OLD DONGOLA

SEASON 2000

Stefan Jakobielski

The 33rd season lasted from January 19 to March 7, 2000. Work progressed mostly in the monastic compound area on Kom H, situated northeast of the town of Old Dongola. The main objective of explorations in the Western Annex to the Monastery was to complete the clearing of the remaining, northeastern part of this structure, and to protect it. This was completed during the season. Complementing this project were the continued excavations of kilns in the pottery manufacturing area (Koms R) bordering the city on the northwest.

- 1) The Mission comprised: Dr. Stefan Jakobielski, Director; Mrs. Gabriela Chmiel and Mr. Wojciech Chmiel, restorers; Dr. Małgorzata Martens-Czarnecka, archaeologist; Eng. Piotr Czarnecki, architect; Mr. Tomasz Jakobielski, photographer; Mrs. Hanna Kozińska-Sowa, archaeologist-documentalist; Dr. Adam Łajtar, epigraphist; Mr. Krzysztof Pluskota, archaeologist-pottery specialist (Koms R site supervisor); Mr. Jarosław Święcicki, archaeologist, assistant restorer. Mr. Mustafa El-Sherif, Inspector of Antiquities (Conservation Department) represented the Sudan National Corporation of Antiquities and Museums. Also participating were archaeology students from Warsaw University: Mrs. Lidia Badowska, Ms Ewa Kolczyńska and Mr. Bartłomiej Malec.
- 2) The excavations were financed by the Polish Center of Archaeology of Warsaw University with some financial assistance from the Research Center of Mediterranean Archaeology of the Polish Academy of Sciences. The "Nubia" Foundation helped to cover the travel and living expenses of part of the mission. Kinomax Enterprises (Poland), Ltd., kindly provided the chemicals essential for the conservation of the murals.

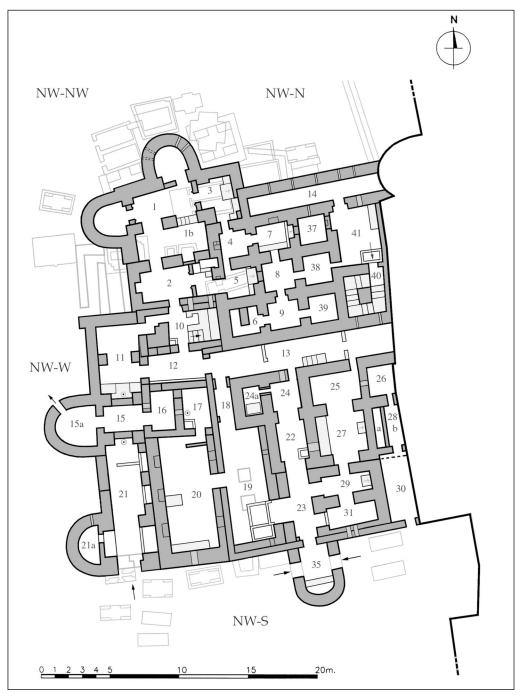


Fig. 1. Old Dongola. Plan of the Western Annex (Drawing after documentation plan by W. Chmiel)

KOM H – WESTERN ANNEX

The complicated plan of the Annex³⁾ with its forty rooms covering an area of 35 by 27 m (Fig. 1) was the result of gradual development and altered function of the rooms on the ground floor, as well as an operation - suggested on the grounds of an analysis of the wall layout – of extending the main monastery building (itself earlier extended westward in this part of the compound) westward on the level of the upper floor. The original phase comprising two structures (NW-N and NW-S), built outside the former western façade of the alleged main monastery building after its enlargement (NW-E), has turned out to be evidently not earlier than the 10th century, as the underlying strata have yielded Classic Christian potsherds.⁴⁾ The gradual westward expansion of building activity did not take place before the 11th century. The final form of the Western Annex with the developed mortuary and commemorative complex is of 12th-century date, following the death in AD 1113 of archbishop Georgios, the spiritual father of the monastery.

In 2000, rooms 37, 38, 39, 41 and 14 in the NW-N Building and rooms 26 and 30

in the NW-S one were excavated to floor level, as was also the remaining part of space 13 between the two buildings. In order to detract from the pressure exerted by sand on the outer eastern wall of Building NW-N (which is at the same time the western wall of NW-E), on which some cracks were observed, it was necessary to clear some 2.5 to 3 m of fill from the rooms situated behind it, i.e., 42, 43, and 45, belonging to the NW-E Building.⁵⁾ These rooms, which were not connected with the Annex on ground-floor level, have survived in exceptionally good condition with considerable sections of the vaults preserved complete with upper-floor flagging stones still in position. Evidence for the latest period of occupation of the structure consists of a partial leveling of the upper floor and its rebuilding. Use was made of old walls wherever they still stood high (Fig. 2). A thick layer of ashes covering the floor of the upper story may be proof of a conflagration that destroyed the building sometime at the close of the 13th century. The pottery material found in association with this occupation level is exclusively of the Terminal Christian period.

³⁾ For previous reports, see: S. Jakobielski, *PAM IV, Reports 1992* (1993), 102-106; *PAM V, Reports 1993* (1994), 115-126; *PAM VI, Reports 1994* (1995), 84-92; *PAM VII, Reports 1995* (1996), 105-113; *PAM VIII, Reports 1996* (1997), 161-168; *PAM IX, Reports 1997* (1998), 160-169; *PAM X, Reports 1998* (1999), 137-147; id., "The Monastery in Old Dongola: Excavations of the Western Annex 1995-1997", in: *African Reports* I (1998), 55-61; W. Chmiel, "Field Conservation at a Nubian Monastery", *African Reports* I (1998), 11-15; B. Żurawski, "The Monastery on Kom H in Old Dongola. The monks' graves - a preliminary report", Nubica IV/V (1999), 201-253; id., "Faith Healing, Philanthropy and Commemoration in Late Christian Dongola", Ägypten und Nubien in spätantiker und christlicher Zeit. Akten des 6. Internationalen Koptologenkongresses, Münster 20.-26. Juli 1996, Bd. I, (*SKCO* 6,1) (Wiesbaden 1999), 423-448. S. Jakobielski, "Das Kloster der Heiligen Dreifaltigkeit. Bauphasen des nordwestlichen Anbaus", in: Dongola-Studien, 35 Jahre der polnischer Forschungen im Zentrum des makuritischen Reiches (Warsaw 2001), 23-43.

⁴⁾ Until the last season, when the structure was examined thoroughly, it was believed to be of earlier date, cf. Jakobielski, *African Reports* I, op. cit., 55; id., *PAM X*, op. cit., 143.

⁵⁾ These works, however necessary from the conservation point of view, had not been planned for this season, and caused unexpected problems, including prolongation of the planned period of excavations and considerable enlarging of the area covered by the protective roof.

The average height of standing walls in the excavated northeastern part of Building NW-N is 3 m. In Room 41, where part of the barrel vault is still in position at 4 m, the original total height of the ground floor could be reconstructed as being 4.80 m. Room 41 (4 x 3 m) was in fact the largest in the Building (*Fig. 3*). It was a hall that opened through an arcaded doorway onto a staircase (40);⁶⁾ doorways in the other walls gave access to an elongated space along the northern facade of the building (14) and originally, before the passage to room 37 was blocked, to the

rest of the building. There was no paving here, only a compact mud floor (similarly as in the rest of the building). The only decoration of this room was a fine mural painting, nearly complete, adorning the east wall. It represents the Baptism of Christ in the Jordan, a theme as yet unknown in Nubia (*Fig. 4*). It can be dated to the period after the mid-11th century renovation and was painted by a master not found among those who decorated the complex at this time, a master who was most certainly under the influence of Byzantine art. 7) Neither the painting nor



Fig. 2. Old Dongola. Building NW-E. Evidence of the latest occupation (Photo T. Jakobielski)

⁶⁾ For a description cf. Jakobielski, PAM X, op. cit., 144.

⁷⁾ M. Martens-Czarnecka, "Suggestions on dating of some murals from the Monastery in Old Dongola", ET 19 (in print); ead., "Wall Paintings discovered in Old Dongola", Dongola-Studien, op. cit., 253-284.

the remains of room furniture (mastaba in the northeastern corner along the east wall, 1.20 m high originally, and dismantled later) help to establish the putative function of the room. There is, however, a low border on the floor – added during the rebuilding – rendered in a kind of hard plaster to form a shallow basin in front of the doorway to the staircase.⁸⁾ This might have been a place where people coming to the monastery from afar could have washed their feet. This was a well-known custom in Christian times. The room could have served as an antechamber for a short period

at the end of the 11th century, when the passage from outside led to the staircase through rooms 12, 10, 2, 5, 8, 7, 37 and 41. Once the commemorative chapels were established in the 12th century in rooms 3 and 5, this passage ceased to be used.

Room 14 in the northernmost part of the building is an elongated space (10 x 1.20 m) accessible solely from hall 41. It is fairly well lighted through five slot windows, each c. 80 cm high, pierced in its north wall. Curiously enough, it did not extend the full length of the facade, leaving an offset at the original northwestern



Fig. 3. Old Dongola. Building NW-N. Room 41, view from the north (Photo T. Jakobielski)

8) A similar structure found in the main doorway leading from the yard (later room 19) into Building NW-S was built in the mid 11th century.

corner of the building. This was apparently due to the presence of a tomb superstructure over twin crypts that was incorporated into the commemorative complex at the end of the 11th century.⁹⁾ The function of room 14 remains unclear, but it was apparently frequented now and again to judge by the large number of graffiti left on the walls, including one of Georgios himself¹⁰⁾ and the bishop Mari(a)nos.

Other excavated rooms: 37, 38 and 39 (each c. 2 x 2 m) were undecorated and uninscribed, and devoid of interior equipment, too. The only find worthy of notice was a large twelve-wicked oil lamp carved of schist, found in the rubble in room 39 (*Fig. 5*). Except for room 39, which originally had two slot windows in the south (outer) wall, the other two rooms were lighted indirectly through small openings, 45 cm high, located over the



Fig. 4. Old Dongola. Building NW-N, Room 41. Scene depicting the Baptism of Christ (Photo T. Jakobielski)

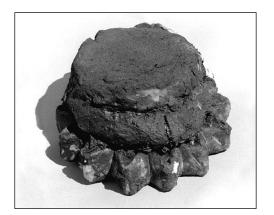
⁹⁾ On these crypts and their equipment, see Żurawski, Nubica IV/V, op. cit., 225-237.

¹⁰⁾ Cf. Jakobielski, *PAM* X, op. cit., 143, fig. 6, and also A. Łajtar, K. Pluskota, "Inscribed vessels from the Monastery of the Holy Trinity at Old Dongola", Dongola-Studien, op. cit., 335-355.

doorways in their west walls. The floors were of compact mud. A second layer of plaster was found only in places, which had been repaired and whitewashed. All the rooms turned out to be very high and originally barrel-vaulted, similarly as room 41.

The Northern Building (NW-N) initially comprised a block (9 by 9.3 m) consisting of nine small square rooms (4-9, 37-39), a staircase (40), a big room in the eastern part (41), and an elongated room at its northern side (14). It was a homogeneous, 11) storied structure, the first to be built in the area as an extension of the monastery to the west and remarkably without an entrance from the outside at ground-floor level (*Fig. 6*). The only explanation of the curious layout, considering also the inner communication system¹²⁾ and the lack of paving, is that the

building was designed chiefly a foundation to support the massive structure of the extension of the main monastery building on the level of its upper floor and may have been used perhaps only as a storage place. 13) Architectural research in Building NW-S brought evidence for dating the original structure to the 10th century, perhaps slightly later than Building NW-N. Trial pits dug to uncover the foundations and observation of the bonding revealed three constituent parts with individual entrances all leading from the south. The westernmost set of three rooms: 22 and 24, plus a side room 24A, was accessible through an imposing archway. The center part comprised two rooms (27 and 25) entered and joined by large but low arcades. An extremely low (1.20 m) doorway joined it with the entrance hall. The eastern part, built



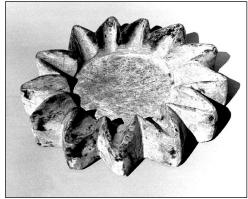


Fig. 5. Old Dongola. Oil lamp made of schist, after discovery (left) and after cleaning (Photo T. Jakobielski)

- 11) After this season there can be no doubt that the staircase (40), room (41) and elongated space (41) were all integral parts of the Northern Building, unlike what was believed earlier (cf. Jakobielski, in: *African Reports* I, op. cit., 55, and id., *PAM* X, op. cit., 142-143.
- 12) Originally, from staircase through room 41 into room 7, from where into non-communicating room 4 and central room 8. From 8 to non-communicating rooms 5 or 38 and to room 9. From 9 to non-communicating rooms 6 or 39. Room 14 was accessible only from 41 and was non-communicating. In the second half of the 11th century most of this was changed.
- 13) I owe this suggestion, as well as that concerning Building NW-S, to architect Jacek Koziński, who analyzed the structures during a short stay at the site in February 2000.

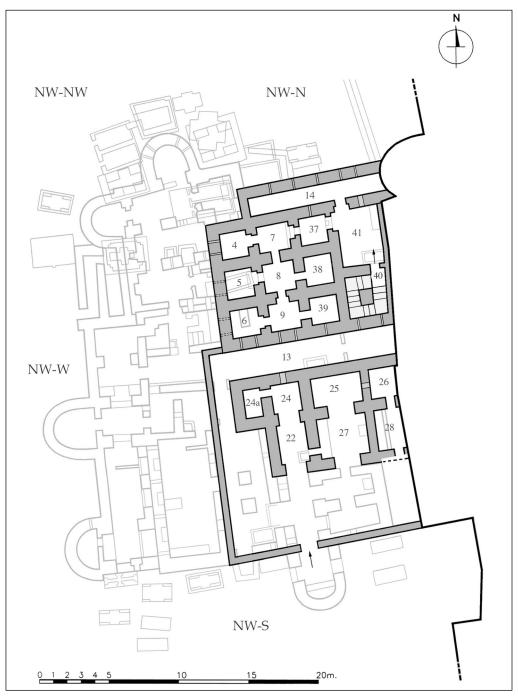


Fig. 6. Old Dongola. Building NW-N. Plan of the first phase (Drawing after documentation plan by W. Chmiel)

against the west wall of the monastery, consisted of a single room (26) entered from the yard through a passage (later room 28B).

The building was barrel-vaulted, some 30 cm lower in height than Building NW-N, and devoid of a staircase. There is no certainty whether it was originally storied; perhaps the upper floor had been added during the first rebuilding, but the position of the vaults seems to imply that at least something like an open terrace or flat roof could have been constructed on top of the vaulting right from the start. ¹⁴)

The original function of the building is unclear. It seems, however, that the structure was not directly connected with the monastery. An imposing archway and a wide vestibule ending in a small room could have been used for the reception of visitors or pilgrims from the outside. The side rooms could have been used as waiting rooms or a place for depositing offerings for the monastery. This function appears to have been emphasized still further in the first rebuilding of this part of the Annex about the middle of the 11th century, during the office of the archpresbyter and archistylites Georgios, prior to his investiture as bishop in AD 1064. Georgios was responsible at least for introducing painted decoration in the newly built interior. 15)

The third building extension must have been carried out during the bishopric of

Georgios. A great hall (20) was added to Building NW-S and parallely room 2 to NW-N. Next the commemorative complex was included in it (rooms 1, 3, possibly 2), and, subsequently, rooms 19 and 21 to Building NW-S. At this time the two buildings were joined to form one complex, entered through a single door from the west (later from the south). Whether it was turned into a xenon (hospice)¹⁶⁾ at this time or later (i.e., after Georgios' death) remains as yet an open question. What is beyond doubt, however, is that during his office a new chapel (room $13 - 13 \times 2.20$ m.) was established in the space that had separated the two buildings. Previous work in room 13 (westernmost end in 1993/4, eastern in 1998) had revealed on the eastern wall a magnificent figure of the Archangel Michael backed by the Holy Trinity (dated to the mid 11th century) and on the northern and southern walls, painted slightly later, life-size figures of Christ and Twelve Apostles. 17) Now, the rest of the room was cleared, uncovering nine other murals: on the south wall (partly on the vault), a representation of the Holy Trinity in one body (badly damaged), Archangel Michael (in good state), Virgin and Child (top part missing), another Archangel Michael and two standing figures (all in highly fragmentary condition); on the north wall, unique representation of the Old Testament story of Balaam's journey to Moab on a donkey

¹⁴⁾ The upper floor, assuming it existed in the original layout (instead of being added during the later rebuilding), would have undergone some rebuilding as well, since the ceramic tiles used in the surviving sections of the floors are identical with those appearing in the rooms that were added (or renovated) on the ground floor in the times of bishop Georgios (rooms 20 and 2)

¹⁵⁾ Proof of this is provided by his dedication on a mural in room 29, which has been identified as a small chapel, cf. Jakobielski, *PAM* IX, op. cit., 162-163; Martens-Czarnecka, *African Reports* 1, op. cit., 86-88.

¹⁶⁾ Cf. Żurawski, "Faith Healing...", op. cit. Recently, P.O. Scholz, Randbemerkungen zur liturgisch-kultische Funktion des Xenodochiums des Dreifaltigkeitsklosters in Alt-Dongola, Dongola-Studien, op. cit., 169-176, has elaborated on the theme based on Żurawski's arguments.

¹⁷⁾ Cf. Jakobielski, PAM X, op. cit., 141-142.

(Numbers 22,15-35), depicted in six subsequent scenes (upper part damaged), standing figure of the Archangel Michael with a founder (surface worn), the Holy Trinity in a mandorla with Four Living Creatures and a figure of a bishop as the founder, and an Archangel (both in excellent condition). These murals, which cover all the available space in the rest of the room, seem to originate from a slightly later period than the magnificent figure of the Archangel Michael with the Trinity on the east wall, as they were painted on top of the second layer of plaster coating, applied only in places that were apparently regarded as worthy of repair. (The remaining parts of the walls appear to have been whitewashed only at this time.) Some, Balaam's story included, are contemporary with figures of Christ and the Apostles thought to date from the 12th century. 18)

The two stages in the painting are by observations paralleled architectural nature, testifying to the gradual evolution of the idea of turning the space into a place of worship. The barrel vault of room 13 is curiously constructed with the eastern part some 30 cm higher than the remaining (bigger) part. The difference in heights is managed by a rib of the arcade. Such a construction suggests that the room was vaulted in two stages and that originally only the eastern part had a roof that corresponded to the floor level of the upper floor of the Northern Building, while the rest of the space remained open. It was at this point that the Archangel and the two other paintings (Warrior saint¹⁹⁾ and Holy Virgin) were painted on the eastern and the upper part

of the south wall. The room furniture, added obviously later than the paving and the original plastering of the interior, consisted of a mudbrick haikal-screen and a pulpit located against the south wall, as well as a wall (with narrow entrance) screening off its western part, fragmentarily preserved. Therefore, all the elements required of a church interior were present, except for the altar, possibly wooden, of which no traces have been observed (Fig. 7). The excavations also cleared the space between the west wall of the Monastery and Building NW-S, including Room 26 with intact vault. Above it, on the upper floor, a small staircase was built later, leading most probably to the roof. The fill in Room 26 revealed two major occupation levels: Two meters above the original floor, a paving of bricks was found on top of a rubble deposit. At this time the room was entered through a hole above the original doorway made in the south wall dividing it from passage-way 28B (which was most probably also paved at this time and on a similar level).²⁰⁾ The fill consisted of ashes and dust mixed with considerable amounts of potsherds of mostly Terminal Christian date, therefore the room must have been used for domestic purposes already after the Monastery had been destroyed in the late 13th century.

Yet another discovery appertaining to the last period of occupation of the Annex is a set of Late Christian mudstoppers and potsherds found by the western facade of the enlarged building, in association with a late staircase or ramp (L.1-2) leading from the outside to the upper floor (or open terrace) over

¹⁸⁾ For a discussion of the dating of the murals, cf. Martens-Czarnecka, ET 19, in print.

¹⁹⁾ Cf Jakobielski, PAM XI, op. cit., 208.

²⁰⁾ For previous work in this part, cf. Jakobielski, PAM IX, op. cit., 160f.

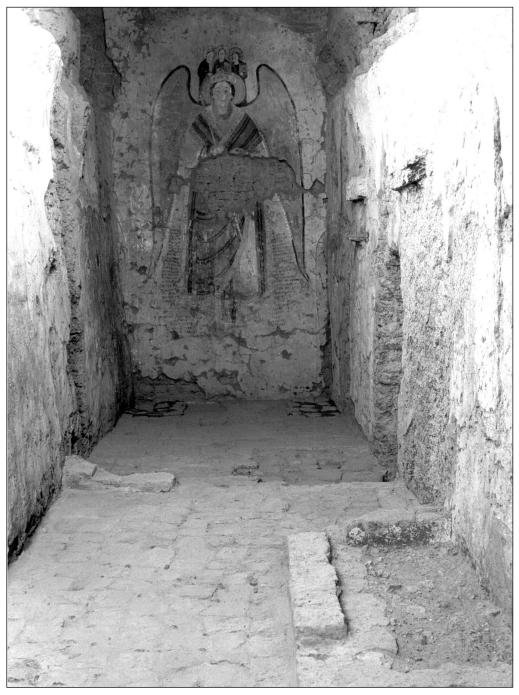


Fig. 7. Old Dongola. Western Annex. Room 13 looking east (Photo T. Jakobielski)

room 2. Among the sherds there were numerous fragments of wine amphorae, some of them inscribed in Old Nubian: "wine for the Great Trinity" and "wine for King Toskoña". This is the first recording of the name of this Nubian king (Fig. 8). He may have been a resident of the monastery or one of the patients cured in the *xenon*.

While more architectural investigation is required, the following hypothetical development of the Annex can be propounded here. Georgios seemingly continued building activity in the Annex even after being invested as bishop. Room 20 (large enough to be suitable as an assembly hall) was built in the southwestern part and another one (room 2) in the northwestern part, perhaps to unify the block outline. Soon after, but still before Georgios' death in 1113, the conception changed and a twin crypt (most probably a reused tomb from the neighboring cemetery) was incorporated to form an imposing commemorative complex (room 1).

Who was actually buried there remains a mystery, as the stele originally fixed in an imposing portal-screen is missing, but the crypts themselves served burial purposes perhaps up to the Terminal Christian period. It is very likely that another crypt (the one, in which Georgios was later buried) was dug at this time (and left unused) under room 5.

By the end of the 11th century the western part of the Annex included extra space within newly constructed massive walls with projecting semicircular structures imitating towers. Georgios' plan, perhaps never completed, appears to have been to add a monumental passage segmented into spans with a row of inner pilasters and with the main entrance from the south, leading to the former gate (room 12). In reality (presumably after Georgios' death in AD 1113) the space was disposed of in a different way, having been divided prior to plastering into individual rooms of diversified use. The southwestern corner room (21), entered only from



Fig. 8. Old Dongola. Western Annex. Inscribed amphora sherds, the one on the top left with the name of a previously unknown Nubian king Toskoña (Photo T. Jakobielski)

outside the building, may have been used generally for storage of provisions and other goods, because a few masonry containers were originally constructed in its interior.²¹⁾ Room 11, separated out in the northwestern part, became part of the commemorative complex. To judge by its furniture (large low bench for the body of the deceased?) and decoration – a series of murals connected with the *prothesis* ritual,²²⁾ it must have been connected somehow with the funeral practices. The space in the middle was not paved and served in all likelihood the purposes of sewage or garbage removal. The room was accessible through a small opening in the outer wall of the western "tower". Room 10, formerly one of two rooms flanking the former entrance to the Annex, was changed into a staircase, which seems to suggest that the newly constructed rooms were storied.

The only outer entrance to Building NW-S (and practically to the whole Annex) at this time led from the south through a semicircular "tower" (room 35) added to the façade in line with the entrance vestibule (rooms 23-22). The former main doorway now led to room 19 (a former yard that had been barrel-vaulted), which may have been a sort of waiting room, in turn giving access to a new reception hall (20) to the west²³⁾ and, to the north, through a passage (18) to the chapel (13) or via rooms 12-10 to the commemorative complex (NW-NW).

The function of the buildings remained apparently unchanged, becoming merely more developed in Georgios' times. The complex was prepared to admit a much larger number of visitors than before. Rooms of a liturgical character were added as well and the walls decorated with murals. A separate storeroom accessible exclusively from the outside (21) was built to accommodate the growing number of offerings brought to the monastery. The incorporation of the crypts in the times of Georgios and a clear tendency, emphasized by later architectural development, to connect the building with the commemorative part and the veneration of the persons buried there, including Georgios himself, are indicative of an attempt to imitate Byzantine monastery-related institutions, like the *xenon* or *xenodocheion*.²⁴⁾

The evidence for the functioning of such a faith-healing complex, where the sick received spiritual consolation, as well as medical treatment, in the neighborhood of the Monastery at least in the 12th and 13th centuries has been growing gradually. It now includes proof of an archaeological nature from the buildings themselves: the furniture required to receive Holy Communion in urgent and exceptional cases; a funerary-commemorative complex incorporated in the building; small empty rooms for meditation or for spending the night close to the crypts; last but not least, the iconography of the wall decoration in the interiors.

²¹⁾ In this room, curiously enough, a big ink inscription in Greek and Old Nubian was written in the southwestern corner. A. Łajtar, who succeeded in reading it this season, believes it records, beside the names of several monks, the full text of the *Pater Noster* prayer in Greek, as well as the Creed of St. Epiphanios.

²²⁾ B. Żurawski, "Old Dongola 1984-1993. The Mortuary Complex. A preliminary report", ET 17, 352, and M. Martens-Czarnecka, African Reports I, op. cit., 100ff., 105. Cf. also ead., in: CRIPEL 17/II, 212-218.

²³⁾ B. Żurawski is of the opinion that it served as a dormitory for patients or pilgrims (pers. comm.).

²⁴⁾ On these institutions recently, cf. Żurawski, "Faith Healing...", op. cit. Also, St. Longosz, Ksenodochium - hospicjum wczesnochrześcijańskie, Vox Patrum 16 (1996), 273-336.

PROTECTIVE MEASURES UNDERTAKEN IN THE WESTERN ANNEX

Walls were repaired in Rooms 1, 3, and 2, where rainfall water descending from the ruined upper floor had caused serious damages. Red brick was used to fill in the gaps, while the original building material (red brick and mudbrick) was used for all provisional blocking and screening walls in rooms 1, 43 and 45. The great portal in room 1 was renovated (partly reconstructed) after the disastrous rainfall in the summer of 1999, which had seriously affected its surface.

Mural conservation started with reinforcement of the edges of surviving plaster with water-diluted hydroxypropylocellulose mixed with sand, Nile mud and chalk. The same mixture was used to fill in the gaps in the plaster and a dilution of it to reattach the plaster to the wall. Surfaces were cleaned mechanically with special sponges and glass-fiber brushes, and chemically, applying locally a 5% solution of NH₄OH. A 3% solution of Paraloid B–72 in toluene was applied repeatedly to protect the painted surfaces.

A screening roof of over 200 m² in area was erected over the Annex structure. It consists of a grid of steel pipes (1.5 inch in diameter) supported on a brick pier-and-wall structure raised to the required height on top of surviving walls. The grid is covered with a palm-fiber (*jarida*) mat and special roofing paper "Tyvek", followed by a layer of *qesh* (palm leaves) and *zibala* (dung and mud) on top, this in keeping with a well tested local roofing tradition.

KOMS R

In the Pottery Manufacturing area two pottery kiln sites were excavated: Kiln R3 (initiated in the 1998 season) and a new site code-named R1.F, located some 36 m northeast of kiln R1.D.

The combustion chamber of Kiln R3 (Fig. 9) is of cylindrical construction, 1.45 m in diameter and preserved to a height of 1.25 m. The pavement, which is unique, consists of large mudbricks (36 x 16 x 6 cm) with similar mudbricks in a double row making up the walls of the chamber. The inner surface of these walls is highly overfired due to repeated firing in high temperatures, and covered with a thick layer of slag. Traces of a small ventilation and refueling opening were found on the south side. At a height of 1.16 m above the pavement smaller bricks $(28 \times 12 \times 4 \text{ cm})$ were used in the walls, constituting in all likelihood remnants of a

structure separating the combustion and firing chambers (*Fig. 10*). This suggests at least two stages of use. The second stage was also distinguished by a layer of slag formed over a stratum of ashes 55 cm thick. A probe dug south of the kiln revealed that the kiln had been built and used during the Post-Classic period (not later than the 12th century). Late and Terminal potsherds indicate the second and final stage of its operation.

Kiln R1.F was of enormously heavy structure with walls 0.80 m thick, built of bricks 30 x 16 x 7 cm in size. The combustion chamber, slightly elliptical in plan (2.30-2.60 m in diameter), is preserved to a height of 110 cm. On three sides it was reinforced with a sort of mudbrick bench. A probe dug south of the kiln indicated that the kiln had been dug in strata of production refuse reaching

280 cm in height. The dump consisted of ashes, brick rubble and potsherds of exclusively Early Christian date, i.e., 7th-8th century (red-slipped plates, bowls, jugs, as well as amphorae and gawadis), while the fill of the combustion chamber contained mostly sherds of the early Classic Christian period (bottles, pilgrim bottles, amphorae, bowls). Two small kilns, 65 cm in diameter, were attached to the kiln in question on the east of it. The archaeological context of kiln R1.F (Early Christian period strata) permits it to be considered part of the huge pottery manufacturing center on Kom R1 and reveals a continuity of production of Early to Classic Christian pottery at the same site. So far proof has been found of extensive pottery production at Old Dongola during the Early, Classic, Post-Classic and Late periods.

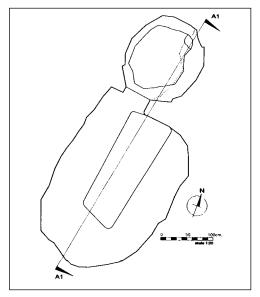


Fig. 9. Old Dongola. Kom R. Kiln R3, plan of kiln and trench (Drawing P. Czarnecki)

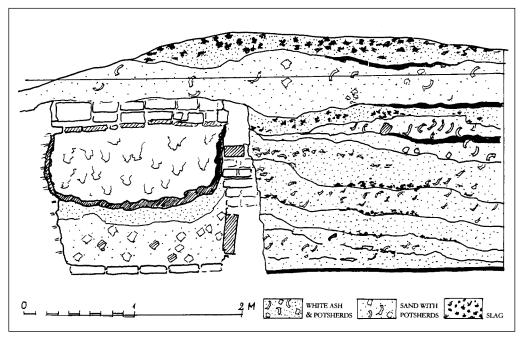


Fig. 10. Old Dongola. Kom R. Kiln R3, cross-section through the kiln and trench (Drawing K. Pluskota)