Washing the masses, washing the self: An architectural study of the Central Bathhouse in Gerasa

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Mots-clés – Jordanie, Jérash, bains, latrine, urbanisme

Abstract – Located at the intersection of the cardo and the south decumanus, the Central Bathhouse is the seventh bathhouse identified in Gerasa. From 2002 to 2010, the bathhouse was extensively excavated documenting a prolonged use from the 4th to the 8th cent. through five main architectural phases. The development reflects a changing attitude from communal bathing in large basins to washing in individual basins. This study examines the architectural development of the Central bathhouse, discusses its relationship with its immediate urban surroundings and touch upon some of the quotidian activities involved in a visit to the bathhouse. An addendum discusses the entrance to the bathhouse, a latrine and the cold-water basins discovered in 2009.

Keywords – Jordan, Gerasa, bathhouse, latrine, urban planning

WASHING THE MASSES, WASHING THE SELF: AN ARCHITECTURAL STUDY OF THE USE AND DEVELOPMENT OF THE CENTRAL BATHHOUSE IN GERASA

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INTRODUCTION

The Central bathhouse in Gerasa takes its name from its location in the south-west corner of the intersection of the cardo and the southern decumanus, in the centre of the commercial district of the Roman period city. Based on the archaeological evidence, the construction of the bathing facility has been dated to the late 3rd cent. and its demise to the early 8th cent. The Central Baths are notable for being the only bathing facility in the city that has been subject to extensive excavation within recent years. It appears to have been a medium sized bath, incorporated into the central urban commercial part of the city, bordering the macellum to the south and the tetrakionion piazza to the north-west.

In many ways, the archaeological data that has been extracted from the Central Baths are not much different from that of other bathhouses. The significance of the building derives from its recent exposure using modern methods of excavation and recording techniques, which has enabled a thorough understanding of the architectural development of the baths, from its construction to the demise of the complex.

The initial excavation of the Central Baths was conducted in 1998 by the Department of Antiquities of Jordan. The excavation was subsequently continued by the author from 2002 to 2010, as part of the joint Danish-Jordanian Islamic Jarash Project, directed by Alan Walmsley, into which the further examination of the Central Baths was incorporated as part of a general examination of the development of the area through Late Antiquity. So far, the excavation of the baths has been conducted through yearly 1-2 month seasons with individual foci on areas that could inform us about the layout and the development of important areas within the baths. The objectives of the examination of the baths have been to provide a synchronic plan of the building, as well as to demonstrate how it developed over time. The focus of excavation has therefore been on the bathing suite, parts of the service area, the westward extent of the baths away from the cardo, and the building’s connection with surrounding structures. Lastly, a deep sounding has been conducted through the frigidarium floor in order to examine a) the foundation of the baths, b) potential reused foundations from buildings that occupied the area prior to the construction of the bathhouse, and c) the possibility of extracting datable material that could provide a terminus post quem date for the initial construction of the building. The heated rooms in particular have been subject to detailed and extensive archaeological excavation, which has provided a thorough understanding of the stratigraphy and enabled a careful reconstruction of the construction, use and disuse of this part of the complex.

The bathhouse was demolished in the process of redeveloping the area for the subsequent use of a congregational mosque. Therefore, the archaeological evidence that remains of the Central Baths comes almost exclusively from its foundations and the debris that relates to the demolition or remodelling of the building. The construction of the mosque sealed the remains of the bathhouse and the evidence deriving from the building can in most cases be considered reliable and undisturbed. In the present study, archaeological data from the Central Baths will be combined in an effort to reconstruct the diachronic life span of the building. These include in situ architecture, numismatics, pottery, and stratigraphic relationships. All archaeological data has been obtained from the excavation of the bathhouse as part

1. The East Baths was exposed to a minor examination conducted by Jacques Seigne during the 1990s. A cleaning and re-examination of the Baths of Placcus has been conducted by Thomas Lepaon in this volume. The debris in this building have, however, been completely disturbed during the original exploration of the bathhouse by C. Fisher (FISHER 1938).
2. The extent of the building in the northern, eastern, and southern directions are given due to the location of the two major thoroughfares and the small alley that separates the macellum from the Central Baths.
3. The amount of details that has been equipped for the present text is adjusted to the purpose of this study. A detailed publication of the Central Baths will be published on a later date.
of the Islamic Jarash Project and is firsthand material not previously analysed together. Following the analysis of the architectural development of the Central Baths a brief note will be made on the context of the bathhouse focusing on its orientation and relationship to the adjacent tetrakionion piazza.

**The Architectural Development of the Central Baths**

**First Phase – Initial Construction**

The first phase of the Central Baths was planned on a north-south axis stretching from the southern decumanus to a small alley that separated the building from the macellum to the south (fig. 1). The baths can roughly be divided into a bathing section, which took up approximately two thirds of the space, and a service area including a praefurnium and other service rooms that occupied the remaining third. The latter was situated in the southern part facing the small alley, whereas the cooler rooms were situated in the northern part and the warm rooms in between. This orientation is in full accordance with Vitruvius’ directions, as he recommended that the hot rooms should be situated towards the south and the cooler rooms towards the north to gain the full advantages from the heat of the sun. Like all other monumental buildings in Gerasa, the primary building material that was employed in the construction of the Central Baths was limestone ashlers.

The hot and tepid section of the building consisted of six hypocaust rooms, of which the westernmost appears to have served as a tepidarium. The remaining five rooms must have been composed of a caldarium and additional heated rooms. The functions of the rooms are, however, impossible to determine due to the superstructure of the baths being absent. For the ease of description, the tepidarium is designated on the plan as C5/T (fig. 1), whereas the additional five hypocaust rooms have been allocated the letters C1-C4 and C6/T. The hypocaust rooms were connected by tile arches that were constructed with an opus latericium technique and permitted the heat and smoke to pass through the system (fig. 2). C1 was connected to C2, C3, and C5/T, and C3 was connected to C4 and C6/T (fig. 1). The praefurnium was located just south of C1 and five chimneys in C4 and two in C5/T respectively created a draft that allowed the heat and smoke to pass through all hypocaust rooms. The floors in the hypocaust were constructed from hard packed clay and tiles coated the floors and walls of the subsurface rooms.

Evidence points towards a full tubulation system in C1-C4, as large quantities of tubuli or box-shaped tiles were recovered from the debris of all rooms. The suspensura was supported by pilae constructed from round ceramic tiles and larger square brick structures that were aligned along the edges of the hypocaust rooms (fig. 3). In some instances, these constructions might also indicate the former presence of basins; however, no traces remain above the surface.

Two distinctive features have been excavated within the service area, namely the praefurnium (fig. 1,Pr & 4) and a room that gave access to the hypocaust in order for it to be cleaned from the ash that would have accumulated in the system over time. The latter room has been termed Service Room 1 and will henceforth be referred to as SR1. SR1 consisted of a corridor, with the same floor level as the hypocaust, and was accessed through a manhole in the service area. It gave access to the hypocaust in room C3, and from there to the rest of the system (fig. 1,SR1). The access to SR1 could be closed off from the service area. As with the remaining subfloor rooms, SR1 was constructed with limestone walls, but rather than having a tile floor, the walking surface was built from hard packed clay.

The praefurnium was the only source of heat for the bathhouse and consisted of a bottle shaped furnace extending towards the hypocaust. One or more boilers would have been positioned above the

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5. Vitruvius 5.10.1.
Figure 1. First phase of Central Baths and hot air circulation © L. Blanke.
Figure 2. Tile arches connecting hypocaust room C1 and C2. View east © L. Thorup, Islamic Jarash Project.

Figure 3. Hypocaust room C1. View south-east © L. Thorup, Islamic Jarash Project.
fornix in order to heat water for the various basins throughout the bathhouse. In the Central Baths this is documented through remains of terracotta pipes that have been uncovered leading from the fornix towards the west. The praefurnium was constructed from tiles except for the stoking hole, which consisted of upright standing stones shaped as an inverted V (fig. 5). The internal floor of the furnace was constructed from hard packed clay, which clearly showed evidence of prolonged exposure to fire. Ash was found in abundance in both SR1 and the hypocaust, but no visible remains in the ash indicates what material was used to heat the bathhouse.

An alternative interpretation of SR1 is that its original function was that of a secondary praefurnium. However, the construction technique of the room differs markedly from the excavated praefurnium and a complete lack of fire damage does not support this theory. Conversely, without a secondary source of heating, room C3 and C6/T would very likely have been somewhat cooler than the remaining hypocaust. The lack of archaeological evidence hinders a final conclusion on this matter and this point it, therefore, left open for discussion.

Apart from the two features described above, the service area would have contained storage rooms for fuel and other commodities, a water reservoir or cistern, and possibly living quarters for any staff that serviced the bathhouse. Based on comparisons with contemporary bathhouses, as well as studies of the overall layout of the remaining structures in the area, it appears as though the service area consisted of an open courtyard lined with rooms with a separate entrance from the alley between the baths and the macellum to provide access for the delivery of fuel and other commodities to the bathhouse. A similar arrangement was employed in relation to the macellum to avoid transporting goods up the cardo and through the main entrance of the building. The service area was completely isolated from the remaining part of the bathhouse, and thereby the bathers would never encounter any staff that worked in the more physically demanding part of the building. The remains of a threshold between room C2 and SR1 could indicate a possible service entrance to the bathing suite as is seen in several other bathhouses, locally in the Baths of Placcus.

The frigidarium has only partially been excavated, but so far a large room lined with benches on its north and south side has been fully uncovered (fig. 1 & 6). The limestone benches were coated with marble veneers. The floor consisted of large marble slabs lined with plaster along the edges, and set into a 10 cm thick layer of opus signinum, laid over a thin layer of tiles, which in turn was set in 10 cm of a coarser type of cement. It appears as though the area east of, and possibly also that west of the room was part of the frigidarium as there are no indications of separating walls. However, this part of the bathhouse has been completely stripped down to the level of the foundations; a process that included the complete removal of surfaces, which complicates the interpretation of relationships between the various features. The remains of a mosaic floor north-east of the room as well as the finds of a high proportion of tesserae in the debris could hint towards the original decoration of the floor. Furthermore, remains of marble slabs have been found in situ and it can therefore safely be suggested that the floor consisted of marble slabs and mosaics. West of the room, the remains of a mosaic floor and a small basin have been found. Rather than being part of the frigidarium, these features may be interpreted as belonging to an apodyterium, though this room is difficult to identify due to the absence of the most common features, namely benches and shelves. However, the small basin could be the remains of a labrum or alveus, used for washing hands and feet before entering the actual bathing suite.

The water that was used in the bathhouse was drained through a sewer running north along C5/T and turning east between the hypocaust and the frigidarium (fig. 1,Se1). The sewer was on average 1.4 m deep and sloped slightly towards the main sewer that ran beneath the cardo.

The presence of shops occupying the area between the excavated part of the bathhouse and the

8. Fisher 1938. According to W. Kolataj, the clear distinction of service area and bathing area was a frequent arrangement within Byzantine period bathhouses (Kolataj 1992, p. 33).
Decumanus could indicate that the shops were part of the original bathhouse building and were leased out for extra income for the bathhouse owner, as it is seen in several bathhouses. Archaeologically, the physical connection between the Central Baths and the shops has been partially established by excavating a wide trench between the area directly east of the frigidarium and the northernmost shop. However, this demonstrated that the baths and the shops were only separated by a single-row wall, indicating that the bathhouse and the shops were constructed as one building. If this proves to be the case, the entrance to the bathhouse would have been situated between two shops.

Excavations of the foundation of the bathhouse below the frigidarium floor revealed a stepped wall-foundation that clearly would have been capable of supporting a substantial amount of weight from the superstructure of the bathhouse (fig. 7). The excavation was unsuccessful in establishing the depth of the foundation, and rather than uncovering remains of any previous buildings, showed that the foundation continued downwards below the level of the cardo to a combined excavated depth of 2.5 m. It appears as though any predating buildings had been completely cleared away in the process of constructing the bathhouse. J. Boersma has in the examination of the 4th cent. baths at the road station of Mutatio Valentia in Italy demonstrated how the initial preparations for the construction of the bathhouse included the excavation of a large trench (18 by 17 m), dug to the level of bedrock, during which all remains of earlier buildings were removed. Based on the nature of the excavated foundation of the Central Baths, it can tentatively be suggested that a similar process took place in the preparation of the site, if not at the entire area then at least along the lines of the walls.

11. Excavations of the north-eastern section of the area, conducted in 2009, exposed walls of a significant size and construction technique that clearly predated the bathhouse. These walls had partially been removed in the process of constructing the bathhouse and, thereby, support the argument presented above i.e. that the area was subject to some preparation prior to the construction of the Central Baths.
Figure 6. Frigidarium. View south-east © L. Blanke, Islamic Jarash Project.

Figure 7. Sondage excavated through western end of frigidarium © I. Simpson, Islamic Jarash Project.
The excavation of the sealed deposit below the *frigidarium* provided a *terminus post quem* date for the construction of the bathhouse. Imbedded in the cement that supported the marble floor of the *frigidarium* was a Roman city coin assigned to the city of Philadelphia, modern day Amman, dating to the reign of the Emperor Elagabalus (218-222). \(^{12}\) The pottery that derived from the foundation was generally very fragmented. However, it was possible to establish a general date from the Late Hellenistic to Late Roman period, and therefore no datable material dating from after the end of the 3rd cent. was recovered.

**Second Phase – Disuse of Hypocaust Room C5/T**

The Central Baths went through several phases of rebuilding and remodelling. Some were complementary parts of coherent phases, while others were not. During the 300 year long history of the use of the building the bathhouse saw minor repairs as well as major alterations that over time entirely changed the visual expression and use of the baths. A full discussion of the evidence would not only be too lengthy, but also unnecessary for the purpose of the present study. Therefore, the most substantial and influential alterations will be discussed in this and the following phase descriptions.

The initial rebuilding of the Central Baths saw a substantial alteration in its layout as it involved the discontinued use of the hypocaust room C5/T and large parts of the sewer. C5/T went out of use as a possible consequence of the disuse of sewer Se1, as the disuse of the sewer would have disabled all uses that required water. The circumstances surrounding the abandonment of Se1 are currently not well understood; however, a blocking towards its western end as well as the construction of a new drainage channel in the subsequent phase suggest that at least parts of the older branch were no longer functioning. The disuse of the sewer can possibly be connected to disuse of a part of the central sewer below the *cardo*. H. Barnes has demonstrated how a section of the sewer immediately south of the *tetrakionion* piazza collapsed at some point during Late Antiquity, as a possible result of the movement of heavy carts that were transporting stones from the oval piazza, most likely from the temple of Zeus towards the north. \(^{13}\)

C5/T was filled with soil followed by three courses of fist sized stones and a layer of plaster. The latter demonstrating a continued use of the surface of C5/T. A small section of the hypocaust room has been excavated revealing two almost intact ceramic vessels of the fine red terracotta ware type dating to the 6th and 7th cent. From the intentional fill in the drainage channel Se1 a coin dating to Emperor Maurice Tiberius (582-602) was recovered, \(^{14}\) which combined with the ceramics could suggest a tentative date for the disuse of Se1 and C5/T in the early 7th cent.

Following the disuse and infill of the original tepidarium, a second one was established in order to replace the former. This room was substantially smaller than the original tepidarium and it was possibly selected due to its location immediately south of the *frigidarium* in the north-eastern part of the heated section of the bathhouse. The layout of the hypocaust room C6/T shows clear evidence of its modification to its new purpose as well as its later date, as the tiles used in this section of the hypocaust were larger and of a different type than in the remaining part of the system. These tiles show hardly any signs of damage caused by heat, which would otherwise be unavoidable in a building spanning more than 300 years of usage. The floor tiles in the remaining part of the hypocaust all bear clear marks of their prolonged use, and some are almost completely eroded away. This situation is very likely related to a difference in the height of the hypocaust in room C6/T from the remaining hypocaust rooms as the height of the hypocaust in room C1-C5/T was 1.35 m whereas that in the second tepidarium only

\(^{12}\) BLANKE et al. 2007, p. 196, Catalogue # 5430.

\(^{13}\) Pers. com. Hugh Barnes. This event probably coincided with the abandonment of latrines that were situated behind the façade in the south-eastern section of the *tetrakionion* piazza, and were flushed with water coming from the main sewer below the *cardo* (KRAELING 1938, p. 108, 113).

\(^{14}\) BLANKE et al. 2007, p. 195, Catalogue # 1807.
measured 0.80 m in height. Thus, only a smaller amount of heat and smoke would have been led below the new tepidarium and the room would thereby have been indirectly heated and somewhat cooler than the remaining rooms above the hypocaust proper.

The potter’s marks on the tiles support the later date of the construction of room C6/T as they are of a different kind to the ones that have been documented in the remaining part of the system. Lastly, only one type of potter’s mark occurs on the pilae, the floor tiles, and the wall tiles, whereas various types of marks are documented from the remaining rooms in the hypocaust, a situation that indicates that all tiles used in the reorganisation of room C6/T were brought to the building from a single potter’s workshop.

The rearrangement of the tepidarium from the western to the eastern end of the heated part of the bathhouse slightly altered the movement of the bather as he or she would have accessed the tepidarium from a different point in the frigidarium.

Third Phase – Repair of the Hypocaust

The restoration in this phase was conducted after the remodelling of hypocaust room C6/T. The repair involved a considerable strengthening of the brick constructions that supported the suspensura in the eastern half of C3 (fig. 1). The density of the brick structures could indicate that a large basin was situated above the hypocaust in this part of the room. The repair was done in a rather haphazard manner employing various types of tiles, including tegulae, pilae, and ordinary bricks. The strengthening was most likely provoked by either a structural collapse or concern that such an event was imminent. The much less organised manner in which the repair was conducted suggests that it was neither carried out simultaneously nor immediately following the repair of room C6/T. Furthermore, a section of the repair was built on the floor of room C6/T and is therefore clearly later than the remodelling of the former.

Unfortunately, no datable material can be related to the two repairs described above. They can, therefore, only be sequentially dated in relation to the overall development of the bathhouse.

Fourth Phase – Restructuring I

The second rebuilding entailed a major restructuring of the entire bathing suite as the hypocaust rooms C3, C4, and C6/T were filled up (fig. 8). The bipedales were pulled up and most likely reused elsewhere; the hypocaust rooms were filled in, and this fill was covered with new tile floors laid with an opus sectile technique. A small basin (B2) was constructed in the north-western corner of C4 (fig. 8.B1) and connected to a new branch of the sewer (Se2). Se2 was built partly into the original Se1, but instead of running eastwards towards the cardo it turned north towards the decumanus (fig. 8.Se2). This new branch of the sewer would have allowed the continued use of water in the frigidarium. Se2 turned north towards the decumanus directly adjacent to the basin, and would therefore have enabled a second drain to be constructed in the eastern end of the frigidarium. Unfortunately, the easternmost side was completely robbed for stones and other useable materials, and the existence of a second drain can therefore not be archaeologically attested. However, the remains of a drain were found in the western side of Se2, which would have provided an exit drain for the continued use of the frigidarium.

Room C6/T was excavated prior to the excavations conducted by the Islamic Jarash Project, and all information about the debris from that particular room is therefore unavailable. However, large quantities of tubuli tiles were found in the filling of both C3 and C4, suggesting that the walls were stripped of their coating and laid bare. The tubuli tiles were usually positioned directly against the stone wall behind a layer of cement and tile or marble veneers; obviously, all these layers had been removed. However, no intact tubuli was found, which could indicate that the undamaged tiles were reused elsewhere. Concurrently, hypocaust room C2 was filled in, and a small basin (B2) was placed above (fig. 8.B2). Parallel to B3 on the west side of C1, another small basin (B3) was constructed (fig. 8.B3).
Figure 8. Fourth phase of Central Baths © L. Blanke.
The material recovered from the fill in the different hypocaust rooms demonstrates that the filling took place as one event, since the fill in the various rooms is all the same type. Furthermore, there is no stratigraphy in the fill, but rather just one sequence of the same material. A pre-reform Islamic fals dating to 660-680 was found within the fill, and thereby provides a terminus post quem date for the disuse of the majority of the hypocaust rooms. 15

It appears as though the praefurnium as well as hypocaust room C1 continued to be used for their original purposes until the area was restructured for the mosque. However, since the chimneys in C4 were no longer functioning, the tubulation system in C1 must have been altered to incorporate a chimney into the system and create the necessary draft. These assumptions are based on the facts that C1 was the only hypocaust room that was not covered with a new floor after it was filled. Furthermore, the deliberate infill of the dismantled hypocaust in C1 contained pottery groups dated to the 8th cent. Among these was a relatively uncommon example of a terracotta jug or jar with white painted decoration that was produced in the pottery kilns that occupied the former North Theatre in Gerasa. 16 This point is emphasised by the find of an Islamic post-reform coin possibly dating to the early 8th cent. 17 An Islamic post-reform coin was also found in the filling of the praefurnium. 18

Based on the evidence that has been presented above, it appears as though the bathhouse continued to function until the construction of the mosque. The southern part of the bathing suite continued to function as hot rooms with two small basins (B3 and B4). The northern part contained at least one small basin (B2) connected to a branch of the sewer (Se2) which also drained the basins in the frigidarium. As the upper part of this branch of the sewer only served the Central Baths, the findings within the sewer can provide good evidence regarding the later use of the building. The finds that were recovered from Se2 strongly suggest a continuation of the bathing function and the related social activities, as they consisted of a large amount of jewellery parts, smaller coinage, and sherds from glass and ceramics, including many small cups dated by S. McPhillips to the seventh and perhaps even 8th cent. 19 Several coins of interest were found in the sewer, among these a follis bearing Emperor Justinian’s name dated to 527-538, 20 but more importantly for this context a pre-reform Islamic fals dated to 660-680. 21

_Fifth Phase – Restructuring II – Dismantling of the Frigidarium_

The last feature that appears to have gone out of use before the final abandonment of the bathhouse was the frigidarium. For unknown reasons, this important feature was deliberately abandoned and filled with soil. The content of the infill was different from the fillings in the hypocaust, as it carried a strong resemblance to the deposits recovered from sewers, containing a high quantity of small finds that could easily be washed out in a drain. These included smaller ceramic pieces, coins, jewellery, fragmented glass, and bones. It is possible that the basin was filled with the waste deposits that had been cleaned out of the sewers, perhaps even the bathhouse drainage system, after accumulating over a longer period of time.

The infill of the frigidarium took place towards the very end of the history of the bathhouse, a fact demonstrated by the absence of any walking surface on top of the basin, as was the case with the other backfilled rooms. Instead, the fill was situated directly below the subsurface packing that was deposited as part of the construction of the mosque. The frigidarium was robbed of stones at both the eastern and

western ends, a process connected to the final dismantling of the bathhouse that probably would not have taken place if other parts of the building still were in use. The deposited material derived from the debris in sewer Se2 seems very similar in type and date to that found in the frigidarium, thereby suggesting that the two features went out of use approximately at the same time.  

**Demise of the Central Baths and Subsequent Use of the Site**

The history of the Central Baths finally came to an end when the area was remodelled for the use of a mosque during the latter part of the Umayyad period. The construction of the new building entailed the demolishment of the bathhouse to a suitable level, which in most parts meant to the level of the foundations. This process included a thorough harvest of all reusable building material.

The demolition of the baths is best documented within the bathing suite. The dismantling of the building appears to have been most systematic. Lead pipes, tanks, and boilers were removed; marble veneers and mosaics were pulled from the floor. The removal of the mosaics is documented by the cement bedding below the remaining fragmented mosaic, west of the frigidarium in the possible apodyterium, as this shows clear evidence of chop marks, indicating that the mosaic was quickly removed with a tool like a pickaxe. Roof and vaulting material, along with other salvageable items were stripped from the building together with the bipedales that were still left *in situ* above C1. The removal of the bipedales may also have been a prerequisite to filling the hypocaust and thereby avoiding the risk of later collapse or subsidence. Since only fragmented tiles have been recovered from the debris, it is safe to assume that the majority of useable material was put to use elsewhere.

Apart from the few examples of remaining mosaic and marble decoration that have been mentioned above, nearly all decorative elements were stripped from the building. Remains of one statue were, however, recovered in the form of a head of the god Mithras, providing an indication of the original decoration that adorned the Central Baths.

The second phase of demolition involved dismantling the masonry superstructure, which again was put to use elsewhere. It would be a reasonable conclusion that the construction of the mosque, which immediately followed the demolition, relied heavily on *spolia* from the Central Baths.

Following the dismantling of the baths, the entire area was prepared for the construction of the mosque. Firstly, the foundations for the mosque walls were built by digging foundation trenches across the baths in the desired locations. However, no great effort was made to remove the bathhouse walls when they were in the way. This is clear from the excavation of the praefurnium that was cut by the entrance wall to the prayer hall. The wall cuts the praefurnium through the middle, and part of the wall that separated C1 from the service area was used as a foundation. Secondly the area was levelled to the desired level with what appears to have been discarded building material, containing unsuitable dressed stones, ceramics, stone rubble, fragmented tiles, terra rossa soil, and hard packed yellow clay. The prayer hall was then floored with large stone slabs, whereas it appears that the hard packed yellow clay served as walking surface within the courtyard of the mosque, and the remains of the Central Baths were sealed below.

The choice of location for the construction of a mosque in Gerasa was possibly based on a combination of centrality as well as the apparently decaying condition of the Central Baths. Also, it might be assumed that a sufficient amount of bathhouses in the city were functioning since a conscious decision was made to demolish this particular one. During the last phase of the baths, the thermal activities were strongly

22. Recent research conducted on site in 2008 and 2009 have demonstrated that the frigidarium was not re-organised to facilitate production as previously stated by the author (Blank et al. 2007, p. 179). Rather, the frigidarium continued to be in use in a diminished form throughout the life span of the bathhouse. Similar to the development in the caldaria, bathing on a smaller and less communal scale was supported. This situation became apparent with the excavation of the two semi-circular piscine. One went out of use and was covered by an *opus sectile* floor, while the other continued to be in use throughout the life span of the bathhouse.
diminished and restricted to smaller basins with a focus on individual rather than communal bathing. The poor state of the bathhouse appears to have been the result of a series of deliberate decisions to restructure its layout rather than repair the various features. In the end this slow process of decay led to a final decision to demolish the building entirely.

A NOTE ON THE ARCHITECTURAL ORIENTATION OF THE CENTRAL BATHS

The architectural relationship between the Central Baths and its immediate surroundings has so far been subject to minor investigation and actual excavation that can clarify these relationships is required before final conclusions can be drawn. This section will briefly comment on observations and work that has addressed the orientation and layout of the bathhouse.

The location of the Central Baths in the southwest corner of the intersection of the cardo and the southern decumanus places the bathhouse right in the centre of a commercial district within the urban landscape. The bathhouse was accessed from an alley leading from the decumanus and should generally be understood within the context of the surrounding urban fabric. It is noticeable that the layout of the bathhouse follows a different orientation than the adjacent thoroughfares and the accordingly orientated related public buildings, such as the macellum (fig. 9). Rather than following the ordinary grid, facilitated by the thoroughfares, the orientation of the bathhouse appears to follow a different, perhaps earlier grid-orientation facilitated by buildings and structures occupying the area prior to the construction to the bathhouse. The architectural interplay between the bathhouse and the thoroughfares was achieved by incorporating the orientation of the latter into the bathhouse building by aligning the shops with the decumanus rather than with the remaining bathhouse building and thereby camouflaging the odd orientation to the viewer as well as incorporating different areas of activity spaces into one building. The excavation of the area south-west of the tetrakionion piazza has been limited and no other buildings that either predates or are contemporary with the bathhouse have been located. A brief examination of the layout of the tetrakionion piazza provides useful information for the understanding of the layout of the area.

A study by W. Thiel of the remodelling of the tetrakionion piazza re-dates the construction of the tetrakionion monument as well as the insertion of shops into the corners of the surrounding piazza to the reign of Diocletian in the late 3rd and early 4th cent. 23 It is noticeable that the layout of the shops in the south-west quadrant of the piazza differs from the remaining three quadrants in that the back wall of these shops follow the orientation of the Central Baths. The relative resemblance of Thiel’s re-dating of the piazza and the material evidence that was uncovered in the sondage below the floor of the frigidarium suggest a close proximity in the construction of the Central Baths to the remodelling of the tetrakionion piazza, perhaps even as contemporary constructions as part of a larger rearrangement of this particular area of the city.

Further clarity on the relationship between the Central Baths and the remodelling of the tetrakionion piazza will be achieved by re-excavating the back wall of the shops during next season of work as the information provided by C. H. Kraeling upon the original excavation of the piazza have proven defective and insufficient, as no note was taken of the relationships between the walls in the area. 24 A re-excavation is believed to provide important information about the stratigraphic relationship between the back wall of the shops and the walls of the adjacent Central Baths and thereby assist in establishing whether the two were contemporary constructions or one predates the other.

Figure 9. Initial phase of Central Baths with adjacent *cardo*, south *decumanus*, and south-western section of *tetrakionion* piazza © L. Blanke and H. Barnes.
ADDENDUM

In 2009 and 2010, excavations to the north of the bathing suite uncovered several rooms that were integral to the use of the Central Bathhouse. These rooms included: an entrance hall providing access to that bathhouse; a latrine, which was accessed from the entrance hall; two semi-circular basins in the unheated section of the bathhouse; and a second entrance and apodyterium located on the eastern side of the frigidarium. An additional excavation of the bathhouse’s auxiliary structures, such as the shops found along the side of the decumanus, has shed new light on the bathhouse, its economic foundation and its physical integration into the urban surroundings.

The Central Bathhouse could be accessed from two directions. The most substantial and possibly the main entrance was found in the north-west part of the bathhouse, possibly giving access from an alley that ran either from or parallel to the south decumanus. The alley is not preserved in the archaeological record, but the layout of the entrance hall remains largely intact (fig. 10). Accessed via a few steps, the visiting bather entered a hallway, measuring some 7.5m by 3.5 m — architectural features belonging to the later mosque obstruct the western end of the hallway. Incised lines in the floor along with a large number of tesserae found in the excavation of the room, suggests that the hallway was once paved by a mosaic floor. The prolonged use of the building and perhaps the need to save expenses and cut back on elaborate architectural decoration meant that the floor, at some point, was replaced by a tiled surface. Employing pilae, tegula and ordinary bricks, the later floor was probably constructed during an architectural phase in which building materials were in abundance. Two doors in the eastern end of the hallway gave access to a latrine (towards the east) and to the apodyterium (towards the south). This configuration would allow visitors to use the latrine without paying the fee to enter the bathhouse. At the same time, the main doorway to the alley allowed a total closure of the Central Baths, perhaps suggesting that it was closed for the night.

Situated just north of the bathing suite and accessed from the entrance hall, the latrine remained in use throughout the life of the bathhouse (fig. 11). This is only the third latrine that has been identified in Gerasa. One was excavated by the British School / Yale Joint Mission in the 1930’s by the entrance to the Baths of Bishop Placcus and a second was identified behind the south-east façade of the Tetrakionia Piazza. Other latrines would surely have been located in relation to the city’s other bathhouses, but they have not been identified as most of these buildings have seen only minor excavations. The latrine in the Central Bathhouse has a highly unusual form: it is semi-circular or rather horseshoe-shaped. The explanation for this construction style is functional rather than aesthetic and should be perceived as a sophisticated architectural solution to the challenge of connecting the two town grids within a single new building. The two grids were combined in the bathhouse through a series of architectural solutions, of which the most obvious is found in the latrine. Rather than following a proper semi-circular form, the eastern part of the room is shifted slightly towards the centre. The wall shared between the latrine and the shops to the north is shaped to facilitate the joining of two angles. The western end of the wall measures 1.80 m across, while the eastern end takes up only 1.20 m. The combination of a semi-circular latrine and this wall served to utilize and camouflage an otherwise trapezoidal shaped part of the building. Consequently, the users would not have experienced this space as peculiar or irregular.

The latrine was identified by its very distinctive features. A sewer runs along the entire length of the curved north wall. It is 1.30 m deep and slopes from south-east towards south-west. No remains of seating have been found, but a ledge in the northern stone wall indicates where the seating would have been. A channel runs from the south-west corner of the room along the full length of the sewer and disappears into the sewer in the south-east corner. This channel was fed by pipes in the south wall of the latrine and, thereby, received water from the same source as the basins in the frigidarium.

The excavation of the sewer resulted in large quantity of finds, particularly from deposits in its lower

26. These three latrines are discussed in BLANKE forthcoming.
Figure 10. Overview of western entrance hallway. Note steps as well as doorways to the *apodyterium* and latrine. View towards north-east © Islamic Jarash Project.

Figure 11. Latrine of Central Baths. View towards west © Islamic Jarash Project.
levels. These materials were not a part of the deliberate infill associated with the disuse of the latrine, but were deposited while the sewer was in use. They were deliberately flushed into the sewer from the adjacent bathhouse, suggesting that the latrine was used to discard garbage from the bathing complex. These material remains are therefore a direct reflection of activities that took place in the Central Baths and can reveal significant information about the social practice of bathing in Late Antique Gerasa. The excavations resulted in large quantities of ceramics of which the most common forms are cups, which have been interpreted as drinking vessels for wine and oil or perfume flasks — most date to the 6th and 7th cent. Glass, bones, beads, coins and jewellery were also retrieved from the sewer.  

A second entrance to the Central Bathhouse was found in the north-eastern section of the building. A doorway between two shops on the decumanus gave access to a small room from which a second apodyterium could be reached. This room was located east of the frigidarium, opposite the changing room identified in previous seasons and described above. The eastern room was smaller than its western counterpart and equipped with a mosaic floor. All other architectural characteristics were removed in Antiquity and the walls were severely robbed of stone. A blocked doorway between the apodyterium and the entrance hall reveals that this access point fell into disuse while the remaining bathhouse was still in use.

Located immediately south of the latrine, two semi-circular basins served the users of the frigidarium. Thereby, the frigidarium consisted of a single rectangular room with these two semi-circular basins that were accessed from the south via three steps (fig. 12). The floors of the basins were laid with tiles and the walls were coated with a waterproof opus signinum plaster. The lack of superstructure means that there are no remains of the piping that would have supplied the two basins with water, but they were most

28. These materials are currently under study and will be published in a joint paper with Pernille Bangsgaard Jensen and Stephen McPhillips.
likely supplied through pipes in the north walls with spouts that were situated above the current level of preservation. The used bathing water was flushed into the latrine sewer through pipes in the north end of the basins. The drain in the western basin was found with a lead plug still in situ. The later development of the bathhouse saw the eastern basin go out of use and its surface paved with tiles. The western basin remained in use throughout the building’s history.

**Concluding Remarks**

The archaeological exploration of the Central Bathhouse has produced a thorough understanding of the plan and development of the bathing complex as well as the interplay with the surrounding urban landscape and the planning strategies that led to both the construction and the demise of the bathing complex. It has been established that the Central Baths developed through at least five major architectural phases between the 4th and the 8th cent., each of which altered its physical appearance and its associated usage.

The Late Antique development of the bathing suite from communal basins to individual bathtubs corresponds with trends observed in bathhouses in Gerasa as well as in the broader Roman world. It is not within the scope of this article to explore the reasons for this development, but the growing influence of Christianity and the associated new focus of private donors on shrines and churches have often been used to explain the development. However, the haphazard repairs of, for example, the hypocaust in the bathhouse’s third phase as well as the mismatched use of tiles in the re-flooring of the entrance hall points towards an economic decline in the funds available to maintain the bathhouse. This could be a consequence of changing fortunes in the lives of the bathhouse owners, but could also result from a lack of willing patronage.

The finds retrieved from the latrine sewers provide evidence for activities that took place within the bathhouse towards the end of its usage. Eating and drinking was common, while gaming pieces reveal that gaming and perhaps even gambling took place. The many coins found in the drain suggest that bathers carried money with them —perhaps to pay for food or drink— and the different types of jewellery suggest that the Central Bathhouse was frequented by men as well as women and perhaps even by children. It is possible that the presence of two *apodyteria* imply a gender segregation, but such division is not reflected in the architectural layout of the remaining bathhouse.

Although the excavation of the Central Bathhouse has come to an end, the archaeological remains will continue to be examined through several interlinked inquiries. Of particular interest are questions related to the building’s economic circumstances, social practices beyond bathing and the experiences of the visitors. A starting point for these studies are the finds retrieved from the sewage system and archaeobotanical samples collected from the latrine and from the ashy deposits in the hypocaust. The objects such as beads, ceramics, glass and coins can help us understand some of the activities that took place within the building. The soil samples from the latrine can unlock information on diet, diseases and general health status, while the samples from the hypocaust can answer important questions pertinent to the use of fuel and thus the bathhouse’s economic foundation. While these queries focus on the Central Bathhouse, they can provide information about social practices in Gerasa as a whole and bring us closer to the daily lives of the people who in Late Antiquity called Gerasa their home.