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 Agaba (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 Agaba 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) Māḥiš ('Troublemaker'), this demon, and any (demon) that is angry at me -overturn!"

I am endebted 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 obscurs 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 Agaba

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). 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 endebted 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.

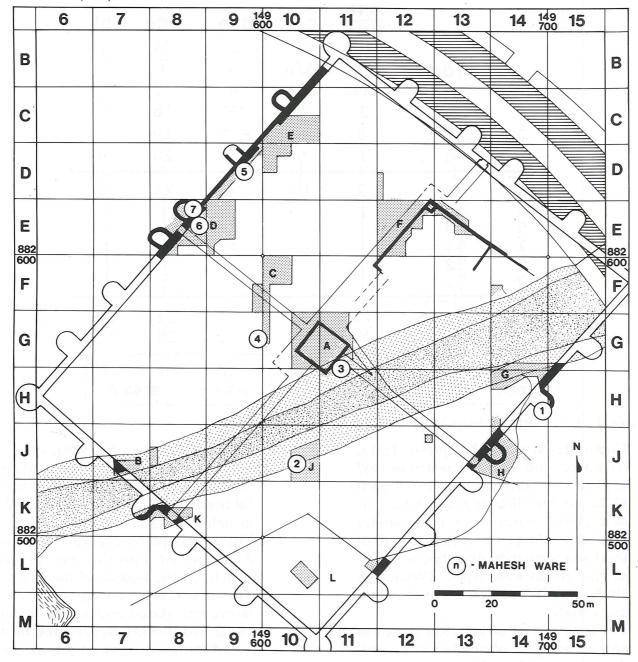


Fig. 1

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

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

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

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

- 4. 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.
- 5. 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.
- 6. 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.

7. 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; 31=10.9; 3m=1.3; 4b≈1.4, 11.10, XII; 4k=XII; 40≈XII; 4s=14.16; 4v=13.3; 4w=13.5;

 $^{51 \}approx 13.7,9$].

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 Agaba (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 Umavvad 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 (Tsaferis 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			vls and basin	ıs	[-] refers to the
	a	H14d-6	88-129		1986 ceramic corpus cream ware, comb incised, common medium sand, diameter unknown.
	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	[=130]	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.
	1	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.
	0	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.
1	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.
0	H14d-9	88-134	[≈16r]	buff-cream ware, greenish cream surfaces, moderate medium sand and mica.
o p	H14d-9 H11a-9	88-134 87-155	[≈16r]	buff-cream ware, greenish cream surfaces, moderate medium sand and mica. grey-brown ware, fine.
			[≈16r] 	sand and mica.
p	H11a-9	87-155		sand and mica. grey-brown ware, fine. cream-buff ware, cream slip on interior and exterior, common
p q	H11a-9 J10d-50	87-155 88-650		sand and mica. grey-brown ware, fine. cream-buff ware, cream slip on interior and exterior, common medium sand.
p q r	H11a-9 J10d-50 J10d-48	87-155 88-650 88-657		sand and mica. grey-brown ware, fine. cream-buff ware, cream slip on interior and exterior, common medium sand. cream ware, common medium and coarse sand.
p q r s	H11a-9 J10d-50 J10d-48 H14d-6	87-155 88-650 88-657 88-130		sand and mica. grey-brown ware, fine. cream-buff ware, cream slip on interior and exterior, common medium sand. cream ware, common medium and coarse sand. cream ware, common coarse grit.
p q r s	H11a-9 J10d-50 J10d-48 H14d-6 J10d-48	87-155 88-650 88-657 88-130 88-657		sand and mica. grey-brown ware, fine. cream-buff ware, cream slip on interior and exterior, common medium sand. cream ware, common medium and coarse sand. cream ware, common coarse grit. cream ware, abundant medium sand.
p q r s t	H11a-9 J10d-50 J10d-48 H14d-6 J10d-48 J10d-50	87-155 88-650 88-657 88-130 88-657 88-664		sand and mica. grey-brown ware, fine. cream-buff ware, cream slip on interior and exterior, common medium sand. cream ware, common medium and coarse sand. cream ware, common coarse grit. cream ware, abundant medium sand. cream-grey ware, common medium and coarse sand. cream ware, grey surfaces on interior (blackened), common medium sand.

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.
1	H14d-6	88-141	[≈18g]	cream ware, cream slip on interior and exterior, common medium sand.

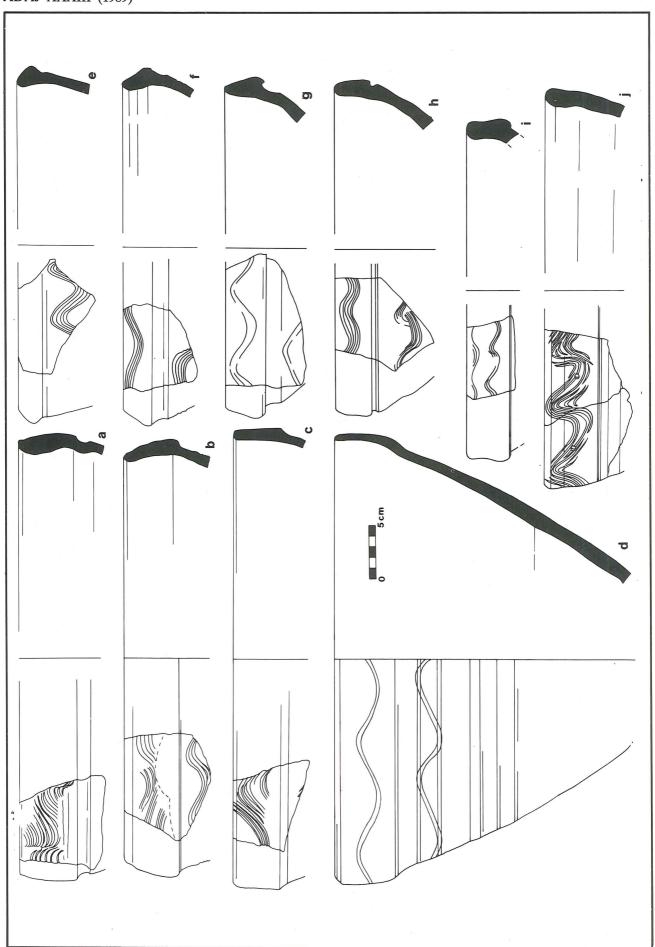


Fig. 2.

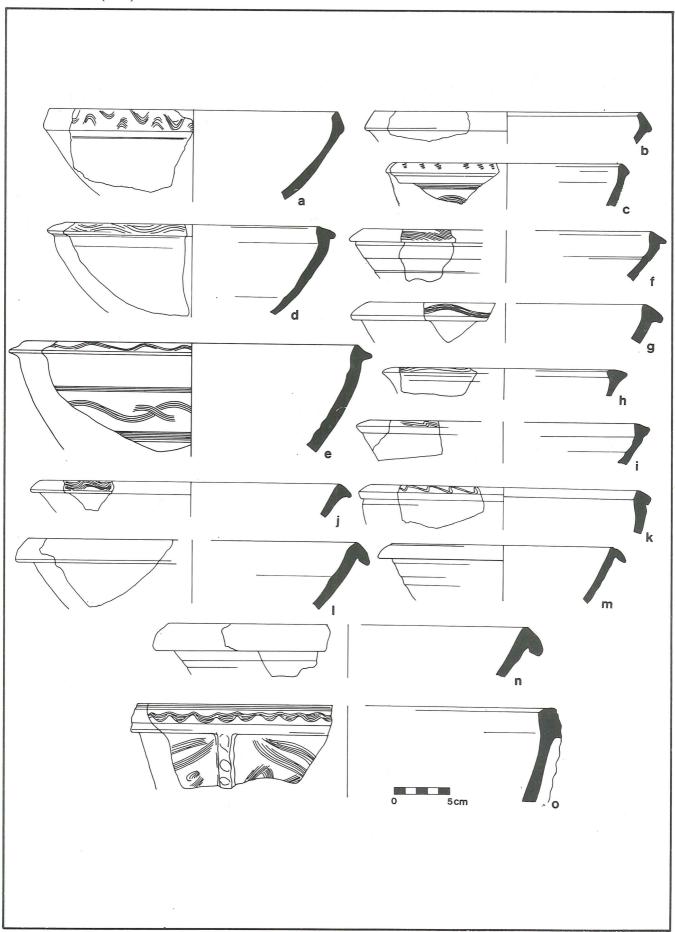


Fig. 3.

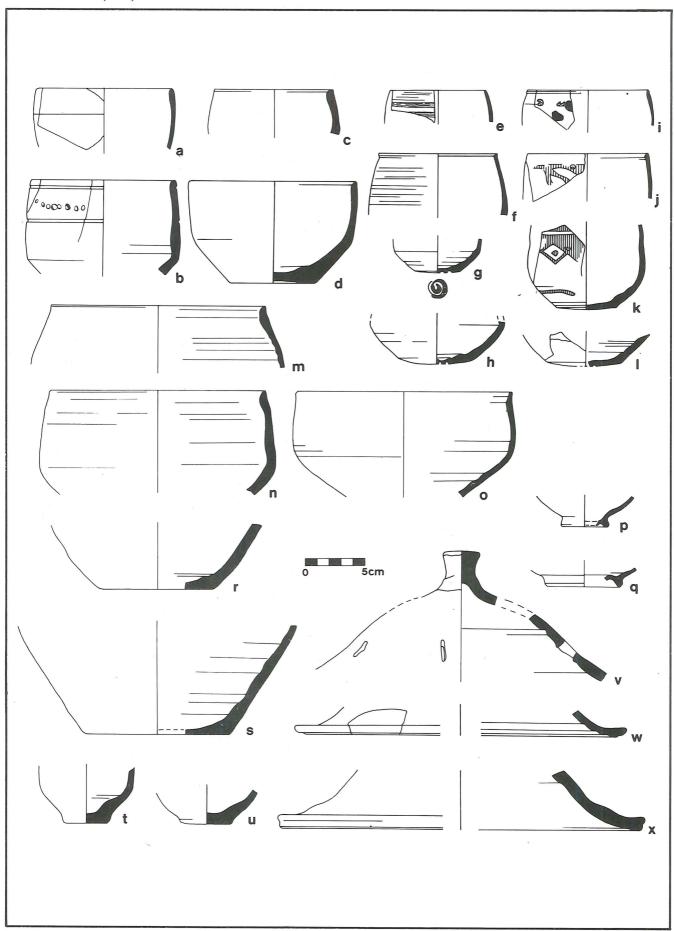


Fig. 4.

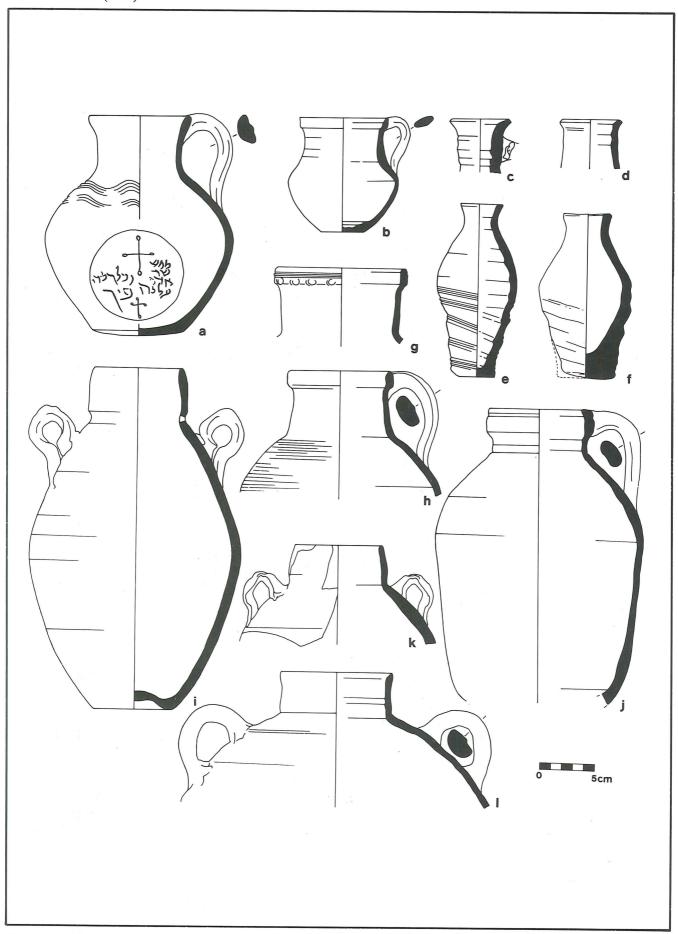


Fig. 5.

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.

Introduction a l'étude archéologique des deux routes syrienne et égyptienne de pélérinage 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

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

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.

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. 'Atigot 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.

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.

- The Administrative Structure and Urban Geography of the Jund of Filastin 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 Niehbuhr 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. *Atlal* 3: 9-42.