

Title: **Buildings on Site B at Naqlun (Nekloni)**

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Journal: *Polish Archaeology in the Mediterranean* 21 (Research 2009)

Year: 2012

Pages: 653-676

ISSN 1234-5415 (Print), ISSN 2083-537X (Online)

ISBN 978-83-235-1144-1

Publishers: Polish Centre of Mediterranean Archaeology, University of Warsaw (PCMA UW),
Wydawnictwa Uniwersytetu Warszawskiego (WUW)

www.pcma.uw.edu.pl - www.wuw.pl

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Site B is situated on the southernmost fringe of an extensive plateau spreading at the foot of low hills (called Gebel Naqlun) to the southeast of Fayum Oasis. It occupies the top and slopes of a low artificial mound formed immediately east of the modern monastery of Archangel Gabriel (still operating, but actually of medieval provenience at least in part, the church included). A shallow valley, perhaps cut by water flowing from the gebel, borders the site on the south and southeast. Before excavations the area of the site descended gently towards the modern monastery enclosure; now there is an archaeological trench cutting off the western end of the site. The ground falls away to the north, toward the ruins of the core of the late antique and medieval monastery of Naqlun

(for a general plan of the monastic compound on the plateau in Naqlun, see Fig. 1 on page 195 in this volume).

The architectural vestiges discovered on site B were grouped into two complexes. They are examined here in terms of plan as well as construction materials and techniques, but not the actual excavations, which are reported elsewhere in this volume. The western complex consisted of at least five units (B.21–26). It was built with distinctively greater care, but it is difficult to speak of rooms in view of the indefinite divisions between them. This does not concern the eastern complex, where the rooms are clearly defined. Only two rooms (B.1–2) have survived of this complex, which is separated from the units on the western side by a narrow passage [*Fig. 1*].

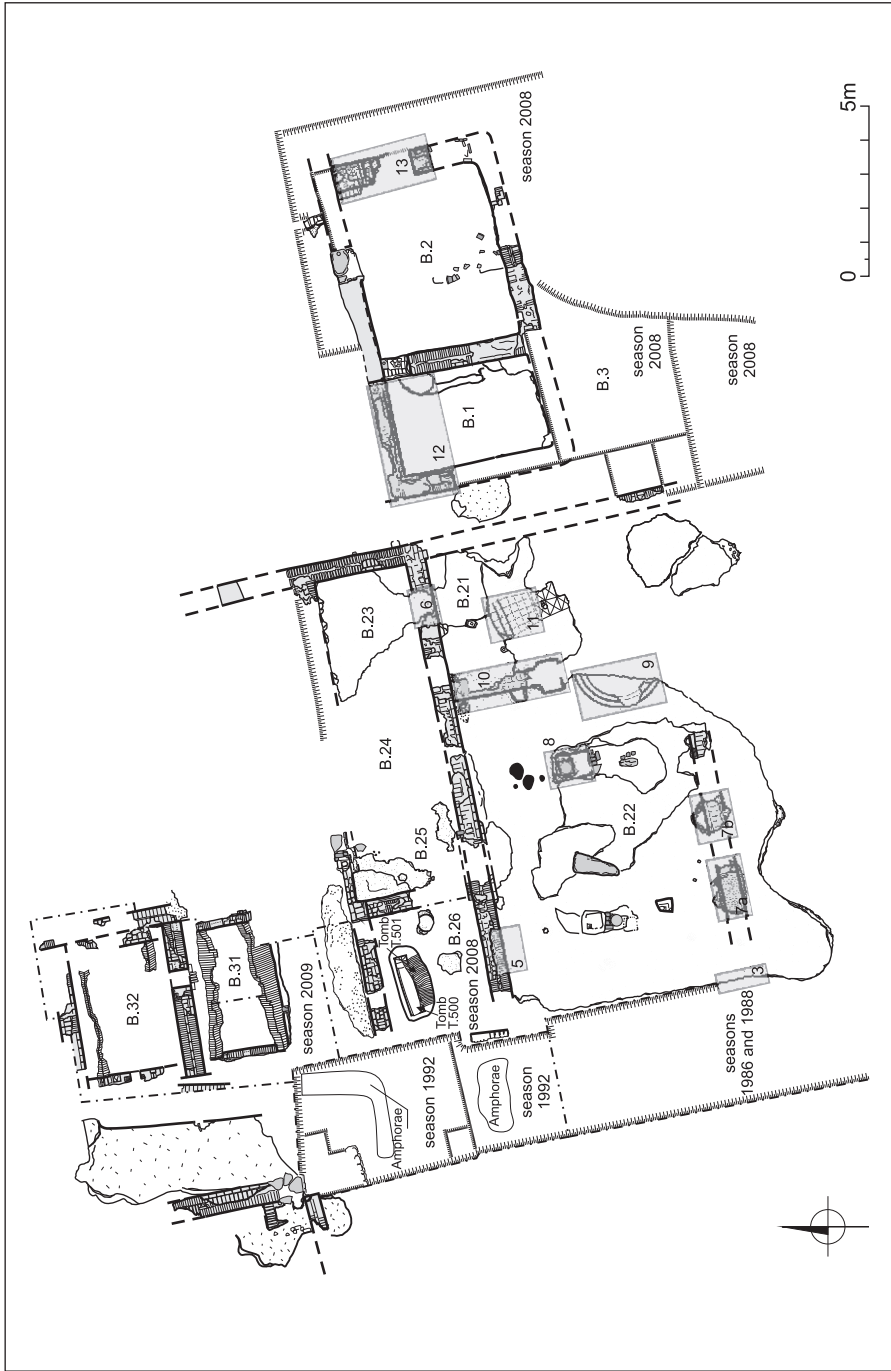


Fig. 1. Plan of the architecture on site B (shaded boxes locate the position of figures included with the text, numbers referring to the relevant figure numbers) (Drawing J. Dobrowolski, S. Maślak)

EXCAVATIONS AND STATE OF PRESERVATION

The site appeared to be disturbed prior to the start of Polish excavations in 1986 (Godlewski 2012, in this volume). The first season of work concentrated on the rubbish dump of a late antique monastery, located at the western end of the site (Godlewski *et alii* 1990: 189; Derda 1995: 29–30). In subsequent seasons (1988, 1990 and 1992), the trench was extended (Godlewski 1990: 33; 1993a: 43–45; Godlewski *et alii* 1994: 209–212, 217–220, 223–226, Figs 13–16; Derda 1993: 49–52; Górecki 1993: 53–61; Derda 1995: 30). It became clear that the uppermost layers of the rubbish dump had been displaced down the southern slope of the mound and the apparent reason for this should be seen in a leveling of the area under the walls of the western complex (Godlewski 1993a: 44–45; Górecki 1993: 53; Godlewski *et alii* 1994: 210). The complex itself was not

cleared until the 1992 season, when it was recorded, but neither a complete plan nor its function and dating were established.¹ In 2008–2009 the northern rooms of the western complex were fully documented and a fragment of an entirely new building was cleared to the east (the excavations here were reported in Godlewski 2012; Danys-Lasek 2012; Derda, Dzierzbicka 2012; Dzierzbicka, Ożarek 2012, all in this volume).

Some of the structures on the site could be discerned even before the area was cleared, other features were uncovered immediately under the topsoil or on a slightly deeper level. Pavements and floors were found to be in relatively good condition, not like corresponding walls, which were merely a single course of bricks high in the western part and approximately 0.50–0.65 m high in the eastern part.

DESCRIPTION OF THE ARCHITECTURAL VESTIGES

UNIT B.22

The pavement in unit B.22 was the largest continuous fragment cleared: approximately 8.85–9.55 m by 9.55 m (see Godlewski 1993a: 44; Godlewski *et alii* 1994: 210). The northern and northeastern limits of this floor were well-defined, while the western, southern and southeastern edges were damaged severely and the corresponding walls had all but disappeared. There were other gaps in the surface of the pavement and much of the central part had subsided [*Fig. 2*].

Three more or less regularly positioned postholes preserved in the southern part of the pavement are the only evidence of missing vertical structural elements. These stood in a straight line parallel to the wall on the north side of the unit. The jagged edges of the pavement around the postholes, where they had been pulled out, did not permit the shape of these elements to be determined. It is clear, however, that they were of different size.

The lowermost courses of a wall following the orientation of missing structural

¹ It was supposed to be domestic in character; its extensive lime-mortared floors could have served for “various agricultural activities”, including, for example, “drying and grinding cereals” (see Godlewski 1993: 44–45; Godlewski *et alii* 1994: 210; Godlewski 2005: 169).

elements have survived at the bottom of three of the postholes on the southern side [Fig. 7]. This sun-dried brick wall, which was below the pavement, may never have been much higher. It was 0.55 m thick, constructed of sun-dried bricks (23-24 x 12.5 x 5-5.5cm) made of mud mixed with chaff, and had planks of palm wood (approximately 12-13 cm wide, i.e., one brick wide) embedded along both of its faces. The evidence of the bedding of this wall, which was much deeper than the north outer wall of the unit, is of structural importance. There is no trace of the wall in the cross-section at the western end of the pavement and it is very likely that it did not go much beyond the level of the pavement; it could have served as a footing for some vertical structural elements.

A parallel sequence of postholes in the form of partly legible impressions of missing vertical elements in the pavement survived approximately 3 m farther to the north. As demonstrated by the two extreme postholes, they were rectangular or even square in plan. The westernmost posthole measured approximately 0.55 m to the side, the easternmost one was 0.70 m wide and at least 0.40 m long. A severely

damaged posthole half way between them must have been of the same kind. Fragments of palm wood planks and sun-dried bricks at the bottom of two surviving postholes are certainly the remains of footing similar to that found farther to the south.

A small rectangular depression in the pavement half way between the westernmost postholes of the southern and northern rows attests to yet another vertical structural element. It was clearly much smaller than the other supports and it did not stand directly on the footing but was settled in the sub-pavement (see below). The imprint preserved in the mortar is undoubtedly that of a wooden post (see Godlewski 1993a: 45). One can expect the same kind or similar vertical element on the opposite side, halfway between the easternmost postholes of the southern and northern rows. The missing pavement here has left no trace of any post.

Despite probably being of different size, shape and possibly also material, the traced vertical elements in unit B.22 demonstrated a striking regularity: three on each side, enclosing a rectangular space in the central part of the unit. A passage 2.50 m wide, presumably roofed, ran around this

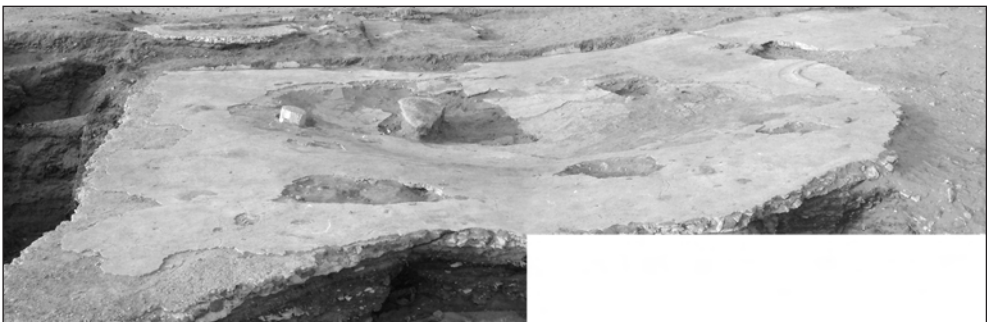


Fig. 2. Vestiges of the pavement in units B.22, state after excavations in 1992 (Photo W. Godlewski; montage of original documentation)

feature. The structure appeared to have been a kind of peristyle courtyard with an open central space and roofed ambulatory around it.²

Little can be said with regard to the other original furnishings of the unit as none of them are extant, but traces in the pavement show the outlines of a few of them. Two holes in the northeastern corner of the unit evidenced missing architectural members abutting a wall or screen separating unit B.22 from unit B.21. The jagged edges of the smaller northern hole indicate the presence of a semicircular object (engaged column?, pilaster?). The presence of another structure, now missing but which was larger and certainly rectangular in plan (approximately 0.60 m by 1 m), was noted slightly south of the previous one. Judging from the very regular outline in the pavement of units B.22 and B.21, a solid pillar, probably made of stone, could be expected here. A pillar is the most logical explanation for the outlines left in the pavement by the missing structure, but it is also possible that this element may have had some functional connection with the semicircular(?) structure on the east-west axis of unit B.22.

Few objects have survived from the original architectural decoration of the interior and all of them were certainly reused. A fragment of a small stone column shaft (diameter approximately 35cm) was found in the westernmost post-hole of the northern row in unit B.22. The easternmost hole in the same row produced a limestone capital Nd.92.400 (H. 0.36 m, W. of base 0.45 cm) with stylized leaves of

acanthus (Godlewski 1993a: 45) [*Fig. 8*]. It stood upside down and could have been reused as a column base. The capital is dated to the early 6th century (Godlewski 1993a: 45).

The most remarkable feature in unit B.22 was recorded at the eastern end of the east-west axis of the unit. The structure is only partly preserved, but it appears to have been semicircular in plan, measuring 2.50 m in diameter [*Fig. 9*]. It is unlikely to have been circular, projecting into unit B.21 as much as into B.22, but the pavement abutting the structure from unit B.21 is almost entirely lost (the surviving edge of the pavement to the north may be evidence against the reconstruction of the structure as a circle projecting into both units). The structure consists of a shallow semicircular depression on the outside (approx. 0.20 m wide) and a convex semicircular band on the inside (approx. 0.10 m wide). Scanty jagged remains indicate that another semicircular depression, similar to the outer one, could be expected inside. All these features were first drawn skillfully with a sharp tool in the sub-pavement (see below), and after that shaped, certainly with another tool running perfectly on the radius of a circle, in the uppermost layer of the same pavement. It is difficult to say what had stood inside these concentric circles by the wall (or in place of the wall) dividing units B.21 and B.22. The function of the structure is unknown. It may have been part of a larger device, the other parts of which are missing along with the unpreserved fragments of the pavement in unit B.21.³

² On a possible flat roof, see Godlewski 1993a: 45.

³ It was suggested in earlier reports that it may have served as a "bottom of a large quern" (see Godlewski 1993a: 45). However, the other half of the circle in unit B.21 is not attested. In addition, there are no cracks or other traces of any advanced wear of the surface (whether concave or convex) of the structure.

The pavement is admittedly the best preserved feature of unit B.22. The significant depression in the central part could be explained by the collapse of heavy columns (or pillars and/or wooden posts, see Godlewski 1993a: 45), which would have damaged the pavement surface and caused the soft refuse dump under the pavement to subside; indirectly, it is considered as proof of there being a peristyle courtyard in this unit. The pavement itself was made of four consecutively laid technical layers [Fig. 3].⁴ The bottom layer is a thin layer of light grey tamped desert clay containing large amounts of chaff.⁵ It corresponded to the walls identified as footing of the vertical structural elements of the possible courtyard in unit B.22. A base layer approximately 10 cm thick lay on top of this earthen layer. This second layer was composed of densely packed baked brick, purple or dark

purple-grey in color, 23.5–24 x 10–11 x 5–6 cm, laid mostly as headers on edge (both upright and inclined), more seldom in flat position. The bricks were mixed with stone rubble, both set in grayish lime mortar (with sand, coarse gravel and some ground ashes added). The sub-pavement directly above it, was 2–3 cm thick; it was made using the same binder as in the layer below. The smoothed uppermost layer (only 1.5 cm thick) was the proper pavement and walking level. It was made of creamy-colored lime mortar containing large amounts of fine sand.

The north wall of unit B.22 was preserved approximately 0.10 m above the level of the pavement. It was 0.56–0.58 m thick and constructed of grey or more seldom dark grey sun-dried brick (23–24.5 x 12–12.5 x 5–5.5 cm) made of mud with chaff. Baked brick (unknown length x 11.5 x 5 cm) is infrequent in the



Fig. 3. Cross-section through the pavement in unit B.22
(Photo S. Maślak)

⁴ Lime pavements with a similar sequence of technical layers were recorded in other parts of the monastery at Naqlun; for Building G, see Maślak 2007: 212; for the neighborhood of Building D, where fragments of such pavements came to light in the fill (W. Godlewski, personal communication); see also Godlewski *et alii* 1994: 210.

⁵ It lies on a thin layer of loose dark yellow sand, which leveled the surface of the late antique rubbish dump and was probably the first leveling layer under the structure.

masonry. The foundation brick course is set only 0.10 m below the level of pavement in soft ashy deposits. It is made of headers on edges shifting into simple headers. The lowermost brick courses of the wall show headers or stretchers in the faces. The core on this level is filled with headers or irregularly laid bricks, brick fragments and mortar. However, as the original photographic documentation from the 1992 season demonstrates, the bonding above the two lowermost courses consisted of courses of headers-on-edges alternating with courses of stretchers in the faces. The wall, at least in the bottom part, was coated with white lime plaster [Fig. 5].

Traces of a narrow step (0.12–0.13 m thick, i.e., one brick length) of sun-dried brick were recorded along the southern face of the north wall. The step began approximately 3.60 m west of the north-eastern corner of the room, and if it ran the full length of the wall, must have been about 2.40 m long. A similar step made of baked brick (24 x 11–12.5 x 6–6.5 cm) came to light on the opposite side of the wall, along its northern face. Here some bricks were built partly into the wall masonry, making the step an integral part of the structure. One can guess that these steps lay in the main entrance to unit B.22 from the north. The use of wood and/or stone in the threshold, now missing, was suggested by the presence of an extensive cut running across the north wall through the central parts of both steps; the hole appears to have only building function.

The northeastern corner of the pavement in unit B.22 is perfectly preserved [Fig. 10]. The plain edge of the pavement here is clear evidence of a wall (or some other long and vertical structure) dividing units B.22 and B.21. Regrettably, little has

survived of the wall itself, the foundation courses at best. The wall, approximately 0.57–0.58 m thick, was constructed of mud brick (23 x 11.5–12 x 5–5.5 cm) containing chaff. The foundation reached approximately 0.10 m below the pavement and did not rise above the level of the floor. Surprisingly, the eastern part of the wall is overlapped by the pavement of unit B.21, certainly contemporaneous with the pavement of unit B.22. Thus, considering the distance of a few centimeters between the two pavements, there is no place left for a structure thicker than a wall comprised of just one brick or a wooden screen separating the two units. The thicker wall below the pavement is likely a footing topped once by a thin partition wall and structures (engaged column?, pillar?) installed further to the south (see above).

UNIT B.21

The edges of the pavement belonging to unit B.21 were severely damaged on the south and west, except for the outlines of a rectangular pillar-like structure (see above) in the southwestern corner. The outlined shape of this pillar can be recognized in the pavement of both units (B.21 and B.22). The north side of the pavement abutted the north wall of the unit, which is a continuation of the north wall of the adjacent unit B.22. Also the eastern edge of the pavement could be identified only in part. The surviving part of the pavement measures approximately 4.00 m by 4.20 m, not including two detached fragments (approximately 3.30 m by 2.45 m), discovered farther to the south.

There is a significant difference in the walking level between units B.21 and B.22, in some places even 0.10–0.20 m higher in B.21 compared to B.22. Nonetheless, the



Fig. 5. Plaster on the southern face of the north wall of unit B.22 (Photo W. Godlewski)



Fig. 6. Pavement of unit B.23 overlying wall dividing the unit from B.21 (Photo W. Godlewski)

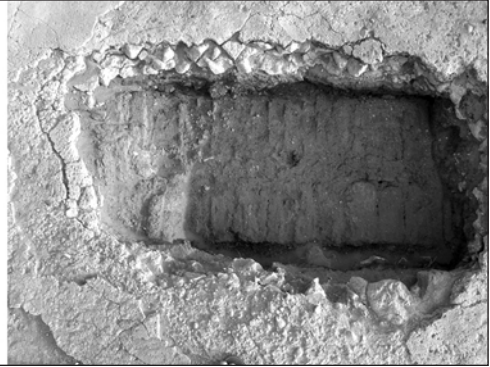


Fig. 7. Postholes with wall at the bottom and wooden planks, westernmost in south row (right) and in the center (left) (Photo W. Godlewski)



Fig. 8. Limestone capital Nd.92.400 (Photo W. Godlewski)



Fig. 9. Semicircular feature at the eastern end of B.22 (Photo W. Godlewski)

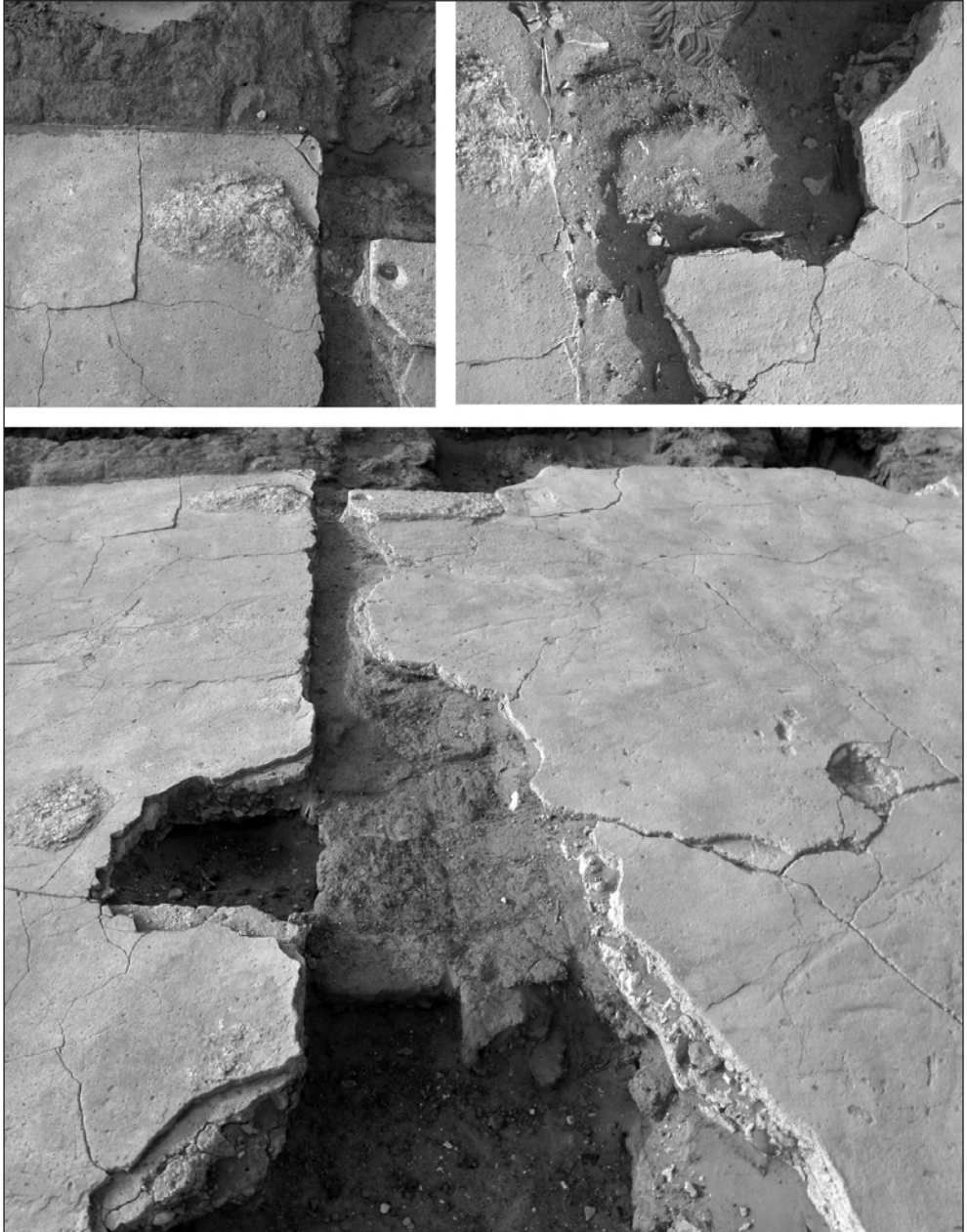


Fig. 10. Pavements of units B.22 (left) and B.21: top left, northeastern corner and socket to right; top right, impression of moving door panel in the pavement on right (note removed socket); bottom, general view of the partition between units (Photos W. Godlewski)

pavements are undoubtedly contemporaneous and much the same from a technological point of view (see above).

The pavement of unit B.21 preserved some remarkable features. A checker pattern incised in the central part of the pavement is one of them [Fig. 11]. The pattern is trapezoidal (approximately 1.75 m by 1.25–1.40 m), skewed slightly west of north. Four small holes (approx. 0.10 m square) were drilled around it, more or less equidistant from one another. These holes are probably evidence of missing posts, made likely of wood. One can only guess that the checker pattern was covered with a light, probably wooden, four-legged

structure, perhaps a table or canopy(?). Immediately to the south of the checker pattern there is another incised design, only partly preserved, consisting of rectangular panels, each divided into four triangles by two diagonal lines. These incised drawings resembled board games in everything except the size, which was unusually large.

A rectangular limestone slab (49 x 23 x 5–8 cm) was inserted into the pavement in the northwestern corner of the unit. The circular cavity in one of the corners certainly served as a door socket. The position of the slab, as well as the rounded impression of the bottom edge of a door panel in the pavement surface [Fig. 10, top], resulting



Fig. 11. Checker pattern in the pavement of unit B.21
(Photo W. Godlewski)

from multiple opening of a door (approx. 0.62 m wide), demonstrate that the door must have closed the passage between units B.21 and B.22. In spite of matching dimensions, the slab was certainly not used as a threshold, but strictly as a door socket. On the northern side it likely abutted a wall projection (pilaster?), the outlines of which were preserved in the pavements of both units B.21 and B.22.

UNIT B.23

A structural interbonding of the east and north walls of unit B.23 and the north wall of unit B.21 cannot be determined beyond doubt and in consequence it cannot be said that the unit was part of the original building. No clear division between them is observable at first glance, but the state of preservation precludes a satisfactory determination. Only the foundation courses of the east and north walls of unit B.23 have survived, showing headers on edge in both faces. They mark the limits of the unit pavement on these sides, which is not the case of the wall separating unit B.23 from the southern unit B.21. The pavement of the northern unit overlies partly the lowest courses of the wall, ending sharply at the edge of the pavement of unit B.21, not overlapping any part of the latter [Fig. 6].

The walking level of the pavement in unit B.23 lies approximately 0.10 m above the pavement of the adjacent unit to the south. This pavement consists of three technical layers. The bottom one, laid directly on the ground, was a 2.5 cm-thick layer of tamped gray mud with huge amounts of chaff. On top of this there was a layer of lime-sandy mortar, 3.5 cm thick, mixed with fine chaff and large amounts of black

ashes with gravel making it grey in color. The topmost layer, featuring a smoothed surface, is thinner than the previous one and was made of creamy-gray lime mortar mixed with fine chaff and sand. The pavement is slightly different from that in units B.21 and B.22; whereas there was no chaff in the pavements of B.21 and B.22, the raw material used in making the floor of B.23 contained it.

UNITS B.24–B.25–B.26

The subdivision into units B.23 and B.24 during the excavations was arbitrary as no trace of a dividing wall between the two units has been preserved. Neither was there any trace of a wall between units B.24 and B.25, which could mean that the presumed unit B.24 never existed. Units B.25 and B.26 farther to the west were better preserved. The lime pavement in unit B.25, with relatively huge patches still in place in the northwestern corner and along the south wall, consisted of only two layers. The bottom layer (approximately 2–2.5 cm thick) was laid directly on top of ash deposits overlying older refuse dumps (see below the section on stratigraphy). It was made of lime mortar mixed with large amounts of gravel. The smoothed top layer (approx. 1.5 cm thick), used as a walking level, is of creamy lime mortar as well.

Little has remained of the pavement in unit B.26.⁶ Similarly to the pavement in adjacent unit B.25, it was laid on the ashy deposits of older refuse dumps. The bottom layer (approx. 10 cm thick) is in good condition, but the uppermost surface has almost completely disappeared. The key material in this pavement is creamy-grayish lime mortar mixed with large amounts of

⁶ In 1992 the lime pavement covered almost half of the total area of unit B.26; now it is largely missing.

coarse gravel, sand, and black ash. Some dispersed pieces of pavement found in the fill of the unit demonstrated that lime mortar was laid in much the same manner as in units B.21 and B.22, on baked brick (unknown length x 11 x 6 cm) and stone rubble. A rounded and shallow depression (approx. 0.45 m in diameter) of unknown function was preserved in the pavement near the middle of the east wall of the unit. It is likely to have served the placement of a vessel with rounded bottom (an amphora perhaps).

Walls of units B.26 and B.25 show distinctively less care on the part of the builders compared to walls of units B.21–23. Foundation trenches of each wall are sunken into ashy deposits of older refuse dumps; in case of unit B.26 they descend even to ca.0.25m below the pavement. These walls are set on a higher level than the north wall of units B.21 and B.22. The foundation courses were typically made up of inclined headers.

The walls were about 0.50 m thick. It is likely that they were not mutually contemporaneous. The faces comprised alternate courses of stretchers (or double stretchers) and headers on edge. The north wall in unit B.26 was built wholly of mud brick (23–23.5 x 11–12 x 5–5.5cm) with chaff. Mud bricks in other walls of units B.25 and B.26, which are likely later additions, were accompanied by a few bricks made of yellow desert clay.

The sun-dried brick masonry of the wall was abandoned at the eastern end of the north wall of unit B.25 in favor of a haphazard conglomerate of sun-dried and baked brick, and roughly dressed stone. The materials used in the construction varied from the rest of the wall, but the quality of execution was just as poor.

A step added on the inside against the same wall was made of fragmented baked brick (unknown length x 11 x 6cm). The step was 0.20 m wide, rising just 4 cm above the pavement of the unit. Regrettably, its full length along the wall is not known. The step was coated with the same lime mortar as the pavement of the unit.

STREET BETWEEN B.21–26 AND B.1–3

A narrow alley, about 1.30 m wide, ran along the outer face of the east wall of complex B.21–B.26 (“western complex”), separating it from a certainly older complex of rooms B.1–2. The orientation of the street is slightly west of north, following the same orientation as the walls of the two complexes. It demonstrated a sequence of tamped sebbakh deposits, burnt a little on top, possibly because it had served later as a hearth.

ROOMS B.1–2

The east wall of unit B.2 was preserved in better condition in its central and northern parts; at the southern end only single bricks have survived. The central part of this wall may be older than the rest of it judging by the different building technique, hence it could have been left from an otherwise unevenced earlier structure [*Fig. 12*]. This wall fragment is rectangular in plan (0.72 m by 0.52 m), resembling a pillar. At the bottom it shows baked brick fired yellow (25.5 x 12.5 x 7 cm) and bonded in mortar of light brown clay mixed with huge amounts of chaff. The upper part is distinctively a later addition. It is built either of baked brick fired red (24–26 x 11–13 x 6–7 cm) or of sun-dried brick (24 x 12–12.5 x 4.5–5.5 cm), both bonded in plain mortar of gray mud

with chaff. The bonding features bricks laid flat, stretchers in the faces and headers at the corners, but fragmented bricks occur as well. The northern section of the east wall of room B.2 has the same thickness (0.71–0.72 m) as the pillar-like structure in the central part of the wall. Sun-dried brick (of mud with chaff mostly, 24.5–25 x 11.5–12 x 5–5.5 cm) is the chief building material in this case. Several fragments of baked brick (fired both red and yellow, unknown length x 12.5–13 x 5–6.5 cm) are used haphazardly in the construction. Wall faces show flat-laid bricks without any pretence to regularity in the bonding. A foundation course, mostly of headers on edge, stood on a layer of ashes (charred *sebbakh*?).

The south wall of room B.2 has a thickness varying from about 0.50 to 0.60 m. It survives mostly as a foundation consisting of a course of more or less inclined headers on edge laid directly on the ashy

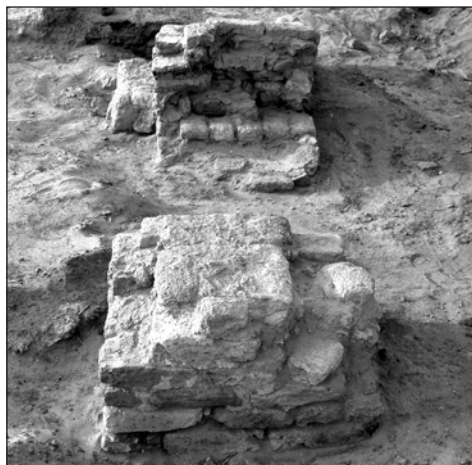


Fig. 13. East wall of room B.2 seen from the south; pillar(?) from older structure in the foreground (Photo W. Godlewski)

deposits. The scant remains of wall masonry suggest a bonding comprised of alternately laid courses of stretchers and headers on edge for the upper parts of the wall. The same bonding was observed in the faces of the west wall of the room. Its eastern face bears some traces of a very thin coating of white lime or gypsum covering a slightly thicker primer coat made of beige clay. These two walls, which were probably part of the same construction (the west one is also about 0.60 m thick), were constructed of bricks (24–24.5 x 11–12 x 5–5.5 cm) made of gray mud mixed with some chaff.

The thickness of the north wall of unit B.2 varied considerably from 0.50 m to 0.68 m. The faces of the only surviving section of this wall were badly eroded, but even so alternate courses of bricks laid as headers and stretchers could be discerned on both sides. The sun-dried bricks (23–24 x 11.5–12 x 5–5.5 cm) were produced of mud mixed with some chaff. Traces of much the same white plaster as that on the west wall of the room survived on the southern face of the north wall. A doorway, of presumably secondary nature (about 1 m wide), was located in the central part of the same wall. A large yellow limestone block (73 x 52 x 25 cm) functioned as a threshold, raised approximately 0.25 m above the floor level.⁷

In the northwestern corner of unit B.2 there was an entry into unit B.1. The doorway measured approximately 0.82 m in width and was about 0.60 m thick. The foundation course of the threshold consisted of headers on edge, overlain by flat-laid bricks, mostly headers; these were mostly sun-dried (and mostly mud) bricks (unknown length x 11.5–12 x 5.5 cm).

⁷ For the identification of the stone, W. Godlewski, personal communication.

Baked bricks (24 x 10.5 x 6 cm) were rare, except for the bottom part of the southern jamb. Lining the threshold inside room B.1 was a piece of wood about 1 m long with both ends fitted into the sidewalls. A flat stone inserted into the masonry in the corner of the threshold served as a door socket.

The floor in unit B.1 marked in negative the course of the south and much of the west walls. The north wall [Fig. 13]

and the surviving part of the west wall featured a long and shallow recess set about 0.45 m above floor level. This shelf, which was about 0.10 m deep, extended nearly the entire length of the inner faces of these walls. The bonding of these walls was fairly standard: alternating courses of stretchers and headers on edge. Headers on edge were present also in the foundation course of the west wall, which stood directly on the leveled surface of tamped *sebbakh* (?),

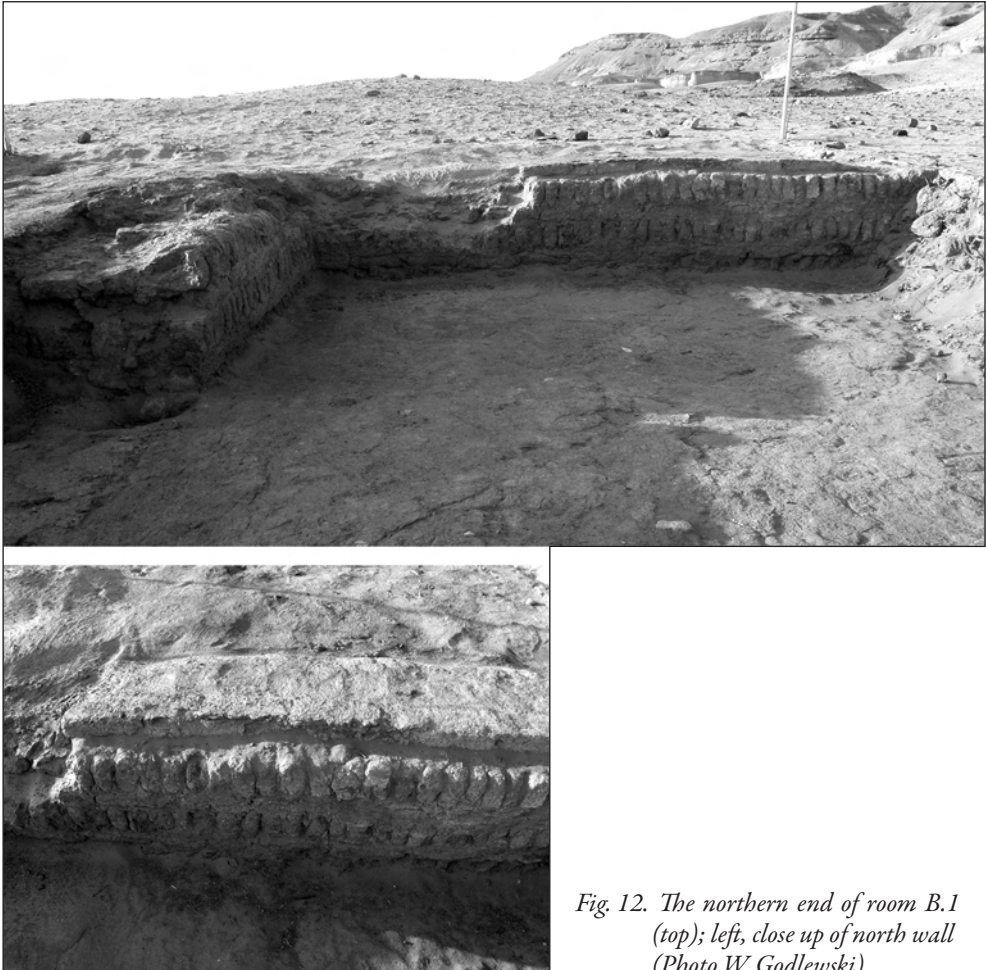


Fig. 12. The northern end of room B.1 (top); left, close up of north wall (Photo W. Godlewski)

descending about 0.10 m below the floor level. The two walls were constructed of light grey–light brown to creamy-yellowish sun-dried bricks (23–24 x 10–11 x 5–5.5 cm) with a matrix of gebel fractions (smashed rock, white particles of gypsum etc.) and large amounts of chaff. Some distinctively dark gray mud bricks were also found.

The floors of units B.1 and B.2 survived in perfect condition unlike the

walls. Tamped gray mud was the predominant raw material in the uppermost surfaces. In room B.1 this layer was approximately 3 cm thick and it was superimposed on flat-lying mud bricks (gray, chaffed, 5 cm thick, other dimensions unknown). A shallow depression in the floor marked the entire length of the east wall. The floor in unit B.2 consisted of a slightly undulating mud surface with a matrix of potsherds and stone rubble.

RAW MATERIALS

To say that lime mortar and plaster were in widespread use on site B would be misleading. These materials were confined exclusively to the pavements and lowermost registers of walls in the western part of the complex. Walls of units on the eastern side preserved only some patches of whitewash of lime or gypsum, coating a primer of desert clay.

Mud mixed with chaff formed the floor in each room of the eastern complex. Tempered desert clay served as a bottom leveling layer for lime pavements in the western complex.

Except for the walls of room B.1, constructed using bricks produced of desert clay mixed with chaff, the chief material identified in bricks from site B is mud of various shades of grey, always containing chaff. Brick dimensions were fairly uniform: 23–24 x 11.5–12.5 x 5–5.5 cm, resembling already recorded brick sizes for other parts of the monastery from the same time horizon (see Dobrowolski 1990: 165;

Godlewski *et alii* 1994: 212; Godlewski 2000a: 130; 2000b: 82; Maślak 2004: 152–153; 2007: 206).

As elsewhere in the monastery, baked brick was used infrequently.⁸ It is primarily recycled, but it is not obvious where it could have come from. Older monastic structures dismantled during the long history of the Naqlun monastery would constitute a perfect explanation for its presence. For the most part these baked bricks have dimensions similar to those found in other parts of the monastery (see Dobrowolski 1990: 164; Maślak 2004: 153; 2007: 206, 209, 213, 214, 216).

Wood preserved *in situ* on site B is a very rare discovery. Well-preserved structures from the Naqlun monastery testify to the presence of wooden elements inserted into the brick masonry of the walls,⁹ but these could not be determined in the case of the walls on site B owing to their poor preservation. Single pieces of wood were found reinforcing the thresholds of

⁸ Except for the church of Archangel Gabriel, constructed in a great part of baked brick, see Dobrowolski 1990: 164; Godlewski 1993: 46; 2005: 162.

⁹ For use of wooden beams in the walls of the church of Archangel Gabriel, see Dobrowolski 1990: 163, 164, 165.

doorways. Roofs, although not extant, must have contained in all likelihood many structural elements of wood, such as beams, for example. The use of wooden planks (of palm wood) in the faces of brick courses in low walls, which probably served as footings for other structures, is quite remarkable.

The two complexes also produced a few pieces of roughly dressed local limestone, used mostly in the thresholds or as rubble under lime pavements. Missing elements of architectural decoration from the western complex can be presumed to be of stone, as suggested by the capital discovered in unit B.22.

REMARKS ON STRATIGRAPHY AND DATING

Most remarks on Site B stratigraphy have been concentrated on the refuse dumps of the late antique monastery deposited at the southernmost fringe of the inhabited part of the plateau (Godlewski 1990: 33; Godlewski *et alii* 1990: 189; Godlewski 1993a: 43–45; Godlewski *et alii* 1994: 209–212, 217–220, 223–226, Figs 13–16; Górecki 1993: 53–61; Derda 1995: 29–30; Godlewski 2005: 160–161; Godlewski 2012, in this volume; Derda, Dzierzbicka 2012, in this volume; Danys-Lasek 2012, in this volume). The latest finds from the uppermost layers of these rubbish dumps date to the beginning of the 8th century or even 9th century.¹⁰ This definitely provides a post-date for any building activity on the site. A thick deposit of ash, potsherds and other refuse of clearly kitchen (and generally household) origin had accumulated in this spot for a long time before this date.

Once the refuse dumps had gone out of use, the area was taken over under architecture. The ground was adapted under

the oldest units of the western complex (B.21–B.22) by removing the uppermost layer and redepositing it further south, on the southern slopes of the mound (Godlewski 1993a: 44–45; Górecki 1993: 53; Godlewski *et alii* 1994: 210). A thin layer of loose dark yellow sand covering the ashes was likely an intentional leveling layer meant to seal the lower rubbish dumps. On the northern side, the oldest part of the western complex appears to have sunk partly into the ash deposits. The ash appears to be preserved to a higher level under the pavements of younger units (B.23–B.26).

Ash deposits extended to the east as far as the south wall of room B.2 of the adjacent eastern complex. A thick layer of ash outside the east wall of the same room may have originated from kitchen activity or a conflagration, which occurred already after the construction of the eastern complex.

The two complexes were constructed after the 8th or more safely even the

¹⁰ Pottery finds excavated in seasons 2008–2009 attest to the continued use of the northern part of the refuse dump on site B through the end of the 7th or beginning of the 8th century (Danys-Lasek 2012 and Derda, Dzierzbicka 2012, both in this volume). Excavations conducted in earlier years farther to the south and west extended the date for these refuse dumps into the 8th or even 9th century (Godlewski 1990: 33; Godlewski *et alii* 1990: 189; Godlewski 1993a: 44; Górecki 1993: 58–61; Godlewski *et alii* 1994: 212, 217, 223; Derda 1995: 29–30; Godlewski 2005: 161). The different dating of finds from the two parts of the refuse dump are due to layers being disturbed during the construction of complex B.21–B.26.

9th century, once the refuse dumps stopped being used, but they show no clear evidence of the conflagration that consumed the monastery some time around the mid-10th century.¹¹ Finds of the like of an Arabic coin, pottery and others have set the date for the buildings on site B in the late 10th or 11th century (Godlewski 2012, in this volume).¹² This makes them more or less contemporary with church A and new buildings E and G located in the centre of the then abandoned and ruined part of the late antique and medieval monastery.

CHRONOLOGY OF BUILDING DEVELOPMENT ON SITE B

The pillar-like structure incorporated into the eastern wall of room B.2 (see above) is presumed to be a vestige of the oldest structure in this area. Extensive use of baked brick in its construction could suggest an early date.

This tentative structure was later surrounded by the walls making up room B.2 to the west. This room was likely part of a larger complex, which was either not excavated (except for the western extension, i.e. room B.1) or had disappeared completely. Room B.2 covered an area of approximately 4.20 m by 5.15 m. It was initially accessible only through a doorway in its northwestern corner. Another doorway

in the central part of the north wall was added when the building was extended by the addition of room B.1. The outer walls of B.1 were set on a higher level than the walls of room B.2. It covered an area of approximately 4.40 m by 2.85 m. Access to this room appears to have been only through room B.2 as no steps were found between it and the lane along its western side.

The building consisting of rooms B.1–B.2 had a flat roof as indicated by the size of the rooms and a fragment of palm-wood beam from the debris inside B.2 and large amounts of reeds from the adjacent room B.1. However, the span of room B.2, which exceeds 4.20 m could hardly have been covered by such a roof without the use of some kind of inner supporting structures, such as a pillar or column somewhere in the middle of the room.¹³ No traces of any structure like that have been found. Therefore, room B.2 may have served as an open-air courtyard giving access to the rooms around it.

Units B.21–26 were constructed on the higher ground which had risen at some point west of room B.1. At least two phases of construction could be observed, the first phase comprising units B.21 and B.22 for certain, the second other units on the northern side (B.23–B.26).

¹¹ Considering new material in evidence, the close of the 9th/beginning of the 10th century as a date for the conflagration of the central part of the monastery (buildings A, AA, E, G and J, as well as fragments of buildings on site D) cannot be maintained (see Godlewski 1999a: 117; 2001: 152, 161; 2002: 167, 169; 2003: 165; 2004: 150; 2005: 160, 162). The event is now safely dated to the mid-10th century (Godlewski 2012, in this volume).

¹² Lacking good evidence, the 18th–19th century had been proposed previously (see Godlewski 1993a: 45; Godlewski *et alii* 1994: 210). A 10th–11th century date for the leveling of the rubbish dumps under the buildings on site B had been put forward tentatively (Górecki 1993: 61), but without proposing a date for the buildings themselves.

¹³ The shorter side of rooms with flat roofs in the buildings from Karanis never exceeded approximately 3.10–3.30 m in length (as calculated by the author based on Husselman 1979: plans 19–22, 25–34, 38–43). The largest room in the Roman dwelling 3200-111 in Tebtynis measured 3.80–3.90 m by 4.80–4.98 m (Hadji-Minaglou 2007: 117–126, especially 118). On the impossibility of covering larger rooms with a flat roof made of palm trunks, see Hadji-Minaglou 2007: 140, 144.

Damage to these units precludes a precise estimate of their size. Unit B.22, which was evidently the largest, may have been approximately 9.50 m wide and at least 9.55 m long, assuming it was proportional in shape. Unit B.21 would have had the same width, but a different length (approximately 4 m).

The row of units added in the second phase along the north side of units B.21–B.22, was founded on a yet higher level. Unit B.23, measuring approximately 2.80 m in width and at least 3 m in length, may have belonged to the original phase of the building (see section on walls above). However, the overall layout of the western complex and the level of the foundations of unit B.23 are in stark contradiction with this idea. Units B.25 and B.26 are clearly later extensions; they are a little wider than B.23 and measure approximately 3–3.20 m in width and more than 2.20–3 m in length.

Although the pavements in the western complex survived in relatively good condition, they preserved few indications of doorways and passages inside the building. The curving hollow in the pavement surface attesting to the open and shut movement of a door panel, is likely evidence of a passage between units B.21 and B.22. Another doorway (or free passage), certainly belonging to the second phase, was located over the wall dividing units B.21 and B.23, but its exact location is uncertain. The main entrance to unit B.22 and probably to the whole building in the first phase, was situated in the central part of the north wall. The location of the door on the central axis of the wall and not in the corner is extraordinary in Naqlun monastery architecture and is a mark of a building of special importance.¹⁴ A second-phase doorway from the north leading into unit B.25 appears to be quite certain.

CONCLUSIONS

The crude masonry of walls and floors of the eastern complex (rooms B.1–B.2) suggests a household function. The building is likely to have encompassed a spacious courtyard and at least one smaller room attached to it. By contrast, the function of the adjacent western complex (B.21–B.26) is less evident, especially as the full layout cannot be determined owing to the poor

preservation of the remains. Nonetheless, one is tempted to interpret unit B.22 as a peristyle-like courtyard.¹⁵ Other units on the east and north were accessed from B.22, but there is no evidence for a similar arrangement to the west and south of this unit, where the ground steepens suddenly.

The walls and floors of the northern units (B.23–B.26) were laid on a much

¹⁴ For example, in the church of the Archangel Gabriel, where the entrance leading to the narthex from the outside is placed in the middle of the west wall (Dobrowolski 1990: 163, Fig.1).

¹⁵ It has been suggested in an earlier report that the building was a partly roofed “courtyard” (see Godlewski 1993a: 45). Peristyle features are occasionally found in Egyptian monasteries. At Sohag there is a peristyle hall located in the centre of the monastic complex, next to the main church, roughly parallel to the west wall; according to the authors of the report, it may have been completely roofed, with no open space in the central part set apart by vertical supports; it is thought to have been used as a refectory (Grossmann *et alii* 2004: 372–374, Figs A, B).

higher level than those of unit B.22. There was also a relatively thick wall between them. Pavements in the two southern units (B.21 and B.22) were on much the same level and were technologically the same; the evidence of a very thin and probably low division between units B.22 and B.21 could be taken as an indication of the units forming an extended room. Indeed, it is likely they were connected that at least in part.

On the other hand, the east–west axis of units B.21–B.22 recalls a basilical plan. Relatively high building standards could be an indication of religious character, but it was most certainly not a church. The two identified churches in Naqlun, the still-standing church of Archangel Gabriel and the almost completely dismantled church above the ruined keep A, dedicated in all likelihood to Archangel Michael,¹⁶ show features, which are not found in the western complex on site B. The churches have thick outer walls on the ground floor (about 0.85–1.00 m, Dobrowolski 1990: 164), indicating that they were intended to carry the burden of relatively high walls and heavy roofing. Moreover, the layout of the eastern parts of the churches is different. Both are furnished with a semicircular apse flanked on both sides by two rectangular pastophories and closed at the eastern end

by a straight outer wall. There is no trace of such divisions inside unit B.21, which formed the eastern part of the western complex. The unidentified semicircular feature at the eastern end of the east–west axis of unit B.22 is also missing from the known sacral architecture in the Naqlun monastic complex. Indeed, patches of a burnt oily substance (oil with incense ?) on the surface of the pavement in the “northern aisle” of unit B.22 may be the sole evidence of a potential religious function of this building. Such high quality lime-mortared pavements as in the building in question are unparalleled in the Naqlun monastery, clearly distinguishing the western complex on site B from other surviving monastic buildings. Lime-washed structures have been recorded in other parts of the compound, but they are all without exception confined to single units of special function.¹⁷

Little has survived of the interior decoration of units B.21–B.26, but the reuse of earlier architectural members here (capital, possibly columns as well) would have raised the esthetic value of the building. They are evidence of the builders’ inclination to embellishment and beautification.

For lack of other indications with regard to the function of the western

¹⁶ For the church of Archangel Gabriel, see Dobrowolski 1990: 161–167, Figs 1–5, Grossmann 1991: 845–847; Godlewski 1992: 52–56, Figs 1–2; 1993: 46–48; 1993a: 189–194; Godlewski, Parandowska 1994: 59–62; Godlewski 1996: 87–88; Godlewski, Parandowska 1997: 93–97; Godlewski 1998: 85–86, Fig. 3; 1999a: 160–161; Calaforra-Rzepka 2002; Godlewski 2002: 169–170; Calaforra-Rzepka 2003; Godlewski 2005: 162–166, 170, Figs 14.5, 14.9; Parandowska 2005; Godlewski 2008a: 74–75; 2008b: 104, Fig. 5. For church A (of Archangel Michael), see Godlewski *et alii* 1990: 185–188, Figs 6–8; Grossmann 1991: 846; Godlewski 2000a: 128–130; Figs 2–3; 2000b: 79–82, Figs 8–9; 2002: Fig. 1; Grossmann 2002: 513, Fig. 131 A–C; Godlewski 2005: 166, 169, Fig. 14.8; 2008a: 75–76.

¹⁷ Surprisingly, the lime mortar of the pavements of the western complex did not contain powdered baked brick, which was a frequently added filler increasing waterproof properties of the mortar. Such enhanced mortar has been noted in several structures inside the Naqlun monastery, notably basins. Obviously, while the builders of the western complex aimed for high-quality pavements, they were not interested in any hydraulic activity. If the western complex were to be considered as a workshop, for example, the processes taking place inside it would not have required much water.

complex, one should take into consideration its location [Fig. 15]. It was definitely located higher on the plateau than other parts of the monastic compound further to the north and the modern monastery with the church of Archangel Gabriel to the west [Fig. 14], this being due in part to natural landscape features and in part to the accumulation of refuse on the site. But it was not the elevation of the site, which played the most important role. The building lay on the absolutely southernmost fringe of the monastic complex with no other architectural remains to the south of site B. Even the refuse dump, which extends there now, appears to have been relocated

from the north. No outer wall of the monastery has been identified in this area and it is possible that it has never existed there (W. Godlewski, personal communication). To the north, west, and east of this complex there were other buildings dated very likely to the 10th–11th century, i.e., Buildings K, L, M, and N (Godlewski 2007: 199; 2008a: 196; 2012, in this volume). A few poorly preserved walls (still not excavated) and oriented similarly as the western complex extended directly north of it toward buildings K and L. This orientation clearly deviates west of the north–south axis, similarly as the eastern curtain of the outer wall of the monastic



Fig. 14. View toward the medieval and modern compound of the monastery with the church of the Archangel Gabriel with the remains of units B.23–B.26 in the foreground, looking west (Photo W. Godlewski)

compound around the church of Archangel Gabriel.¹⁸ There was also architecture in the area between this wall and the western complex, but only a few detached walls of these building(s) have survived. Considering the location of all these buildings, one can imagine that the western complex (B.21–B.26) was inherently connected with the compound around the church of Archangel Gabriel through some gate in the eastern curtain wall of the monastery. Even so, it has proved impossible so far to locate any gate or furta in this part of the curtain wall.

There is also another convenience of the location of the western complex. It bordered one of the main wadis descending from the *gebel* Naqlun.¹⁹ The bed of the wadi appears to be the easiest passage across

the hills going in a northeasterly direction, connecting the monastery with the area around el-Lahun. Lively contacts between the residents of Naqlun and people living in the neighborhood of el-Lahun have been evidenced by official documents found in the ruins of monastery (see Gaubert 1998: 87–89; Godlewski 1998: 85; 2011: 477–478). The wadi continues, although less clearly, southwest from site B through a late antique cemetery (designated as cemetery C) and undulating plateau down to the cultivated area of the Fayum depression. It would be the shortest way from the monastery to the oasis, only about 1.3 km compared to the modern road which is 3 km long, and likely one of the shortest land routes linking the southeastern corner of Fayum oasis with areas east of *Gebel*



*Fig. 15. View of units B.21–B.22 in the foreground, looking west toward the *gebel* (Photo W. Godlewski)*

¹⁸ For a general description of the enclosure and especially the east wall, see Dobrowolski 1990: 166.

¹⁹ The whole wadi or a part of it can be seen on an older map of the site: Godlewski 1990: Fig. 1; Godlewski *et alii* 1990: Fig. 2; Godlewski *et alii* 1994: Fig. 1; Godlewski 1999a: Fig. 1; 2000: Fig. 1; 2005: Fig. 14.1, 2008b: Fig. 1, as well as on a recently updated map, see Godlewski 2008a: 72; 2010: Fig. 1; 2011: Fig. 1.

Naqlun. The western complex (B.21–B.26) should certainly be considered in the context of this communication route.

A tentative interpretation of the building's function, derived from its location on the outskirts of the monastery may be proposed as a kind of hostel for travelers or a domestic structure for storing and/or grinding cereals (see Godlewski 1993a: 44–45; Godlewski *et alii* 1994: 210; 2005: 169). Other economic activities needed by the monastery are also a distinct possibility. Whichever the case, one thing is for certain: the architecture on site B was erected already outside the enclosure surrounding the church of Archangel Gabriel,

to which the core of the Naqlun monastic community may have moved by then.

Tombs and crypts discovered in the area of the northern units of the western complex (B.23–B.26) (Derda, Dzierzbicka 2012, and Godlewski 2012, both in this volume), dated likely to the end of 12th or 13th century (Godlewski 2012, in this volume), could not have been constructed before the abandonment of the building. However, in view of the fact that no graves were found in the southern part of the complex, it cannot be excluded that the southern units at least (B.21–B.22) remained in use in a graveyard context.

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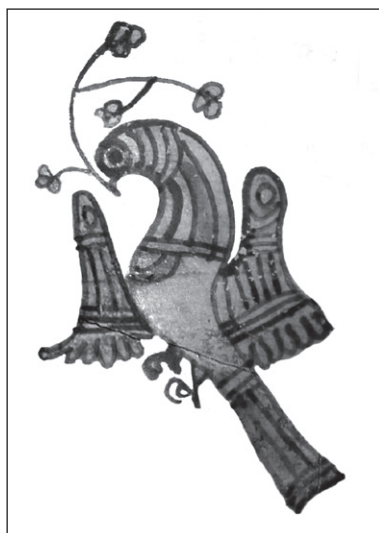
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