TOWN AND VILLAGE: SITE TRANSFORMATIONS IN SOUTH JORDAN (THE GHARANDAL ARCHAEOLOGICAL PROJECT, SECOND SEASON REPORT)*

by

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Project and Season Objectives

The principal aim of the Gharandal Archaeological Project is to investigate the nature and extent of human settlement in south Jordan, especially the causes, processes and degree of change in that settlement, between Classical Antiquity and the Islamic Middle Ages. The applied approach is interdisciplinary, drawing on a wide spectrum of archaeological and historical sources, and specifically features the archaeological excavation and survey of a large urban site and a reconnaissance of its immediate hinterland. The research program is set to produce new and verifiable information on urban conditions, economic activities, urban-rural relations, land use patterns, diet, settlement and population change in the transition from Antiquity to the Islamic Middle Ages. Particular focus is placed on understanding major variations to urban and rural settlement patterns over a millennium (roughly second to thirteenth centuries CE), specifically the important issues of 'town' and 'village', 'urban' and 'rural'.

The absence, until recently, of any serious work on south Jordan in Late Antiquity and the Early Islamic period is attributable to the entrenched perception that this region is geographically isolated and historically irrelevant. Now, seen as a highly erroneous nineteenth-century European view, it has been successfully challenged and essentially overturned by an increasing number of major regional surveys and site excavations.¹

Gharandal (Byzantine Arindela, Early Islamic 'Arandal; Fig. 1) and its district of al-Jibāl rose to prominence in Late Antique and Early Islamic times, ranking third in the Byzantine province of Palaestina Tertia. The district surrendered early to the Muslim armies, after which it formed part of the extensive Province of Damascus (Jund Dimasha). However by the tenth century Ruwāth had replaced Gharandal as the chief centre of al-Jibāl and literary sources note the dominance of the "Arabs" (Bedouin), suggesting major developments in sociopolitical conditions. Al-Jibāl and the neighbouring district of ash-Sharā to the south are also conspicuous in the later Islamic and Crusader sources. For almost nine decades (ca. AD 1100-1188) both were ruled by the



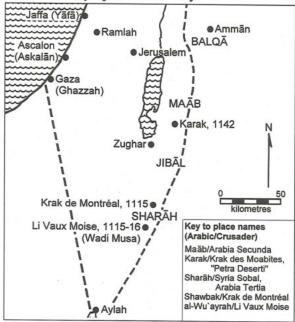
1. The location of Gharandal (Arindela), aț-Țafilah district, Jordan (Walmsley 1999).

1988; 1992), and the recent archaeological discoveries at individual sites such as al-Humayma and 'Aqaba (e.g. Oleson 1997; Whitcomb 1997; 1998).

Illustrative material by Hugh Barnes and Judith Sellers

Note especially the important survey work of, among others, D. Graf, G. King, and B. Mac-Donald (e.g. Graf 1992; King 1985; MacDonald

Latin Kingdom of Jerusalem, becoming part of the fiefdom of al-Karak after the construction of the castle at al-Karak (Fig. 2). The Islamic sources, for instance Ibn al-Qalanisi and al-Dimishqi, describe from the Arab viewpoint the struggle for domination over al-Jibāl and all south Jordan, and its social, economic and religious reconstruction after the expulsion of the Crusaders in 1188.² Clearly these sources collectively demonstrate the folly of older opinions that propose the virtual abandonment of settled life after the Islamic conquest. However their brevity precludes any fuller under-



South Jordan in the Crusader period (Walmsley 1998).

- 2. Critical for Jordan in the twelfth to fourteenth centuries are the journals and geographical works of Abū'l-Fidā' (1983), Dimishqī (1923), Fulcher of Chartres (1969), Ibn al-Qalanisī (1932), Ibn Jubayr (1952), William of Tyre (1941a; 1941b), to which can be added the great geographical dictionary of al-Yāqūt (Mu'jam al-Buldan).
- 3. The Gharandal Archaeological Project is a collaborative undertaking with the Department of Antiquities of Jordan, in affiliation with the Council for British Research in the Levant (in Amman: the British Institute at Amman for Archaeology and History). For the first season report see Walmsley (1998).
- Staff for 1998 were: Dr Alan Walmsley (Project Director, Australian Research Fellow, University of Sydney), Mr Imad al-Droos (Department of An-

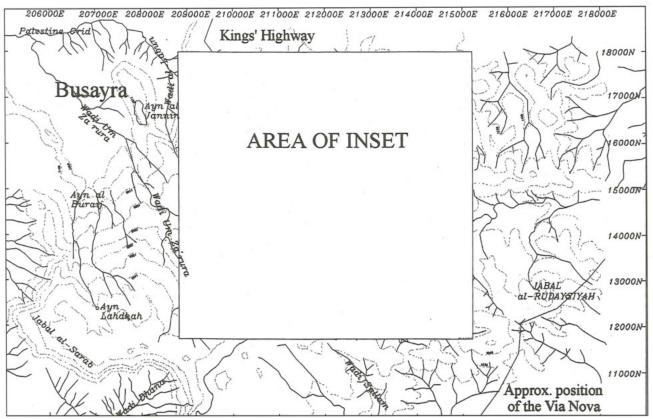
standing of social developments between Late Antiquity and the Islamic Middle Ages, and it is in this area that archaeology can make a major social historical contribution.

The archaeological site of Arindela / 'Arandal is strategically located in the upper eastern reaches of a wide valley, midway between the 'Kings Highway' and the *Via Nova* (Figs. 3 and 4). A perennial water source at the foot of the site irrigates agricultural fields that fan out in the valley below to the west. Grapes, apricots and figs are the major crops. Only about one fifth of the site is preserved, with the rest being built over in the last three decades by modern housing (Fig. 5).

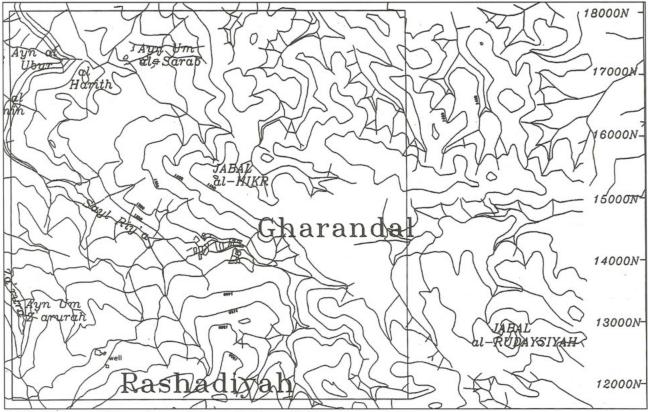
The second season of archaeological investigations at Gharandal was undertaken between 16 May and 9 July 1998.³ The work comprised seven weeks of excavations in the Department of Antiquities area and survey work around Gharandal, and a subsequent week of post-excavation work in the field and the dig house. A team of twelve undertook the work.⁴ The specific objectives of the 1998 season were as follows:

- 1. To continue ongoing investigations into the constructional sequence, architectural features, and post-ecclesiastical history of the Byzantine church (Area A, Fig. 6), probably the cathedral of Arindela.
- 2. To initiate excavations at a large doubleenclosure on the summit of the site, south

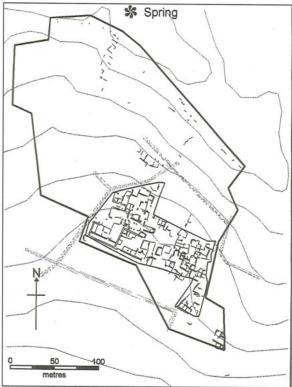
tiquities Representative), Mr Hugh Barnes (Surveyor), Ms Kim Barrett (Field Archaeologist, University of Sydney), Mr Malcolm Choat (Field Archaeologist, Macquarie University, Sydney), Ms Yara Doleh (Archaeological Assistant, British Institute at Amman), Mr Tony Grey (Ceramicist), Mr Philip Karsgaard (Head Field Archaeologist), Ms Judith Sellers (Illustrator, Australian National University, Canberra), Ms Noël Siver (Conservator and Project Administrator), Mr Barnaby Skinner (Archaeological Assistant, British Institute at Amman), Dr Rachael Sparks (Registrar, University of Sydney). The dig cook was Hassan Rahmi. A workforce of 15 was employed in the field, and was made possible by the considerable financial support of the Department of Antiquities of Jordan.



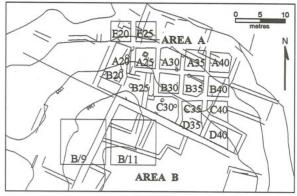
3. The Gharandal Catchment area, showing the approximate line of the Via Nova and the Kings' Highway (Barnes 1998).



4. Detailed map of the environs of Gharandal (Barnes 1998).



 Contour map of Gharandal, showing original extent of site and current antiquities area (Barnes 1997-98).



 Map of central antiquities (DOA) site showing location of excavations in Areas A and B (Barnes 1997-98).

of and earlier in date than the church (Area B). Excavation of the church revealed that it had been built against a massive stone wall, seemingly either Nabataean or early Roman in date. This wall formed part of a larger double compound measuring 65 x 25 m, the outer walls of which stand above ground to the south and west.

3. To develop a stratigraphically linked ce-

ramic sequence from the Late Roman to Islamic periods. This basic work is crucial for the accurate interpretation of regional survey data in the region. The historically questionable results from many surveys in southern Jordan reflect the absence of a reliable and fully published pottery sequence.

4. To document in plans the standing remains at nearby Ruwāth, a historically important site now seriously threatened by agricultural and building developments. The extensive ruins, all undated, feature major wall lines and two tower-like structures, possibly military/defensive in purpose.

RESULTS

Area A: Church (Supervisor: Malcolm Choat, assisted by Barnaby Skinner and Yara Doleh) (Fig. 6)

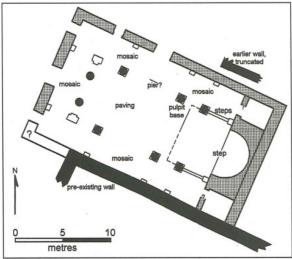
This year's work concentrated on defining and ascertaining the architectural features of the sanctuary and apse area of the church, paying special attention to periods of subsequent occupation in the area. As in last year's report, the five phases of occupation in the church are presented in Table 1 (with slight adjustments to dates), but this phasing has no relevance to occupation over the rest of the site.

Church Level 5: Construction and Use (Fig. 7)

The Apse: The Gharandal church is a monoapsidal basilica with two rectangular rooms flanking the central apse. Internally constructed of finely dressed masonry, the apse did not protrude beyond the external face of the church's east wall, which consequently presented a plain straight façade to the east. Within the church, the apse had the unusual feature of a full step up in line with the inner face of the east wall. The raised floor of the apse thus produced was paved with flagstones, which are poorly preserved. On ei-

Table 1. Provisional levels and archaeological features in Area A.

	Features	Date
Level 1	Post-occupation collapse.	?Seventeenth-twentieth centuries
Level 2	Houses. Thick uncoursed two-faced stone walls, doorways, packed earth floors, tabuns.	Fourteenth-?sixteenth centuries
Level 3	Houses. Uncoursed stone walls.	Eleventh-thirteenth centuries.
Level 4	Yellow clay fill within church; dividing walls; build-up.	c. Late eighth/ninth to tenth centuries.
Level 5	Monoapsidal Church with nave paving and mosaics in the aisles and narthex.	c. Fifth-eighth centuries.



7. Block plan of the Gharandal Church. Solid walls were pre-existing (mod. Barnes 1998).

ther side of the apse was a substantial pier, and these served as the eastern terminus for the flat lintels of the aisle colonnades in the body of the church. Beyond the piers, on both sides, doorways led from the aisles into the two small rooms that flanked the apse.

The Sanctuary Platform: Extending deeply into the nave of the church is the raised sanctuary platform, which was approached by three steps from the nave to the west and two steps from the aisles to the north and south. These have been preserved on the nave side and facing the north aisle. Slots for the sanctuary screens and posts can be clearly seen in the stonework edging the sanctuary on the

north side. Extensive remains of floor mosaics are preserved along the north and west parts of the sanctuary. The mosaic is plain on the north, but presents a simple, yet appealing rectangular pattern facing the nave on the west. A disturbance in this mosaic suggests that an altar stood on the platform in front of the apse, and this is confirmed by the absence of mosaics in the platform centre adjacent to the apse step. However, this area was paved with well-cut triangular stone including marble/calcite.

At the northwest corner of the sanctuary was a large flat base that served for a major piece of church furniture was discovered. Constructed from two flat stones, the base projects deeply into the nave to a point, roughly in line with the second row of pillars west of the sanctuary. The nave paving terminates at the base, suggesting it is an original feature of the church. The base exhibits three (of probably originally four) sockets cut in a hexagonal shape, which were almost certainly intended to hold colonnettes (probably for a pulpit, like in the Petra church), especially as one still preserves the lead bonding used to securely hold the insert in place.

Church Level 4: Dismantling of the Church

In the sanctuary area, the dismantling of

the church resulted in an extensive demolition of the apse and sanctuary platform, including the total removal of the screens. Many screen fragments were found in earlier seasons, suggesting an intentional demolition of the church's apse. The body of the church and the steps leading into the sanctuary and apse were deliberately filled with a yellow clayey soil to create a reasonably level surface. Roof tiles were found extensively in the fill, suggesting that the church roof was removed (or repaired) at this point. Roof tiles are commonly found in levels above the fill, suggesting possible re-roofing at the time the fill was laid down.

The date of this dismantling/conversion phase is unclear. However the absence of any type of handmade wares in the fill suggests a date before the eleventh century CE, but the identification of red painted early Islamic pottery equally suggests a date not before the mid-eighth century. Thus, a roughly ninth-tenth century date for the demolition of the church can be suggested.

Church Level 3: Construction of Domestic Structures

This phase typically involved the construction of stone walls for domestic occupation directly over the yellow fill and, in the sanctuary, usually directly onto the surface mosaic and apse paving. The question as to whether the yellow fill was laid immediately for the construction of these walls or served some other purpose is still unresolved. Notably, the sanctuary mosaics do not appear to have been exposed for any long period of time before being built over, suggesting that the time period between laying the yellow fill and building the walls was quite short.

The earliest surfaces associated with these walls include the first hand-made pottery. The vessels are thinly bodied and fired hard with the use of much chaff as temper, displaying red-orange to light brown faces and

black cores. No paint is attested. This type of pottery compares well with the later eleventh century CE varieties from 'Amman Citadel and Ayla/'Aqaba, and likewise probably dates to the latter part of the eleventh century.

Associated with the first handmade wares are:

- moulded lamps including a beautifully executed "arcade" style with arches resting on double columns and with vine scrolls above;
- wheel made wares including a jug with a tall, thin narrow neck and a long handle in a grey metallic ware (no paint or combing evident);
- 3. cream ware sherds with evidence of body paring ("Abbasid-Fatimid").

Later floor levels in these same houses have produced the first painted handmade wares. The paint is thick and sometimes bulgy, and bright red in colour. The decoration is linear, comprising wavy lines, dots and droplets. This pottery compares well with Robin Brown's twelfth century ash-Shawbak ware ("Crusader"), and should be of a similar date.

Shortly after, and in levels immediately above those with the linear handmade ware, the first geometric painted ware appears. However, the painted decoration is still very red in colour and applied to a similar, if thicker, fabric to the Shawbak linear ware. This pottery would appear to be a precursor to Hand Made Geometric Painted Ware (HMGPW).

Church Level 2: Modification of Domestic Structures

The upper levels exhibit considerable modification to standing domestic structures and the insertion of new wall lines. The pottery associated with this occupation is "classic" HMGPW, and would appear to have a very long life. At this point earlier and later varieties cannot be distinguished, although the earlier decoration appears more "refined".

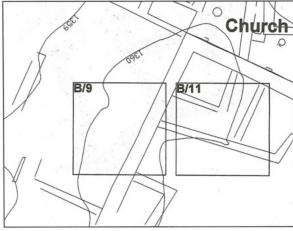
Church Level 1: Post-occupational Collapse and Subsequent Usage

After a long period of occupation, the Level 2/3 houses within Area A were abandoned. The absence of Ottoman pipes suggests they were deserted some time before the seventeenth century. The houses, being generally of relatively poor construction (especially those of Level 2), probably collapsed within a few decades of abandonment. A few rough walls, almost at ground level, would indicate some type of subsequent use of this area (stock herding, temporary winter shelters?), but seemingly not for prolonged village settlement.

Area B: The Double Enclosure Supervisors: Kim Barrett (B/9), Philip Karsgaard (B/11) (Figs. 6 and 8)

The exploration of the large double compound on the summit of Gharandal was a major initiative in 1998.

At the highest point of ancient Gharandal stands the impressive remains of a large double compound, probably of later Nabataean or early Roman date (first-second century CE), judging from the masonry. The massive constructional style of the outer and dividing walls share much in common with Khirbat adh-Dhariḥ, Khirbat at-Tannūr and, especially, the "Great South Temple" of Petra. The intention this year was to commence



8. Location of squares B/9 and B/11 in the Double Compound of Area B (Barnes 1998).

an archaeological section across the central dividing wall, thereby probing both enclosures to the east and west of this wall. Two 10x10 m adjoining squares, labelled B/9 and B/11, were laid out to span the central dividing wall (Fig. 8). The top course of this wall, still partially exposed above ground level, displayed evidence of a major rebuild. Sections of engaged and circular columns, probably recycled from this same building, were laid end on to increase the wall height. Other stonework also suggested at least one major phase of wall rebuilding.

Similarly, prior to excavation it was immediately apparent that there had been considerable later reuse of space within the building, evidenced by late internal dividing walls that mostly ignored the symmetry of the compounds.

Square B/9

This season was largely devoted to removing a thick deposit, over 2m deep, against the west face of the central dividing wall, of wind blown ash and dumped rubbish. Three phases can be identified, with a fourth that has just commenced.

- 1. Infant burials, which had been placed in shallow pits cut into a wind/dump deposit (phase 2). These can be dated to the recent past. One burial included two iron bracelets and a bead necklace made from carnelian, jasper and a red wood resin.
- 2. The wind/dump deposit of layered dark grey ash and a harder yellow organic material. The upper layers butted up to the rebuild of the central dividing wall, and hence they must post-date this activity. Considerable bone and pottery (especially HMGPW) was recovered from these levels.
- 3. The first architectural phase, represented by a frugal wall running north south, a small round room abutting this wall, and a pit. The pottery recovered seems unchanged from phase 2.
- 4. A major north south wall built roughly

parallel to the central dividing wall. The space between the two walls was filled with numerous stone blocks - many dressed and obviously from other buildings - and bright yellow earth. The purpose of this construction is unclear at this point. Interestingly the pottery is very different from that recovered in the levels above, being mostly wheel made and sporting an orange-brown bloom. However some early handmade sherds were recovered, but no painted types. This would suggest, very provisionally (and tantalisingly), a late eleventh to twelfth century date for this major construction.

Square B/11⁵

Square B/11 lies to the south of the church and the monumental north wall of the Double Enclosure that the church abuts. It also lies to the east of the dividing wall of the Double Enclosure (Figs. 6 and 8). The square was thus positioned to catch any occupation relating to the use and reuse of a portion of the Double Enclosure.

Several wall lines were apparent on the surface of the square, and the first feature of this area of excavation was the enormous amount of stone tumble and rubble that had fallen off the surrounding walls. The first task was defining the wall lines through the removal of tumble. Once most of the walls were defined, excavation was concentrated mainly in the north-western area of the square, leaving especially the area along the southern edge of excavation as well as that along the eastern edge of the square unexcavated. From quite early on in the season, it was realised that maintaining a baulk between squares B/9 and B/11 in the northern half of the square was almost impossible. Hence, excavation was carried out right up to the main dividing wall of the Double Enclosure (wall 1), north of wall 3.

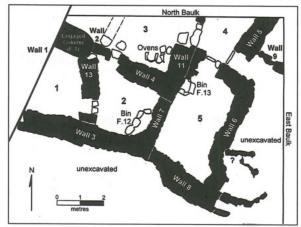
Also, almost immediately apparent was

the distinction in the use of space on either side of B/11 wall 1 (= B/9 wall 1). B/11 showed intensive architectural occupation, while B/9 seems to have remained almost as an open space in the latest phases.

The earliest features in the square, the massive wall 1 and the associated engaged column (feature 1), are very probably Nabataean/Roman in date (ca. first or second century). The most recent 'use' of the area may perhaps be characterised by a 'magical text', a modern charm deliberately buried at the site. Most of the material excavated during this season, however, appears not to reach earlier than 'Mamluk' occupation.

Some nine 'phases' may be tentatively identified, and again at this early stage only refer to the sequence in this square.

- Phase I is a profound abandonment phase, characterised by much tumble with windblown material and modern detritus.
- II. Phase II is somewhat more amorphous. It is represented by tumble that possibly fell onto an ill-defined level or surface, but there is no secure evidence for any substantial occupation. It may represent simply 'seasons of tumble' which appear to form horizons/surfaces, but may also slide into 'low-use' surfaces where actual oc-



 Square B/11; principal features (mod. Karsgaard 1998).

^{5.} The following section is an edited version of Philip Karsgaard's end of season report.

- cupation is difficult to pick up.
- Phase III is a solid later Islamic oc-III. cupational phase spread over five rooms (Fig. 9). It is clearly represented in room 3 by two rectilinear ovens and a very compact and secure surface associated with them. This phase is further characterised by a storage bin in room 2 and, in room 5, a small storage bin and a solid mud plaster yellow surface edged with stone. However even in this period of apparently heavy occupation, the surfaces within rooms 1 and 2 remained elusive; there was not, for example, an obvious surface associated with the bin. It is assumed that these rooms, therefore, were used for storage, as the narrow doorway would also suggest.
- IV. Phase IV is simply defined as occupation/stratigraphy dug in room 2 below the bin of phase III. Perhaps the most secure of the loci from this phase is locus 61, a putatively partially plastered floor butting wall 13, probably that wall's primary surface. Again, however, the deposits in this room remain enigmatic, so much so that no very good primary surface for wall 4 was identified on its south side.
- Phase V is the main late architectural V. phase in the square. The precise chronological relationships between the walls are difficult to establish, especially given the lack of excavation throughout the south and east of the square. Nevertheless, it may be stated that walls 5, 8, 9 and 13 are later even within this phase. Wall 5 seems to have been built down a slope and seems quite late along with its butting wall, wall 9. Wall 8 butts wall 3 and so must be later, as does wall 13. Perhaps earlier in this phase are walls 3, 6 and 7. Walls 7 and 3 are bonded, and so should be contemporary. Wall 2 seems problematic as to its exact chronology. It is later than wall 4, but

- probably contemporary with wall 13. It appears to be a rebuild to form a narrow doorway with wall 4, so perhaps it is contemporary with the building of the western room up against walls 4 and 11.
- VI. Phase VI includes the bonded walls 4 and 11, the earliest except for wall 1 of the double enclosure. Excavation to the north of the walls, and in room 5, is needed to confirm this.
- VII. Phase VII is solely represented by locus 50, which apparently underlies wall 4, and is thus assumed to be a deposit predating all the above. Note also that wall 3 may be built upon an earlier wall. Hence, locus 50 may be associated with wall 3's predecessor.
- VIII. Phase VIII is probably the earliest post-Nabataean phase, and is represented by feature 18, the blocking of the doorway through wall 1, and perhaps the rebuilding onto the top of wall 1.
- IX. Phase IX is the architectural Nabataean phase represented by the massive wall 1 and feature 1, the engaged column.

The Finds

As predominantly domestic levels were encountered this year, the ceramic finds consisted of pottery including much HMGPW, and a large range of non-ceramic objects in stone, iron, glass, copper and bone. Initial inspection of the coins has identified Nabataean (especially Aretas IV), Roman, Arab-Byzantine and Mamluk issues, but further cleaning and identification of the coins is required before a complete list can be offered. Architectural fragments were also recovered in considerable numbers.

As already noted, an important objective of the Gharandal Archaeological Project is to build up a stratigraphically and chronologically tied pottery sequence for the highlands of south Jordan, a resource desperately needed. Such ceramic "chrono-typologies"

can serve as a valuable tool in the writing of a social history, offering vital information on areas of production and lines of trade, cultural regionalism, and contributing to broader issues of social identity and change. Material culture is also, perhaps, a most useful tool to address the issue of whether transitional societies are passive or active in the response to change. Although it is still early days in the study of the Gharandal pottery, some major discoveries in the ceramics of south Jordan are worth noting at this stage.⁶

The Pottery (Figs. 10-12)

Most of the pottery studied to date has been from the Church (Area A), recovered during the 1997 and 1998 seasons. All excavated pottery was retrieved with the aid of sieving, and all was retained. This has enabled tiny eggshell thin sherds to be retrieved that would otherwise not have been noted. Individual ware and form types were catalogued and the ware types quantified by sherd count for each context.⁷

To date, 48 ware types have been tentatively assigned, subject to confirmation by further study including petrologic analysis. A ceramic sequence for sherds found within the church has been developed, commencing with the deposits on the floor following the termination of the church as a place of worship and its subsequent incorporation into secular village structures. The dating of the end of the building's use as a church appears to be eighth century from the ceramic evidence. Residual material from the Iron Age, Nabataean and Roman periods is present in some layers. The sequence is terminated by the cessation of village settlement in the late Middle Islamic, tentatively dated preseventeenth century. The evidence shows an absence of Ottoman smokers' pipes.

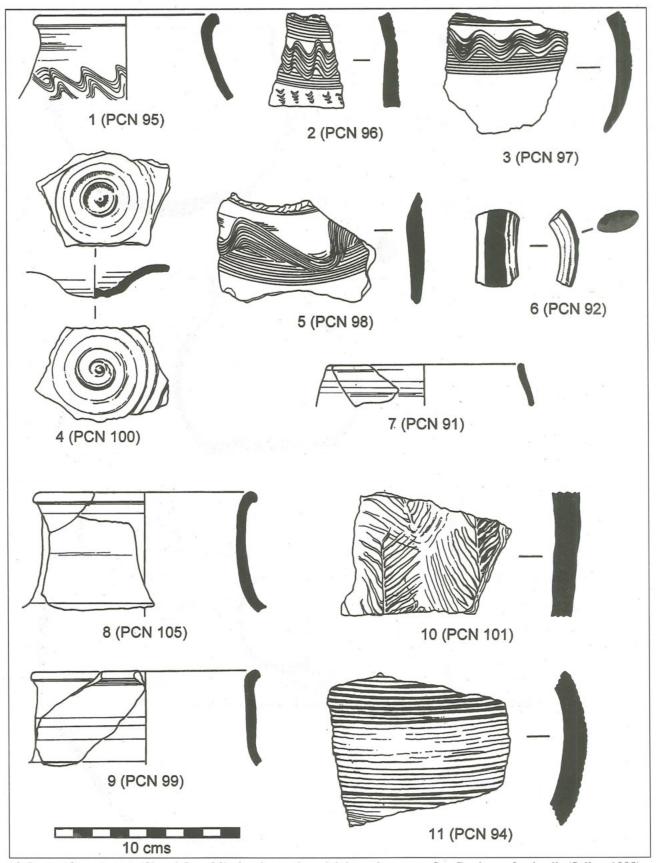
Within the church sequence, two important groups have been isolated. The first is a single-phase deposit from the yellow fill directly overlying the paving and mosaics of the church floor (Walmsley and Ricklefs 1997). The ceramics in this layer appear to form a closed group with no earlier residual and no later intrusive material. A detailed, contextual analysis of this material has identified regional styles distinctive to the south, but fortunately with datable links to the well established north-Jordan sequence. Prevalent are various jar types in a sandy fabric, with extensive body combing and fired to a mostly light colour of red, reddish yellow and very pale brown to light and pinkish grey (Fig. 10: 1-5). The prevalence of light surface blooms and combed decoration on the pottery could easily be mistaken as Byzantine, but the context is clearly early Islamic. Apart from the post-church context, Red Painted ware is also present (Fig. 10:6), dated to the eighth and ninth (plus?) centuries in north Jordan. Also present is "Fine Byzantine Ware" (Fig. 10:7), in a type common 'Abbasid contexts further north (Walmsley 1991; 1995). Also represented are tall necked jars (Fig. 10:8,9) and handmade amphora, including a type with stamped palm decoration (Fig. 10:10,11).

The second group consists of a sequence beginning in the later tenth or early eleventh century and continuing into the thirteenth century. An important component of this sequence is the handmade wares, initially appearing in a thin-bodied variety made from a heavily chaffed fabric, but without any painted decoration (Fig. 11). However, found in the same contexts are wheel made wares, including cooking jars (Fig. 12: 1, 2), and extremely fine moulded lamps (Fig. 12:3). Based on finds from 'Aqaba and 'Amman

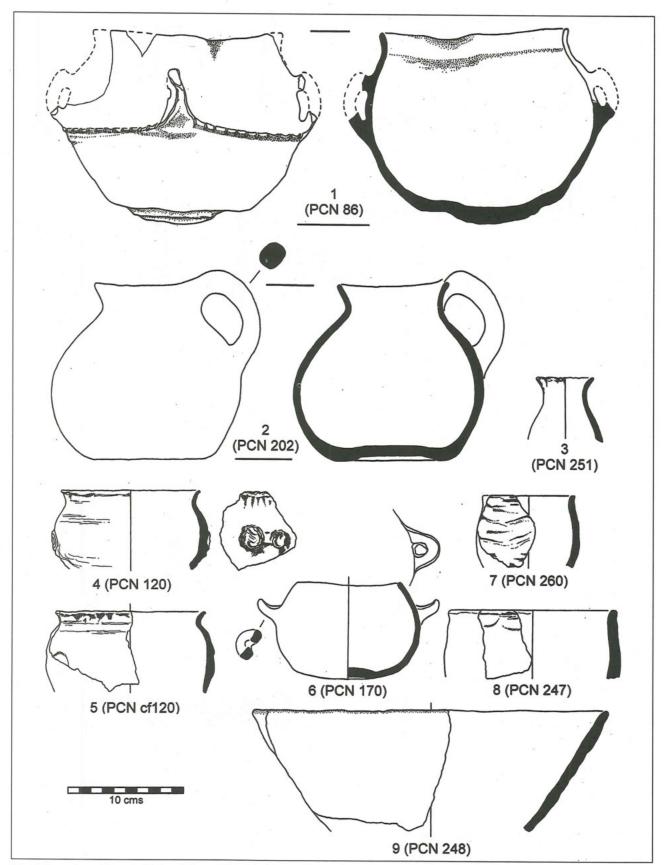
This pottery report includes material drawn from a more detailed article being prepared for the journal *Levant* by the Project ceramicist Tony Grey.

Data were entered into catalogue and layer proforma sheets designed by the Project registrar Ra-

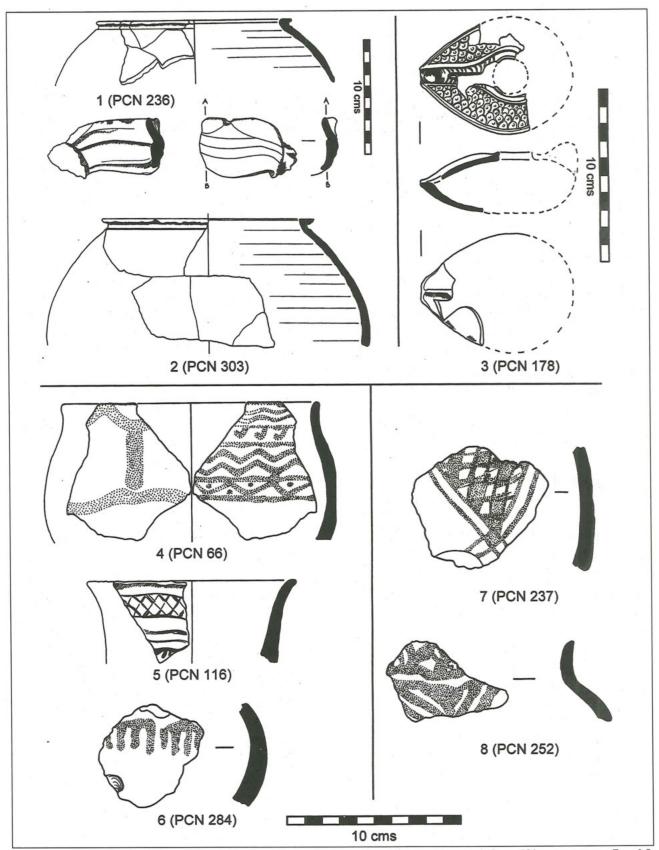
chael Sparks, who imputed the handwritten data into the project databases. Restoration of vessels was undertaken by Project conservator Noël Siver. Illustration of the catalogued items was done by Judith Sellers.



10. Pottery from Area A (Church Level 2), dated to ca. late eighth-tenth century. See Catalogue for details (Sellers 1998).



11. Pottery from Area A (Church Level 3), dated to ca. later eleventh century. See Catalogue for details (Sellers 1998).



12. Pottery from Area A (Church Level 3). Nos 1-3: ca. the later eleventh century; nos 4-6: twelfth century; nos 7 and 8: early thirteenth century. See Catalogue for details (Sellers 1998).

Citadel (Whitcomb 1988; Northedge 1992), these early handmade varieties probably date to the eleventh century, but could have originated in the later tenth. Interesting is the variety of forms (jars, jugs, bowls in different sizes), and the intense regional differences these early handmade wares display. Next in the sequence appear the first painted wares (Fig. 12:4-6). The fabric is much the same, with much chaff and thinly formed, but now with paint applied to the exterior, usually red in linear designs and sometimes in thick 'blobs' (Fig. 12:6). Incised decoration is also present (Fig. 12:5). External surfaces can be slipped. Parallels with the pottery from Robin Brown's excavations at Shawbak (Phase 1) and al-Wu'ayrah invite a twelfth century date (Brown 1987; 1988), which would certainly agree with the Gharandal sequence. Subsequently in the thirteenth century the earliest HMGP wares appear (Fig. 12:7-8), with geometric painted decoration on a thicker ware with less chaff and a more treated surface.

Catalogue of Pottery

Fig. 10

10.1:PCN 95, A/A20-25.13

Jar (rim), Metallic ware (hardness: hard, Mohs 6), wheel made.

Fabric: Quartz-rich with large angular quartz and occasional lime and black inclusions; iron-rich, fired metallic; thin-walled. Core: 7.5YR N7/1 'light grey'-5YR 7/1 'light grey'; external surface ("ext"): 7.5YR 6/2-5YR 6/2; internal surface ("int"): 2.5YR 6/4-6/6.

Decoration ("Dec"): combing.

10.2: PCN 96, A/A20-25.13

Jar (body sherd), Coarse sandy jar ware (soft, Mohs 3), wheel made.

Fabric: Coarse sandy ware with large angular quartz, occasional lime, fired oxidised and fairly soft (grey, clear and white quartz). Core: 2.5YR 6/6 'light red'-5/6 'red'; ext:

2.5YR 6/6 'light red'-10R 6/6; int: 5YR 8/4-7/2.

Dec: combing, rouletting.

10.3:PCN 97, A/A20-25.13

Jar (body sherd), Coarse sandy jar ware (soft, Mohs 3), wheel made.

Fabric: Coarse sandy ware, abundant large angular quartz, voids, friable, soft, oxidised. Core: 2.5YR 5/6-5/8 'red'; ext: 2.5YR 6/6; int: 5YR 7/3.

Dec: combing.

10.4:PCN 100, A/A20-25.13

Jar (base), Coarse sandy jar ware (medium, Mohs 4.5), wheel made.

Fabric: Coarse gritty sandy oxidised ware, laminar. Core: 2.5YR 6/8 'light red'; ext: 5YR 7/6-2.5YR 6/6; int: 2.5YR 6/6.

Dec: none visible.

10.5, PCN 98, A/A20-25.13

Jar (body sherd), Coarse sandy jar ware (medium, Mohs 3.5), wheel made.

Fabric: Coarse sandy ware, laminar, voids, abundant ill-sorted angular quartz, white, grey and clear. Core: 5YR 7/6 'reddish yellow'-2.5YR 6/6 'light red'; ext: 10YR 6/1 'light grey'; int: 2.5YR 5/6-10R 6/6.

Dec: combing, slip.

10.6:PCN 92, A/A20-25.13

Jar or jug (handle), Red painted ware (medium, Mohs 4), wheel made.

Fabric: Fine silty sandy ware of abundant small angular quartz. Core: 5YR 7/4 'pink'; ext: 5YR 7/6; int: 5YR 7/6.

Dec: Slip, monochrome paint (10YR 8/3).

10.7:PCN 91, A/A20-25.13

Bowl (rim), "Fine Byzantine ware" (medium, Mohs 5), wheel made.

Fabric: Fine ware, hard-fired, thin-walled, very few inclusions except for occasional lime. Core: 5YR 8/4 'pink', ext: 2.5YR 6/8; int: 2.5YR 6/6.

Dec: burnished, slip.

10.8:PCN 105, A/A20-25.13

Jar (rim & neck), Coarse sandy jar ware (medium, Mohs 3.5), wheel made.

Fabric: Oxidised sandy ware with possible chert plates, very little lime. Coarse hard-fired in metallic style, but not quite to metallic hardness. Core: 2.5YR 6/8 'light red'; ext: 5YR 5/1 'grey'; int: 5YR 5/1 'grey'.

Dec: none.

10.9:PCN 99, A/A20-25.13

Jar (rim & neck), Coarse sandy jar ware (medium, Mohs 4), wheel made.

Fabric: Coarse sandy ware with voids, abundant ill-sorted angular quartz of varying size, fired reduced and fairly hard but not quite metallic. Core: 10YR 5/1 'grey'; ext: 7.5YR N5/1; int: 7.5R N5/1

Dec: none.

10.10:PCN 101, A/A20-25.13

Storage jar (body sherd), Palm branch jar ware (medium, Mohs 4), handmade.

Fabric: Coarse sandy oxidised ware with large angular smoky and clear quartz; thick-walled and rather hard. Core: 2.5YR 5/6 'red'; ext: 2.5YR 5/6 'red'; int: 2.5YR 6/8-10R 6/8; slip: 10YR 8/3.

Dec: impressed, slip.

10.11:PCN 94, A/A20-25.13

Storage jar? (body sherd), Basalt-tempered coarse ware (hard, Mohs 6.5), wheel made. Fabric: Very, very coarse and hard-fired with dense suite of large angular ill-sorted inclusions including temper of chert and basalt? Core: 10YR 6/2 'light brownish grey'-7.5YR N6 'light grey-grey'; ext: 7.5YR N4; int: 7.5YR N4.

Dec: ribbing (functional?).

Fig. 11

11.1:PCN 86, A/B-C40.27

Globular cooking pot (complete profile), Early plain handmade ware (soft, Mohs 3). Fabric: Chaff and grog-tempered coarse ware, lightweight, friable, low-fired, black core, fairly thin. Core: 7.5YR N4 'dark grey'; ext: 10R 6/6 'light red'-7.5YR 5/6 'strong brown'; int: 10R 5/6 'red'.

Dec: applied bands, slip.

11.2:PCN 202, A/E20.16

Jar (complete profile), Early plain handmade ware (soft, Mohs 2).

Fabric: Soft, lightweight, chaff-tempered coarse ware with numerous chaff impressions, large lime and friable black core and margins fired buff. Some firing shrinkage and cracks; smoothed. Core: 7.5R N2 'black'; ext: 7.5YR 7/4 'pink'; int: 5YR 6/4 'light reddish brown'.

Dec: none.

11.3:PCN 251, A/C30-35.19

Jar, jug or small cooking pot (rim & neck), Early plain handmade ware (soft, Mohs 2). Fabric: Lightweight, soft, friable, chaff-tempered coarse ware, thin-walled with buff margins. Core: 7.5YR N4 'dark grey'; ext: 5YR 6/4 'light reddish brown'; int: 5YR 6/4 'light reddish brown'.

11.4:PCN 120, A/E20.7

Globular cooking pot (rim), Early plain handmade ware (soft, Mohs 2.5).

Fabric: Chaff-tempered ware, low-fired, cindery black at core; thin-walled. Core: 5YR 3/1 'very dark grey'; ext: 2.5YR 6/4 'light reddish brown'-2.5YR 6/6 'very light reddish brown'; int: 2.5YR 6/4 'light reddish brown'-6/6 'light red'.

Dec: slip.

11.5:PCN 170, A/E20.20

Globular cooking pot (rim, handle, shoulder, body), Early plain handmade ware (medium, Mohs 3.5).

Fabric: Thin-walled, low-fired, lightweight, chaff-tempered ware with voids, burnt out material and black cindery core. Core: 7.5YR N3 'very dark grey'; ext: 5YR 6/3 'light reddish brown'; int: 5YR 6/3 'light reddish brown'.

Dec: none.

11.6:PCN 260, A/C35.108

Cooking pot (rim), Early plain handmade ware (soft, Mohs 3).

Fabric: Lightweight, soft, low-fired, chaff-tempered coarse ware with friable black core and narrow buff margins/surfaces. Core: 5YR 5/1 'grey', ext: 7.5YR 7/3 'pink'; int: 5YR 6/4 'light reddish brown'.

Dec: none.

11.7: PCN 247, A/C35-40.16

Cooking pot or jar, closed form (rim), Early plain handmade ware (soft, Mohs 3).

Fabric: Lightweight, coarse, chaff-tempered ware with limestone up to 8 mm across, thick black friable partly carbonised core. Very similar to 'Mamluk' wares. Core: 7.5YR N3 'very dark grey'; ext: 2.5YR 6/4-6/6 'light reddish brown'; int: 5YR 6/4 'light reddish brown'.

Dec: none.

11.8: PCN 248, A/C30-35.19

Bowl (rim and body), Early plain handmade ware (soft, Mohs 2).

Fabric: Chaff-tempered coarse ware with thick black friable core and uneven exterior surface. Core: 7.5YR N3 'very dark grey'; ext: 10YR 8/3 'very pale brown'; int: 2.5YR 5/6-5YR 5/6 'yellowish red'.

Dec: slipped.

Fig. 12

12. 1: PCN 236, A/C35-40.16

Cooking pot (rim and handle), Wheelmade brown cooking pot ware (soft, Mohs 3), wheel made.

Fabric: Quartz-tempered ware fired brown, fairly thin-walled. Core: 2.5YR 4/6 'red'; ext: 2.5YR 5/4 'reddish brown'; int: 2.5YR 5/4 'reddish brown'.

Dec: none.

12.2: PCN 303, A/B-C40.24

Cooking pot (rim and body), Wheelmade

brown cooking pot ware (medium, Mohs 4). Fabric: A brittle, thin-walled ware, sandy with abundant small quartz, oxidised brown. Core: 2.5YR 4/6 'red'-5YR 4/4 'reddish brown'; ext: 10R 5/3-2.5YR 5/3 'reddish brown'; int: 5YR 5/3 'reddish brown'.

Dec: none.

12.3:PCN 178, A/B-C40.34

Lamp (front half), Fine lamp ware (soft, Mohs 3.5), mould made.

Fabric: A fine silty sandy ware with occasional lime visible, fired buff in colour, thinwalled, fairly soft. Core: 7.5YR 6/2 'pinkish' ext: 7.5YR 6/2 'pinkish grey'-6/3 'light brown'; int: 7.5YR 6/2 'pinkish grey',-6/3 'light brown'.

Dec: moulded (relief).

12.4: PCN 66, A/B25-30+B-C30.18

Jug (rim), Handmade painted ware (soft, Mohs 3).

Fabric: Very coarse, low-fired, cindery black friable core with burnt out chaff, sparse lime and quartz. Core: 10YR 3/1 'very dark grey'; ext: 5YR 8/4 'pink'; int: 10R 6/8; ext. slip 10R 6/8.

Dec: slip, monochrome paint (7.5YR 3/2).

12.5:PCN 116, A/E25.39

Jug (rim), Handmade painted ware (soft, Mohs 3).

Fabric: Coarse, lightweight, low-fired ware with voids and cindery black core. Core: 7.5YR N3 'very dark grey'; ext: 5YR 7/2 slip 'pink'; int: 5YR 7/2 'pink'.

Dec: monochrome paint, slipped.

12.6: PCN 284, A/E20.4

Jug? (body sherd), Early handmade painted ware (medium, Mohs 4).

Fabric : A lightweight, coarse, chaff-tempered ware with large chaff impressions, oxidised outer margin and reduced core and inner margin. Core: 2.5YR N4 'dark grey'; ext: 5YR 7/4 'pink'; int: 2.5YR N5 'grey'.

Dec: slip, monochrome paint 10R 4/4 'weak

red'.

12.7: PCN 237, A/C35-40.16

Dish/bowl (body sherd), Early handmade painted ware (soft, Mohs 2.5).

Fabric: Soft, friable, lightweight, low-fired, chaff-tempered ware with carbonised black core. Core: 2.5YR N3 'very dark grey'; ext: 10R 6/6 'light red'-2.5YR 6/6 'light red'; int: 2.5YR 6/6 'light red'.

Dec: slip, monochrome paint.

12.8:PCN 252, A/C30-35.19

Jug (neck), Early handmade painted ware (soft, Mohs 2.5).

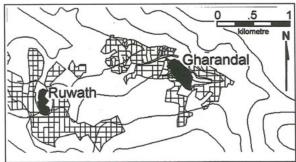
Fabric: Chaff-tempered ware with friable, carbonised black core and buff margins. Core: 2.5YR N4 'dark grey', ext: 10R 6/6 'light red'; int: 5YR 6/4 'light reddish brown'.

Dec: slip, monochrome paint (7.5R 4/4 'weak red').

Ruwāth

A major attempt was made to record by planning and photography the extensive standing remains of the infelicitously named site of Ruwāth. After two days of initial reconnaissance, the surveyor, Hugh Barnes, was unfortunately prevented from doing any further recording by the landowners.

Ruwāth is to be equated with Byzantine Rabatha, located a short distance to the northwest of Gharandal (Fig. 13). The Arabic sources display some confusion over



13. Map showing the location of Ruwāth in relation to Gharandal and adjacent field systems (mod. Barnes 1998).

this place, especially about the spelling of its name, due to its unfortunate meaning (animal droppings) in Arabic. Ruwath and its district of al-Jibāl are described as fertile by the tenth century Arab geographers al-Istakhrī and Ibn Hawqal, but inhabited by the Arabs (meaning the Bedouin) who had, as they noted, gained (political) mastery over the district (Ibn Hawgal 1938: 173.12-14, 170; Al-Istakhrī 1927: 58.7-10). It would seem that, by the tenth century, Ruwath had displaced Gharandal as the main centre of al-Jibāl. It seems as though the sources observed a significant transfer of political power from the traditional urban elites that had persisted in the primary towns of Late Antiquity to the new tribal leaders based on equally long established sites-compare the power shift from Areopolis (Maab, Rabbah) to al-Karak at about the same time.

The site is considerably damaged. The upper part has been partially bulldozed and built over with modern housing, and a road and electricity poles encroach upon the site in the middle of it and on its east. Ruwāth is in great danger from modern development.

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