

Columbia University
Excavations at Ain el-Gedida 2008
Final Report to the Supreme Council on Antiquities

Introduction

The 2008 excavation season at the site of Ain el-Gedida (Dakhleh Oasis Project site no. 31/405-N3-1) was carried out from 8 January to 14 February 2008 by a team sponsored by Columbia University, under the direction of Professor Roger Bagnall.

The Dakhleh Oasis Project conducted a preliminary survey of the site in 1980, and the local Coptic and Islamic Inspectorate carried out three seasons of excavation between 1993 and 1995, under the direction of Ahmed Salem and Kamel Bayumi. The southern part of Mound I was the main object of archaeological investigation. Excavation was resumed in 2006. The documentation of the rooms excavated in the 1990s was begun in that year; five rooms were also excavated in the northern half of Mound I, including room B5 identified as a church (plate 1). In 2007, the excavation of the church was completed and further archaeological investigation was carried out to the north and north-west of room B5 and A46, revealing a church complex consisting of a long E-W corridor (B7), an anteroom/kitchen (room B6), a pantry (room B9), and a staircase (B8), which led to an upper floor or to a roof (now missing). Another room (B10), not connected to the church complex and presumably functioning as a kitchen, was investigated to the west of room B6.

The staff of the 2008 mission consisted of Prof. Roger Bagnall, project director; Nicola Aravecchia, archaeological field director; Dorota Dziedzic, archaeologist; Maria Guadalupe Espinosa Rodriguez, assistant archaeologist; Delphine Dixneux, ceramicist; Andrea Myers, assistant ceramicist; Angela Cervi, registrar; Marina Nuovo, assistant registrar and archaeologist; Fabrizio Pavia and Silvia Maggioni, topographers. The inspector was Adli Abdallah Zawal of the local Coptic and Islamic Inspectorate.

The excavation was first carried out in the area immediately to the south and to the east of the church complex, with the goal of ascertaining the topographical relationship of the complex with the surrounding buildings, within the fabric of the settlement on the main mound of Ain el-Gedida (plates 3-4).

Room B11

A long, E-W oriented passageway (B11) was excavated to the south of the church, along the north edge of area A (excavated by the SCA in the 1990s). It measures approximately 10.76 m E-W by 2.15 m N-S and has walls preserved to a maximum height of 2.09 m. It was originally vaulted, as significant remains of spring vaults are still extant. The passageway, leading from the east to the west half of Mound I, is not perfectly rectilinear; the western sector seems to have been built at a later time, with its two walls (and the vault springs on top of them) having a slightly different orientation from the eastern half of the corridor. A door, originally opening into room A16 (unexcavated) to the SW of the corridor, was bricked in at some point before the construction of the western vault.

A floor of compacted mud, with several organic inclusions and small pottery fragments, was found below layers of sand, organic deposits, and ash. The presence of animal coprolites and signs of wear along corner walls suggest that the passageway was accessible not only to men but also animals and carts.

Room B12

To the east of the church, a long N-S oriented street (B12, measuring 14.75 m N-S by 2.04 m E-W, with walls preserved to a maximum height of 1.90m) was excavated. The street has an irregular layout, due to the different constructional phases of the buildings whose walls define its outline (cf. description of room B15 below). Three sectors, all running N-S and joined among them, formed the street: one to the north, stretching northward from the eastern end of corridor B7 and crossing another E-W passageway (B16), which is the northern boundary of B12 and was excavated only in part this season; a central area lying to the east of room A46; and a third sector running along the east side of the church (room B5) and ending to the south into room B13, an open-air courtyard at the crossing of B11 and B12. The investigation revealed scattered remains of several

street levels throughout B12, consisting of packed silty mud rich in organic material and small potsherds. The street gently sloped from N to S, presumably following the natural slope of gebel underneath.

Room B13

To the south, street B12 led to room B13, which is an open-air courtyard at the intersection of streets B11 and B12 (plate 5). B13 is roughly rectangular and measures 4.45 m E-W by 3.41 m N-S, with walls preserved to a maximum height of 2.10 m. This space also opens onto an unexcavated area to the east and to a N-S passageway (A34) partially excavated in the mid-1990s. A doorway, located along the south wall of B13 connects the courtyard with unexcavated room A19 to the south. Two mud-brick basins were found at floor level to the sides of a doorway opening onto B13 along its south side (plate 6). Their function has not yet been ascertained beyond doubt. Patches of floors belonging to at least three different phases were identified throughout the room.

Rooms B14-15

After the area including streets B11-12 and room B13 was completely excavated and documented, the investigation was extended further east, in the vicinity of the entrance to the church complex. A set of two interconnected spaces was dug, i.e., rooms B14-15 (plate 7). B15 is an L-shaped room, measuring approximately 4.81 m E-W by 4.55 m N-S and has walls preserved to a maximum height of 1.97 m. Three floor levels, visible in the south-east part of the room are evidence of different occupational phases. The removal of a large collapse in the western part of B15 revealed significant remains of substructures related to the presence of ovens, whose traces are still visible on the surrounding walls. Other evidence for the identification of the room as a kitchen was the clay stove found against the wall separating room B15 from B14. The west and the south-west walls were poorly constructed and seem to be the result of an enlargement of room B15 protruding into street B12, which possibly happened at the same time or after the apse was added to room B5, to the south-west of B15. Three niches were built within the E wall of room B15 (the wall seems to have been built as a thick facing against an earlier N-S wall): a small niche in the center, about the size of an oil lamp, and two larger ones to the sides.

These two side niches are connected inside and form one storage space. Another niche is located within the south face of the E-W wall (possibly plastered at some point) that divide room B15 from room B14. A small doorway located at the north-west corner of B15 allowed for the passage from this room onto B12, near the main entrance to the church complex. Two other doorways once led onto an unexcavated space to the south. No evidence of any roof was found *in situ* or inside room B15; also, the presence of ovens suggests that it was an open-air space.

B14 is a fairly small room (2.69 m E-W by 2.31 m N-S), located to the north-east of room B15 and originally opened onto it through a doorway that was found shifted from its original location and that had partly collapsed in antiquity. The maximum height of the walls is 1.97 m. The room bears traces of two floors and possibly served as a storage facility for kitchen B15. A test trench was excavated down to *gebel* along the doorway on the N side of the room.

Room B16

To the north of street B12, another passageway (B16) was partly excavated, in order to identify the northern end of B12 (dimensions of excavated part of B16: 1.72 m N-S by 1.63 m E-W, with walls preserved to a maximum height of 1.36 m). Only part of the south face of the northern wall of B16 was exposed; it seems that this street ran E-W, roughly perpendicular to B12. A thick layer of wall collapse, above and below sand, filled the excavated part of B16, in which no small finds were uncovered.

Rooms B17-24

Following the excavation of the area to the south and east of the church complex, further archaeological investigation was carried out along the west edge of Mound I, where a large complex of eight rooms was uncovered. The complex is 10.47 m N-S by 7.10 m E-W and has walls preserved to a maximum height of 2.19 m to the east, while the north and west parts of the complex were subject to a severe process of erosion and all features are preserved above *gebel* to a low height. The east wall is characterized by the presence of ten regularly spaced niches; it is possible that the west wall was niched as well, but it is currently preserved to a lower level than the one at which the niches would have been

placed. Two rectangular rooms are located in the southern part of the complex, B17 and B18. To the west is B17, measuring 3.73 m N-S by 1.76 m E-W, with walls preserved to a maximum height of 1.04 m. The room was accessible through a doorway located at the northern end of the east wall. The north and south walls and the stratigraphy of the room were subject to substantial shifting, as several large cracks suggest.

To the east of B17 is room B18, whose dimensions are 3.65 m N-S by 3.21 m E-W (maximum wall's height: 2.19 m). B18 seems to have been the only access to the whole complex of rooms B17-24. A mud-brick staircase, which was found, in fairly good condition, against the south-east corner of B18 once gave access to an unexcavated area. Puzzlingly, no wall was found against the south side of the staircase, and no traces of a south wall for room B18 were identified. A mud-brick rectangular feature was also built against the north-east corner of B18, with a large stone slab placed horizontally on top of this structure and two channels running to both sides (plate 9). The nature and original function of this feature have not been identified, yet. Consistent traces of at least two floor levels were found throughout the room. An analysis of the walls and the study of the stratigraphy of B17 and B18 shows that these two rooms had not been built originally as separate spaces, but only some time after the construction of the long east and west walls of the complex.

A large and poorly preserved doorway opens from room B18 into room B19, the largest space of the complex. B19 measures about 9.10 m N-S by 4.74 m E-W and has walls preserved to a maximum height of 1.91 m (E wall). The east and west inner walls, built against earlier ones, and the south wall of B19 suggest that the room went through different phases of construction, as seen for rooms B17-18. The compacted mud floor, quite well preserved above an earlier floor level (identified in the north-west corner of the room), slopes down from north to south. In the north-west corner of the room a mud and mud-brick hearth is preserved to the south of an earlier hearth partly visible within the floor. In the north-east corner of B19 traces of a roughly rectangular clay basin are visible, embedded in the latest floor. To the south, a large rectangular basin is placed against the east wall of the room, at a lower level than the late floor in its northern half. A smaller but deeper stone and clay basin, of a roughly rectangular shape, was found in the south-east corner of the room. A further circular bin, made of clay, was found, not *in situ*

and in a very poor state of preservation, while excavating the deposits in the southern half of the room. The presence of all these features, seemingly pertaining to a small-scale industrial establishment, and the discovery of a significant number of sherds of unbaked vessels, has led to the preliminary identification of the complex, at least in its late occupational phase, as a workshop for the production of ceramic vessels.

Room 19 opens onto a set of four rooms to the north through three smaller openings. A very small rectangular room (B20), measuring 1.83 m E-W by 1.73 m N-S and whose poorly preserved walls measure 0.93 m at their highest point, could be originally accessed through a central doorway, which is on an axis with the main entrance from room B18 into room B19. A floor of compacted mud, with organic inclusions and small pottery sherds, had been laid out directly on *gebel*, hiding the foundation courses of the surrounding walls.

To the north, room B20 opens onto room B21, which measures 1.83 m E-W by 1.55 m N-S and has walls preserved to a maximum height of 0.65 m. This small space is located at the north end of the complex, on its N-S axis. A narrow facing was built inside the room, abutting the south face of the north wall; its precise function could not be ascertained.

Rooms B20-21 are flanked by two symmetrically placed rooms: B22 to the west and B23 to the east. B22 measures 4.27 m N-S by 1.64 m E-W and has walls preserved to an extremely limited degree due to erosion: their maximum height is 0.60 m. The north and west walls are almost completely missing. Very limited traces of a compacted mud floor were uncovered above *gebel*.

Room B23 measures 3.54 m N-S by 1.57 m E-W; its walls are, by comparison, slightly better preserved, with a maximum height of 1.06 m. Larger patches of a floor of compacted mud were preserved below the stratigraphical units. Among the small finds that were uncovered in this room are three small complete vessels, which had been buried in a hole beneath the foundations of the west wall of B23.

Another very small space (B24) was built against the south-west corner of room B19. It measures 1.40 m E-W by 1.07 m N-S, with walls preserved to a maximum height of 0.75 m. A doorway placed within the east wall gave once access to it from room B19. A mud-brick step, built to the west of the doorway inside the room, leads to a mud-brick

platform, as could be ascertained during the excavation of a test trench in the southern half of B24. Two lumps of unbaked clay were found in the threshold, lying on a thin layer of dark brown sand, right above floor level. Room B24 seems to belong to a later constructional phase, possibly contemporary to the rearrangement of the large complex that involved also the construction of rooms B17-18.

The discovery of collapses, consisting for the most part of vault bricks, throughout room 19 is evidence to the fact that such a large space was, at least in its late phase of occupation, covered with a barrel-vaulted roof.

A preliminary examination of the walls and their relative chronology points to different constructional phases for the complex. It is possible to argue that at a first stage rooms B17-19, and 24 were one large, rectangular space, which was later partitioned into several rooms. Two long walls were built along the inner face of the west and east original walls, possibly to support them, as evidence was found of structural problems and of attempts to restore the complex already in ancient times. Surely, the central doorway between rooms 18 and 19 does not seem to have been the earliest entrance to the complex, whose original function has not been ascertained beyond doubt and awaits further comparative study.

In the last few days of the 2008 excavation season, the rooms that were the object of archaeological investigation were partially backfilled, paying particular attention to the features more in danger of collapse or damage, which might arise from a prolonged exposure to the elements. Rooms B9 and B10, excavated in 2007, were completely backfilled and rooms B5 and A46 were filled in with additional clean sand.

Topographical Work

The topographers surveyed the excavated rooms and updated the two plans of the archaeological site, the first showing the plan of the walls at ground level and the second depicting the overall architecture of each room. The methodological standards and graphic conventions that were set in 2007 were followed. Scalable photographs of the outer face of the eastern and southern walls of the church complex were taken and then elaborated for photogrammetric analysis. Furthermore, the planimetric and photogrammetric data of the church complex, collected in 2007 and 2008, were processed

and plates for most rooms of the complex were created. Each of them includes a CAD plan of Mound I, a simplified plan of the church complex, and the photogrammetric images pertaining to each room.

Small Finds

Several small finds were discovered and collected in all the rooms that were the object of archaeological investigation. Among them are three Greek ostraka (plate 10), one of which bears what might be the ancient name of the site (with the same meaning as the modern Arabic toponym), fragments of dull glass bracelets (plate 11), several beads (plates 12-14), two pieces of chloroplastic, i.e., a woman and an animal (plates 15-16), and seven complete or fragmentary lamps (plate 17). All small finds were cleaned, numbered, and photographed; written records were created for each of them and then entered into the general database.

Over one hundred bronze and billon coins were found during the excavation season (plates 18-19), with a high concentration of them in rooms B11-13. Unfortunately, several were in a very poor state of preservation. They were cleaned, weighed, photographed, and recorded. All the available information was entered into the excavation database. The detailed analysis of all numismatic evidence from Ain el-Gedida, including the coins from the 2008 season, was begun by David Ratzan; this work may provide significant information toward the establishment of the relative and absolute chronology of the site. Most of the coins found in 2008 seem to fit within the time range established with the discovery of the coins from the two previous excavation seasons, that is to say, the century going from the second half of the third century to the second half of the fourth century CE.

Numerous small fragments of painted plaster were collected in rooms B14-15, B17, B20-21, and B23 and were the object of preliminary conservation by Laurence Blondaux. The pieces seem to belong in part to a cartonnage funerary mask, possibly Roman in Egyptian style, and in part to a molded sculpture. Many fragments of the funerary mask still bear the imprint of textile on their back (plate 20). Details of the painted decoration are still visible, including part of the hair, of the chest, possibly hieroglyphs and other pharaonic motives, like wings and a geometric frieze. No

fragments of the face were identified. A comparison could be established with funerary masks from Kellis and dated to the IIIrd-IVth century CE. The few pieces of molded plaster that were collected include a hand, grapes and smaller, round pieces, probably part of grapes, and what could be possibly interpreted as toes.

Ceramics

The few complete vessels and the large amount of pottery fragments that were found and collected during the 2008 excavation season were recorded and drawn by the ceramicist. Furthermore, the recording of the diagnostics from the 2007 season was completed. The corpus of material found in 2008 includes jars, flasks, plates, cooking-pots, craters, and several bowls with white slip and red dots on the rim. A few fragments of Oasis Red Slip Wares and of ceramics from the Nile Valley were also identified, i.e., Egyptian amphoras made of Nile brown silt and a fragment of a marl clay juglet. The Late Roman dating of the ceramics found in 2008 is consistent with those from the two previous excavation seasons. The chronological range spans from the fourth to the beginning of the fifth century C.E., with the exception of a few pottery sherds, found in room B10 at the end of the 2007 season and analyzed this year, which possibly belong to Early Roman forms. Furthermore, the list of the main iron-rich (A1-A2) and calcium-rich fabrics and the general catalogue of forms and fabrics from Ain el-Gedida were reorganized, including the evidence collected in the 2006-2008 excavation seasons.

The systematic study of all documentation from the 2006-2008 seasons, including ceramics and small finds, has already begun. Its results will be published in collaboration with the SCA.

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PLATES



Plate 1: church complex and new rooms excavated in 2008.

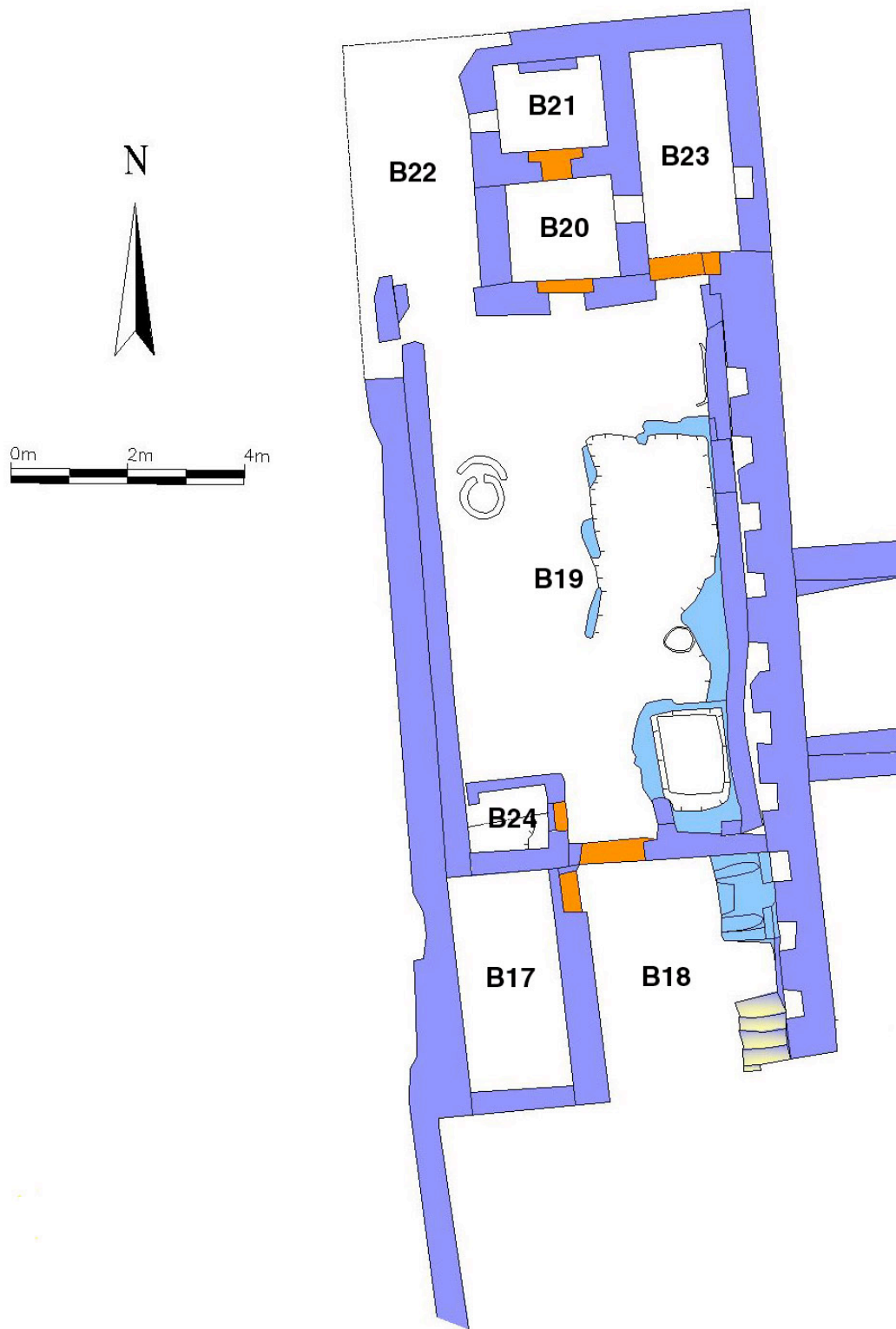


Plate 2: excavated complex of rooms along the west edge of Mound I.



Plate 3: vaulted passageway B11 (view to the W).



Plate 4: excavated area to the E of the church complex (aerial view to the S).



Plate 5: room B13 (aerial view to the SW).



Plate 6: rectangular mud-brick feature along the S wall of room B13 (view to the S).



Plate 7: rooms B14-15 (aerial view to the S).



Plate 8: excavated area along the W edge of Mound I (aerial view to the N).



Plate 9: rectangular mud-brick feature in the NE corner of room B18.

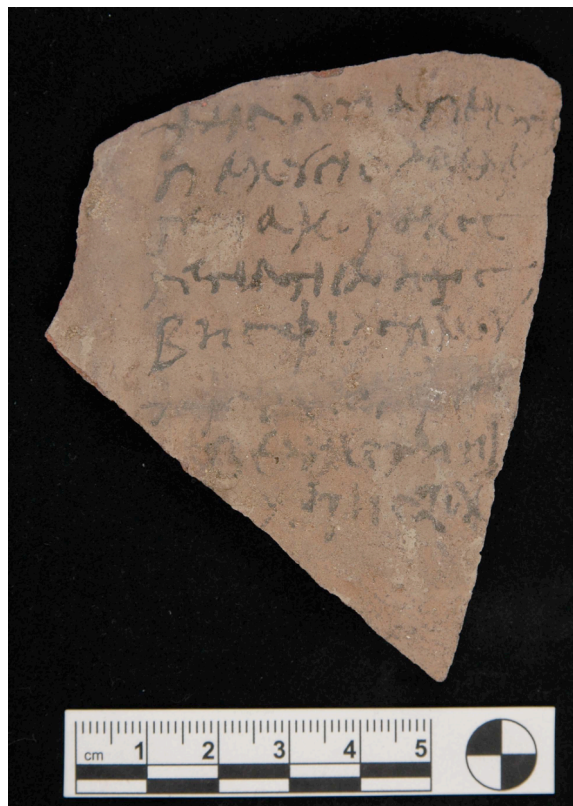


Plate 10: ostrakon from room B19.



Plate 11: fragment of dull glass bracelet from room B12.



Plate 12: bead from room B13.



Plate 13: bead from room B15.

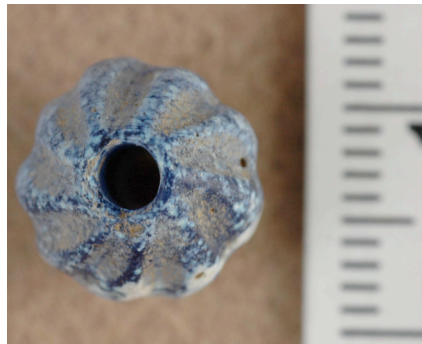


Plate 14: bead from room B17.



Plate 15: choroplastic statuette from room B19.



Plate 16: choroplastic statuette from room B15.



Plate 17: lamp from room B21.



Plate 18: obverse of coin
from room B12.



Plate 19: reverse of
coin from room B12.



Plate 20: fragments of cartonnage from room B20.