# KOM EL-DIKKA EXCAVATION AND PRESERVATION WORK PRELIMINARY REPORT, 2004/2005 

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#### Abstract

The Kom el-Dikka Archaeological and Preservation Project in Alexandria proceeded uninterrupted from September 2004 until the end of August 2005, ${ }^{1}$ a key objective being the stepping up of already advanced preservation work aimed at establishing a fully accessible open-air display of the uncovered monuments. This was closely connected with the recurrent task of removing soil and debris from the central and western parts of the archaeological site, prerequisite to a planned upgrading of this part.

The current restoration program necessitated also relevant archaeological research, concentrated mainly in the western area of the site.

In addition to the excavations, team members continued the study of medieval glazed pottery and associated finds from Kom el-Dikka, this in preparation for a comprebensive publication of the collection. The recording work concentrated this year on the Sgraff and Slip Painted group of Mamluk pottery finds. ${ }^{2}$


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## EXCAVATIONS

As in previous years, archaeological excavations on Kom el-Dikka were integrated with the program of the Preservation Project and covered various areas of the site [Fig. 1]. A major effort this year concerned the western part of the site directly behind the huge backwall of the Theatre Portico. Three previous campaigns had resulted in the discovery of a large and well-preserved complex of lecture halls of Late Roman date. The excavated area was now considerably extended to the north and east. ${ }^{3}$

## MOSLEM CEMETERY

Yet another section of a vast Moslem cemetery was explored in areas $G$ and $H$. The superimposed strata revealed the same stratigraphic sequence that has already been identified elsewhere on the site, extending from Ayyubid/Mamluk down to Umayyad times. ${ }^{4}$ Exploration of associated strata brought the usual assortment of finds: a typical range of pottery sherds including medieval glazed wares, both Egyptian and imported and a variety of finds including a limestone coin mould (reg. no. 5104) and a fragmentarily preserved funerary stela inscribed in Kufic (reg. no. 5103), dated to the 10th-11th century.

Graves assigned to the earliest Lower Necropolis were found dug among the walls of the Late Roman auditorium G. They were all excavated in a relatively thin (not exceeding 1 m ) stratum of loose,
mostly wind-blown soil, apparently accumulated there shortly after the roof had collapsed, but significantly within walls still standing to some height. In many cases, the graves were cut into the pavement or benches of the auditorium, from which fact it can be reasonably inferred that this hall, like the others, was abandoned at a rather late point in time, shortly before the earliest internments.

The dating material from the fill consists mostly of residual pottery obscuring any chronological conclusions; nonetheless, the absence of Early Islamic glazed wares is conspicuous. All things considered, the so-called Lower Necropolis appears to have been introduced as early as the late 7 th/early 8th century. The phase of the cemetery overlying it (so-called Middle Necropolis) is traditionally dated to the 9th century, a date now corroborated by the unexpected find of a funerary stela (reg. no. 5111, cf. Fig. 4 on p. 38 below), bearing a precise date to Rabi' al-Awwal 247 AH (May-June of 861). The stela was found in area AS (further to the north), reused in the construction of a later (11th/12th century) grave (AS 147), but there is little doubt that it must have come from some earlier burial in the same area. The find is of crucial importance, constituting the earliest epigraphic evidence confirming the existence of a Moslem cemetery within the city walls of ancient Alexandria. ${ }^{5}$ Other stelae (reg. nos

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Fig. 1. Kom el-Dikka archaeological site map, state for 2005
(Drawing W. Kotataj, D. Tarara)


Fig. 2. Late Roman auditoria $A-G$
(Drawing A. Pisarzewski)


Fig. 3. Late Roman auditoria A-G. General view from the west
(Photo G. Majcherek)

5108, 5109, 5110), unfortunately broken, were found reused in the construction of nearby tombs of later date (AS 144, AS 146).

The upper stratum overlying the necropolis was explored also in the extensive area designated as CW. Altogether, some thirty or so graves of the Upper Necropolis were unearthed, fairly tightly packed and occupying almost all of the excavated area. The layer of the necropolis was found to be substantially lower than in other areas (9.70-10.50 m a.s.l.) and it should be expected that the Late Roman structures still buried underneath will be found in a rather mediocre state of preservation. Two more funerary stelae (reg. nos 5097 and 5098) were found out of context. The skeletal material from this sector will be studied in the next season.

## AUDITORIA

Investigations carried out in the western part of the site were set on clearing the remaining lecture halls belonging to a large academic complex. ${ }^{6}$ All the auditoria formed two large groups: one extending immediately north of the theatre and another one located in the northern area of the site. The gap between the two sets of halls is merely a reflection of the progress in archaeological excavations and there is no reason why the unmapped territory is not to hold more such halls, thus lining the entire length of the portico and going even further in the direction of the Via Canopica.

Three more lecture halls (D, F, G) were cleared this season bringing the total number of these chambers to $17 . .^{7}$ They are located in the southern wing of the complex, running north of the theatre in the direction of the gate to the baths [Figs 2-3]. All three follow a rectangular layout.

Auditorium G is located at the very corner of the southern run, next to the bath entrance [Fig. 4]. In similarity to the previously discovered units, it was built as a large rectangular hall ( $9.50 \times 4.75 \mathrm{~m}$ ), taking advantage of structures already existing in the area, i.e., the backwall of the portico. In the course of excavation it was found that its eastern wall also belonged to an earlier urban phase. Although large sections of these walls had been robbed out, it was apparent that it was huge ( 1.55 m thick), possibly forming part of some unknown building that had once stood behind the portico.

Like in other lecture halls located along the theatre portico, the doorways were situated in the thick backwall, invariably closer to the northern end of the auditorium. In this case, however, the doors were deprived of any structural doorjambs, being simply pierced through the thick wall instead. The floor of the auditorium was made of limestone pugging, heavily damaged by Early Islamic burials. Profiting from the scarcely preserved floor, excavations were continued in order to precise the general stratigraphy of the area. Immediately below floor level,

[^2]two small brick-made circular furnaces were cleared; one placed near the entrance and the other at the back of the hall, partly sealed by the adjacent benches. Both were apparently used as glass furnaces - glass slag was found in abundance nearby and the inner walls bore evidence of vitrification. They apparently predated the auditorium, suggesting that the area had been used as an industrial zone. These findings confirm the surprising isolation of the area behind the portico until the end of the 5th century and it is extremely difficult to reconcile an industrial establishment of this sort with the traditional function of a portico. The construction of
this lecture hall corresponds with a complete rebuilding of the portico itself. Solely a severe earthquake could have caused the massive destruction observed in its structure. Similar evidence for a seismic catastrophe is to be observed also in other monuments in the area.

Auditoria D and F, located further to the west, were built along the E-W passage leading to the baths. Regardless of their actual location and position of the door, they show a typical orientation along an $\mathrm{N}-\mathrm{S}$ axis; the differences lie in the size and details of the internal arrangement.

Hall D, clearly narrower than the others ( $7.30 \times 4.25 \mathrm{~m}$ ), was furnished with


Fig. 4. Late Roman auditorium $G$ with remains of glass furnaces cleared at floor level (Photo G. Majcherek)


Fig. 5. Auditorium D, view from the entrance
(Photo G. Majcherek)


Fig. 6. Auditorium F, view from the entrance
(Photo G. Majcherek)
two rows of masonry benches built along the longer sides and a raised platform (made of three benches) at the back [Fig. 5]. The monumental seat encountered in other halls was not preserved, but clearly visible imprints and leftover plastering pointed to the existence of steps originally leading up to it. As a rule, the benches were made of a single row of large blocks, but in several sections larger blocks cut from the brick walls of abandoned structures, most probably the bathhouse or cisterns, were reused a phenomenon previously noted also in other constructions of the Late Roman age. Plastering, which was the rule on the benches, covered and evened out all the irregularities. Interestingly enough, the auditorium is not entered directly from the bath passage and it is separated by a continuous wall from another chamber which is. It is not yet clear whether this latter room was an anteroom from the start or was partitioned off at a later date.

Auditorium F, so far the largest one (12.70 x 5.50 m ), appears to depart from the typical layout of lecture halls forming the southern group [Fig. 6\}. The principal difference in plan is the presence of a clearly separated small anteroom (approx. 1.80 m deep). The internal arrangement of hall F , however, follows the conventional layout, with three rows of benches around the walls and a raised dais at the back. The floor was made of carefully laid limestone slabs and was almost wholly preserved. The level of the floor was found to be approximately 0.85 0.90 m higher than the floor in neighboring auditorium $G$. The reason
for such a substantial difference was discovered when exploring the underfloor layers. In the northwestern corner of hall F , remains of a sewage channel were cleared. The channel, built along the wall, was some 2.60 m deep. Yet another section of it was also cleared in the northeastern corner of the structure. It became apparent that this was a large public latrine, most probably belonging to the bath complex. Once the latrine had gone out of use, the channels were filled and an auditorium built on top of it. Material recovered from the fill consisted mostly of badly corroded coins and a large number of pottery sherds, both Egyptian and imported, giving a terminus post quem for the building of the auditorium. It seems that the latrine went out of use by the end of the 5 th century AD. The date of the abandonment and destruction of the lecture halls is no less ambiguous and it is closely linked to the appearance of the first graves of the Lower Necropolis. As indicated above, the dating material from the fill consists mostly of residual pottery, obscuring possible chronological conclusions; nonetheless, the absence of Early Islamic (Coptic) glazed wares is conspicuous. Two fragmentarily preserved Saint Menas ampullae, pottery and glass finds, ${ }^{8}$ point to the mid 7 th century as the most probable date for the abandonment of these auditoria.

One last remark: the walls of the newly discovered auditoria are not homogeneous. Some of them belong to older structures adapted to new function, while others were newly built in the pillar technique typical of Late Antiquity.

## CONSERVATION

On-site conservation followed guidelines and priorities set down in the general program of the Restoration Project approved by the Supreme Council of Antiquities. Work was carried out in the Theater Portico and complex of auditoria, the Bath complex and Area F.

## THEATER PORTICO AND COMPLEX OF AUDITORIA

Following the successful anastylosis of the portico completed last season, the remaining sections of the stylobate were treated this year. Missing blocks were reintegrated into the structure in places deemed appropriate, and the entire southern section was consolidated.

The last remaining section of the portico wall (section $G$ ), some 12 m long, was thoroughly restored [Fig. 7]. The core of the wall, visible where most of the facing
had long been lost, was duly cleaned and stabilized with lime mortar filling all the cracks and crevices. The facing was rebuilt using mostly blocks retrieved from nearby graves and retaining their original shape and size. It was apparent that these blocks had been robbed from the backwall in medieval times to serve as handy building material for the nearby tombs. The facing was rebuilt in places up to 1.80 m above the portico pavement. The missing brick lacing was restored with new bricks cut to required dimensions. Following a general conservation principle established for the site, the newly restored wall facing, albeit done in original stones, was clearly separated from the extant original masonry with a layer of bitumen tarpaper and additionally with two slightly recessed courses of new blocks. Restoration in this section of the backwall involved also


Fig. 7. Restored section $G$ of the portico backwall
(Photo G. Majcherek)


Fig. 8. Auditorium L, eastern wall before (top) and after consolidation (Photo G. Majcherek)
a rebuilding of the original entrance. Both door jambs were structured in small blocks, following the original technique.

Auditorium L posed yet another problem. It was ascertained that the area behind the wall had been abandoned already in late antiquity, becoming a dumping ground for city waste. The process of accumulation was so rapid that ancient builders had to deal with the heavy load exerted by the growing dump. Although built of large ashlars, the east wall constructed in the 6th century had not sustained the combined load of the dump and had leaned out substantially, requiring intervention [Fig. 8, top]. Following photographic documentation of the most endangered section, all the stones in the topmost three courses of masonry were duly marked and the section carefully dismantled. The whole wall was then reassembled $\{$ Fig. 8, bottom $\rceil$. In order to assure stability, some badly eroded stones were replaced with new blocks.

In auditorium H , a badly damaged eastern wall was also restored to its original appearance. The wall had originally been constructed in pillar technique with the pillars made of large blocks and the intercolumnar spaces filled with small stones. The said wall had lost some of the original fabric, mostly in the built-in spaces between the pillars. The joints were now filled with lime mortar and losses completed with coursed squared rubble. New wall coping was formed in order to prevent moisture penetrating from the adjacent escarpment.

Preservation work was also continued in auditorium N , located in the northern section of the portico. The operation of restoring auditorium seats was now completed with the entire western bench being rebuilt. An adjacent section of the portico backwall was also rebuilt. The work, however, had to be halted for lack of
building material. Even so, large patches of the original pavement could be restored, using limestone slabs found nearby.

## BATHS COMPLEX

Work continued on a restoration of the vaults in the southern wing of the underground vaulted structure. Two more partially collapsed vaults located in the eastern end of the complex were restored. Most of the stones in the vaults were seriously deteriorated, threatening immediate collapse. The vaults were first thoroughly documented and then dismantled. New abutments made of large blocks were made and subsequently the vaults were reassembled on specially designed timber scaffolding and raised to the original level. Some of the badly damaged and crumbled voussoirs were replaced with new ones. The vault was then covered with an outer coating made of a double layer of small stones set in a manner similar to the original ones.

The corner of a nearby cross vaulting also called for immediate attention. The entire structure was first explored down to the footing. During the exploration, three 4th century lamps (reg. nos 5112-5114) were found in the fill, once again confirming the dating of the vaulted structure [Fig. 9]. A new abutment was made and the entire vault stabilized.

Work was also continued in the area next to the western gate of the bath complex, where one of the adjacent vaults was consolidated and restored $\{$ Fig. 10〕.

Minor preservation operations were carried out in the southern latrine of the bath. Its walls were now consolidated with several new blocks replacing the most deteriorated ones or filling in the losses. Three column bases executed a couple of years ago were now mounted in their respective locations and fixed with mortar.


Fig. 9. Roman 4th-century lamps from the vaulted structure under the Baths (Photo G. Majcherek)


Fig. 10. Vault next to the western gate after restoration (Photo G. Majcherek)

## AREA F

In area F , large fragments of two houses (FA and FB) of Early Roman date had been explored already in the 1990s. ${ }^{9}$ They were built along a small E-W side street. Some fragments of these structures were already subject to conservation procedures in the previous seasons. ${ }^{10}$ This year, an operation for restoring the southern elevation of these houses was initiated. The facade wall (some 0.50 m thick and 25 m long) was rather poorly preserved. Large sections of it were dismantled down to the foundation
level. Only at the eastern and western ends, the wall stood to a substantial height of approximately 3-5 courses of ashlars. The biggest problem faced by conservators was the shortage of proper stones suitable for reconstruction. Using seasoned stones stored at the site, as well as loose blocks found during excavations finally solved the issue. All the blocks were carefully chosen with regard to their quality and dimensions in order to meet restoration requirements. The wall was finally rebuilt


Fig. 11. Early Roman bouse F, restored southern wall (Photo G. Majcherek)

9 G. Majcherek, "Excavations at Kom el-Dikka, 1995", PAM VII, Reports 1995 (1996), 13-22.
10 W. Kołątaj, "Preservation work 1995-96", PAM VIII, Reports 1996 (1997), 13-17.
to a height of 4-5 courses (approx. 1.601.85 m ). The doors were structured in the required locations according to the original archaeological evidence. Since the wall was designed also to serve as a sustaining wall for the planned escarpment along the cisterns, it was decided to block the doors in order to create a continuous barrier and to enhance its structural strength. The doors were blocked with smaller stones in an attempt to separate the original structure of the house from modern additions necessitated by the planned site exhibition [Fig. 11]. An additional wall dividing rooms F9 and F10, structured in pillar technique, was also thoroughly rebuilt.

The restoration of a double wall separating houses FA and FB turned out to be particularly demanding. During the initial exploration, it was ascertained that both these walls had sustained heavy damage, having almost totally disintegrated due to hasty dismantling carried out in the medieval period.

Robbing pits had been filled with large blocks, all dislocated and wedged together. These were carefully extracted, lifted and prepared for the ensuing restoration. To secure the stability of the rebuilt wall and to avoid subsidence, it was decided to lay new strip foundations (c. 0.30 m thick). These were made of plain concrete laid some 0.80 m below the original floor level. Both walls were rebuilt up to $4-5$ courses of ashlars. Damp-proof insulation (tarpaper coated with bitumen) was introduced approx. 0.15 m above ground level.

An adjacent fragment of the facade of house FB appeared to have been largely dismantled sometime in Late Antiquity, when a large brick-made lime kiln was built directly on top of the wall. The decision to preserve the kiln necessitated the building of a retaining wall to support its construction, now dangerously overhanging house FB. The sustaining wall was built of small assorted stones to create a visual distinction between two chronologically different structures.


[^0]:    1 The Kom el-Dikka Project is financed jointly by the Supreme Council of Antiquities (restoration work) and the Polish Center of Mediterranean Archaeology of Warsaw University (archaeological research). The team headed by Dr. Grzegorz Majcherek included: Ms Renata Kucharczyk, archaeologist, Deputy Director; Prof. Dr. Barbara Lichocka, numismatist; Ms Ewa Czyżewska, Ms Emanuela Kulicka, Ms Anastazja Stupko, Ms Joanna Then, Ms Urszula Wicenciak, Mr. Marek Woźniak, archaeologists; Dr. Wojciech Kołątaj, Mr. Aureliusz Pisarzewski, architects; Mr. Wiesław Kuczewski, conservator. The Supreme Council of Antiquities was represented throughout the season by Mr. Ahmed Moussa, Chief Inspector; Ms Tahany Ragab, Mr. Mohammed el-Mustafa, Ms Magda Mohammed Ibrahim, Ms Magda Mohammed Hasib and Ms Shayma Rashid, inspectors, all of whom actively participated in our work. The assistance given by the SCA is much appreciated and we would like to express our sincere gratitude especially to Dr. Zahi Hawass, Secretary General of the SCA, and to Dr. Mohammed Abdel Maqsud, Director General of Lower Egyptian Antiquities, for their competent and far-reaching support throughout the work.
    2 Ms Małgorzata Redlak continued on the project. For previous stages of the research, see M. Redlak, "Syro-Egyptian underglaze painted ceramics from Kom el-Dikka", PAM XV, Reports 2003 (2004), 46-52.

[^1]:    3 For previous work in this area: G. Majcherek, "Kom el-Dikka, excavations 2000/2001", PAM XIII, Reports 2001 (2002), 31-44; G. Majcherek, W. Kołątaj, "Alexandria, excavations and preservation work, 2001/2002", PAM XIV, Reports 2002 (2003), 19-31; G. Majcherek, "Excavations and preservation work, 2002/2003", PAM XV, Reports 2003 (2004), 25-38.

    4 Cf. communications by E. Kulicka and R. Mahler in this volume.
    5 For the Kufic stela found near Nabi Daniel Street and dated to 805, cf. E. Combe, "Inscriptions arabes du Musée d'Alexandrie", BSAA 30-31 (1935-37), 56.

[^2]:    6 Our research on the auditoria could be stepped up thanks to a generous contribution from Dr. Roger Bagnall of Columbia University, to whom I would like to express my heartfelt thanks.
    7 For 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 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. For recently uncovered auditoria, cf. reports by G. Majcherek, PAM XIV, Reports 2002 (2003), 19-31; PAM XV, Reports 2003 (2004).

