THE MONUMENTAL ARCHITECTURE of Jarash (Gerasa), erected with great extravagance during the period of Roman rule, readily impresses many visitors to the site. Yet, the history of Jarash as a major city extends well beyond the Roman age (first to early third centuries AD). In particular, Jarash’s many early Christian churches, often decorated with brightly coloured mosaics, reveal a vibrant Late Antique culture, as does the wonderful series of vividly painted plates known as ‘Jarash Bowls’.

Lacking, however, in this impressively long cultural record is the later history of the site; that is, the period following the non-violent Islamic Conquest of 634–640. It is precisely this vacuous historical period that the Islamic Jarash Project – a joint endeavour between the Department of Antiquities of Jordan and the Carsten Niebuhr Institute of the University of Copenhagen – sets out to address in a comprehensive program of research and excavation.
**Islamic Jarash: the problem**

Identifying and understanding the civic features and urban nature of Jarash in the formative centuries following the Islamic Conquest has not been satisfactorily accomplished. Conventional wisdom among earlier generations of Western archaeologists argued that the formerly magnificent ‘Classical’ city of Roman Gerasa was, by the mid-eighth century CE, in its death throws after years of relentless decline, urban decay and abandonment. In recent decades, the scholarly reconsideration of both new and old data drawn from a range of historical, archaeological and numismatic sources has increasingly supported the view that there ought to have been a significant – and probably important – early Islamic settlement at Jarash. However, the extent and precise nature of Islamic occupation at the site has not been properly understood nor explained.

1. **The Written Sources**

The first clear indication for a continuing social and administrative role for Jarash is preserved in the written accounts of four authoritative ‘Abbasid-period sources dating to the third century Hijra (ninth century AD). These works are:

1. Ibn Khurdâdhbih (211–300/826–913), Kitâb al-Masâlik wa’l-Mamâlik 78.8 (published 232/847, redaction 272/885–6);
2. al-Balâdhurî (d. 279/892), Kitâb Futûh al-Buldân 116.19;
3. al-Ya’qûbî (d. 284/897), Kitâb al-Buldân 115/327.22 (published 278/891); and

In these sources, which served as handbooks on the cities and routes of the Islamic empire for government officials based in Baghdad, Jarash was listed as an administrative district (kûrah) in the jund al-Urdunn. A jund was a military province established after the Islamic Conquest to support the army. In addition to Jarash, there were eight other district centres in the jund al-Urdunn, all of which were answerable to Tabariyâh (Tiberias), the provincial capital (Fig. 1). The jund extended to the strategic naval ports of Akkâ and Sûr (Tyre) on the Mediterranean Sea. Jarash was located in the southeast corner of the jund al-Urdunn, and abutted against the important district(s) of ‘Ammân/al-Balqâ’ in the extensive province of the Jund Dimashq.

Apart from recording the official role of the city, the ‘Abbasid sources pay scant attention to Jarash. However, a little later the geographer al-Maqdisî (al-Muqaddasî,
d. 1000) of Jerusalem (Bayt al-Maqdis), who wrote about 985 under Fāṭimid hegemony, placed the region north of the wādī Zarqā’ called ‘Jabal Jarash’ in the district of al-Urdunn, which had Adhri’āt (Dera’ā) as its chief town (Kitāb ʿAbūn ʿAl-Ṭaqaṣīm fī Maʾrifat al-Aqālīm 162.5-6). He described the region as being populated with many villages, and producing honey, olives and different types of fruit, especially grapes. The agricultural productivity of the district, remarked al-Maqdisi, was a major contributor to the wealth of Ṭabarīyah, the provincial capital. However, while al-Maqdisi was a native of Jerusalem, and travelled widely, his knowledge of this region seems vague, suggesting he never went there himself.

2. Archaeological Sources

While extensive archaeological activity has taken place at Jarash over the last seventy-five years, this work has traditionally focused on the Classical and early Christian monuments. Nevertheless, the excavations also uncovered – mostly by chance – a significant Islamic presence at the site. Yet in spite of nearly three-quarters of a century’s work, no comprehensive picture has been formed of the main urban features and physical extent of the early Islamic settlement.

Briefly, evidence has been found in the following areas of the site, and is chiefly domestic, commercial or industrial in nature (this sample list is based on available published material). No major public structures were properly identified by this work (for none, in any case, were expected by the excavators).

1. An extensive domestic quarter built over the ‘Oval Piazza’ and cleared by G.L. Harding between 1937 and 1940. The quarter probably dated to after the reign of the Byzantine emperor Maurice Tiberias (582–602), based on a coin hoard recovered during the excavation. Fallen architraves were incorporated into the house walls, suggesting their construction after an earthquake. Water was pressure-feed to a central fountain by pottery piping in two channels cut into the paving entering from the north and the west.

2. Further housing built over the Cardo between the Oval Piazza and the South Tetrakonia, and around the South Tetrakonia, ‘cleared away’ by the Yale/British School/American School Mission (hereafter Yale Joint Mission) to Jarash during 1933–1934 and Harding in 1937–1940.

Fig. 2. The Umayyad ‘housing’ at Jarash, excavated by the Polish team of the Jerash Archaeological Project in 1982 and 1983. View to the southeast.
3. Umayyad structures located north of the South Decumanus, west of the South Tetrakonia, consisting of shops along the street front and, behind them, a ‘house’ with rooms placed either side of an open court (Fig. 2). Later, the ‘house’ was subdivided and the shops converted into another ‘house’ (late eighth century). After an earthquake, the area was converted into a potters’ workshop (ninth century).

4. Another domestic quarter west of St Theodore’s church, also with a later kiln.

5. Other potters’ kilns spread over many parts of the site, including a massive industrial complex in the temenos of the ruined Artemis Temple (Fig. 3), numerous kilns in and around the North Theatre and its portico, the Macellum (industrial, but perhaps not potters?), and in front of the Temple of Zeus compound. Moulded ceramic lamps were a common product (see Fig. 24A), at times with inscriptions in Kufic Arabic mentioning the potter’s name and Jarash as the place of manufacture.

6. Continued use of Jarash’s many churches as religious establishments, especially the triple churches of John the Baptist, St George, and popular SS Cosmas and Damianus (Fig. 4), and the subdivision of space within the common atrium of these three churches. There was also use of the Synagogue Church and SS Peter and Paul, the latter possibly an Umayyad construction. Evidence for the removal of images from church mosaics at Jarash reveals the continuing operation of these buildings well into ‘Abbâsid times,
during which time the iconoclastic movement swept the Eastern Church, and strongly influenced the Christian communities located in regions under Islamic hegemony. No churches showed evidence of conversion into a mosque.

7. Two blacksmiths’ shops, one at the South Tetrakonia and another occupying two modified shops up the Cardo between the Cathedral Propylaeeum and the Nymphaeum.

8. Ongoing urban activity in the Baths of Placcus and adjacent shops next to the Cathedral Church, where twenty-three ‘Arabic’ coins were found during excavation.

9. Continuing occupation in the Clergy House of St Theodore’s church, with ten ‘Arabic’ coins identified.

10. The recent reanalysis of the upper occupation levels in the Macellum on the Cardo has identified a major Islamic presence.

11. The small ‘Umayyad’ mosque discovered by the Cardo in 1981, but probably much later in date.

Until the mid-1980s, it was commonly thought that Jarash was effectively deserted with the end of the Umayyad Period (mid-eighth century). Before this date, it was widely believed, Jarash had suffered from decades of urban decline and neglect, and with the shift of the capital from Damascus to Iraq (eventually Baghdad), Jarash faded into oblivion until modern times. In recent years, however, a fresh understanding of early Islamic material culture, especially ceramics, the recognition of a disconnection between social change and dynastic succession, and new interpretations of the character of human settlement in towns have aggressively questioned the naive assumption. Rather, attention has turned to seeking a more comprehensive understanding of urban change in late antiquity and the first Islamic centuries.

3. Numismatic Sources

The identification in the 1980s of copper coins issued by the mint of Jarash in both the Pre-Reform and Post-Reform series marked a major step forward in the recognition of the town as a significant Islamic centre (Fig. 4). While the subject of much recent research, Umayyad coinage, and especially the Pre-Reform types, is still poorly understood. For instance, it is not clear why some of the district towns were authorized to issue coins and others not, but to some degree it must indicate varying levels of administrative seniority.

Fig. 4. A Pre-Reform (Arab-Byzantine) issue from Jarash. Note the mirrored ‘N’s of ANNO, ‘year’, on the reverse (right-hand image) and the gaunt depiction of the figures on the obverse. The mint-name Gerasone (‘of Gerasa’) faintly appears to the right of the figures. Most legends on the Pre-Reform Islamic coins were in Greek, often blundered.

Who issued the authority to mint copper coins is also unknown; but many issues display strong regional characteristics dating back centuries, indicating a local authority minting for local requirements.
Jarash issued coins in the same style as the coppers of Baysân (Scythopolis, Fig. 5), and the Jarash coins have been often misidentified as coming from Baysân. The pre-reform types follow the heavy fabric of the Justin II and Sophia Byzantine series, which was clearly very popular in the area and co-circulated with the first Umayyad issues.

A post-reform issue from Jarash is also known, but is uncommon. Like all post-reform Umayyad coins, they have legends in Kufic Arabic on both sides, mostly consisting of the shahadah, or proclamation of faith (‘There is no god but God; ‘Muhammad is the Messenger of God). The mint name is written in Arabic as ‘Jarash’, for coinciding with the reform of the coinage under the caliph Abd al-Malik in around 695 the language of the administration was changed from Greek to Arabic – a full 60 years or two generations after the commencement of the Islamic Conquest of Syria-Palestine.

**Islamic Jarash - Discovered?**

**The Inauguration of the Islamic Jarash Project (IJP) in 2002**

Reflecting, once again, early in 2002 on the textual sources and the available archaeological, numismatic and architectural material, it seemed quite plausible to infer that early Islamic Jarash had a Muslim community of some size and, accordingly, was probably provided with a congregational mosque and a governor’s residence, no matter how modest each of those might have been. Yet, in spite of the considerable evidence for a major Islamic-period presence at Jarash, the urban heart of the town had never been satisfactorily located. With these issues in mind, the Islamic Jarash Project was inaugurated at the Carsten Niebuhr Institute early in 2002.

The first step was to go back and reanalyze earlier work undertaken at the site, and here the first clue was discovered. Between 1929 and 1934, the circular plaza around the south Tetrakonia was excavated down to the Roman period paving. Housing of the early Islamic period was exposed and removed. Also uncovered in the southwest quadrant was a ‘well built Arabic edifice … laid out in the form of a hollow square with at least one corner tower and colonnaded porticoes’ (C.H. Kraeling, *Gerasa, City of the Decapolis*, p. 114. New Haven: American Schools of Oriental Research, 1938). It was suggested this structure was a guardhouse.

The idea that the building was a guardhouse seemed implausible, and was more a reflection of the excavators’
distorted vision of the nature of Islamic authority in the district towns of Syria-Palestine (Bilâd al-Shâm). For a long time, it had been suspected that the Yale Joint Mission had uncovered part of a major public building, perhaps a mosque or a caravanserai, given its centralized location at the main crossroads of Jarash. The re-inspection of an old aerial photograph of Jarash (Fig. 6), which must have been taken in about 1928, suggested that it was indeed a mosque.

Upon closer examination, a sizable courtyard building could be clearly identified on the photograph. The external measurements of the structure, as estimated from the photograph, were 43.32 by 38.4 metres. More critically, it was noted that the building was out of alignment with the original Roman-period urban grid; rather, it was oriented towards the qiblah (direction of prayer, facing southwards towards Makka). The remains of a tower could be seen in the northeast corner. To the south of the building, a separate broad room was discerned, running the full width of the structure and estimated at being about

**Fig. 6.** Aerial photograph of Jarash, taken in the late 1920s (north is towards the top right hand corner of the photo). The Oval Piazza can be clearly seen to the lower left, with many columns still standing (the dark image is their shadows). Running north (towards the top right hand corner) is the Cardo, passing by the tetrakonia at the crossroads. Located immediately to the left of the crossroads can be seen a rectangle; this is the outline of the mosque.
13.78 metres deep. This could be interpreted as the prayer hall of the mosque, located in front of the principal qiblah wall.

The open rectangular shape of the building was seen as strongly indicative of an early Islamic congregational mosque, a conclusion supported by shared features with the congregational mosque of ‘Ammân, once located in the lower town, as described by Alastair Northedge (Fig. 7). Although the ‘Ammân mosque is much longer (57.1 metres), it is essentially the same width (39.7 metres) and with a prayer hall of much the same size (39.7 by 14.0 metres), at least in its later form. The Jarash mosque had to be shorter, as on the south it was constrained by the existing Macellum.

The almost sure identification of a sizable early mosque at Jarash was quite a pleasing discovery, but a further surprise lay in store. More detailed inspection of the aerial photograph revealed the likely remains of a much larger Islamic urban presence. Immediately to the west of the mosque, facing north onto the South Decumanus, an area of ruins could be identified (Fig. 8). Its position next to the mosque suggested an important, probably public, building, which may have been the administrative centre of Jarash. Usually the governor’s palace in Bilâd al-Shâm was located to the south of a mosque, adjacent to the qiblah wall, but the existing Macellum already occupied this space at Jarash.
Further to the west of the mosque and the Macellum, and higher up a slope, substantial and regularly laid out buildings can be seen, covering an area of approximately 130 by 130 metres (Fig. 8). These buildings may comprise a terraced urban quarter belonging to Islamic Jarash, but the precise layout, date and function of these buildings is unclear at this stage. On the ground, the overall plan of the area is not as regular as it appears in the photo, and the land rises steeply to the west, but the area has been greatly disturbed since the 1920s.

Other structures continue next to the South Decumanus as it progresses uphill towards the west (Fig. 8). Some of these buildings appear to have been large; one can clearly be identified as the ruins of the ‘Umayyad House’ before it was excavated. Others were obviously as significant. It would seem as though the South Decumanus, not the Cardo (as perhaps might be expected), was the main arterial route in the early Islamic period. As noted earlier, buildings restricted access along the Cardo, which was reduced to a laneway. West of the South Tetrakonia, the decumanus was evidently lined with shops, probably Jarash’s sūq in the early Islamic period. Some of the shop units were excavated in front of the ‘Umayyad house’ along the decumanus, which was clear of other structures. This thoroughfare could have also been used to bring water on pack animals from the perennial stream in the wādí of Jarash to the east; in contemporary al-Fusṭāṭ (Egypt), water sellers brought Nile water to the houses, as flowing water was preferred to wells and cisterns for drinking.

At the top of the rise to the west are two churches: the Mortuary church and SS Peter and Paul (Fig. 9). Although somewhat remote from the town centre, they are an integral part of the early Islamic settlement, as the aerial photograph reveals. The floor mosaics uncovered in SS Peter and Paul (Fig. 10) and other architectural features suggest a construction date later than that proposed by the excavators (Justinianic), perhaps in the seventh or eighth century (cf. Umm al-Rasâs). The mosaics in SS Peter and Paul show evidence of iconoclastic activity (second half of the eighth century), and the church supposed non-ecclesiastical use later on. The evidence suggests that the church was constructed after the sixth century, and had a long history thereafter.
To conclude, the Islamic urban core of Jarash is to be found west of the Cardo extending as far as the western city wall on the ridge (there is probably more occupation east of the Cardo, but this requires further investigation). Occupation in the eighth century extended southwards to the Oval Piazza and northwards to the churches of SS Cosmas and Damianus, the baths of Placcus and the Cardo as far as the Cathedral Propy-laum — that is, an area of at least 400 by 400 metres (c. 16 hectares). Beyond these limits, the commercial potters of Jarash’s ceramics industry located their kilns, later moving them closer to the large rectangle of the Islamic town centre.

**The Field Program in 2002**

Armed with the wealth of tantalizing information outlined above, an initial field season was undertaken at Jarash for five weeks from 11 August to 12 September 2002. The intention was to investigate some of the more pressing issues identified by the earlier research, most obviously if the large rectangular building to the southwest of the tetrakonia was, indeed, an early mosque.

**Team and acknowledgements**

The field team consisted of thirty staff and students from the Carsten Niebuhr Institute of the University of Copenhagen. In addition to the Project Director Alan Walmsley, Alex Wasse (formerly Assistant Director of the CBRL Amman) acted with great success as field director, with Louise Blanke, Kate Wolrige (University of Western Australia), Mette Bach, Lasse Outzen, Andreas Bech and Ole Herslund as field supervisors. Mikala Mortensen was the field architect. The finds registrars were Mette Sorensen and Bente Markussen; Louise Westergaard was conservator. Anne Poepjes (University of Western Australia) was house manager.

Hearty thanks are sincerely offered to HE Dr Fawwaz al-Khraysheh, Director-General of the Department of Antiquities of Jordan, for his full and unreserved backing for our work. The team is especially appreciative of the very comfortable living and working space made available to us in the departmental housing at Jarash. In addition, staff of the Department of Antiquities office at Jarash gave considerable logistic and moral

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The subsequent development of this settlement and its ultimate abandonment, especially of the mosque, are critically important questions in the urban history of Islamic Jordan that have yet to be answered, and which archaeology is best placed to solve.
backing, providing equipment large and small, advice and support; no request seemed too much to ask. We would especially like to extend our full appreciation to Mr Abdul-Majid Mejali for his unfailing and enthusiastic assistance with equipment and housing. It was, furthermore, a pleasure to have Ms Samira Khouri as our DOA representative, who most ably assisted us on a day-to-day basis in the field.

Support in Denmark was equally as enthusiastic, especially from Professor Ingolf Thuesen of the Carsten Niebuhr Institute and the Governing Board of the C.L. David Foundation.

Object and progress of work

The work concentrated on the area of the hypothetical mosque, labelled Area MO. An earlier inspection in April of the area southwest of the South Tetrakonia had discovered the presence of two adjoining trenches excavated in 1998 by the late Mr Ali Musa, and these were the focus of our first investigations. It was hoped that these trenches, when cleaned out of debris and residual earth (Fig. 12), would give us a quick answer as to the building located here. In reality, that work at first confused the situation, rather than giving the hoped for quick solution.

In addition to the old trenches, joined by the removal of a baulk into one (MO/1), five new squares based on a 10 by 10 metre grid were laid out in areas of primary concern.

1. Two squares (MO/2, MO/3) were positioned inside the entrance wall of the mosque that face out onto the South Decumanus (Fig. 13). One was
placed in front of an already identified but blocked doorway and another in the area of the exposed ‘tower’ in the northeast corner.

2. Two other squares (MO/4, a half-square, and MO/5) were placed in front of the qiblah wall, opposite the main doorway to the building, where the mihrab of the prayer hall was expected (Fig. 12).

Fig. 14. MO/6 and MO/2 (standing figure), showing the portico foundations and bracing walls, all originally below the mosque courtyard surface. The base of the minaret can be seen behind and to the rear-right of the figure.

3. Later in the season, a half-square (MO/6) was laid south of MO/2 along a portico emerging inside the east wall, adjacent to the Cardo, after it was established that the Yale Joint Mission had previously excavated the area (Fig. 14). The purpose was to remove recent fill and expose buried architectural details.

After some early confusion caused by the discovery of an earlier bathhouse in MO/1, probably of Byzantine (Late Roman) date (Fig. 15), the excavations soon confirmed the presence of a sizable mosque datable to the early Islamic period. At this stage a more precise date of its construction is still less than clear, but there are indications that the mosque should belong to the reign of the active Umayyad caliph Hisham b. Abd al-Malik (r. 724–43), during whose reign other towns in the region were renovated, notably Baysân (Scythopolis). The mosque was constructed, evidently in two major stages, over the earlier bathhouse, which had a long history that is only just beginning to be discovered. The bathhouse was demolished and the area levelled to make space for the mosque in the heart of Jarash. Apart from pre-modern field walls, the mosque represents the last major period of occupation in the area southwest of the tetrakonia. In the following section, some of the more significant discoveries made during the excavation of the mosque are described and a preliminary chronology of the building proposed.

Fig. 15. General view southeastwards across the excavations. Foreground: the earlier late Roman bathhouse with partially excavated hypocaust supports for the floor; mid-background (at base of baulk): foundations for the entrance façade of the mosque’s prayer hall. Beyond: MO/4 and MO/5, located over the prayer hall.
The Mosque

The mosque can be almost fully reconstructed in plan from the visible surface features, mostly wall lines, supplemented with the many architectural details that were exposed during the excavations. The main enclosure wall of the mosque, constructed from stone blocks and incorporating recycled building material including street colonnade architraves, measures 38.9 metres E-W by 44.5 metres N-S (original estimate from the aerial photo: 38.4 by 43.32 metres). The wall was a two faced construction, 70 cms wide, with a central packing of red terra rossa earth and small stones. Generally, no mortar was used in constructing the walls. A projecting mortar edging, decorated with incised lines in a herringbone pattern, concealed the joints between the wall stones on both the inside and outside façades (Fig. 17). No other plastering or decoration is apparent on the extant walls.

A single, centrally placed doorway gave access to the building through the north wall. Accordingly, the principal entry to the mosque, at least originally,

Fig. 16. General plan of the mosque, as reconstructed from existing surface evidence and excavations in 2002.

Fig. 17. Plaster edging covering joints between the masonry in the enclosure wall of the mosque.

Fig. 18. View along the south sidewalk of the South Decumanus, with the wall of the mosque to the right. Note how it converges towards the colonnade of the decumanus at the far end. The entrance to the mosque, blocked at a later date, can be seen on the right. The upright scale marks the east doorjamb.
was from the South Decumanus of the Roman-period city, the main thoroughfare of its early Islamic successor. Because of the necessity to orientate the mosque in the direction of the qiblah (at Jarash 160 degrees southeast), the building had to be set at an angle to the original grid. The disorientation of the building is particularly apparent with the north and east walls, which face out to the South Decumanus and Cardo respectively (Fig. 18). In the early Islamic period the out-facing (entry) wall of a mosque was consistently built parallel to the qiblah wall to preserve symmetry, and hence at Jarash had to be offset from the decumanus.

The threshold of a second doorway has been preserved in the east wall. This side entry, seemingly part of the original structure, was approached via a platform from the built-over Cardo. Much of the detail concerning the precise arrangement of the eastern entry was lost with the Yale Joint Mission excavations, although the retaining wall for the platform, built over demolished Byzantine shops and paving, has survived (Fig. 14). There may have been another doorway in the west wall, mirroring that in the east wall, but the area is unexcavated.

The north and east doorways gave access to a spacious and mostly unpaved courtyard. On the north, east and probably west sides stood porticoes, 4.8 metres deep beginning at solid corner piers and carried on intervening columns. The spacing between the columns on the east side was 3.5 metres, and that on the north a slightly wider 3.8 metres. Whether arches or flat lintels spanned these porticoes is unclear; only one stray voussoir has been recognized so far. The open centre of the courtyard measured 28.2 metres E–W and 24.6 metres N–S, the latter measurement assuming the absence of a portico in front of the prayer hall façade.

In the northeast corner of the courtyard, at the junction of the north and west porticos, there once stood a 4.5-metre square tower, almost certainly an

Fig. 19. Foreground: the inner (south and west) walls of the tower, with the door threshold to the middle-left. Background centre: foundations of the portico colonnades. Background left (at lower level): truncated walls of earlier Byzantine shops belonging to the South Tetrakonia piazza.

early type of minaret for the mosque (Figs 14, 19). To carry the additional weight of a tower, the internal walls are of thicker construction, about a metre instead of the standard 70 cm of the enclosure wall, and rest on foundations that step out a further 10 cms each side. The tower could be entered from the east portico through a small doorway in its south wall, the threshold of which survives (Fig. 19). Any internal arrangements, such as a staircase or floor, are lost due to earlier clearance work, but the space within the tower is limited (2.4 metres square) indicating, perhaps, that a ladder was used to ascend the tower.
On the south side of the courtyard, aligned towards Mecca (the qiblah), was the central feature of the mosque: the prayer hall, which probably extended the full width of the building (Fig. 16). The total depth (N–S) of the prayer hall turned out to be 13.8 metres (original estimate: 13.78 metres).

In the centre of the principal south (qiblah) wall, the excavations uncovered unequivocal evidence for two mihrâb (Fig. 20). While their discovery proved beyond doubt that this building was a mosque, the presence of two mihrâb came as something of a surprise, especially given their unusual proximity. However, it would seem as though only one of the mihrâb was in use at any one time. The probable original mihrâb, the larger of the two with a diameter of 3.5 metres, was slightly offset from the central axis of the mosque to the east by 1.2 metres. Its rear (external) wall was circular, which was common in the later Umayyad period. At some later stage, that mihrâb was blocked leaving only a narrow doorway. Probably at the same time a second, smaller mihrâb (diameter: 1.65 metres) was inserted in the qiblah wall a further four metres to the east. Unlike the circular external wall of the first niche, this mihrâb had a heavy square salient that projected some 80 cms from the outside surface of the qiblah wall (cf. the downtown mosque of Amman). In addition, the second mihrâb was built using a quite different mortar. In the first mihrâb, a light grey ashy mortar with black specks was utilized, as on the citadel of Amman, whereas the second mihrâb was constructed with a white hard lime mortar. The widespread presence of fragmentary volcanic scoria rock in the mihrâb area may suggest that a dome once existed somewhere here. Most probably, it originated from the half-dome that would have topped the original large mihrâb.

The reason, or reasons, for a change in the location and size of the mosque’s mihrâb cannot be given yet; more excavation will be required to both the east and west. Also unclear is to what use the original mihrâb was put after the insertion of the new one. Nevertheless, the change in mihrâb is but one further piece of evidence that the mosque had a long life in at least three major stages before its destruction, probably by natural means, at an unknown date.

The excavations in MO/4 in particular have shown that the floor of the prayer hall was paved with stone slabs, but only a small area has survived. Quite possibly the famed reed mats of Tabariyah (Fig. 21; also mentioned by al-Maqdisi), or local
versions thereof (reeds were available in the wâdi of Jarash), were used to cover the stone paving of the prayer hall to make a more serviceable floor surface. The paving continued beyond the north façade of the prayer hall into the courtyard, stopping at some point as yet unknown, but perhaps in line with the first column of the east and west porticos (about four metres out from the entrance into the prayer hall).

The roof of the prayer hall rested on two rows of columns running parallel with the qiblah wall. Matching the column positions at the entry point into the prayer hall from the courtyard was a line of stone piers, rather than columns. No evidence for a portico in front of the prayer hall could be identified.

Both the prayer hall and the courtyard porticoes were roofed with ceramic tiles. Many broken pieces of these, both imbrices and tegulae, were found during the excavations. From the two squares MO/4 and MO/5, 760 kgs and 960 kgs respectively were recovered from a destruction level in the mosque. As a single tile weighed 5.2 kgs, this represents 330 tiles. The volume of tile fragments, and the presence of pointed capping tiles with a heavy whitish mortar on their internal surfaces, indicates that the prayer hall of the Jarash mosque was covered with a triple gabled roof similar to that of the Great Mosque of Damascus. The tiles were probably carried on wooden beams, but these have either decayed or were reused later elsewhere. Both materials were available locally. The potters’ kilns at Jarash produced, amongst other products, roof tiles, while the nearby mountains of Ajlun (Jabal ‘Awf in early Islamic times) were a source of wood.

As a rough calculation, the prayer hall could have held between 450 and 650 worshippers and the full mosque many more. It suggests, perhaps, the presence of a sizable Muslim community at Jarash, at least at times, during the first Muslim centuries, and a town population, mostly Christians, of several thousands to match.
Construction and location

The construction of the mosque at the junction of Jarash’s primary streets required the demolition of an existing bathhouse, probably of Byzantine date but seemingly in a state of advanced decay before its end. Once the levelling of the bathhouse and the adjoining shops in the southwest quadrant of the tetrakonia plaza was completed, a large area of some 50 by 50 metres was created in which the mosque could be erected. The external enclosure wall was built first, probably beginning with the qiblah wall, which facing 160 degrees southeast is correctly aligned. Next, an earth fill was placed within the four outside walls of the mosque, which both covered up the wall stumps and floors of the bathhouse and shops while presenting a level surface for the completion of the mosque.

The tower/minaret in the northeast corner of the building and the portico arcades were later additions to the mosque. Neither exhibits the plaster edging on the masonry joints as with the enclosure wall, while the foundations of the porticos were cut into the fill. The later addition of a minaret and porticoes is known elsewhere with other mosques. At Jarash, the date of the additions, and whether the tower and porticoes were added contemporaneously, is not known. Unfortunately, the excavations of the Yale Joint Mission removed the evidence for the tower, so the date of its addition can not be established.

There are two important points to remember about the Jarash mosque. Firstly, the high profile construction of a large congregational mosque at the central crossroads of the town brought it into line with an established Islamic urban tradition of the Umayyad eighth century. Like, for example, ‘Anjar in Lebanon (Fig. 22) and Aylah (al-‘Aqabah) in Jordan, a centrally placed mosque became one of the defining features of urban life under the Marwânids. Within an existing town such as Jarash, the insertion of a mosque would have resulted in considerable urban disruption, making clear the growing permanency of Islamic rule in the local district, more broadly in the Jund al-Urdunn, and Bilâd al-Shâm generally.

Secondly, the erection of the mosque at Jarash was only one part of a wider program of urban renewal in Bilâd al-Shâm. The new town of ‘Anjar was very much part of that program, as was the market complex at Baysan and, on a grander scale, the ‘Ammân Citadel

Fig. 22. ‘Anjar, Lebanon. Note the mosque (#2) at the crossroads, with a monumental entrance to the west leading from the main north–south street. Observe also the many shops in this area.
development featuring a huge governor’s palace, a market square and a mosque. At Jarash, the construction of the mosque was accompanied, as it would seem, by the total redevelopment of the South Decumanus, which thereafter functioned as the principal thoroughfare for the early Islamic town. Apart from the mosque at the Cardo junction other public buildings, many of which have yet to be uncovered, flanked the decumanus. They may include a governor’s residence and an extensive market place (ṣūq).

**The Bathhouse**

As already noted, the remains of an earlier bathhouse was exposed within the area of the central courtyard of the mosque, which was never paved. The date of the bathhouse’s construction has not been positively established at this point, but it may well relate to the enlargement of the plaza around the South Tetrakonia in the early Byzantine period (see Kraeling, *Gerasa*, p. 114, where this development is attributed to the period AD 293–305). That date, however, would require the bathhouse to have an operational life of some four centuries, perhaps a little too long. Quite possibly, there was another building in this area before the bathhouse, and Kraeling’s date for the plaza redevelopment is too early.

Preliminary work on the bathhouse has identified four major hypocaust rooms, with evidence of a makeshift refurbishment after the collapse of some of the floor supports. Subsequently, all of the sub-floor hypocausts were filled in with building debris, including a great deal of broken roof, floor and wall tile (Figs 15, 23). Pottery finds would suggest a date in the first decades of the eighth century for this fill. Over the fill, plastered basins and floors made from reused stone paving were laid down. The precise function of the building represented by these sparse architectural fragments is unclear, but water appears to have been a continuing element. Plastered basins, water pipes and paved floors suggest the continued use of the building for ablutions, but without the same degree of heating. Probably in the second quarter of the eighth century, this building was demolished almost to its foundations to allow for the construction of the mosque.
**Finds**

Apart from over five tons of roof, wall floor and hypocaust tiles (samples showing potters’ marks, **Fig. 24B**), the excavations within the mosque and bathhouse produced few objects of note. Not many were expected in any case, as both the character of the building – a mosque – and the very disturbed nature of the archaeological deposits lessened the likelihood of significant discoveries.

The most common discoveries were as follows.

1. A complete ‘Jerash’ lamp (**Fig. 24A**), manufactured at Jarash in large numbers in early Islamic times.

2. A fragment of a sculptured head in limestone, of which the left cheek, left eye and side of head with hair is preserved (**Fig. 24C**). The style of the eye suggests a late antique date.

3. Column capitals (47 examples, mostly abraded), some perhaps from the mosque but no longer in their original context.

4. Pieces of marble mouldings and church sanctuary screen fragments (**Fig. 24D**), probably building rubble from elsewhere.

5. Many mosaic tesserae both stone (numerous) and coloured glass.

6. Ceramic drain pipes from the bathhouse.

7. Fragments of bone, glass and metals that will, nonetheless, repay further study by leading authorities in the field. The glass, for instance, is to be included in Nottingham University’s research project on Islamic glass.

**Fig. 24.** Selection of finds from the excavations. A: ‘Jerash’ lamp; B: tiles with potters’ marks; C: sculpture fragment (cheek, eye and hair); D: decorative marble pieces (left piece perhaps from a church screen).
8. Coins. A total of 179 coins were recovered, all copper alloy types, including a number of interesting pre-reform and post-reform Islamic issues. All of the coins, which suffer from degrees of corrosion, have been x-rayed, producing very interesting results (Fig. 25A-C). A decision on the merits, or otherwise, of further cleaning has yet to be made.

**Fig. 25A.** Scanned and manipulated x-ray image of IJP-CN682 Coin (copper alloy) from MO/5.15 (constructional phase of the mosque prayer hall), diameter 28mm. The coin is an Umayyad Pre-Reform 'Justin II and Sophia' type (compare with Fig. 4). On the obverse two seated imperial figures are represented; on the reverse a large ‘M’. The ‘ε’ under the M (the officina) identifies this coin as a product of the Jarash mint, as Baysan – the other mint of this coin type – only issued coins attributed to the Α officina. X-raying coins will often reveal important details before cleaning, but the obverse and reverse of a coin are joined into one image. Nonetheless, manipulation of lighting direction can lessen this problem, as the two images above demonstrate. They are, in fact, drawn from the one original negative image, but manipulated differently.

**Fig. 25B.** Reconstructed x-ray image of two Pre-Reform (Arab-Byzantine) coins (copper alloy). Left: IJP-358 from MO/1.49 (the filled-in hypocaust system of the bathhouse), measuring 23 by 19 mm. Right: IJP-CN354 from MO/1.108 (insecure context), diameter 19 mm. Both are obverses of seventh century Islamic issues that feature a central minuscule ‘m’. The coin on the right is a Damascus issue, the left anonymous but probably also Damascus.

**Fig. 25C.** Reconstructed x-ray image of a post-reform Islamic copper alloy coin IJP-CN173 from MO/3.9 (a mixed deposit in the mosque), diameter 19 mm. The Arabic legend in Kufic Arabic is the second part of the shahada: Muhammad/Rasūl Allāh, that is ‘Muhammad is the Messenger of God’. To the right of the legend is a palm branch. This coin type was minted in al-Ramlah, the new Islamic capital of Filastin (Palestine), in the epigraphic series that followed the reform of the coinage by the Umayyad caliph Abd al-Malik (r. 685–705) in the 690s. This specimen is a little unusual in that the ‘lam’ of rasūl is carried over to the lower line (see example below, Fig. 25D).

**Fig. 25D.** Actual image of an al-Ramlah fals of the type shown in Fig. 25C. The marginal legend on the reverse gives both the denomination and place of minting.