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Kom El-Dikka: Excavation and Preservation Work, 2003

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KOM EL-DIKKA

EXCAVATION AND PRESERVATION WORK, 2003/2004

Grzegorz Majcherek

The Kom el-Dikka Archaeological and Preservation Project completed another season of fieldwork lasting from September 2003 through June 2004.¹ Unexpected problems with financing the restoration work compelled a readjustment of the annual program in an effort to balance research goals and the most pressing restoration operations. In turn, the relocation of the excavation workforce and financial resources to areas of the greatest need had direct bearing on the effects of the season, resulting in some of the scheduled work not being completed.

1 This year the staff included: Dr. Grzegorz Majcherek, director; Mrs. Renata Kucharczyk, deputy director; Mrs. Iwona Zych, Ms Aleksandra Chabiera, Ms Emanuela Kulicka, Mr. Tomasz Pelc, archaeologists; Ms Joanna Lis, Mrs. Ewa Parandowska, Mr. Wiesław Kuczewski, conservators; Dr. Wojciech Kołataj, Ms Małgorzata Krawczyk, architects; Prof. Dr. Karol Piasecki, anthropologist. SCA inspectors Mr. Ahmed Moussa, Mr. Husnaa Mahmud Fahmi, Mr. Ibtihal Abdel Samad, Mrs. Fahima Ibrahim, Mr. Bahgat Ibrahim Salem, Mr. Mohammed Senussi Ahmed and Mr. Yusri Mohammed Hassan worked with the mission all through the year. We would like to express our thanks to the Antiquities Authorities, in particular to Dr. Zahi Hawass, Secretary General of the SCA, and all the officials in Cairo as well as Alexandria for their friendly cooperation and support.

EXCAVATIONS

The year saw a continuation of archaeological work focusing on the area of the Theater Portico, which traverses the site from north to south. Explorations are already well advanced, with four auditoria of Late Roman date (5th-7th century AD) having been discovered here in the past season to add to previously investigated halls.² Similar lecture halls had been ex-

pected along the entire length of the portico and this initial assumption has now been fully confirmed as another three halls (H, J and N) were excavated this season [Fig. 1].

Additional archaeological research was also carried out in the area of the presumed location of the southern palestra of the Imperial Bath (Area Q).

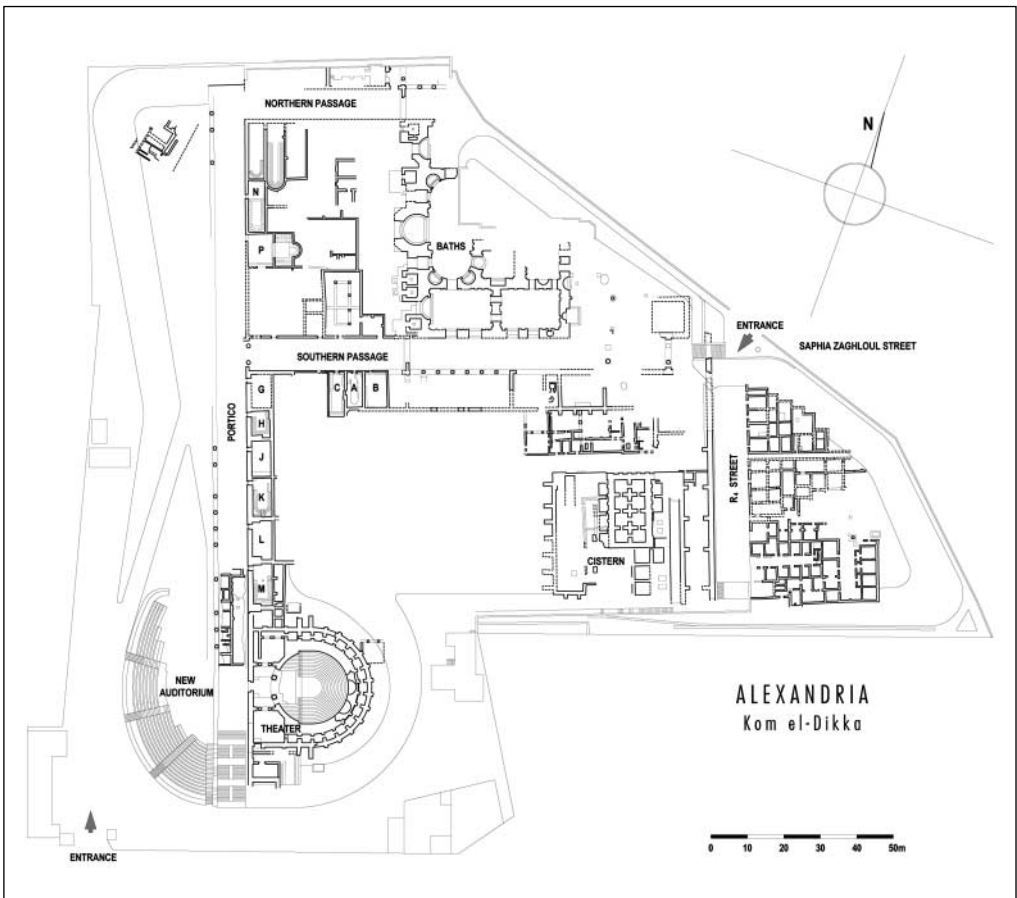


Fig. 1. General plan of the site
(Drawing W. Kotqtaj)

² Cf. PAM XI, Reports 1999 (2000), 27-38; PAM XII, Reports 2000 (2001), 23-34; PAM XIII, Reports 2001 (2002), 31-44; PAM XIV, Reports 2002 (2003), 19-31; PAM XV, Reports 2003 (2004), 25-34.

AREA H

The upper strata in the area of planned work corresponded to a vast Moslem cemetery, which is known to cover virtually the entire site. Some twenty or so graves of the so-called Upper Necropolis (nos. H 10-17 and H 41-48) were cleared within the trench confines (8 x 20 m) [Fig. 2]. They were, however, largely damaged by later robbing activities. In some cases, the superstructures were utterly destroyed, exposing burial chambers underneath. In the southern part of the trench, an extension of the perimeter wall surrounding a group of previously excavated graves was cleared. The accompanying strata yielded the usual assortment of artifacts: medieval glazed pottery both Egyptian and imported, some lamps and glass finds, all dated to the 10th-12th century AD.³ Two fragmentar-

ily preserved funerary stelae inscribed in Kufic script were found reused in the construction of some of the tombs. Higher standing segments of Late Roman walls came to light once a thick underlying layer, consisting mostly of rubble, urban refuse and ashes from the bath, was cleared. Continued exploration revealed several graves of the Lower Necropolis (H 110-117), dug at random among the existing walls. All were apparently introduced relatively not long after the ultimate abandonment of the auditoria, the deposits overlying the original floors not exceeding 0.50-0.60 m in thickness.

The recently excavated auditoria followed the same internal arrangement, although their state of preservation varied considerably. Hall J (5.20 x 9.80 m) has lost almost all of the original benches save



Fig. 2. Area H. Moslem Upper Necropolis looking south
(Photo G. Majcherek)

3 Cf. below, communication on glass finds by R. Kucharczyk.

for a small elevated platform located at the southern end. Fortunately, its original layout was easily traced thanks to the extant pavement witnessing the exedra-like shape of the benches. The pavement is in generally good condition, made of well fitted limestone slabs, measuring mostly 0.40 x 0.75 m. Some damages, observed mostly at the west end, were caused by the excavation of burial pits belonging to the Lower Necropolis. In the middle of the hall, equidistant from both side walls, there was a marble capital inserted into the paving and found *in situ*. It rose c. 0.30 m above the pavement, apparently marking a place of significance inside the hall. Similar installations were discovered also in halls K and H. The precise nature of this

'pedestal' eludes us, although an elevated platform for an orator could be the most plausible explanation. Apart from the dismantled benches, the auditorium is quite well preserved. Both the eastern and western walls rise to 1.60-1.90 m above the floor. Contrary to the other halls, the wall dividing it from the neighboring Hall K is surprisingly thin (0.40 m) and was introduced obviously at a later date. This raises some questions as to the original layout of both halls. It seems that originally they formed one long hall and the subdivision occurred only as a result of turning them into auditoria.

Further to the north, auditorium H constitutes a practically complete, although not as well preserved example of an audi-



Fig. 3. Auditorium H. View from the north
(Photo G. Majcherek)

torium [Fig. 3]. It has proved the smallest of the excavated halls, measuring roughly 5.10 x 6.70 m. Three rows of benches ran straight along the three walls. The southern end was higher, accom-modating a seat for the lecturer. The benches (0.30-0.35 m high) survived almost intact in the southern and eastern part of the hall. Of those lining the western wall, the topmost row is gone, but the dismantled stones have left clearly visible imprints. The inner face of the southern wall was not aligned with the portico back wall buttress, which is recessed by 0.70 m. This irregularity caused some problems in planning the benches on the south. The resulting recess was filled with rubble and plastered, creating a kind of platform that ran even with the topmost

row of benches. The floor was made of regular, carefully laid limestone pavers. Nearer to the door, again almost in the middle of the hall, there was a small hexagonal limestone block rising conspicuously above floor level. As in the case of Hall J, it is likely to have something to do with the oratorical function of the room. Yet another puzzling installation was noted next to the north wall. It was a small, elongated basin (0.80 x 2.65 m), its walls lined with waterproof plaster. There was neither a solid bottom nor an outlet. The purpose of this basin remains enigmatic, especially in view of the assumed function of the hall.

It is still unclear when the auditoria were built. The ceramic and numismatic evidence recovered to date is ambiguous to



Fig. 4. Auditorium N. View from north
(Photo G. Majcherek)

say the least. Sherds of Late Roman amphorae, both Egyptian and foreign, found sealed behind the benches, belonged to the 5th-6th century AD horizon. The coins, however, were rather poorly preserved and unreadable on the whole. The final occupation of these halls can be established more securely. Considering the entirety of the material (pottery, lamps and glass finds), it can be dated to the late 7th century AD.

AREA AS

Yet another auditorium (N) was cleared immediately below the medieval cemetery level. It was an elongated structure (approximately 14.25 m long), clearly divided into the auditorium proper and preceding anteroom. The latter almost square room (5.00 x 5.10 m), accessed from the Theatre Portico, opened into the auditorium through a wide doorway. The lecture hall (approx. 8.75 m long) was furnished with three built rows of stone benches placed along the walls and an apsidal ending on the south [*Fig. 4*]. Remnants of an elevated seat and the low steps leading to it occupied the center of the apse. The western stretch of benches was found almost totally dismantled. Remnants of a single bench were preserved also in the vestibule. The floor in both rooms, badly damaged by later burials, was paved with regular limestone slabs.

Its east wall, although heavily weathered, has been preserved to a height of

0.90-1.70 m above floor level. The west (back wall of the portico) and south walls were shaved off practically at ground level. The damages were apparently due to medieval plundering.

Investigations to date have shown that similar halls ran all along the colonnade; excavations in the coming season are set on clearing the remaining auditoria. A few halls of this kind had been explored already in the 1980s,⁴ but it was the unexpected discovery of seven new halls, coupled with additional research and a study of the written sources, that led us to conclude that we had uncovered the remains of an academic institution of Late Antique Alexandria.

The most recent discoveries have also shed new light on the function of the nearby theatre, discovered in the 1960s. Likely in the 6th century AD, following a major architectural renovation program that turned it also into an auditorium, the theatre was incorporated into the same academic complex and may have been used as a meeting place or lecture hall for larger student bodies.⁵

The academic complex discovered at the Kom el-Dikka site provides surprising evidence of the enduring nature and liveliness of the academic and intellectual traditions of Alexandrian science, the most famous institutions of which were the Library and Museum, older by a few hundred years.⁶ We believe it crucial to our understanding of the higher education system of Late Antiquity in general.

4 For the lecture halls excavated in the 1980s, cf. M. Rodziewicz, "Excavations at Kom el-Dikka in Alexandria 1980-81", *ASAE* 70 (1984), 236-240; cf. also set of auditoria located close to the southern passage of the Baths, Z. Kiss et al., *Fouilles polonaises à Kom el-Dikka 1986-1987*, *Alexandrie VII* (Warsaw 2000), 9-33.

5 W. Kołtąj, "Theoretical reconstruction of the Late Roman theatre at Kom el-Dikka in Alexandria", in: C.J. Eyre (ed.), *Proceedings of the 7th International Congress of Egyptologists* (Leuven 1998), 631-638.

6 For the intellectual life of Late Antique Alexandria, cf. D. Roques, "Alexandrie tardive et protobyzantine (IVe-VIIIe s.): témoignages d'auteurs", in: *Alexandrie: une mégapole cosmopolite* (Paris 1999), 203-236.

AREA Q

The zone adjoining the southern portico of the bath had not been investigated so far. In 1998, poorly preserved remains of a huge foundation wall running N-S and a marble column were uncovered at its eastern extreme, raising hopes of finding more material evidence of the palestra supposedly located there⁷ and resolving issues relevant to its potential layout, as well as architectural decoration and chronology.

First cleared was a large group of graves of the Upper Moslem Necropolis (Q 45-Q 74), located on almost flat ground, approximately 12.30-12.70 m above sea level. The excavated structures paralleled in form graves previously recorded elsewhere on the site. Earlier graves featured an open rectangular casing made of thin upright slabs (Q 62-63, Q 70-73). Later structures were made commonly as stone chambers covered with slabs that were laid flat or else pitched (Q 45, Q 61, Q 65). Some graves were additionally equipped with shafts placed at the eastern end of the chamber in order to facilitate secondary burials. Simple interments were also found tightly packed in the available space between the graves. The layers associated with the cemetery produced the usual range of finds: glazed oil-lamps, glass weights, some rather undecipherable coins and fragmentarily preserved inscribed stelae.

Of special interest was a large assemblage of medieval glazed ceramics ranging from Egyptian wares through Siculo-Maghrebi proto-Majolicas, Cypriot and Al-Mina wares. The artifactual evidence supports the chronology previously established for this phase of the necropolis.

All the graves were clustered rather to the north, leaving a gap along the southern edge (balk) of the trench. It was soon discovered, however, that this was due to a huge robbers' pit, which had destroyed some of the graves. Approximately 1.50 m down into the pit with Mamluk Glazed pottery much in evidence, the remnants of a huge stone wall closing the area from the south were found. Three separate segments of the wall, measuring from 1.50 to 3.30 m in length, were cleared.

The wall (c. 0.90 m thick) was structured of large limestone ashlars, some of them exceeding 1 m in length. Evenly spaced pits clearly seen in the southern baulk of the trench left little doubt that the wall must have been originally buttressed in a manner similar to the wall running in the same line further east. This in turn led to the conclusion that the newly discovered wall was indeed the outer southern wall of the bath complex.

The layout of the palestra was thus marked out on the ground; the facility was found to measure approximately 9 x 27 m and to be surrounded with porticoes on the north, east and presumably also west (assuming a symmetry of design) [*Fig. 5*]. These rather modest dimensions, standing in telling opposition to the overall size of the bath complex, conform well to Late Roman practice and find numerous parallels in bathhouses excavated in the Eastern Mediterranean.

The work was halted temporarily at a level approximately 11.00 m above sea level, where a large stretch of flagstone paving was cleared [*Fig. 6*]. The paving is

7 PAM X, *Reports 1999* (2000), 29-39; for the presumed palestra, see W. Kołataj, *Imperial Baths at Kom el-Dikka, Alexandrie VI* (Warsaw 1992), 169-170.

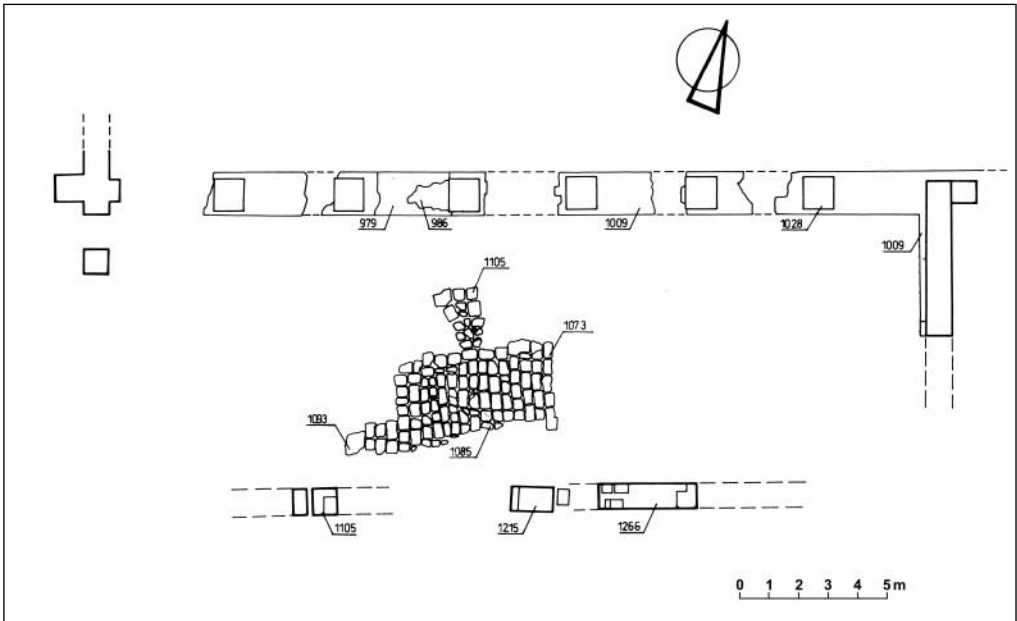


Fig. 5. Southern palestra of the bath
(Drawing M. Krawczyk)

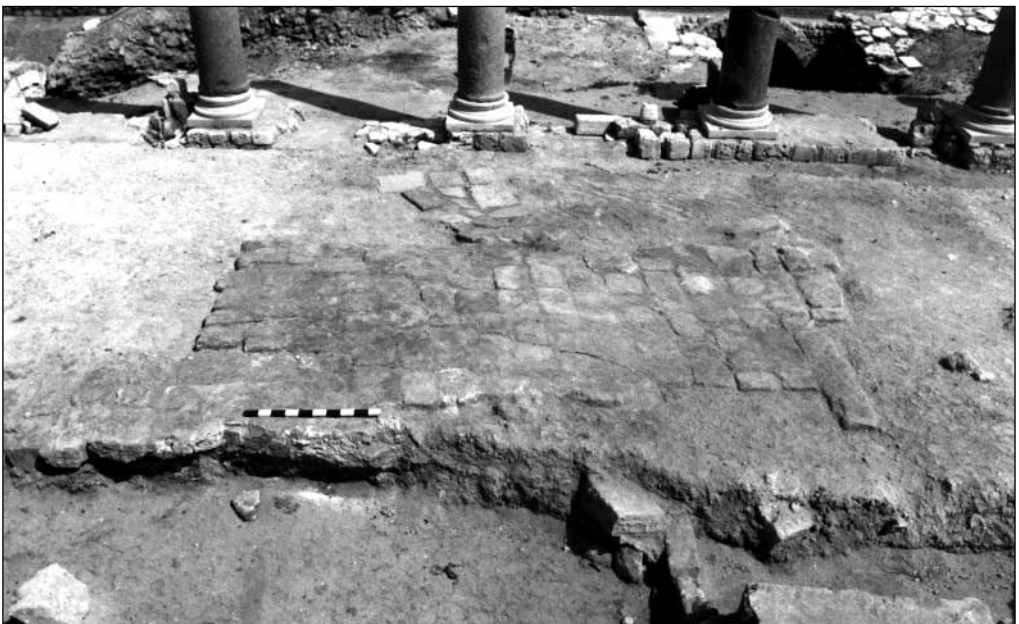


Fig. 6. Flagstone paving of the southern palestra of the bath
(Photo G. Majcherek)

preserved only in the central part of the area, in other locations it had been apparently removed leaving a rubble substructure. The paving rises some 1.20 m above the level of the portico flagging and can hardly be linked to the latest phase of the bath. Pre-

liminary dating based on the available material (pottery and lamp fragments) collected from the layer lying directly on top of the paving, points to the 7th century. Detailed dating should be possible upon examination of the underlying strata.

CONSERVATION

In keeping with the ongoing restoration program, conservation work was carried out concurrently on various monuments at the site.

THEATER PORTICO

The anastylosis of the portico was the most important operation undertaken this season. Two recent field campaigns resulted in the clearing of c. 40 m of the portico.⁸ Four toppled and broken granite columns were found lying immediately on top of the extant pavement of the portico [Fig. 7 top]. Since the adjacent section of the portico stylobate was found to be quite well preserved with only some minor reparation needed, it was decided to proceed with the raising of the columns to their respective original positions [Fig. 7 bottom]. All the original marble bases were missing, so limestone replacements had to be manufactured. One of the columns, however, turned out to be shorter than the others; originally, it must have stood on a low pedestal to compensate for the missing height. A pedestal of two large blocks was constructed to accommodate it. The land configuration and easy access to the area in question allowed the lifting operation to be carried out using a crane instead of the traditional tripod and pulley device.⁹

Meanwhile, some additional restoration work was also carried out on the walls of

the newly discovered auditoria in Area H. In Hall I, a considerable section of the eastern wall was consolidated. The wall built in the pillar technique (*opus africanum*) was now completed with new stones found during excavation and the void joints pointed with new lime mortar.

Conservation work was also conducted in auditorium P excavated last season. In order to prompt an understanding of the original appearance of the edifice, one or two courses of ashlar were added on the top of the existing north wall and in the apse. The same approach decided about the restoration of some of the benches along the northern wall, which had suffered from later burials.

The newly uncovered auditorium N also received immediate attention. First, the missing facing of the eastern wall was repaired over a distance of some 14 m. The wall had suffered badly from weathering and damages caused by medieval burials. All the missing or eroded stones were replaced with new ones. The wall was rebuilt to a maximum height of some 1.60-1.80 m in places and the wall coping additionally reinforced to prevent water penetration. Some of the benches along the northern wall were found to be quite well preserved with only minor reparation needed, while the southern part of the auditorium had been almost entirely robbed out. The

⁸ See PAM XIV, *Reports 2002* (2003), 19-31.

⁹ The lifting operation was successfully designed and supervised by Dr. W. Kołtąj.



*Fig. 7. Theatre Portico before (top) and after restoration, looking south
(Photo G. Majcherek)*

necessity to rebuild also a huge adjoining facade wall excluded immediate restoration of the benches. Only the lowermost run of seats and a fragment of the southern apsidal ending could be restored.

BATH COMPLEX

The already well advanced restoration program for the bath complex focused on the southern part of the complex. The southeastern corner of the edifice was restored in the manner of the original construction. The corner turned out to be severely damaged and the stone from the foundations robbed out sometime in medieval times [Fig. 9 top]. In the past, a large section of the original brick-made corner had been anchored with steel rods to the extant core of the wall.¹⁰ It was decided now to rebuild the entire corner, in an effort not only to restore its original appearance, but also to support this hanging fragment. A test pit revealed poorly preserved remains of stone foundations. They were rebuilt with large limestone blocks, whereupon the red-brick facing was carefully restored up to c. 2.50 m above the original occupation level [Fig. 9 bottom]. The hanging segment of the original wall now rested securely on the newly built structure, and the supporting steel rods were removed.

Work continued also in the western corner of the baths' southern passage. A stretch (c. 2 m) of the vault adjoining the gate leading to the subterranean structure from the east was now entirely restored with new limestone blocks. At its eastern extreme a supporting curtain wall was built in order to seal the as yet unexplored and unstable fill and rubble. This temporary

construction is removable as required, depending on progress in the restoration of the entire corridor. The adjacent 11-m long segment of brick-made water channel running on top of the vaults along the bath facade was also restored with new bricks.

The operation that was technically perhaps the most demanding and certainly the most time consuming was the restructuring of the damaged vault over the southwestern entrance chamber of the subterranean service area. The vault had collapsed apparently under the heavy load of a Late Roman wall built across it and was found resting on a thick deposit of ashes and bath refuse. The wall itself had subsided and been deflected considerably. Following detailed recording in drawing and photo-



Fig. 8. Restored vault in the southern passage of the bath, looking south (Photo G. Majcherek)

¹⁰ W. Kołataj, "Travaux de conservation et de reconstruction dans les thermes romaines et la construction voûtée de Kom el-Dikka", *ET II* (1968), 155-171.

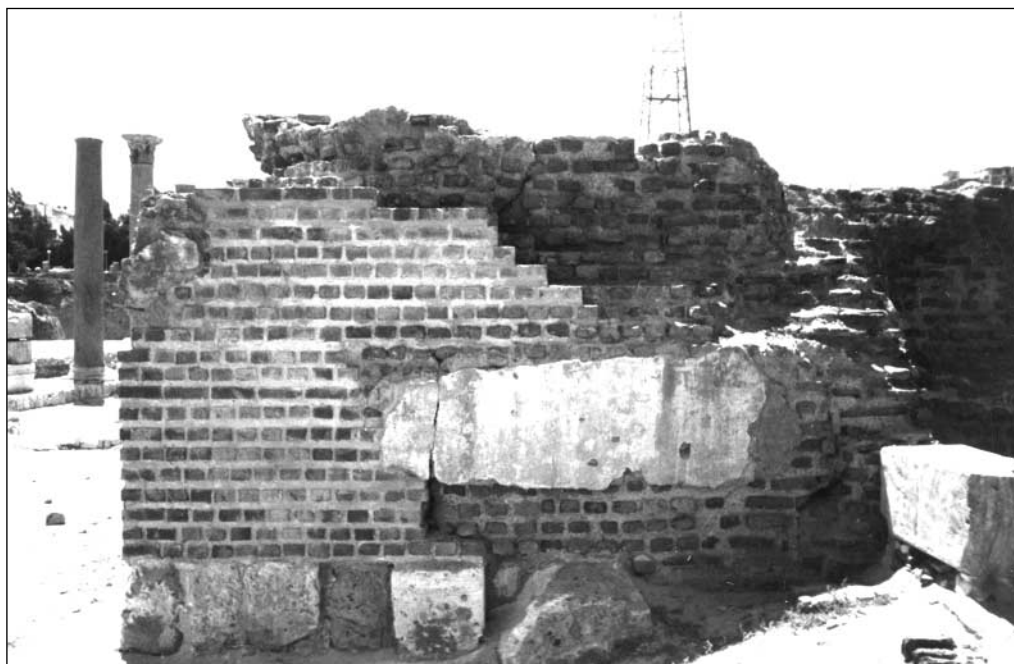


Fig. 9. *The southeastern corner of the bath before (top) and after restoration (Photo G. Majcherek)*

graphy, this wall was dismantled, the fill cleared and the lateral walls of the chamber inspected for damages. Disintegrated blocks were replaced with new ones and the voids were filled with new mortar, making the construction structurally sound again. Since all the extant stone elements of the original vault were either heavily weathered or utterly destroyed, it proved necessary to rebuild the vault with new blocks cut to the required dimensions. The restored fragment

of the vault is approximately 4.50 m long. In the next stage of the operation, the dismantled wall was reassembled in its original position and the outer coating of the vault restored of smaller, randomly arranged stones [Fig. 8]. The restoration of this vault was essential in view of the planned visitors' route that is to run along the southern facade of the baths. The gap between the western and eastern part of the passage was thus bridged.

MOSAIC CONSERVATION

A pressing issue of the season was the transfer of a floor mosaic decorating the triclinium in an Early Roman house discovered in front of the Theater.¹¹ Since its

discovery in 2000, the mosaic had been seriously threatened with seasonal water seeping in from the surrounding escarpment, causing irreparable damages to the sur-



Fig. 10. *Transferring the mosaic*
(Photo A. Chabiera)

11 Cf. Majcherek, PAM XII, op. cit., 23-34. The fragmentarily preserved multi-colored emblema showing three birds was preserved and removed in the previous season..

face.¹² In view of its size (3.90 x 1.90 m), the mosaic could not be removed in one piece. It was decided to cut it into two smaller sections, positioning the cutting lines to follow basic pattern designs.

Standard conservation procedures were applied during the operation.¹³ To facilitate the process, two rows of tesserae were removed along the dividing line. The surface of each section was cleaned and then rinsed with 5% ammonia water and acetone. The surface was then fixed with two layers of cotton gauze and reinforced with canvas, all soaked in PVA. Both sections were then

carefully detached from the bedding and gradually rolled onto a specially prepared wooden drum (c. 0.60 m in diameter) [Fig. 10]. The mosaic was then transferred to an on-site field laboratory where conservation treatment was continued. Remains of the bedding adhering to the underside were removed and the back of the mosaic was impregnated with a 7% solution of PRIMAL AC-33.

The mosaic was stored at the site storerooms. It is to be displayed eventually as part of a newly prepared exhibition in the Greco-Roman Museum.

12 For a detailed description of the mosaic, see G. Majcherek, "Mosaic floors from Roman triclinia in Alexandria: Evolution of technique and design", in: Z. Hawass (ed.), *Egyptology at the Dawn of the Twenty-first Century, Proceedings of the Eighth International Congress of Egyptologists* (Cairo 2000), 319-327.

13 Cf. J. Lis, "Mosaic conservation at Kom el-Dikka in Alexandria in 2002", *PAM XV, Reports 2003* (2004), 39-42. The work was carried out by J. Lis assisted by W. Kuczewski.