand grits. The firing ranges from good to excellent (black or grey cores are rare), and the light colours predominate (white, pink) with some grey colours.

Various types of decorations are

5. Yousef Ghawanmeh, 'Earthquakes Effects on Belad el-Sham Settlements', paper submitted to the Fourth Conference on the History and

Archaeology of Jordan, Lyon 30 May - 4 June 1989.

found: painting (red paint on white slip), moulding (floral and geometrical designs on lamps), combing/incising and thumb-impressing on basins and pithoi, ribbing especially on cooking pots and necks of jars. Some burnishing on cooking pots with ledge handles and some glazing can also be found.

The most characteristic forms are open straight-sided bowls, channel lamps, bag-shaped jars, and cooking pots with horizontally attached handles.

What is characteristic of our assemblage from el-Muwaqqar is the total absence (so far) of the white paint decoration. The latest white paint decoration was attested at Pella and Jerash at the second quarter of the 9th century, and there is no white paint decoration from the Amman Citadel from the destruction layer attributed to the A.D. 747 earthquake. At the same time no Samarran pottery (836-892) was found at el-Muwaqqar. Accordingly our pottery cannot be earlier than *ca.* A.D. 730 or later than *ca.* A.D. 840. Beside that we have some additional indicators: lamp F.10.60, which probably dates from the 9th century, and the cooking pot F.10.58, with ledge hand-

les, which most probably belongs to the same century.

4. It was widely believed by archaeologists that almost all Umayyad sites in Jordan were abandoned shortly after the collapse of the Umayyad Caliphate and the transfer of the capital to Iraq.⁶ This is an example of the use of political history to explain and interpret scarcity of archaeological data and to see a reflection of the historical and political facts in the material culture.

The flourishing of Jordan in all periods (not only the Abbasid) was the outcome of its strategic position, environment and cultural relations with neighbouring countries. The abandonment (if there was any) should be explained by other motives (mainly socio-economical), but not by political events alone. Beside that we now have strong evidence for the continuity of occupation from the Umayyad to the Abbasid period in northern,⁷ central,⁸ and southern⁹ Jordan. El-Muwaqqar provides additional evidence in central Jordan.

It was supposed for many years that there is no Abbasid pottery and accordingly no Abbasid occupation in

6. For further information see A. Walmsley, 'Fihl (Pella) and cities of North Jordan During the Umayyad and Abbasid Periods', paper submitted to the Fourth Conference on the History and Archaeology of Jordan, Lyon 30 May - 4 June 1989.

7. M. Gawlikowski, 'A Residential Area by the South Decumanus', in F. Zayadine (ed.), *Jerash Archaeological Project 1981-1983, I*, Amman, 1986, p. 107-136; S. Holm-Nielsen and F.G. Andersen, 'The Excavation of Byzantine Baths in Umm Qeis', *ADAJ* 30 (1986), p. 219-32; C.J. Lenzen and E.A. Knauf, 'Beit Ras/Capitolias: A Preliminary Evaluation of the Archaeological and Textual Evidence', *Syria* 64 (1987), p. 21-46; A. McNicoll and A. Walmsley, 'Pella/Fahl in Jordan During the Early Islamic Period', in A. Hadidi (ed.), *Studies in the History and Archaeology of Jordan, I*, Amman, 1982, p. 339-345; A. McNicoll, et al. *Pella in Jordan: An Interim Report on the Joint University of Sydney and the College of Wooster Excavations*

at Pella 1979-1981, Canberra, 1982; R.H. Smith, *Pella of the Decapolis*, Vol. I: *The 1967 Season of the College of Wooster Expedition to Pella*, Wooster, 1973; A.G. Walmsley, 'The Abbasid Occupation in Area XXIX, Preliminary Report on the University of Sydney's Seventh Season of Excavations at Pella (Ṭabaqat Faḥl) in 1985', *ADAJ* 30 (1986), p. 182-95.

8. A. Northedge, *Qal'at Amman in the Early Islamic Period*, Unpublished Ph.D thesis, University of London (SOAS), 1984; M. Piccirillo and T. Attiyat, 'The Complex of Saint Stephen at Umm er-Rasas-Kastron Mefaa', *ADAJ* 30 (1986), p. 341-351.

9. J. Johns, A. McQuitty and R. Falkner, 'The Faris Project: Preliminary Report upon the 1986 and 1988 Seasons', *Levant* 21 (1988); D. Whitcomb, 'Excavations in Aqaba, First Preliminary Report' *ADAJ* 31 (1987), p. 247-266; *idem*, 'A Fatimid Residence at Aqaba, Jordan', *ADAJ* 32 (1988), p. 207-224.

southern Jordan. At the same time many historical sources mention certain important Abbasid sites in Jordan.¹⁰ To explain this phenomenon some archaeologists proposed different hypotheses about the depopulation and even complete abandonment of Jordan during the Abbasid period.¹¹ The same approach had been used earlier to explain our incomplete knowledge of the material culture of the Middle and Late Bronze Ages. The lack in archaeological excavation was compensated for by theory about gaps in the history of Jordan during certain periods.

Nowadays, with our increasing knowledge of material cultures, it is more and more obvious that the gaps exist only in our knowledge of the history and material culture of certain periods, rather than there being occupation gaps during these periods.¹²

In the case of the Abbasid period, it seems to me that we are simply not able, (for the time being), to distinguish Abbasid from Umayyad pottery due to the limited number of excavated sites from this period. I believe that forthcoming excavations at different sites will undoubtedly fill out all the so-called gaps in the history of Jordan.

POTTERY DESCRIPTION¹³

Fig. 5

1. MR.89,IV.H14.1,112a. Rim, Bowl: wheelmade; Temper: small sand and calcite grits; Dec: weak red paint on white slip; Colour: ware-pink 7.5 YR 7/4, int-pink 7.5 YR 7/4, ext-white 10 YR 8/2; Dia:10 cm.
2. MR.89,IV.H14.2,84a. Rim, Bowl: wheelmade; Temper: small calcite grits; Dec: faint traces of red paint on ext; Colour: pink 5 YR 7/3 throughout; Dia: 11 cm; Pll: Northedge *et al.* 1984, Fig. 39.11C (9th century Abbasid); McNicoll *et al.* 1986, Fig. 9.9 (8th century Abbasid).
3. MR.89,IV.H14.2,57a. Rim, Bowl: wheelmade; Temper: many small chert and calcite grits; Dec: weak red paint on white slip; Colour: ware-reddish yellow 5 YR 6/6, int-pinkish white 7.5 YR 8/2 slip, ext-pinkish white 7.5 YR 8/2 slip; Dia: 10 cm.
4. MR.89,IV.H14.2,42a. Rim, Bowl: wheelmade; Temper: small grits including sand and calcite; Dec: dark brown 10 YR 3/3 paint; Colour: light brownish grey 10 YR 6/2 throughout; Dia: 12 cm.

10. A.G. Walmsley, *The Administrative Structure and Urban Geography of the Jund of Filastin and the Jund of al-Urdunn*. Ph.D. thesis, University of Sidney, 1987.
11. J.A. Sauer, *Heshbon Pottery 1971*, Berrien-Springs, 1973, p. 49; *idem*, 'The Pottery of Jordan in the Early Islamic Periods,' in A. Hadidi (ed.), *Studies in the History and Archaeology of Jordan*, I, Amman, 1982, p. 329-337; *idem*, 'Umayyad Pottery from Sites in Jordan', in L.T. Geraty and L.G. Herr (eds.), *The Archaeology of Jordan and Other Studies*, Presented to Siegfried H. Horn, Berrien-Springs, 1986, p. 301-330.
12. M. Najjar, 'Jordan Valley (East Bank) During the Middle Bronze Age in the Light of New

Excavations', paper submitted to the Fourth Conference on the History and Archaeology of Jordan, Lyon 30 May-4 June 1989; R. Th. Schaub and W. Rast, 'A Reassessment of Nelson Glueck on Settlement on the Jordan Plateau in EB III and EB IV', paper submitted to the Fourth Conference on the History and Archaeology of Jordan, Lyon 30 May - 4 June 1989; D. Whitcomb, 'Reassessing the Archaeology of Jordan of the Abbasid Period', paper submitted to the Fourth Conference on the History and Archaeology of Jordan, Lyon 30 May-4 June 1989.

13. Abbreviations used: Dia = diameter; Dec = decoration; ext = exterior; int = interior; Pll = parallel(s); JAP = *Jerash Archaeological Project 1981-83*, I. Ed. F. Zayadine.

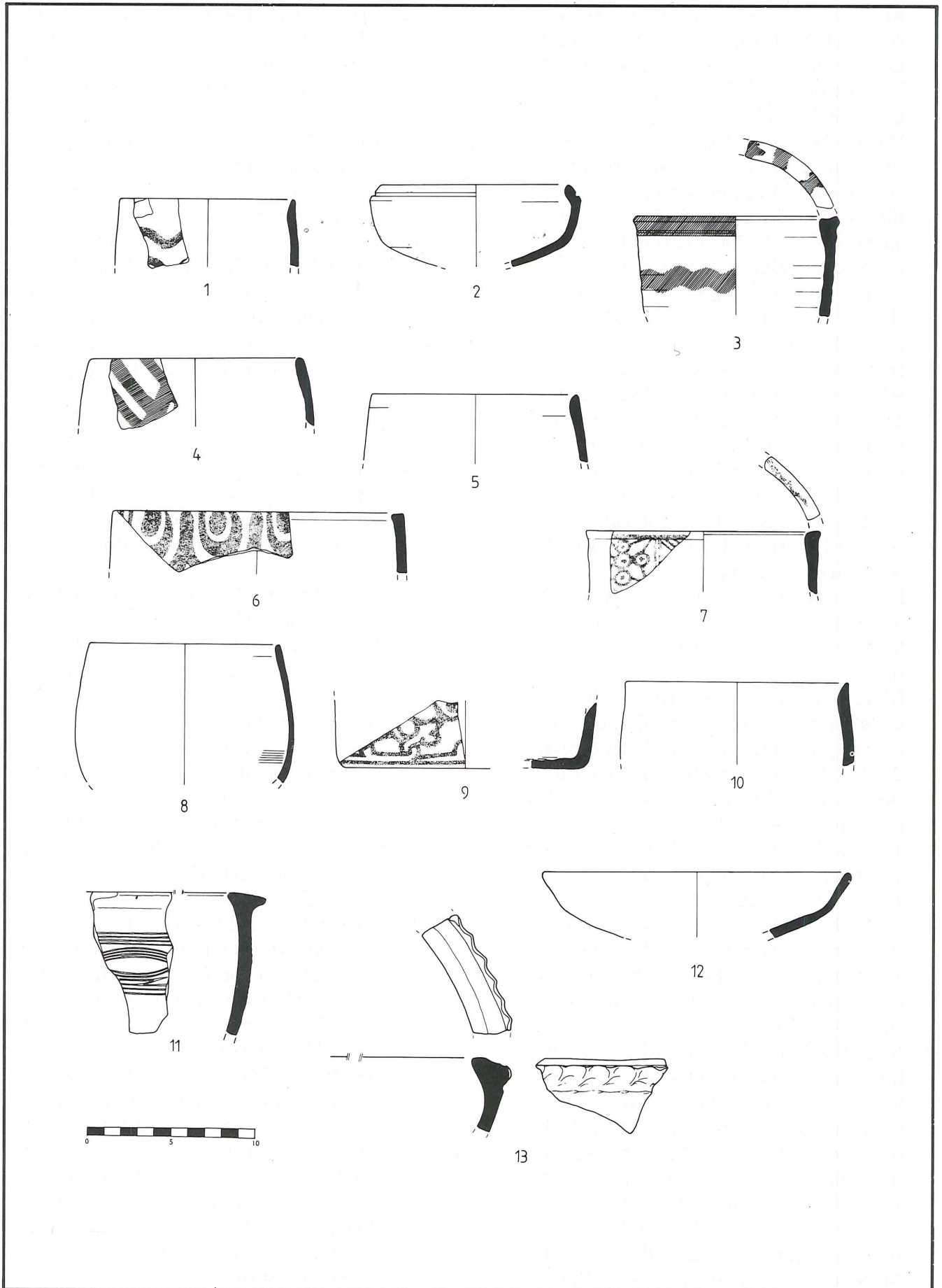


Fig. 5

5. MR.89,IV.H14.3,3. Rim, Bowl: wheelmade; Temper: small sand grits; Dec: none; Colour: ware-pink 7.5 YR 7/4, int-pink 7.5 YR 7/4, ext - light grey 10 YR 7/2; Dia: 12 cm.
 6. MR.89,IV.H14.4,109a. Rim, Bowl: wheelmade; Temper: small sand grits; Dec: dark reddish grey paint on white slip; Colour: ware-pink 7.5 YR 7/4, int-pink 7.5 YR 7/4, ext-pinkish white 7.5 YR 8/2; Dia: 16 cm; Pll: Olávarri-Goicoechea 1985, Fig. 15.16 (Umayyad); Gawlikowski 1986 in JAP, Pl. XII (Umayyad and Abbasid).
 7. MR.89,IV.H14.3,1. Rim, Bowl: wheelmade; Temper: small sand grits; Dec: weak red paint on white slip; Colour: ware-reddish yellow 5 YR 7/6, int-white 5 YR 8/1 slip, ext-white 5 YR 8/1 slip; Dia: 13 cm; Pll: Northedge 1984, Fig. 74.7 (Abbasid).
 8. MR.89,IV.H14.4,108a. Rim, Bowl: wheelmade; Temper: calcite grits; Dec: none; Colour: reddish yellow 5 YR 6/6 throughout; Dia: 11 cm; Pll: McNicoll *et al.* 1986, Fig. 9.11 (Abbasid).
 9. MR.89,IV.H14.4,9. Base, Bowl: wheelmade; Temper: small sand and calcite grits; Dec: dark reddish brown 2.5 YR 3/4 paint on white slip; Colour: ware-pink 5 YR 7/4, int-white 5 YR 8/1 slip, ext-white 5 YR 8/1 slip; Dia: 15 cm; Pll: Baramki 1942, Fig. 6.4 (8th century); Olávarri-Goicoechea 1985, Fig. 15.13 (Umayyad).
 10. MR.89,IV.H14.4,92a. Rim, Bowl: wheelmade; Temper: small sand grits; Dec: traces of reddish brown paint on ext; Colour: pink 5 YR 7/4 throughout; Dia: 13 cm.
 11. MR.89,IV.H14.1,111a. Rim, Basin: handmade, wheel-finished; Temper: many sand and calcite grits; Dec: combed straight and wavy lines; Colour: greyish brown 10 YR 5/2 throughout; Dia: 30-34 cm; Pll: Baramki 1942, Fig. 10.2; Harding 1951, Fig. 3.50 (Umayyad); Ball 1986 in JAP, Fig. 1.3 (second quarter of the 8th century); McNicoll *et al.* 1986, Fig. 8.1 (Abbasid).
 12. MR.89,IV.H14.4,11. Rim, Bowl: wheelmade; Temper: sand and calcite grits; Dec: none; Colour: light reddish brown 5 YR 6/4 throughout; Dia: 18 cm.
 13. MR.89,IV.H14.4,19. Rim, Basin: handmade, wheel-finished; Temper: small sand grits; Dec: thumb impressions; Colour: ware-pink 7.5 YR 7/4, int-pink 7.5 YR 7/4, ext-light grey 10 YR 7/1, core 30% grey; Dia: 37 cm; Pll: Northedge 1984, Fig. 74.4 (Abbasid); Schaefer 1986 in JAP, Fig. 9.14 (Umayyad); Clark 1986 in JAP Fig. 21.6-7 (8th century Umayyad).
- Fig. 6*
14. MR.89,IV.H14.3,7. Rim-handle sherd, Jug: wheelmade; Temper: small sand grits; Dec: none; Colour: reddish yellow 5 YR 7/6 throughout; Dia: 9 cm.
 15. MR.89,IV.H14.4,103a. Base, Cooking pot: wheelmade; Temper: sand grits; Dec: none; Colour: ware-light grey 10 YR 6/1, int-light grey 10 YR 6/1, ext-grey 10 YR 5/1; Dia: 3.5 cm.
 16. MR.89,IV.H14.4,49a. Rim-handle sherd, Cooking pot: wheelmade; Temper: small sand grits; Dec: none; Colour: ware-grey 10 YR 6/1, int-dark grey N 4/0, ext-dark grey N 4/0; Dia: 8.5 cm; Pll: Northedge 1984, Fig. 74.13 (Abbasid); McNicoll *et al.* 1986, Fig. 8.5 (Abbasid).
 17. MR.89,IV.H14.4,15. Base, Jug: wheelmade; Temper: calcite and sand grits; Dec: none; Colour: light reddish brown 2.5 YR 6/4 throughout; Dia: 3 cm; Pll: Olávarri-Goicoechea 1985, Fig. 22.17 (Abbasid).
 18. MR.89,IV.H14.4,106a. Lid: wheelmade; Temper: small sand and calcite grits; Dec: none; Colour: ware-light brown 7.5 YR 6/4, int- greyish brown 10 YR 5/2, ext-greyish brown 10 YR 5/2, core 50%; Dia: 18 cm.
 19. MR.89,IV.H14.4,96a. Rim-handle sherd, Cooking pot: wheelmade; Temper: small sand and calcite grits; Dec: none; Colour: ware-grey 10 YR

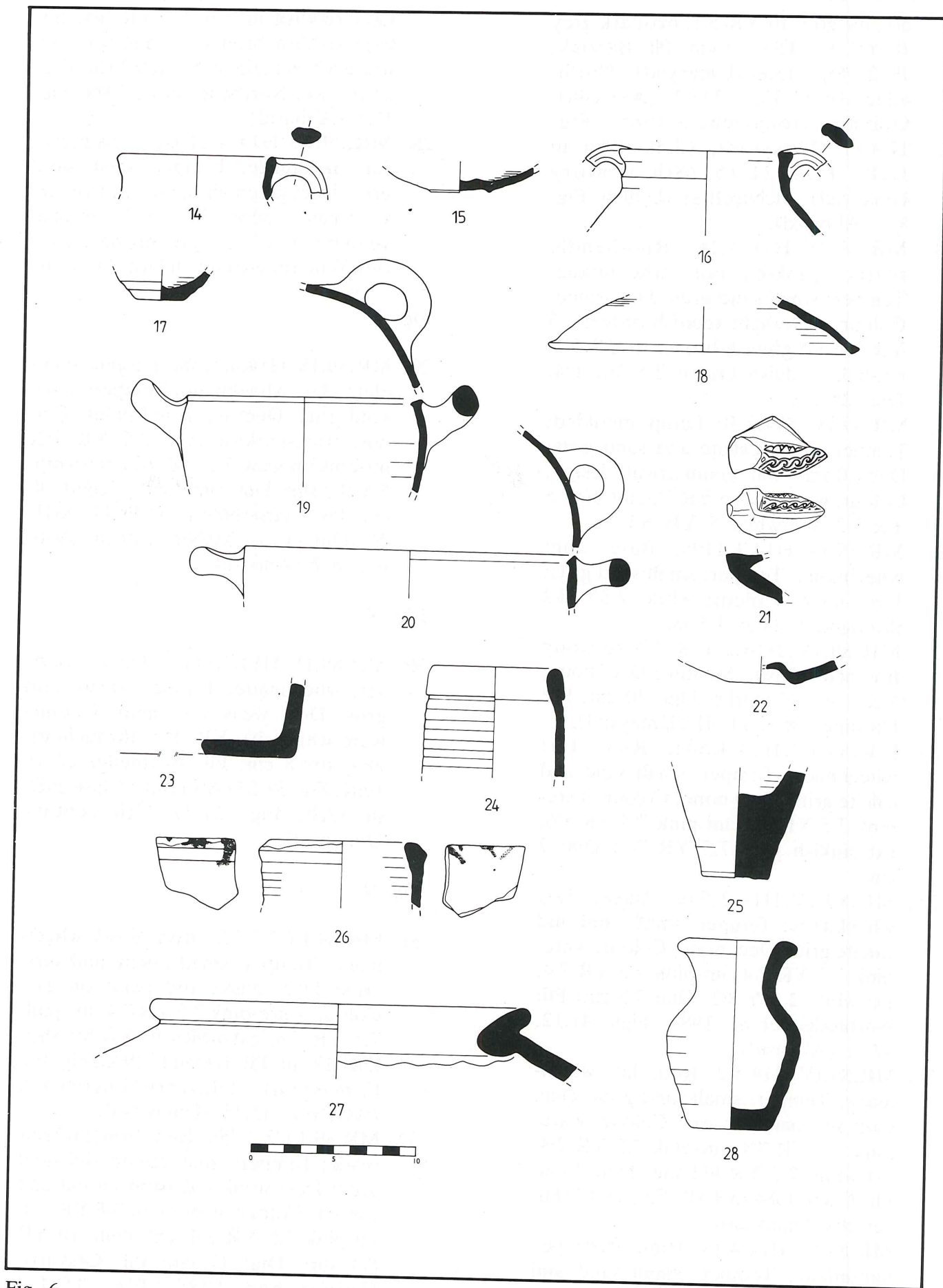


Fig. 6

- 5/1, int-grey 10 YR 5/1, ext-dark grey 10 YR 3/1; Dia: 13 cm; Pll: Baramki 1942, Fig. 13.8 (Umayyad); Northedge 1984, Fig. 74.12 (Abbasid); Olávarri-Goicoechea 1985, Fig. 17.4,11 (Umayyad); Clark 1986 in JAP, Fig. 21.15 (8th century Umayyad); McNicoll *et al.* 1986, Fig. 8.3 (Abbasid).
20. MR.89,IV.H14.4,16. Rim-handle sherd, Cooking pot: wheelmade; Temper: small sand grits; Dec: none; Colour: ware-light reddish brown 2.5 YR 6/4, int-greyish brown 10 YR 5/2, ext-light reddish brown 2.5 YR 6/4; Dia: 20 cm.
21. MR.89,IV.H14.2,10. Lamp: moulded; Temper: small calcite and sand grits; Dec: floral and geometrical design; Colour: ware-pink 5 YR 7/3, int-pink 5 YR 7/3, ext-white 5 YR 8/1.
22. MR.89,IV.H14.1,110a. Base, Jug: wheelmade; Temper: small sand grits; Dec: none; Colour: white 2.5Y 8/2 throughout; Dia: 4.5 cm.
23. MR.89,IV.H14.2,118. Base/body fragment, Basin, Steatite; Dec: none; Vertical tool-marks; Dia: 40 cm; Pll: Harding 1951, Pl. II (Umayyad).
24. MR.89,IV.H14.4,50a. Rim, Jar: wheelmade; Temper: small sand and calcite grits; Dec: none; Colour: ware-pink 7.5 YR 8/6, int-pink 7.5 YR 8/6, ext-pinkish grey 7.5 YR 7/2; Dia: 7 cm.
25. MR.89,IV.H14.2,59a. Base, Jar: wheelmade; Temper: small sand and calcite grits; Dec: none; Colour: ware-pink 7.5 YR 7/4, int-pink 7.5 YR 7/4, ext-white 2.5 Y 8/2; Dia: 3.5 cm; Pll: Northedge *et al.* 1984, Figs. 41.12, 42.8. (Abbasid).
26. MR.89,IV.H14.3,2. Rim, Jar: wheelmade; Temper: small sand grits; Dec: dark red paint on ext; Colour: ware-pink 7.5 YR 7/4, int-pink 7.5 YR 7/4, ext-white 7.5 YR 8/2 slip; Dia: 7 cm; Pll: Clark 1986 in JAP, Fig. 21.17 (8th century Umayyad).
27. MR.89,IV.H14.4,18. Rim, Store jar: handmade; Temper: small sand and calcite grits; Dec: none; Colour: ware-
- light reddish brown 2.5 YR 6/4, int-light reddish brown 2.5 YR 6/4, ext-white 5 Y 8/1 slip, core grey 30%; Dia: 22 cm; Pll: Northedge *et al.* 1984, Fig. 41.3 (Abbasid).
28. MR.89,IV.H14.4,116a. Complete, Jar: handmade; Temper: small sand grits; Dec: green glaze on ext; Colour: ware-pale yellow 5 Y 8/3, int-pale yellow 5 Y 8/3, ext-green glaze; Dia: rim-5 cm, base-6 cm; Height: 11.6 cm.

Fig. 7

29. MR.89,IV.H14.4,115a. Largely complete, Jar: wheelmade; Temper: small sand grits; Dec: weak red paint; Colour: ware-pinkish grey 7.5 YR 7/2, int-pinkish grey 7.5 YR 7/2, ext-white 5 Y 8/2 slip; Dia: rim-7 cm; Height: 40 cm; Pll: Clark 1986 in JAP, Pl. XIII. 26 (Umayyad); McNicoll *et al.* 1986, Fig. 8.7 (Abbasid).

Fig. 8

30. MR.89,IV.H14.4,114a. Upper part, Jar: wheelmade; Temper: small sand grits; Dec: weak red paint; Colour: ware-white 10 YR 8/2 throughout; Dia: rim-8 cm; Pll: Northedge *et al.* 1984, Fig. 38.23 (Abbasid); Clark 1986 in JAP, Fig. 21.17 (8th century Umayyad).

Fig. 9

31. MR.89,I.C2.2,72a. Rim, Bowl: wheelmade; Temper: small calcite and sand grits; Dec: dusky red paint on ext; Colour: ware-pink 7.5 YR 7/4, int-pink 7.5 YR 7/4, ext-white 10 YR 8/1 slip; Dia: 17 cm; Pll: Baramki 1942, Fig. 6.2 (Umayyad); Olávarri-Goicoechea 1985, Fig. 15.15 (Umayyad).
32. MR.89,I.C2.2,75a. Rim, Bowl: wheelmade; Temper: small calcite and sand grits; Dec: weak red paint on ext and rim int; Colour: ware-pink 7.5 YR 7/4, int-pink 7.5 YR 7/4, ext-white 10 YR 8/1 slip; Dia: 17 cm; Pll: Olávarri-Goicoechea 1985, Fig. 15.1,3

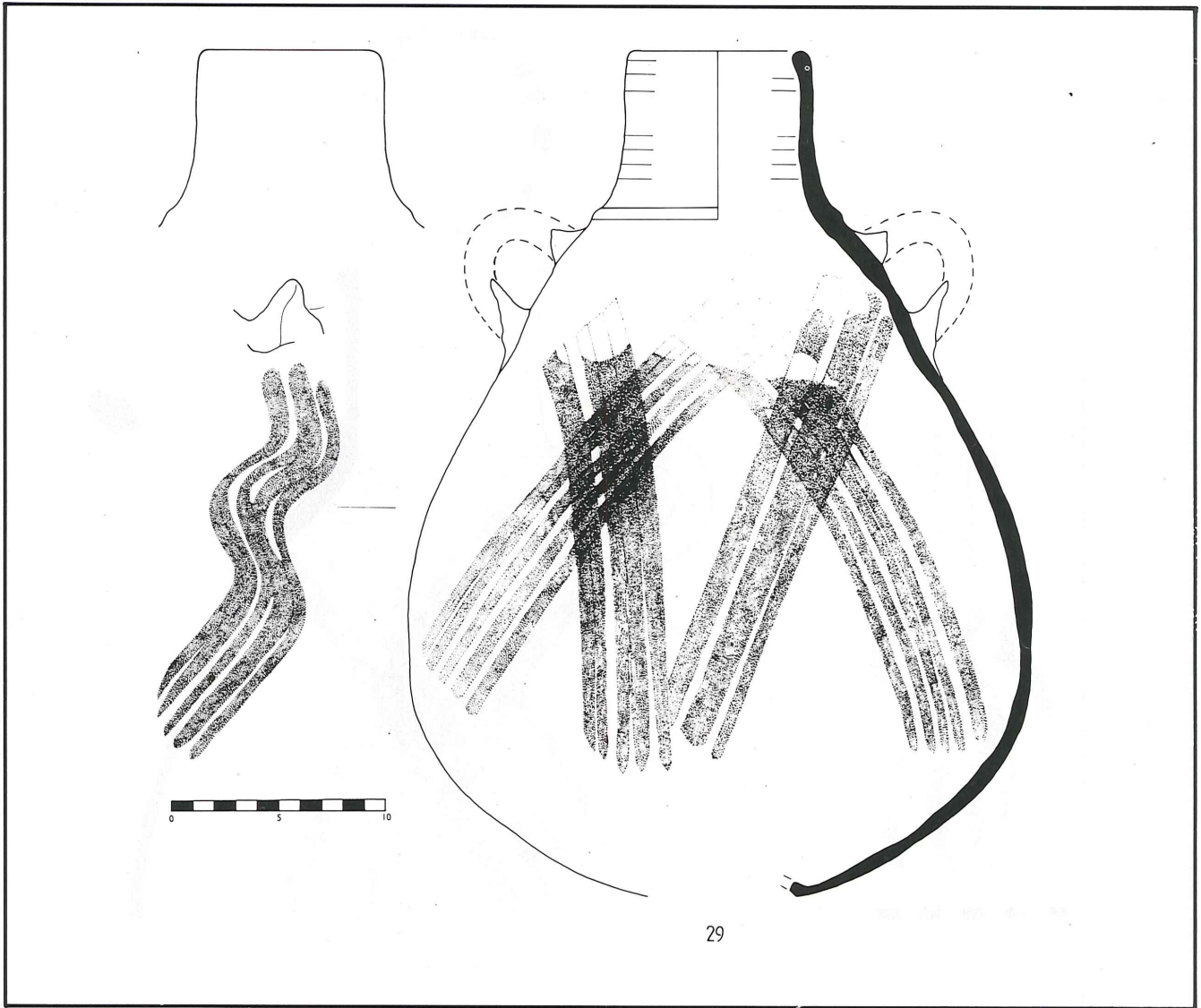


Fig. 7

- (Umayyad).
33. MR.89,I.C2.1,43. Rim, Bowl: wheel-made; Temper: small calcite and sand grits; Dec: none; Colour: very pale brown 10 YR 7/3 throughout; Dia: 15 cm.
34. MR.89,I.C2.2,106. Rim, Jug: wheel-made; Temper: small sand grits; Dec: none; Colour: pale red 10 R 6/3 throughout; Dia: 7 cm; Pll: Northedge *et al.* 1984, Fig. 42.5 (Abbasid); McNicoll *et al.* 1986, Fig. 9.7 (Abbasid).
35. MR.89,I.C2.2,64a. Rim, Bowl: wheel-made; Temper: small calcite and sand grits; Dec: none; Colour: very pale brown 10 YR 7/3 throughout; Dia: 14 cm; Pll: Northedge 1984, Fig. 74. 10, 11 (Abbasid)
36. MR.89,I.C2.1,47. Rim, Jar: wheel-made; Temper: small calcite and sand grits; Dec: none; Colour: pinkish grey 7.5 YR 7/2 throughout; Dia: 6 cm; Pll: McNicoll *et al.* 1986, Fig. 8.8 (Abbasid).
37. MR.89,I.C2.2,76a. Rim, Bowl: wheel-made; Temper: small sand grits; Dec: black, green and white splashes of glaze on int; Colour: ware-white 2.5 Y 8/2, ext-white 2.5 Y 8/2; Dia: 20 cm; Pll: Northedge 1984, Fig. 74.8 (Abbasid).
38. MR.89,I.C2.2,110. Base, Bowl: wheelmade; Temper: small calcite and sand grits; Dec: dusky red 10 R 3/4 paint on ext; Colour: light reddish brown 2.5 YR 6/4 throughout; Dia: 13 cm.
39. MR.89,I.C2.3,94. Base, Store jar:

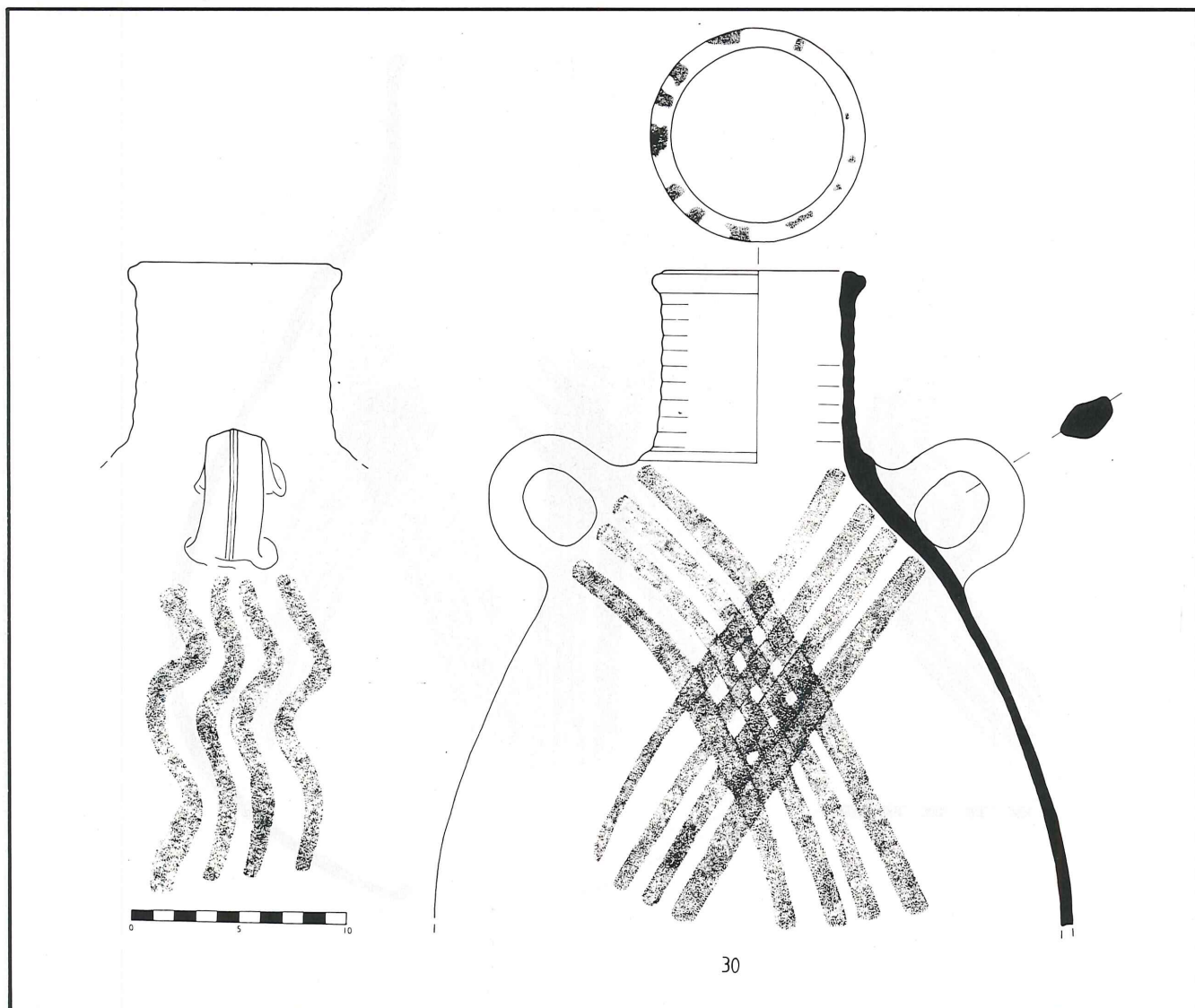


Fig. 8

- handmade; Temper: many small sand grits; Dec: none; Colour: pink 7.5 YR 7/4 throughout; Dia: 18 cm.
40. MR.89,I.C2.1,52. Rim, Basin: handmade; Temper: many small chert and sand grits; Dec: none; Colour: dark grey N 4/0 throughout; Dia: 35-37 cm; Pll: McNicoll *et al.* 1986, Fig. 8.1 (Abbasid); Schaefer 1986 in JAP, Fig. 9.6 (8th century).
41. MR.89,I.C2.1,87. Rim, Jar: wheel-made; Temper: small calcite and sand grits; Dec: none; Colour: ware-light reddish brown 5 YR 6/4, int-light reddish brown 5 YR 6/4, ext-light grey 2.5 Y 7/2; Dia: 6 cm; Pll: Northedge 1984, Fig. 74.14 (Abbasid); Olávarri-Goicoechea 1985, Fig. 52.20 (Abbasid).
42. MR.89,I.C2.2,99. Rim, Store jar: handmade/wheel-finished; Temper: small calcite and sand grits; Dec: none; Colour: pale red 10 R 6/4 throughout; Dia: 16 cm.
43. MR.89,I.C2.1,86. Rim, Basin: handmade; Temper: small calcite and sand grits; Dec: thumb or flat rod impressions; Colour: pink 7.5 YR 7/4 throughout; Dia: 40 cm, Pll: Schaefer 1986 in JAP, Fig. 8.15 (8th century).
44. MR.89,I.C2.2,67a. Rim, Jar: wheel-made; Temper: small sand grits; Dec: none; Colour: White 2.5 Y 8/2 throughout; Dia: 7 cm; Pll: Northedge 1984, Fig. 74.14 (Abbasid); Olávarri-Goicoechea 1985, Fig. 23.2 (Abbasid).
45. MR.89,I.C2.2,104. Rim, Jar: wheel-

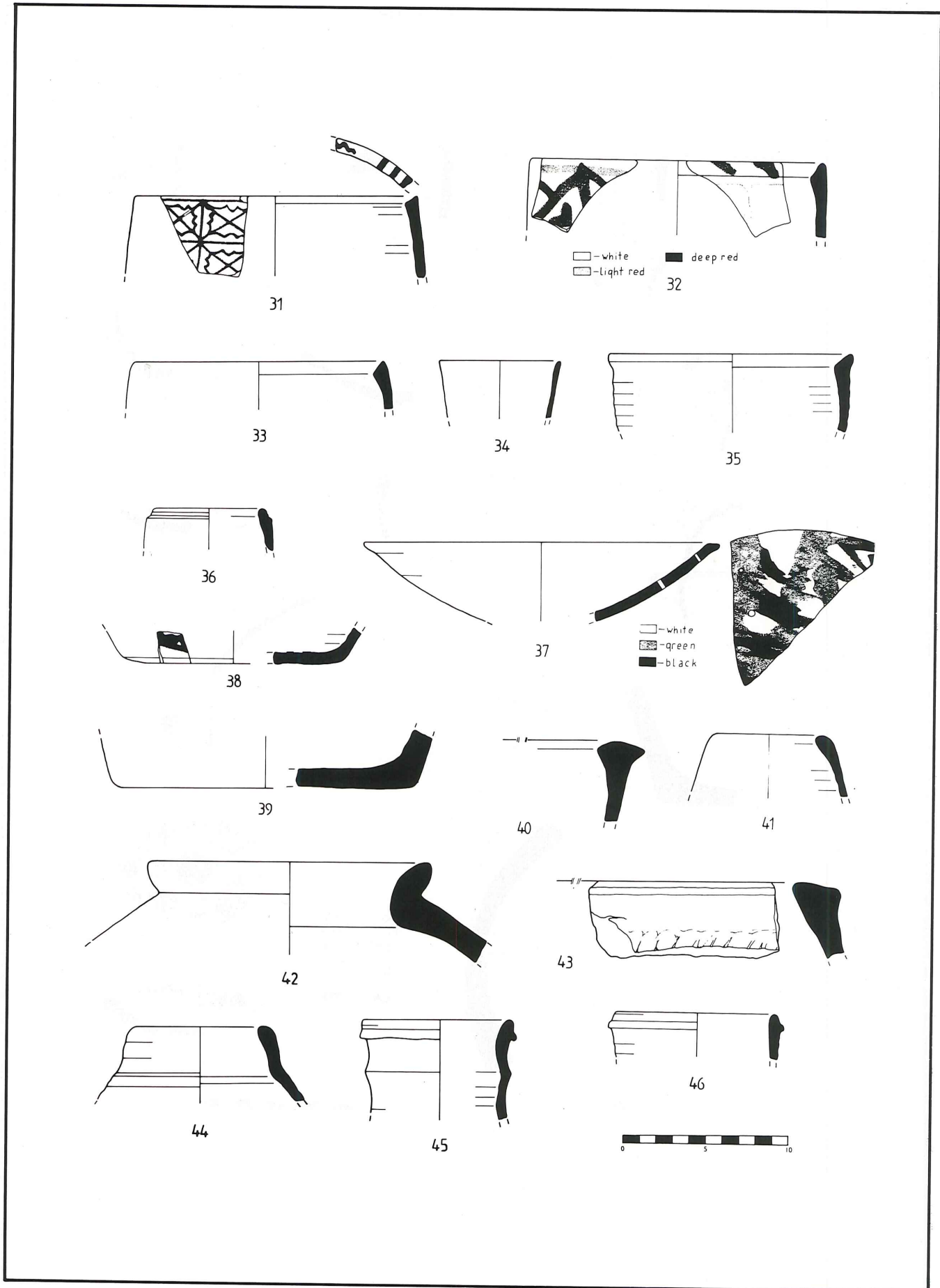


Fig. 9

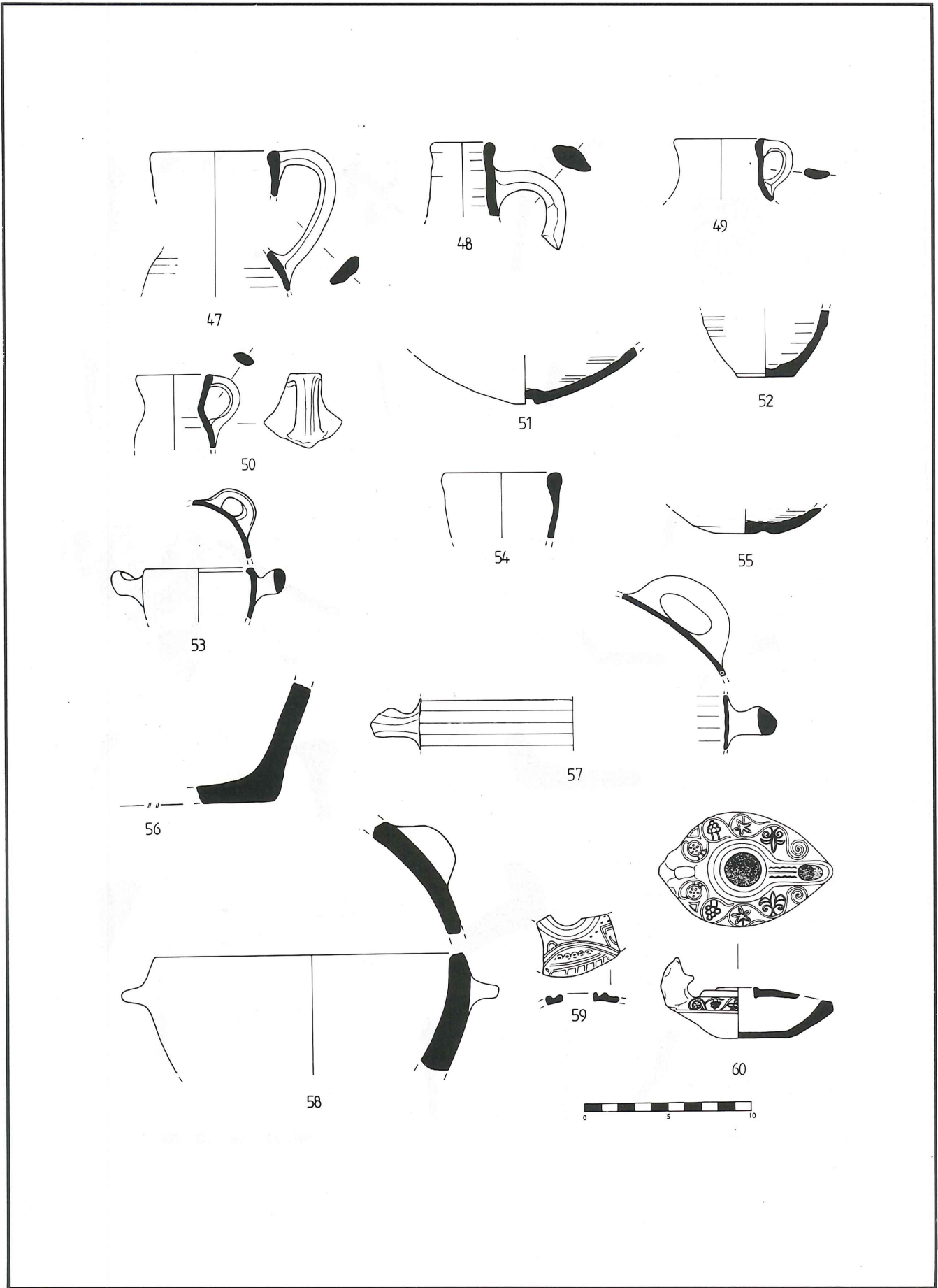


Fig. 10

made; Temper: small calcite and sand grits; Dec: none; Colour: pale red 10 R 6/4 throughout; Dia: 8 cm; Pll: Ball 1986 in JAP, Fig. 2.2,5 (second quarter of the 8th century Umayyad).

46. MR.89,I.C2.1,44. Rim, Jar: wheelmade; Temper: small calcite and sand grits; Dec: none; Colour: pinkish grey 7.5 YR 7/2 throughout; Dia: 9 cm.

Fig. 10

47. MR.89,I.C2.1,49. Rim/handle sherd, Jug: wheelmade; Temper: small calcite and sand grits; Dec: none; Colour: reddish brown 2.5 YR 5/4 throughout; Firing good, grey core; Dia: 7 cm; Pll: Olávarri-Goicoechea 1985, Fig. 15.5 (Umayyad).

48. MR.89,I.C2.1,53. Rim/handle sherd, Jug: wheelmade; Temper: small calcite and sand grits; Dec: none; Colour: light grey 10 YR 7/2 throughout; Dia: 3 cm; Pll: Olávarri-Goicoechea 1985, Fig. 22.1,4 (Abbasid).

49. MR.89,I.C2.2,73a. Rim/handle sherd, Juglet: wheelmade; Temper: small sand grits; Dec: none; Colour: white 2.5 Y 8/2 throughout; Dia: 5 cm.

50. MR.89,I.C2.2,108. Rim/handle sherd, Juglet: wheelmade; Temper: small sand grits; Dec: none; Colour: white 2.5 Y 8/2 throughout; Dia: 4 cm.

51. MR.89,I.C2.2,66a. Base, Jug: wheelmade; Temper: small calcite and sand grits; Dec: none; Colour: very pale brown 10 YR 7/3 throughout; Dia: 1.5 cm.

52. MR.89,I.C2.2,101. Base, Juglet: wheelmade; Temper: small sand grits; Dec: none; Colour: ware and int-pale red 10 R 6/3, ext-white 10 YR 8/2; Dia: 3.5 cm; Pll: Olávarri-Goicoechea 1985, Fig. 22.17 (Abbasid).

53. MR.89,I.C2.1,48. Rim/handle, Cooking pot: wheelmade; Dec: none; Temper: small sand grits; Colour: white 2.5 Y 8/2 throughout; Dia: 6 cm; Pll: Olávarri-Goicoechea 1985, Figs. 23.13, 52.21 (Abbasid).

54. MR.89,I.C2.2,65a. Rim, Jar: wheelmade; Dec: none; Temper: small calcite and sand grits; Colour: pink 7.5

YR 7/4 throughout; Dia: 6 cm.

55. MR.89,I.C2.2,102. Base, Jar: wheelmade; Dec: none; Temper: small calcite and sand grits; Colour: pale red 10 R 6/4 throughout; Dia: 3 cm.

56. MR.89,I.C2.1,85. Base, Store jar: handmade; Dec: none; Temper: many small calcite and sand grits; Colour: ware and ext-grey 10 YR 5/1; int-light grey 10 YR 7/1; Dia: 35-37 cm.

57. MR.89,I.C2.1,53a. Handle, Cooking pot: wheelmade; Dec: none; Temper: small sand grits; Colour: weak red 10 R 4/3 throughout; Dia: 18 cm; Pll: Northedge *et al.* 1984, Fig. 39.12 (Abbasid); Olávarri-Goicoechea 1985, Fig. 23.13 (Abbasid).

58. MR.89,I.D6.6,26. Rim/handle, Cooking pot: handmade; Dec: burnishing; Temper: small quartz and larger crystalline pieces; Colour: ware-pinkish grey 5 YR 7/2, int-light grey 5 YR 6/1, ext-dark grey 5 YR 4/1; Dia: 18 cm; Pll: Baramki 1942, Fig. 12. 24,25 (8th century); Northedge *et al.* 1984, Fig. 39.9,10C (Abbasid); Olávarri-Goicoechea 1985, Fig. 17.3 (Umayyad).

59. MR.89,I.C2.1,104a. Fragment, Lamp: moulded; Dec: floral and geometrical design; Temper: small calcite grits; Colour: pink 5 YR 7/3 throughout; Pll: Northedge 1984, Fig. 74.1 (Abbasid).

60. MR.89,II.D3.2,90a. Complete, Channel lamp: moulded; Dec: floral (scrolls, vine and grape clusters) design; Temper: small calcite grits; Colour: varies from white 2.5 Y 8/2 to light reddish brown 2.5 YR 6/4; Pll: Baramki 1942, Pl. XVII.4,8 (8th century); Northedge 1984, Fig. 74.1 (Abbasid); Olávarri-Goicoechea 1985, Fig. 24.4 (Abbasid?); Gawlikowski 1986 in JAP, Pl. XIV.13 (Abbasid); Homés-Fredericq & Franken 1986, 772-773 (Middle of 7th century, Abbasid [?]); Scholl 1986 in JAP, Fig. 1.10-11.

Mohammad Najjar
Department of Antiquities
Amman

References for Pottery Descriptions

- Baramki, D. 'The Pottery from Khirbet al-Mafjar', *QDAP* 10 (1942), p. 65-103.
- Harding, G.L. 'Excavations on the Citadel, Amman', *ADAJ* 1 (1951), p. 7-16.
- Homès-Fredericq, D. & Franken, H.J. *Pottery and Potters - Past and Present*. Tubingen, 1986.
- McNicoll, A., *et al.* *Pella in Jordan I*. Canberra, 1982.
- McNicoll, A., *et al.*, 'Preliminary Report on the University of Sydney's Seventh Season of Excavations at Pella (Tabaqat Fahl)', *ADAJ* 30 (1986), p. 155-199.
- Northedge, A. *Qal'at 'Amman in the Early Islamic Period*. Unpublished Ph.D. thesis, School of Oriental and African Studies, University of London, 1984.
- Northedge, A., *et al.* *Excavations at Ana - Report on the Excavations of the British Archaeological Expedition to Iraq in 1981-82*. Warminster, 1984.
- Olávarri-Goicaechea, E., *El Palacio Omeya de Amman*, II. Valencia, 1985.
- Zayadine F. (ed.), *Jerash Archaeological Project 1981-83*, I. Amman, 1986.

**FIRST SEASON OF EXCAVATIONS AT
TELL ABŪ ŠARBŪṬ, 1988
A PRELIMINARY REPORT**

by

Hubert de Haas, H. Eduard LaGro
and Margreet L. Steiner

Introduction

The first season of excavations took place between the 19th of February and the 25th of March. The participants were H. de Haas (Leiden), H.E. LaGro (Netherlands Institute for the Near East), and M.L. Steiner (Leiden University). S. Rabaḍi was the much appreciated representative of the Department of Antiquities. A. Kana'an acted as foreman of the four workmen, who were later joined by two others. We thank Dr. 'Adnan Hadidi, former Director General of the Department of Antiquities and his staff for their continual interest and encouragement. We thank Prof. Dr. H.J. Franken, who instigated the research, for his sound advice and continuous support during the past years. Special thanks go to Dr. M. Ibrahim and Dr. E. van Donzel, who enthusiastically supported us and provided much logistic support. The excavations also benefited from visits by Dr. D. Whitcomb and several colleagues from Yarmouk University. The excavations were funded by the "Tell Abū Šarbuṭ" Foundation, The Oosters Institute in Leyden and Royal Jordanian Airlines.

Site Location

Tell Abū Šarbūṭ is located in the central Jordan Valley, about 1.5 km west-northwest of Tell Deir 'Allā.¹ It lies amidst agricultural fields irrigated by small canals branching off from the main Ghor canal. Directly south of the tell, running approximately east-west, a small stream runs through a small canal along the edge of the

tell. At the north side, running parallel to the canal, is a road which leads from the main north-south road in the valley in the direction of the Jordan River (see Fig. 1, Pl. XLIV).

The tell is succinctly mentioned by N. Glueck. When he visited the tell, the stream, which now runs south of it, flowed through a small wadi along the north side, called Wadi el-Khor.² The tell is also included in the East Jordan Valley Survey of 1976.³

The tell measures about 250 m east-west and 125 m north-south. From the highest point, -248 m, it gently slopes to -252 m at the east and south sides and to -255 m at the north and west sides. At the surface traces of building foundations made of unworked stones are still visible. These are at some places disturbed by robber pits, especially at the top. On the east side, at the bottom of the tell, a scattering of worked stones might indicate the place where, as the story goes, in the beginning of this century the remnants of a gate were still discernable. Sherds, which are amply found on the surface, indicate Roman-Byzantine and extensive Umayyad-Mamluk occupation. No previous excavations are known to have been carried out.

Objectives

The main purpose of the excavations at Tell Abū Šarbūṭ is to collect stratified sherd material in order to make a typochronology of the decorated and non-decorated pottery from the Islamic periods on that site. This typochronology will be

1. 35° 37' E. - 32° 12' N. 1: 250,000 map of Jordan, Sheet 1 (Amman). Department of Lands and Surveys of Jordan, 1948.

2. Nelson Glueck, *Explorations in Eastern Palestine*, IV. AASOR XXV-XXVIII (1945-1949),

p. 311.

3. Khair Yassine, Mo'awiyah Ibrahim and James A. Sauer, 'The East Jordan Valley Survey 1976, pt. II'. In: Kh. Yassine, *The Archaeology of Jordan: Essays and Reports*. Amman, 1988, p. 187-206.

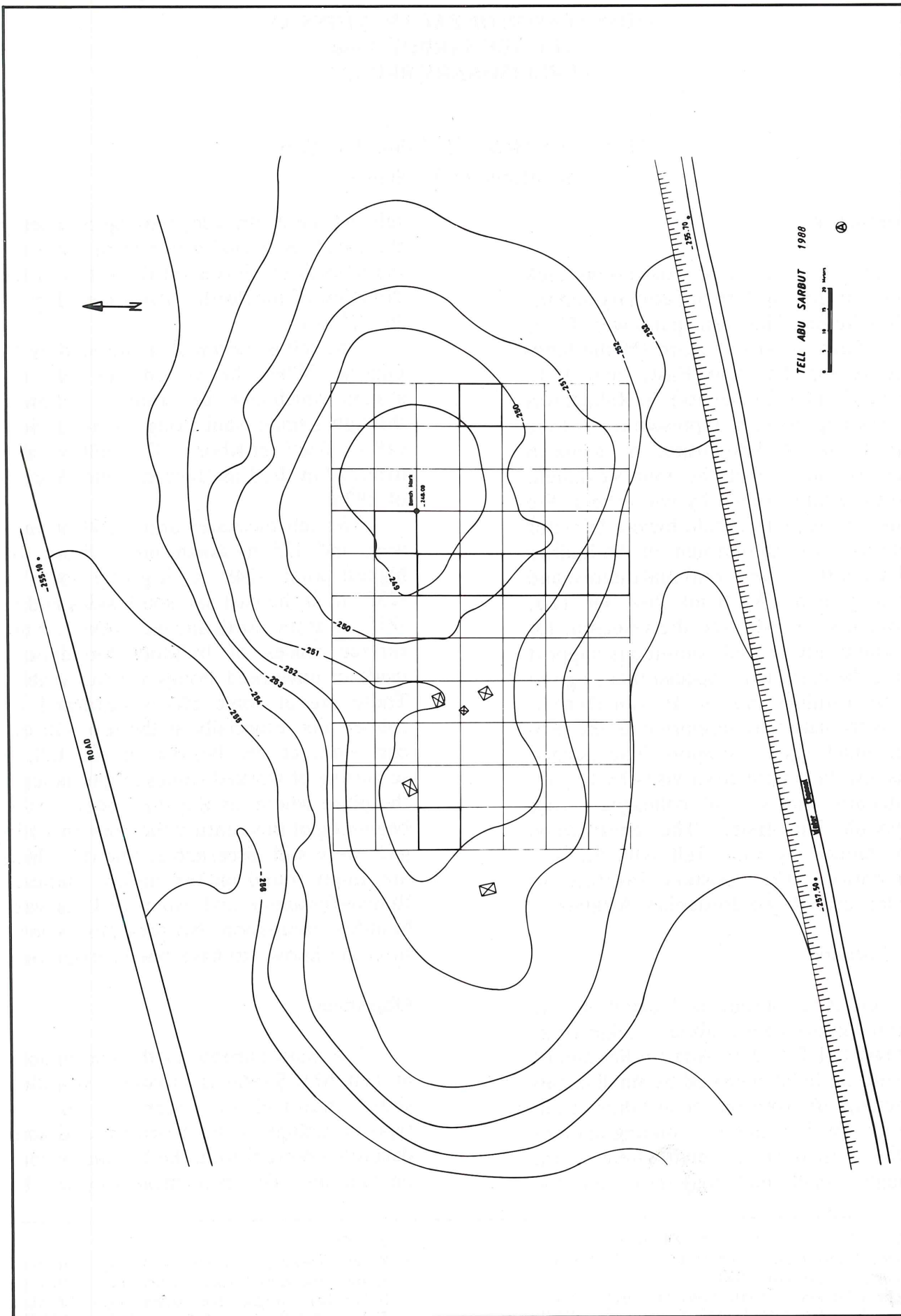


Fig. 1. Plan of Tell Abū Šarbūt.

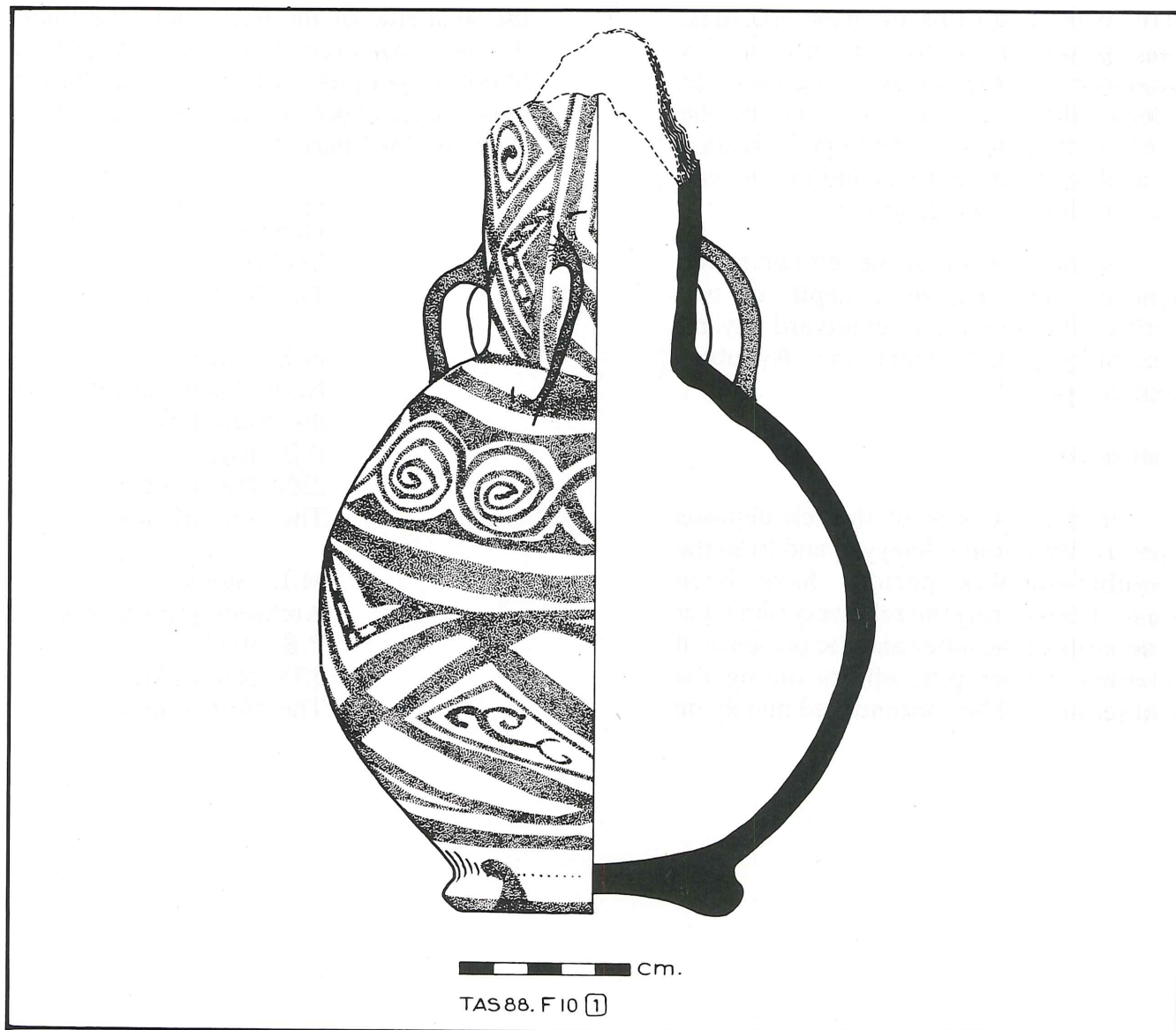


Fig. 2. Decorated jug with three handles.

based on technological analysis and statistical computation of the stratified material, combined with the results of excavations at other sites in the area, especially Abū Qurdān. Floral and faunal material will be studied, as well as the other remains of material culture.

The objectives of this first, preliminary season, were to verify the nature and extent of deposits dating from the Islamic periods and to collect sherd material to start the technological research.

Results of the First Season

On the southeast slope a trial trench 55 m long was dug to varying depths. At two points the trench was enlarged to 10 m

by 10 m squares (squares C and F). In square C, wash layers around 0.75 m deep and pits were found, probably belonging to occupational phases higher up the slope and on the top, which have been eroded away. The finds in these layers and pits can be attributed to the Ayyubid-Mamluk periods. Underneath these layers, deposits containing sherds from the Byzantine-Umayyad periods were found as well as some fragments from the Roman period. In square F, on the east top of the tell, at least four occupational phases from the Ayyubid-Mamluk periods were found (Fig. 2). The original stratigraphic sequence was, however, severely disturbed by the presence of numerous robber pits from recent times. Among the objects found

were many fragments of glass bracelets, some pieces of bronze and iron and a decorated jug (Fig. 2). A selection of the pottery, fifteen crates, was sent to the Institute of Pottery Technology in Leiden for analysis by the authors and Dr. A. van As, director of the Institute.

On the west top of the tell two probe trenches were dug to a depth of two metres. They revealed courtyard layers, containing sherds from the Ayyubid-Mamluk periods.

Conclusion

On the east side of the tell deposits from the Byzantine-Umayyad and from the Ayyubid-Mamluk periods have been found. Considering the relatively thin layer of deposits of the latter and the presence of extensive robber pits, efforts during the next season will be concentrated mainly on

the west side of the tell, where the thick deposits attested from the Ayyubid-Mamluk periods will provide a better opportunity to obtain stratified material, at least for that period.

H. de Haas
Dahliastraat 7
Leiden,
The Netherlands.

H.E. LaGro
Netherlands Institute for
the Near East
P.B. 9515
2300 RA Leiden,
The Netherlands.

M.L. Steiner
Archaeological Center
P.B. 9515
2300 RA Leiden,
The Netherlands.

LES NICHES CULTUELLES DU SADD AL-MA'JAN A PETRA

par
Marie-Jeanne Roche

Introduction

Au cours de deux voyages d'étude à Pétra, au printemps 1978, et à nouveau en été 1987 j'ai pu visiter plusieurs fois le petit wâdî appelé Sadd al-Ma'jan; la première année, j'ai été accompagnée par M.F. Zayadine, Directeur-Adjoint au Service des Antiquités de Jordanie, et la deuxième année par Adrian Mandzy, étudiant américain en archéologie.

Ce petit wâdî compte parmi les sites les plus curieux de Pétra, et l'un des plus intéressants pour toute personne étudiant la religion nabatéenne; on y trouve en effet une remarquable concentration de niches votives, certaines vides, d'autres abritant un bétyle.

Curieusement ce site est peu connu; depuis l'ouvrage de G. Dalman aucune étude n'a été faite sur ce lieu; cependant, dans la dernière édition de l'ouvrage collectif dirigé par le Dr. M. Lindner, un dessin montrant de nombreuses niches est accompagné d'un bref commentaire.¹

Description

Le Sadd al-Ma'jan est situé au nord-est de Pétra; son entrée est à environ neuf cent mètres du tombeau de Sextus Florentinus, lui-même placé sur le flanc ouest du massif d'al-Khubtha.

On longe sur la droite un massif rocheux; près de l'entrée du défilé on

distingue très haut des traces de niches. Le Sadd al-Ma'jan est une sorte de couloir de largeur irrégulière (Fig. 1); selon G. Dalman, la largeur moyenne du wâdî est de deux ou trois mètres, et sa longueur totale de quatre-vingt pas. Il m'est très difficile d'estimer sa longueur totale, en revanche je puis préciser que la première partie, jusqu'à la rotonde mesure environ quatre-vingt mètres; le passage peut se retrécir jusqu'à moins d'un mètre dans les goulots au début du défilé (il y a trois coudes dans cette partie), mais que deux mètres me semblent une longueur moyenne (Pl. XLV,1). Le lit du wâdî, habituellement à sec, comporte au printemps des mares d'eau assez profondes qu'il faut enjamber; ce sont elles qui ont empêché très souvent l'exploration du site (outre son éloignement du centre de la ville); Palmer le dit explicitement et G. Dalman mentionne aussi cette difficulté.²

Les niches sont creusées à plusieurs mètres de hauteur sur les parois, de chaque côté. Dalman dit avoir répertorié et dessiné quatre-vingt quinze niches; le chiffre est sans doute un peu élevé, car la distinction entre une niche très érodée et certaines cavités naturelles est parfois délicate; néanmoins leur nombre est plus grand que les trente niches mentionnées par le Dr. Lindner. La description du site commencera par la façade nord (sur la gauche en entrant) pour finir par la façade sud.³

Les premières niches intéressantes

1. G. Dalman, *Petra und seine Felsheiligtümer*, 1908, p. 308-314, fig. 254-173 (no. 553-664); l'ouvrage est abrégé en: *Petra*; les numéros des niches et des figures, cités dans l'article, sont ceux de Dalman. Autres mentions du sadd al-Ma'jan: Palmer, *PEFQS*, 1871, p.55; A. Musil, *Arabia Petrea, Edom*, II, 1908, p. 73; D. Nielsen, *JPOS*, 13 (1933) p. 186-187; G. Horsfield, *QDAP*, 7 (1938) Pl. XIX, fig. 2; J. Starcky, "Pétra et la Nabatène", *SDB VII*, 1966, col. 1006; M. Lindner (ed.), *Petra* 1980, p. 306-307, fig. 3. J'ai fait allusion au sadd al-

Ma'jan dans un article précédent: "Les bétyles", *Le Monde de la Bible* 14, mai-juil., 1980, p. 33, fig. 47; p. 34, fig. 49; également, dans ma thèse: *Niches à bétyles et monuments apparentés à Pétra* (1985), dont je prépare la publication.

2. Palmer, *op. cit.*; *Petra*, p. 309.

3. C'est l'ordre de présentation des documents photographiques qui a imposé cet ordre, inverse de celui de Dalman. Voir fig. 1 pour l'agencement des niches sur les deux façades.

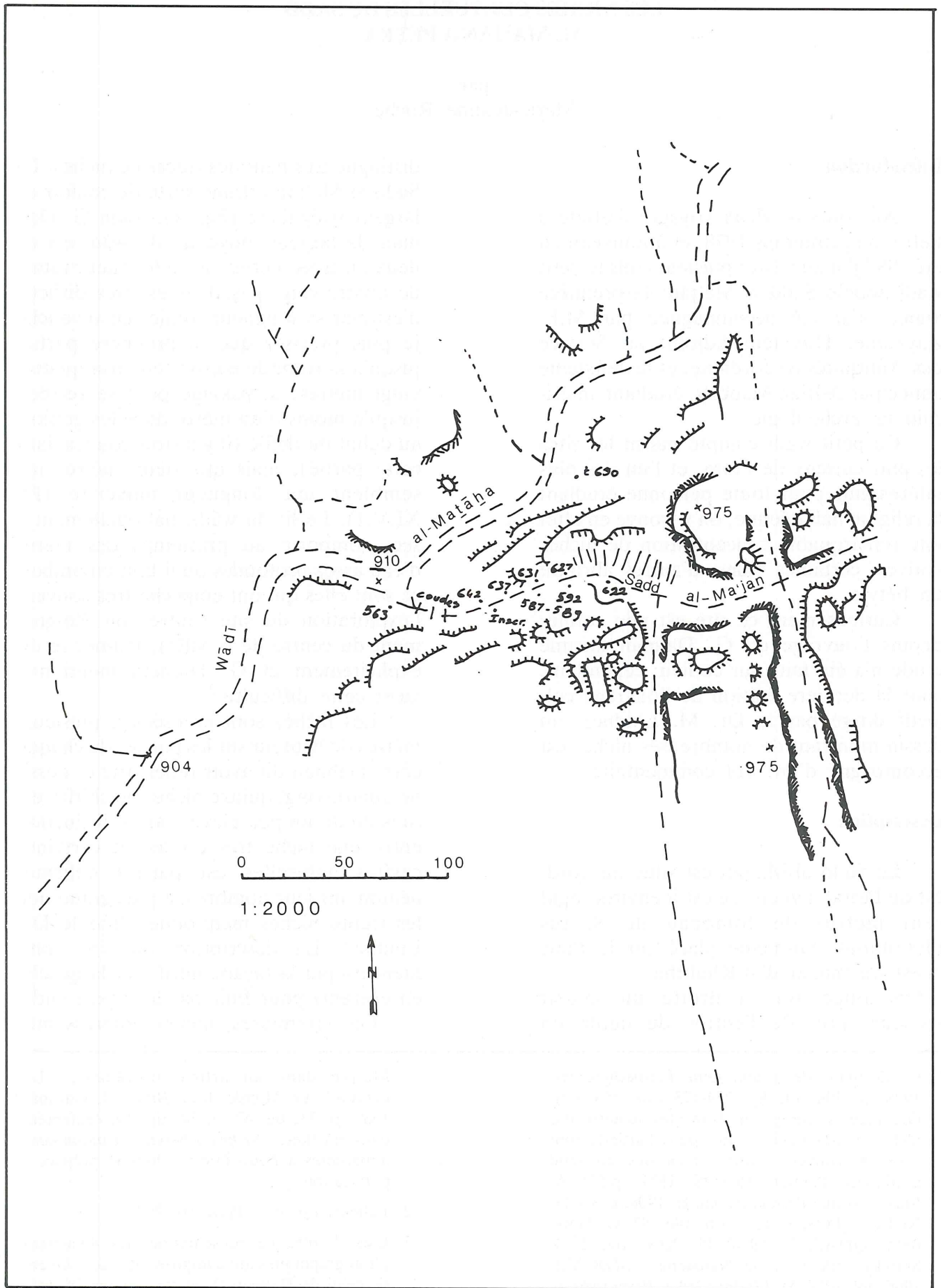


Fig. 1. Carte du Sadd al-Ma'jan et de ses environs, d'après R. Saupin.

sont situées après les passages les plus étroits. Le premier groupe est composé de quatre niches d'un type très sommaire: 642 (*Petra*, fig. 271), 641, 640, 639 (Pl. XLV,2). Plus loin, mais toujours placé assez haut donc hors d'atteinte, un second groupe se remarque au contraire par une présentation élaborée sur une surface rocheuse soigneusement dressée et formant un décrochement: 638, 637 (*Petra*, fig. 270), 636, 635, 634, 633 (Pl. XLV,3). Un troisième groupe se signale par l'extrême originalité de deux des niches, placées à angle droit l'une par rapport à l'autre, et creusées de cavités en forme de champignons: 631 (*Petra*, fig. 269; Pl. XLV,4), 629 (*Petra*, fig. 268). Avant d'atteindre la partie élargie du wâdi, que l'on appelle la rotonde, il convient de signaler une niche à double bétyle, située très haut, à l'endroit où la paroi tend à surplomber le chemin: 627 (Pl. XLVI,1).

On pénètre ensuite dans la partie élargie du wâdi, où sont creusées les niches les plus remarquables. A l'origine il devait s'agir d'un coude du wâdi, dont on a excavé l'angle rentrant, laissant au sol, sur le côté nord une sorte de plate-forme naturelle située au-dessus du niveau du lit; les parois en surplomb donnent l'impression d'une salle plutôt que d'un lieu en plein air.

A gauche, donc près de l'entrée, quelques niches sont placées à des hauteurs variables, l'une présentant une curieuse forme en T: 626, 625 (*Petra*, fig. 267), 624, 623 (Pl. XLVI,2); juste à la suite, le monument principal: 622 (*Petra*, fig. 266; Pl. XLVI,3) est formé d'une double niche, de type hellénisant, dont un petit panneau de l'architrave est décoré d'un buste en bas-relief (Pl. XLVI,4); quelques niches plus modestes sont situées à droite: 621, 620, 619 (Pl. XLVII,1), au-dessus d'une inscription où al-'Uzzâ est nommée, signalée par J.T. Milik.⁴

La deuxième partie du couloir faisant suite à la rotonde était inaccessible quand je l'ai visitée, car une mare d'eau en

interdisait l'accès, en 1978, et en 1987, un gros rocher bloquait le goulot; j'ai pu néanmoins photographier le seul monument digne d'intérêt pour la deuxième partie selon Dalman: 618 (*Petra*, fig. 25; Pl. XLVII,2).⁵

La paroi sud de la rotonde suit la courbe que forme le lit du wâdi et est littéralement trouée de niches votives; l'ensemble le plus intéressant est situé à l'extrême gauche: un autel à cornes dans une petite niche: 607 (*Petra*, fig. 264; Pl. XLVII,3), suivi d'un édicule cintré de type hellénisant, abritant trois bétyles de tailles différentes, dont deux avec une base: 606 (*Petra*, fig. 262; Pl. XLVII,4). A la suite, parmi un enchevêtrement de niches vides, on note un bétyle miniature: 604 (Pl. XLVIII,1), et un bétyle avec un trou à la base: 600 (*Petra*, fig. 262; Pl. XLVIII,2); lui faisant suite, un bétyle ovoïde surmonté d'une niche: 598 (*Petra*, fig. 261; Pl. XLVIII,3), puis un couple de bétyles arrondis placés devant deux niches accolées: 597 (*Petra*, fig. 260; Pl. XLVIII,4). Les deux derniers monuments sont décorés de croissants lunaires. Une niche arrondie dont le bétyle également arrondi était surmonté d'un croissant (dont il ne reste que la moitié gauche), comporte des rainures destinées à recevoir des éléments rapportés: 507 (*Petra*, fig. 259a; Pl. XLIX,1). Le dernier édicule, placé dans un renforcement, est surmonté d'un croissant et abrite un bétyle ovoïde: 593 (*Petra*, fig. 259; Pl. XLIX,2).

On retourne ensuite dans le couloir pour examiner la paroi sud; au bout de quelques mètres, on remarque, situé à bonne hauteur, un monument isolé suivi de trois autres groupés; tous présentent des édicules hellénisants à frontons. Le premier renferme un bétyle avec un trou à la base: 592 (*Petra*, fig. 258; Pl. XLIX,3); les trois autres abritent simplement une cavité: 589, 588, 587 (*Petra*, fig. 257; Pl. L,1). Entre ce dernier groupe de monuments et le suivant prennent place une dizaine de niches très abîmées, se confondant aisé-

4. J.T. Milik et J. Starcky, *ADAJ* 20 (1975) p. 126; F. Zayadine, dans Lindner, *op. cit.*, p. 115.

5. *Petra*, p. 311. Dalman décrit brièvement les niches 608, 609, 610.

ment avec les irrégularités de la roche, et placées de telle sorte qu'il est très difficile de bien les photographier.

Le groupe suivant présente la particularité d'être accompagné d'une inscription à Dûshara, déjà publiée, et dont voici la traduction:

Paix à Abdmali/ku/
Fils de 'Ubaidu devant
Dûshara et tous les dieux, en bien,
Paix au lecteur⁶ (Pl. L, 2)

Cette inscription est entourée de quelques niches: 576, 575, 574 (*Petra*, fig. 256). L'édicule 575 est à fronton avec une base évidée et élargie; la niche 574 comporte un bétyle avec un trou à la base. Parmi les niches suivantes, une seule présente quelque intérêt, avec son édicule cintré et son bétyle en relief (l'ensemble est assez abîmé): 568.

Le dernier ensemble de monuments est situé à l'entrée du couloir, très haut sur la falaise: ces niches, toutes à peu près au même niveau, se caractérisent par l'absence de bétyle: 566, 565, 564, 563 (*Petra*, fig. 255), 562-558 (Pl. L, 3). L'édicule 566 est cintré et flanqué de pilastres, le numéro 563 est, selon Dalman, surmonté d'un fronton; la niche 559 est précédée d'une petite plate-forme à laquelle on accède par quelques marches latérales.

D'autres monuments, situés bien davantage à l'intérieur du massif nord sont invisibles du chemin et pratiquement inaccessibles; près de l'entrée du couloir Dalman a situé deux triclinia. On trouve également un triclinium dans le massif nord, avec une niche au fond: 653b (*Petra*, fig. 273); on signalera encore, lui faisant face et située à quelque distance, une niche arrondie, avec un rebord, n'abritant ni bétyle ni cavité, et précédée d'un escalier: 562 (*Petra*, fig. 272). Enfin on notera la présence de canalisations creusées dans le grès, à flanc de côteau.⁷

Classification

Les niches votives du Sadd al-Ma'jan forment un ensemble cohérent et il est possible d'esquisser une classification. Auparavant il faut rappeler la typologie proposée par Dalman pour l'ensemble des bétyles de Pétra.⁸

- la stèle simple
- la stèle à pied
- la stèle à socle
- le cône tronqué
- le groupe de stèles

Ce classement, qui a par ailleurs le mérite de mettre en évidence des types intéressants, a le défaut d'être incomplet et de mettre sur le même plan des notions différentes; la niche elle-même est totalement oubliée, or elle fait partie d'un ensemble dont les composantes sont les suivantes: le bétyle, unique ou multiple, et dont la forme peut varier, avec parfois sa base; et la niche, d'une architecture plus ou moins complexe.

1. Le bétyle et sa base:

Le type le plus fréquent est la pierre dressée, deux fois plus haute que large, telle qu'elle est décrite par la *Souda*⁹; il est fréquent au Sadd al Ma'jan; 641, 637, 627, 606, 600, 592, 574; on le trouve, dans le domaine nabatéen, à Médain Saleh (Arabie Saoudite), au wâdi Ram et dans le Hauran.¹⁰ Très proche est le type du bétyle arrondi: 642, 595, mais l'usure du grès tend parfois au même résultat; le monument 161 dans le Sîq semble représenter le même type. On trouve aussi au Sadd al-Ma'jan trois exemples de bétyles ovoïdes: 598, 597, 593; la niche 150 dans le Sîq abrite un bétyle semblable; ce type apparaît aussi à Médain Saleh et sur des monnaies d'Adraa pour Dûshara.¹¹

Dans trois cas on est en présence d'un

6. G. Dalman, *NPF*, p. 89, no. 28.

7. *Petra*, p. 313-314; E. Gunsam, dans Lindner, *op. cit.*, p. 306-307.

8. *Petra*, p. 70-74.

9. Citée par J. Starcky, *op. cit.*, col. 988-989.

10. Jaussen & Savignac, *Mission archéologique en Arabie*, I, p. 424, fig. 214; R. Savignac, *RB*, 43 (1934) p. 572-591; M. Dunand, *Le Musée de Soueida*.

11. Jaussen & Savignac, *op. cit.*, fig. 207, p. 418; G.F. Hill, *BMCC Arabia*, p. xxiii s., p. 15, no 2.

double bétyle; dans le monument 637 les deux stèles sont identiques, mais elles sont de tailles différentes dans les monuments 597 et 627. Le triple bétyle ne se rencontre qu'une seule fois, dans l'édicule 606, que l'on comparera au monument 172 du Sîq: les trois stèles y sont de tailles différentes, deux d'entre elles reposant sur des bases.

Ce dernier détail est curieux et est l'indice de l'importance que peut avoir la base sur laquelle repose le bétyle; les inscriptions la nomment *môtaba*, c'est-à-dire "siège". Selon J. Starcky, le siège vide a dû parfois recevoir un culte.¹² Dans le cas de la niche 636 la base est surmontée d'une cavité à la place d'un bétyle. Le bétyle de la niche 574 semble lui aussi reposer sur une base, contrairement au dessin de Dalman.

Il a déjà été fait allusion à des stèles en creux; on les trouve sous deux formes, soit rectangulaire: 589, soit arrondie: 636, 588, 587, 563, 566. Ces renforcements étaient destinés à recevoir des bétyles portatifs sous la forme de petites stèles comme celles "aux yeux" trouvées récemment à Pétra.¹³

Mais dans deux cas: 631, 629, on trouve des types aberrants en forme de champignons; il est improbable que ces renforcements aient été laissés tels quels, mais leur forme bizarre devient beaucoup plus compréhensible si l'on imagine que des stèles arrondies ou des reliefs, bustes ou statues y prenaient place.

Dans trois cas la stèle, rectangulaire ou carrée, est creusée à sa base d'une petite cavité également quadrangulaire; l'élément de comparaison le plus intéressant est un petit autel à cornes sculpté sur la paroi d'une grotte d'Umm al-Biyâra:¹⁴ sur le devant de l'autel est creusée une petite niche contenant un bétyle miniature posé sur une base; on peut suggérer le

même arrangement dans le cas des monuments du Sadd al-Ma'jan.

Dans le cas du monument 598, la petite niche carrée se trouve placée au-dessus du bétyle ovoïde; cette composition rappelle celle du bétyle au médaillon situé près du Haut-Lieu;¹⁵ on pourrait ainsi avoir un buste divin doublant une représentation aniconique: la même divinité serait représentée sous deux formes différentes.

Le curieux agencement du double bétyle de la niche 597 est sans doute le fait d'une réutilisation: le bétyle de gauche, le plus petit, étant antérieur à celui de droite, rajouté par la suite; le léger renforcement dans lequel le premier était placé a ensuite été tronqué.

L'autel 607¹⁵ est tout à fait à part; c'est le seul du site et il est présenté comme les bétyles, c'est-à-dire dans une niche. On trouve à Petra d'autres autels à cornes gravés ou sculptés en bas-reliefs sur les parois;¹⁶ deux exemples existent également à Médain Saleh.¹⁷ Au Sadd al-Ma'jan il est simplement gravé, et n'était pas destiné aux sacrifices; il ne doit donc pas être considéré en fonction du monument 606 qui lui fait suite. En effet l'autel a parfois reçu un culte, au même titre que le bétyle, leurs fonctions se confondant souvent¹⁸ (on a vu plus haut qu'il pouvait y avoir aussi ambiguïté entre le bétyle et son *môtab*).

2. La niche:

Sa fonction est très importante; on peut la définir comme une réplique de l'édicule au fond de l'adyton.¹⁹ Le terme *MSGD* qui désigne l'autel-bétyle²⁰ chez les Nabatéens, peut prendre le sens élargi de sanctuaire contenant la pierre cultuelle dans le Hauran²¹; la niche forme donc un tout avec le bétyle qu'elle abrite. On

12. J. Starcky, *op. cit.*, col. 1010.

13. F. Zayadine, *ADAJ XIX* (1974), Pl. L, Fig. 3.

14. C.-M. Bennett, *ADAJ XXIV* (1980), fig. 2, p. 210.

15. P.C. Hammond, *BASOR* 192 (1968), p. 16-21, fig. 1.

16. *Petra*, no. 251, 271a, 699.

17. Jaussen & Savignac, *op. cit.*, fig. 212b, p. 423; fig. 219, p. 429.

18. J. Starcky, *op. cit.*, col. 1008.

19. *Ibid.*, col. 1009.

20. J. Starcky, *op. cit.*, col. 1007.

21. D. Sourdél, *Cultes du Hauran*, p. 105-106.

observe au Sadd al-Ma'jan une grande diversité. Les niches les plus simples sont rectangulaires ou carrées, la délimitation étant parfois difficile; quelques-unes sont cintrées: 596, 559, 560, 561, 640, 642. La niche 625 est un cas à part; sa forme en T ne semble abriter ni bétyle ni cavité plus petite; on peut la comparer au monument 592, qui présente aussi une niche en T, elle-même placée dans une niche plus grande et rectangulaire. Il est difficile de préciser la signification exacte de cette forme.

A mi-chemin de la simple niche et du véritable édicule, on trouve des niches à pilastres, rectangulaires ou cintrées: 625, 566; également une niche cintrée garnie d'une bordure en léger relief: 652.

D'autre part, certaines niches sont surmontées de rainures: 620, 619, 629, 600 (le dessin de Dalman est incomplet dans ce dernier cas). Le monument 575 est évidé à sa base. C'est la niche 595 qui présente l'exemple le plus complet: elle est en effet coiffée d'une large rainure dans laquelle on distingue des trous de fixation (le dessin de Dalman est là encore inexact), et le bas, élargi, est évidé. Ces rainures étaient sans doute destinées à être stuquées, l'emploi de ce matériau est en effet bien attesté à Pétra, en particulier au Qasr al-Bint²²; l'aspect de la niche, garnie d'une bordure et d'une base de bétyle, était sans doute très différent de ce qu'il est aujourd'hui.

Enfin certains monuments affectent la forme de véritables édicules de style hellénisant. Les formes cintrées sont peu fréquentes au Sadd al-Ma'jan: 568, 600; le meilleur exemple est le monument 606 que l'on peut rapprocher du décor de la porte du tombeau B 229.²³ Les niches à fronton sont au contraire assez nombreuses: 621, 575, 589, 588, 587, 563, 592; on trouve un parallèle au monument 587 dans la porte du Tombeau aux Lions.²⁴

Je n'ai pas trouvé de correspondant

exact au double édicule 622; son originalité vient de l'absence de fronton; ce double encadrement suggère peut-être l'entrée d'un sanctuaire et le naos qui abrite un bétyle ou un relief aujourd'hui disparus.

L'édifice 593 offre un aspect très proche de celui d'une niche de Medaïn Saleḥ,²⁵ mais son attribut, surmontant l'arceau, est un croissant de lune, et non un aigle. L'ensemble s'éloigne sensiblement du modèle classique.

Deux monuments sont précédés d'un petit escalier; celui de la niche 652 se présente de la même façon que celui du monument 286 à an-Numayr; et les quelques marches latérales qui mènent à la niche 559 sont très semblables à celles de la niche 273f, au wâdi an-Numayr également. Plusieurs monnaies du Hauran montrent de même de petits escaliers placés devant des bases de bétyles.²⁶

Commentaire:

On peut à présent tenter d'approfondir quelques-uns des problèmes que pose l'étude de ce site.

Pour déterminer quelles étaient les divinités adorées au Sadd al-Ma'jan on dispose de divers indices. Les deux inscriptions apportent des éléments sûrs; Dûsharâ et al-'Uzzâ sont les deux divinités principales de Pétra. L'expression "et tous les dieux" était utilisée dans la grande inscription de Pétra;²⁷ elle ne vise pas nécessairement les divinités connues à Pétra, comme Isis, Atargatis et Kutbâ,²⁸ mais englobe des divinités étrangères à la ville ou simplement des dieux anonymes.

La forme des bétyles eux-mêmes est d'un faible secours pour déterminer la divinité représentée; on trouve au Sadd al-Ma'jan des bétyles rectangulaires et d'autres ovoïdes; mais rappelons que celui de Dûshara dans la *souda* est rectangulaire, mais que sur les monnaies d'Adraa il

22. H. Kohl, *Kasr Firaun*, 1910.

23. Brünnow & Domaszewski, *Die Provincia Arabia* I, 1904, p. 269.

24. *Ibid.*, no. 239, p. 273; no. 425, p. 328.

25. Jaussen & Savignac, *op. cit.*, fig. 206, p. 417.

26. Hill, *op. cit.*, p. xxxi et p. 27 no. 3.

27. *C.I.S.* 350.

28. Isis, *ADAJ*, 20 (1975) p. 120s, Pl. XLII, 2: Atargatis, *C.I.S.*, 423; al-Kutbâ, *op. cit.*, col. 978.

est hémisphérique.

Dans le cas des bétyles associés, l'interprétation est délicate: quand il y a deux divinités seulement on peut suggérer encore Dûsharâ et al-'Uzzâ, mais le triple bétyle pose un problème plus complexe. On pourrait suggérer les trois déesses citées par Ibn-al-Kalbî et par le Coran: Allât, al-'Uzzâ et Manât²⁹; mais cette interprétation paraît prématurée à l'époque nabatéenne.

L'unique représentation anthropomorphique du Sadd al-Ma'jan, le petit buste de la niche 622, ne me paraît pas représenter une figure féminine comme le pensait Dalman³⁰; les cheveux sont mi-longs et la tête est coiffée d'un calathos; on distingue les plis de la chlamyde sur la poitrine et une corne d'abondance derrière l'épaule droite. Un buste très semblable se trouve au Dayr (Br. 468)³¹; ces attributs sont ceux d'un dieu de la fertilité, et ici le buste avait un pendant à droite, peut-être une figure féminine³²; il s'agissait donc de deux divinités secondaires, assesseurs de la divinité principale, peut-être al-'Uzzâ (proximité de l'inscription), qui aurait été représentée dans la petite niche.

Certains monuments, enfin, sont ornés du croissant de lune (593, 595, 618). Dans le cas du monument 618, l'érosion de la pierre rend la lecture difficile, néanmoins les deux pilastres surmontés de demi-lunes rappellent le monument 109 au Haut-Lieu; ils évoquent les hampes babyloniennes dédiées au dieu lunaire Sin³³; un buste de Pétra, non publié, porte un croissant derrière les épaules, selon un schéma propre à la Syrie à la même époque³⁴. Il paraît donc assuré qu'il y a eu à Pétra, à l'époque nabatéenne, un culte dédié à un dieu Lune. Ce dieu n'est pas forcément d'origine nabatéenne; je pencherais pour le dieu lunaire des Minéens, Wadd. En effet, les Nabatéens étaient en relations étroites avec cette population d'Arabie du sud, dont la colonie la plus

septentrionale, Dédan (l'actuelle al-'Ulâ), était non loin au sud de Médain Saleh; par ailleurs leur présence est attestée à Wâdi Ram.³⁵ Enfin, un petit autel portant en minéen et en grec une dédicace à Wadd a été trouvé à Délos.³⁶

Que peut-on dire, dans l'état actuel du site, sur les pratiques cultuelles?

Les sanctuaires rupestres paraissent caractéristiques des sites nabatéens (on retrouve le même principe à Médain Saleh), mais à ma connaissance, les auteurs anciens et arabes n'en font pas mention; c'est à la description de rites autour de pierres dressées, comme dans la *Souda* ou le *Livre des Idoles*, qu'ils s'attachent. Pourtant, il y a une différence fondamentale entre les rites autour d'un bétyle, tels qu'ils sont décrits chez ces auteurs, et ceux accomplis devant une niche à bétyle; la frontalité interdit les circum-ambulations très à l'honneur chez les bédouins préislamiques. De même il apparaît difficile de traiter les stèles des niches comme des autels-bétyles sur lesquels on fait des sacrifices parfois sanglants; pourtant les cupules placées à la base de certains bétyles étaient évidemment destinées à recevoir des libations, de lait ou de sang.

Au-dessus de la niche 640 des trous permettaient de suspendre des offrandes ou des ex-votos (deux trous sont parfois reliés entre eux pour permettre de passer un lien); quelques marches, précédant la niche 652 renforçaient la solennité des rites. La tradition des pèlerinages a dû rester bien vivante; la présence de niches vides servant de reposoirs est là pour en attester.

La comparaison avec d'autres sites semblables de Pétra fait apparaître certaines caractéristiques. Alors que le Sîq est un lieu de passage, puisque c'est la principale voie d'accès de Pétra, le Sadd al-Ma'jan se trouve, lui, à l'écart; on peut aussi le comparer avec le Qattâr ad-Dayr,

29. Ibn al-Kalbi, *Les Idoles*, p. 15-16.

30. *Petra*, p. 311.

31. P.J. Parr, *PEQ* 100 (1968), Pl. IV.

32. M. Dunand, *op. cit.*, Pl. XIV, 39 et 40.

33. A. Spycket, *RB* 80 (1973), p. 388.

34. D. Sourdel, *op. cit.*, Pl. II, 1.

35. J. Starcky, *op. cit.*, col. 978.

36. *RES* 3570.

beaucoup plus petit, mais également en rapport étroits avec l'eau; c'est elle qui a modelé le Sadd al-Ma'jan et en a fait un lieu saint; il faut se garder toutefois de considérer l'aspect de ce problème d'après la situation actuelle: les travaux de canalisation ont dû, dans l'Antiquité, régulariser le flot et contenir les inondations, car ce site faisait partie d'un très important ensemble hydraulique destiné à acheminer les eaux du wâdî Mousa dans le site, au moyen de canalisations naturelles ou artificielles longeant à l'est et au nord la façade d'al-Khubtha.

Les éléments de datation dont on dispose sont assez fragiles, à part l'inscription à Dûshara qui peut être datée, selon le Père J. Starcky du premier siècle de notre ère.

Les niches de type hellénisant doivent se situer entre le règne d'Arétas III Philhellène (85-62 av. J.C.) et le deuxième siècle ap. J.C. qui voit le déclin progressif de la ville.

Nielsen estimait que le niveau du sol avait baissé d'environ un mètre depuis l'Antiquité; on peut donc estimer que les niches les plus hautes sont aussi les plus anciennes; il faut également imaginer que l'érosion a détruit les chemins d'accès et parfois même, les marches qui accédaient à ces niches; elles ont généralement les formes les plus simples.

C'est dans la rotonde que l'on observe le mieux les phénomènes d'érosion. A l'origine il s'agissait d'un simple coude du lit du wâdî; la face sud, qui se dresse bien droite avant un léger surplomb, a dû porter très tôt des niches; elles sont très nombreuses, placées à différentes hauteurs et s'imbriquent les unes dans les autres, avec des réaménagements et des réutilisations. L'autre face du couloir, la face nord, qu'elle ait été ou non antérieurement creusée de niches elle aussi, a été excavée,

et sans doute en plusieurs temps. Les niches 619 et 620 me paraissent ainsi antérieures à la niche 621, elle-même plus ancienne que l'édicule 622 qui semble représenter le dernier état; le panneau de droite, faisant pendant à celui au buste, a été soit érodé par l'eau, soit inachevé; aucune niche nouvelle n'est venue trouser la façade bien dressée que l'on aperçoit à droite sur la (Pl. XLVI,3); seule une rainure atteste peut-être l'esquisse d'un nouveau monument. Le flot du wâdî a continué à creuser son propre lit, érodant le bord de la plate-forme témoin.

Remerciements

Je veux adresser tous mes remerciements au Père Jean Starcky pour son aide constante et pour les conseils qu'il m'a prodigués au cours de ce travail; il m'a également communiqué les photos des (Pls. XLV,1 et 2). Ayant appris sa disparition soudaine, je veux saluer ici respectueusement sa mémoire. J'adresse aussi mes remerciements au Dr. Fawzi Zayadine qui m'a fait découvrir le site; à M. Jean-Marie Dentzer qui a matériellement facilité mon séjour à Pétra en 1978; également à Adrian Mandzy, qui m'a accompagnée dans mes visites en 1987, et m'a aidée à faire un croquis du site; et à René Saupin (IGN), qui a bien voulu dessiner la carte du site (fig. 1). Enfin, je veux remercier ici le Dr. Adnan Hadidi, ancien Directeur Général du Département des Antiquités de Jordanie, qui a si aimablement accordé les autorisations de séjour à Pétra.

Marie-Jeanne Roche
 Department of Anthropology
 Hunter College, CUNY
 695 Park Ave
 New York, NY 10021
 U.S.A.

ARCHITECTURE OF THE PETRA BEDUIN: A PRELIMINARY REPORT

by
Piotr Bienkowski

Introduction

The Bedul tribe of beduin lived within ancient Petra for about 150 years, occupying the caves carved by the Nabataeans. In 1985 most of the tribe was moved to the new nearby village of Umm Saihun. This was part of the reorganisation of Petra along more commercial lines in an attempt to improve facilities for tourists. The prospect of the move presented the last opportunity to record the traditional way of life of the Bedul. The author's first season (May and June 1983) surveyed their architecture in Petra, recording the different types of habitation (Bienkowski 1985). It further suggested that study of the ways in which the Bedul adapted the Nabataean caves to their own needs might shed some light on Nabataean domestic occupation (*ibid*: 158-159). The second season (September 1986) had two components: study of the now abandoned caves that had previously been surveyed in detail, to compare the visibility of remains before and after abandonment; and an architectural survey of certain houses in the new village. The latter concentrated on houses of families whose habitations we had studied in 1983, in order to make a direct comparison.¹ Parallel work by Anna Ohannessian-Charpin on the socio-economic history of the Bedul has stressed the social changes caused largely by external forces (Ohannessian-Charpin 1986 and 1987; *cf* also Banning and Köhler-Rollefson 1986: 161 for Bedul living among

the 'Ammarin in Beida).²

The Bedul in Petra

About 140 beduin families lived within Petra until 1985. Their economy was based on agro-pastoralism, mostly outside Petra in fields and pastures in Beida and Jabal Harun, and on commercial and seasonal employment (*cf* Ohannessian-Charpin 1987 for a detailed investigation of this aspect). Many of the Nabataean caves they inhabited were very spacious indeed. The number of caves for each family ranged from two to about twelve, which directly reflects the varying sizes of families and their economic status (*cf* Ohannessian-Charpin 1986 and 1987). The beduin left some chambers in their original state, without alterations or additions. Usually, though, they built stone walls, with a door and windows, across the front. Water had to be fetched from a spring some distance away. In one large complex of caves there was a stone channel to divert runoff rain water into a rock-cut well. Many families planted gardens outside their caves where they grew flowers and herbs such as mint and parsley.

The survey identified three basic types of unit used by the Bedul. Characteristic criteria were use, type of unit, and period of occupation. The three typical types were:

1. Caves used for permanent residential occupation (Figs. 1 & 2);
2. Caves used as occasional work areas

1. The fieldwork in Petra was supported by the British Institute at Amman for Archaeology and History, the British School of Archaeology in Jerusalem, the Palestine Exploration Fund, the University of Liverpool, and Liverpool Museum. The survey team was Basia Chlebik, Pennie Vickers and the author. We are most grateful to Dr. Adnan Hadidi for all his assistance, and to

Niazi Shab'an and Suleiman Farajat for help in Petra. Thanks also to Anna Ohannessian-Charpin and Dr. Judith McKenzie for discussing various points, and to the British Institute for practical assistance.

2. The final report on this work will be written in collaboration with Anna Ohannessian-Charpin.

(Fig. 3);

3. Tents used for seasonal residential occupation (Fig. 4).

(These have been described in detail in Bienkowski 1985: 152-158.)

Some caves were used primarily as living quarters, with spaces for cooking and storage (*cf.* Figs. 1 & 2). Some were animal pens or middens, and others were used only at certain times of the year, for instance during the harvest. These are situated near fields and were used as work areas or storage spaces for equipment and food (*cf.* Fig. 3). However, many caves had overlapping uses, and could not be defined by a specific activity. They fulfilled different functions depending on the time of day, the season and the whim of the occupants (Bienkowski 1985: 155).³ Many families set up a tent outside their caves during the summer, and the focus of family life shifted there. The reasons for this are hard to disentangle — tradition, increased living space, life in the open with protection from the sun, and probably other factors are all involved.⁴ In some cases the cave was vacated in about April, and a tent erected some distance away. Within the tent were stone walls, one to four courses high, which acted as windbreaks and to define the 'living space' (Fig. 4; Bienkowski 1985: 156-158).

The New Village

New purpose-built houses have been provided by the Jordanian Government at Umm Saihun for the Bedul. One hundred semi-detached homes have been built, and more are under construction. Smaller rooms, running water, several shops, the absence of animal pens and the siting of the

village by a road are all factors contributing to a change in family life which is already noticeable. The houses are very close together compared with the spaciousness of Petra, which seems to be leading to a deliberate demarcation of space (as at Mu'addi, *cf.* Layne 1987: 371-n. 21). Many of the beduin are erecting boundary walls and building extensions, usually for use as guest rooms or shops. Fig. 5 illustrates the plan of a typical house, indicating what has been added by the Bedul within the first two years.

A major change is the presence of several shops in the village and the siting of the village on a road. In Petra, shops were not easily accessible, and bread-making was part of the daily routine. Now fresh bread is bought daily, and the villagers have no need to make their own. Layne has reported a similar development at Mu'addi in the Jordan Valley (1987: 367). Increased availability of commercially produced items, such as bread and yoghurt (which is still made at home by some of the Bedul), may well affect the future use of household storage space and activity loci. The road makes transport simpler, since in Petra many homes were not even accessible by car. The increased mobility of the Bedul is already integrating them far more into regional life, from which they were perhaps isolated previously through their reliance on a tourist economy (Ohannessian-Charpin *ms.*; *cf.* Shoup 1985).

The former homes of the Bedul in Petra, now abandoned, are falling into disrepair. Much of the evidence for gardens and painted walls is already disappearing; this is the sort of detail we might cautiously infer on a larger scale for

3. Ohannessian-Charpin (1986 and 1987) argues that in Petra a mixed economy was always accompanied by a greater number of monofunctional caves, while a more intense agro-pastoral economy led to a large number being used for storage and animal pens. *Cf.* also Layne (1987: 365ff) who discusses monofunction and multifunction in relation to economic activities, though Kent (1984: 219) suggests that an increase in

monofunctional activity is a result of sedentism. This is what seems to have happened at Smakieh, though a change to a salaried economy affected the overall physiognomy of the village (Aurenche 1985: 338-341).

4. *Cf.* Layne (1987: 350-351) who reports enjoyment of the life-style as the major reason for moving into a tent among the 'Abbad.

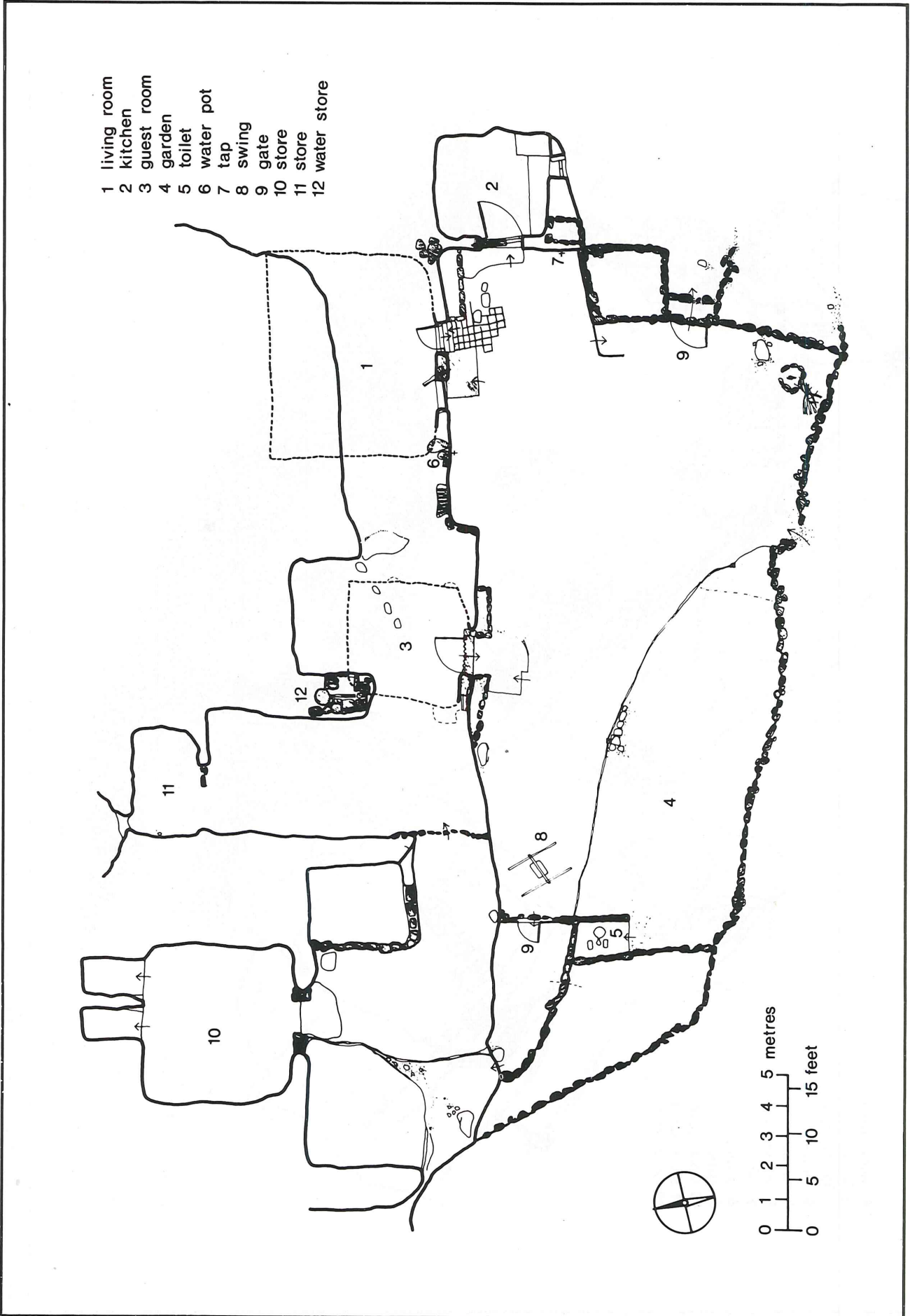


Fig. 1. Residential cave: plan. Shaded walls indicate structures added by the Bedul.



Fig. 2. Residential cave: axonometric projection.

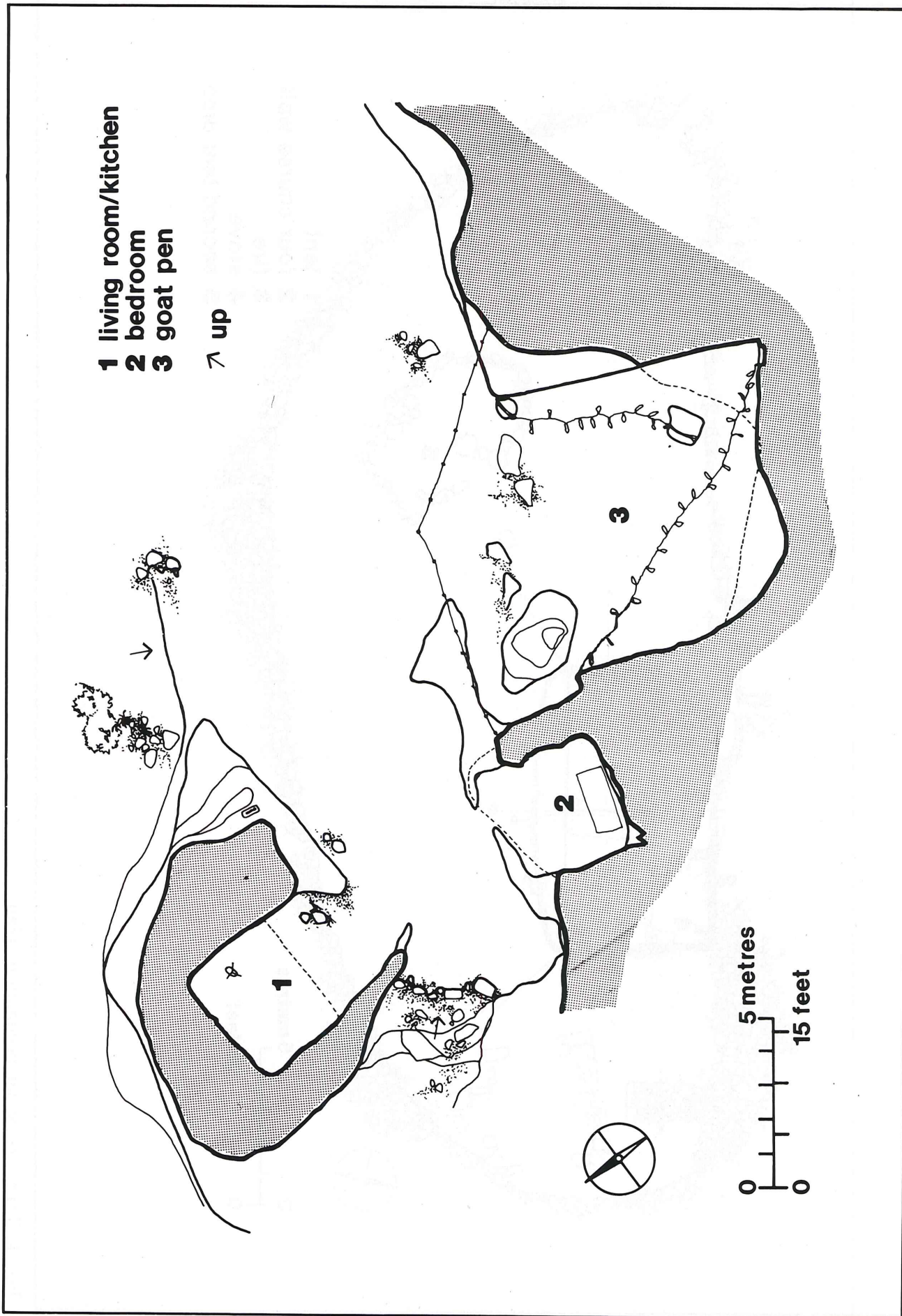


Fig. 3. Work cave - occasional occupation: plan.

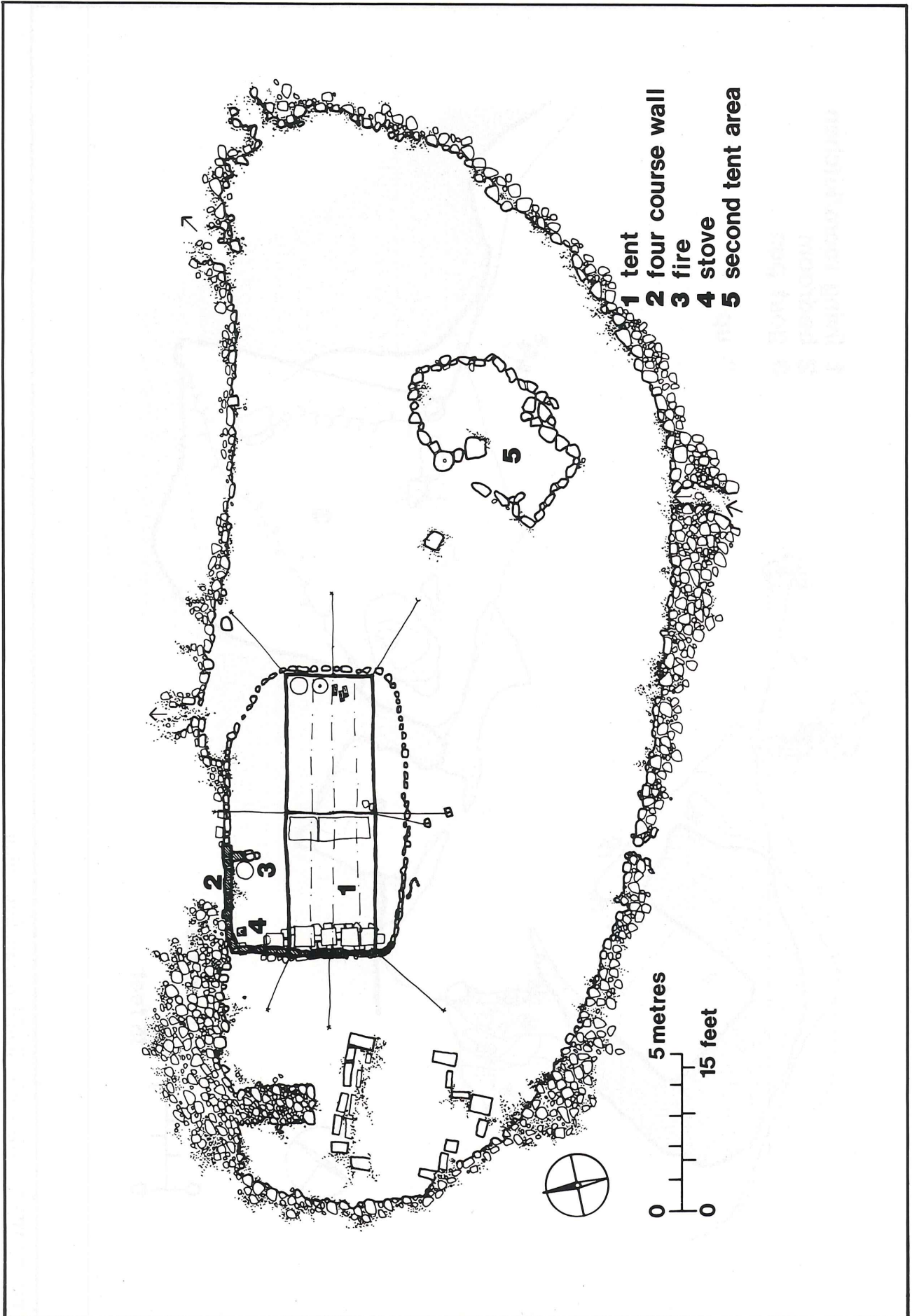


Fig. 4. Tent - seasonal occupation: plan.

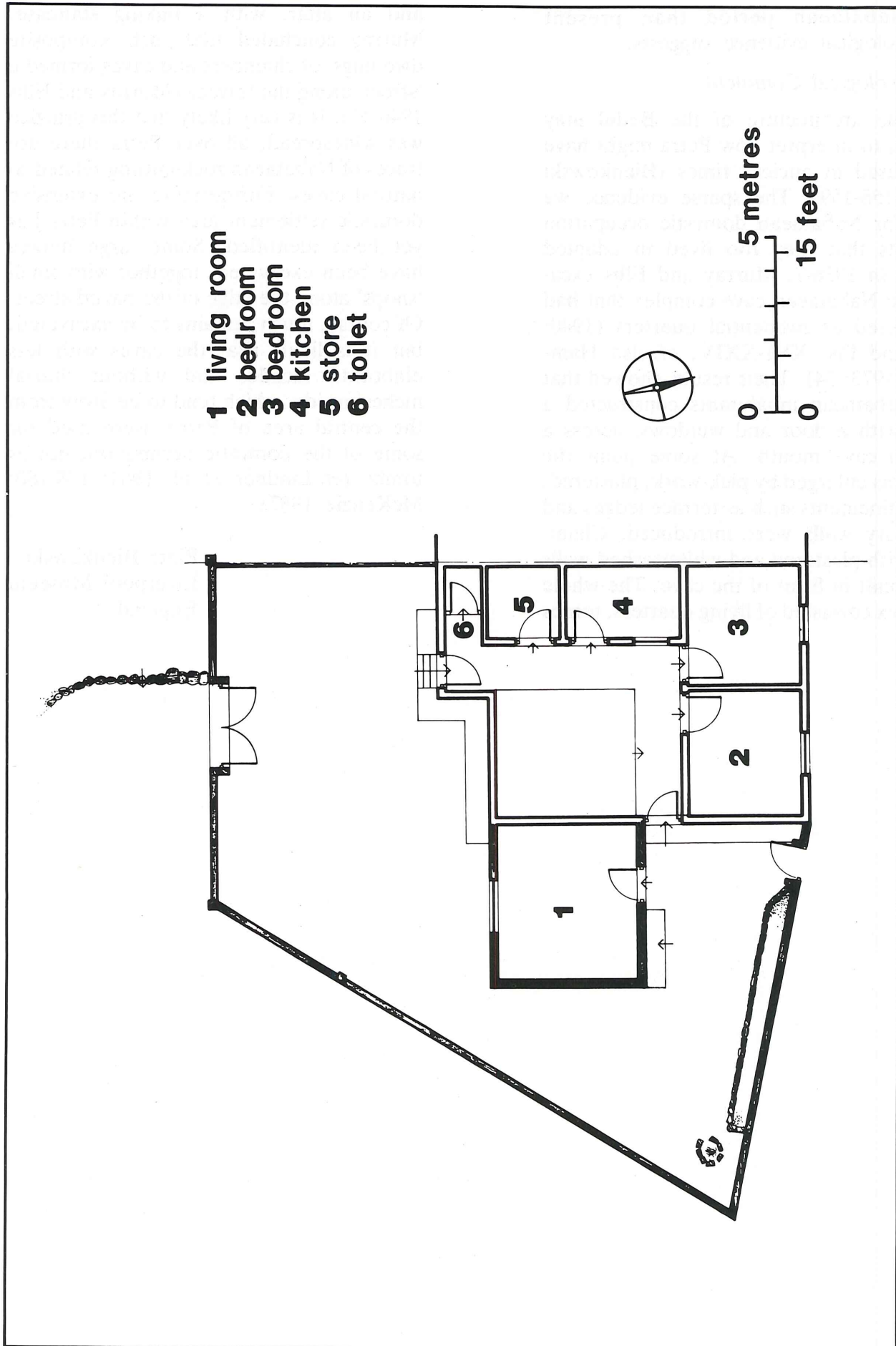


Fig. 5. Plan of family house in Umm Saihun. Shaded walls indicate structures added by the Bedul to the basic unit.

the Nabataean period than present archaeological evidence suggests.

Archaeological Comment

The architecture of the Bedul may help us to interpret how Petra might have been used in ancient times (Bienkowski 1985: 158-159). The sparse evidence we have for Nabataean domestic occupation suggests that they too lived in adapted caves. In 1936-7, Murray and Ellis excavated a Nabataean cave complex that had been used as residential quarters (1940: 3-12 and Pls. XVI-XXIV; cf. also Hammond 1973: 54). Their results showed that the Nabataean inhabitants constructed a wall, with a door and windows, across a natural cave mouth. At some point the cave was enlarged by pick-work, plastered, and refinements such as terrace ledges and boundary walls were introduced. Chambers with plastered and whitewashed walls were built in front of the cave. The whole complex consisted of living quarters, tombs

and an altar, with a linking staircase. Murray concluded that such 'composite dwellings' of chambers and caves formed a 'street' along the terrace (Murray and Ellis 1940:11). It is very likely that this practice was widespread; all over Petra there are traces of Nabataean rock-cutting related to natural caves. Furthermore, no extensive domestic settlement area within Petra has yet been identified. Some large houses have been excavated, together with small 'shops' along the edge of the paved street. Of course, much remains to be excavated, but it is likely that the caves with less elaborate facades and without 'burial niches' inside, which tend to be away from the central area of Petra, were used for some of the domestic occupation, not as tombs (cf. Lindner *et al.* 1984: 178-180; McKenzie 1987).

Piotr Bienkowski
Liverpool Museum
England

Bibliography

- Aurenche, O. (1985) 'Enquête ethnoarchitecturale à Smakieh (Jordanie). Rapport préliminaire', in A. Hadidi (ed.), *Studies in the History and Archaeology of Jordan II* (Amman), p. 331-345.
- Banning, E.B. and Köhler-Rollefson, I. (1986) 'Ethnoarchaeological Survey in the Bēḏā Area, Southern Jordan', *ZDPV* 102, p. 152-170.
- Bienkowski, P. (1985) 'New Caves for Old: Beduin Architecture in Petra', *World Archaeology* 17:2, p. 149-160.
- Hammond, P. (1973) *The Nabataeans: Their History, Culture and Archaeology* (Studies in Mediterranean Archaeology Vol. 37, Gothenburg).
- Kent, S. (1984) *Analyzing Activity Areas: An Ethnoarchaeological Study of the Use of Space* (Albuquerque: University of New Mexico Press).
- Layne, L.L. (1987) 'Village-Bedouin: Patterns of Change from Mobility to Sedentism in Jordan', in Susan Kent (ed.), *Method and Theory for Activity Area Research: an Ethnoarchaeological Approach* (Columbia University Press), p. 345-373.
- Lindner, M. et al. (1984) 'New Explorations of the Deir-Plateau (Petra) 1982/1983', *ADAJ* 28, p. 163-181.
- McKenzie, J. (1987) 'Corpus of the Principal Monuments at Petra, 1986', in 'Research Reports 1985-6', *Levant* 19, p. 217-218.
- Murray, M.A. and Ellis, J.C. (1940) *A Street in Petra* (London).
- Ohannessian-Charpin, A. (1986) 'L'utilisation actuelle par les Bédouins des grottes archéologiques de Pétra', *ADAJ* 30, p. 385-395.
- Ohannessian-Charpin, A. (1987) 'The Influences of Tourism in Petra and the Strategies of the Bdouls', Paper read at the Workshop on the History and Reality of Pastoralism, Yarmouk University, Jordan, 23-25 April 1987.
- Ohannessian-Charpin, A. (ms.) 'Les transformations du mode de vie des Bdoul de Petra' (unpublished paper).
- Shoup, J. (1985) 'The Impact of Tourism on the Bedouin of Petra', *Middle East Journal* 39:2, p. 277-291.

REPORT ON A PRELIMINARY SURVEY OF THE WADI SHU'EIB

by

Katherine Wright, Robert Schick
and Robin Brown

Introduction

A preliminary survey of the Wadi Shu'eib was conducted by Katherine Wright and Dr. Robert Schick from June 18 to June 20, 1988. Robin Brown examined the ceramics recovered in surface collections made at selected sites. Although previous exploration of the Wadi Shu'eib has been very limited, there are suggestions that the wadi served as an important geographical link between the Jordan Valley and the highlands of the East Bank. The purpose of the 1988 fieldwork was to conduct a brief pilot study of the potential of the wadi for a systematic survey to be carried out in 1990.

I (K.W.) would like to express gratitude to the Department of Antiquities for permission to conduct the study, and to the former Director-General, Dr. Adnan Hadidi, for his assistance. I also wish to thank the following individuals for helpful discussions during the initial stages of the project: Dr. E.B. Banning, Dr. Andrew Garrard, Dr. Moawiyah Ibrahim, Dr. Zeidan Kafafi, Jonathan Mabry, Dr. David McCreery and Dr. Gaetano Palumbo. Responsibility for errors lies with the author.

Previous Research in the Wadi Shu'eib

Travellers' accounts of the geography of the Wadi Shu'eib are relatively scanty and center on the regions near Salt and on the juncture of the wadi and the Jordan Valley. For example, Merrill's (1881) description of the region focuses on the Wadi Nimrin and provides a description of the landscape near Tell Nimrin. The earliest systematic archaeological work in the wadi is that of Nelson Glueck (1951), who describes a number of sites in the area between Shuna and the Jordan River, but

apparently not further east of there. The Salt region was investigated by Roland de Vaux (1938). Mellaart explored this part of the Jordan Valley and excavated the site of Ghрубba (1956, 1962) and the East Jordan Valley Survey recorded sites in the Jordan Valley where Wadi Nimrin reaches it (Ibrahim, Sauer and Yassine 1988). In the early 1960s, Raikes (1965) explored the middle part of the Wadi Shu'eib and discovered three prehistoric sites there, including one Epipaleolithic cave site and two Pre-Pottery Neolithic sites. Raikes' brief exploration is the only archaeological survey of the middle and upper reaches of the wadi which is concerned specifically with prehistoric sites. The University of Durham conducted a soil survey of the wadi as part of a series of environmental studies conducted in the side wadis of the Jordan River (Atkinson *et al.* 1967). At present, excavations are under way at the Pre-Pottery Neolithic and Yarmoukian site of "Wadi Shu'eib" by a team from Yarmouk University, San Diego State University and the University of Nevada (Rollefson 1987, and this issue, p. 27).

Research Goals

The 1988 pilot project forms the first phase of a projected systematic survey of the Wadi Shu'eib. The general purposes of the project are (1) to document the settlement history of the Wadi Shu'eib from the Paleolithic to the present; (2) to trace the development of the wadi as an important route of communication and trade between the Jordan Valley and the Transjordanian Plateau; (3) to explore the foundations of settled life in the Neolithic and Chalcolithic periods.

The specific goals of the 1988 study were to obtain an overview of the range of sites in the wadi; to assess the problems of

the terrain affecting discovery of sites, particularly the problem of identifying buried sites; and to check briefly the environmental zones identified in the literature against field observations. This preliminary exploration was specifically designed *not* to test hypotheses about human settlement in the valley, but to provide background information permitting refinement of our research goals and methodology for the systematic survey to be conducted in the future.

Methodology

The overall methodology of the Wadi Shu'eib Survey Project is to obtain settlement data representative of the wadi as a whole. The survey area shown in Fig. 1 is a region of 150 square kilometres, defined as the full extent of the Wadi Shu'eib from the city of Salt to its juncture with the Ghor (where it is called the Wadi Nimrin). The survey area extends at least two kilometres on each side of the wadi bed and the area has been defined according to the Universal Transverse Mercator grid system.

Within this area, the 1988 fieldwork focused exclusively on the course of the wadi between Salt and Shunat Nimrin. Given a limited amount of time for the pilot study, the wadi itself was chosen as a natural "transect" which encompassed three important environmental zones: the Mediterranean woodlands, the foothill steppe, and the riparian forest associated with the wadi bed and springs. In addition, the course of the wadi itself was chosen for initial study because of certain topographical advantages: ease of access by road and the presence of road and wadi cuts allowing identification of buried sites in section. Further, we made the working assumption that the course of the wadi would have been a natural magnet of settlement in all periods and therefore would be the most likely feature along which to identify sites from the greatest range of periods.

Because previous exploration of the wadi has concentrated on the areas near Salt and Shunat Nimrin, a decision was

made to survey the areas between these two towns, in order to assess the range of sites in the central part of the valley. Here, the course of the wadi crosses the Mediterranean woodlands in the higher elevations of the east, and the steppe areas of the foothills as they descend toward the *ghor*. By road travel, each of these two zones is 12 kilometres in length. Three kilometer-long transects within each zone were chosen by random sampling for initial exploration. Each kilometer transect followed the course of the wadi bed and the road; one member of the team focused on the road cut and wadi cuts while a second surveyed the areas about 50 meters away from the wadi on each side. It was expected that a focus on the road cut would provide the maximum opportunity to observe prehistoric sites buried under colluvial deposits.

For each site, details of size, surface materials, local environment and modern land use were documented on a site form. Photographs were taken and sketch plans of each site were drawn. Surface collections were made in order to obtain a general idea of the dates of the sites. In most cases the collections were very small and composed of non-random samples of diagnostic artifacts. In several cases, systematic collections of all artifacts were made within small areas 32 cm. in radius.

Results of the 1988 Pilot Project

The 1988 fieldwork identified 21 sites ranging in date from Paleolithic-Neolithic(?) to modern (20th century). A site was defined as either (1) any concentration of artifacts of moderate or high density relative to the "background noise" of artifacts which can be seen in most areas of the landscape; or (2) any abandoned feature or structure which suggests ancient occupation or land use. It should be noted that modern sites of potential interest to ethnoarchaeologists were also recorded if they were abandoned.

Given this definition, the 21 sites recorded included sites of diverse dates and functions, from flint scatters possibly

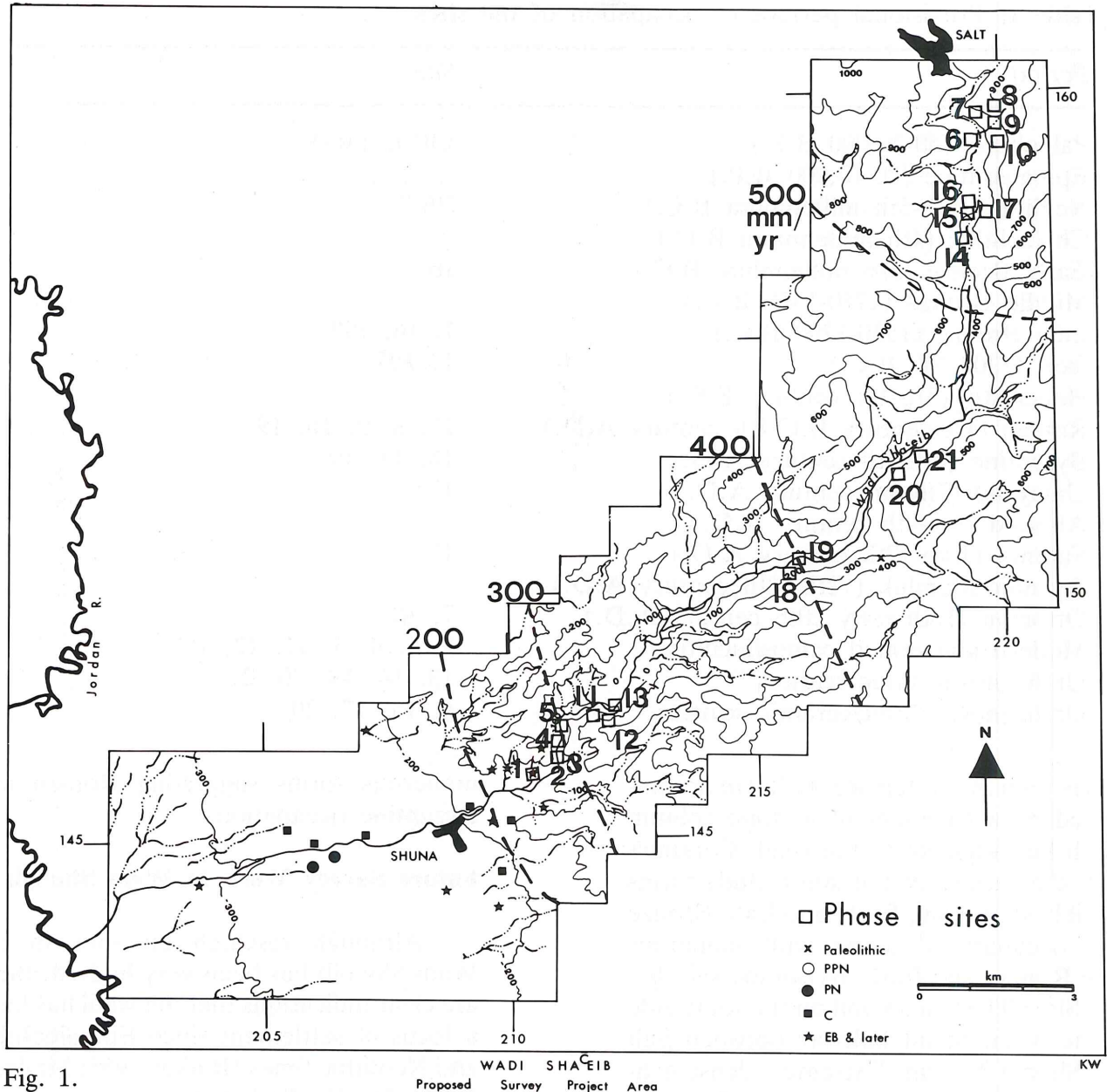


Fig. 1.

of Paleolithic or Neolithic date (Sites 13 and 20) to large tells of Late Bronze and subsequent periods (Site 1, Tell Bleibil); Roman tombs and subterranean chambers (Sites 8 and 9); Ottoman water mills (Sites 7 and 10); and abandoned pastoralist camps such as Site 18. Of special interest are two Roman/Byzantine sites (16 and 19) of substantial size, containing architecture and extremely dense artifact scatters suggesting large habitation sites. Several of the sites recorded were already known (Sites 1 and 16).

Table 1 summarizes the provisional periods of occupation of these settlements.

Sites of particular interest include two Roman/Byzantine sites which are large and contain substantial architecture. One of these (Site 16) is known from previous work (Hadidi 1979); it contains a number of rock-cut tombs, an olive press and masonry structures of dressed stone which have now been dismantled and re-used in terrace walls of historic and modern date. One of these tombs, described by Hadidi (1979) is particularly elaborate, containing sarcophagi of carved limestone and a sculpture carved in a niche set into one wall of the tomb. Similar, less elaborate rock-cut chambers and tombs were discovered elsewhere on the site. The re-used dressed

Table 1: Provisional periods of occupation of the sites.

<i>Period</i>	<i>Sites</i>
Paleolithic (50-20,000 B.P.)	13(?), 14(?)
Epipaleolithic (20-10,000 B.P.)	
Neolithic (9th-5th millennium B.C.)	20(?)
Chalcolithic (4th millennium B.C.)	
Early Bronze (3rd millennium B.C.)	16
Middle Bronze (1750-1550 B.C.)	
Late Bronze (1550-1200 B.C.)	1, 16, 19?
Iron (1200-300 B.C.)	1? 19?
Hellenistic (3rd-1st century B.C.)	
Roman (1st century B.C.-4th century A.D.)	1?, 8, 9, 16, 19
Byzantine (4th-7th century A.D.)	16, 17, 19
Umayyad (7th-8th century A.D.)	17?
Abbasid (8th-9th century A.D.)	
Fatimid (10th-12th century A.D.)	1?
Ayyubid-Mamluk (12th-16th century A.D.)	
Ottoman (16th-early 20th century A.D.)	7, 10
Modern abandoned camps/facilities	2, 3, 4, 5, 11, 12, 18
Undiagnostic lithic scatters	13, 14, 18, 20, 21
Undiagnostic lithic/ceramic scatters	6, 15, 17, 20

stones seen in the terrace walls are accompanied by a fragment of a stone column which lies adjacent to the road. Ceramics from the surface of this site include forms possibly suggesting Early and Late Bronze Age occupations¹ along with numerous Late Roman and Early Byzantine sherds².

Site 19 lies on a knoll on the south side of the wadi, about halfway between Salt and Shunat Nimrin. Extremely dense artifact concentrations suggest Roman/Byzantine occupation as well as earlier periods, evident in the large numbers of chipped stone artifacts. At least two masonry structures are visible on the surface as a result of digging, presumably by "pothunters". Surface ceramics collected from the site include possible Late Bronze or Iron Age sherds along with more

numerous forms suggesting Roman and Byzantine occupation.³

Future Survey Work in Wadi Shu'eib

Although research on sites in the Wadi Shu'eib has been very limited, there are clear indications that the wadi has been a focus of settlement since Epipaleolithic and Neolithic times (Raikes 1965; Mellaart 1956). The Wadi Shu'eib presents a unique opportunity to investigate the transitions from Pre-Pottery Neolithic to Pottery Neolithic and Chalcolithic periods. This is because the wadi flows into the Jordan River near three important sites which originally defined these transitions, namely, Jericho, Ghрубba and Ghassul (Kenyon 1957; Mellaart 1956; Hennessy 1977). Re-

1. Ceramics suggesting Early and Late Bronze or Iron Age dates include one plain ledge handle (cf. Amiran 1969: Plate 8:6) and one LB/Iron loop handle with ovoid section.
 2. Roman: four diagnostic sherds of Early and Late Roman dates, including one loop handle from a jar and one possible Early Roman jar stand (?). Six diagnostic sherds of Byzantine date include four Early Byzantine strap handles from jars and

one cream-slipped, ridged handle from a large pithos.
 3. Ceramics from Site 19 include one Late Bronze/Iron IA jar rim in a pale beige ware with a cream slip; one Early Roman *terra sigillata* sherd; three pinched grooved handles (cf. Sauer 1973: Figure 2:82); three notched bowl rims (cf. Sauer 1973: Figure 2:65); three rim sherds from Late Roman juglets and two Early Byzantine jug handles.

cent and forthcoming work at 'Ain Ghazal and the Wadi Shu'eib Neolithic site promises to give us a much clearer picture of the relation of these Jordan Valley sites to the Neolithic in highland Jordan (Rollefson and Simmons 1988) as well as new insights into the transition from the Early (aceramic) Neolithic to Late Neolithic periods.

Recent research on the northern wadis (Wadis Ziqlab, Kufreinja and Yabis) and on the southern wadis (Hisban and Kafrein) have given us some information on highland/valley settlement histories, but virtually no survey work has focused on the upper reaches of the Wadi Shu'eib, which form both an east-west route and a corridor to the northern reaches of the East Bank (Banning 1985; Greene 1986; Ibach 1976, 1978; Ibrahim, Sauer and Yassine 1976, 1988; Mabry and Palumbo 1988; Raikes 1965). We anticipate that the Wadi Shu'eib Survey will produce useful data on the prehistory and history of economics and trade between the Jordan Valley and the highlands, from the earliest villages of the Neolithic, to the establishment of the administrative centers of the Ottoman empire.

Future research in the Wadi Shu'eib should focus on systematic survey of the entire region along with a program of limited soundings at selected prehistoric sites. Such a program would require a detailed geomorphological survey in order to maximize the chances for discovery of prehistoric sites. Our preliminary results suggest that Paleolithic and Neolithic sites are buried under heavy deposits of colluvium throughout the wadi. Without detailed data on geomorphic processes affecting site discovery, inferences about settlement distribution in prehistoric periods would be premature. It is hoped that combined with such a geomorphological survey, the Wadi Shu'eib archaeological survey will address questions related to the settlement system of the wadi in Neolithic periods, in order to understand relationships between large villages such as the Wadi Shu'eib site and land use practices in surrounding areas.

K. Wright
R. Schick
R. Brown

Bibliography

- Amiran, R.
1969 *Ancient Pottery of the Holy Land*. Jerusalem: Massada Press Ltd.
- Atkinson, K. *et al.*
1967 *Soil Conservation Survey of the Wadi Shu'eib and Wadi Kufrein, Jordan*. United Nations Development Programme/FAO. University of Durham.
- Banning, E.B.
1985 *Pastoral and Agricultural Land Use in the Wadi Ziqlab, Jordan*. Unpublished Ph.D. thesis, University of Toronto.
- Glueck, N.
1939 *Explorations in Eastern Palestine III*. AASOR 18-19. New Haven: American Schools of Oriental Research.
1951 *Explorations in Eastern Palestine IV*. AASOR 25-28. New Haven: American Schools of Oriental Research.
- Greene, J.
1986 *Ajlun-Kufreinji, Archaeological Survey, 1986. Preliminary Report*. Department of Antiquities of Jordan Registration Centre. Open File Report.
- Hadidi, A.
1979 A Roman Family Tomb at es-Salt. *ADAJ* 23: 129-137.

ADAJ XXXIII (1989)

Hennessy, J.B.

1977 *Teleilat Ghassul*. Sydney: University of Sydney.

Ibach, R.

1976 Archaeological Survey of the Hesban Region. *Andrews University Seminary Studies* 14: 119-126.

1978 Expanded Archaeological Survey of the Hesban Region. *Andrews University Seminary Studies* 16: 201-214.

Ibrahim, M., J. Sauer and K. Yassine

1976 The East Jordan Valley Survey, 1975. *BASOR* 222: 41-66.

1988 The East Jordan Valley Survey, 1975 (Second Part). In: K. Yassine, ed., *Archaeology of Jordan: Essays and Reports*, p. 189-207. Amman: University of Jordan.

Kenyon, K.

1957 *Archaeology in the Holy Land*. New York: Praeger.

Mabry, J. and G. Palumbo

1988 The 1987 Wadi el-Yabis Survey. *ADAJ* 32: 275-305.

Mellaart, J.

1956 The Neolithic Site of Ghрубba. *ADAJ* 3: 24-40.

1962 Preliminary Report of the Archaeological Survey of the Yarmouk and Jordan Valleys. *ADAJ* 6-7: 126-158.

Merrill, S.

1881 *East of the Jordan*. New York: Scribner.

Raikes, R.

1965 Sites in Wadi Shu'eib and Wadi Kafrein. *PEQ* May-December 1965: 161-168.

Rollefson, G.O.

1987 Observations on the Neolithic Village in Wadi Shu'eib. *ADAJ* 31: 521-524.

Rollefson, G. and A. Simmons

1988 The Neolithic Settlement of 'Ain Ghazal. In: H. Gebel and A. Garrard, eds., *The Prehistory of Jordan: The State of Research in 1986*, p. 393-421. BAR International Series 396.

Sauer, J.A.

1973 *Heshbon Pottery 1971*. Andrews University Monographs Volume VII. Berrien Springs, Michigan: Andrews University Press.

Vaux, R. de

1938 Exploration de la region de Salt. *RB* 1938: 398-425.