



DONGOLA

2015–2016

FIELDWORK
CONSERVATION
AND SITE MANAGEMENT



DONGOLA
2015-2016



POLISH CENTRE OF MEDITERRANEAN ARCHAEOLOGY UNIVERSITY OF WARSAW

PCMA Excavation Series 5

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DONGOLA

2015–2016

FIELDWORK, CONSERVATION AND SITE MANAGEMENT

EDITORS

WŁODZIMIERZ GODLEWSKI
DOROTA DZIERZBICKA
ADAM ŁAJTAR

POLISH CENTRE OF MEDITERRANEAN ARCHAEOLOGY
UNIVERSITY OF WARSAW

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Series managing editor:	Iwona Zych
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Polish Centre of Mediterranean Archaeology

University of Warsaw

ul. Nowy Świat 4, 00-497 Warsaw, Poland

www.pcma.uw.edu.pl

pcma@uw.edu.pl; pam.pcma@uw.edu.pl

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LIST OF CONTRIBUTORS

Barbara CZAJA, MA
Museum of King Jan III's Palace at Wilanów
czajabarbara@yahoo.com

Katarzyna DANYŚ, MA ORCID 0000-0002-9192-2857
University of Warsaw, Polish Centre of Mediterranean Archaeology
katarzyna_danys@o2.pl

Agata DEPTUŁA, MA ORCID 0000-0001-7578-0898
University of Warsaw, Institute of Archaeology
University of Warsaw, Polish Centre of Mediterranean Archaeology
a.deptula@uw.edu.pl

Dorota DZIERZBICKA, PhD ORCID 0000-0002-1172-5889
University of Warsaw, Institute of Archaeology
University of Warsaw, Polish Centre of Mediterranean Archaeology
d.dzierzbicka@uw.edu.pl

Vincent W.J. van GERVEN OEL, PhD ORCID 0000-0003-1637-4261
vincent@vangervenoel.com

Prof. Włodzimierz GODLEWSKI
University of Warsaw, Polish Centre of Mediterranean Archaeology
w.godlewski@uw.edu.pl

Barbara IDZIKOWSKA
National Museum in Warsaw, Department of Coins and Medals
bidzikowska@wp.pl

Urszula KUSZ, MA
urszuskusz@gmail.com

Prof. Adam ŁAJTAR ORCID 0000-0003-3842-2180
University of Warsaw, Institute of Archaeology
a.lajtar@uw.edu.pl

Dorota MORYTO-NAUMIUK, MA
dorotamoryto@gmail.com

Anna NOWICKA, PhD
Academy of Fine Arts in Warsaw, Faculty of Conservation and Restoration of Works of Art
anna.nowicka1@cybis.asp.waw.pl

Marta OSYPIŃSKA, PhD ORCID 0000-0003-4603-9245
Polish Academy of Sciences, Institute of Archaeology and Ethnology, Poznań
archeozoo@o2.pl

Assoc. Prof. Romuald TARCZEWSKI, DSc ORCID 0000-0003-2033-3104
Wrocław University of Science and Technology
romuald.tarczewski@pwr.edu.pl

Naïm VANTHIEGHEM, PhD ORCID 0000-0002-1380-5153
L'Institut de recherche et d'histoire des textes, CNRS
n.vanthieghem@irht.cnrs.fr

Maciej WYŻGÓŁ, MA ORCID 0000-0003-4693-5701
University of Warsaw, Polish Centre of Mediterranean Archaeology
maciej.wyzgol@gmail.com

Bogdan F. ZEREK, MA
Academy of Fine Arts in Warsaw, Faculty of Conservation and Restoration of Works of Art
bfilipzerek@yahoo.com

PREFACE

In 2015–2016, a mission from the Polish Centre of Mediterranean Archaeology, University of Warsaw, continued fieldwork and conservation at the site of Dongola. Work was conducted in cooperation with the Sudanese National Corporation for Antiquities and Museums within the frame of two research programs funded by the Qatar–Sudan Archaeological Project: QSAP.10 and QSAP.31. The two focal points of the fieldwork were the Great Monastery of St Anthony (Kom H) and the Citadel of Dongola. The team also engaged in conservation and reconstruction work in the staircase of the Mosque Building, the former Throne Hall of Makuria.

In the monastery, excavation work was carried out in the western courtyard, the Monastery Church and the Central Building. In addition, a reassessment was made of the architectural phasing of the northwestern part of the monastery (so-called Northwest Annex). Furthermore, research on the previously uncovered burial complex of the bishops of Dongola, particularly the inscribed crypt of archbishop Georgios, led to the publication in 2017 of a volume by Adam Łajtar and Jacques van der Vliet, *Empowering the dead in Christian Nubia. The texts from a medieval funerary complex in Dongola (JJP Supplement XXXII, Warsaw)*. Lastly, a shelter built over the western part of the Monastery Church permitted the transfer of several wall paintings from the walls in the naos of the late church. The murals are now on exhibition in this secure space.

In the complex of royal buildings on the sites SWN.B.I and B.V on the Citadel, a new roof was built over the Church of Archangel Raphael. This measure was vital for the protection of several dozen wall paintings preserved in the

interior. The new shelter also ensured proper conditions for the documentation of compositions and inscriptions from the late 8th–early 9th century, which survive on the walls of the royal church.

Protective works in the Mosque Building consisted of the reconstruction of the upper part of the staircase and building a roof and terrace over the west part of the building. The interior of the building had been exposed to wind, sand, and rain for nearly two hundred years due to damage and ultimate destruction of the roofing over the stairwell. Now the roof is in place, and visitors can admire from the rooftop terrace a stunning view of the landscape surrounding the ruins of Dongola—the Nile, the cemetery with domed tombs, and the abandoned village to the south of the Citadel.

The papers presented in this volume report on the fieldwork, conservation and restoration work and present the results of studies on uncovered texts and objects.

Thank are due all the participants in the research: archaeologists, conservators, architects, epigraphists, ceramologists, and others, for their unfailing dedication to the work and for their important intellectual contributions to the study of the civilization of Dongola, the capital of the kingdom of Makuria.

The expedition is also grateful to the University of Warsaw, the Sudanese National Corporation for Antiquities and Museums, and the Qatar–Sudan Archaeological Project for support that made research in Dongola possible.

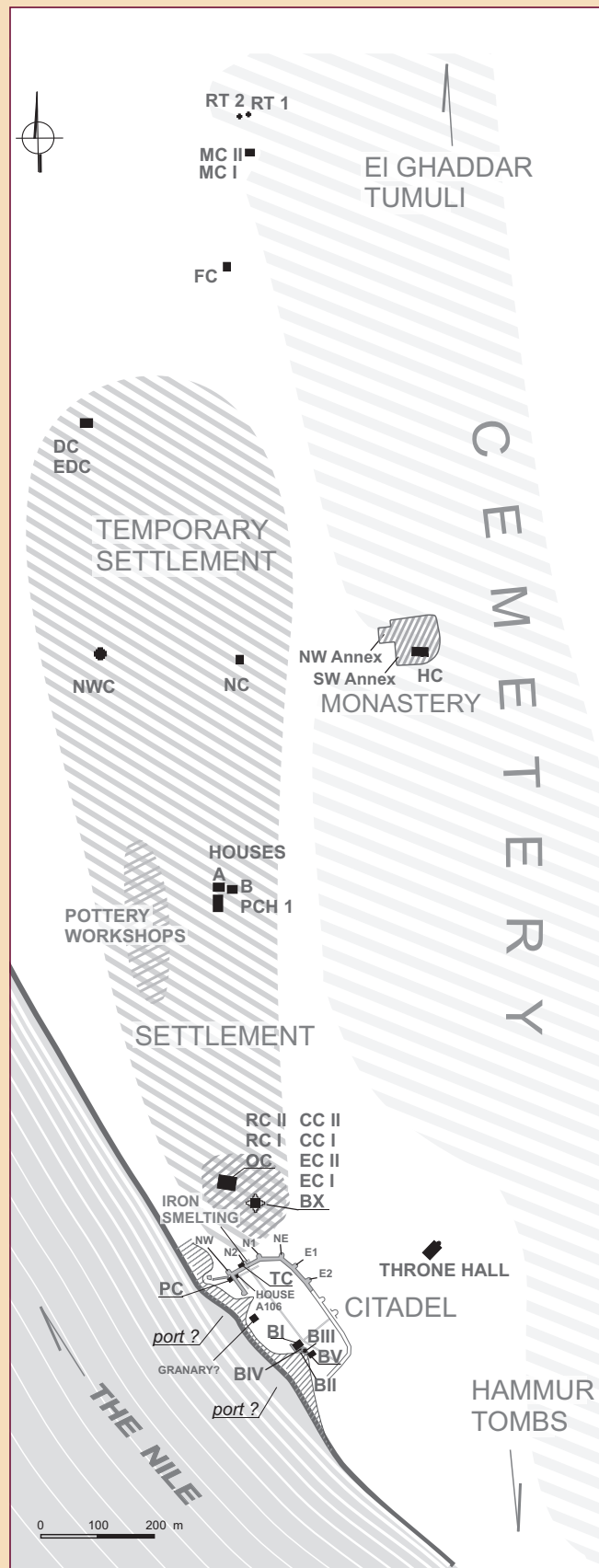
Last but not least, words of gratitude are due to all colleagues whose work brought this publication to fruition.

DONGOLA PLAN AND TIMELINE

Topography and site locations

All major sites and buildings excavated in ancient Dongola, their location and new coding system in brackets

- B.I** Building I = "Palace of Ioannes" (Site SWN)
- B.II** Building II (Site SWN)
- B.III** Building III.1 = commemorative monument;
Building III.2 = church (Site SWN)
- B.IV** Building IV (Site SWN)
- B.V** Building V = Royal Church (Site SWN)
- B.X** Building X (Site SWN)
- BX** Building X (Site CC)
- CC.I** First Cruciform Church (Site CC)
- CC.II** Second Cruciform Church (Site CC)
- DC** Church D (Site D)
- EC.I** First Cathedral = Church of the Stone Pavement (Site CC)
- EC.II** Second Cathedral = Church of the Stone Pavement (Site CC)
- EDC** Early Church D (Site D)
- FC** Church F
- Fortifications** Towers NW, N2, N1, NE, E1, E2
- H.HC** Monastic Church, Great Monastery of St. Anthony (Kom H)
- H.NW** Northwest Annex, Great Monastery of St. Anthony (Kom H) (H.NW.B.I, B.II, B.III – constituent parts of the annex)
- H.SW** Southwest Annex, Great Monastery of St. Anthony (Kom H)
- House A.106** NW fortifications
- Houses A, B, PCH.1** architecture on Site P
- MC.I** First Mosaic Church
- MC.II** Second Mosaic Church
- NC** North Church
- NWC** Northwest Church
- OC** Old Church
- PC** Pillar Church
- RC.I** Third Cathedral = Church of the Granite Columns
- RC.II** Fourth Cathedral = Church of the Granite Columns
- RT.1, RT.2** Rock-cut tombs
- Site = Kom A** Citadel
- Site C** northwestern Citadel area
- Site CC** area around the Cruciform Church
- Site D** northern outskirts of the town settlement
- Site = Kom H** Great Monastery of St. Anthony
- Site P** northern town agglomeration
- Site R** pottery workshops
- SWN** southwestern part of the Citadel
- TC** Tower Church
- Throne Hall** = Mosque Building



Note:

For the sake of compatibility with earlier reports, the elevation quota in this report refer to the 1964 geodetic vertical datum based on the level of the River Nile in Dongola (Michałowski 1966).

EARLY MAKURIA I	Rise of the Kingdom of Makuria; founding of Dongola 5th–early 6th century	El Ghaddar cemetery Hammur cemetery Citadel of Dongola
EARLY MAKURIA II	Main center of the Kingdom 6th–early 7th century	Rock tombs (R.I and R.II) Old Church (OC) Building X (B.X) First Mosaic Church (MC.I) First Cathedral = Church of the Stone Pavement (EC.I) Site SWN: Building B.IV Great Monastery of St Anthony (Kom H) Site R: Pottery workshops Iron-smelting furnaces Fortifications
EARLY MAKURIA III	Center of Great Makuria early 7th–early 9th century	Site SWN: Building B.I (“Palace of Ioannes”) Site SWN: Building B.III.1 – commemorative monument Site SWN: Building B.V = King's Church NW fortifications: House A.106 Second Cathedral = Church of the Stone Pavement (EC.II) Third Cathedral = Church of the Granite Columns (RC.I) Second Mosaic Church (MC.II) Site D: Early Church (EDC) Site P: House PCH.1 and Houses A and B
MIDDLE MAKURIA	Center of Great Makuria early 9th–mid 11th century	First Cruciform Church (CC.I) Throne Hall Fourth Cathedral = Church of the Granite Columns (RC.II) Site SWN: Building B.V = King's Church Pillar Church (PC) Site D: Church (DC)
LATE MAKURIA I	Dotawo Kingdom mid 11th–end of 12th century	Northwest Church (NWC) Northwest Annex (Great Monastery of St. Anthony)
LATE MAKURIA II	Dotawo Kingdom 13th–mid 14th century	New fortifications on the Citadel Site SWN: Building B.II Second Cruciform Church (CC.II) North Church (NC) Tower Church (TC) Site SWN: Late Building I Site SWN: Building B.III.2 = church Mosque
LATE MAKURIA III	Small Makuria (Dotawo Kingdom) In Dongola: Kingdom of Dongola Town mid 14th–16th century	New houses: Site B and Site SWN Palace of the Mek Southern settlement, <i>qubbas</i> South Wall
FUNJ KINGDOM	Funj Kingdom In Dongola: Kingdom of Dongola Town 17th century–1822	New houses: Site B and Site SWN Southern settlement

PART I



THE MONASTERY ON KOM H

WŁODZIMIERZ GODLEWSKI

THE MONASTERY CHURCH

The origins of the monastery on Kom H are associated with the arrival in Dongola of the first missionaries who brought the new religion to the royal court of Makuria and the Dongolese community. The monastery itself was probably one of the first Christian foundations in Dongola, alongside other sacral complexes like the Old Church and Building X located to the north of the Citadel (Godlewski 2013: 59–64, 80–81).

The Monastery Church on Kom H is situated next to the Central Building (C.B). Together with the Northern Building (NW.B.I), it is one of the oldest structures in the monastic complex [Fig. 1.1]. The church was uncovered by Daniel Gazda in 2003–2006 (Gazda 2003; 2005; 2008; 2010; Jakobielski 2008: 283–288). Additional excavation,

documentation and conservation works were undertaken in 2008–2016 in order to uncover the original layout of the building. This became possible after the transfer of wall paintings belonging to a late development phase of the church to partly reconstructed spaces in the western part of the building. Conservators Dorota Moryto-Naumiuk and Maciej Karpiński dismantled the wall relics from this late phase [see Chapter 2]. This opened the way to further in-depth research in the church naos. Remains of the original stone altar screen were uncovered and a more precise chronology of the construction phases and subsequent transformations of the church was established. It was also possible to reconstruct the original interior of the church [Fig. 1.2].

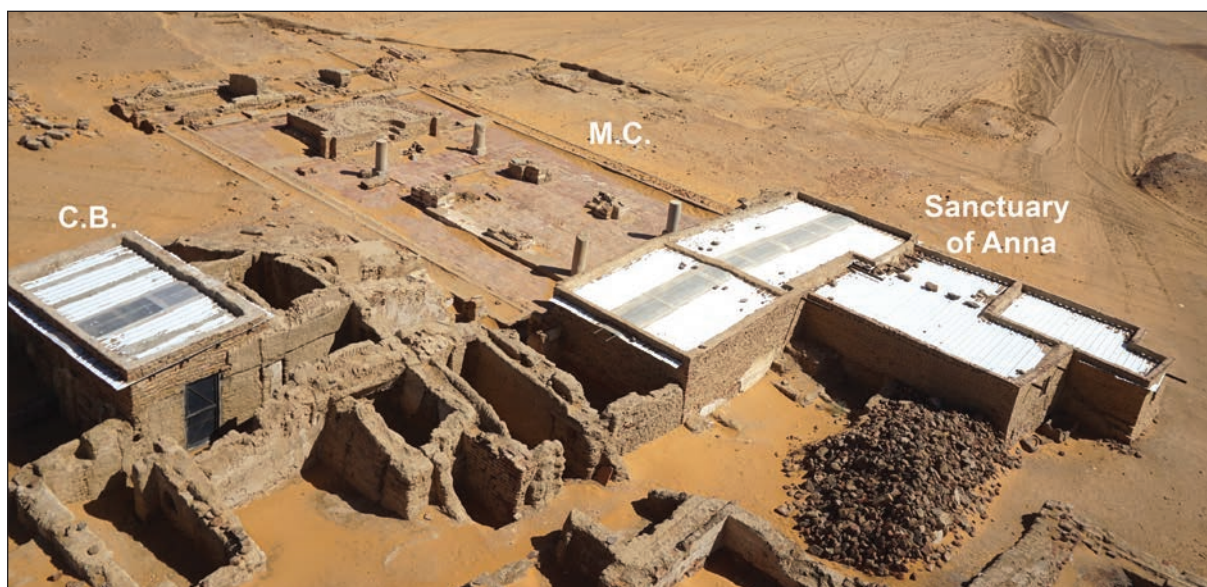


Fig. 1.1. Aerial view of the Monastery Church (center back), Central Building (partly roofed structure on the left), and sanctuary of Anna (roofed complex on the right), state in 2017

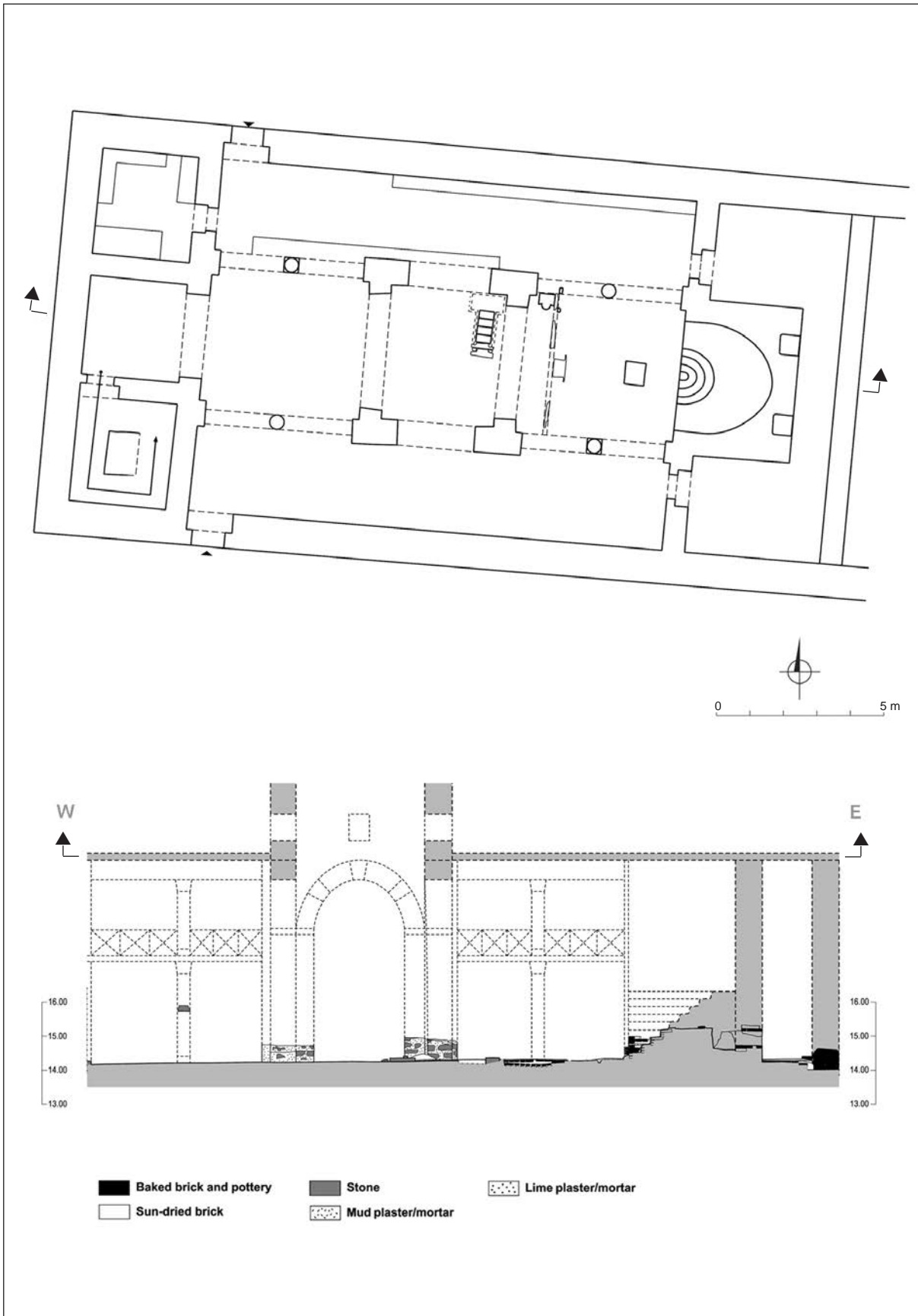


Fig. 1.2. Monastery Church: top, original plan of the church from the mid-6th century AD; bottom, east-west section through the early naos, looking north

EARLY CHURCH (MC.1)

According to its original design, the Monastery Church was intended to have elongated proportions. The planned size of the building is indicated by the foundation layout that survived in the eastern, ultimately undeveloped, part of the church. The planned size of the structure was 31 m by 14 m and the original northeastern corner of the building is preserved at foundation level [Fig. 1.3].

For reasons now unclear, the length of the constructed church was ultimately 27 m. It bears stressing, however, that the builders did not plan for the current east wall of the structure to be the external wall of the church; its width, 0.70 m, is typical of the building's internal walls, and the wall is thinner than the other outer church walls, which measure 1.15 m in width. Also the foundation level of this wall is higher than that of the external walls of the church. It also seems that at foundation level the east wall of the church was not structurally bonded with the side walls. However, conclusions based on the preserved evidence are hampered by the fact that the foundation of the structure's outer north wall was completely destroyed at its junction with the east wall, and the eastern part of the outer south wall is obscured. Nonetheless, it was possible to determine the relationship between the south

and the east walls of the church in the southeastern corner of the *diakonikon* [Figs 1.4, 1.5].

It is uncertain whether the eastern section of the south wall of the building was destroyed or simply never built. At the current stage of research one cannot rule out the possibility that the southeastern part of the building was razed along with some of its foundations. The originally planned eastern part of the church was at a later stage adapted to other functions, including funerary purposes. Nothing suggests, however, that construction of this eastern part of the church was continued above foundation level. It is probable that the original version of the project was abandoned while the building of the church was still in progress, and the logical consequence was the reduction of the building's length to 27 m. The originally planned eastern part was never built. The internal partition wall behind the apse thus became the external wall of the building. This wall is preserved almost exclusively at foundation level, up to the level of internal flooring. It is impossible to establish how its external face was finished, as no plaster has been preserved [Figs 1.2 top; 1.5].

The monastery church was built of baked bricks (32–33 cm by 15–16 cm by 6.5–7 cm) and of sandstone blocks used only for the central pillars and the arches that connected them.



Fig. 1.3. Church foundations: northeastern corner, view from the north

Architectural decoration elements were made of granite (columns) and sandstone.

STATE OF PRESERVATION OF THE ORIGINAL BUILDING

In general, most of the church is preserved no higher than the level of its internal flooring. Apart from three stone pillars and two lower

parts of columns, the features rising above floor level in the naos date from a later phase, when the interior was remodeled. The internal walls of the church were dismantled along with their foundations, and fragments of the latter survived only in the western and eastern parts of the building [see *Figs 1.2 top; 1.7*].

The walls of the church were founded in deep trenches adjusted to the width of the prospective



Fig. 1.4. Church foundations: left, state of preservation of the east wall of the church; right, eastern part of the south outer wall of the church

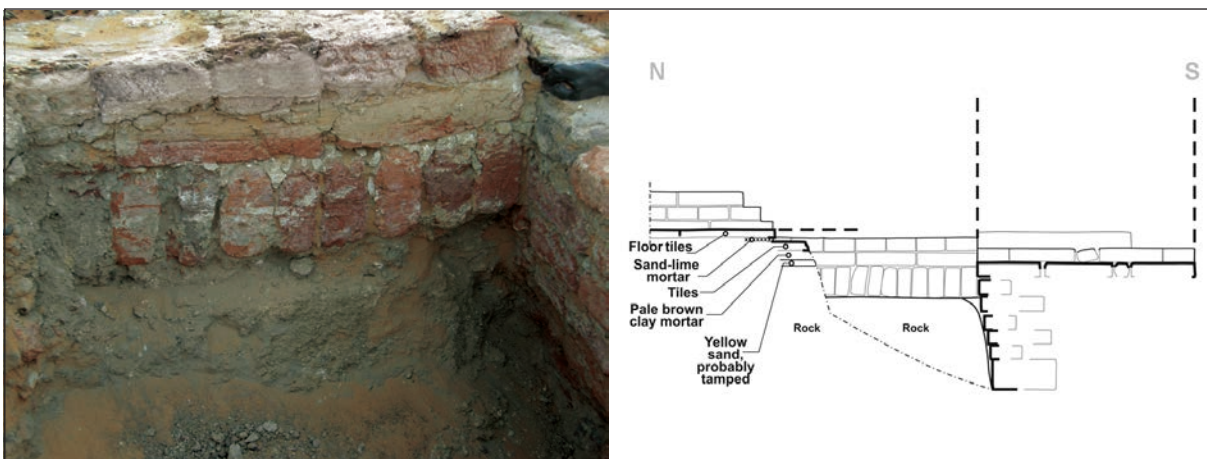


Fig. 1.5. Foundations of the south and east walls in the southeastern corner of the diakonikon

walls. The north wall was founded 1.15 m below the level of the floor in the naos, the south wall 0.90 m, and the thinner east wall behind the apse 0.57 m below this level [see *Fig. 1.5*]. The foundation level of the west wall has not been established.

ORIGINAL BUILDING LAYOUT

The church was planned as a basilica with a tower in the central part of the naos [see *Fig. 1.2 top*]. The nave was wider than the side aisles (4.70 m versus 3.00 m). The back wall of the apse

was separated from the east wall of the building by a corridor that connected the two pastophories. The two corners in the western part of the building were walled off to form rooms; the southern one housed a staircase. Two entrances leading into the church, one from the south and the other from the north, were located near these western corner rooms. The vaulted ceilings of the nave and aisles were supported by four central pillars and four granite columns [*Fig. 1.6, 1.8*]. The existence of vaults is suggested by the fact that the fill inside the building contained vault bricks, baked with characteristic side

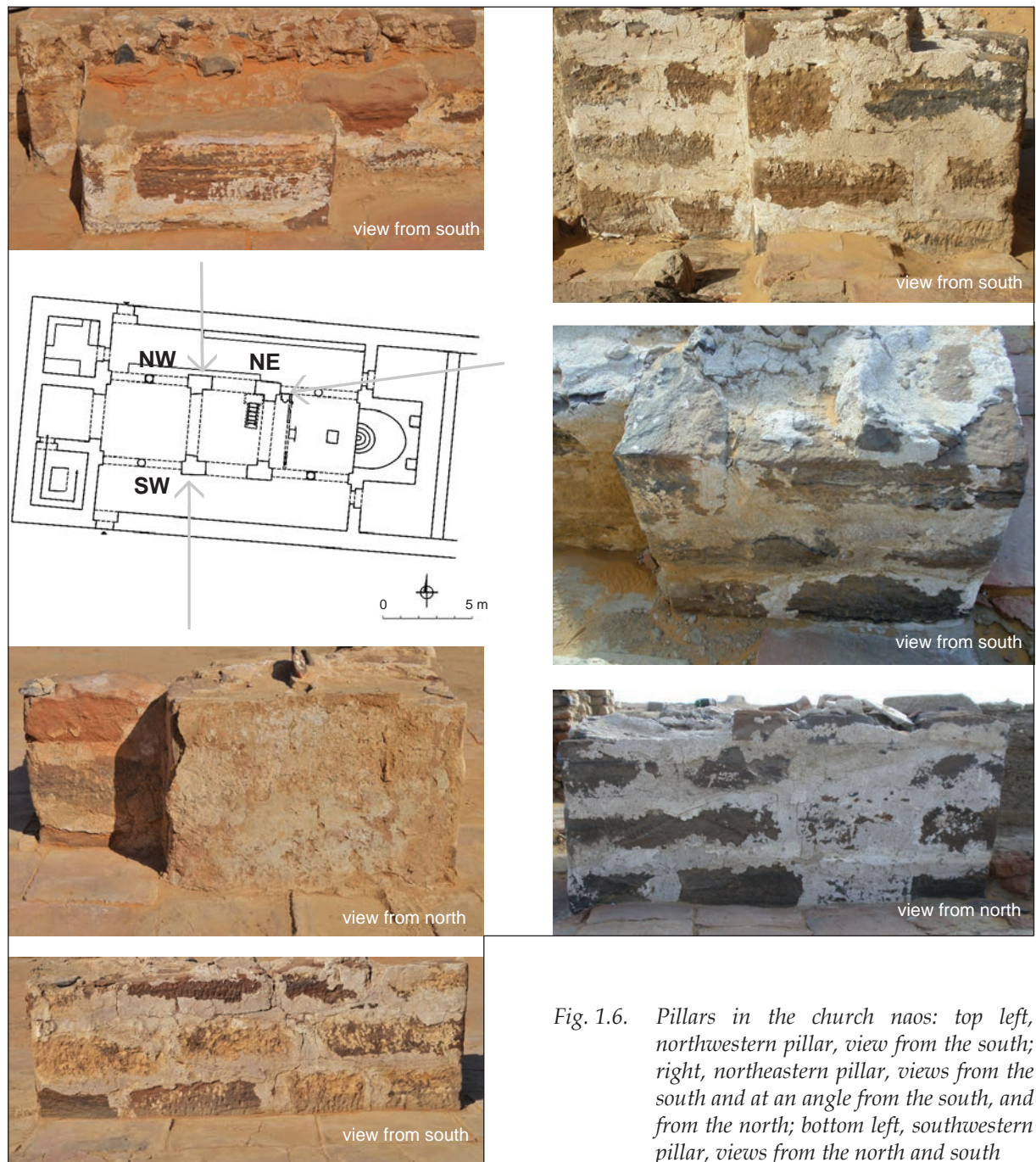


Fig. 1.6. Pillars in the church naos: top left, northwestern pillar, view from the south; right, northeastern pillar, views from the south and at an angle from the south, and from the north; bottom left, southwestern pillar, views from the north and south



Fig. 1.7. Southern side of the southwestern pillar in the church naos: left, earlier pavement seen in test under ceramic tile floor; right, later ceramic tile floor abutting the face of the pillar



Fig. 1.8. Columns in the church naos: top right, outline of lost southwestern column; bottom left, northwestern column; bottom right, southeastern column

depressions that improved the cohesion of the mortar binding them. Vaults were sprung probably over the western and eastern rooms of the building.

CHURCH NAOS

Pillars

The central part of the naos was occupied by a tower (5.80 m by 6.20 m), of which only three stone pillars survived. The pillars were built of broken ferruginous sandstone blocks worked only on the exposed surfaces and bonded with lime mortar. Three of these supports are preserved up to a height of approximately 0.50 m, while the fourth (southeastern) one was completely dismantled. Its location, however, is discernible from the layout of the floor tiles. The pillars were built on continuous baked-brick footings stretching between the western rooms of the church and the apse of the basilica; the footings also separate the nave from the side aisles.

The northwestern pillar, founded on the northern footing, is uniform in construction and consists of a wall, 1.58 m in length and 0.86 m in width, with a pilaster, 0.40 m long and 0.70 m wide, attached to it from the south. The preserved height of the structure is 0.56 m above the floor level [Fig. 1.6]. The northeastern pillar, also founded on the northern footing, has a uniform structure and it, too, consists of a wall, 1.58 m in length and 0.86 m in width, and a pilaster, 0.40 m long and 0.70 m wide, attached to it from the south. The preserved height of the structure is 0.59 m above the floor level [see Fig. 1.6]. The southwestern pillar, founded on the southern continuous footing, is uniform in construction and likewise consists of a wall, 1.58 m in length and 0.86 m in width, and a pilaster, 0.40 m in length and 0.70 m in width, attached to it from the north. The preserved height of the structure is 0.41 m above floor level [see Fig. 1.6]. The southeastern pillar was completely removed, yet its shape and size are discernible in the outline of the adjoining flooring. This pillar was also founded on the southern continuous footing and consisted of a wall at the southern side and a pilaster on the northern side.

In the 2012 season, trench 10.01 was excavated in order to determine the relationship of the stone pillars to the floor and to the footing. The size of the trench was 1.00 m by 0.30 m [Fig. 1.7]. Two floor tiles were removed by the western edge of the southern face of the southwestern pillar. The floor tiles, 0.50 m by 0.30 m each, lay

parallel to the pillar's face, on a thin (0.02–0.03 m) layer of fine gray sand (bedding), covering a carefully laid course of baked bricks perpendicular to the continuous footing, on which the pillar was founded. Also noted on the bricks were drips of excess lime mortar used to bind the sandstone blocks of the pillar. The surface of the mortar was slightly smoothed, it is therefore beyond doubt that the pillar was founded on the footing after the adjacent course of bricks had been laid: the plaster and mortar preserved on the southern face of the pillar are the same as those preserved on the bricks below the flooring, so the plaster must have dripped down from the pillar face.

The upper surface of the footing is at a level of 14.13 m and its foundation is on bedrock at an elevation of 13.75 m. Only the southern face of the footing has been uncovered; it was built of baked brick, and its foundation consisted of a course of bricks on edge followed by three courses of bricks on bed. The footing's height is approximately 0.38 m; its width has not been determined but it must have been adjusted to the size of the pillars.

By the northern face of the footing, below the layer of bricks, there was a uniform layer of finely crushed rock and baked brick; this fill was tightly packed and very hard.

Columns

The same continuous footing on which the stone pillars were founded also supported four granite columns standing to the east and west of the central tower. Two columns, the southeastern and the northwestern one, are preserved *in situ*. The other two were dismantled, but it is possible to establish their location by investigating the layout of the floor tiles that abutted their bases [Fig. 1.8 top right]. Each of the two preserved columns was made of a monolithic block of gray granite carved to form a shaft and a base. The upper parts of shafts of both columns were destroyed. The northwestern column, over 1.82 m in height, had a base measuring 0.50 m by 0.50 m and 0.30 m high [Fig. 1.8 bottom left]. The southeastern column (over 1.45 m high, with a square base 0.50 m to the side and 0.38 m high) was overturned when the church had already been partly buried and destroyed [Fig. 1.8 bottom right].

SANCTUARY

The space partitioned off as the sanctuary measured 4.30 m by 5.20 m and was located in the

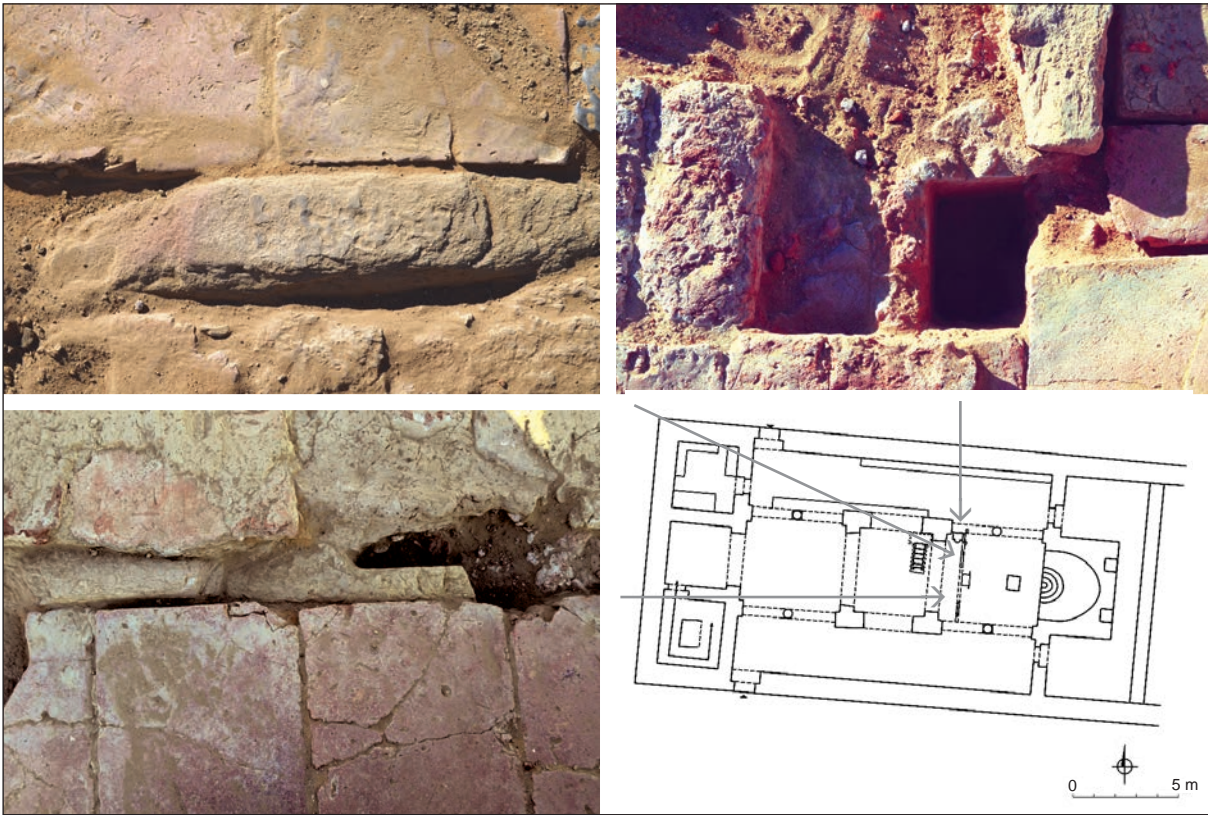


Fig. 1.9. Evidence for the location of the original sanctuary: top and bottom left, broken slabs of the altar screen between the flooring tiles; top right, outline of a removed altar screen post in the pavement



Fig. 1.10. Sandstone slab from the altar screen

eastern part of the nave, in front of the apse filled by the synthronon. At a later stage, this space was remodeled and destroyed by burial pits (Gazda 2005: 290–292). The original location of the sanctuary was established thanks to fragments of broken slabs from the original altar screen preserved below the flooring [Fig. 1.9 left].

The slabs of the western section of the altar screen were embedded in the fill below the floor and additionally supported by small posts mounted on their inner side [Fig. 1.9 top right]. Only postholes survive on the northern side of the western screen. The distance between posts was 0.52 m; the holes in which they were mounted varied in size: 19 cm by 12.5 cm and 14 cm by 15 cm.

One of the sandstone altar screen slabs (dimensions: H. 97 cm; L. 110 cm; Th. 12.5 cm) was uncovered lying in front of the west screen wall, in the naos of the church [Fig. 1.10]. The surface of the slab is badly damaged, with cracks and chips in the upper and lower parts. Only one side of the slab was studied, since raising it could have led to its complete destruction. Within a border 15 cm wide were two bands, each 10 cm wide, one horizontal and the other vertical, dividing the space on the slab into four fields decorated in shallow relief. The decoration is very eroded and hardly discernible. The motifs in the two lower(?) fields were geometrical, with diagonal lines intersecting in the middle and circular elements inscribed into the resulting triangles. Decoration in the two upper(?) fields was floral with symbolic elements including a small cross.

The entrance to the sanctuary was situated in the central part of the west altar screen wall. The surviving stone threshold of this entrance was 0.88 m wide and 0.39 m long. In the shorter sides, it had notches (14 cm by 17 cm and 15 cm by 16 cm), in which the slabs of the screen had been lodged. The width of the entrance was 0.58 m. No elements survived of the lateral north and south screen walls, which were erected on the continuous footings, on both sides of the eastern columns.

The original altar was situated in front of the synthronon, which filled the apse. One can only hypothesize as to the exact location of the altar based on relics and traces extant in the floor of the sanctuary; although the floor underwent changes during the period when the sanctuary was in use, the stone bases installed in it to hold up the pillars supporting the altar top seem to have retained their original position. Of the four bases, only two are preserved *in situ*. They are located centrally, and the distance between them (0.60 m) allows for the reconstruction of only one of the dimensions of the altar. Hypothetically,

the altar mensa could have measured 1.00 m in the length and about 0.80 m in width.

Apse and synthronon

The apse, 3.60 m in width and 3.00 m in diameter, was flanked on the front by two pilasters (W. 0.70 m; Th. 0.20 m), which presumably supported the ceiling beams of the side aisles [see Fig. 1.2 bottom]. The inside of the apse was completely filled by the synthronon, only the central part of which survives [Fig. 1.11].

The synthronon was a semicircular feature consisting of several concentrically arranged steps, of which only the bottom two are extant. On the top step of the synthronon there might have been a platform or throne, the stone backrest of which was found below the floor next to the northeastern pillar in the naos. This sandstone slab (dimensions: H. 0.505 m; W. 0.54 m; Th. 0.08 m) has a rounded upper edge with two finials on the sides.

PULPIT

The pulpit, located in the inner corner of the northeastern pillar, was oriented transversely in relation to the axis of the nave [see Fig. 1.2 top], which was an unusual solution. It consisted of a flight of steps and a platform, which are no longer preserved *in situ*, but their dimensions can be reconstructed on the basis of the extant relics. The slab measured 0.62 m by 1.15 m, and the steps 1.45 m by 0.75 m. Both the steps and the platform of the pulpit rested on structural supports, four posts in each case.

Of the four posts supporting the platform, the lower parts of three are still lodged below the preserved flooring. The fourth post was removed, but the posthole in which it had been mounted is preserved in the pavement next to the pillar. The posts supporting the pulpit stairs were also lodged in postholes below the flooring. The first step of the stairs is preserved *in situ* [Fig. 1.12]. A reconstruction of the pulpit using the preserved architectural elements – slabs and posts – requires further investigation.

The pavement in the naos as well as in the western and eastern rooms of the basilica consists of large ceramic tiles (50 cm by 32 cm) laid in a regular pattern on a thin bedding of sand. Below it was a brick leveling layer, which in all likelihood could not have been an earlier floor, since it did not directly abut the footing of the pillars and columns, while the tile floor situated above the top surfaces of the footings had its



Fig. 1.11. Central part of the synthronon, frontal view from the west



Fig. 1.12. Relics of the pulpit preserved at floor level, view from the west

pattern adjusted to the placement of the pillars and column bases. The surviving floor is thus part of the original furnishings of the church.

Continuous, low benches were found in the northern aisle of the naos, along the north wall, as well as along the pillars and columns on the southern side of this aisle. They may have been intended for the monks, who could access the church directly from within the monastery through the northern entrance.

PASTOPHORIES

The apse was flanked by two rooms accessible from the naos and connected by a corridor running behind the back wall of the apse. The northern room measured 4.40 m by 3.20 m. In its northern half, the floor was destroyed by a deep pit. The southern room was identical in size; its floor was also partly destroyed, and its south wall, which is also the south wall of the church, was completely dismantled. The two rooms were connected by an eastern corridor measuring 1.40 m in width. No original furnishings were preserved in either of the rooms.

WESTERN PART OF THE BASILICA

The western part of the basilica contained three rooms. Situated centrally on the axis of the naos was a square room measuring 3.40 m by 3.40 m, entered from the nave through an arched passageway 2.05 m wide. Two narrow benches by the north and west walls seem to belong to the original furnishings of the room. A passageway in the southeastern corner of the room led south to a corner room (3.30 m by 3.50 m), which housed a staircase, now completely destroyed to foundation level.

Another room with dimensions 3.30 m by 3.50 m was located in the northwestern corner of the basilica. It was entered from the northern aisle. It is uncertain whether the preserved elements of its interior – a small cellar by the south wall, a masonry table next to the entrance by the east wall, and benches by the north and west walls – were part of the original furnishings; it is very likely that they were added at a later date (Jakobielski 2008: 287–288, Fig. 6).

The Monastery Church is a unique structure without parallel in Nubia. A basilica with a central tower is a sacral structure usually associated with Byzantium of the pre-Justinianic period (Krautheimer 1981: 258–260), and such churches were popular in Cilicia. The dating of the Monastery Church in Dongola is based on pottery

recovered from the foundation fill of the building (Bagińska 2008a: 370, Fig. 5a–g). Such pottery, produced in Dongola in the 6th century, was also found in the foundation contexts of Dongola's Old Church (Gartkiewicz 1990: 278–279) and Building X (Godlewski 2013: 60–63). Therefore, the Monastery Church was probably built by missionaries who arrived in Dongola in the mid-6th century. With the exception of the central tower, the plan and furnishings of this three-aisled basilica determined the salient features of Dongolese and, more generally, Makurian architecture for centuries to come. These characteristic traits are the location of the sanctuary in the eastern part of the nave; an apse filled with a *synthronon*; pastophories joined by an eastern corridor running behind the apse; the tripartite western section of the basilica; and two entrances, one from the south and the other from the north, situated in the western part of the building. All these elements became the main characteristics of Makurian sacral architecture.

LATE CHURCH (MC.2)

The remodeling of the Monastery Church consisted in changes to its interior, the entire naos and adjoining rooms, as well as entrances to the church from the north and the south. The external body of the building remained mostly unchanged, apart from the addition of a vestibule in front of the southern entrance and possible changes to the upper part of the building, although data that might lead to conclusions regarding this aspect are lacking. One cannot ascertain whether all the changes were introduced simultaneously or in phases. The materials used in the new structures, their technical characteristics, as well as paintings on the new partition walls of the naos suggest that the changes were made at the same time. Although these alterations must have had a significant impact on the functioning of the church interior, it is difficult to identify the functions of the delimited spaces (the sanctuary being the only exception). The earliest new structure was the small, square vestibule (external dimensions 3.90 m by 3.90 m) added in front of the southern entrance. Its appearance may be associated with a broader 11th–12th-century tendency to build vestibules of this kind in entrances to sacral buildings. The northern entrance to the basilica was reserved for the monks and led to the so-called Central Building currently dated to the late 6th–early 7th century.

The remodeling of the basilica interior was a complex engineering project, which transformed the entire space of the naos [Fig. 1.13]. It would seem that the remodeling process was uniform in terms of both material (sun-dried brick used for all partition walls) and function, albeit we lack certainty in this regard. An assessment positing a more complex chronology of the changes was proposed by Stefan Jakobielski (2008: 286–288).

SANCTUARY

A new dividing wall of sun-dried brick was built around the eastern pair of columns, stretching north of the northeastern column and south of the southeastern column and cutting across the nave to the west of both columns. Thus, the partition walled off the eastern part of the naos along its entire width and formed a new sanctuary, considerably enlarged in comparison to the original one. The enclosed area comprised the eastern part of the nave (4.80 m by 4.70 m; 22.60 m²) and the eastern parts of the two side aisles (two spaces measuring 3.00 m by 2.84 m; 17.1 m² in total). The entrance to the sanctuary was situated in the center of the partition in the nave. The passages to the pastophories did not change.

The partition wall delimiting the sanctuary was built of large sun-dried bricks (dimensions 35–36 cm by 18 cm by 8 cm) and was founded on the floor. Its maximum preserved height is 1.07 m, but there is no indication of its original height. The walls, about 0.40 m in width, were plastered and covered with paintings, which survived in fragments on the western face: in the nave on both sides of the entrance, and in the southern aisle (Martens-Czarnecka 2011: Cat. Nos 142, 143, and 144). Numerous Greek inscriptions, most of them school exercises, survived next to a painting of Christ on the western face of the wall in the southern aisle [Fig. 1.14].

The entrance to the sanctuary was 0.80 m wide and had a granite threshold, which presumably shifted slightly to the east of the location of the entrance to the original sanctuary.

The flooring in the central part of the sanctuary was re-laid: a brick floor was introduced in place of the old ceramic-tile floor [see Fig. 1.7 right]. In a considerable part of the sanctuary, the new floor followed no regular pattern and was covered with a smoothed layer of lime plaster with an admixture of gravel. The new flooring in the sanctuary was in all likelihood associated with the interment of burials in this area (Gazda 2005: 290–292). The original floor remained *in situ* in the lateral parts of the

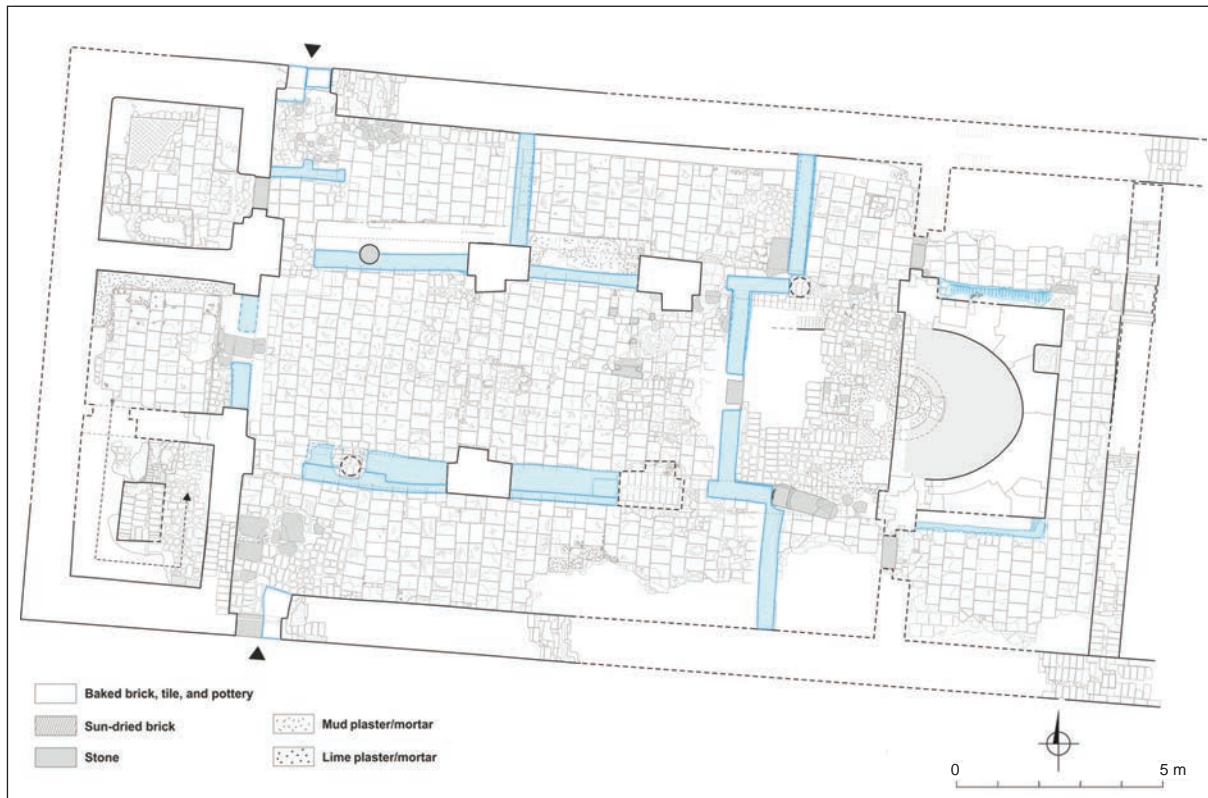


Fig. 1.13. Plan of the Monastery Church after structural changes (indicated in blue)

sanctuary, although it is lacking altogether in a vast area along the south wall, possibly due to the existence of a grave in this area of the sanctuary (Gazda 2005: 290).

The altar, situated in the central part of the sanctuary directly in front of the *synthronon*, was built of baked bricks and stone blocks. It is fragmentarily preserved (dimensions: H. +0.70 m; base 0.70 m by 0.70 m). In the floor on the eastern side of the altar are two stone blocks with rectangular depressions, in which vertical elements (*ciborium* columns?) were probably once lodged. Next to them, lower parts of amphorae are embedded in the floor, probably in order to secure the vertical elements in place. Such traces are absent on the western side of the altar, where the poor state of preservation of the flooring hinders interpretation (Gazda 2005: 287, Fig. 2). The sandstone blocks with square depressions may have been part of the earlier altar. If so, then the mensa would have rested on vertical stone pillars.

NAOS

Once the eastern part of the naos was walled off to form the new sanctuary, the rest of the space was divided into several rooms connected only by narrow passages.

The southern aisle, after its eastern part had been separated out, was partitioned off from the nave with walls built between the pillars and on both sides of the western column. Its

communication with the nave was enabled by two passages: the eastern one, 0.60 m wide, and the western one, 1.20 m wide. The walled-off space, 12.80 m by 2.80 m in size, contained no preserved furnishings. The only indications of its possible function are the painting and inscriptions on the east wall (i.e., the sanctuary partition in the southern aisle). Therefore, teaching activity might have been one of the functions of this space.

The northern aisle was divided into two rooms, the eastern and the western one. The dimensions of the eastern space, accessible only from the nave through a narrow passage measuring 0.65 m in width and located by the sanctuary wall, were 6.40 m by 2.40 m. A low bench, 0.40 m in width, abutted the entire length of the north wall. Next to the partition wall between the pillars there was another bench, also low but wider (0.75 m), remaining from the previous construction phase of the basilica. The function of this room was not established, but the presence of benches might suggest its use as a place of assembly. It could have been reserved for monks partaking in the liturgy separately from the lay congregation.

The western room in the northern aisle measured 6.00 m by 2.40 m. It was accessed from the Central Building via a constricted northern entrance and from the nave through a 0.84-m-wide passage along the west wall, by the northwestern pilaster. A western doorway, in turn, gave access to the northwestern corner



Fig. 1.14. Representation of Christ and educational inscriptions in Greek on the altar screen closing the southern aisle of the Monastery Church after structural changes, view from the west

room of the basilica. A small wall with a central reinforcing pillar was erected opposite the northern entrance inside the church. It was perpendicular to the west wall and formed a kind of screen, 0.30 m wide and 1.85 m long. Its preserved height is 1.20 m.

Underneath the south partition wall was a low (0.48 m in height) but wide (0.70 m) bench, slightly raised but otherwise unchanged since the previous construction phase.

The east and south walls of the room bore partly preserved paintings. The one on the east wall depicted two standing figures (Martens-Czarnecka 2011: Cat. No. 136c), and the south



Fig. 1.15. Wall separating the nave (on the right) from the southern aisle, view from the east

wall carried fragments of a larger Nativity scene (Martens-Czarnecka 2011: Cat. Nos 136A–B).

The west room might be identified as a kind of vestibule due to its location by the north entrance to the church, but such an interpretation is rendered difficult by the paintings, especially the Nativity scene and the adoration of the seated Makurian Holy Trinity by two figures, a man and a woman, painted on the western pilaster (Martens-Czarnecka 2011: 159 and Cat. No. 137; Makowski 2015: 304).

The nave, now walled off from the side aisles, remained almost unchanged. Its western end was closed off with walls introduced into the western archway; its eastern end, in turn, was delimited by the new altar partition. The new walls on the western side carried partly preserved painted decoration (Martens-Czarnecka 2011: Cat. Nos 138–139).

The western archway was blocked with a mud-brick wall that most probably reached the top of the arch. The new entrance to the west was located in the center of this wall and measured 0.70 m in width. Partly preserved paintings adorned the eastern face of the wall on both sides of the entrance (Martens-Czarnecka 2011: Cat. Nos 140–141).

A bench, 0.48 m high and 0.64 wide, abutted the northern face of the thin (0.18 m wide) south wall separating the nave from the northern aisle.

The mud-brick wall between the southwestern and southeastern pillars was built as two parallel walls, each 0.18 wide, the space between them filled with rubble [Fig. 1.15]. Up to a height of 0.48 m the entire wall was 0.82 m wide, but above this level only the south facing wall is preserved (up to about 0.70 m in height). Thus, on the southern face, the wall separated the southern aisle from the nave, while on the northern face, it formed a bench, 0.64 m wide and 0.48 m high. Currently the bench is topped with red bricks laid crosswise on the upper surface.

The rubble fill of the bench contained numerous ceramic sherds, mainly storage vessels, and lime plaster fragments with Greek inscriptions, among them one with the complete text of the Constantinopolitan Creed (see *Chapter 3*).

NORTHERN AND SOUTHERN ENTRANCES TO THE CHURCH

The southern entrance to the church led through the southern vestibule. The original entrance, whose external width was 1.10 m, was constricted to 0.65 m by building a wall of sandstone blocks against the original eastern jamb in the

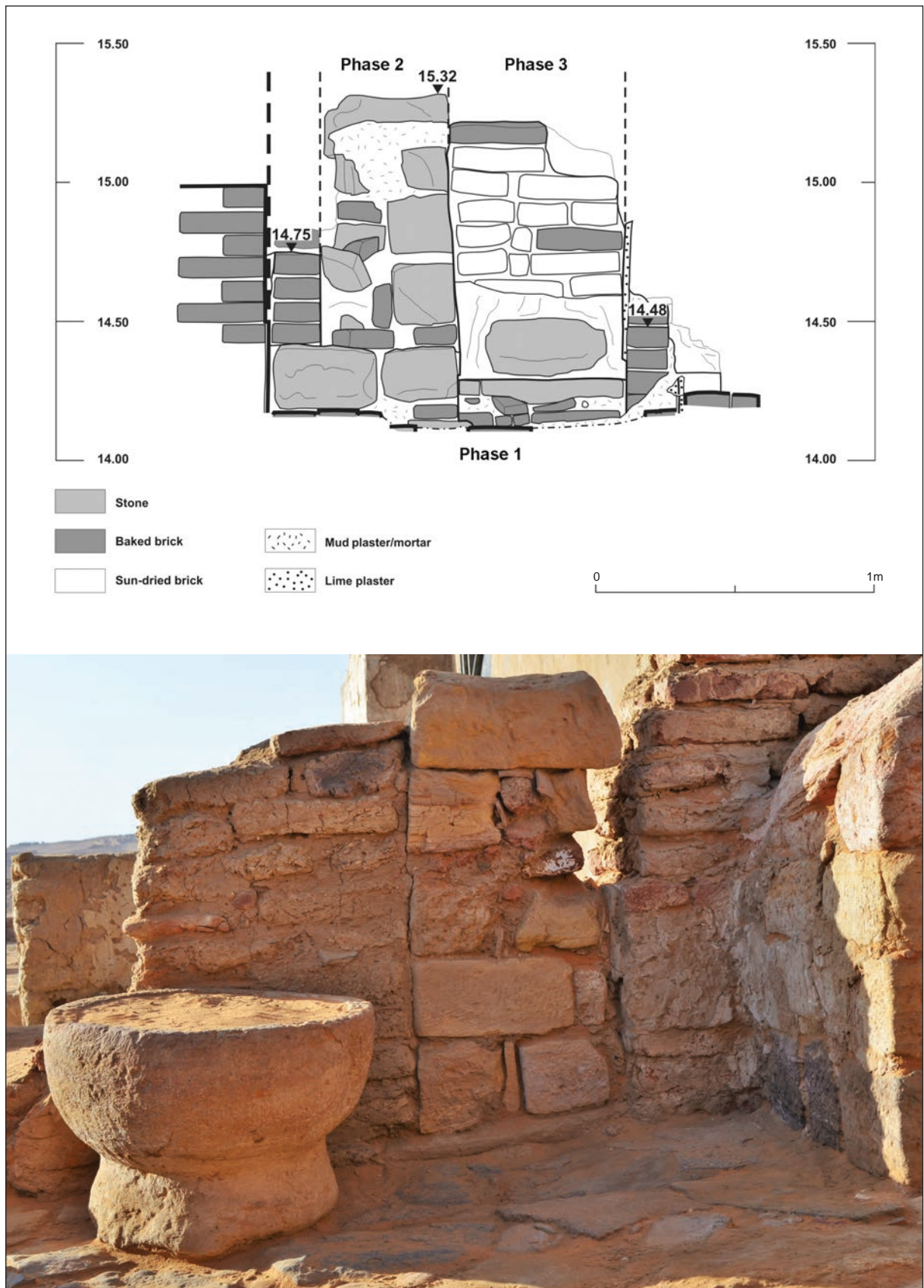


Fig. 1.16. Northern entrance to the church: top, evidence of three structural phases, view from the inside; bottom, blocked doorway following two structural changes, view from the north; a sandstone baptismal font stands next to the blocking wall

doorway. The northern entrance led from the Central Building. Also in this case the width of the original entrance was reduced from 1.10 m on the outside to 0.60 m by erecting a structure of sandstone blocks by the western jamb. Original stratigraphy preserved by the northern entrance permitted a comprehensive analysis of the structural changes done in the northern entrance itself leading to a reconstruction of three successive stages of building work inside the church (HC) [Fig. 1.16 top]:

► *HC.1*: the northern entrance in this phase had splayed jambs (external width: 1.10 m; internal width: 1.50 m) and a threshold of stone slabs.

► *HC.2*: the northern entrance was constricted to the width of 0.60 m by adding a wall by the western jamb in the northern, external part of the doorway. The wall, 0.50 m wide, was built of stone blocks laid in regular courses visible in the external, western face of the new entrance and of bricks that filled the space by the face of the jamb. The threshold was raised by adding a sizable stone block.

The blocking wall in the entrance is preserved up to a height of 0.90 m. The used sandstone blocks were probably reclaimed from arches and pillars of the tower, which would suggest that

the narrowing of the entrance took place after the destruction of the upper part of the church. The possibility of a link between this destruction episode and the first Mamluk invasion of the second half of the 13th century requires further inquiry. In any case, the narrowing of the entrance was probably associated with the erection of walls within the naos and the resulting rearrangement of its interior, although it also cannot be excluded that this remodeling was performed at a later stage.

► *HC.3*: The latest phase brought the blocking of the northern entrance [Fig. 1.16 bottom]. The passageway was carefully filled with a mud-brick and baked-brick wall in a regular bond, with a neat and vertical external face. The wall was founded on a layer of sand overlying the raised threshold of the entrance.

The closing of the northern entrance to the church may have been associated with its abandonment. The Central Building to the north of the church, as well as the northwestern monastic complex hold evidence suggesting that the monastery was still active in the 14th and even the 15th century. By that time, the church was probably already in ruins.

DOROTA MORYTO-NAUMIUK

TRANSFER OF WALL PAINTINGS FROM THE MONASTERY CHURCH ON KOM H

Paintings in the Monastery Church on Kom H were uncovered in 2002–2005 (Gazda 2003: 234–235; 2005: 292) and provisionally secured *in situ*. In the 2016 season, restoration work in the church necessitated the transfer of six compositions preserved on mud-brick walls originating from a late building phase [see *Chapter 1*, pages 25–30, especially *Fig. 1.13*]. Thin partition walls separating the nave from the side aisles and surrounding the sanctuary carried a series of representations and inscriptions, which were in danger of destruction due to the weathering of their supports.

The following scenes, originally located in the northern and southern aisles of the church, as well as on the west wall of the nave

(Martens-Czarnecka 2011: Cat. Nos 136–139, 141, 144) were transferred to a new support: the Nativity (Cat. No. 136A–C); the Holy Trinity enthroned, flanked by donor figures (Cat. No. 137); an architectural motif with a representation of a horse (Cat. No. 138); an architectural motif and Archangel Michael (Cat. No. 139); guilloche pattern (Cat. No. 141); and a standing figure of Christ (Cat. No. 144) together with an inscription in black ink.

TRANSFER METHOD

One of the necessary preservation methods used during archaeological excavations is the transfer of wall paintings. Murals are transferred to



Fig. 2.1. Part of the mural showing the Nativity on a partition wall selected for dismantlement

different spaces if the pieces under conservation prove impossible to secure *in situ* due to their location on isolated walls (as was the case in the Monastery Church in Old Dongola) and when building a shelter over the whole structure is not economically viable [Fig. 2.1].

All transfers were performed with the *stacco* method (removal of a painting together with a layer of plaster). Use of the *strappo* method, or removal of the paint layer only, was also an option. However, in field conditions mounting the painting on a new support was likely to prove very difficult. The choice of the *stacco* method was dictated by several factors. The first was that using this method one can preserve the texture and uneven form of the plaster surface. The *stacco* method also makes the process of cutting the painting off the structural support much safer, as the plasters on which the paintings were executed are delicate and fragile. Another advantage is that the layer of plaster remaining on the back makes it easier to mount the painting on a new support.

The principle that permits to remove a wall painting and remount it on a new support is the polarity of adhesive solvents. The transfer of a wall painting is a multi-stage process which comprises the following steps: securing, impregnation of the painting layer, attachment of the facing, cutting the painting off the wall, treatment of the back, mounting the painting on a new support, removing the facing, and esthetic treatment of the face.

SECURING AND IMPREGNATING THE PAINT LAYER

The impregnation of the paint layer was always preceded by the dry-cleaning of the faces of paintings or plasters in order to remove any loose soil deposits. Cleaning the surface of the painting is crucial, as it helps avoid attachment of dirt to the surface when applying resin during the impregnation stage. It was also often necessary to make under-plaster injections of aqueous dispersions of acrylic resin (PRIMAL AC 33) or poly-vinyl acetate (MOWILITH DMC2). This treatment is performed in order to consolidate the plaster and prevent damage during detachment from the structural support. Losses in the plaster layer were filled and edges were lined with putty.

Lime-sand mortar (1 part lime to 3 parts sand) was used for infillings. Especially the filling of large voids allowed for better attachment of the facing. Work on various pieces has shown that minor plaster losses may be left unfilled without threatening the integrity of the whole piece.

Impregnation of the paint layer was conducted using a 2 to 5% solution of acrylic resin PARALOID B72 in acetone. It was usually applied several times with a brush. The stage was considered finished upon noting that further application would give the painting a glossy surface. Proper impregnation is crucial for the safe removal of the facing further on.



Fig. 2.2. Markings on a faced painting ready for transfer to a new support



Fig. 2.3. Cutting the plaster along the lower edge of the painting selected for transfer, before attachment of the facing



Fig. 2.4. Dismantlement of the wall during transfer of the Nativity scene

FACING

The facing of a wall painting is a process that consists in covering the mural face with Japanese tissue and textile layers to protect the paint layer during removal from the wall and treatment of the back. Various adhesives may be used for attaching the protective coats. It is important, however, that they be soluble using a substance different from the one used to impregnate the paint layer (i.e., PARALOID B72).

Animal glue (PERELKA) dissolved in water in proportions 1:7 was used to attach the facing. This adhesive is ideal for the task, as it is sufficiently strong yet easy to remove. Its greatest shortcoming in field conditions is the need to heat it up prior to application.

Two layers of Japanese tissue were attached. Instead of gauze, linen or cotton textile, a layer of polyester chiffon was applied to the face. It is an ideal choice, as this material is easily attached and there is no risk of leaving imprints of the canvas on the face, for the textile is thin and very finely woven, but also strong enough to support heavy plaster fragments.

Broad margins of textile left around the murals were nailed to wooden frames. Such trusses facilitate conservation work and protect the paintings from damage, breaks, or tears during the detachment stage.

It proved useful to mark the vertical and the horizontal axes of the faced paintings, as well as the top and bottom edges [Fig. 2.2]. Such marks facilitate the correct attachment of paintings to their new support. The lack of these indications may lead to errors during re-mounting.

DETACHMENT

Detaching a mural from the support is probably the most hazardous stage of the transfer process. The painting is deprived of its natural support, i.e. the wall.



The walls that carried the paintings came from late construction phases of the Monastery Church and were selected for dismantlement. Thus, it was possible to detach the faced and trussed murals gradually by removing consecutive bricks one by one, starting from the top [Figs 2.3, 2.4]. After dismantlement of the wall, the painting remained attached to the truss.

TREATMENT OF THE BACK

After removal from the wall, the back of a painting is very uneven, therefore its surface requires smoothing [Fig. 2.5]. Sanding down and evening out the back is necessary in order to obtain a surface that permits mounting the mural on a new support. Furthermore, removing the surplus plaster significantly decreases its weight, facilitating further work.

Work on the back of the painting requires a flat surface on which the piece can be placed face-down. The detached plaster fragments are flexible and adjust to the uneven surface. Rasps and metal-cutting blades were used as scrapers to even out the backs. Subsequently, loose dust particles were carefully removed with dry brushes. After removal of excess plaster and evening out the surfaces, the backs were consolidated. The solution used for under-plaster



Fig. 2.5. Back of the painting: left, immediately after detachment from the wall; right, the same painting after the back surface was evened out

injections was applied with a brush to the surface, which was moistened with water and alcohol in order to decrease surface tension. It was important to keep the saturated plaster fragments in the shade or to cover them with foil or tarp in order to slow down the evaporation process. If the injection fluid dries up too quickly it leaves a film of adhesive on the plaster surface.

After consolidation of the back sides, losses were filled with lime-sand mortar (1:3). When the infillings set, mesh was placed on the backs and attached using a mixture of sand and a dispersion of polyvinyl acetate in water. The piece of mesh was always several centimeters larger than the transferred plaster fragment so that its

edges could be attached to the new support at the time of mounting. A fiberglass mesh brought from Poland was used, as it is durable, flexible, and does not decompose. After attaching the mesh, the faced murals were once more nailed to trusses.

MOUNTING ON A NEW SUPPORT

After treatment and preparation of the back, the paintings had to be mounted on a new support. Given the changes that tend to befall secondary supports in Sudan, it was considered the best solution to mount the detached items on walls. This type of structural support is akin to the



Fig. 2.6. Pressure on the transferred mural with the Nativity scene as it is mounted in a new location



Fig. 2.7. Removal of the facing from the transferred Nativity mural



Fig. 2.8. Transferred Nativity mural after removal of the facing

original and does not warp, remaining stable and durable.

In order to prepare suitable places for mounting the transferred wall paintings, new walls were built on the preserved remains of original walls in the western part of the Monastery Church, thus rebuilding the rooms that originally existed in this area. The walls were built of baked bricks (partly of new ones and partly of re-used original bricks recovered from fills) bonded with mud mortar. The walls were coated with plaster composed of lime and coarse sand. Additionally, the surface of the new plaster was scratched in order to improve adhesion. The plaster was hydrated for several days so that the fresh mortar would not dry out too quickly and have time to bond properly.

The process of re-attaching the paintings was significantly facilitated by the fact that the plaster fragments had been fixed to wooden trusses and bore indications as to their vertical and horizontal axes. The position in which each painting was to be attached to the wall could thus be easily determined. In the places of attachment, the surfaces of the newly plastered walls were scratched and daubed with injection fluid. Lime-sand mortar with an admixture of polyvinyl acetate was applied to obtain a ribbed surface similar to the effect of using a tile trowel with serrated edges. Then, the backs of the paintings were moistened with injection fluid and quickly attached to the fresh mortar. To prevent the pieces from shifting, they were suspended from nails hammered into the walls under the upper boards of the trusses. The faces were held in place with boards, which, in turn, were supported with stanchions [Fig. 2.6]. The trusses could be removed after one day, and the mesh could be attached to the walls with nails. The lower and side edges of the attached plaster were lined with putty. Despite attempts, it was impossible to attach the plaster evenly to the whole surface. Therefore, liquid lime-sand mortar was poured in along the upper edge to

fill the cavities. This method brought satisfactory results. The boards applying pressure to the attached fragments were removed when the poured-in mortar had set.

REMOVAL OF THE FACING

Facing removal is the stage of transfer works that permits assessment of results. Detachment of a facing attached with animal glue requires use of hot water. Warm water is inadequate, as the layers of paint are in danger of becoming excessively damp. Experience has shown that the best method is to apply hot compresses to the facing and to carefully peel off the layers of tissue and textile parallel to the painting as they start to become detached [Fig. 2.7].

The most problematic was the removal of remains of Japanese tissue in places where the injection fluid used to consolidate the back permeated through the cracked plaster. In these places the whitewash layers tended to come off together with the tissue. In such cases the area was left to dry and the tissue was removed mechanically with a scalpel after softening the glue with ethanol.

After detachment of the facing, remains of adhesive were removed together with excess impregnating substance using alternately ethanol compresses and water. At the same time, injections were made in weak places. The whitewash layers proved to be the most fragile, as they had lost adhesion to the plaster layer, and it was possible to detect them by listening for “rustling” bubbles. Often in such places there were voids in the plaster, usually caused by termite damage. The whitewash layers were re-attached using injection fluid, which was the same as the one used for other treatments. If there was need for filler injections, hydraulic lime (PLM or Ledan) was used.

Thus, transferred to a secure, roofed space, the wall paintings await further stages of conservation and preparation for display [Fig. 2.8].

ADAM ŁAJTAR

THE CONSTANTINOPOLITAN CREED IN AN INSCRIPTION FROM THE MONASTERY CHURCH ON KOM H IN DONGOLA*

The Monastery Church on Kom H in Dongola was excavated between 2002 and 2006 by Daniel Gazda working on behalf of the Polish Mission (Gazda 2003; 2005; 2008; 2010; Jakobielski 2008: 283–288). In the years that followed, the remains of the church were subject to further field activity, which aimed to achieve two goals: (1) protecting and preserving the architectural substance, paintings, and inscriptions, and (2) studying the history of the building and its position in the development of Dongolese sacral architecture.¹ Thanks to this additional research, it was possible to establish that the Monastery Church was one of the earliest structures on Kom H. It was built shortly after the Christianization of the Kingdom of Makuria, probably still in the 6th century. Its original form was that of a basilica with a tower over the central space, supported by four massive pillars [Fig. 3.1].² The church functioned, with some structural changes, probably until the 14th century.

Research on the architectural history of the church necessitated the dismantling, during the 2015 season, of a feature inserted between its two southern pillars. According to Włodzimierz Godlewski, the construction under consideration came into existence in the latest period of use of the church (13th/14th century) in connection with a new arrangement of the sacral space.³ The structure, founded on the church

floor, consisted of a wall connecting the pillars and a bench abutting it from the north [Fig. 3.2].

The wall was built of mud bricks laid lengthwise in a single row and covered with mud plaster. It was preserved up to 0.68 m, but must have been much higher originally, possibly as high as 2 m. The bench, 0.62 m wide and 0.33 m high, had an external facing wall built of mud bricks and was topped with a platform of the same material. The interior of the bench was a loose fill containing, among other material, large quantities of broken lime plaster concentrated in its western end, neighboring on the southwestern pillar. As it is difficult to imagine that this debris was brought from afar, one has to assume that the plaster originally coated the walls of the Monastery Church, possibly even the southwestern pillar. It was removed or damaged during the rebuilding of the church interior and was cleaned up by throwing it into the fill of the bench that was constructed at exactly that moment. Numerous pieces of plaster recovered from the bench fill carried inscriptions in black paint, which indicates that they belonged to the “decoration” of the church. On the basis of technical and stylistic criteria (color of paint, letter shape and dimensions, script dynamics), one can distinguish as many as eight different inscriptions. Only one of them has been preserved

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¹ For the recent work in the Monastery Church, see, e.g., Godlewski 2014: 272–275; for the study of the form and the history of the Church, see above, *Chapter 1*; for Dongolese churches in general, see Godlewski 2006.

² This type of church, quite unusual for Nubian church architecture, was probably transplanted onto Nubian soil from southeastern Asia Minor; see Godlewski 2013: 80–81; see above, *Chapter 1*.

³ Włodzimierz Godlewski is of the opinion (personal communication) that this new arrangement took place when the church was already deprived of the roof, possibly damaged during one of the Mamluk interventions in Makuria in the last quarter of the 13th and the first quarter of the 14th centuries; see also *Chapter 1*.

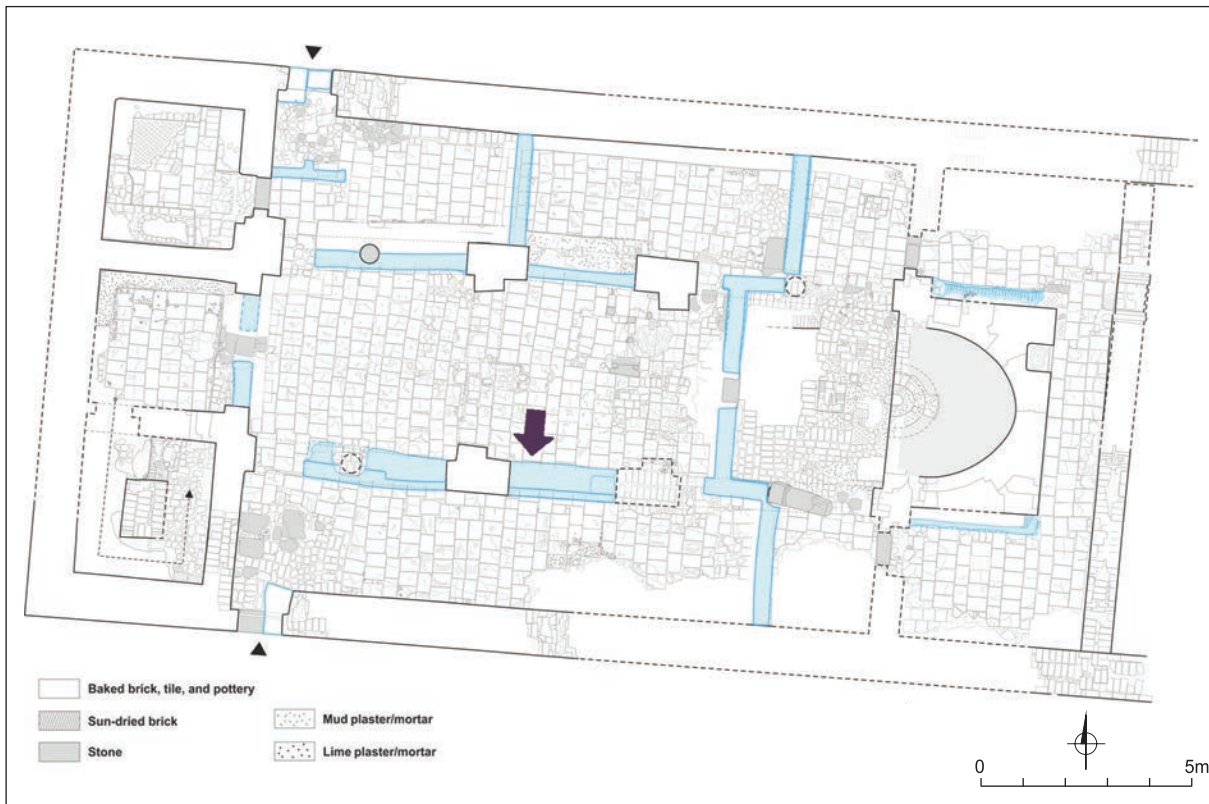


Fig. 3.1. Location of the inscribed fragments of plaster, found in the fill of a bench lining a partition wall from the late phase of the church (marked in blue)



Fig. 3.2. Secondary structure between the southern pillars of the church, seen from the east (see also Fig. 1.15)

well enough to allow the identification of its contents.⁴ It is the Constantinopolitan Creed in Greek, followed by the signature of the writer.

The inscription is found on 25 pieces of lime plaster partly joining with one another [Fig. 3.3]. A piece on the left-hand side at the bottom, the largest one at that, shows traces of mortar forming a corner to the left of the inscription. This suggests that the inscription was bordered on the left by another wall added at right angles to the inscribed one. The inscription was executed with black ink on a thin layer of lime whitewash covering the plaster.⁵ It measured approximately 15 cm in height and 34 cm in width. The height of the letters varied between 0.4 cm (Δ, ο, ω) and 1.3 cm (ζ, ξ, φ). The script is an inclined majuscule of the Nubian type, characteristic of Nubian literacy from the 10th/11th century onwards. The hand is trained and fluent even if not very nice. *Nomina sacra* are used regularly according to common rules. Interestingly, the verbal form ἐνανθρωπήσαντα (l. 8) was also recorded as a *nomen sacrum*, a phenomenon that

⁴ It seems that all inscriptions were in Greek. One of them mentioned some high-rank ecclesiastics, including bishops.

⁵ The whitewash is rather unstable and peels off in many spots causing losses to the inscription. The transcript presented here was made immediately after the discovery of the inscribed fragments of plaster, when the inscription was better preserved than at the moment of taking the photograph. This is why the transcript does not agree with the photo in all details.

is not unparalleled in Nubian literacy.⁶ *καὶ* is recorded either in *scriptio plena* or as the siglum *ς*. Apart from *nomina sacra* and *καὶ*, there is only one other instance of abbreviation used within the text of the creed: [προσ]δοκῶ(μεν) in line 16 was abbreviated by dropping the final *μεν*, shifting the last preserved letter (*ω*) and marking the place with a double slash.⁷ Abbreviation through suspension with the last preserved letter shifted is also used for *καλ(ο)ύμενος* in the signature of the writer. Vowels at the beginning of words are provided, though inconsistently, with dots placed above them. Dots also occur over vowels in medial positions if they follow other vowels, probably to mark them as syllables (*α*) ὁρατῶν in line 2, ποιῆθ[εν]τα in line 5).

Apart from some spelling slips (see critical apparatus), the language of the inscription is relatively correct from the point of view of standard Greek grammar. Either the editor of the inscription, who might have also been the scribe, had a decent command of Greek, or he had a decent “Vorlage” at his disposal (or both). There are three examples of a change of grammatical case (*θεὸς* for *θεὸν* in line 4, ἐρχόμενος for

ἐρχόμενον in lines 10–11, and αἰῶνα for αἰῶνος in line 17), one example of letter substitution (*ις* for *κ* in line 7), and one example of unnecessary repetition (ὁρατῶν πάντων τε καὶ) [πάντων ἀ]ορατῶν in line 2). It is impossible to determine whether these mistakes were made by the writer of the inscription or were already present in his “Vorlage”. Writing *εἰς* for *ἐκ* (l. 7) might actually not have been a mistake but a textual variant (see the line commentary).

The inscription can be dated broadly to the period between the 10th/11th century (spread of the Nubian type majuscules) and the 13th/14th century (new arrangement of the church interior with the wall and the bench between the southern pillars). A more exact date is difficult to give because of the lack of clear chronological criteria. It is my impression that the inscription came into existence in the 11th/12th century, which is the period of the most intensive literary production in the Kingdom of Makuria, including Dongola. The majority of the wall inscriptions with a literary character found on the walls of the buildings on Kom H originate from exactly this period.

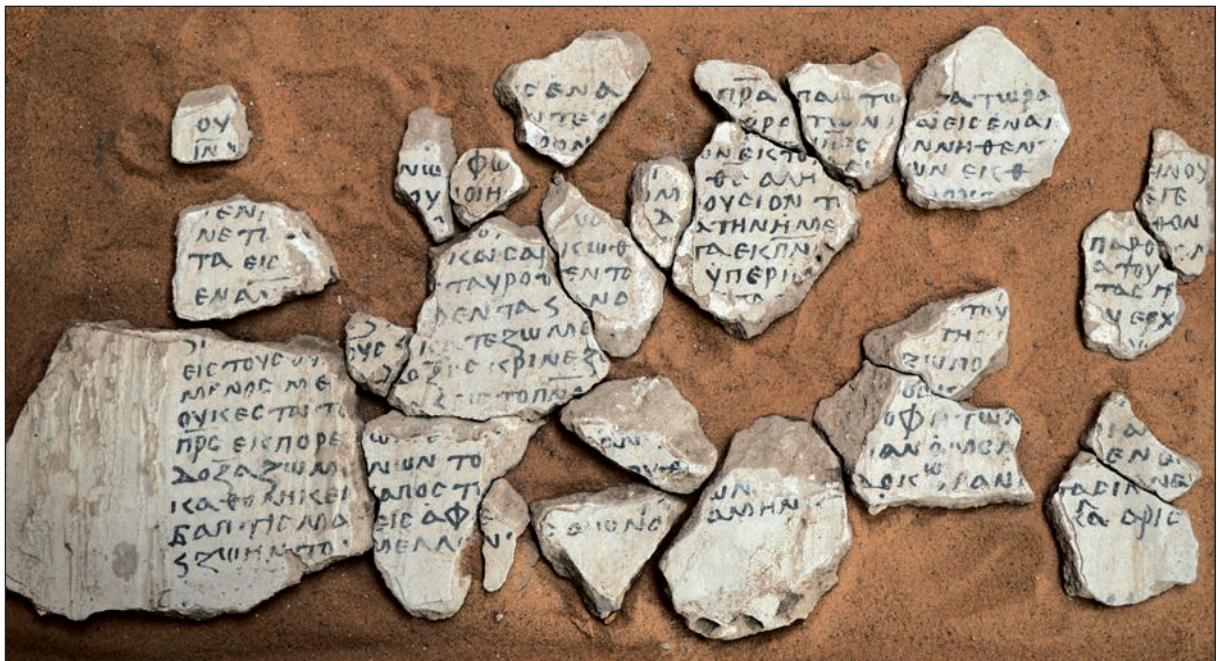


Fig. 3.3. Fragments of plaster with the inscription identified as the Constantinopolitan Creed in Greek

⁶ The same scribal endeavor is found in the parchment leaf from Gebel Adda with the *Symbolum Dongolanum* (see below), although the place is obviously corrupted there (ἀνῶνῆς[ἀντα instead of the expected ἀνῶνῆς[ἀντα]).

⁷ The use of a double slash for such a purpose is fairly unusual in Nubian literacy, in which a double slash normally marks the end of a logical portion of a text.

DIPLOMATIC TRANSCRIPT

1]ΙCENA[]ΠΡΑΠΑΝΤΩ[]ΡΑΤΩΡΑ[
 2 ΟΥ[]ΝΤΕΣ[]ΟΡΑΤΩΝΚΑΙΕΙCΕΝΑΚ[
 3 ΙΝΧ[]Τ[]ΜΟΝ[]ΟΝΕΚΤΟΥΠΡ[]ΝΝΗΘΕΝΤ[
 4]ΝΩ[]ΦΩ[]Τ[]Θ̄CΑΛΗΘΕΙ[]ΩΝ ΕΚΘ[]ΕΙΝΟΥ
 5 ΓΕΝΝ[]ΟΥΠΟΙΗΘ[]ΟΜΟΟΥCΙΟΝΤΩ[]ΟΥΤ[]ΕΓΕ
 6 ΝΕΤΩ[]CΤΟΥ[]ΥC[]Δ[]ΑΤΗΝΗΜΕ[]ΘΟΝ
 7 ΤΑ ΕΙC[]ΚΑΙCΑΡΚΩΘ[]ΝΤΑΕΚΠ̄Δ[]ΠΑΡΘΕΝ[
 8 ΕΝΔ̄Ν[]CΤΑΥΡΟΘΕΝΤΑ[]ΥΠΕΡΗΜ[]ΑΤΟΥ
 9 ΣΗ[]ΑΞΤ[]ΦΕΝΤΑΣΑΝΑ[]ΝΤΑΤ[]ΑΤΑCΓΡΑ[
 10 ΕΙCΤΟΥCΟΥΝΘΥCΚΑΤΕΖΩΜΕ[]ΤΟΥ[]ΝΕΡΧ[
 11 ΜΕΝΟCΜΕ[]ΑΔΟΞΗCΚΡΙΝΕΖΩ[]ΤΗCΒ[]ΑC
 12 ΟΥΚΕCΤΑΙΤΕ[]CΕΙCΤΟΠ̄Δ[]ΖΩΠΟ[
 13 ΠΡ̄CΕΚΠΟΡΕΥΩΜΕ[]ΡΟCΚΥ[
 14 ΔΟΞΑΖΩΜΕΝΩΝ ΤΟ[]CΑΝΔ[]ΟΦΗΤΩΝ[]ΜΙΑΝ[
 15 ΚΑΘΟΛΗΚΕΙ[]CΑΠΟCΤΟ[]ΤΟΥΘ[]ΙΑΝΟΜΟΛ[]ΕΝΕΝ
 16 ΒΑΠΤΙCΜΑΙCΔ̄ΦΕ[]ΡΤ[]ΩΝ[]ΔΟΚ`Ω`//ΔΝΔ[]ΤΑCΙΝΝΕΚ[
 17 CΖΩΗΝΤΟΥCΜΕΛΛΟΝΤ[]CΑΙΩΝΑ ΔΜΗΝ[] .[] .[]ΚΑ`Χ`ΑΡΙC

READING TEXT

1 [† πιστεύομεν ε]ίς ἓνα [θ(ε)ν] π(ατέ)ρα παντω[κ]ράτωρα, [ποιητὴν]
 2 οὐ[(ρα)νοῦ καὶ γῆς ὁρατῶν πάντων]ν τε (καὶ) [πάντων ἀ]οράτων καὶ εἰς ἓνα κ[(ύριον)]
 3 Ἰ(ησοῦ)ν Χ[(ριστὸν) τὸν υ(ιὸν)]ν τοῦ θ(εο)ῦ τὸν μον[ογενῆ, τ]ὸν ἐκ τοῦ π(ατ)ρ(ὸς) [γε]ννηθέντ[α]
 4 [πρὸ πάντων τῶν αἰώ]νω[ν], φῶ[ς ἐκ φῶ]τ[ος], θ(ε)δ[ος ἀληθει]ν[ων] ἐκ θ[(εο)ῦ ἀληθ]εινοῦ
 5 γενν[ηθέντα] οὐ ποιηθ[έντα], ὁμοούσιον τῷ π(ατρ)ί, δι' οὗ τ[ὰ πάντα] ἐγέ-
 6 νετώ. [τὸν δι' ἡμᾶς τοῦ]ς ἀν(θρώπ)ο[υ]ς [(καὶ)] δι[ι]ὰ τὴν ἡμε[τέραν σωτηρίαν] κατελ[θόν]-
 7 τα ἐ(κ) [τῶν οὐ(ρα)νῶν] καὶ σαρκωθ[έντα] ἐκ πν(εύμ)α[τος ἁγίου καὶ Μαρίας τῆς] παρθέν[ου (καὶ)]
 8 ἐναν[θ(ρωπ)ήσαντα], σταυρωθέντα [τε] ὑπὲρ ἡμ[ῶν ἐπὶ Ποντίου Πιλ]άτου
 9 (καὶ) π[αθόντ]α (καὶ) τ[ι]ὰ φέντα (καὶ) ἀνα[στά]ντα τ[ῇ τρίτῃ τῇ ἡμέρᾳ κατ]ὰ τὰς γρ[αφάς, (καὶ) ἀνελθόντα]
 10 εἰς τοὺς οὐ(ρα)νοὺς (καὶ) κατεζώμε[νον ἐκ δεξιῶν] τοῦ π(ατ)ρ(ὸς) (καὶ) πάλι]ν ἐρχ[ό]-
 11 μενος με[τ]ὰ δόξης κρῖνε ζῶ[ντας καὶ νεκρούς, οὗ] τῆς β[ασιλεί]ας
 12 οὐκ ἔσται τέ[λο]ς (καὶ) εἰς τὸ πν(εύμ)α [τὸ ἅγιον, τὸ κύριον καὶ] ζωπο[ιόν, τὸ ἐκ τοῦ]
 13 π(ατ)ρ(ὸς) ἐκπορευώμε[νον, τὸ σὺν π(ατ)ρί καὶ υ(ι)ῷ συμ]μ[ε]ροσκυ[νούμενον καὶ συν]-
 14 δοξαζόμενων τὸ [λαλῆ]σαν δι[ὰ τῶν προ]φητῶν. [εἰς] μίαν [ἀγίαν]
 15 καθολικὴν] (καὶ) ἀποστο[λικήν] τοῦ θ[(εο)ῦ ἐκκλησ]ίαν. ὁμολ[ογοῦ]μεν ἐν
 16 βάπτισμα εἰς ἄφε[σιν ἁμα]ρτ[ι]ῶν, [προσ]δοκῶ(μεν) ἀνά[σ]τασιν νεκ[ρῶν]
 17 (καὶ) ζῶην τοῦ μέλλοντ[ος] αἰῶνα, ἀμήν. .[] .[- - - ὁ] καλ(ούμενος) ἀριC.

1. παντοκράτορα, 4. θεὸν ἀληθινόν, 5–6. ἐγένετο, 8. σταυρωθέντα, 10. καθεζόμενον, 10–11. ἐρχόμενον,
 11. κρῖναι, 12. ζωοποιόν, 13. ἐκπορευόμενον, 14. συνδοξαζόμενον, 15. καθολικὴν, 17. αἰῶνος

We believe in one God, the Father almighty, maker of heaven and earth, of all things visible and all things invis-
 ible; And in one Lord, Jesus Christ, the only begotten Son of God, begotten from the Father before all ages, light
 from light, true God from true God, begotten not made, of one substance with the Father, through Whom all things
 came into existence, Who because of us men and because of our salvation came down from the heavens, and was
 incarnate from the Holy Spirit and the Virgin Mary, and became man, and was crucified for us under Pontius
 Pilate, and suffered and was buried, and rose again on the third day according to the Scriptures and ascended to
 heaven, and sits on the right hand of the Father, and will come again with glory to judge living and dead, of Whose
 kingdom there will be no end; And in the Holy Spirit, the Lord and life-giver, Who proceeds from the Father, Who
 with the Father and the Son is together worshipped and together glorified, Who spoke through the prophets; in one
 holy Catholic and apostolic Church of God. We confess one baptism to the remission of sins; we look forward to the
 resurrection of the dead and the life of the world to come. Amen. (Written by) [NN] also called Aris.

2. The lacuna between ζ and ὁράτων is too big to have contained only the letter α, which suggests that ἀποράτων was preceded by πάντων. This is surely not a textual variant but a mistake, probably made by the scribe or editor of the text: it is either a mechanical repetition of the word in question or a conflation of two readings: the standard ὁρατῶν πάντων τε καὶ ἀοράτων, and the rarer and later variant ὁρατῶν τε καὶ πάντων ἀοράτων.

6. The fourth letter of the line is definitely ω not o, even if it was preserved only in part.

7. There is clearly εἰς on the plaster in place of the expected ἐκ. The place is difficult to judge because the suspect εἰς is followed immediately by a lacuna in the text. The simplest and most probable explanation is that the writer of the inscription confused ις with κ due to their visual proximity. There is a possibility, however, that he or one of his predecessors in the process of text transmission substituted εἰς τοὺς οὐρανούς for its opposite, ἐκ τῶν οὐρανῶν. The former expression is found further on in the text (here lines 9–10), and this could have facilitated the substitution. Finally, one can take into consideration the possibility of a true textual variant, e.g., κατελθόντα εἰς τὴν γῆν.

14–15. The reading [ἀγίαν] | καθολικεῖν (καὶ) ἀποστολικήν τῷ θεῷ ἐκκλησίαν seems to be certain even if the text is considerably reconstructed. According to the critical edition by Giuseppe Luigi Dossetti (Dossetti 1967), this reading (with τοῦ θεοῦ added after ἀποστολικήν) is found in no major testimony for the Constantinopolitan Creed. However, the designation ἡ ἀγία καθολικὴ καὶ ἀποστολικὴ τοῦ θεοῦ ἐκκλησία (or ἡ ἀγία τοῦ θεοῦ καθολικὴ καὶ ἀποστολικὴ ἐκκλησία) is found elsewhere, especially in the dogmatic and normative texts of Late Antique date dealing with procedures for receiving certain heretics into the church. Among them are: the seventh canon of the Constantinopolitan council of 381,⁸ the 18th canon of the Lateran council of 649 (ed. by Riedinger 1984: 378), the 95th canon of the council “in Trullo” of 691/2 (ed. by Ohme, Flogaus, and Kraus 2013: 57, l. 27), and Novel 109 of Justinian concerning women of heretic faith (ed. by Schöll and Kroll 1912: 517, Prooimion, ll. 22–23). It is present in the anathematizations of the Nicene Creed as given by

Socrates Scholasticus in *Historia ecclesiastica* I 8,⁹ and in the *Henoticon* of Zeno as quoted by Evagrius in *Historia ecclesiastica* III 14. The relative popularity of the designation ἡ ἀγία καθολικὴ καὶ ἀποστολικὴ τοῦ θεοῦ ἐκκλησία in the language of Late Antique theology and law suggests that the insertion of τοῦ θεοῦ between ἀποστολικήν and ἐκκλησίαν in the text of the Constantinopolitan Creed took place at that time, within the East Roman imperial Church. The text of the Creed must have been transplanted to Nubia already with this addition.

17. αἰῶνα (αἰῶνα) is clearly a mistake for αἰῶνος (accusative for genitive). The mistake could have arisen under the influence of the expression εἰς τὸν αἰῶνα τῶν αἰώνων (τοῦ αἰῶνος), frequently occurring in Christian prayers.

In Christian Nubian inscriptions, scribal subscripts normally take the form of a name in the nominative, sometimes provided with additional pieces of information such as the name of an office or church affiliation. This suggests that the expression ὁ καλ(ο)ύμενος ἀρχις must have been preceded by a personal name, now almost completely lost.

ὁ καλούμενος, frequently recorded in an abbreviated form ὁ καλ'χ', has been attested several times in inscriptions from Christian Nubia. A visitor's inscription on the eastern wall of the southern nave of church SWN.B.V in Dongola was left by καῖσογν ὁ καλ(ο)ύμενος Σεργίου διάκ(ονος) (unpublished; known to me from autopsy). A wall inscription in the upper church at Banganarti was authored by οὐάριος[κ]ογΔ(α) Ἰ(ησοῦ)ς μέγ(ας) λευίτ(ης) ὁ καλούμ(ενος) Παφ(α)ῖ(λ) διάκ(ονος) (Łajtar forthcoming a: no. 323). Another inscription from Banganarti has παπα ΔΑΝΓ() Ἰ(ησοῦ)ς διάκ(ονος) καὶ Νήσος (Μιχαήλ) πόλιν ὁ καλ(ο)ύμενος ΘΕΚ(ΝΑ) as the author (Łajtar forthcoming a: no. 578; cf. 2014: 278–280, no. 16). The protagonist of the famous inscription of AD 1322 written in debased Greek on the wall of Deir Anba Hadra (St. Simeon Monastery) near Aswan is described (l. 2) as ἄββα Ἰωσήφ ὁ λεγ(ο)ύμενος Δικαίος [- - -].¹⁰ One may also compare a wall inscription from the Faras cathedral edited by Stefan Jakobielski (1972: 134 with n. 135). The editor printed: ἐγὼ [. . .] ἐπ(ι)δ(ι)άκ(ονος) ἡάββα Πέτρου, ὁσιωτ(άτου) ἐπισκ(όπου) μ(η)τρό[πο]λις Παχ(ωρας) remarking that ὁς

⁸ Edited by Joannou 1962: 53, ll. 19–20. It is commonly agreed that canon 7 is not an authentic document of the council of AD 381, but was connected with it by a later tradition. It is probably an excerpt from a letter of the bishop of Constantinople Gennadios (mid-5th century) to Martyrios of Antioch; see Ohme 2012: 50–51.

⁹ Socrates introduced τοῦ θεοῦ, absent from the original text of the Nicene Creed, probably under the influence of the contemporary theological language represented by the seventh canon of *Constantinopolitanum primum*.

¹⁰ Griffith 1928: 134–145. For a new reading and a new interpretation of this important but very difficult text, see Łajtar forthcoming b.

In spite of the fact that the inscription has been preserved in a rather fragmentary state, one can say that with all probability it transmitted a full

In addition to these three attestations of the Constantinopolitan Creed (including the inscription studied in this paper), there is one testimony for the Nicene Creed known from Christian Nubia. It is an inscription in Sahidic Coptic painted on the north wall of the so-called Anchorite's Grotto in Faras. The inscription, the layout of which apparently imitates a codex page, gave the title and the complete text of the creed including final anathematisms. The creed

¹²Lajtar forthcoming c. The archaeological context demonstrates that the inscription cannot be earlier than the 12th century.

is here an element of a larger set of literary and paraliterary texts in Coptic (Gospels incipits, letter of Jesus to Abgarus, *Apophthegmata patrum*, list of forty martyrs of Sebaste, list of the seven sleepers of Ephesus, etc.) executed in AD 738 by a certain monk Theophilos.¹³

Interestingly, Christian Nubia also yielded a creed that is unknown from elsewhere (here called the *Symbolum Dongolanum* for the sake of convenience). The creed under consideration, constructed on the basis of the *Symbolum Constantinopolitanum*, was definitely a product of Egyptian theological thought, probably of the first half of the 5th century. Its particular trait was a highly developed anamnestic part in the second paragraph, which, in addition to birth from the Virgin Mary, crucifixion under Pontius Pilate, and burial, listed several further events from the earthly life of Jesus. The *Symbolum Dongolanum* has been attested twice thus far: in an inscription painted on the north wall of a recess in the east wall of room 22 of the so-called Northwest Annex to the Monastery on Kom H at Dongola,¹⁴ and on a parchment leaf, probably originating from a codex, found by the ARCE mission in Gebel Adda (field register: 64:4:2), at present kept in the Royal Ontario Museum in Toronto (ROM Acc. No. 973.24.1165).¹⁵ Both testimonies give the text in Greek. The inscription from Dongola breaks off abruptly in the middle of the second paragraph, within the presentation of the human life of Jesus, while the leaf from Gebel Adda contained, as it seems, the complete text of the creed written continuously on its two sides.¹⁶

The occurrence of as many as three creeds in Christian Nubia is thought-provoking. Why did Christian Nubians make use of several creeds? In what situations were the individual creeds used? Can we detect doctrinal or practical preferences explaining the use of individual creeds? To answer these questions, we have to look at the functioning of the creed in the universal Church in the 6th century, at the time of the Christianization of the Nubian kingdoms. We will be interested primarily in the liturgical use of the creed, as it contributed decisively to the spread of the text.

By the time of Justinian, the creed was used essentially in two contexts: in the baptismal liturgy and in the Eucharistic liturgy.¹⁷ The use of the creed during baptismal rites goes back

to the 3rd century. There was a custom in the Church of this period, especially in the West, to interrogate the baptized person about his/her belief, wherein this interrogation was called *σύμβολον*/*symbolum*, the very term employed to designate declarative creeds in later times. The latter started to be used during baptism, rather in addition to interrogative creeds than in place of them, in Constantinian times, in the situation of a massive inflow of new believers, from whom one demanded at least a basic knowledge of the Christian faith. In connection with this new development a custom of *traditio-red- ditio symboli* emerged, at least in the West: first, the bishop transmitted and explained the text of a creed to catechumens, and then they recited it before or during the ceremony of baptism. In the 4th and the first half of the 5th centuries, there existed numerous baptismal creeds mirroring the theological views of local churches or even bishops. These local creeds were gradually supplanted by the Constantinopolitan Creed after the Chalcedon council of 451, which gave the latter a stamp of authority. Nevertheless, some local Churches might have stuck to baptismal creeds of their own for a considerable period. Such was the situation in the West, where, except for Rome, one commonly employed the so-called Apostolic Creed through the Middle Ages.

The use of the creed in the Eucharistic liturgy is much later than its use in the baptismal rites. Theodorus Lector, in his *Historia ecclesiastica*, epit. Fr. 429 (ed. by Hansen 1971: 118, ll. 27–28), based on an unidentifiable source, ascribes the introduction of this custom to Peter the Fuller (Petrus Fullo), an anti-Chalcedonian bishop of Antioch between 471 and 488. The same author states in epit. Fr. 501 (ed. by Hansen 1971: 143, ll. 16–19) that in Constantinople, the anti-Chalcedonian patriarch Timothy I (511–518) ordered recitation of the creed at every divine worship (*σύναξις*), ending an earlier practice of reciting the creed only once a year during the bishop's teaching on Good Friday. Theodorus Lector's information has awakened some doubts among modern scholars. Irrespective of whether we believe it or not, the recitation of the creed became a custom both in Constantinople and in local Churches in the 6th century. This is clearly demonstrated by a description of the Eucharist, which took place in Constantinople on

¹³ For this collection of texts, see Griffith 1927: 82–91, especially 84–86 (the Nicene Creed).

¹⁴ Jakobielski and Łajtar 1997; see also Brakmann 2006: 324–325. The inscription can be dated contextually to the 12th century.

¹⁵ The find remains unpublished. It is being studied by the present author. The date of the find is difficult to ascertain, possibly it is the 11th–12th century.

¹⁶ For a reconstructed text of the Creed, see below, Appendix.

¹⁷ As far as the creeds of the early Church are concerned, the reference work remains Kelly 1972; on the liturgical use of creeds, especially important from the point of view of the present study, see Kinzig 2007.

16 July 518, after the death of the patriarch Timothy I and the emperor Anastasius I (ed. by Schwartz 1940: 76, ll. 18–25). According to this description, the creed (ἅγιον μᾶθημα) was recited “as usual (κατὰ τὸ σὺνηθεὶς)” after the catechumens left the church and the doors closed behind them. In spite of Theodorus Lector’s information that the creed introduced by Timothy I in Constantinople was the Creed of 318 Fathers (the Nicene Creed), there is no doubt that the role of the liturgical creed was played from the very beginning by the Constantinopolitan Creed. At this point it is worthwhile to stress the place of the creed recitation in the Eucharistic liturgy of 6th-century Constantinople: at the beginning of the anaphora, immediately after the order to close the doors behind the catechumens. Therefore, it was recited only by full members of the Christian community (= the baptized ones).¹⁸ This corresponds with the place of the creed in the later liturgical forms of St Basil and St John Chrysostom. Other liturgical forms place it differently, but always before *Pater noster* (Kinzig 2007: 238–240).

The Nubian practice concerning the creed must have been the same as the external one and must have included the baptismal liturgy and the Eucharistic liturgy. The attestations of the Constantinopolitan Creed known to us from Nubia should most probably be connected with its use in the Eucharistic liturgy. In this context, it is important to observe that two of them are directly related to the liturgical space: the Monastery Church in Dongola and the cathedral in Faras. The third Nubian attestation of the Constantinopolitan Creed was inscribed on the wall of a room remaining outside of the liturgical space,¹⁹ but liturgical inspiration is suggested in this case by the combination of the creed with

Pater noster into one inscription. These two texts are elements of the Eucharistic liturgy, in which they are recited in the same sequence as they occur in the inscription from Dongola.²⁰ That the Nubian attestations of the Constantinopolitan Creed have liturgical inspiration behind them is also implied by the fact of their being in Greek, the liturgical language of the Nubian Church.²¹

More difficult to answer is the question about the use of the *Symbolum Dongolanum* in the Nubian Church. Its two known attestations are in Greek, which points to a liturgical function. Considering that the Constantinopolitan Creed was an element of the Eucharistic liturgy, one is tempted to suggest the function of the baptismal creed of the Nubian Church for the *Symbolum Dongolanum*. Were this the case, one has to assume that the creed under consideration, composed, as mentioned above, in the first half of the 5th century in Egypt, was employed there as a baptismal symbol and as such was transferred to Nubia during the Christianization of this country, an effort that was carried out mainly by Egyptian means.²² Unfortunately, the archaeological contexts of the two Nubian attestations of the *Symbolum Dongolanum* do not say much about its function. The Dongola inscription is located in a liturgical space, which, however, has no direct connection with baptism,²³ while the exact findspot of the Gebel Adda parchment leaf has not been recorded.

As far as the Nicene Creed in the Anchorite’s Grotto is concerned, an explanation for its use should be sought in its context. The Anchorite’s Grotto was probably a dwelling and then the place of eternal rest for a holy monk associated with the neighboring monastery of Qasr el-Wizz, the main monastic site of the Faras gglomeration.²⁴ The inscriptions adorning the walls of

¹⁸Maximus the Confessor, *Mystagogia* 18 (PG XLI 696A–B), an equally early source, also places the creed among preanaphoral rites. Generally on the question of the creed’s place within the Eucharistic liturgy of Constantinople, see Taft 1975: 405–416.

¹⁹It is not known what function the room in question had in the original arrangement of this part of the Northwest Annex. It immediately neighbored on rooms 22, 23, 24, 25, 27, 29, and 31, which, together, formed a liturgical space, probably a kind of a commemorative church; see below, note 23). In the final stage of the Annex’s existence, room 21 housed a rubbish dump or rather a repository, in which inscribed tableware sets of several high ecclesiastics were placed; for the publication of these vessels, see Łajtar and Pluskota 2001.

²⁰John of Biclaro gives information (ed. by Mommsen 1894: 211.13–17) that the emperor Justin II (565–578) decreed the recitation of the Constantinopolitan Creed immediately before *Pater noster*. This information is obviously false for two reasons: (1) by the time of Justin II the creed was a well established element of the Eucharistic liturgy, and (2) the recitation of the creed immediately before *Pater noster* is against Oriental tradition; John of Biclaro probably ascribed to Constantinople a practice that existed in his native Spain. On this subject, see Kelly 1972: 351; Kinzig 2007: 236–238.

²¹For Greek as the liturgical language of the Nubian Church, see Brakmann 2006: 328–331; Łajtar and Ochala forthcoming.

²²For the Christianization of Nubia, see Richter 2002; Dijkstra 2008: 271–304.

²³On the structure and decoration of this liturgical space, see Jakobielski 2001; Zielińska 2009: 122–124; Martens-Czarnecka 2011: passim, especially 68–74; Godlewski 2013: 85–86.

²⁴The monastery of Qasr el-Wizz was excavated by the mission of the American Research Center in Egypt in the frame of the Nubian campaign of the 1960s. For preliminary reports, see Scanlon 1970b and 1972. The final publication of the results of the work of the ARCE mission is under preparation by an international team led by Bruce Williams and Artur Obłuski.

the Grotto were connected with its residential functions rather than funerary ones.²⁵ They were executed, as we already know, by a monk named Theophilus, who may be identical with the original inhabitant of the Grotto. Most probably Theophilus not only wrote the inscriptions with his own hand but also made the choice of texts. The inscriptions played a double role: they guarded the living space and its inhabitant against every attack of evil forces and were a demonstration of the inhabitant's belief and lifestyle. The apotropaic function was assured primarily by incipits and explicits of the gospels, but also by the letter of Jesus to Abgarus, which we know was considered a mighty *apotropaion* in the Christian tradition, and the lists of saints' names.²⁶ The demonstrative function was realized in the first line by the excerpts from *Apophthegmata patrum*, which constitute the most voluminous element of the set, and, again, by gospels and the creed. The choice of the *Symbolum Nicenum* and not the more popular and Church-sanctioned *Symbolum Constantinopolitanum* is probably due to the personal preferences of the monk Theophilus. He

might have considered the former to be more holy than the latter because of either its greater age or its being the work of a greatly esteemed first ecumenical council. Additionally, he, as a true anti-Chalcedonian, might have despised the Constantinopolitan symbol as the one that obtained its authoritative status thanks to this very council. The semiofficial character of the inscription with the Nicene Creed (and other texts inscribed on the walls of the Anchorite's Grotto) is confirmed by the choice of language: all inscriptions are in Sahidic Coptic, just like Greek a sacral language of Christian Nubians, but unlike Greek avoided by the Nubian Church in the liturgy.

The discovery of an inscription with the Constantinopolitan Creed in the Monastery Church in Dongola considerably enriches our knowledge of the liturgical life of the Nubian Church. Compared with similar finds, both published and unpublished, the creed allows insight into various aspects of the spiritual life of Christian Nubians.

appendix

²⁵ Włodzimierz Godlewski (personal communication) is of a different opinion. According to him, the Anchorite's Grotto was not used as a living space but only as a grave. Consequently, he assumes that the inscriptions adorning its walls were destined to guard the burial place and the body and soul of the person buried in it.

²⁶ For the function of the inscriptions adorning the walls of the Anchorite's Grotto in Faras, see now van der Vliet 2017: 160–162. The author expresses the opinion that the Creed was primarily the sign of orthodoxy of the original inhabitant of the grotto.

APPENDIX

SYMBOLUM DONGOLANUM: RECONSTRUCTED TEXT

πιστεύομεν ἀεὶ ἐν ἀληθείᾳ (?) εἰς ἓνα θεόν, φιλόανθρωπον ὄντα, πατέρα παντοκράτορα, ποιητὴν οὐρανοῦ καὶ γῆς, ὁρατῶν τε πάντων καὶ ἀοράτων καὶ εἰς Ἰησοῦν, υἱὸν δὲ αὐτοῦ τὸν ἐλεήμονα, τὸν ἐκ τοῦ πατρὸς γεννηθέντα πρὸ πάντων τῶν αἰώνων, θεὸν ἀληθινὸν ἐκ θεοῦ ἀληθινοῦ, ὁμολογοῦμεν καὶ παρακαλοῦμεν σωτῆρα δὲ ἀεὶ τοῦ κόσμου καὶ σὺν πατρὶ ἀεὶ ἄναρχον καὶ ὁμοούσιον. ἔτι πιστεύομεν [- - -] ἐκ τῆς ἀγίας ἀειπαρθένου Μαρίας σαρκωθέντα καὶ ἐνανθρωπήσαντα, τὸν δι' οὗ τὰ πάντα ἐγένετο, φῶς ἐκ φωτός, Χριστὸν κύριον, γεννηθέντα μὲν οὐ ποιηθέντα δέ· αὕτη ἐστὶν ἡ νίκη ἡμῶν· ἐν ἀληθείᾳ [- - -], διὰ Ἡρώδου εἰς Αἴγυπτον φυγόντα καὶ ὑπὸ τοῦ διαβόλου πειρασθέντα, ὑπὸ δὲ Ἰωάννου βαπτισθέντα καὶ ὑπὸ Ἰούδα πραχθέντα, ὑπὸ τοῦ Πιλάτου ἐξετασθέντα καὶ ἐπερωτηθέντα καὶ ὑπὸ τῶν Ἰουδαίων ἐμπαιχθέντα, [- - -] τον ἡλοθέντα στα[υρῷ καὶ - - -]ντα καὶ ταφέντα καὶ ἀναστάντα τῇ τρίτῃ ἡμέρᾳ, ἐν δεξιᾷ τοῦ πατρὸς καθεζόμενον, μετὰ δόξης κρίνοντα ζῶντας καὶ νεκρούς. καὶ εἰς τὸ πνεῦμα τὸ ἅγιον, τὸν κύριον καὶ ζωοποιόν, τὸ ἐκ τοῦ πατρὸς ἐκπορευόμενον κ[αὶ - - -]ναρχον [- - -]α μάννα γὰρ δο[- - -] σωτῆρα πιστὸν το[- - -] πιστεύομεν [- - -]

We constantly believe in truth (?) in one God, the one Who loves mankind, the Father almighty, maker of heaven and earth, of all things visible and invisible; And in Jesus, his only son, the merciful one, begotten from the Father before all ages, true God from true God, we acknowledge and request the eternal savior of the world and the one Who, together with the Father, is coeternally without beginning and of the same substance; we believe [- - -] the holy ever-Virgin Mary, took flesh and became man, through Whom all things came into existence, light from light, Christ the Lord, begotten not made; this is our victory; Who truly [- - -], Who fled to Egypt through Herod and was led into temptation through the devil, Who was baptized by John and was sold by Judas, Who was examined and interrogated by Pilate and was mocked by the Jews, [Who was - - -] and nailed to the cross, [- - -] and was buried, and rose again on the third day, Who sits on the right hand of the Father and judges the living and the dead; and in the Holy Spirit, the Lord and life-giver, Who proceeds from the Father, [- - -] manna [- - -] the pious savior [- - -] we believe [- - -].

WŁODZIMIERZ GODLEWSKI

BUILDING H.NW.B.I AND ITS SUCCESSIVE CONSTRUCTION PHASES

Research in the northwestern part of Kom H and investigation of the tombs began in 1989 (Żurawski 1999b; 2006: 182–187). From that time onward, work including excavation of relatively well-preserved remains of buildings, conservation of wall paintings, and protection of the interiors by covering the rooms with palm-rib roofs continued until the early 21st century. Several reports on the progress of fieldwork have been published. In 2001, Stefan Jakobielski presented a first attempt at establishing the development sequence for the entire complex and anchoring it in a historical context (Jakobielski 2001). The cornerstone for analysis of the architecture and painted decoration preserved on the walls of the northwestern complex, interpreted as an annex to the monastery at the time, was the funerary stela of the archbishop Georgios, as well as several inscriptions referring to the same individual (Łajtar 2002). The murals from the northwest annex were published by Małgorzata Martens-Czarnecka in an analytical work consisting of a discussion of the iconography and a catalogue presenting the corpus of wall paintings (Martens-Czarnecka 2011). The study of the murals, however, did not include an analysis of the function of the individual rooms or of the spatial development of the complex. Also, the author did not make sufficient use of inscriptions and did not publish all of them. Another publication put forward a hypothesis that the Northwest Annex was a *xenodochion* (Żurawski 1999a: 423–436; Scholz 2001). The works conducted at the monastery in 1989–2006 were summarized in a paper published by Stefan Jakobielski in 2008 (Jakobielski 2008).

Fieldwork in the Great Monastery of St Anthony, formerly identified as the Monastery of the Holy Trinity, resumed in 2009 with the re-opening of the previously uncovered crypts. The works included anthropological research on the burials (Godlewski, Mahler, and Czaja-Szewczak 2012; Mahler et al. 2015) and recording of texts written on the walls of the crypt of the archbishop Georgios (Łajtar and van der Vliet 2012). An edition of these texts, prepared by Adam Łajtar and Jacques van der Vliet, was published in 2017 (Łajtar and van der Vliet 2017).

Continuing research on the architectural layout of this complex included detailed recording and functional analysis of its disparate parts, as well as tracing its development from the mid-6th century until its abandonment in the late 14th–early 15th century [Fig. 4.1].

The proposed outline of the development of the Northwest Complex is different from the one published in 2002 and repeated in 2008 by Stefan Jakobielski. The structural and functional analysis requires a more detailed study, which would have to include the wall paintings and inscriptions and make full use of the assemblage of objects recovered from the complex.

The changes in room designations result mainly from the subdivision of the complex into disparate architectural units built to serve specific purposes. As a whole, the Northwest Complex consists of at least eight buildings, each with a well-defined function and architectural form, altered over the centuries and adapted to play additional roles. Not all their functions have been securely identified to date.

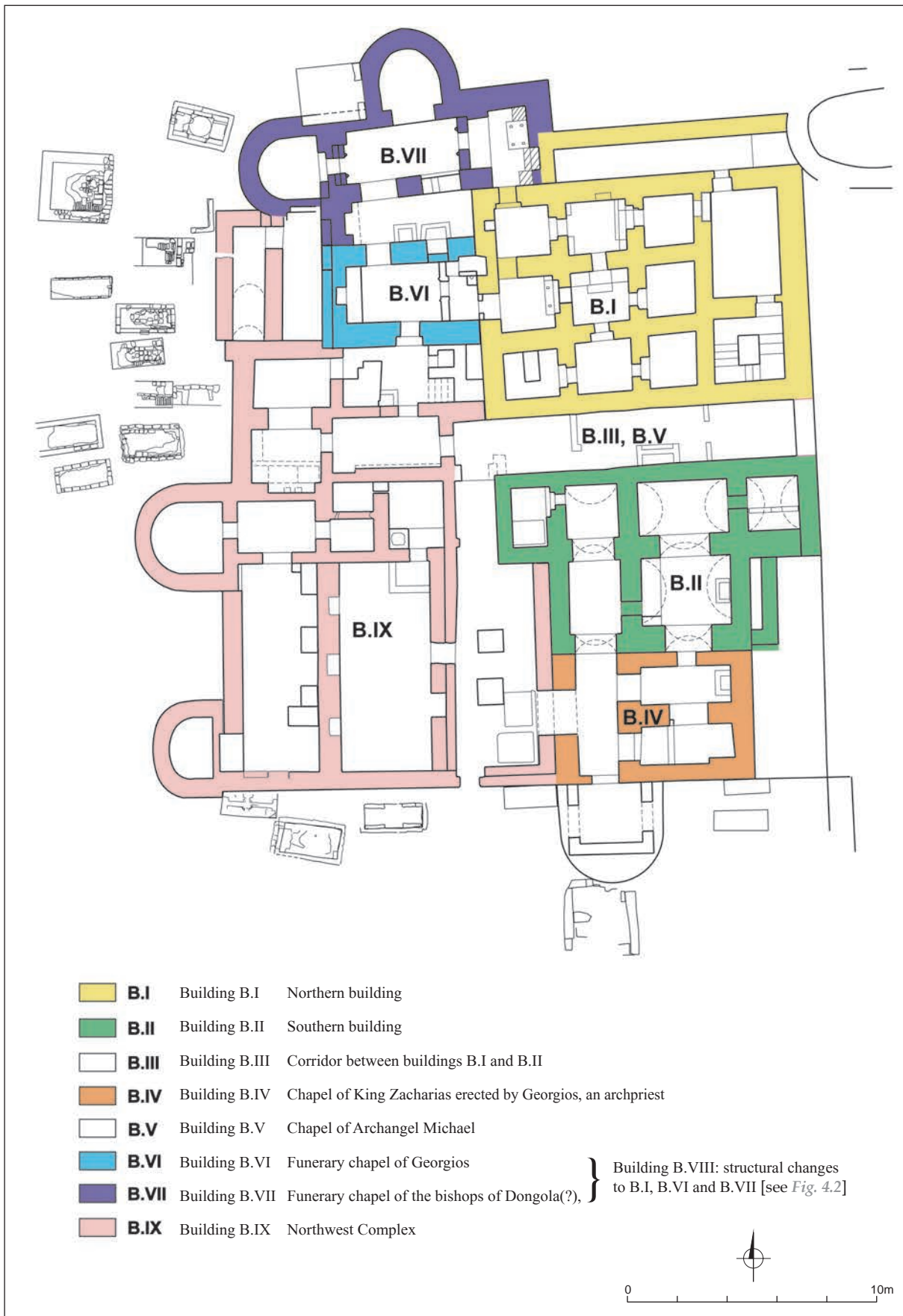


Fig. 4.1. The Northwest Complex in the Great Monastery of St Anthony: plan distinguishing structural units

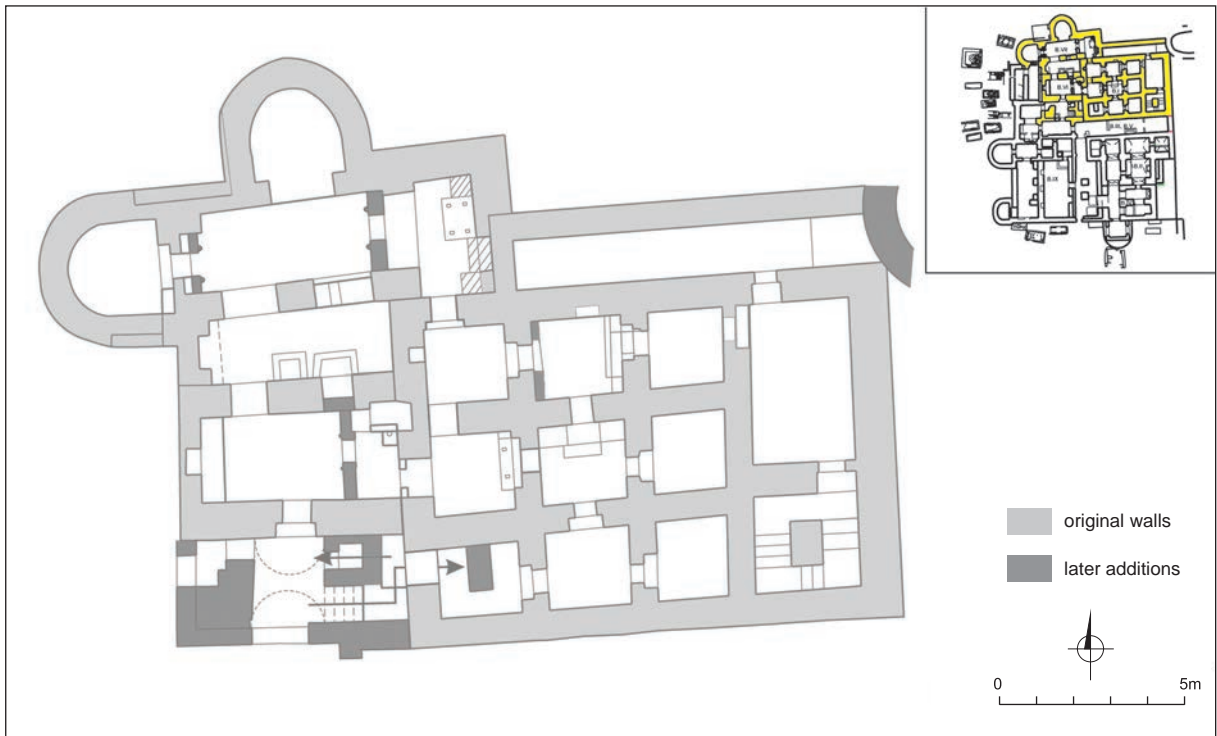


Fig. 4.2. Building B.VIII (commemorative church) in the Northwest Complex encompassing units B.I, B.VI and B.VII; inset, location of the complex on the general plan

At this stage of research, the following parts of the Northwest Complex at the Monastery on Kom H can be distinguished:

- ▶ Building B.I Northern building
- ▶ Building B.II Southern building
- ▶ Building B.III Corridor between buildings B.I and B.II
- ▶ Building B.IV Chapel of King Zacharias erected by Georgios, an archpriest
- ▶ Building B.V Chapel of Archangel Michael
- ▶ Building B.VI Funerary chapel of Georgios
- ▶ Building B.VII Funerary chapel of the bishops of Dongola(?)
- ▶ Building B.VIII Commemorative chapel (units B.I, B.VI and B.VII after structural changes)
- ▶ Building B.IX Northwest Complex

The preliminary analysis of the Northwest Complex at the Monastery on Kom H includes Building B.I and subsequent structural changes. The first of these alterations was connected with enlargement of the complex by adding the funerary chapels of Georgios (B.VI) and of the bishops of Dongola (B.VII). The second major change had to do with the transformation of the latter two buildings into a commemorative chapel (B.VIII) [Fig. 4.2].

BUILDING H.NW.B.I

H.NW.B.I was a free-standing building with an upper floor. The 12 rooms on its ground floor were accessed most likely through two entrances, one on the east, in the northern corner, and the other on the west, in the central part of the west wall [Fig. 4.3].

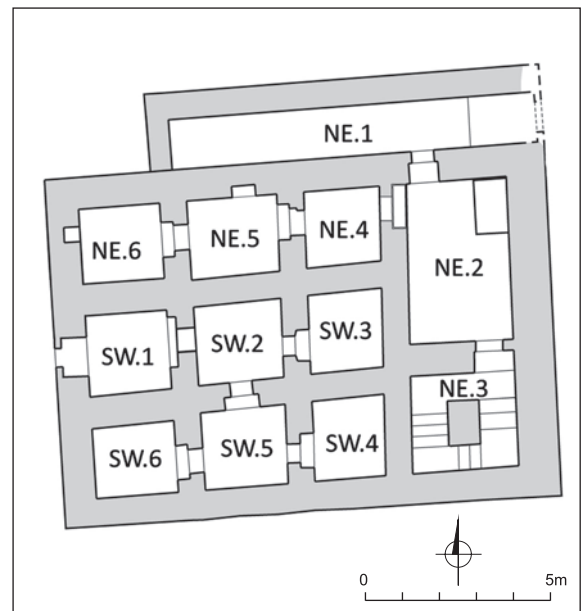


Fig. 4.3. Ground floor of Building H.NW.B.I



Fig. 4.4. Baptism of Christ: scene painted on the east wall of room B.I.NE.2



Fig. 4.5. Pottery fragments from a trench in the northeastern corner of room B.I.NE.2

The rooms of the ground floor belonged to two unconnected parts of the building. The east entrance gave access to the eastern part (B.I.NE.1–6), to the upper floor of H.NW.B.I, and possibly to the upper floor of H.NW.B.II, the adjacent building to the south. The western entrance opened only on the southwestern part of the ground floor (B.I.SW.1–6)

The construction date of B.I is difficult to determine with precision, but it may have been as early as the mid-6th century(?). It was most likely the first residential building in the nascent Monastery on Kom H, or the Great Monastery of St Anthony (notably, however, this designation of the monastery is unattested until the early 11th century). Material that could help establish a precise founding date for the building is lacking; pottery from a trench excavated in the northeastern corner of room NE.2 is dated to no earlier than the 7th century [Fig. 4.5]. However, the composition of the wall painting on the east wall of this room, a representation of the Baptism of Christ, is attributable to the 6th century [Fig. 4.4]. A structure underneath the painting, possibly a baptismal font, may be associated with the beginnings of Christianity in Dongola. However, the structure was removed in a later period and only modest traces of it remain on the walls in the northeastern corner of the room [Fig. 4.6].

Until the beginning of the 12th century the building remained in its original form, not counting the connection to H.NW.B.II (mid 6th century?) on the south and to H.NW.B.III after its transformation into B.V (11th/12th century).

In the late 11th–early 12th century, the ground floor of the building was subject to structural changes associated with the construction of the mausoleum of the archbishop Georgios (NW.B.VI) against the west wall of building H.NW.B.I. The space between buildings H.NW.B.I and H.NW.B.II, a narrow corridor, was turned into a chapel of Archangel Michael (H.NW.B.V) most likely in the second half of the 11th century or in the early 12th century. There are no dating indicators for this phase of changes in the chapel of Archangel Michael besides paintings preserved on the chapel walls, which most likely came into being during two or even three different construction episodes. The chronology of the paintings in the northwestern part of the monastery was preliminarily established by Małgorzata Martens-Czarnecka (2011: 235–260).

Ground floor of building H.NW.B.I

The mud-brick building with external dimensions 13.00 m x 11.40 m certainly had an upper floor. The walls are massive, measuring from



Fig. 4.6. North wall of room B.I.NE.2 with the entrance to room B.I.NE.1. The eastern side of the entrance was remodeled at a later stage

0.70 m to 0.85 m in thickness. The inner walls are 0.70 m thick with the exception of the walls of room B.I.SW.1, which measure 0.85 m like the outer walls. The south external wall of the building is 0.70 m, which may indicate that B.I and B.II were built contemporaneously. The walls were erected on the ground surface, without foundation trenches.

A staircase in the southeast corner of the building gave access to the upper floor of H.NW.B.I and most likely to the upper floor of building NW.B.II on the south. As the ground floor was divided into two separate parts, two entrances were necessary – one was most likely located in the northeastern corner of the building and the other in the central part of the western façade. Both entrances disappeared in the subsequent structural changes, and their secure architectural identification is impossible, but they must have existed for functional reasons. In order to gain a clearer understanding of their function, the two parts of the ground floor were given separate designations: B.I.NE and B.I.SW.

Northeastern part (B.I.NE)

The ground floor of B.I.NE was accessed from the east through a long vestibule located in its northern part (NE.1). The largest room, located in the eastern part (NE.2), opened on the staircase (NE.3) and gave access to a sequence of three rooms in the northern part of the building (NE.4–6) [see *Fig. 4.3*]. One can see a clear and meaningful functional differentiation of the rooms. Furthermore, the connection of this part of B.I to the entire upper floor of the building, as well as probably the upper floor of building B.II, renders this part of the ground floor the most important area of building B.I from the functional viewpoint.

Room NE.1 is an attenuated corridor measuring approximately 10.00 m by 1.33 m, accessed through an eastern entrance currently blocked with a semicircular, tower-like structure dating most likely from the 13th century. There were most probably slit windows in the north wall. The sole passageway leading from this room to the inside was located in the eastern part and gave access to NE.2. It was a typical external doorway with sides splayed to the inside. The width of the arched external embrasure (W. 0.64 m; H. 1.42 m) is smaller than the inner part of the passageway, which measures 0.93 m in width and over 1.95 m in height (the arch over it is only partly preserved). The inner part of the doorway preserves evidence of a socket for a wooden

beam mounted in the lateral walls above the arch of the external part of the doorway. Above the beam was a slit window 0.29 m wide and over 0.15 m high. The lintel permitted the mounting of the upper door pivot next to the western jamb. The door could be closed with a bolt, which slid into a cavity in the eastern jamb. The upper part of the doorway is not preserved.

Room NE.2 was the largest room in the building, measuring 3.85 m by 2.90 m and reaching a height of approximately 4.10 m. It was accessed from the northern vestibule (NE.1) and led to a staircase (NE.3) and to a sequence of three northern rooms (NE.4–6). Relics of its furnishings are preserved in the form of traces on its walls in the northeastern corner [*Figs 4.6, 4.8*]. This corner most likely held a tall brick structure measuring 2.18 m by 1.42 m and reaching 1.08 m in height. Its upper surface was accessed on the south by a flight of steps, of which only the lowest one is preserved. The function of this structure is uncertain. However, one must consider the suggestive meaning of the painting on the east wall above the feature. It is a superbly preserved scene of the Baptism of Christ [see *Fig. 4.4*], maintained in the composition and style of early depictions of this type in Byzantine art of the 6th century. It is most likely the oldest wall painting uncovered to date in Dongola (and in all of Makuria) and its creation can be placed around the mid-6th century. The room was covered with a barrel vault, a fragment of which is extant above the east wall [*Fig. 4.7*] (see also Martens-Czarnecka 2011).

Room NE.3 was a stairwell 3.32 m by 2.95 m. It was most likely remodeled in a later period, when the staircase inside it received treads of roughly hewn sandstone blocks reclaimed from some earlier building. Due to the current state of preservation of the structure no research on the original spacing of the treads was conducted. Three landings of the original five are preserved. The staircase gave access to rooms on the upper floor of the building and most likely to the upper floor of building H.NW.B.II. The stairs are 0.94–0.88 m wide, and some of the treads (besides the first) are 0.30–0.34 m wide and 0.21–0.23 m high. The entrance to room NE.3 was splayed towards the inside. On the north side it was topped with an arch measuring 0.70 m in width and 1.82 m in height, and the inner (southern) embrasure was capped by the vault (W. 1.10 m; H. 2.75 m). Above the lintel of the inner part of the doorway there was a slit window measuring 0.60 m in height and 0.12 m in width [*Fig. 4.9*].

The **enfilade of halls NE.4–6** consisted of three small rooms of similar dimensions (2.00 m by 1.70 m) located in the northern part of the building and accessed from NE.2. The rooms were connected by two arched, architecturally

identical passageways to form an enfilade. The height of the passageways varied on the two sides of the walls through which they passed, additionally enabling the placement of slit windows above the tops of the arches [Fig. 4.11].



Fig. 4.7. East wall of room B.I.NE.2 with a fragmentarily preserved barrel vault



Fig. 4.8. Northeastern corner of room B.I.NE.2 with traces of a dismantled feature (walls of a basin?)



Fig. 4.9. Entrance from room B.I.NE.2 to staircase B.I.NE.3



Fig. 4.10. Doorway leading from room B.I.SW.3 to B.I.SW.2

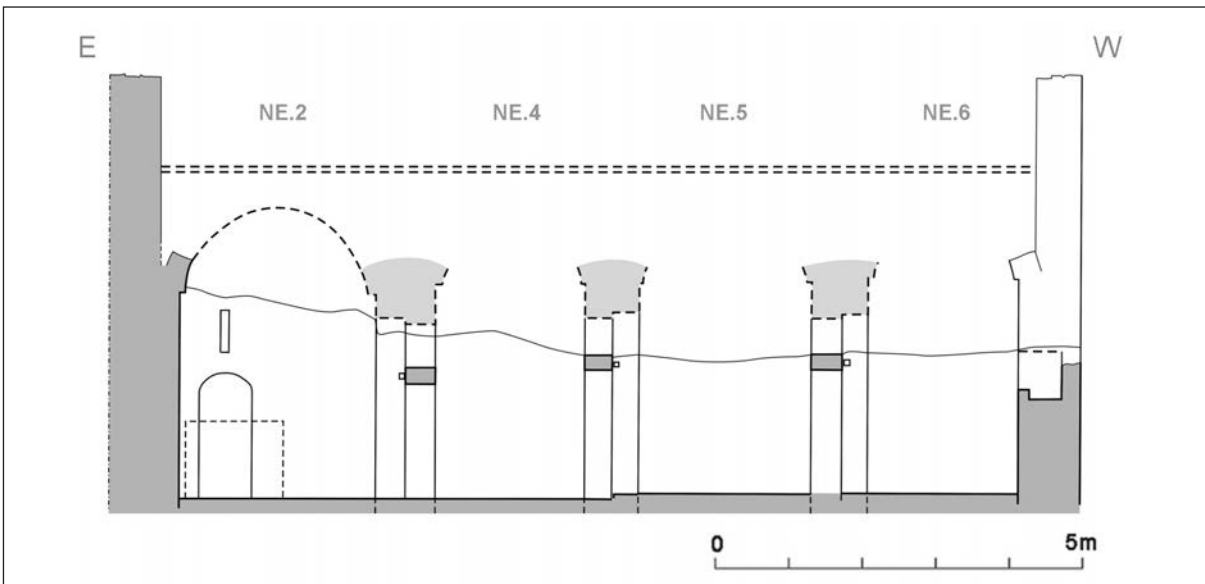


Fig. 4.11. Rooms B.I.NE.2 and 4–6, east–west section looking south (see Fig. 4.3 for plan of the building)

All rooms in this part of building H.NW.B.I had plastered walls, but the floor was unpaved; the preserved ceramic tiles in rooms NE.5 and NE.6 come from a later period, as do the niches in the walls. The rooms lack furnishings with the exception of NE.2, the northeastern corner of which holds vestiges of a tall structure (possibly a baptismal font, see above) [see *Fig. 4.8*].

The rooms were most likely vaulted, but remains of vaults are preserved only in rooms NE.2 and NE.3 (staircase). In other rooms the walls are preserved at too low a level to permit identification of vault springs. The height of the ground floor was approximately 3.90 m judging from rooms NE.2 and NE.3. Inscriptions preserved on the walls in this part of the building certainly date from the 11th century (Jakobielski 2001: 165, *Fig. 27a-b*) and some of them are even later.

Southwestern part (B.I.SW)

The southwestern part of the building was accessible from the west through an entrance leading to room SW.1. The doorway was subject to structural changes in a later period, when this room was turned into the sanctuary of the commemorative chapel of the archbishop Georgios.

The ground floor of B.I.SW consisted of six rooms. The central one, SW.2, may have been a kind of light well, from which natural light spread to adjacent rooms SW.3-6. The external walls of these rooms also featured slit windows, better preserved in the southern part and occurring in pairs in rooms SW.4-6. All these rooms

have almost identical dimensions and lack interior furnishings. The doorways between rooms had a form typical for the entire building: each was topped with two arches differing in height, with a slit window above the lower arch [*Fig. 4.10*]. The preserved height of the walls impeded identification of the type of ceilings over this part of the building. We do not know if the roof was made of wood or if there were barrel vaults like in NE.2, the largest room of B.I, but the former seems more likely. The walls of the rooms were plastered, and the inscriptions preserved on them date from a later period, when the building underwent structural changes.

There was no access to the upper floor from the southwest part of the building. All activity conducted inside was confined to the ground floor.

BUILDING H.NW.B.VI: COMMEMORATIVE CHAPEL OF ARCHBISHOP GEORGIOS

Construction of the burial chamber of the archbishop Georgios under the floor of B.I.SW.1 brought major changes in building B.I and the creation of a new chamber against its west external wall [*Fig. 4.12*]. These works were conducted in the 12th century, most likely before the death of archbishop Georgios in AD 1113 (Łajtar 2002; Łajtar and van der Vliet 2017: 18–22). Georgios' funerary complex includes a subterranean part (the crypt) and a part above ground consisting of B.VI.1, a newly built western room, and of B.I.SW.1, an earlier room adapted to serve as the sanctuary.

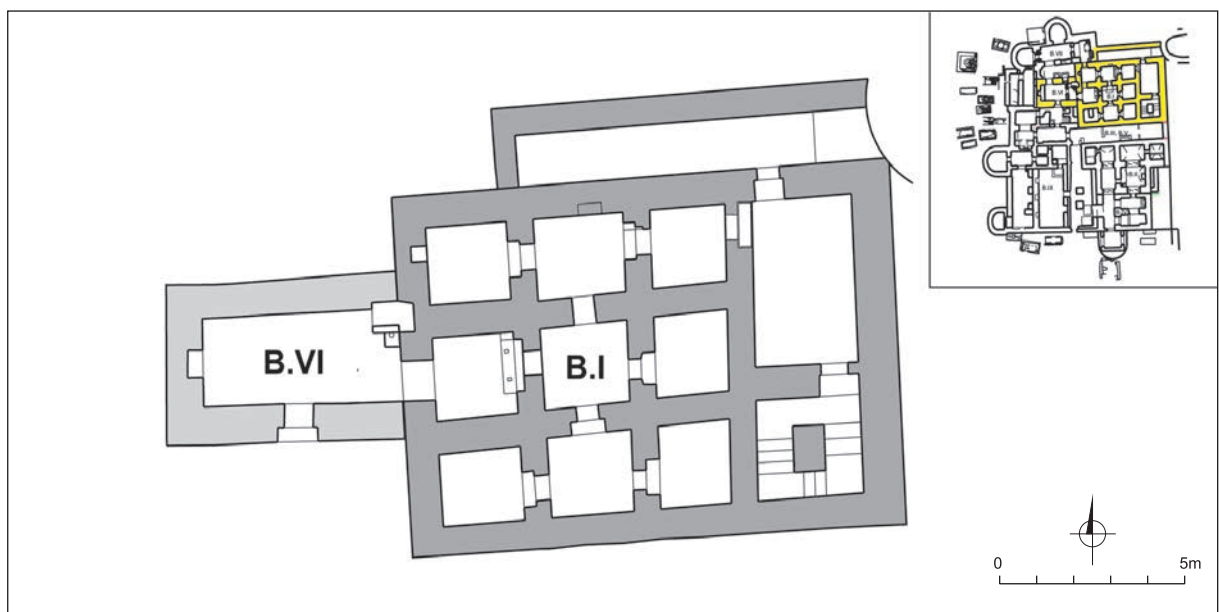


Fig. 4.12. Commemorative chapel of the archbishop Georgios (H.NW.B.VI), built onto the western side of Building B.I; inset, location of the complex on the general plan

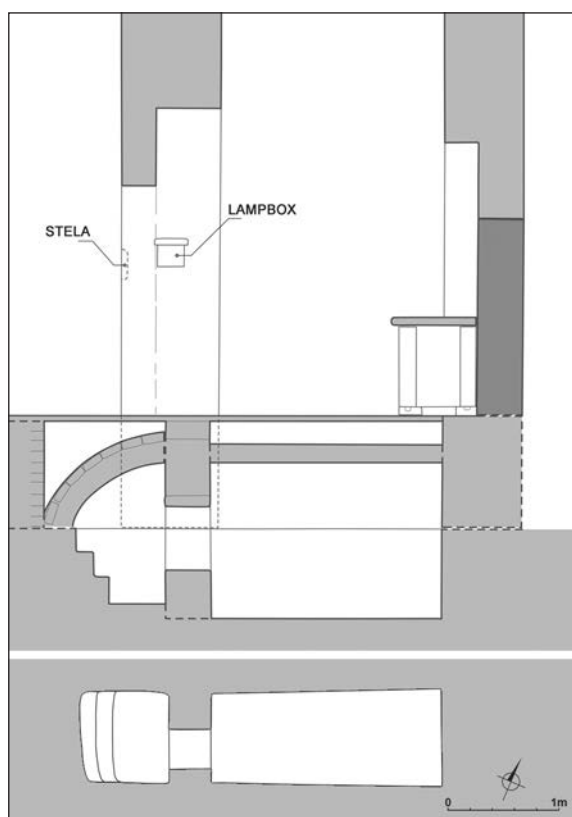


Fig. 4.13. Sanctuary and crypt of Georgios: top, E-W section looking north with reconstructed altar; bottom, plan of crypt

The crypt is partly cut in the bedrock, and its upper part is constructed of brick. It consists of a burial chamber and of a shaft located on the western side [Fig. 4.13]. The burial chamber, measuring 2.08 m by 0.80–0.86 m and reaching a height of 1.20 m, has a brick vault. Its carefully plastered internal walls are covered with texts in Greek and Coptic (Łajtar and van der Vliet 2017). The burial shaft measuring 0.80 m by 0.80 m, with three steps descending from west to east, gave access to the chamber, which had a rectangular opening in the west wall. The opening measured 33 cm by 38 cm and was topped with a stone lintel. In addition to Georgios, the crypt contained the bodies of six other men, who had died at an advanced age (Godlewski, Mahler, and Czaja-Szewczak 2012: 338–348, 353–356) [Fig. 4-14].

The sanctuary of the new complex encompassed room B.I.SW.1, as well as room B.VI.1 built against the west external wall. In room SW.1, the jambs of the western entrance were cut away to broaden the doorway, and the passage to room B.I.SW.2 was blocked, forming a kind of apse. The apse held an altar whose base, built of limestone blocks, measured 0.69 m by 1.02 m. The now-lost *mensa* was supported by four stone pillars and its dimensions were presumably 1.25 m by 0.70 m. The height of the altar



Fig. 4.14. Interior of the crypt of Georgios with seven burials in the uppermost layer, state in 2009 after the crypt was reopened

is impossible to determine for lack of evidence. A lamp box was found in the entrance to the sanctuary, in its northern doorjamb. It measured 19 cm by 24 cm and was located 1.36 m above floor level. There was originally no altar screen between the naos and the sanctuary [Figs 4.12, 4.15].

B.VI.1 (naos) was a room added to the western façade of B.I. It had massive mud-brick walls approximately 0.80 m in thickness and inner dimensions 5.30 m by 2.30 m. The entrance to the room was located in the south wall; its external embrasure measured 1.00 m in width. As for the type of roofing over the room, no data survives. The lateral walls were pierced by windows, slits in the north wall and wider ones (0.35 m) in the south. The west wall had a niche or recess 0.70 m wide and 0.35 m deep at floor level on the axis of the room. Its ceiling is lost and the full height is unknown. The west wall of the niche was decorated with a painted cross, only the lower part of which has been preserved (Martens-Czarnecka 2011: 238, Fig. 126, Cat. No. 9). Against the east wall, in the northeastern corner of the room, there was a pulpit accessed from the west by a flight of steps. The space it occupied was enlarged by cutting a recess in the wall of B.I. The recess, which measured 0.70 m by 1.30 m, was flanked on the south by a square engaged pillar, 0.40 m by 0.40 m wide and 1.90 m high. A deep cavity in its upper surface served for mounting a vertical element (cross?). Embedded in the wall on the southern side of the pillar was the bishop's funerary stela, measuring 0.27 m by 0.26 m and located 1.22 m above floor level



Fig. 4.15. Base of an altar in the blocked entrance to B.I.SW.2

[Fig. 4.17]. Written on the plaster above the stela is an inscription containing Psalm 129 (130) in Old Nubian [Fig. 4.16] and a subscript in Greek giving the name and title of Georgios as the archbishop of the (cathedral) of the Holy Trinity: ἄβ(βα) Γεώργιος ἀρχ(ι)επίσκοπος ὁρθόδοξος Τριᾶς Ἁγίας (Łajtar 2002: 188–189; Browne 2006; Łajtar and van der Vliet 2017: 22–25).

Changes to the interior of H.NW.B.I

The blocking of the passageway from room B.I.SW.1 to room B.I.SW.2 resulted in the lack of access to the southwestern part of the ground floor of Building I. In order to ensure communication with rooms B.I.SW.2–6, a new doorway to SW.2 was cut in the south wall of NE.5. It enabled internal communication inside Building B.I after the closing off of SW.1, as well as of the western entrance to B.I.SW. from the outside. Thus, the eastern sequence of rooms on the ground floor of B.I.NE was additionally augmented by five rooms, B.I.SW.2–6 [Fig. 4.18; see Fig. 4.12].

BUILDING NW.B.VII: BISHOPS' MAUSOLEUM

The building of a mausoleum (B.VII) against the northwest wall of building B.I and the north wall of building B.VI entailed major changes in the entire northwestern complex. The intensity of these changes most likely also had to do with the social-political situation in Dongola in the late 13th–early 14th century, a time of Mamluk raids, administrative instability of the kingdom, and decline of the Makurian Church. An inscription on the south pilaster supporting the arch on the west side of the bishops' mausoleum (Łajtar and van der Vliet 2017: 36–38) commemorates a visit of a group of high-rank officials, both priests and laity, paid in 1276–1277, apparently just after the erection of the sanctuary. The inscription mentions the king Mashkouda, who ascended to the throne of Makuria merely two or three years after the Mamluk invasion. It may be that the crypts were built for two bishops who passed away during the invasion.

Building B.VII was erected atop an earlier cemetery [Fig. 4.19; see also Fig. 4.24]. Some of the grave superstructures, including domed monuments, were destroyed most likely before the construction began (Żurawski 1999a; 2006). This forms a basis for supposing that building B.VII was constructed after the first Mamluk raid in 1276. In addition, some structural features of the new building B.VII, for instance its

semicircular towers, support the late founding date of the mausoleum. The enclosure wall with semicircular towers on the eastern side of the monastery also stands on razed funerary monuments and was most likely built in the late 13th century.

Building B.VII is directly associated with the creation of two crypts in the northwestern corner of building B.I. The crypts were used for burial of high-rank Church officials (or laypersons?) of the kingdom of Makuria. No preserved funerary stelae allow for identification of persons

buried in the crypts. After the construction of the two crypts, a mausoleum was built on the surface in a trench dug outside B.I. It consisted of a sanctuary in the eastern part and a naos with two semicircular, tower-like structures on the north and west. Most likely at the same time two openings were cut in the north wall of the naos of the mausoleum of Georgios (B.VI.1), allowing the creation of a larger naos and giving access to B.VII from the south through the entrance to the earlier mausoleum of Georgios (B.VI) [see Fig. 4.2].

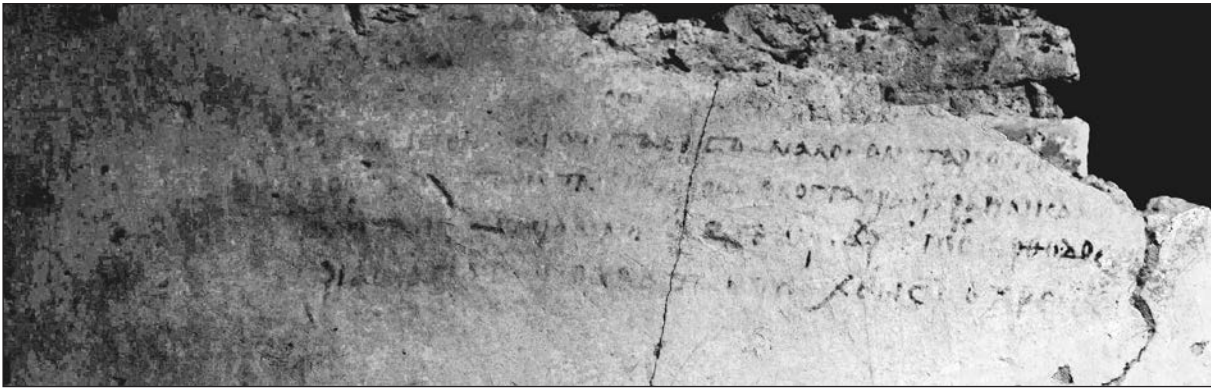


Fig. 4.16. Ink inscription with Psalm 129 (130)

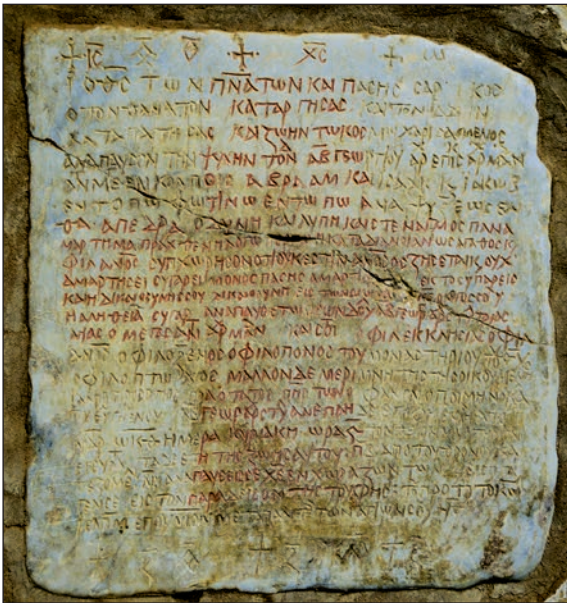


Fig. 4.17. Funerary stela of the archbishop Georgios



Fig. 4.18. Hacked-out passageway from B.I.NE.5 to B.I.SW.2, view from the north

Two crypts (K.2 and K.3), built in a single trench measuring 2.43 m by 3.45 m, are not a structural unity, even though they were most likely contemporary. The southern crypt (K.2) was built first or may have belonged to an earlier tomb. Subsequently, on the northern side crypt K.3 was added, its southern vault spring resting on the vault of crypt K.2. Both crypts were accessed from the west by separate narrow grave shafts. The walls and vaults of the crypts, as well as their shafts, were built of baked bricks. The interiors were covered with lime plaster, but the coating fell away from the bricks most likely due to high humidity inside the crypts [Figs 4.20, 4.21]. The details of the crypts are as follows:

Crypt K.2: dimensions: H. 0.94 m; L. 2.56 m; W. 0.98 m; seven male burials identified (Godlewski, Mahler, and Czaja-Szewczak 2012: 342–345, 348–352, 356–360);

Crypt K.3: dimensions: H. 1.05 m; L. 2.45 m; W. 0.98 m; five male burials identified (Godlewski, Mahler, and Czaja-Szewczak 2012: 355–359).

The last deposited burial in crypt K.2 was wrapped in luxury silk robes and *tiraz*-type textiles used as shrouds [Fig. 4.21 left]. This may indicate that the deceased who was interred last had been very wealthy and had occupied a high position in the Church or at the royal court.

Mausoleum

The bishops' mausoleum, measuring 12.00 m by 9.40 m, was built to abut the north wall of the mausoleum of Georgios and the northwestern corner of building B.I. It had an articulated plan consisting of two tower-like structures in the north and west and a rectangular internal part in the south [Fig. 4.22; see also Fig. 4.19]. The massive walls of building B.VII, erected on the ground surface without foundation trenches, were built of mud bricks. The western and northern façades incorporate relics of broken tomb superstructures built of baked brick. Two parts of the interior of the new building are discernible: the sanctuary above the crypts in the eastern part, and the naos in the western part of the building. The two parts were connected by a broad, arched passageway 2.00 m in width. Located to the west of the arch, in the naos, were shafts giving access to the crypts.

The sanctuary occupied a rectangular space measuring 3.20 m by 1.90 m. Several features are preserved against its east wall, including an altar on a stone base, with stone posts that once supported a *mensa* measuring 1.15 m by 0.75 m. The preserved sandstone blocks were laid atop the pavement of the room [Fig. 4.23 left]. To the south of the relics of the stone altar there are two structures built of mud bricks and coated

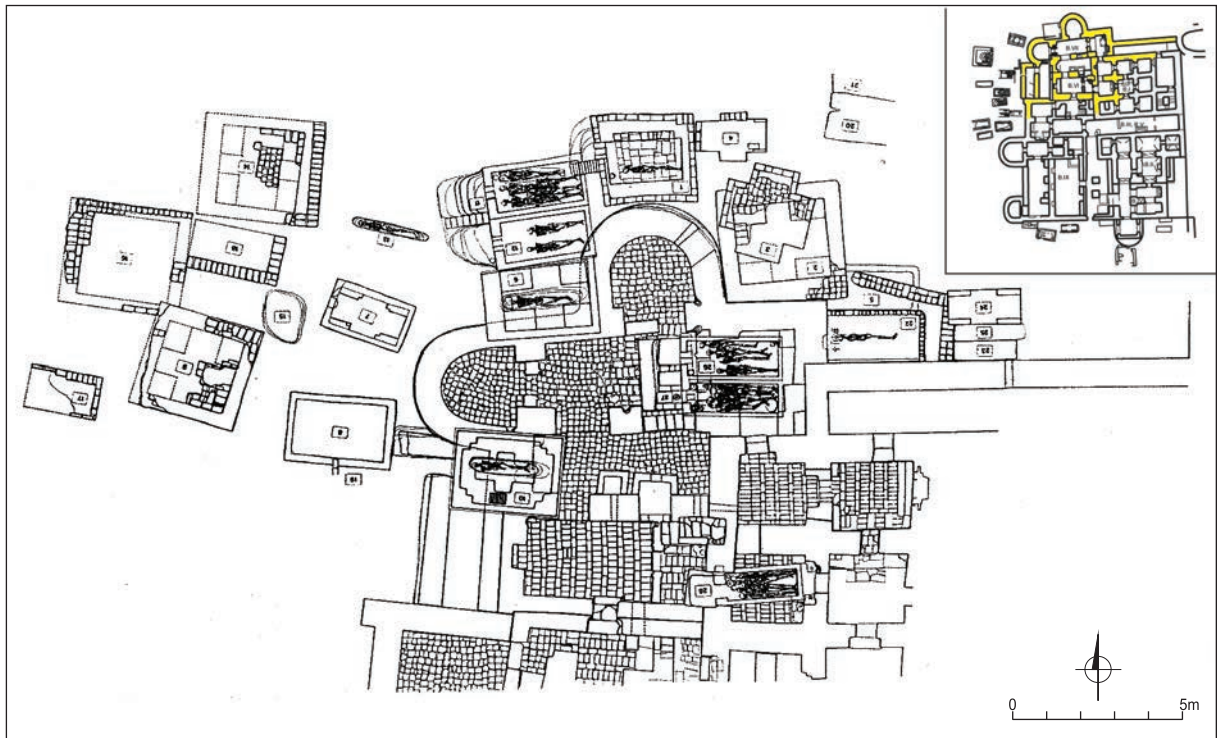


Fig. 4.19. Plan of the Bishops' Mausoleum in the northwestern part of the complex (H.NW.B.VII) with surrounding tombs (1993); inset, location of the complex on the general plan

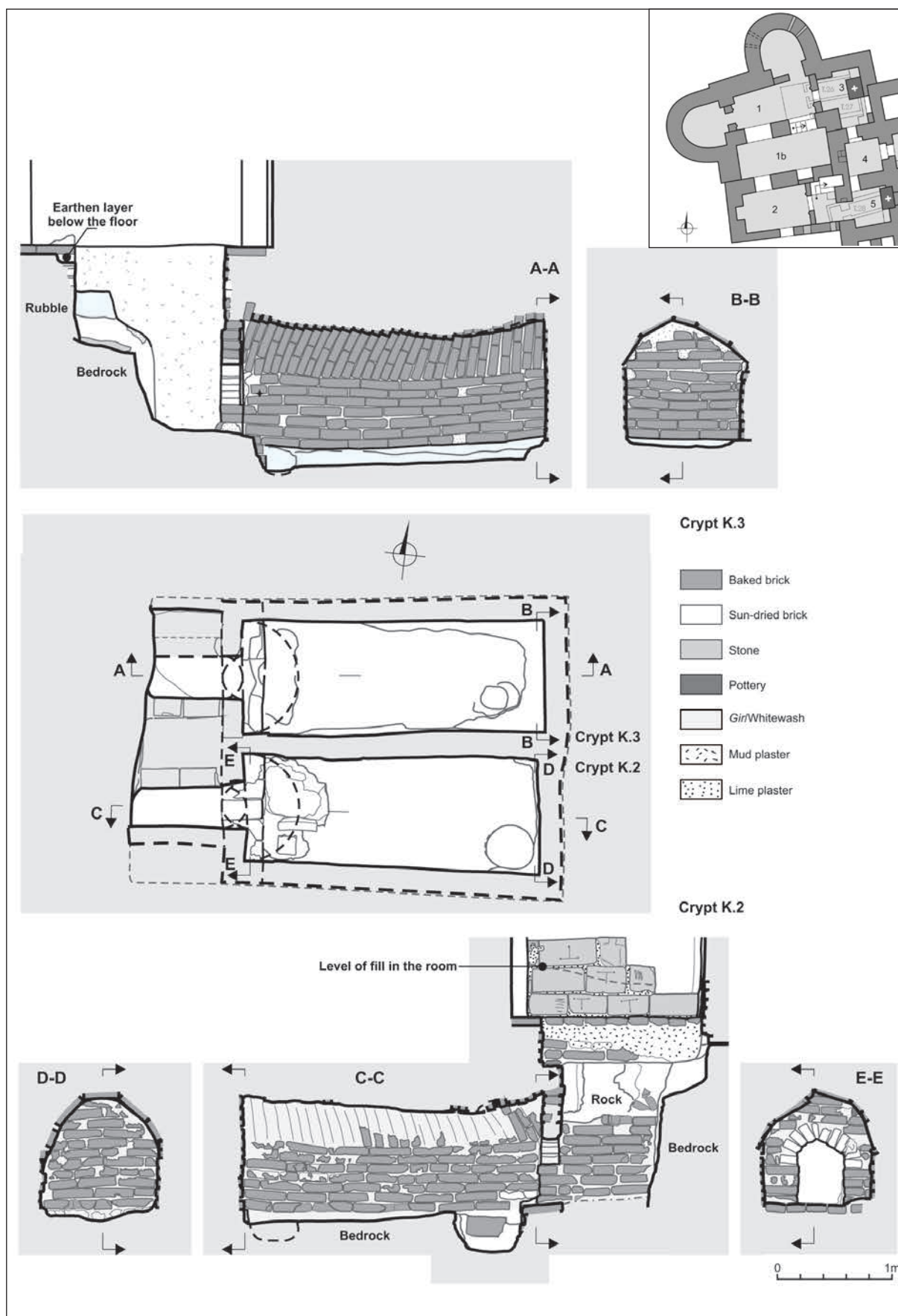


Fig. 4.20. Crypts K.2 and K.3: plan and sections

with plaster painted red. The northern one was probably the original altar with base dimensions 1.00 m by 0.60 m and over 0.70 m in height. The feature in the southeastern corner was of similar height and its base measured 0.90 m by 0.60 m. It may have been an auxiliary table [Fig. 4.25 right].

The naos of the B.VII chapel was connected to the naos of the chapel of Georgios (B.VI), but one cannot be certain that it was intended when building B.VII. Initially, the naos seems to have had two aisles connected by two arched passageways. The northern aisle was connected on the north and west with the semicircular interiors of the two tower-like structures, and the southern one had in its west wall a niche with a parapet at floor level. It is also possible, however, that at the same time two openings (arched passageways?) were cut in the north wall of the naos of the chapel of Georgios, connecting the two spaces to form one joint naos. It is all the more probable that the new building B.VII could only be accessed through the naos of the chapel of Georgios. The entire width of the eastern arched passageway of the naos of B.VII, closer to the sanctuary, was blocked with a pulpit. The structure, built of sandstone blocks most likely reclaimed from some dismantled building on the Citadel, is preserved only in its lower part, consisting of the three lowermost steps. The walls of the chapel were plastered and the floor was laid with ceramic tiles, but the preserved pavement

may be attributed to the last occupational phase of this large complex because it is fairly uniform throughout both chapels and the later prothesis and was laid on practically the same level.

Most likely in the early period of its use chapel B.VII lacked an altar screen; the screen belongs to the last construction phase of the northwestern complex (B.VIII).

No ceilings are preserved, but the interiors likely had brick vaults, and the thickness of the walls suggests the existence of an upper floor above the sanctuaries. The presence of a staircase (B.IX), likely built in the same period to the south of the mausoleum of Georgios, may support this supposition.

COMMEMORATIVE CHAPEL B.VIII: STRUCTURAL CHANGES TO B.VI, B.VII, AND B.I.NE

Structural transformations in the sacral complex led to several changes in the interiors of preexisting buildings (B.I, B.V, and B.VII) and to the enlargement of the complex by adding rooms on the southwest. These rooms were part of a newly erected building, B.IX [see Fig. 4.1].

After the final closing of the crypts, which presumably followed the deposition of the last deceased individual wrapped in silk textiles in crypt K.3, both funerary chapels (B.VI and B.VII) were transformed into one large sacral complex encompassing chapels B.VI and B.VII



Fig. 4.21. Interior of crypt K.2: left, state in 1993; note textile on right, by the wall; right, state in 2009, after the reopening of the crypt

and the northwestern part of the ground floor of Building B.I (NE.5–6 and SW.1). In order to enable access to the entire complex, a doorway 0.64 m wide was cut through the north wall, in the northwestern corner of building B.I, connecting the sanctuary B.VII with room B.I.NE.6. At the same time, a passageway from the sanctuary of the chapel of Georgios (B.VI) to room B.I.NE.6 was cut through the north wall, in the

northwestern corner. The two newly created passages allowed to connect both sanctuaries with the prothesis arranged in room B.I.NE.5 after structural changes [Fig. 4.24].

In room B.I.NE.6, the passage from room B.I.NE.5 to room B.I.NE.4 was closed and the resulting recess was filled with a masonry altar of the prothesis. Its liturgical identification is possible thanks to Greek inscriptions written on



Fig. 4.22. Building H.NW.B.VII, view from the west in 1993; state of preservation of the walls



Fig. 4.23. Eastern side of the sanctuary in H.NW.B.VII: left, view of stone altar base in the northern part; right, auxiliary tables in the southern part



Fig. 4.24. Commemorative chapel (H.NW.B.VIII), constructed of remodelled units B.VI. B.VII and B.I; in red, later structural additions



Fig. 4.25. Building B.VIII: eastern part of the prothesis, the altar viewed from the west

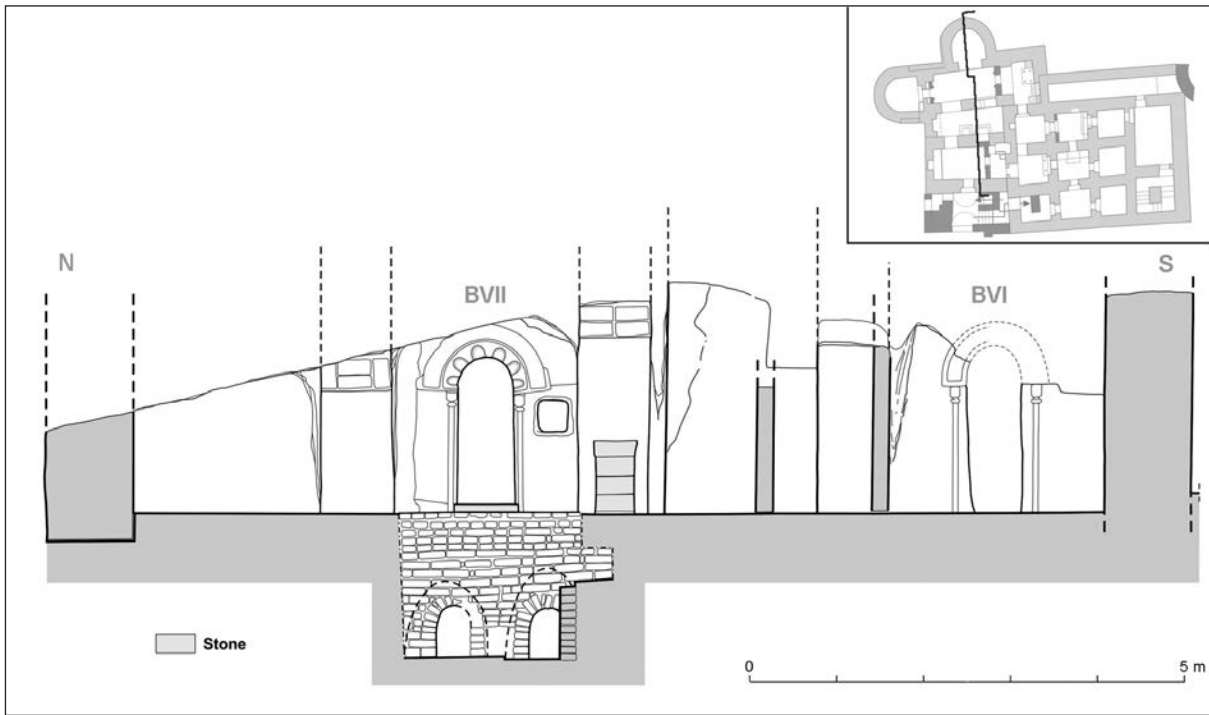


Fig. 4.26. Building B.VIII: north-south section cutting in front of the altar screens, looking east; inset, Building B.VIII from the general plan



Fig. 4.27. Building B.VIII: altar screen with the entrance to the northern sanctuary

the wall plaster near the altar, as well as the fragmentarily preserved representation of Christ with a chalice, located above [Fig. 4.25].

Two altar screens were built in the naos shared by the two chapels in order to close off the sanctuaries [Fig. 4.26]. A screen of similar construction most likely also stood in front of the entrance to the semicircular western “tower”, but only relics of its lower part are preserved [Fig. 4.27].

In building B.VII the screen was located directly in front of the eastern arched passage of the naos, and in B.V the eastern arched passage in the north wall had to be blocked to allow building a similar screen to the west of the pulpit, which thus became part of the sanctuary [Figs 4.24, 4.26].

Only the altar screen in front of the northern sanctuary (B.VII) is almost completely preserved. It was a tall wall built of mud bricks, with a central arched passageway, in which the arch over the entrance was adorned with six semicircular lobes. The surface of the screen wall bore molded decoration: two pilasters “supporting” the arch, and semicircular cornices above the arch. The south screen (B.VI) was similar in shape and decoration. Tall, masonry-built altar screens are popular in late Makurian churches at least from the early 11th century. They also bear decorative elements mainly in the form of pinnacles, and have a central, arched passageway giving access to the sanctuary. However, the type of decoration present on altar screens in buildings B.VI and B.VII finds no parallels in material preserved in the territory of Makuria [Fig. 4.27].

The entire interior of the sacral space was newly paved (or re-paved?) with ceramic tiles.

Several paintings on the walls of the large naos bear no chronological indicators that could help determine their dating besides stylistic traits (Martens-Czarnecka 2011: 252–260). They most likely came into being in the period that followed the last structural changes.

After the installation of the prothesis altar inside room NE.5 the users of the sacral spaces and of SW.2–6 no longer had access to the upper floor, reachable from the ground floor only through the prothesis (NE.5). A new staircase was built on the west to give access to the first floor of the entire complex of buildings B.I and B.VIII (B.VI and B.VII) and to allow communication between the ground and upper floors. It stood against the eastern part of the south wall of B.VI, by the west wall of B.I. In room B.I.SW.6, a wall perpendicular to the north wall was built to hold up a half-vault that supported the upper part of the staircase [Fig. 4.24].

In the late period, most likely in the 14th–15th centuries, building B.VIII played the role of a church for the local population, after the destruction of the agglomeration of Dongola in the successive wars. Inside the sacral space, however, the sanctuary of Georgios was left as a distinctly separate area. It was set apart with an altar screen located to the west of the lectern (pulpit); thus, the distinguished space included the sanctuary and the underground crypt together with its entrance. Such a spatial organization seems to imply a particular reverence (cult) of the archbishop Georgios. Another possible explanation is that perhaps the burials added inside the crypt of Georgios were the latest burials deposited in its interior.

BARBARA CZAJA

THE „GOLDEN TEXTILE” FROM A BURIAL IN THE MONASTERY ON KOM H IN DONGOLA: CONSERVATION AND RESTORATION

Excavation works carried out in the 1990s in the so-called Northwest Annex to the Monastery on Kom H in Dongola revealed the existence of three burial crypts (Żurawski 1999a). After opening, the chambers were documented and subsequently resealed for future investigation. In 2009, the southernmost and the middle crypts were reopened and fully excavated [Fig. 5.1; sfor the state after discovery in 1993, see above, Fig. 4.21]. Subsequently,

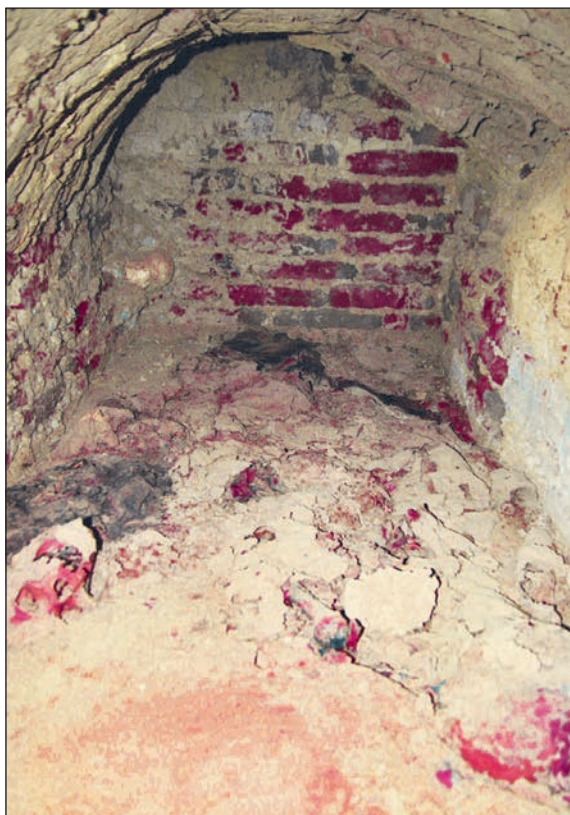


Fig. 5.1. The crypt after reopening in 2009

detailed analyses were conducted of the skeletal remains, as well as of the fragments of textiles found *in situ*.

A remarkable object, fragments of which had already been identified and documented during the first opening of the crypts in 1990, was found in crypt K.2. Among the few textile fragments preserved in the burial vault were three pieces of silk textile with gold thread [Fig. 5.2]. Comparison of photographic documentation of the fragments recovered and documented in 1990 to the piece attributed to the same textile and excavated in crypt K.2 in 2009 gave a positive match (Godlewski, Mahler, and Czaja-Szewczak 2012). The textile found in 2009 (HDd.09.048) is the same textile as the one documented in 1990 (identical weaving technique and ornament), although it is not the same fragment.

The weaving technique, the used material, and the ornamentation of the textile permit to date the item to the 12th century AD. The textile is woven in tapestry weave using silk thread wrapped in metal wire (gold according to results of elemental analysis of a fragment of the metal wrap) for parts of the ornament [Figs 5.4, 5.5]. On a dark blue background there are rows of gold medallions and gold bands filled with red guilloche patterns and floral decoration (grapevine motif). The ornament executed with red thread on a yellow or gold background is typical for a group of textiles referred to as *tiraz*, produced from the middle to the end of the 12th century, a period corresponding to the late Fatimid period in Egypt (Scarce 2003; Czaja-Szewczak 2000). The decoration prevalent in textiles of this type consists of bands of wavy ornamental motifs, Arabic inscriptions and guilloche patterns interspersed with medallions filled with representations of



Fig. 5.2. Three fragments of the “golden textile” from crypt K.2 of the monastery on Kom H in Dongola



Fig. 5.3. Fragment of a tunic with decoration in red silk thread on a yellow background, 12th century, Naqlun, Fayum Oasis, Egypt



Fig. 5.4. Fragment of the “golden textile” with decoration in red silk thread on a golden background

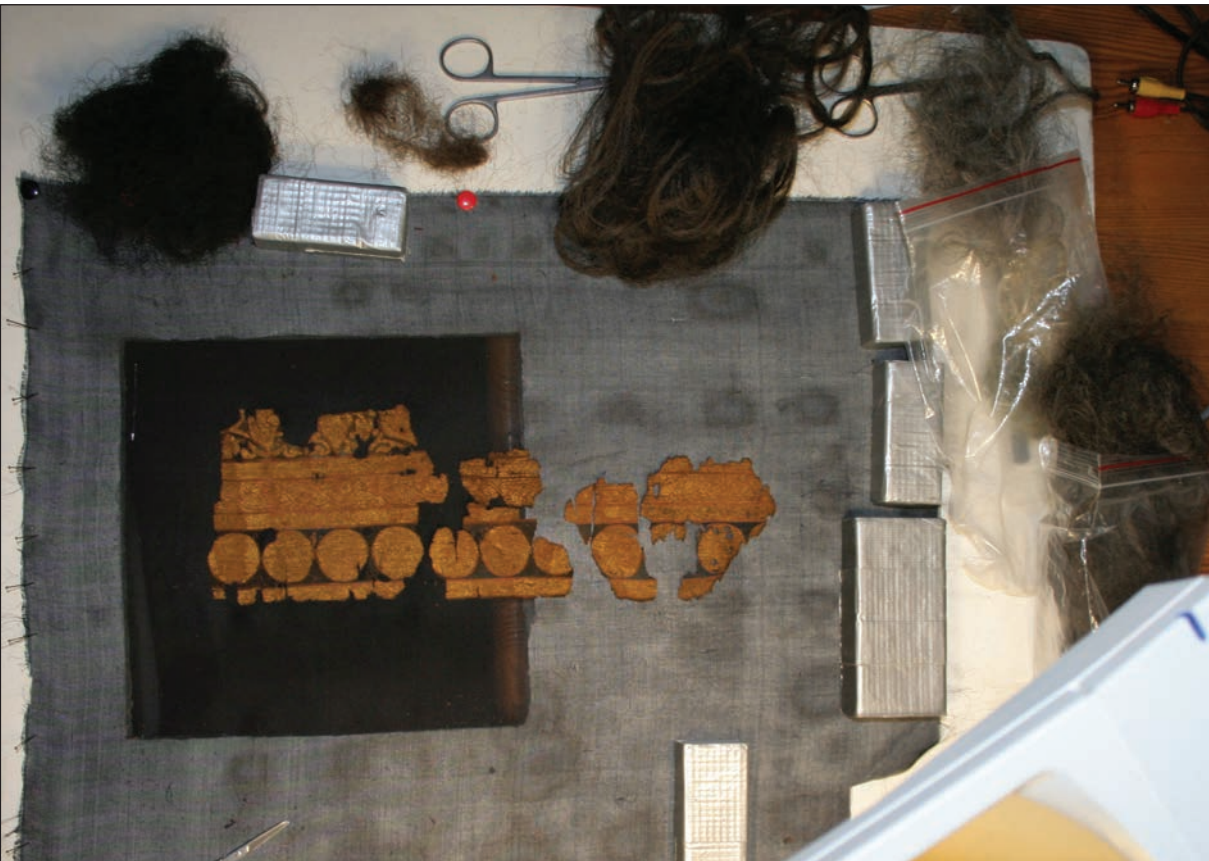


Fig. 5.5. Textile during conservation and restoration

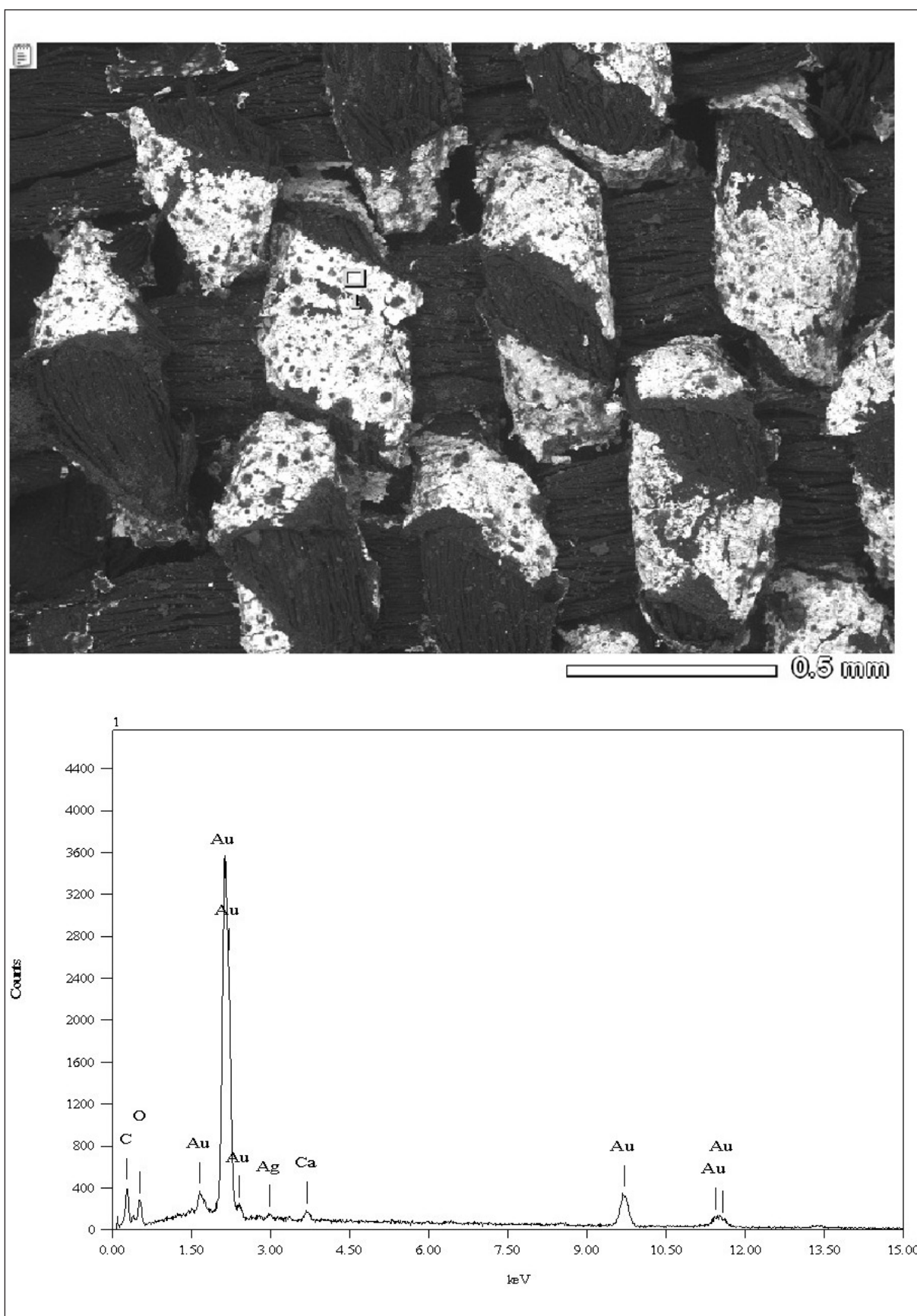


Fig. 5.6. Analysis of the elemental composition of the metal braid of the thread (analysis and photographic documentation Marek Wróbel, Laboratory of the Faculty of Geology, University of Warsaw)



Fig. 5.7. One of the fragments of the textile: left, before conservation; right, after straightening and cleaning



Fig. 5.8. Textile fixed with conservation stitches to a secondary silk ground



Fig. 5.9. Textile after conservation; inset on left, stretched onto acid-free cardboard and set in a passe-partout frame

birds and running hares. Several examples of decoration of this type can be seen on textiles from Polish excavations in Naqlun, Fayum Oasis, Egypt (Czaja-Szewczak 2011) [Fig. 5.3].

The most probable interpretation of the uncovered fragments is that they formed part of a richly decorated outer garment. The vertical decorative band most likely continued over the entire length of the robe from the shoulder to the bottom edge. It may have been placed centrally, or there may have been two identical bands arranged symmetrically on the garment. The textile, a product of one of the tiraz producing workshops, came to Dongola as an import from Egypt. The dimensions of the preserved fragments are as follows: 10.0 cm by 13.5 cm; 7.5 cm by 7.5 cm; 8.0 cm by 10.5 cm.

The cleaning and smoothing of the textile was impossible to carry out in field conditions. The piece required treatment that could only be conducted in a specialized conservation laboratory. With consent from the Sudanese National Corporation of Antiquities and Museums, the

“golden textile” was transported to Poland in order to conduct all the necessary analyses, including microbiological tests, fiber analyses, as well as conservation and restoration treatments (disinfecting, cleaning, and protection from further damage). The textile was shipped in a specially designed box made from Kapa type foam board with a polyurethane core. The interior was lined with acid-free paper and Japanese tissue. In Poland, the metal wire wrapping of the silk threads was analyzed using a scanning electron microscope (SEM) at the laboratory of the Faculty of Geology, University of Warsaw. The results indicated that the metal leaf used to wrap the silk thread was made of gold [Fig. 5.6].

The first stage of conservation consisted in cleaning the textile of surface dirt and other impurities that had penetrated into the fabric. The textile was stiff, and its fibers were very dry, brittle and prone to breakage [Fig. 5.7]. Prior to cleaning, the object was swabbed for microbiological testing. The analysis results showed no microbiological growth in progress. The cleaning

process was conducted in two stages. During the first phase, the surface of the textile was cleaned mechanically with soft-bristled brushes. In the second stage, the fragments were placed on glass panes and gently dabbed with cotton pads soaked in distilled water. As a result, dirt was removed from both sides of the textile and from between the threads. Another important result of this measure was that the water-soaked fabric was more flexible and less susceptible to damage during attempts to smooth out creases. The textile fragments were thus restored to smooth form.

In order to consolidate the cleaned textile, the fragments were placed on a doubling material prepared from a piece of silk dyed to match the dark blue background of the original and attached to it using yarn of raw silk (greze) in the same color. Fragments of the original

textile were first laid out on the silk plain weave [Fig. 5.5]. After arranging the fragments in such a way as to obtain continuity of the pattern, the original was secured to the support with silk yarn by tacking down the edges and surfaces with conservation stitching: self-couching stitch and laid-couching stitch [Fig. 5.8]. Once fixed to the support, the textile was stretched on a piece of acid-free cardboard. For prophylactic reasons it was decided to mount the piece in a clip frame, inserting a passe-partout to keep the glass pane away from the textile [Fig. 5.9].

In the first half of 2017, the “golden textile” was transported to France, where from 14 April to 30 July 2017 it was presented at the exhibition *Trésors de l’islam en Afrique, de Tombouctou à Zanzibar* at the Institute of the Arab World in Paris (Aloudat and Boghanim 2017).

ADAM ŁAJTAR AND VINCENT W.J. VAN GERVEN OEI

WOMEN IN THE SOUTHWEST ANNEX

The Southwest Annex of the Monastery on Kom H in Dongola [Fig. 6.1] has a number of features that indicate a relation with womanhood, including, first of all, the many depictions of the Virgin Mary (Martens-Czarnecka 2011: Cat. Nos 86, 89B, 94, 97, 98, 108). One of them, located on the north wall of room 5, assumes the form of an icon of the Standing Virgin Mary with Child (Martens-Czarnecka 2011: Cat. No. 108). Next to it, rendered in the same style, is a scene of a dance (Martens-Czarnecka 2011: Cat. No. 107), in which the participants invoke Mother Mary, asking for her intercession in the

labors of the *ngonnas*, the sister of the king (van Gerven Oei 2018). Furthermore, at least three wall paintings in the Annex were donated by women, as is suggested by small representations of female donors accompanying them (Martens-Czarnecka 2011: 221–225). In the light of these features, the Southwest Annex may be constructed as a marked feminine space.¹ This interpretation is strengthened by a graffito in Old Nubian found in room 2, in which an anonymous woman asks for the intercession of Mary with God the Christ in the birth of her firstborn. The publication of this inscription is the main

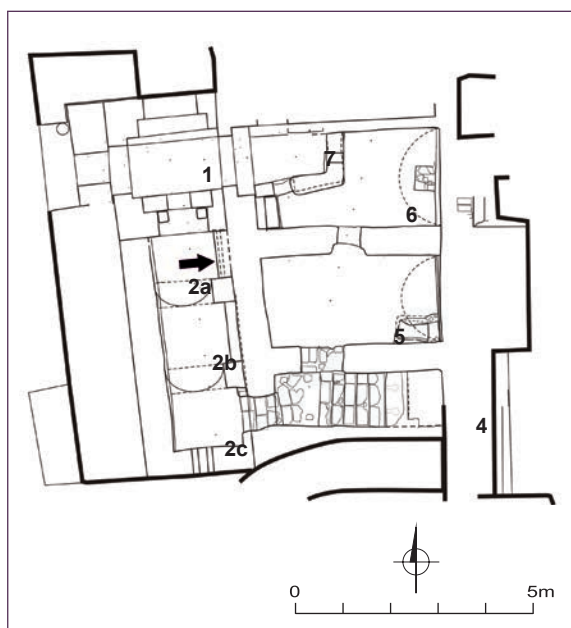


Fig. 6.1. Location of the graffito in the Southwest Annex



Fig. 6.2. Enthroned Virgin and an unidentified figure on the east wall of room 2

¹ This was already suggested by Stefan Jakobielski (2008: 297).

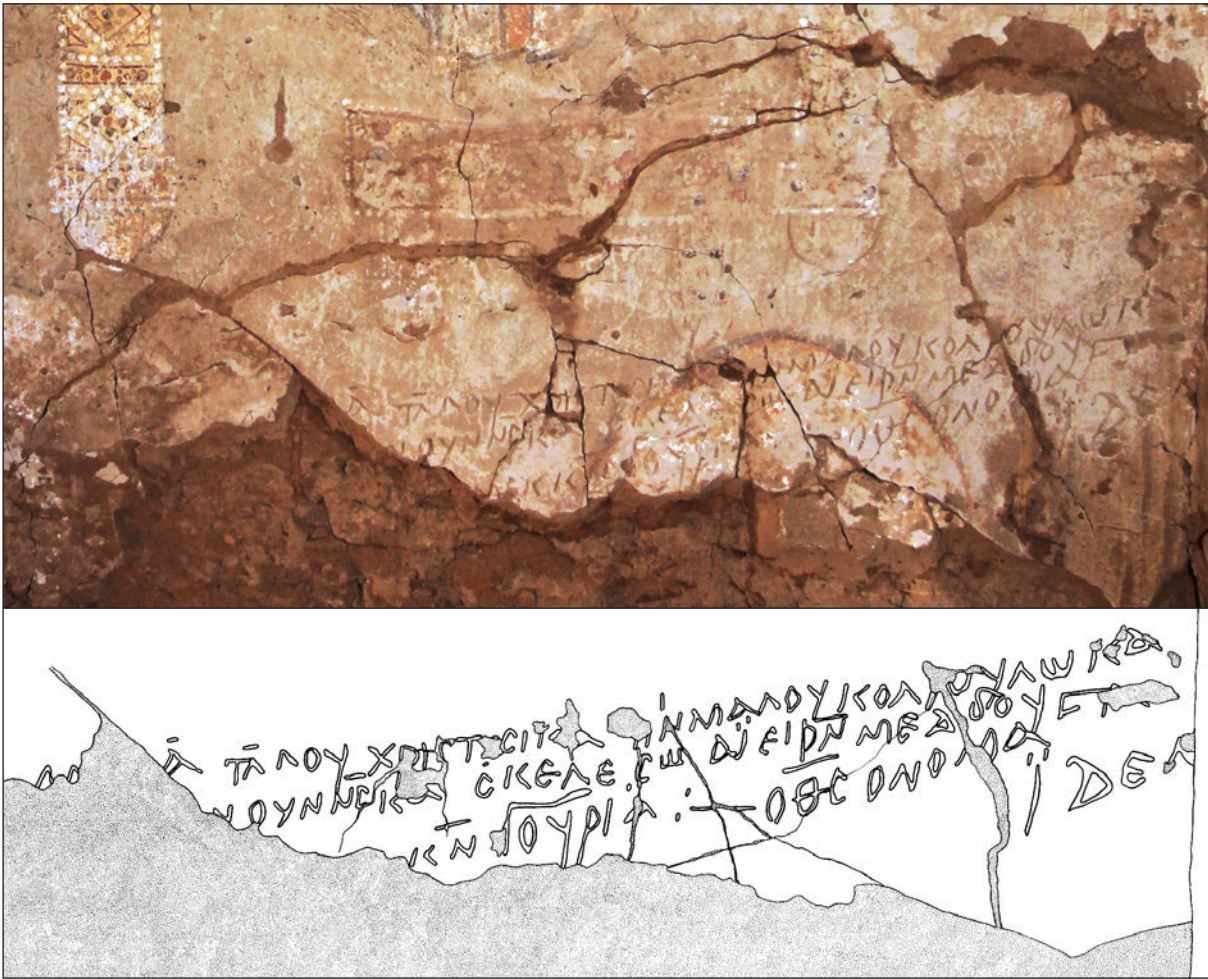


Fig. 6.3. Graffito of an anonymous woman on the east wall of room 2 of the Southwest Annex

purpose of the present paper. As an addendum we offer the publication of an ink inscription in Greek, also from room 2, accompanying a representation of one of the female donors.

The Old Nubian inscription is found on the east wall of room 2 of the Southwest Annex [see Fig. 6.1]. It is located 38 cm away from the northeastern corner and 207 cm above the floor, underneath a mural showing the Enthroned Virgin with Child (Martens-Czarnecka 2011: Cat. No. 86) [Fig. 6.2]. It is written across a painting of an

unidentified figure (Martens-Czarnecka 2011: Cat. No. 87),² and is adjacent at right angles to a representation of a figure, supposedly the donatrix of the painting(s). The inscription is 11.5 cm in height and 76 cm in width. Height of letters varies between 1.3 cm (o) and 4 cm (p, τ). The inscription is a graffito scratched in the plaster [Fig. 6.3]. The writing is in Nubian-type majuscules. The hand is trained but not particularly neat. The scribe could not fit the word ἰδεν in line 3 and put it beneath thus producing line 4.

† Μ[ΑΡΙ]Δ ΤΛΟΥ ΧΡΙΣΤΟΙΚΑ ΗΝΜΑΛΟΥ ΚΟΛΤΟΥΛΩ ΚΑ-
 [ΚΙ]Ν ΟΥΝΝΕΚΑ ΣΚΕΛΕΩ. ΔΙ ΕΙΡΝ ΜΕΔΔΟΥ Ε . .
 [ca. ?] ΜΕΚΚΗ ΔΟΥΡΙΑ : — ό θ(εδ)ς όνομα
 4 ἰδεν.
 4. εἶδεν

² Małgorzata Martens-Czarnecka identifies this figure as St Epiphanius, but it rather appears to be an archangel (information kindly provided by Dobrochna Zielińska).

Mary, beg to God the Christ, according to this (prayer) that the firstborn is born in purity. I, your servant, [- -] for the sake of the small [one]. God knows the name.

The essential part of the inscription is a prayer in Old Nubian, with which an anonymous woman asks for the intercession of the Virgin Mary in relation to the birth of her firstborn and heir. The prayer is followed by a formulaic expression in Greek, which explains the petitioner's anonymity: her name is known to God. The two elements are separated from one another by a sign consisting of a colon and a prolonged line. As this sign is habitually used to close a text in Nubian scribal tradition, one gets an impression that the expression of anonymity was added as if in afterthought. The code switching from Old Nubian to Greek may be related to the formulaic nature of the Greek expression or its absence in Old Nubian.

Particular linguistic aspects of the Old Nubian used in the inscription suggest that the author may have been a local from the region in which it was found, namely the area surrounding the capital of Makuria, Dongola. Although Old Nubian as a literary and official language used throughout the Makurian kingdom appears to have been initially based on the Nobiin language, spoken in the region of Nobadia (Rilly 2010: 165–166), it appears that in this case the influence of Dongolawi can be detected in some of the morphology (see below, commentary to lines 1 and 2). This may give us insight into how Old Nubian developed after it was adopted as the official language of Makuria following the incorporation of Nobadia in the 6th/7th century.

1. HNMAΛΛΟΥ : HN “this” (Browne 1996: 70) followed by the suffix $-\text{MAΛΛΟΥ}$, supposedly a regional variant of $-\text{MAΛΛΟ}$, “according to, following”. The orthography $-\text{ΟΥ}$ suggests a pronunciation as $/-u/$ rather than $/-o/$, which would appear in standard Old Nubian. Perhaps this is an indication of the influence of the regional Dongolawi dialect of the author. The locative ending in $-u$ has been preserved in toponyms in the Dongola reach, for example Gebel Kullaru, a rocky hill near Old Dongola, supposedly from *kullu*, “rock”, with locative $-ru$, cf. Old Nubian $-\text{xo}$. In contemporary Andaandi, the final $-u$ of the locative has been dropped.

KOΛTOYXΩ : A word with the root KOΛ , “pure” (Browne 1996: 96) followed by the nominalizer $-\text{τ}$, and locative $-\text{xo}$. As the overall writing direction of the inscription goes upward to the

left, the scribe perhaps had difficulties keeping a straight line.

1–2. KA[KI]N : If no additional letters are missing at the beginning of line 2, KA[KI]N appears to be a plausible reconstruction. Only the nominative $\text{KA}\bar{\text{K}}\bar{\text{Λ}}$, “firstborn”, and the irregular plural $\text{KA}\gamma\epsilon\text{I}$ have been attested (Browne 1996: 83), suggesting that the final *lambda* of the root is labile and thus allowing a genitive KA[KI]N . It is unlikely that KA at the end of line 1 belongs to the previous word, as that would create an ungrammatical sequence of locative–accusative. To pray for the successful delivery also appears to be worthy of special intercession by Mary, as the firstborn was supposed to be the heir. For example, a woman's desire for a $\text{KA}\bar{\text{K}}\bar{\text{Λ}}$ drives the plot in the Old Nubian *Miracle of Saint Menas* (El-Shafie El-Guzuuli and van Gerven Oei 2013), and it could be argued that also the dance scene in room 5 is concerned with the production of an heir to the throne and thus a firstborn. KA[KI]N is the genitive-marked subject of $\text{OYNN}\bar{\text{C}}\text{KA}$.

2. $\text{OYNN}\bar{\text{C}}\text{KA}$: From OYNN , “to bear” (Browne 1996: 138), with preterite $-\bar{\text{C}}$ and accusative $-\text{KA}$, which marks a complement clause dependent on $\bar{\text{C}}\text{KE}\bar{\text{Λ}}\epsilon\text{C}\omega$, the 2nd/3rd person singular imperative “beg”.

$\epsilon\text{I}\bar{\text{P}}\bar{\text{N}}$: This form of the 2nd person singular pronoun $\epsilon\text{I}\bar{\text{P}}$ with genitive $-\bar{\text{N}}$ has heretofore only been found in a specific genre of literary texts, the regular form being ϵIN . This particular form, together with its 3rd person singular pronoun parallel $\text{TA}\bar{\text{P}}\bar{\text{N}}$ for TAN , has only been attested in Psalms. Of the nine texts displaying this feature, four came to light in Qasr Ibrim and are written on parchment (Plumley and Browne 1988: nos 2 and 3; Browne 1989: nos 12 and 13) and five in Dongola, where one is written on parchment (Browne 1987: 76–81, no. 1) and four have the form of ink inscriptions on the walls of the so-called Northwest and Southwest Annexes to the Monastery on Kom H (Browne 2006; van Gerven Oei and Łajtar in preparation). Thus, more than half of the texts containing this specific form of the genitive personal pronoun have been found in Dongola. The appearance of $-\text{MAΛΛΟΥ}$ and $\epsilon\text{I}\bar{\text{P}}\bar{\text{N}}$ in the same graffito suggests that the latter form is perhaps also a local variant, either derived from the Dongolawi language in that period or the result of a development internal to Old Nubian originating in Dongola. This would, in turn, suggest that all attested Psalm translations found both in Qasr Ibrim and in Dongola, most of which are partly or fully bilingual Greek–Old Nubian and share a host of other stylistic and linguistic features, have their provenance in the

same place, presumably the Makurian capital (see for further discussion van Gerven Oei and Tsakos in preparation).

3–4. The formula οὗ ὁ θεὸς ὄνομα εἶδεν occurs in two visitors' inscriptions in the upper church at Banganarti, probably left by the same man (Łajtar forthcoming a: Nos 416 and 853). It is probably also used by the author of a wall inscription in the so-called Church of Angels in Tamit (Donadoni 1967: 71, No. 29b, l. 3; the text has: Ἰ(ησοῦ)ς Χ(ριστ)ὲ ὄνομα εἶπων). The formula οὗ ὁ θεὸς ὄνομα εἶδεν is frequently found in Christian votive inscriptions from the Balkan Peninsula, Aegean islands and Asia Minor. Its attestations were collected and discussed by Denis Feissel (1983: No. 104), although his list of attestations may be enriched by numerous further items (here only a selection) coming from Athens (SEG XV 141), Corinth (Meritt 1931: no. 253), Sparta (SEG XXXIV 305), Demetrias in Thessaly (SEG XXXVII 464), Rhodes (SEG XXXI 737 and XLIII 537), Hierokaisareia in Lydia (TAM V 1, 1300), Sinuri in Caria (Scheibelreiter 2006: no. 27), and Anemourion (Russell 1987: no. 78). A similar formula οὗ ὁ θεὸς γινώσκει τὸ ὄνομα appears in votive inscriptions, especially the mosaic ones, from southeastern Asia Minor,

Palestine and Arabia (Haensch 2010). Also, a rare variant with ἐπιστάται is known (Scheibelreiter 2006: no. 28; the inscription comes from Sinuri in Caria). The Greek οὗ ὁ θεὸς ὄνομα εἶδεν/γινώσκει/ἐπιστάται has a counterpart in the Latin *cuius nomen Deus scit* (Thiel 2014). A similar expression is also known in Hebrew. All these formulae, both in votive inscriptions from the Balkan Peninsula, Asia Minor and Palestine/Arabia and in visitors' inscriptions from Nubia, are expressions of the anonymity (and modesty) of the authors of these inscriptions in front of God, who, being omniscient, knows the name of the donor and visitor (Roueché 2007).

The paintings on the east wall of the room may have been donated by an individual represented on the northern face of a pilaster adjacent to this wall. This person, presumably a female, is clad in a red robe (Martens-Czarnecka 2011: Cat. No. 87A) and is accompanied by a dedicatory inscription in Greek. The inscription is found 16 cm away from the southeastern corner, 169.5 cm above the floor. Its dimensions are 12.5 cm in height and 7 cm in width. The letters have a height varying between 0.9 cm and 1.2 cm and are executed in black paint. The inscription is severely damaged, especially in its lower part.

† κ(ύρι)ε Ἰ(ησο)ῦ Χ(ριστ)έ,
 φύλαξον
 εὐλόγησον
 4 [β]οίηθισον
 τὴν δ[.] [.] [.]
 ..[- - -]
 ..[- - -]

4. βοήθησον

O Lord Jesus Christ, guard, bless, help [- - -].

The inscription follows the habitual structure of dedicatory inscriptions in Christian Nubia, which are regularly written in Greek. They start with an invocation of God or a saint, followed by a series of requests expressed in the aorist imperative active starting with φύλαξον εὐλόγησον (see remarks by Adam Łajtar in *Chapter 13*). After this series of requests, the name of the person making them is given, always preceded by the qualification “your servant”. In this particular

instance, the feminine article τὴν in line 5 seems to suggest that the donor, whose name can no longer be deciphered, was female. Even though Nubian texts show that gendered nouns and articles could sometimes be used to refer to either gender (Łajtar 2003: No. 7, commentary to line 13), in this case the red dress of the person depicted next to the inscriptions rather suggests that the article is gendered properly.

DOROTA DZIERZBICKA AND AGATA DEPTUŁA

COURTYARD A AT THE MONASTERY ON KOM H IN DONGOLA: FIELDWORK IN 2014–2016

From 2014 to 2016, excavations in the Monastery on Kom H in Dongola concentrated in Courtyard A, an open area located to the northeast of the so-called Southwest Annex, or Gatehouse H.SW.B (Godlewski 2015e: 277–279) and to the south of the so-called Main Building¹ (Jakobielski 2010) [Fig. 7.3]. The area under investigation also included rooms and areas provisionally investigated by Stefan Jakobielski and referred to in previous scholarship as SW-E.14, SW-E.15 and SW-E.16 [Fig. 7.2] (Jakobielski 2010: 83, Fig. 82; Jakobielski and Martens-Czarnecka 2008: 331–334 and 326, Fig. 1). Since excavations in Courtyard A have yet to be completed, this report should be regarded as a preliminary consideration of the results obtained thus far.

OVERVIEW

The total area of Courtyard A measured approximately 20 m north–south and 16 m east–west at its maximum extent. The structures and deposits found in this area are broadly dated from the late 11th to the early 15th century on the grounds of ceramic evidence [see Chapter 8]. This multiphase area contains relics of numerous structures, as well as deposits of soil, ash and debris preserved up to a height of over 2.3 m. Excavated features, most of which were built of re-used baked and sun-dried bricks, show evidence of several occupational phases possibly related to changes in the courtyard’s usage.

At the beginning of exploration, the area under investigation sloped slightly from north-west to south-east due to erosion. Thus, the latest structures are preserved only in the west, where erosion was not as severe as in the more exposed

eastern part. However, horizontal stratification of deposits indicates that the surface of successive occupational levels remained relatively flat throughout; this allowed assignment of individual features to different phases based primarily on the levels of their foundations and walking surfaces [Figs 7.1, 7.4].

In the early phases (I–VI), the courtyard space was limited to the southern half and the northwest quadrant of the excavated area, while the northeastern part was occupied by a building (henceforth referred to as H.B.01), which also extends further to the north, beyond the

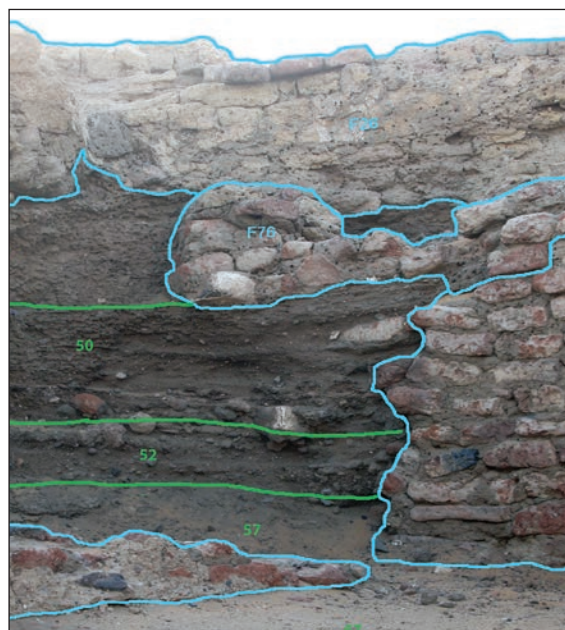


Fig. 7.1. Stratification of deposits (in green) and features (in blue) in the northwestern quadrant of the courtyard

¹ The upper floor of the Main Building, or rooms 52–57 according to Jakobielski’s plan (2010: 70, Fig. 1), was also cleared of deposits, plotted using a Total Station and photographed as groundwork for a future investigation of the entire complex.

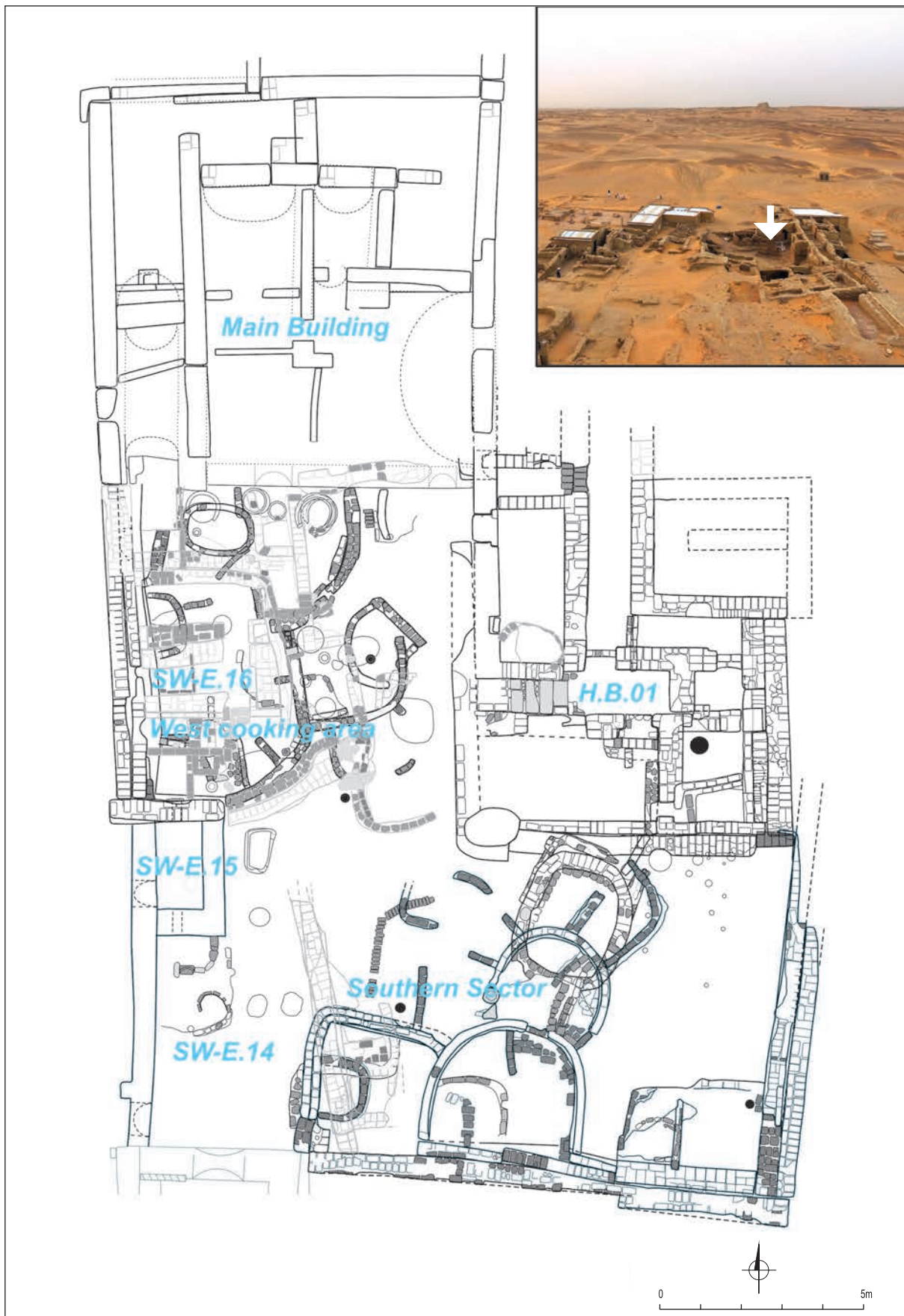


Fig. 7.2. General cumulative plan of Courtyard A and related structures excavated in 2014–2016

area under investigation. The excavated rooms have stone and brick pavements and bear evidence of structural changes divisible into at least two phases. The later of these phases has been exposed, while the layout of the building in the earlier phases is unclear due to architectural changes and the presence of later, overlying structures.

The rest of the excavated area, in turn, revealed no relics of larger buildings with a regular layout and, instead, was filled with a variety of loosely dispersed ovoid structures and standalone walls, as well as hearths and workspaces. It seems to have functioned as a courtyard since the earliest occupational phase, a courtyard that

most likely catered to the needs of the users of buildings located to the north and west of it.

In an intermediate phase of occupation of the investigated area, the walls of building H.B.01 were leveled and the rooms were filled with rubble. From that time onwards (phases VII–IX), the space was an open area, while the southern part of the courtyard was occupied by several rooms, structures and working areas. These eventually fell into disuse, but new structures appeared, including a complex of rooms SW-E.16 built in the northwest quadrant of the courtyard. The uncovered structures and related deposition units were assigned to several phases discussed in detail below.



Fig. 7.3. Aerial view of the southwestern part of Kom H with the location of the investigated area

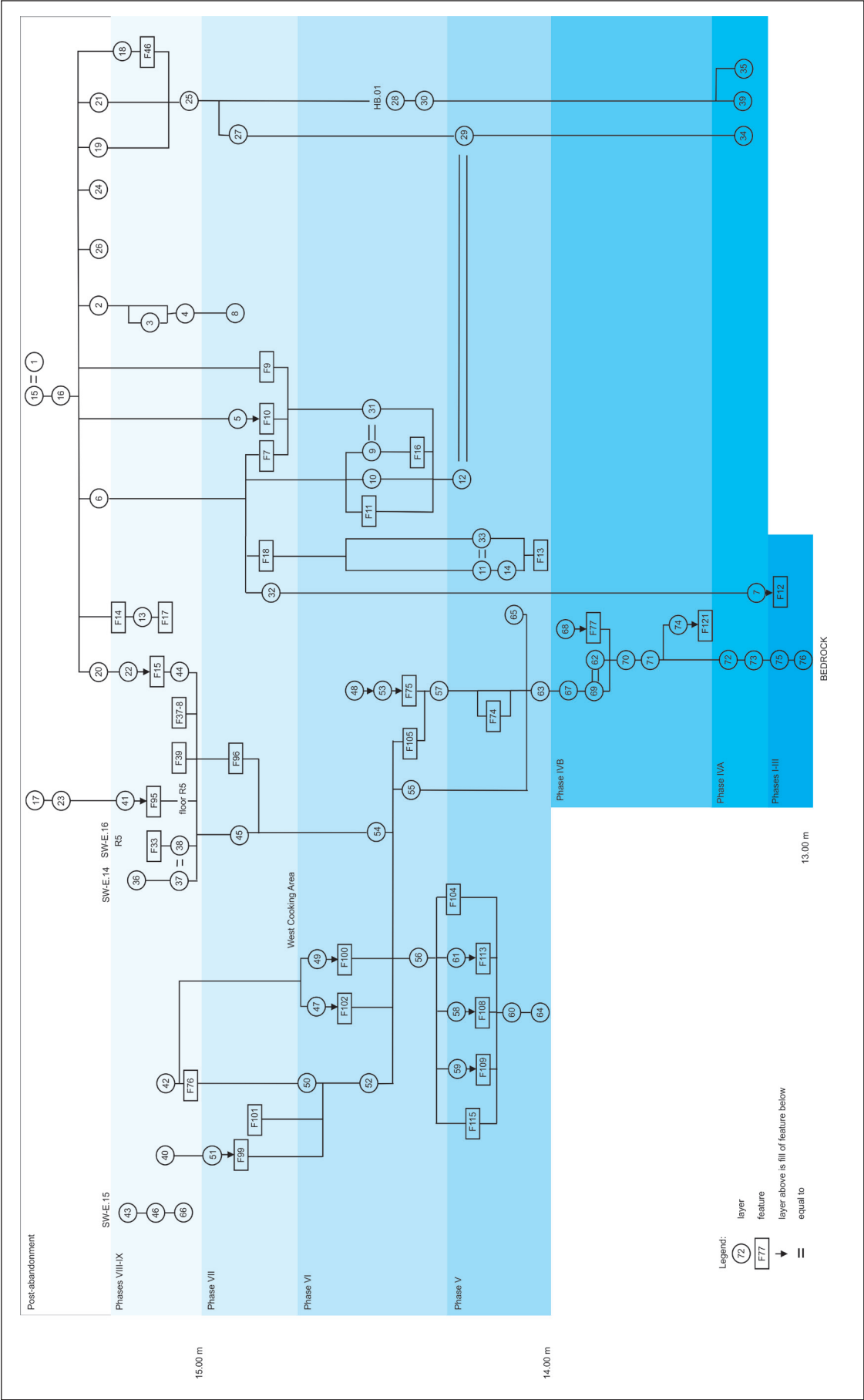


Fig. 7.4. Harris matrix and phasing scheme for Courtyard A, seasons 2014–2016

OCCUPATIONAL PHASES OF COURTYARD A

Phases I–III

At the earliest investigated levels (Phases I–II), the northeast quadrant of the area under consideration was occupied by Building H.B.01.² In the northwest quadrant, in turn, levels corresponding

to the earliest phases have not been reached, therefore the use of this space remains obscure. The courtyard area was delimited on the south by a series of east–west oriented walls (F8, F22, F23), and on the southeast by parallel walls F1 and F4 [Fig. 7.5]. In the northwest quadrant, the northern edge was formed by walls F86 and F94, which belong to vaulted ground-floor rooms of the

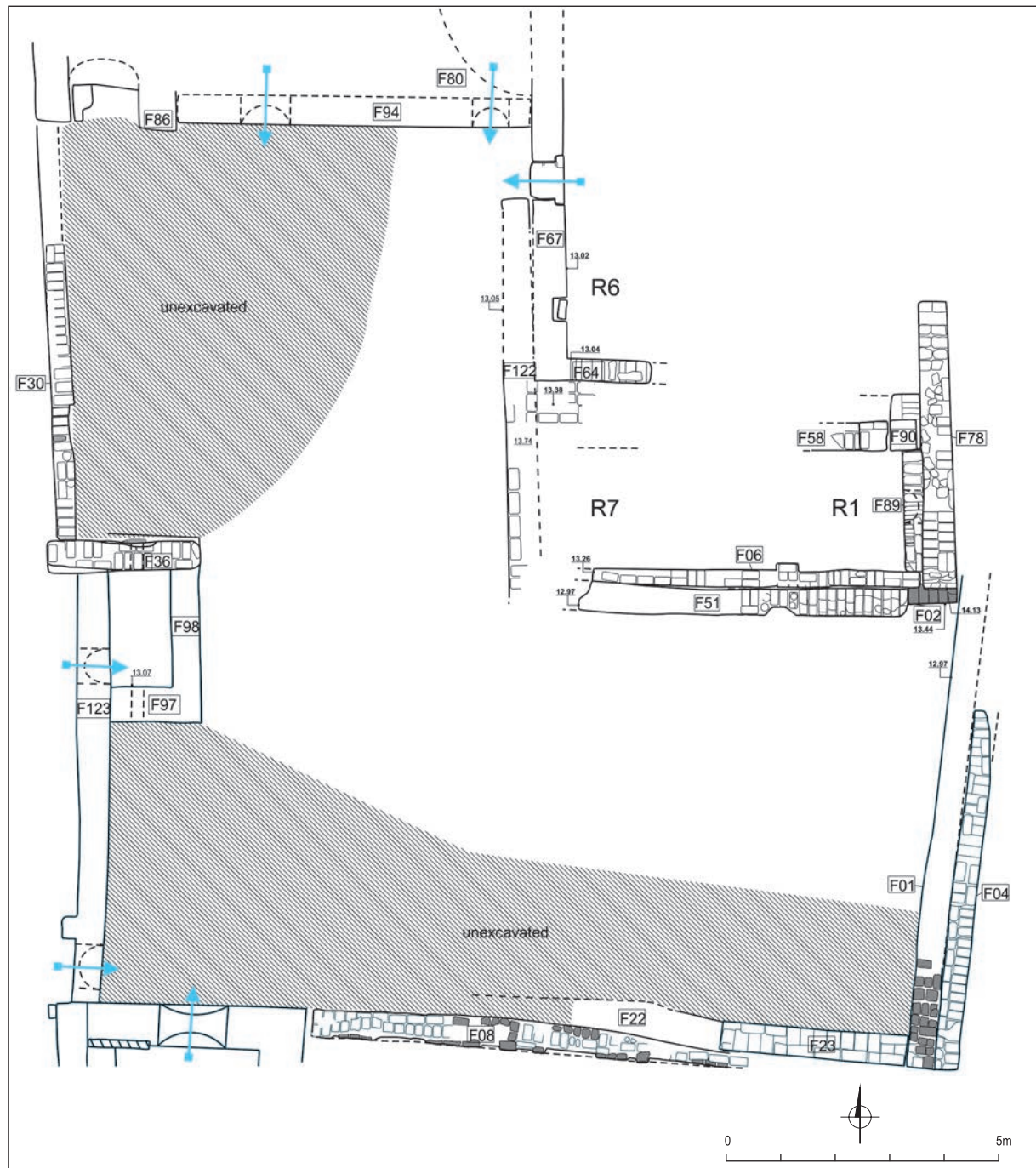


Fig. 7.5. Courtyard A in Phase II

² Building H.B.01 continues to the north of the excavated area, therefore a thorough discussion of its construction details and function can be attempted after it is investigated completely. However, a preliminary discussion of its development is necessary at this point, as it is relevant for the interpretation of Courtyard A.

Main Building (complex NW-E(a), Jakobielski 2010: 71). The western boundary may have been the outer wall of the monastery supplemented at higher levels by additional walls (e.g., F30) that followed its course but structurally formed part of different rooms comprising H.SW.B and H.NW.B (so-called Annexes). Walls F1 (baked brick) and F2 were founded on bedrock; the foundation levels of the other walls have not been reached, but they continue below the level of deposits and structures excavated hitherto.

H.B.01: relics of early phases

The oldest part of H.B.01 seems to be preserved in Room 6. Its west wall (F67) is a continuation of a wall of the Main Building located to the north, and it stands on bedrock. It features a doorway, bricked in at an unspecified period but prior to the subsequent structural changes to H.B.01. Also the south wall of Room 6 (F64) belonged to this early phase and was founded on the same level. However, the original dimensions of the room and its full extent are unknown, as its two other walls (F65 and F66) were added later (see below).

Walls F6, F58, F89, F90 (the south, east and north walls of Room 1) also seem to belong to the earliest structural phase of the building and at least F6 was built on bedrock. East wall F89 had a centrally located niche, which went through the entire thickness of the wall and used wall

F78 to the east as its back, but originally may have been a window. Fragmentarily preserved lime plaster on F89 bore traces of faint geometrical decoration painted in black, red and yellow.

Excavations in the southwestern part of the building revealed the existence of Room 7, which was only in use during the early phase. Its south wall was F6, which at a distance of 2.20 m from its eastern end had a small pilaster that might have been the southern jamb of a doorway between Room 7 and an early version of Room 1. The east internal wall of Room 7 has yet to be found. The original floor level has not been reached.

Also at an early stage, but possibly somewhat later on, the external walls were laid out: F122 to the west ran along the western face of F67 to the doorway to Room 6. On the south it met with perpendicular wall F51, which closed the building from that side. Wall F78, which made use of older wall F2 as a foundation and ran perpendicular to F51, was part of the same enclosing structure for building H.B.01.

Southern sector: Room 1

The earliest structure in the courtyard's open space (Phase III) was Room 1, built against the south wall of the courtyard (F8) [Fig. 7.6 left]. It was a semicircular structure measuring 2.90 m by 3.50 m, with walls preserved up to about 2 m in



Fig. 7.6. Room 1, Phase III: left, top view looking west; right, relic of a palm-wood post supporting the roof

height. First, a series of three structurally separate but contemporary facing walls were built against the northern face of F8 and extended to the east, where they abutted older wall F23. The semicircular wall (F12) forming Room 1 was erected against the facing. It was built of reused building material (mostly mud bricks) and it stood on a foundation of carelessly spread out baked bricks. The walls of the room were coated with mud plaster inside and out.

Room 1 was entered through a doorway in its northern part, flanked on the inside by a thin, perpendicular stub wall. Cavities in the jambs indicate the presence of a door. A trunk of a palm tree was inserted vertically by the south facing wall in the center of the room [Fig. 7.6 right]. The facing walls and the palm-wood post served as supports for a light roof. Indications of this are fragments of mud mortar with impressions of a palm rib framework and matting found inside Room 1. In the southwestern corner of the room there was a low, roughly square mastaba (F70) with a mudbrick edge and a plastered top surface (1.80 m N-S, 1.70 m E-W, H. 0.15 m). A hearth (F73) was located against wall F23 to the east of Room 1, on the same walking level as the room's original floor. It had a perimeter of bricks preserved on the north, east and south.

The features and material found in Room 1 in contexts corresponding to Phase III offer no direct evidence of the function of this space, but while storage is certainly a possibility, the room's residential character also cannot be excluded.

Phases IV and V: structural changes to H.B.01 and new features in the courtyard

The level contemporary to the functioning of building H.B.01 in Phases IV and V was reached in most of the courtyard space [Fig. 7.7]. To the west of H.B.01, an area used for food preparation was uncovered and found to have operated consistently, with small changes, through Phases V and VI.

H.B.01: first structural change

In building H.B.01, structural changes that occur in Phase IV can be divided into two episodes, A and B. In Phase IVA, the west and south outer walls of H.B.01 (F51 and F122) were demolished, creating layers of compacted rubble (layers 72 and 73) that sloped to the south and west of the building. After the demolition of these walls, the

space to the west was cut by several fire pits, while the space to the south featured numerous post holes testifying to the presence of a structure or structures with multiple vertical wooden supports [see Fig. 7.7].³

Room 7 was no longer in use. It was filled with rubble (layer 34) from the demolition of its west and south walls. In addition, its southwestern corner was cut by pit F121, which destroyed the junction of walls F6, F51 and F122, cut through the rubble layer 34 and reached bedrock.

In this period new walls were built, changing the layout of H.B.01:

Room 1 was separated from the space formerly occupied by Room 7 by a north-south oriented wall (F57). An entrance to it was cut in the north wall.

A flight of stone steps was built to the south of Room 6 and its south wall (F60) became the south wall of the building, separating it from the courtyard area. A doorway connecting the interior with the courtyard to the south was built in this wall to the west of wall F57. At the top of the steps, to the north of F60, Room 4 was created and paved with a baked-brick floor.

Walls F65, F66 and F68 were built, giving a new shape to Room 6 that in this phase may have been accessed from the east, through a doorway in wall F65 (the location of this doorway is uncertain due to the poor state of preservation of this wall). F66 and F68, in turn, were part of a staircase construction, with a flight of baked-brick steps ascending westward to the upper floor of the Main Building.

H.B.01: second structural change

In Phase IVB, walls F52, F62 and F63 were built, creating Room 2 (an anteroom for Room 1) [see Fig. 7.7]. F62 was the new west wall bonded with F63, an east-west oriented wall that formed the northern boundary of the room. The east wall was the older wall F90 and its later extension to the north, F52. The bottom courses of F63 formed the threshold in the doorway to the room and abutted wall F52.

Corridors 3 and 5 paved with stone tiles also came into being in this phase. Room 3 was a corridor running east-west and reaching the entrance to Room 2 at its eastern end. Its south wall was F63, which separated the room from Rooms 2 and 4. The north wall was F91, which is also the south wall of an unexcavated staircase to the north. F52, the east wall of Room 3,

³ The layers of debris resulting from the mentioned destruction episode help correlate changes in H.B.01 with phases identified in the stratigraphy of the courtyard.

abutted F91 on its southern face. The floor of the corridor was paved with tiles of broken stone. Lime-mud plaster on the north and south walls bore some graffiti. The legible ones are numeric cryptograms and their function can be interpreted as apotropaic (Plumley 1982; Müller 2001; Łajtar and van der Vliet 2017: 72–74). Such

cryptograms were usually placed at the doors and windows of residential dwellings.

Room 5 was a corridor leading from Rooms 3 and 4 to the north. Most of it was paved with tiles of broken stone, except its southern end, which was somewhat carelessly laid with baked bricks. Its east wall was F92, bonded with F91.



Fig. 7.7. Courtyard A in Phase IV: two episodes (A and B) of structural change

Its west wall was F65, which was built together with baked-brick stairs leading westward to a higher level (only two lowermost steps are extant). The corridor seems to continue further to the north outside the excavated area.

Room 4 is an east–west oriented corridor paved with baked bricks. It was entered from

the north and its north–east corner was formed by walls F62 and F63. In its heavily damaged south wall (F60), in the southeastern corner of the room, was a doorway leading out into the courtyard on the south. Following the corridor to the west, however, one reached the four stone steps laid between wall F60 and older wall F64

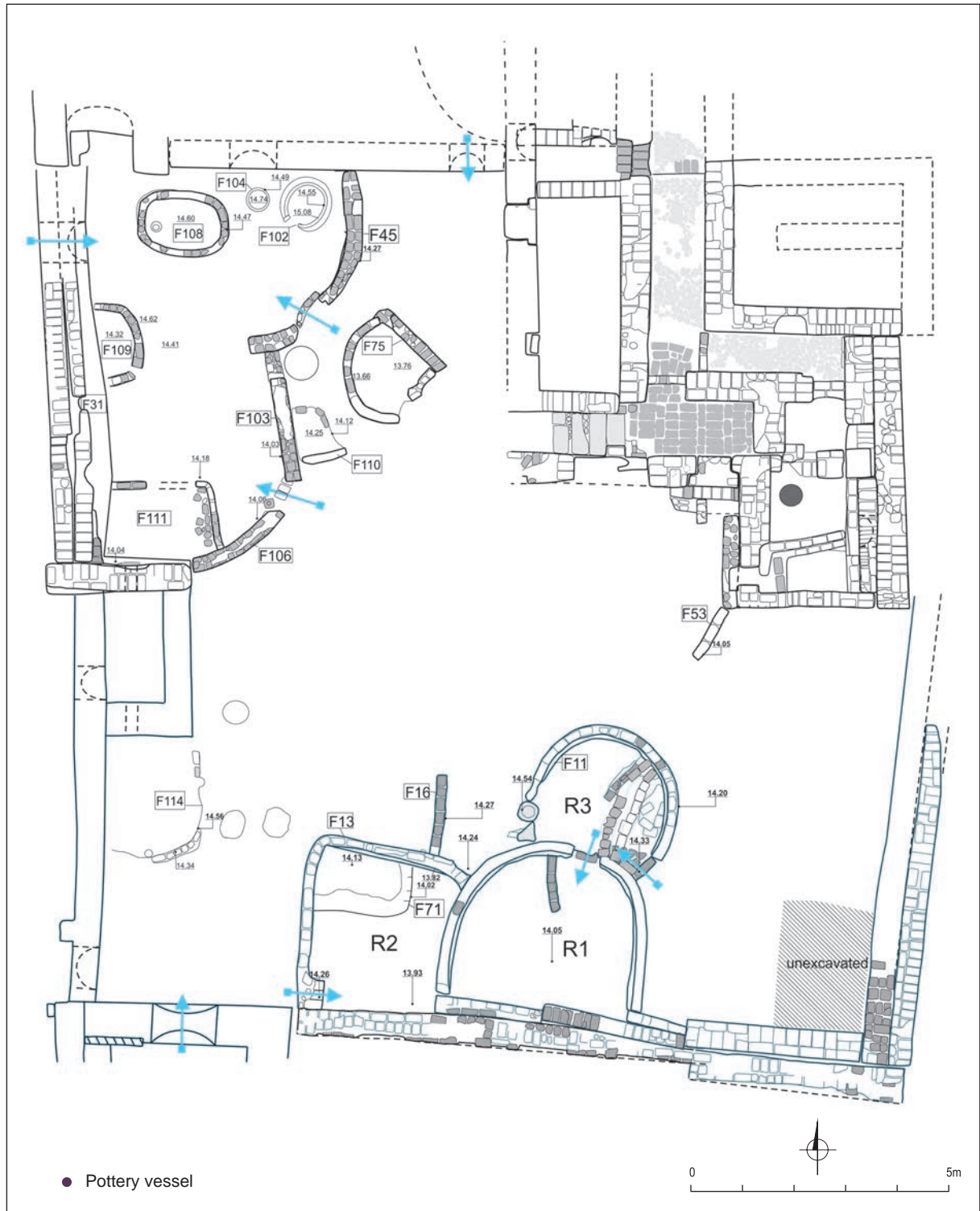


Fig. 7.8. Courtyard A in Phase V

and leading out into the courtyard on the west, where the walking level was apparently somewhat lower.

It cannot yet be determined at this point whether the staircase walls F91, F92 and F93 were also built in this phase or earlier, as their foundations could not be reached. However, they were certainly standing in this phase because the stone pavement in the corridors abuts them.

At the same time or shortly afterwards, additional features (walls F55 and F59) were installed in Room 1. These low walls were built along the west wall some time before the other changes; they stand on a floor at an elevation of 13.76 m. Then, presumably following a destruction phase, a new west wall was built (F57), together with an east-west oriented dividing wall F56, possibly the relic of a mastaba or bin that occupied the southern part of the room. In the northern half of the room, north wall F58 was hacked out to create a new doorway, next to which a large pottery vessel (amphora) was inserted into the mud floor (elevation 13.93 m) in the north-western corner. The vessel was not excavated and remains *in situ*. In this form, building H.B.01 functioned through courtyard Phases IVB and V (see below).

Southern sector: new rooms and features

In Phase IV, new structures emerged in the southern sector of the courtyard. Oval enclosure F77 was constructed to the north of Room 1 [see *Fig. 7.7*]. Its walls, built of fragments of mud bricks and baked bricks, are preserved to a height of a maximum of 0.30 m. It is possible that the entrance to the structure was located in the south, close to Room 1, as the wall is lowest in that part and the top surface of the bricks is level with a mud walking surface to the north of the entrance to Room 1. Between the doorway and F77, to the east, there was a semicircular mud-plastered area with traces of burning (F88). A child's footprint (L. 20 cm; W. 8 cm) was preserved in its surface [*Fig. 7.9* right].

Some structures were also built against the outer walls of H.B.01 in the courtyard (e.g., F54). Circular holes in the upper surface of the razed wall F51 indicate the presence of some kind of installations against the south wall of the building.

In Phase V, Room 2 was built in the courtyard to the west of Room 1 [*Fig. 7.8*]. The room, roughly square in shape (2.80 m by 2.80 m, height approximately 2 m at maximum), was accessed through a door in its southwestern corner. It was



Fig. 7.9. Plastered surface F88 (left) and a footprint of a child in the mud coating (right)

easily accessible to those who entered the courtyard through the Gatehouse and it neighbored on the vaulted room SW-E.13. In its original phase, Room 2 was furnished with a low, rectangular mastaba F71 (1.27 m by 1.80 m, H. 0.20 m) located in its northwestern corner [Fig. 7.10]. A tamped walking level in Room 1 seems to correspond to the same phase. Room 2 may have replaced Room 1 in the function of a dwelling space; in this period, Room 1 is no longer roofed – the vertical palm-wood post was reduced to the walking level – and there are traces of cooking activity inside, such as burnt areas on its south and northwest walls.

In this phase, oval structure F77 was replaced by Room 3 (2.50 m by 2.30 m, maximum height 0.70 m), a circular space with traces of burning on the walls, which formed a vestibule to Room 1 [see Fig. 7.8]. Room 3 was entered from the east, where a blocking wall was found. A plastered, raised working area (F72) occupied its eastern half. The area in and around Room 3 was covered in ashes, possibly due to cooking activity conducted inside. On the west, in the corner formed by walls F11 and F12, the presence of a large stone with a depression in the top surface may indicate the location of a vertical post supporting a roof. Also the space between Rooms 2 and 3 bore traces of cooking activity. A low wall F16 was built to abut the north wall of Room 2, possibly in order to mark off another small area for food processing activity.



Fig. 7.10. Room 2, Phase V, aerial view looking north

West cooking area

In Phase V, the area to the north of room SW-E.15 and extending approximately 3 m from the west wall was separated from the rest of the courtyard by two walls, F106 running southwest–northeast from the northeastern corner of room SW-E.15, and F103 oriented north–south [see Fig. 7.8]. The area had a compacted mud floor featuring circular pits and relics of thin brick walls. This was the earliest of several floor levels identified within this space. One floor level higher, a sequence of bread ovens (F115, F102, F113) was constructed against the north wall F94.

Wall F45 closed the cooking area on the northeast [see Fig. 7.8]. The space first had three entrances: one between F106 and F103, one between F103 and F45, and one in F45. The northern one led to an area occupied by two mastabas (F108 and F109), an oven in the corner of walls F45 and F94, and a small storage bin (*gesseba*) close to it on the east. The southern part had only one standing feature (bin F111) and was cut by fire pits. Soon the doorway between F103 and F45 was closed with a blocking wall and the space against the eastern face of F103 was used for cooking activity (*doka* space F110 and a fire pit to the north). These features were accompanied by a mud-brick structure (mastaba?) in the shape of a quarter-circle (F75). Three more fire pits were found in a compacted floor level to the southeast of room SW-E.15.⁴

Phases VI–VII: destruction of building H.B.01

H.B.01: destruction

In Phase VI, the walls of H.B.01 were intentionally razed at a level of approximately 0.50–0.70 m above the floors, and the space between the walls was filled with tightly packed rubble [Fig. 7.11]. Only the perimeter walls F6, F52, F89, F90, F91, and F92 were left standing, as were the walls of the vaulted rooms of building NW-E(a) in the north (part of F67, F79, F86, F94). As a result, the previously built-up part of the excavated sector became an open area, an extension of the courtyard zone located to the south of it. The space it had occupied remained practically empty from then onwards.

⁴ A detailed description of the development sequence of the west cooking area had to be excluded from this report, as excavation in this quadrant of the courtyard has yet to be completed. Also, a thorough discussion of the functions of its features is necessary, but such an analysis extends beyond the framework of this interim presentation of results achieved thus far.

Southern sector

Meanwhile, the areas to the south and west develop along the same lines as before. In the southern part of the courtyard, two nearly rectangular structures, F10 (or Room 4, 2.00 m by 1.16 m, maximum H. 0.45 m) and F7, were constructed abutting Room 3 [see *Fig. 7.11*]. Their function is impossible to determine, but the

substantial amount of animal droppings (small ruminants) in the deposits inside and around the structures still in use at the time may provide a clue. The most obvious explanation would have been that they played the role of pens for keeping livestock, but animal droppings may have also been stored for use as fuel. Inside Room 1, a rectangular bin constructed in this period contains ash layers and deposits of coprolites.

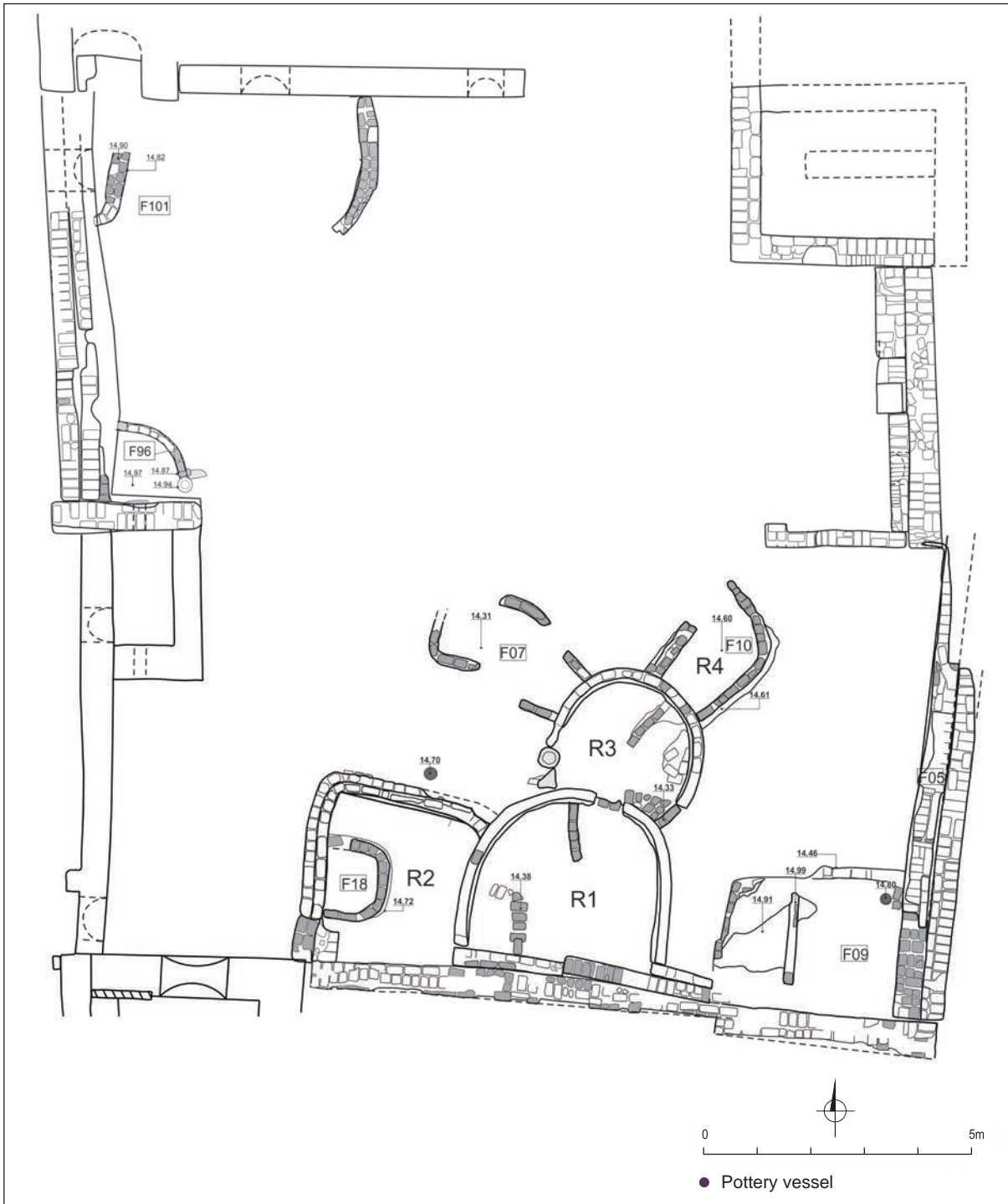


Fig. 7.11. Courtyard A in Phases VI–VII

In Phase VII also Room 2 was refurbished by reinforcing the walls and a rectangular bin was placed inside, perhaps for the same purpose. In addition, a large, bipartite *mastaba* F9 was built to the east of Room 1 in the southeastern corner of the courtyard and a north–south oriented wall of mud bricks (F5) was built on top of wall F1 to give a new eastern boundary to the courtyard space.

West cooking area

In the west cooking area, through Phase VI new features replace old ones as the walking level rises, but no change in function is observable, as new ovens, bins and cooking installations replace older ones. With Phase VII, however, the developmental sequence of the cooking area comes to an end. A feature found in this area in Phase VII is a rounded *mastaba* with pot, abutting room SW-E.15 on the north [see Fig. 7.11].

Phases VIII–IX: structural overhaul and construction of SW-E.16

In Phase VIII, Rooms 1–4 in the southern sector fell out of use. However, new structures continued to be built, though some may not be preserved due to erosion [Fig. 7.13 inset]. A north–south oriented wall (F17) was built on top of the western part of Room 2, closing off the western part of the courtyard and turning it into a corridor along the west wall of the Gatehouse complex. The corridor led to the northern part of the courtyard, which housed an ovoid structure (F15) founded on approximately the same level as wall F17. The relics of two contemporary features are preserved in the courtyard area: a corner of a structure (F29) [Fig. 7.13 right] and an oval *mastaba* F46. In an

ashy layer of debris (layer 25) along wall F91, fragmentary human remains were found. The fragments were not in anatomical layout, suggesting they had been secondarily deposited in this spot after removal from their original burial place. The bones were stowed for anthropological analysis.

The best-preserved structures assigned to Phase VIII in the investigated area are located in the northwestern quadrant, along the west wall. They were investigated in the past as building SW-E.16. As a result of excavations in 2014–2016, it was possible to determine that the structures comprising SW-E.16 had two main phases, which could be distinguished on the basis of their foundation levels [Fig. 7.13].

Early phase of SW-E.16 (Courtyard phase VIIIA)

In the original phase of SW-E.16 [Fig. 7.13 left], a square Room 5 (3.40 m by 3.80 m) was built against the east face of wall F31 at an elevation of approximately 15.00–15.10 m. The walls were relatively thin (0.20–0.30 m) and built of mud bricks. The original walls of the room consisted of a sharply bent L-shaped wall F32, which enclosed the space from the north and east, and two east–west oriented walls on the south (F39 and F43) with short stub walls flanking the entrance. The room was entered from the south through a doorway 0.60 m wide. The doorway had a threshold of mud bricks and was closed with a door, as indicated by a door socket to the west of the entrance and a bolt hole in a stub wall to the east. The room had a light, flat roof of reeds and palm ribs covered in mud, supported by a vertical element, possibly a wooden post in a square mud-brick casing

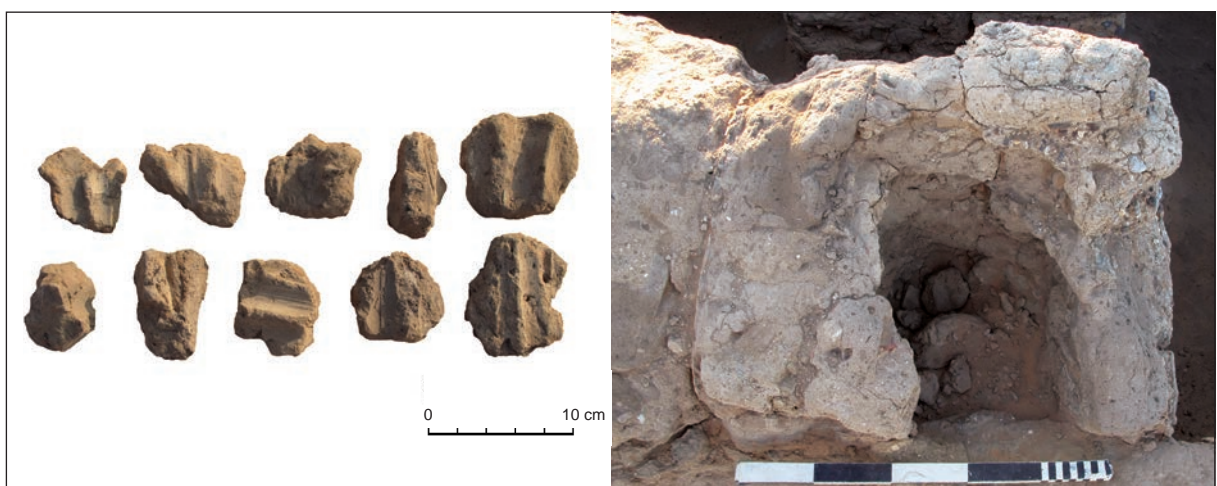


Fig. 7.12. Evidence of a flat roof over Room 5 in Phase VIIIA: left, fragments of mud ceiling with reed impressions found in SW-E.16; right, mud-brick casing for a now-lost palm-wood post

(F42) bonded with the east wall. The casing was filled with debris which included fragments of mud with impressions of reeds and palm ribs. Such fragments were also found in the later floor of SW-E.16, indicating the dismantlement of the flat roof after the first phase [Fig. 7.12].

The only feature found inside Room 5 was a shallow, rectangular bin (F95, dimensions 1.71 m by 0.97 m, height 8 cm) with sides made of mud-bricks placed on the long edges. The walls of the room were covered with mud plaster and whitewashed. Wall F31 bore an inscription in Old Nubian (eight lines, to be read by Vincent van Gerven Oei and Adam Łajtar), which was located on the east-west axis of the room, above the bin. Deciphering it may be of significance for determining the room's original function.

To the north of the room lay an area most likely used for food preparation (Room 4). A space in the western part of this room was filled with packed ash and closed off by a thin, baked-brick, north-south oriented wall (F82), which lined up with a wall of an older structure (F99) to the north and abutted F32 on its northern face. This structure formed a “step” presumably used to access the cooking area. Directly above the cooking area, a decorative zigzag pattern in

baked bricks adorned wall F32. It is impossible to determine if such decoration was originally present on all walls of the room or if it was limited to the cooking area [Fig. 7.14].

The area to the east of the ash-filled cooking space was delimited by a curved mud-brick wall F76, which abutted the north wall F79 on the northern end and the wall of the room (F32, eastern face) on the southern end. The walking level was a compacted mud floor, which preserved six post holes that possibly held palm-wood posts (a piece of one was found during excavation of layer 42). To the north of F32 a cooking pot (HDd.16.255) was embedded in the floor and the space between it and wall F82 was occupied by a fire pit. An overturned grinding stone (52 x 35 x 14 cm) was found in the southwestern corner of the space, along wall F76. It is difficult to determine the location of the entrance to this service space due to the poor state of wall F76, but it was likely in the southeastern corner, where the wall is preserved as one course of bricks for approximately 0.40 m.

South of Room 5 was a staircase consisting of a poorly preserved flight of steps ascending towards the west. The space between walls F39 and F38 was filled with rubble and stone, and brick treads were laid on top of the debris,



Fig. 7.13. SW-E.16 in Phases VIII: left, Phase A; right, Phase B

ascending westward. Three bottom steps are preserved. Perpendicular wall F37 is bonded with wall F38, which abutted F36 on its other end. The walls formed a small compartment originally filled with sand and broken pottery, mainly pipes and sanitary installations (Jakobielski 2010: 86–87). At a higher level the steps possibly turned southward, ascending above the compartment, which presumably functioned as a staircase support. Below the stairs, against the eastern end of wall F36 was another small compartment with a low bench or step along its north wall.

Late phase of SW-E.16 (Courtyard Phase VIIIB)

In a later phase, the light roof over the room was demolished and its vertical support was removed from casing F42. Fragments of crumbled mud bearing imprints of reeds and palm ribs have been found inside bin F95, inside F42 and in the new floor level of the room [see *Fig. 7.12*]. Several buttress walls (F61, F40, F41, F44 and F47) were built inside the room, presumably to support a sturdier roof, since the original walls were too thin [see *Fig. 7.13* right]. Wall F34 was built abutting the eastern end of F36 to create Room 6, a sort of vestibule for Rooms 5, 7 and the staircase. The entrance to Room 6 was open but marked with a brick threshold, while

the doorway to Room 5 was closed with a door, as indicated by the presence of a door pivot. It seems, therefore, that Room 5 was turned into a magazine space, while the staircase could give access to an upper floor, possibly used then for dwelling purposes.

Further walls were built along the eastern side of Room 5, in effect creating a series of spaces (Rooms 1–3). Room 1 was the entrance to the complex, while Room 2 constituted a vestibule from which one could enter the original space or continue northward through a corridor (Room 3) to access a cooking area (Room 4). Four cooking pots were interred in the walking level of Room 2. Two were empty and two contained infant burials.

The newly built walls screened off the passageway from Room 4 to Room 6. The north-east wall of the corridor (F26) had three evenly spaced out vertical wooden posts incorporated into its structure. The posts may have aided in supporting a light roof over the corridor (Room 3), as well as over Room 4. Relics of the wood were still preserved in the holes and a sample was taken from the central one for ¹⁴C analysis. In Room 4, twin square bins (F49) were built against the east wall (F26). A cooking pot was found next to the northern one.

Subsequently (Phase IX), the south wall of the compound SW-E.16 was reinforced with a thick buttress wall (F33) on the south. At the



Fig. 7.14. SW-E.16: cooking space in the western part of Room 4

same time the north–south oriented wall F17 was succeeded by a new wall built on top of it (F14), with relics of working surfaces against its eastern face. The interpretation of this feature is impeded by its poor state of preservation due to erosion. Activity also seems to have continued in the vicinity of the upper floor of the Main Building to the north, as indicated by the construction of walls F25, F48 and F50. Possibly this means the upper floor was also used in this period, but in the role of a ground floor due to accumulation of deposits.

The latest additions – walls F48 and F50 in SW-E.16, as well as wall F25 built as an upward extension of wall F79 – seem to be tied to activity on the relics of upper floors atop the vaults of building NW-E(a), where Jakobielski found traces of re-use and activity dating from the Terminal Christian period (Jakobielski 2010: 71). At that final stage the courtyard and SW-E.16 seem to have fallen out of use, as the area was visited with the purpose of excavating *sebbakh*. The rich, organic layers covering especially the northern half of the courtyard were cut by pits, later filled with windblown sand (layer 16).

SW-E.15: reuse contemporary to Phase VIII

Room SW-E.15 was a small, rectangular space with interior dimensions 2.05 m by 1.10 m abutting wall F123 on the eastern face [Fig. 7.15 right]. It was accessed through a small doorway in its southwestern corner, from the corridor on

the ground floor of H.SW.B. In the northwestern corner it had a hearth, which damaged the internal faces of walls F123 and F36. The room may have had a flat roof, as no traces of vaulting are present. The floor was compacted mud.

The walls of the room suffered heavy damage. The room had two slit windows (in walls F36 and F97) measuring 0.20 m in width and approximately 0.90 m in height. The window in the damaged north wall F36 was bricked in. The east wall had a regular window (H. 0.90 m; W. 0.60 m), which was also bricked in.⁵ The slit window in the south wall was broken at the bottom, forming a narrow, irregularly shaped doorway from the level of about 14.30 m.

It seems that in Phase VIII the room was no longer in use and functioned as a garbage dump. Its upper fill was partially excavated by Jakobielski, but below an approximately one-meter layer of windblown sand original dump deposits were reached. The layers of refuse had a total thickness of approximately 2 m. They were excavated as three layers: 43, 46, and 66 [Fig. 7.15 left].

There seems to be a connection between the dump in SW-E.15 and the occupational layers of SW-E.16. Matching pieces of the same vessel were found both in the dump and pressed into the mud floor of SW-E.16, indicating that it was the users of SW-E.16 who deposited their trash in SW-E.15. The rubbish may have been dumped into the room from the top, from the level of the upper floor. In later periods, as the



Fig. 7.15. Room SW-E.15: left, dump layer 66; right, the excavated room seen from above with a doorway in the southwestern corner and damaged northwestern corner

⁵ The arch presently above it is a modern reconstruction from the beginning of the 21st century.

room filled with rubble to match the walking level outside, it may have been accessed through the broken window in the south wall. A shallow stone basin at the interface of layers 43 and 46 may have been placed there for use rather than thrown in [see *Fig. 7.13* left], but this is not certain.

COMMUNICATION BETWEEN COURTYARD A, MAIN BUILDING (NW-E), H.SW.B AND THE OUTSIDE

Access to the courtyard area was possible from the north and the west, that is, from the ground and upper floors of the Main Building and from

ground-floor rooms of gatehouse H.SW.B. In Phase V, the west cooking area could be accessed from the west, from the ground floor of the corridor beyond walls F30 and F31. The arched doorway, 1.10 m wide, seems to have been in operation during the functioning of the west cooking area (its floor levels continue into the passage) and subsequently it filled with deposits [*Fig. 7.16* left]. However, the doorway remains unexcavated and further investigation is necessary in order to confirm this passageway's function and period of use.

From the west the courtyard was also entered from H.SW.B through a doorway in the south-western corner of the open space leading from the ground floor of the Gatehouse and, through



Fig. 7.16. Doorways leading to Courtyard A from the north and west: left, western doorway in wall F31, opening on the western cooking area; top and bottom right, entrances to the Main Building

it, from the outside. Upon entering the courtyard, close at hand on the south was the entrance to double vaulted room SW-E.13. This doorway, however, was bricked in at a period that has yet to be determined.

On the ground floor of the Main Building, two entrances on the level of the courtyard were uncovered in the south wall. The outline of a blocked entrance is visible in the central part of the southern façade of the Main Building [see *Fig. 7.16* bottom right]. The doorway was apparently no longer in use when the west cooking area was in operation, as it is bricked in and abutted by deposits.

A second entrance to the Main Building was cut in its south wall (F94), below the spring of the eastern room's vault (F80). The level of its original threshold seems to match that of Phase IVA (the first structural changes to H.B.01, see above), but further investigation is necessary to confirm this. Two later thresholds were also identified in this doorway. These can be matched to levels of Phases IVB and V, which predate the destruction of building H.B.01. Later the doorway fell out of use and filled with deposits [see *Fig. 7.16* top right].

A third doorway may have led to the westernmost vaulted room in the southwestern corner of the Main Building, but this area was damaged and blocked with bricks, stones and rubble already during use of the courtyard. The blocking wall was left intact, but a small opening at the top, where the vault is damaged, permitted to determine that the room was filled with sand and debris.

It appears, therefore, that during the investigated stages of development of Courtyard A access to the ground floor of the Main Building was limited to the secondary entrance hacked in the wall of its southeastern room; access to the upper floor, in turn, was possible for some time (Phases IVB–VI) thanks to a flight of steps constructed inside building H.B.01. As long as this building was standing, its corridors also provided access to the courtyard from the north. During Phase IVB, once inside Room 5, one could do one of the following:

- a) ascend the staircase to an upper floor, possibly atop the vaulted rooms of NW-E(a);
- b) follow the corridor to the south, enter Room 4 and turn west to descend to a lower level and reach the west cooking area;
- c) pass through corridors 5 and 4 and enter the courtyard through the southern doorway;
- d) follow corridors 5 and 3, pass through Room 2 and enter Room 1.

OBJECTS

Pottery and lamps, animal bones, textual finds (ostraka, inscriptions on vessels, an inscribed marble tray and a marble stela fragment) and mud-stoppers were the focus of specialist studies [see *Chapters 8* and *9*]. Among other common finds are stone tools and glass. Several categories of stone tools were distinguished: grinding stones, spherical and rectangular hand stones, hard, oval pestles, and whetstones of soft sandstone. All glass fragments were collected. The diagnostic fragments seem to belong primarily to small flasks and bottles. Non-diagnostic but decorated body sherds come from mold-blown vessels, flasks with trailed or marvered decoration, applied thread or cut ornaments [*Fig. 7.19* center]. The finds in the assemblage represent common types of Islamic glass vessels ubiquitous in this period and are likely imports. Both categories of finds require more detailed analyses by specialists.

Other finds included personal effects such as simple jewelry, fragments of clay figurines, game pieces, and a wooden comb. The ornaments were mostly beads made of glass, bone, ostrich eggshell, cowrie shell, as well as baked and unbaked clay. Two ear-plugs were also found: one small, of burnished baked clay, and one of bone [*Fig. 7.17* inset]. The game pieces belonged to two categories: spherical, hand-formed balls of baked or unbaked clay, and tokens or pawns made of re-used potsherds or stone. Both seem to have been made on the spot when needed.

Among the found objects particularly worthy of note are five seals, each of which is different and was likely used for different purposes [*Fig. 7.18*]. HDd.16.500 is a small baked-clay cubic seal with a perforation. It has carved images on four sides: a cross on top, a gazelle on the bottom, and birds on two sides. HDd.16.373 is a sandstone mushroom-shaped seal with an oval handle. The stamp is quadrangular and bears a cryptogram (a cross and Greek letters *khi, pi, theta*) written in ligature and enclosed within a border. HDd.16.172 is a hand-made cone-shaped seal of unbaked clay with a perforation for a cord in the upper part. The seal was illegible, either very faded or originally blank; perhaps it was never finished. HDd.16.479 is a baked clay signet ring with an oval bezel bearing a representation of a fish. The surface of the ring and bezel sides are decorated with incised parallel lines. Lastly, HDd.16.336 is a square metal seal with a shallow floral motif on one side and a broken handle rod attachment on the other.

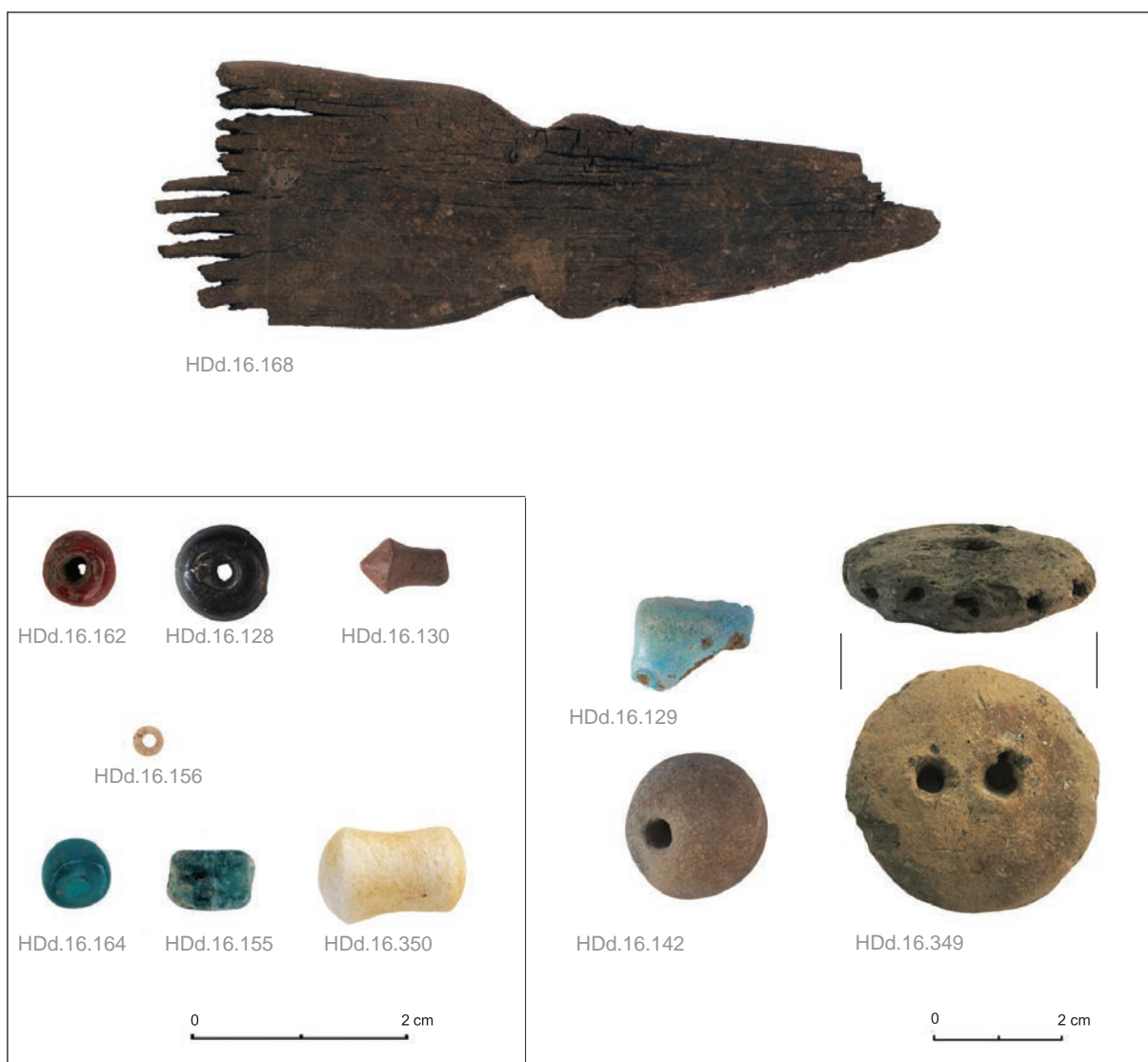


Fig. 7.17. Personal effects: comb HDd.16.168; button HDd.16.349; plugs HDd.16.130, HDd.16.350; assorted beads



Fig. 7.18. Seals: (from left) HDd.16.479, baked clay; HDd.16.373, sandstone; HDd.16.336, copper alloy; HDd.16.500, baked clay; HDd.16.172, unbaked clay

An interesting find from SW-E.15 is an ocarina (HDd.16.348), a type of vessel flute with three openings [Fig. 7.19 right]. This hollow object of unbaked clay is assembled from two precisely matching halves. After attachment, the outer surface was carefully smoothed and three holes were made. The instrument was thrown away before firing, it is therefore possible that it was unfinished; possibly not all the holes were made.⁶

Lastly, a notable find is a Byzantine coin HDd.16.183 uncovered in area SW-E.14 [Fig. 7.19 top left]. It was found during the cleaning of the top of layer 55 (Phase VII) and may have been exposed as a result of erosion of surrounding features or of the layer itself due to wind and rain. The coin was identified as a 12-nummia of Heraclius issued by the Alexandrian mint and

dated to AD 629–632 (type MIB III, 204 or 205).⁷ The obverse features two frontal busts separated by a cross, while the reverse carries large letters I and B separated by a small cross standing on a triangular base. Below an exergual line appears the Greek mint signature ΑΛΕΞ. While the context of the coin's discovery is secure, its presence is most likely residual and not directly related to activity in the courtyard. Nonetheless, it ties in well to ceramic evidence of equally residual character, associated with the early phases of the monastery. It is impossible to determine how the coin found its way to Dongola and the Monastery on Kom H. The find certainly can serve as further evidence for contacts—the movement of people and objects—between Egypt and the Makurian capital in the 7th century.



Fig. 7.19. Assorted finds: 12-nummia coin (HDd.16.183); glass fragments (HDd.16.332; HDd.16.333; HDd.16.497); ocarina (HDd.16.348)

⁶ An ocarina usually has four to eight finger holes regulating the pitch of the sound it produces.

⁷ Piotr Jaworski (Institute of Archaeology, University of Warsaw) identified the coin type and contributed to its description.

CONCLUSION

The collected evidence indicates that Courtyard A was an industrial and service area used for storage, food processing, and possibly keeping of livestock. The courtyard's position near the gatehouse H.SW.B, coupled with the dominance of storage vessels found in the deposits, seem to indicate its role as a delivery point for supplies brought to the monastery [see also *Chapter 8*].

The correlation of structural changes in H.B.01 in Phase IVB with the emergence of structures related to cooking and storage activity in the courtyard is crucial to the interpretation of the function of Courtyard A as a whole. Despite changes in spatial organization and the emergence of new features from Phase IVB onwards, one can observe a remarkable consistency and continuity in the use of the courtyard's open space, the repeating pattern of constructing *doka* spaces, fire pits and ovens, storage bins and curved walls to shelter the cooking areas from wind and sand.

Rooms 1 and 2 in the courtyard may have originally functioned as dwelling places (this is indicated by the presence of low mastabas inside), but were also turned into spaces for storage and food preparation. At the same time, the depth and quality of structural changes in H.B.01 (building new walls, stairs, pavements) show that the courtyard activity described above was beyond doubt associated with a monastic community that still had the administrative and financial means to carry out major building projects. At the same time, since the razing of H.B.01 in Phase VI brought no interruption in the development of the courtyard service areas, it is justified to believe that at least through Phase VII they continued to be used for the benefit of the monastic community. It is difficult to say the same for the successive Phases VIII and IX, however, primarily due to the lack of evidence for continuity as a result of erosion. The building of SW-E.16 indicates a new stage in the use of this space, but its relationship to the rest of the monastery requires further investigation beyond the currently excavated area.

The objects found in the contexts of Courtyard A, particularly jewelry, hairpins, game pieces, clay figurines and spindle whorls, indicate the presence of a lay population consisting of men, women and children inside the monastery [see *Figs 7.9 and 7.17*]. Since activity in the courtyard in Phases I–VI is contemporary to development of regular monastic buildings (H.B.01), one can surmise that these people were servants working for the monastic community (for such people in Egypt, see Wipszycka 2009: 381–383). Their presence within the walls of the monastery may have been semipermanent or temporary. The cooking areas found in the courtyard were also presumably used by these people for their own alimentary purposes. The scale and character of features related to food preparation (e.g., one bread oven about 1 m in diameter per phase) makes it clear that this space did not play the role of a monastic kitchen.

The rounded, oval and irregularly shaped single-space structures like Rooms 1 and 2 in the southern sector of the courtyard may have been used as (provisional?) dwellings in their early phases of use. The construction method of such free-standing rooms is consistent throughout the courtyard's chronology and found in several structures, including structure F77, Room 3, and SW-E.16 in its original phase. The foundations were typically delineated with rather carelessly laid bricks, on which thin (0.20–0.30 m) and uneven walls were built from re-used materials. The walls supported a light, flat roof additionally propped up with a wooden post. Several rooms formed clusters that developed organically over time, while changes to interiors were made as need arose.

Though uncommon in published excavation reports, the presence of such structures in a courtyard space is not unique to the Monastery on Kom H. A similar cluster of oval rooms has been found at Serra East in an open area of similar function, dated to the Late Christian period.⁸ Thus, it seems that Courtyard A may bear a testimony to a model of use of courtyard space in the 12th–14th centuries, as a versatile service area with easily adaptable spaces for storage, cooking, and miscellaneous activity.

⁸ We are grateful to Bruce B. Williams of the Chicago University Oriental Institute Nubian Expedition for sharing this information.

KATARZYNA DANYS

INTRODUCTORY REMARKS ON POTTERY FINDS FROM COURTYARD A OF THE MONASTERY ON KOM H IN DONGOLA

INTRODUCTION AND METHODOLOGY

Excavations conducted in 2014–2016 on Kom H at Dongola included investigations in the space to the east of the gatehouse H.SW.B, formerly referred to as the Southwest Annex (Godlewski 2015e: 277–279), and to the west of the Central Building [see *Chapter 7*]. They revealed some structures, several occupation levels and, among other finds, a very large number of pottery fragments.

Since the beginning, the pottery studies had two main goals. The first was establishing the general chronology and distinguishing the phases of occupation in Courtyard A. The second was revealing the functional aspects of the pottery itself and its role in the excavated area, as well as the character and function of the courtyard in the monastic space. Examination of the ceramics followed procedures used for recording mass material, and the analyses were based on statistical methods. The finds were grouped according to their stratigraphic position in the Harris matrix. The chronological division was based on typological and stylistic analyses strictly connected with the archaeological context of the finds, which helped to determine the phases of occupation. Material was quantified by counting Rims, Bases, and Handles (the so-called RBH method of quantification) within a larger group of diagnostic fragments, as well as by counting Sherds as non-diagnostic fragments. Rims with attached handles were counted as rims. Body sherds joined to any diagnostic element were counted together with them as one fragment.

Non-diagnostics were later discarded, unless it was possible to join them to larger, significant parts of the vessel or they bore marks or inscriptions. The ceramic material from the beginning of the excavations, before a ceramologist could attend to the work, was subject to preliminary sorting, in which only the diagnostic items were kept. The remaining pottery fragments were deposited on the site and later added to the general count, but without a record of their stratigraphic positions. The complete assemblage of finds was first sorted according to technological criteria into wheel-made and handmade vessel groups. General functional and technological groups were distinguished: wheel-made utility ware (WMUW), handmade vessels for storage, food preparation, serving and cooking purposes (HMSV, HMFSP, HMCP), wheel-made tableware (TW), and transport containers (TC). Other groups of ceramic finds were comprised of lamps, pot-stands, fire-dogs, pipes, heaters/trays/boxes, and unfired storage containers/bins. Complete statistical analysis of the whole material (including non-diagnostic fragments) permitted to quantify the assemblage and gave a chance to record imported pottery, preserved mainly in the form of body sherds. Vessels from Courtyard A were added to the corpus of pottery from Dongola. The designations of vessel types and fabrics followed the Dongolese field naming system established by the author, which is being prepared for publication. In cases where the material corresponded to Lower Nubian pottery, this system was coordinated with the system established by William Y. Adams (1986).

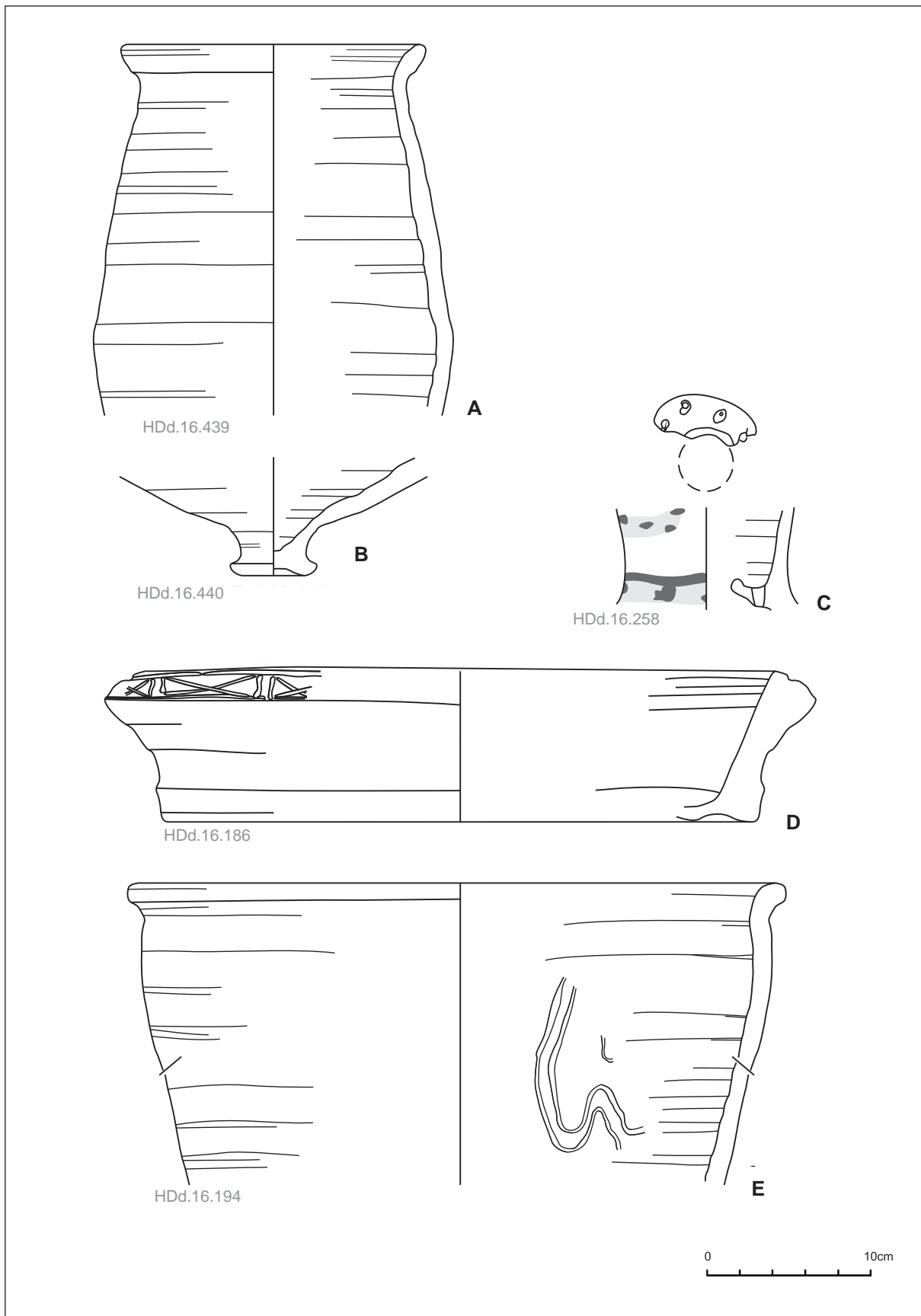


Fig. 8.1. Selected household pottery: A, B – qawadis; C – qulla; D – basin; E – storage vessel

CATEGORIES OF CERAMICS

The following introductory presentation of the pottery assemblages contains a brief description of the most common ceramic wares and distinguished types. The complete catalogue and statistical analysis are still in progress, along with the archaeological investigations of Courtyard A, and are being prepared for final publication.

The first of the aforementioned groups (WMUW) comprises:

- ▶ large, open-mouth storage vessels **SV** of different shapes, e.g., HDd.16.194 [Fig. 8.1:E] made of PB1 fabric, with red-slipped walls and a partly preserved engraved depiction of a snake(?);
- ▶ *qawadis* **Q** (*saqiya* pots), e.g., HDd.16.439, HDd.16.440 [Fig. 8.1:A,B], made of NC2 fabric, with smoothed, unslipped surfaces;
- ▶ *qullae* **QUU**, e.g., HDd.16.258 [Fig. 8.1:C], made of NC2 fabric, with outer walls with a pink “self-slip” and painted decoration of white bands with black outlines and inner spots. The

strainer has one larger, central hole and smaller perforations placed around it.

The category of handmade forms contains vessels used for different purposes, including:

- ▶ large storage vessels **HMSJ** and jars **HMJ**;
- ▶ bowls **HMB** of different shapes and sizes used for food preparation and serving, e.g., HDd.15.516 and HDd.16.233 [Fig. 8.2:B,C], made of NC1 and NC2 fabrics, with brown and black burnished surfaces. The latter has a plain zigzag incised inside, just below the rim;
- ▶ hemispherical cooking pots with necks and flaring rims **CP1**, neckless forms **CP3-4**, e.g., HDd.15.396 [Fig. 8.2:A] made of NC4 fabric with grog (crushed ceramic fragments), in which the upper part of the outside is smoothed or burnished, while the belly is rough. The boundary is marked by a row of semicircular stamps;
- ▶ large bowls **HMDB** used for cooking/frying, e.g., HDd.15.463 [Fig. 8.2:D], made of NC4 fabric, with a rough external surface and a fine, black, burnished interior. Small incisions are visible on the rim.

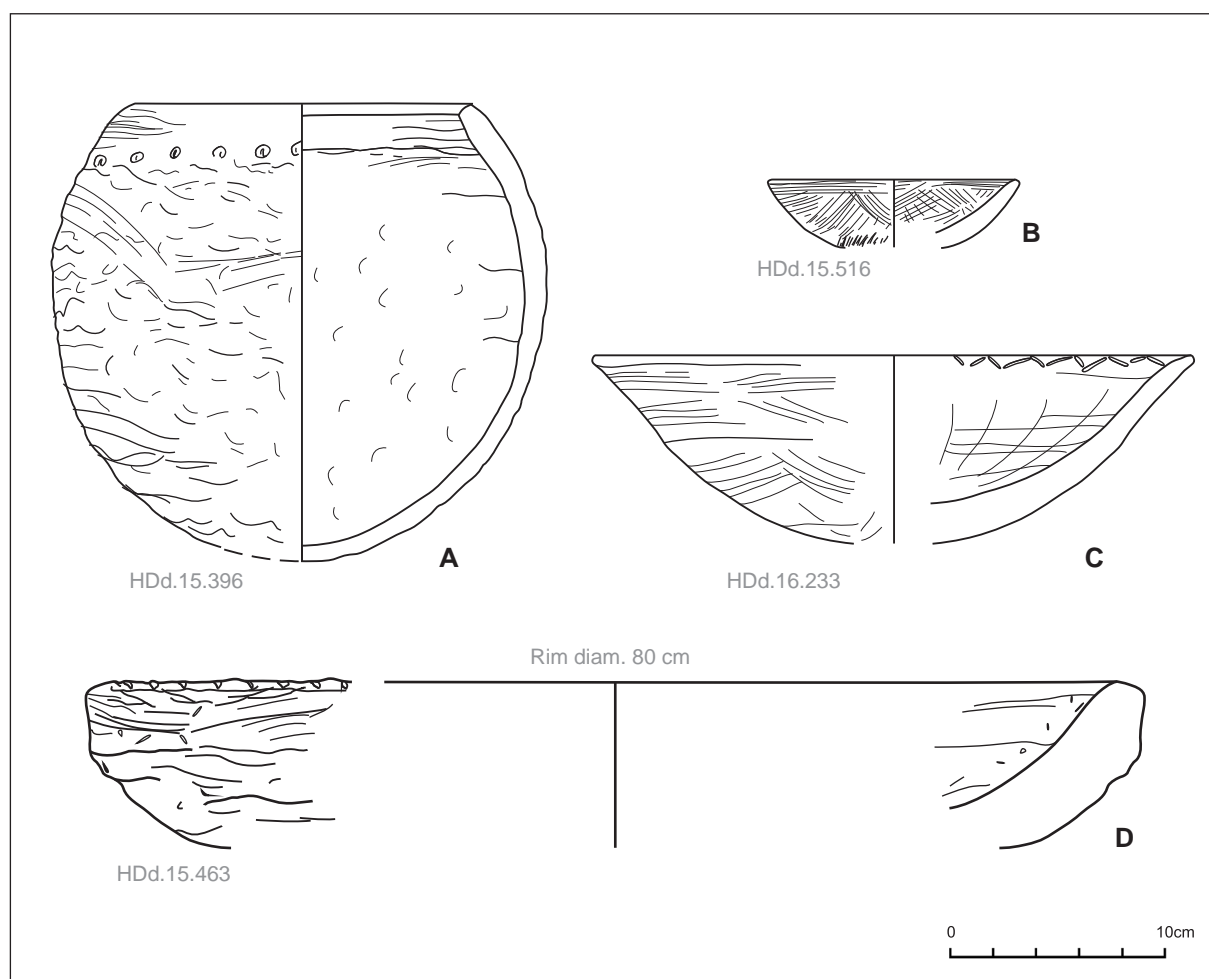


Fig. 8.2. Selected handmade vessels for cooking and food preparation and serving: A – cooking pot; B, C, D – bowls

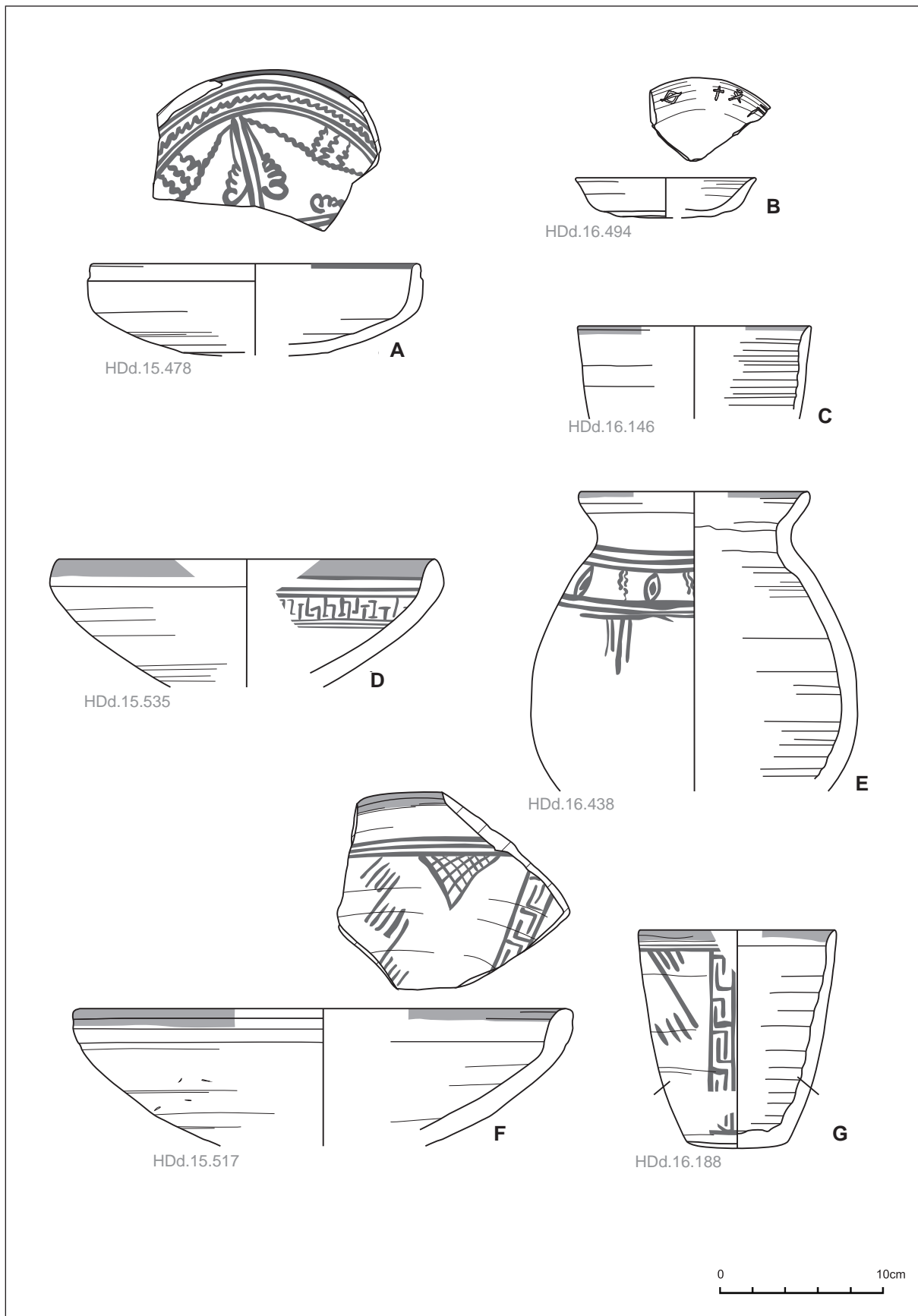


Fig. 8.2. Selected tableware: A, D, F – plates; B – bowls; C, G – cups; E – vase

Most of the tableware (TW) was produced in local Dongolese workshops, but a small number of imported vessels were also recorded (from Lower Nubia, Alwa, Egypt, and the Great Oasis) and are represented by the following types:

- thick-walled plates with painted decoration, type **T8**, e.g., HDd.15.478 [Fig. 8.3:A] made of DF5 fabric, covered with a cream slip and bearing brown-painted decoration in the form of a band on the rim, a continuous band with a wavy line below, and a radial design with “veined” leafs on the floor. Such vessels were produced in Dongolese workshops and have been dated to the post-Classic Christian period (Pluskota 1994; 2010: Fig. 5), parallel to Lower Nubian Style N.V (Adams 1986: Fig. 185). The most common was type **T10**, e.g., HDd.15.517, HDd.15.535 [Fig. 8.3:D,F], made of OR1 fabric, covered with an orange slip and decorated with a red rim band and black geometrical designs inside: semi-“guilloche”, groups of vertical lines, or “meander” and pendant triangles filled with cross-hatchings. Those vessels were connected with the Late Christian Period (Pluskota 2010: Fig. 5) and occurred parallel to Lower Nubian Style N.VIA and N.VII (Adams 1986: Figs 196, 204);
- cylindrical cups **CC** represent two main variations with plain or more elaborate decoration,

e.g., HDd.16.146 [Fig. 8.3:C] made of OR1 fabric, covered with a cream slip and bearing a single red-painted rim band, and HDd.16.188, also made of OR1 fabric, but with an orange slip and geometrical designs analogous to those on the aforementioned plate HDd.15.517;

- vases **V**, e.g., HDd.16.438 [Fig. 8.3:E], made of OR1 fabric, covered with an orange slip and painted with a red rim band and a black continuous band with alternating and pendant elements, parallel to Lower Nubian Style N.VA (Adams 1986: Fig. 191);
- bottles **BT**;
- *qullae* **QUT**;
- bowls **M3**, **M5**, e.g., HDd.16.494 [Fig. 8.3:B], made of DF5 fabric, cream-slipped, undecorated, with a scratched inscription inside, partly preserved;
- glazed vessels.

The group of transport containers (TC) comprises:

- local amphorae from both Dongolese production phases (categories **AL1**, **AL2**), where the earlier ones were undoubtedly redeposited, for instance as fill of a mastaba. Type **AL2**, e.g., HDd.15.487 [Fig. 8.4:A] was made of PB1 fabric, with traces of a black, resinous substance inside,

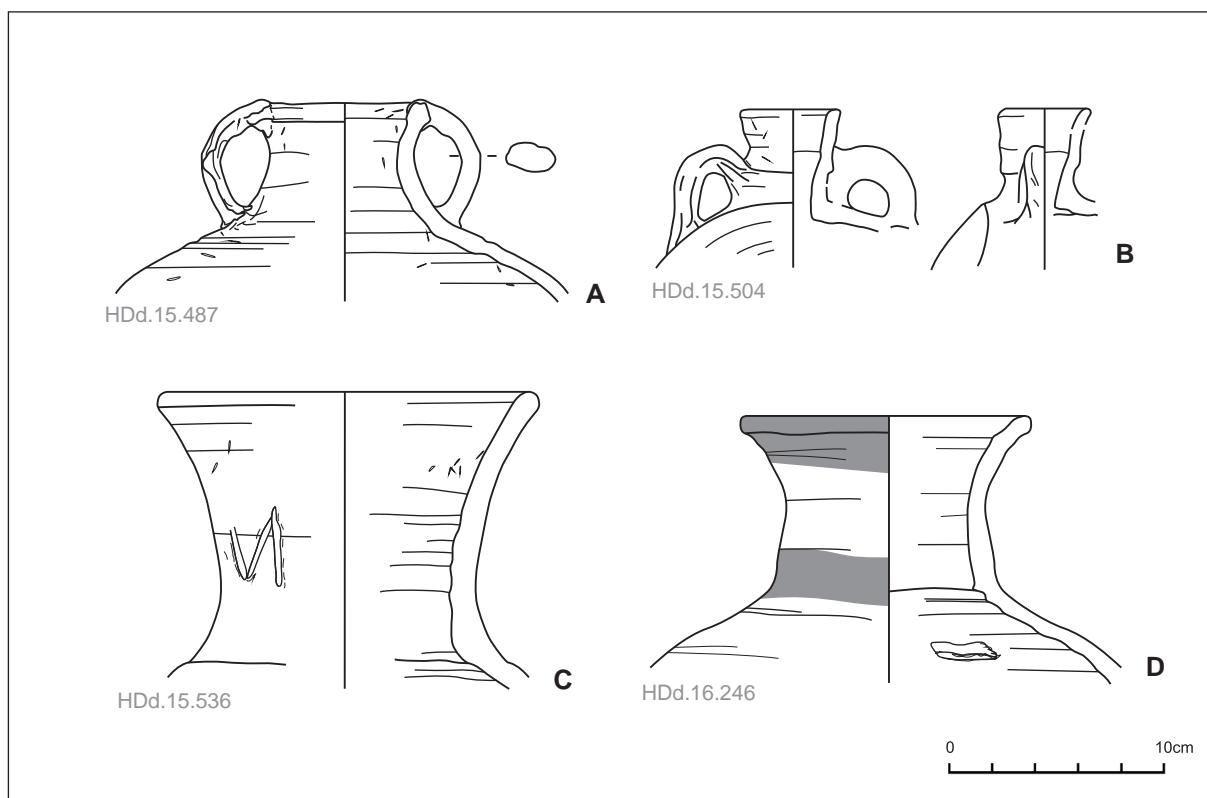


Fig. 8.4. Selected pottery used for transport: A – amphora; B – flask; C – jar; D – bottle

analogous to the type F amphorae of the second pottery production phase (Pluskota 2005: Fig. 8F);

■ imported amphorae **AI** (origins were recognized in Aswan and Ballas in Egypt, in the Aegean, and in Palestine), most of which are dated to earlier periods and were redeposited in bricks or mortar;

■ large jars **JT** with broad conical/cylindrical necks, e.g., HDd.15.536 [Fig. 8.4:C] made of NC2 fabric, with brown, smoothed surfaces and a partly preserved letter “M” made prior to firing on the neck;

■ bottles **BTT** with rounded bodies and narrow necks, e.g., HDd.16.246 [Fig. 8.4:D], made of NC2 fabric, with brown, smoothed surfaces and two broad, purple-painted bands on the rim and neck;

■ flasks **FT** (former “pilgrim” bottles), e.g., HDd.15.504 [Fig. 8.4:B], made of PB1 fabric, resinated inside and with a pink, unslipped exterior.

Other groups of the ceramic finds consist of:

■ lamps, e.g., HDd.16.179 [Fig. 8.5], made of NC1 fabric, with brown, smoothed surfaces and a characteristic “wavy rim” recorded in Dongola during previous investigations (Pluskota 2010: Fig. 3);

■ lids;

■ pot-stands;

■ fire-dogs;

■ hydraulic pipes;

■ heaters/trays/boxes;

■ basins, e.g., HDd.16.186 [Fig. 8.1:D] of NC2 fabric, with unslipped, brown, smoothed surfaces and deep, engraved panels with two cross-hatched lines on the rim;

■ unfired storage containers/bins.

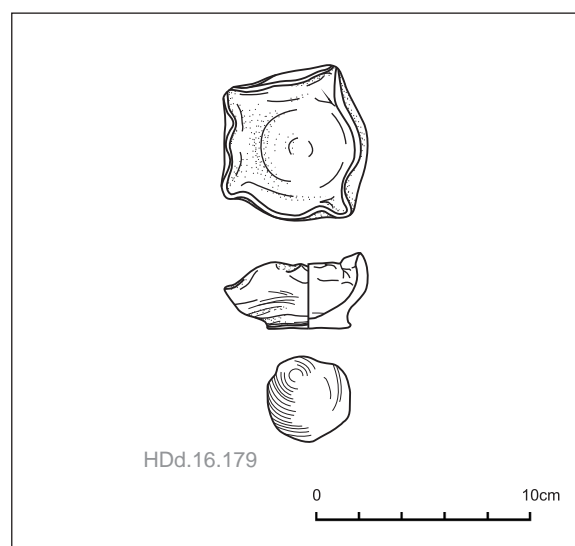


Fig. 8.5. Ceramic lamp

GENERAL CONCLUSIONS AND CHRONOLOGY

The most numerous group among the pottery discovered in Courtyard A is transport containers, where **JT** seems to be prevalent, less numerous amphorae **AL2** and rather infrequent **FT** and **BTT**. All those types have mud stoppers of diameters fitting each container (D. Dzierzbicka, personal communication). Discoveries of **JT** from the Palatial Building revealed such sealings still *in situ* on the jars' necks. The presence of mud stoppers and resinous residues on the inner walls suggest that those types of vessels were used for keeping and transporting some goods (e.g., wine). Tableware also appears very frequently among the pottery collected from the courtyard. The most common types are thick-walled plates and cylindrical cups with geometrical motifs painted in black. Other types are rather less frequent and there are no dominant shapes, like in the case of the aforementioned plates and cups. Handmade vessels create an extensive set, not very numerous among courtyard finds, but most probably connected with the functional aspects of the investigated space. They were connected with food preparation and cooking. Plain bowls with fine, smoothed surfaces could have been used in food preparation, while pots **CP** and bowls **HMDB** (often identified as *dokat*, used for *kisra* bread baking) were used in the kitchen, as traces of heavy burning on the outside left no doubt about such an interpretation. The most significant feature was the usage of the NC4 fabric with large and numerous grains of grog, which has not been attested for use on such a great scale in handmade vessels from other parts of the site and similar chronological horizons.

The preliminary reports revealed that the earliest finds of small potsherds, re-deposited in layers composed of rubble or in fillings of structures can be dated to the 6th–10th centuries. On the basis of the vessels' shapes, decorative elements and parallels, it seems that the greater part of the occupation levels deposited in the courtyard of the monastery were connected with domestic activity mainly during the 13th–14th centuries. The pottery discovered in the lowest layers suggests that the arrangement of this space may have taken place sometime in the 11th century, while the latest materials indicate the beginning of the 15th century. Further and more detailed analysis of the collected ceramics will provide more statistical data on the chronological horizons of occupation levels, as well as their function and character.

MARTA OSYPIŃSKA

FAUNAL REMAINS FROM THE MONASTERY ON KOM H IN DONGOLA (SEASONS 2014–2016)

The most important sources in the study of animal husbandry in Makuria are currently faunal remains recovered from the capital of the kingdom, Dongola. The seasons reported herein are a continuation of more than a decade of archaeozoological research on this site. Thus far, the study has focused on two zones of regular excavation: the Citadel and the Monastery on Kom H. The faunal remains studied herein (in the 2015–2016 seasons) were uncovered during fieldwork in 2014–2016, headed by Dorota Dzierzbicka, within the area of a monastic courtyard [see *Chapter 7*], which functioned as a service area of the monastery in its late phase (12th–14th centuries). In total, 673 fragments of bones, teeth and shells were recorded.

MATERIAL

The state of preservation of the skeletal material submitted for analysis was very good. Macroscopic observation demonstrated that factors affecting the condition of the remains were mainly at the biostratonomic stage: butchering, kitchen-based partitioning of the carcass [Fig. 9.1], and thermal processing of meat, much less

Table 9.1. *Faunal remains from Courtyard A (seasons 2014–2016)*

Faunal remains	n	%
Identified	508	75.48
Unidentified	165	24.52
TOTAL	673	100.00

diagenetic, post depositional factors. The composition of the layers, which contained substantial amounts of mulch and ash, had acted as a preservative. Naturally, the high temperatures and severely arid environmental conditions resulted in degradation of the organic components of the bone material, leaving it brittle, but this process was not considerably advanced. The good state of preservation of remains recovered from the monastery is confirmed by the high ratio of taxonomically and anatomically identified fragments [Table 9.1].

The archaeozoological remains studied for this report are now deposited for future reference in the Polish Mission's on-site storeroom.

RESULTS

Analyses of the faunal remains discovered in the monastery permitted identification of eight species of mammals, as well as catfish, and shells of one species of mollusk [Fig. 9.2]. Nearly half



Fig. 9.1. *Traces of carcass partitioning on a cattle mandible*

of the analyzed remains were bones of cattle (*Bos primigenius* f. *domestica*) [Table 9.2; Fig. 9.3]. Other identified species were sheep (*Ovis orientalis* f. *domestica*) and goat (*Capra aegagrus* f. *domestica*), pig (*Sus scrofa* f. *domestica*), dromedary (*Camelus dromedarius* f. *domestica*), horse (*Equus ferus* f. *domestica*), and donkey (*Equus africanus* f. *domestica*). The lack of remains of wild animals and game is noteworthy.

The osteological material came from four groups of archaeological contexts [Table 9.3].

Table 9.2. Taxonomic distribution of faunal remains from Courtyard A [see Fig. 9.3]

Species	n	%
Cattle <i>Bos primigenius</i> f. <i>domestica</i>	244	48.03
Sheep/goat <i>Ovis orientalis</i> f. <i>domestica</i> / <i>Capra aegagrus</i> f. <i>domestica</i>	162	31.88
Pig <i>Sus scrofa</i> f. <i>domestica</i>	61	12.00
Dromedary <i>Camelus dromedarius</i>	14	2.75
Dog <i>Canis lupus</i> f. <i>domestica</i>	1	0.19
Horse <i>Equus ferus</i> f. <i>domestica</i>	1	0.19
Donkey <i>Equus africanus</i> f. <i>domestica</i>	10	1.96
Catfish <i>Siluriformes</i> sp.	2	0.39
Oyster <i>Etheria elliptica</i>	13	2.55
TOTAL	508	100

Table 9.3. Faunal remains from Courtyard A

Courtyard A context group	Cattle	Sheep/ goat	Pig	Dromedary	Horse	Donkey	Dog	Fish	Oyster	Indeterminate
H.2014.2 Layers 1–14	80	26	20	14	0	0	1	1	12	60
H.2015.2 Layers 15–37	26	10	0	0	0	0	0	0	0	0
H.2016.2 Layers 38–65; 67–76	87	70	18	0	1	1	0	1	0	66
H 2016.2 SW-E.15, layer 66	51	56	23	0	0	9	0	0	1	39

The largest bone assemblage was recorded in dataset H.2016.2. It contained a total of 244 faunal remains. The second largest assemblage, which

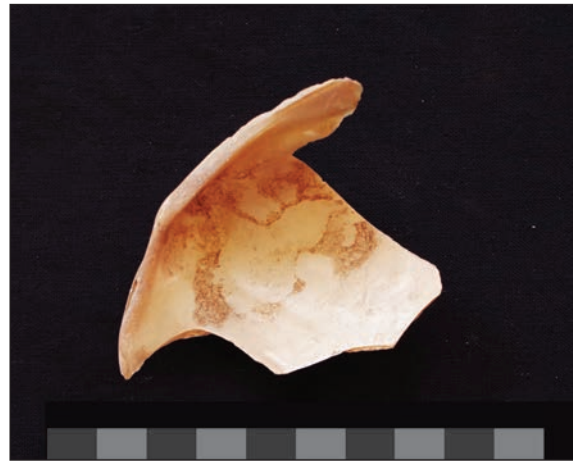


Fig. 9.2. Fragment of a Nile oyster shell with traces of tooling (spoon)

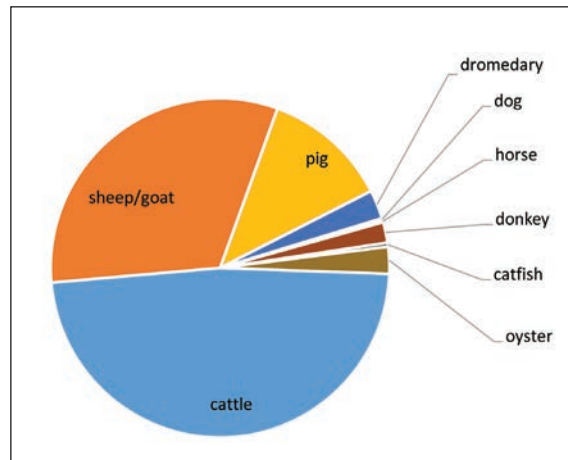


Fig. 9.3. Taxonomic distribution of faunal remains from Courtyard A [see Table 9.2]

numbered 212 fragments, is dataset H.2014.2. This material was the most varied as far as the recorded species were concerned. A relatively large set of animal bones was also found in room SW-E.15, layer 66.

The remains of all identified mammal species were analyzed to determine the anatomical position of skeletal elements [Table 9.4]. The skeletal assemblage was the most complete for cattle. Nearly all bone fragments of this species were identified, including very small ones, which serves as confirmation of high standards of site exploration and recording of faunal remains. The only element of the bovine skeleton absent from the assemblage is the third phalanx. In turn, the skeletal elements of the sheep and goat that were absent from the collected assemblage were much more numerous. The material lacked very small elements of the skeleton: carpals,

patellae, tarsals and the second and third phalanges. In the group of pig remains, besides the analogous absence of carpals, tarsals, talus, and calcaneus, the assemblage also lacked elements of the femur.

The analysis of anatomical layout of the faunal remains and their comparison to the model ruminant skeleton showed beyond doubt that the cattle bones constituted kitchen refuse. The parts of the carcass that carried the most meat, i.e., the shoulder and the rump, were used particularly frequently [Table 9.5: cattle].

The distribution of butchery sections of the small ruminants follows a similar pattern, though some variations could also be observed. The main difference lay in the fact that parts of the head of sheep were prepared for consumption; also, distal parts of the posterior limb of small ruminants were not used, in contrast to cattle [Table 9.5: sheep/goat].

As far as the distribution of pork butchery sections is concerned, the most frequent use was noted for proximal parts of the limbs, including the rump and shoulder. Unlike ruminants, however, in the case of pigs also the meat on ribs and vertebrae was consumed [Table 9.5: pig].

Osteometric analyses of cattle remains yielded data of high scientific value. The material from 2014–2016 seasons yielded 67 measurements useful in studies on the morphology and population of cattle in the late Makurian period [Table 9.6].

Interim results of studies on the morphology of cattle have indicated use of animals primarily from local populations of short-horned cattle. Particularly worthy of attention, however, are the corneal processes of African long-horned cattle [Fig. 9.4]. These finds support the hypothesis on long-distance trade in live animals put forward on the basis of results of research on chronologically similar bone assemblages from the Citadel of Dongola. Osteometric data were obtained, albeit in smaller numbers, also for other species: sheep, pig, donkey, horse, and camel.

Animal bones found during excavations in the Monastery on Kom H also bore evidence of much damage inflicted while preparing the meat for consumption. The most common were traces attributable to the action of fire: burning, charring. Other traces of damage were the result of hacking the carcass at the joints [Fig. 9.5], cutting the bone lengthwise in order to extract marrow, and separating meat from bone.

Faunal remains uncovered at the Monastery on Kom H in contexts dated to the 12th–14th

Table 9.4. Anatomical distribution of faunal remains of cattle, sheep/goat and pig

Part	Cattle	Sheep/ goat	Pig
<i>Cranium</i>	15	18	7
<i>Proc. cornuales</i>	4	4	–
<i>Maxilla</i>	2	3	1
<i>Dentes</i>	6	10	1
<i>Mandibula</i>	9	19	6
<i>Vertebrae</i>	30	25	15
<i>Costae</i>	10	15	7
<i>Scapula</i>	10	9	2
<i>Humerus</i>	31	3	4
<i>Radius</i>	18	8	4
<i>Ulna</i>	3	5	3
<i>O. carpi</i>	2	–	–
<i>O. metacarpi</i>	11	3	2
<i>Pelvis</i>	18	13	1
<i>Femur</i>	16	5	–
<i>Tibia</i>	12	7	6
<i>Patella</i>	3	–	–
<i>Talus</i>	6	5	–
<i>Calcaneus</i>	9	1	–
<i>O. tarsi</i>	9	–	–
<i>O. metatarsi</i>	10	6	2
<i>Ph. proximalis</i>	5	3	1
<i>Ph. media</i>	5	–	–
<i>Ph. distalis</i>	0	–	–

Table 9.5. Anatomical distribution of butchery sections of the carcass for remains of cattle, sheep/goat and pig

Key: H head
 B body
 PPAL proximal parts of anterior limbs
 DPAL distal parts of anterior limbs
 PPPL proximal parts of posterior limbs
 DPPL distal parts of posterior limbs
 PH phalanxes (digits)

	Butchery section	n	%	Model skeleton (%)	Surplus/deficiency (%)
C A T T L E	H	36	14.75	20	-5.25
	B	40	16.40	43	-26.6
	PPAL	62	25.41	5	20.41
	DPAL	13	5.32	8	-2.68
	PPPL	49	20.08	3	17.08
	DPPL	34	13.93	7	6.93
	PH	10	4.09	14	-9.91
S H E E P / G O A T	H	15	24.20	20	4.2
	B	22	35.48	43	-7.5
	PPAL	13	20.96	5	15.96
	DPAL	2	3.22	8	-4.78
	PPPL	7	11.30	3	8.3
	DPPL	2	3.22	7	-3.78
	PH	1	1.61	14	-12.39
P I G	H	52	7.65	20	-12.35
	B	275	40.50	34	6.5
	PPAL	166	24.44	4	20.44
	DPAL	9	1.32	10	-8.68
	PPPL	156	22.97	3	19.97
	DPPL	16	2.35	9	-6.65
	PH	5	0.73	20	-19.27

Table 9.6. Osteometry of cattle remains

Key	GL	greatest length
	GLI	greatest length of the lateral part
	Bp	(greatest) breadth of the proximal end
	SD	smallest breadth of diaphysis
	Bd	(greatest) breadth of the distal end
	GLm	greatest length of the medial half
	GLP	greatest length of the Processus articularis (glenoid process)
	GLpe	greatest length of the peripheral (abaxial) half
Bone	Osteometry (mm)	Points
<i>Pr. cornuales</i>	Circumference 255 mm; 280 mm	58, 85
<i>Scapula</i>	GLP-62,47 GLP-78,84	34, 88
<i>Humerus</i>	Bd-65,48; 68,35; 70,12; 75,80	19, 25, 26, 31
<i>Radius</i>	Bd-59,00; 62,13; 67,66; 74,18; 79,87; 82,17	0, 2, 15, 32, 41, 50
<i>O. metacarpi</i>	Bd-48,08	0
<i>Femur</i>		
<i>Tibia</i>	Bd-50,96; 56,13; 56,67; 60,49	8, 22, 22, 37
<i>Talus</i>	GLI-62,12; GLm-55,12; Bd-37,47 GLI-64,47; GLm-60,78 GLI-69,76; GLm-65,39; Bd-40,51 GLI-69,85; GLm-65,13; Bd-39,26 GLm-58,5; Bd-42,62	28, 10, 22, 33, 25, 42, 38, 35, 44, 38, 30, 19, 40
<i>Calcaneus</i>	GL-114,81; 121,29; 130,55	23, 30, 35
<i>O. metatarsi</i>	GL-254,92; Bd-56,71; SD-28,47	32, 40, 18
<i>Ph. proximalis</i>	GL-63,38; Bp-27,00; SD-22,62; Bd-26,39 GL-69,34; Bp-28,99; SD-26,26; Bd-27,87 GL-61,67; Bp-31,77 Bp-24,74	20, 5, 30, 66, 22, 40, 31, 80, 60, 31, 3
<i>Ph. media</i>	GL-40,29; GLpe-37,01; Bp-26,09; Bd-21,21 Bp-26,56; Bd-24,08 GL-44,83; GLpe-41,97; Bp-27,20; Bd-23,22 GL-46,29; GLpe-43,54; Bp-27,97; Bd-25,16 GL-43,73; GLpe-43,00; Bp-28,45; Bd-24,85	20, 25, 19, 20, 40, 21, 35, 35, 25, 45, 45, 27, 40, 45



Fig. 9.4. Fragment of a corneal process of African long-horned cattle

centuries constitute a highly valuable source of archaeozoological data. They will be used in further in-depth studies concerning not only the economic role of animals in late Makuria, but also in research on economic, ethnic and social diversity and economic processes taking place in Nubia in this period. These are the first broad-scope studies on the diet and use of animals in monastic communities in Nubia and in the kingdom of Makuria. Already the initial stages of research have indicated similarities between the models of animal use traceable in material of Late Makurian date recovered from contexts on the Citadel and at the monastery. The first of such shared elements is evidence for the presence of long-horned cattle, alien to the



Fig. 9.5. Corneal process of a goat with traces of hacking at the skull end

Middle Nile Valley in this period. Another common feature recorded in the capital of Makuria in the 12th–13th century is the dominant role of beef in the diet. At the monastery, beef was consumed in relatively large amounts, while in the same period at the Citadel it played a much smaller role in the diet. Meat consumption in the community that inhabited the monastery was practically limited to domesticated species. In the assemblages submitted for analysis no skeletal fragments of game were found, although scarce remains of gazelle and Nile fish had been recorded in the study conducted in 2007. At the Citadel in this period the diet was much more frequently supplemented with meat of wild game.

PART II



THE CITADEL IN THE TIMES OF THE KINGDOM OF MAKURIA

WŁODZIMIERZ GODLEWSKI

THE CHURCH OF ARCHANGEL RAPHAEL (SWN.B.V)

The Church of Archangel Raphael (SWN.B.V =Royal Church) is well grounded in Dongola's tradition of church architecture. A similar spatial arrangement was applied in the construction of the Pillar Church located to the west of the Citadel walls, on a platform by Tower NW. The two churches are, in fact, almost identical in plan. We do not know, however, if the Pillar Church was earlier than SWN.B.V and could therefore serve as its prototype. It seems, instead, that they were both created as a continuation of the architectural tradition of the Third Cathedral of Dongola (RC.I). However, the Church of Archangel Raphael and the Pillar Church are somewhat smaller than RC.I, in both the central part of the complex is more developed, and the form is structurally improved thanks to pillars. Elements of the plan typical for a basilica were kept but significantly reduced in the naos, which has the shape of a Greek cross (Godlewski 2007: 294; 2013: 67–71; 2015a).

Church SWN.B.V has a central plan with a narthex and *gamma*-shaped pastophoria connected by an eastern corridor and accessed from the naos [Fig. 10.1]. The interior of the church measures 20.70 m in length and 15.00 m in width, with a slight increase to 16.40 m in the center, where the entrance bays form recesses in the side walls.

CHURCH FOUNDATIONS

The floor level inside the church (24.01 m) is significantly higher than the walking levels inside buildings located to the north of SWN.B.V: SWN.B.III (22.44 m) and SWN.B.I inside the staircase (22.02 m). This difference of almost 2.00 m

was surely caused by the high stone foundations of SWN.B.V, which stand on the level of 22.57 m, i.e., slightly higher than the floor in SWN.B.III.

The structure of the foundation was investigated in a test trench along the southern part of the western façade. The foundation was built of small, roughly hewn sandstone blocks, directly on the surface of bedrock (Godlewski 2015a: 53–54, Figs 5.7 and 5.9). Test trenches excavated in the sanctuary demonstrated the foundation level of the west wall of the church to be similar to that of the east wall of the naos beneath the apse.

Taking advantage of the lack of floor, two test trenches were excavated in the sanctuary next to the northeastern pillar, the southeastern engaged pillar, and the apse.

PIT 2016.1

Pit 2016.1 was located next to the southeastern face of the northeastern engaged pillar, between the north and west altar screens [Fig. 10.1 section E–W]. It was excavated down to 1.47 m below the stone pavement. The southeastern corner of the foundation of the pillar was exposed. The footing of the pillar was built of baked bricks measuring 38 cm by 19 cm by 7–8 cm; it consisted of nine regular courses bonded with mud mortar. The foundation was 25 cm wider than the pillar on both exposed sides, hence its probable dimensions were 1.66 m by 1.66 m, and its exposed height was 0.82 m. It was founded on a brick feature that extended beyond the area occupied by the base. A narrow test trench excavated along the southern face of the pillar base was not enough for its precise identification.

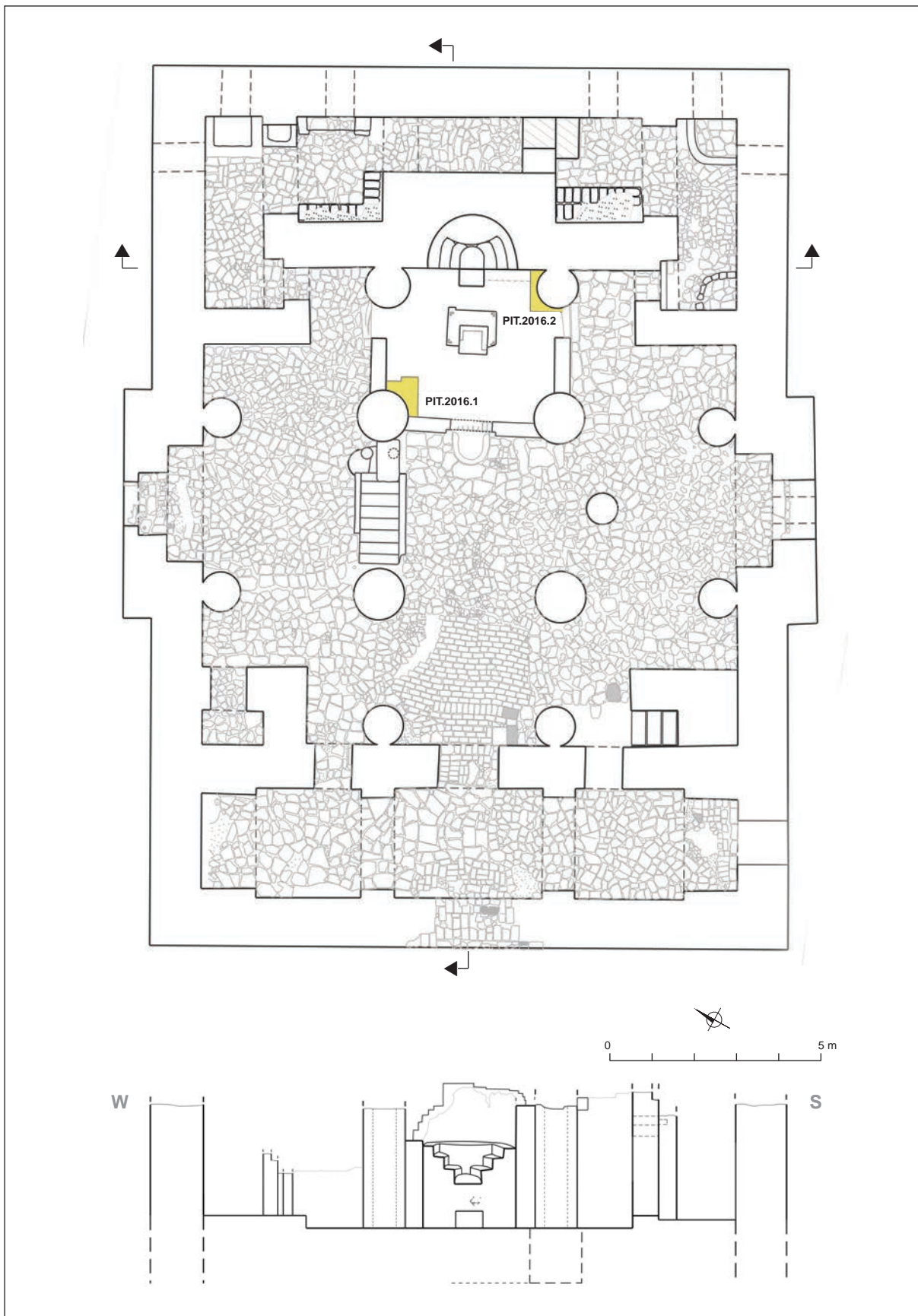
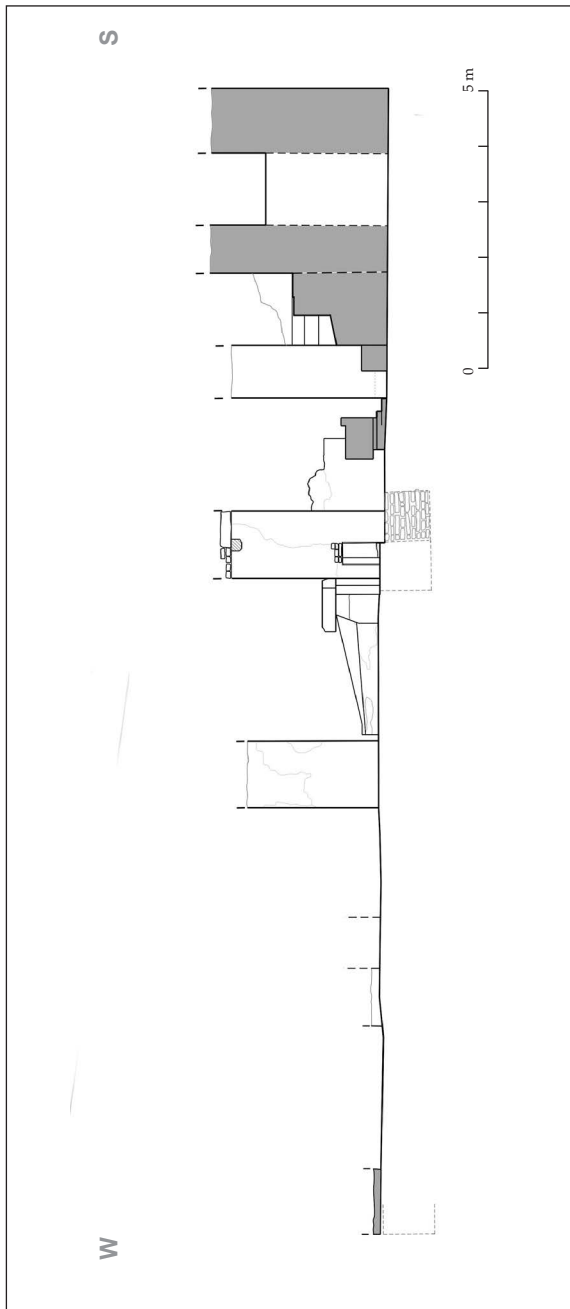


Fig. 10.1. Church of Archangel Raphael: top, plan with the location of the two test trenches in the sanctuary; bottom, north-south section looking east; opposite page, east-west section looking north



PIT 2016.2

Pit 2016.2 was excavated to a depth of 1.40 m along the northern face of the southeastern engaged pillar and the western face of the apse, between the engaged pillar and the outermost step of the *synthronon*. The foundation of the apse and *synthronon* is a uniform construction built of broken sandstone slabs [Figs 10.1 section N-S; 10.2]. The foundation of the engaged pillar abutted the stone face and was built of baked bricks. On three sides it was 10–15 cm wider than the engaged pillar, and its dimensions were 1 m by 1 m. It measured 1.34 m in height and consisted of 16 regular courses of bricks. It seems that the

foundation was built in a narrow trench, slightly wider (approximately 30 cm) than the feature itself.

NARTHEX

The western part of the church, which was destroyed to floor level, was a narrow room stretching along the whole length of the building. It was accessible from the outside on the south, through an entrance in the southwestern corner. The narthex was connected with the naos via three passageways in the east wall. The long room measuring 12.70 m by 2.60 m was divided into three parts by three arches supported by pilasters, 0.80 m wide, protruding from the side walls. The lateral extremities of the narthex are slightly constricted for a distance of 1.30 m.

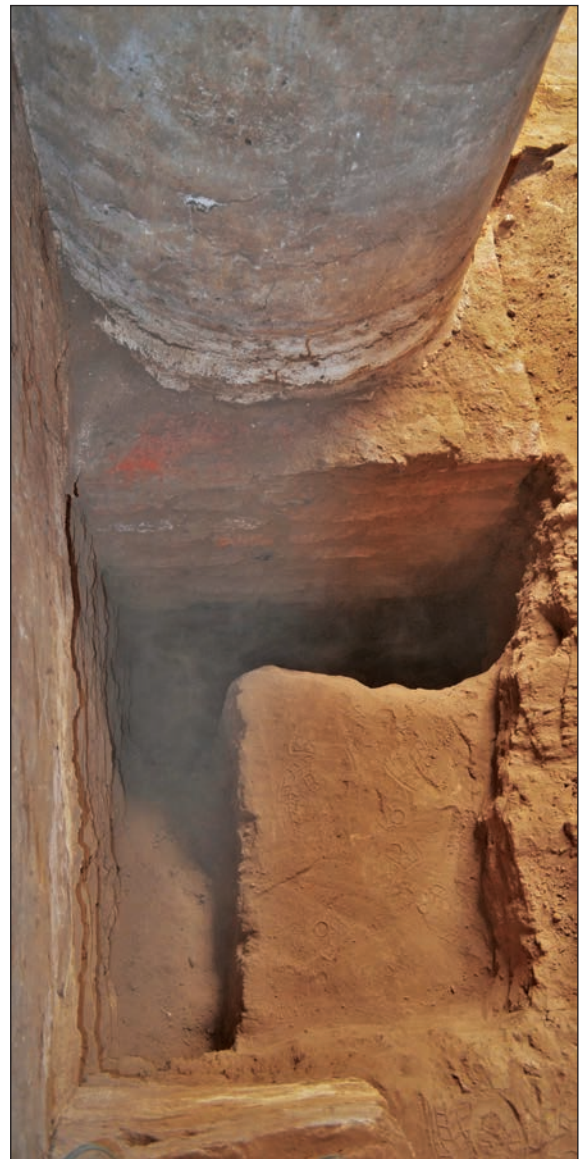


Fig. 10.2. Pit 2016.2 in the church sanctuary

The southern entrance, heavily damaged, had embrasures built of sandstone ashlars; the eastern one is preserved (Godlewski 2015a: 58–60).

NAOS

The naos of the church has the shape of a Greek cross. The outline of its arms is determined on the east by the western sections of the pastophoria; on the west it is delimited by a staircase in the southwestern corner and by a small room in the northwestern corner [see *Fig. 10.1*].

The naos was accessible from the west via three passageways from the narthex and via two side entrances in the north and south walls.

The interior of the naos is articulated by four freestanding pillars, which together with cylindrical engaged pillars support the arches and vaults reaching different heights above the naos. It is without a doubt that the domed central part of the naos was the highest part of the complex [*Figs 10.3, 10.5*].

The stone floor was made of roughly hewn ferruginous sandstone, which was laid on a bed of lime mortar throughout the naos, with the exception of the sanctuary. In the west part of the naos, next to the central passageway leading

to the narthex, the floor was supplemented with bricks. The reason for damage to the original floor in this part of the naos was not investigated. It need not have been caused by wear of the original floor.

Staircase

The staircase, located in the southwestern corner of the naos, was built of baked bricks and measured 1.80 m by 2.50 m. It is preserved only in the bottom part, up to a height of 1.70 m. The stone treads of three remaining bottom stairs are preserved in the wall of the narthex. The staircase was 0.80 m wide [see *Fig. 10.1*].

Northwestern room

The small northwestern room was 1.40 m by 0.80 m measured inside. It was placed symmetrically to the staircase, on the other side of the naos, and was entered from the naos. The walls were massive, as indicated by the outer dimensions of this space (2.50 m by 1.80 m), identical to those of the staircase [see *Fig. 10.1*].

Freestanding pillars

The four freestanding pillars were massive features with a diameter of 120 cm, built of specially



Fig. 10.3. Documentation inside the church, view from the west

designed curved bricks joined with lime mortar. Their preserved upper surfaces were capped with pairs of sandstone blocks, which served as bases for arches and held beams that connected the freestanding and engaged pillars. The stone capping is preserved *in situ* only on the northeastern freestanding pillar (CNE) [Fig. 10.4], but most of the other blocks were found in the fill of the church.

Engaged pillars

The engaged pillars are nearly cylindrical features structurally separate from the side walls.



Fig. 10.4. Northeastern freestanding pillar

They measure 90 cm in diameter and are built of curved bricks joined with lime mortar. At the height of 2.66 m they were capped with sandstone blocks, which supported the arches connecting the engaged pillars with each other, as well as with the freestanding pillars. Blocks preserved *in situ* are found on the southeastern and southwestern engaged pillars [see Fig. 10.1].

Southern entrance

The southern arm of the naos holds an entrance to the church [Figs 10.6, 10.7]. The doorway has been excavated only on the inside and was found partly blocked with a wall that probably dates from the late period of operation of the church.

The south wall features a recess 2.68 m wide and 0.84 m deep, flanked by two lateral engaged pillars. This bay had a vaulted ceiling, which is preserved only in the lower part, on the eastern side. In the center beneath the vault was a window preserved only to the level of the window-sill, which is 0.70 m in width. The entrance was located below the window, in the south wall of the bay. It was splayed towards the inside, where it measured 1.40 m in width and was topped with an arch 2.97 m high and 0.66 m deep. On the external side the passageway was narrower, 1.02 m, but it also had an arch, which was 1.83 m



Fig. 10.5. Church naos, view from the west toward the apse

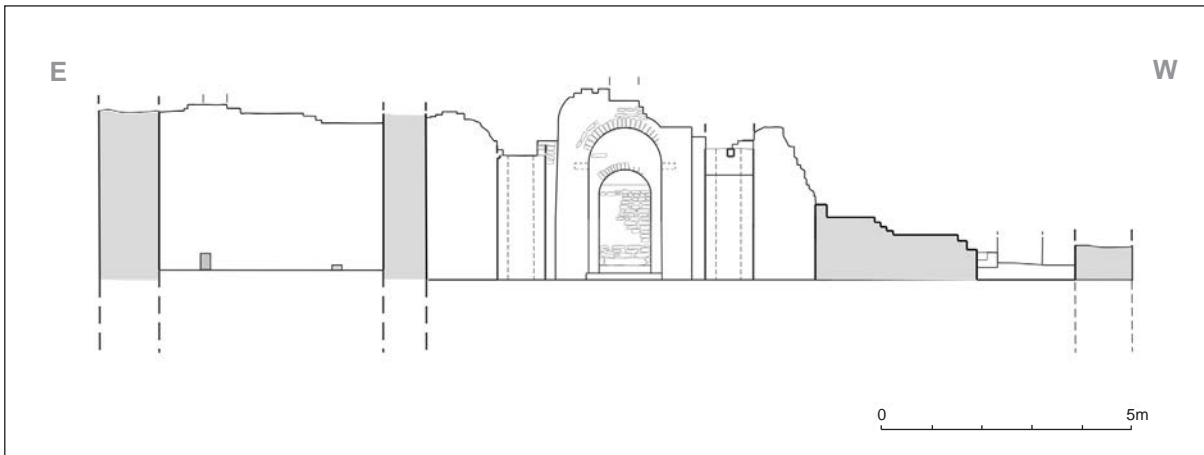


Fig. 10.6. East-west section through the church looking at the south wall with the southern entrance



Fig. 10.7. Entrance to the church from the south, view from inside the naos (see Fig. 10.6)

high above the naos floor. A wooden beam was inserted 23–35 cm deep into the side walls above the external arch of the entrance.

The threshold of the internal part of the entrance was built of two sandstone slabs, supplemented with bricks on the outside and lined with a 12-cm-wide wooden beam along the threshold of the external entrance. The external threshold, in turn, was built of bricks and a sandstone slab and rose to a height of 37 cm above the internal threshold. The external threshold was later raised using a sandstone slab, and ultimately the entrance was blocked with a brick wall.

SANCTUARY

The sanctuary occupies the central part of the naos, or the space in front of the apse, between the eastern engaged pillars and the eastern free-standing pillars of the church. It was surrounded with screen walls pierced by three entrances: a central one on the west and two on the sides. Its internal space measured 4.12 m by 3.55 m.

Altar screen

The screen walls around the sanctuary were built of baked bricks and measured 0.41 m in width. They were low initially, barely 1.10 m above the floor, but later they were raised by adding courses of mud bricks and ultimately reached a height of approximately 1.80 m.

The north and south screens by the passages from the naos to the sanctuary (each 0.70 m wide) were originally each topped with a round finial that was 0.20 m high. The southern finial is preserved with minor lateral damage, but a circular base or rather hemispherical negative is all that remains of the northern one.

A central entrance opened in the west screen. Its width from the naos was 1.20 m, reduced to 1.00 m on the other side. The upper part of this structure is missing. The floor in front of the entrance preserves an imprint of a semicircular slab, 0.82 m wide and 0.84 m high, with a 13-cm-wide band along its rounded edge. The impression is slightly embossed at the base [Fig. 10.8].

Both the faces and the flat tops of the screens were coated with partly preserved smooth sand-lime plaster. As said above, in a later phase the altar screen of the sanctuary was raised to a level of approximately 1.80 m, as indicated by an imprint preserved on the eastern face of the southeastern engaged pillar. The upper part is partly preserved on the southern and northern side screens. The taller screens were completely covered with a new layer of plaster.

The southern section of the screen spanned the space between the southeastern set of engaged and freestanding pillars. The entrance to the sanctuary next to the engaged pillar was 0.75 m wide. It gave access to it from the south, that is, from the naos, and from the *diakonikon*.

The screen was built of baked bricks. The feature was 0.42 m wide and 1.08–1.10 m high above the stone floor in the south aisle. The lowermost course of bricks is below the level of the floor, which abuts it from the south. The face was covered with lime plaster, approximately 1.2 cm thick. The foundation, or the lowermost 0.20 m of the wall on the southern face, is exposed, as the floor of the sanctuary was completely removed in this area [Fig. 10.9]. By the entrance, the wall was topped with a hemispherical finial, approximately 0.20 m high, with a base equal to the width of the wall (0.42 m). The top was covered with lime plaster. The original face was in vast part covered with a second layer of plaster during a refurbishment that took place in the second phase. Two Greek inscriptions (S.SS. LN. Nos 1–2) remain on the second plaster layer on the northern face of the wall.

The southern entrance is 0.76 m wide. It is preceded by a stone slab measuring 0.17 m by 0.93 m. The threshold was removed; an imprint in the mortar measures 0.65 m in length and is probably a relic of a marble slab.



Fig. 10.8. Imprint of a semicircular slab preceding the western entrance to the sanctuary area (see Fig. 10.1)

The northern section of the screen is located between the northeastern set of freestanding and engaged pillars. The entrance next to the engaged pillar is 0.72 m wide. The wall was 0.42 m wide and was built of baked bricks. The original height was 1.10 m above the floor in the north aisle. The wall was founded below the floor, which abuts its northern face. The wall faces were covered with lime plaster. The hemispherical element on the wall next to the entrance is preserved only in relics; it measured 0.38 m in diameter and was probably identical to the one on the south. To the west of the finial, a part of the upper surface of the screen is flat and covered with lime plaster.

The northern entrance is 0.74 m wide. Before it is an irregular stone slab measuring 0.90 m by 0.20–0.27 m. The threshold was removed and its impression left in the lime mortar is unclear. It was probably covered with a marble slab.

The southwestern section of the screen is built of baked bricks bonded in lime mortar. It is 0.42 m wide and rises 0.88 m above the floor of the nave. The foundation consists of two courses of bricks (approximately 12–14 cm) located

below the floor level. The upper part of the wall is destroyed and the upward extension from the second phase is lacking. Both faces are covered with original lime plaster, while sand-lime plaster from the second phase is partly preserved on the western side. Only the lime plaster is preserved on the eastern face.

The northwestern section of the screen is built of baked bricks bonded with lime mortar. The top of the wall and the upward extension from the second phase are lost. The preserved height is 0.97 m above the floor of the nave. The foundation level is 0.13 m below the floor. The screen is covered with lime plaster, while the plaster layer from the second phase is partly preserved on both faces of the wall.

The west entrance has splayed doorjambs, 1.03 m wide on the inside and 1.23 m wide on the outside. The outer threshold was incorporated into the floor of the naos. It consisted of a slab of most probably marble, of which only a semicircular imprint in the lime mortar has survived. The slab measured 0.82 m by 0.84 m and resembled an altar top. The internal threshold was built of small baked bricks. A slab over 0.50 m long (approximately 0.90 m), probably made of marble, is not preserved but left an imprint in the mortar.

Late changes to the altar screen

The original south wall was overbuilt with mud bricks along its whole length. The preserved height reaches approximately 1.65 m, while the height indicated by an uncertain mark on the southeastern pillar was approximately 1.80 m [see Fig. 10.9].

The original capping over the entrance was also overbuilt and partly damaged with side cuts. The faces of the wall were covered with a thick layer of sand-lime plaster, approximately 8–10 mm in thickness. Two Greek inscriptions are preserved on the second plaster layer on the northern face of the south wall.

The original northern screen wall was overbuilt with a wall of mud bricks along its full length after the hemispherical finial at the entrance was removed. Its maximum preserved height by the northeastern pillar is approximately 1.40 m above the floor of the north aisle. The faces of the overbuilt wall were covered with thick sand-lime plaster (approximately 1 cm), which is partly preserved and originally descended to the level of the church floor.

As for the west wall, no overbuilding was observed on either side of the entrance. Sand-lime plaster is partly extant on top of the lime coating.

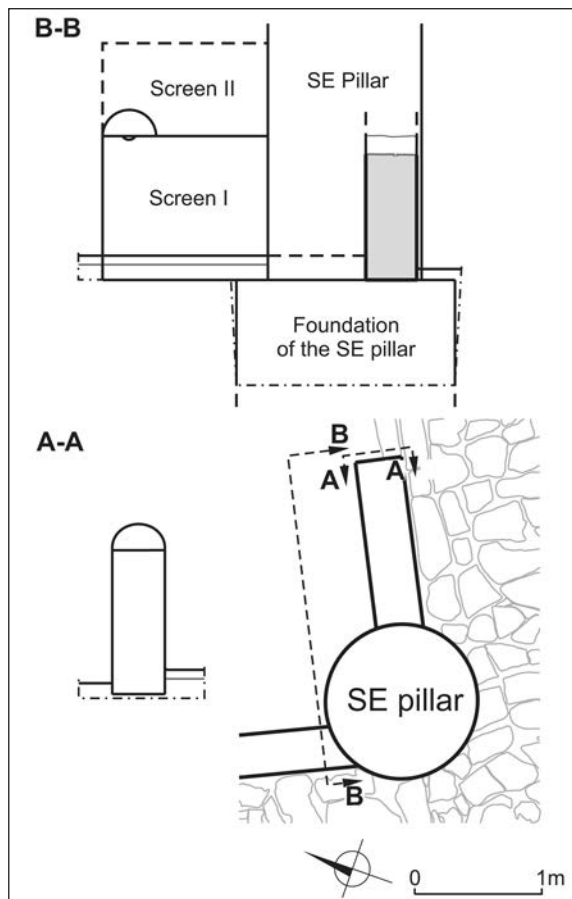


Fig. 10.9. Southern altar screen wall: sections through foundations of the southeastern pillar and the late changes to the wall

FURNISHINGS

Altar

The altar was placed relatively close to the front of the high *synthronon*, at a distance of 0.95 m. A relic of the original altar is a stone slab measuring 119 cm by 86 cm, on which the altar was founded. The slab's corners have holes in the shape of the letter *gamma*, probably for mounting metal joints. They delineate a rectangular area 1.09 m by 0.73 m. The slab is probably a *spolium*, but this cannot be determined without lifting the stone, which lies beneath a late altar built of baked bricks. The late altar is only partly preserved [Fig. 10.10]. It was founded on a soil deposit that had covered the slab after removal of the floor in the sanctuary. A square feature measuring 0.73 m by 0.73 m with a preserved height of +0.74 m occupied the central part of the sanctuary.

A rectangular dais stood next to the central, front part of the *synthronon*, which filled a small apse. The brick feature measured 0.46 m by 0.63 m and reached a height of 0.49 m. The construction probably made it easier to reach the upper part of the *synthronon* [see Fig. 10.1].

The floor in the sanctuary was removed and only the pale sandy bedding remains. It lies on a tamped level, which is the surface into which the

foundation trenches of the church were dug (see above). The floor level is discernible on the lower parts of the plaster of the altar screen, approximately 0.15 m above the foundation level of the altar. Parts of marble slabs found in the sanctuary, as well as larger slabs recovered from the fill in the northern part of the church, suggest that the floor of the sanctuary and its thresholds were built of marble slabs 5 cm thick.



Fig. 10.10. Altar viewed from the east



Fig. 10.11. Synthronon, frontal view from the naos

Synthronon

The small apse, 2.20 m wide and 1.35 m deep, was filled with a baked-brick feature measuring 1.80 m in height. At its top was a slightly sloping semicircular dais, with a maximum width of 0.70 m and with two semicircular steps leading to it. The feature was covered with plaster. The unusual shape of the feature in the apse resembles a throne rather than a typical *synthronon* known from many other churches in Makuria [Fig. 10.11].

Pulpit (lectern)

The pulpit was situated between the northern freestanding pillars. It is a massive construction measuring 1.80 m in length and 1.27 m in width, built of baked bricks in the foundation part and incorporating granite *spolia*. The pulpit is preserved *in situ*, and it is almost complete. The missing granite slab of the platform was found near the northern entrance to the church. Granite stairs, probably from a sanctuary of a Kushite temple, stand on a rectangular base 0.50 m high. The brick base was diligently plastered.

Between the stairs and the northeastern pillar (a distance of 0.94 m), two fragmentary granite column shafts were mounted upright, slightly below floor level. Their height measured from floor level differs slightly: the northern one is 0.65 m, the southern 0.73 m. The diameter in both cases is 0.30 m. They supported the granite blocks of the platform, which additionally rested on the uppermost edge of the granite stairs. The platform consisted of two blocks. One of them is a statue base with a hieroglyphic inscription listing the names of conquered cities and peoples (Schiff Giorgini 2003: 418). It measures 1.00 m by 0.57 m and is preserved *in situ*, while the second granite block without inscriptions was found near the northern entrance [Figs 10.12].

Feature adjacent to the pulpit

The semicircular feature is situated on the northern side of the pulpit, next to the edge of the stairs and the column supporting the platform. It is built of baked bricks, it measures 0.69 m by 0.67 m and rises to a height of approximately 0.70 m [Fig. 10.13]. The surface is coated with smoothed lime plaster. The external upper edge is destroyed, but there is a hollow in the middle of the feature, additionally lined on the inside with a low rim and preserving waterproof lime plaster on the bottom, which suggests that originally it was a shallow basin. Its depth was not determined.

Circular feature

The circular feature was built of baked bricks bonded with lime mortar and covered with lime plaster. It belongs undoubtedly to the original phase as the stone floor abuts it. It is 0.73 m in diameter and survives to a height of 0.69 m. It was placed on the transversal north-south axis of the church outside the zone delimited by the central pillars. Its function has not been determined, but it probably served as a base for something that stood on top of it, e.g., a bowl [see Fig. 10.3].

PROTHESIS

The *prothesis*, located in the northeastern part of the church, was a set of two rooms joined by an arched passageway to form the shape of the Greek letter *gamma* [see Fig. 10.1]. The space was accessed from the naos and connected with the east corridor, which passed behind the apse and led to the *diakonikon*.

One room was rectangular and measured 4.54 m by 1.38 m. The second one, nearly square in shape, measured 2.08 m by 2.48 m. The joining passageway was 2.08 m wide and its overhead arch rested on pilasters measuring 0.80 m in width. The 1.28-m-wide entrance to the eastern corridor was topped with an arch that sprang from the side walls of the corridor.

The *prothesis* was entered from the naos, through a doorway located next to the sanctuary. The jambs of the entrance were 0.74 m apart on the outside and 1.17 m apart on the inside, and the level of the baked-brick threshold is 0.30 m higher than in the naos. Both rooms of the *prothesis* are paved with irregular-shaped stone slabs laid on a bed of lime mortar and the floor is preserved almost intact. The walls were carefully plastered, and the north and east ones bore painted decoration (Zielińska 2015: 104–108). The murals have legends and preserve a number of Greek inscriptions, mainly of a liturgical nature, located next to the paintings in the lower part (Łajtar 2015).

Furnishings

Furnishings of the *prothesis* included features dating back to the original building: a bench along the wall of room 2 and a stone slab by the east wall of room 1, on which the original *prothesis* altar had once stood. In addition, two altars dating from a later phase are preserved. One of them is located next to the east wall of room 1, while the second one abuts the face of the eastern pilaster [Fig. 10.15]. Stone elements of the bench



Fig. 10.12. Pulpit incorporating granite elements from a Kushite temple, view from the naos



Fig. 10.13. Circular feature on the northern side of the pulpit, view from the northern aisle

along the east wall of room 2 were added probably during the room's last occupational phase.

Original features

The bench is located along the west and south walls, in the corner of room 2, south of the pilaster supporting the arch. It measures 0.43 m in width and 0.45 m in height. The feature was built of large baked bricks measuring 38 cm by 20 cm by 8 cm and 36 cm by 18 cm by 7 cm. It was covered with smoothed lime plaster, which is partly preserved on the top surface of the bench. It stood on the flagstone floor and constituted one of the original features of the interior [Fig. 10.14].

The original altar is not preserved, but the platform on which it stood still exists. This platform, with dimensions 0.95 m by 1.40 m, was situated against the east wall, between the pilaster and the north wall. The stone floor abuts it on the western and southern sides.

Later features

The north altar was built against the east wall, on the stone pavement in the northern part of the *prothesis*. It was constructed of carelessly laid bricks. The upper part of the feature is damaged, since the top was supported by small, 8-cm-thick wooden beams, which are not preserved.



Fig. 10.14 Bench in the *prothesis*, view from the north



Fig. 10.15. Late altars in the *prothesis*, view from the west

They were located 0.82 m above the floor. The walls are one-brick thick and measure 0.12 m in width. The feature measured 0.82 m by 0.72 m and reached a height of 1.11 m. The interior is empty and the walls lack plaster or wash. Mud plaster was hastily laid only on the external walls. A small hole measuring 24 cm in width and 44 cm in height was found at the edge of the north wall. The upper surface of the feature was built of large bricks laid on small beams. In its flat surface there was a rectangular hollow by the wall, measuring 20 cm by 25 cm. The upper part is damaged and some elements of it are missing [see *Fig. 10.15*].

The southern altar stands on the stone floor against the eastern pilaster. The feature, built of baked bricks of different sizes, was shaped to resemble a four-legged table. It measured 0.75 m by 0.48 m and is preserved to a height of 0.95 m. Three holes were discovered in the lower parts of its side walls. They were probably identical in shape, but the best-preserved one is in the front. This front opening is 33 cm high and 40 cm wide at the base, and it is topped with a small arch. The arches of the lateral openings are damaged. The interior of the feature is empty. The altar top rested on a base, which measured 0.44 m by 0.35 m and abutted the face of the pilaster [see *Fig. 10.15*].

The east bench stood by the east wall, south of the altar and abutting the eastern pilaster. It was constructed of sandstone elements: a long block (1.55 m by 0.31 m by 0.12 m), probably a *spolium*, was cut to fit and was supported by two small blocks placed on the floor. The southern block measured 0.38 m by 0.34 m by 0.15 m and the northern block 0.39 m by 0.26 m by 0.16 m. The latter, which almost touches the pilaster, only partly supported the bench.

Two more blocks were found on the floor in front of the bench: one is circular, possibly of marble, and measures 0.14 m in thickness and 0.50 m in diameter, and the other is a sandstone block (0.37 m by 0.31 m by 0.11 m) cut to fit the other elements.

DIAKONIKON

The *diakonikon* was a set of two rooms connected by an arched passageway to form a space in the shape of the Greek letter *gamma*. It was accessed from the nave.

The first room was rectangular in shape (dimensions 4.52 m by 1.42 m) and had a stone floor but lacked original furnishings. Several painted representations were preserved on its walls:

- East wall: John the Baptist; the legend is lacking, but a dedication probably relating to this painting is preserved on the eastern pilaster [*Fig. 10.16*].
- South wall (eastern part): a standing figure, partly preserved.
- West wall: depiction of the archbishop Aaron dated to the end of the 8th or the beginning of the 9th century; an inscription preserved on the robes identifies the figure. The name of the archbishop is given in the inscription commemorating the meeting of bishops held in this church between AD 802 and 804 (Godlewski forthcoming).

The second room was nearly square (dimensions 1.95 m by 2.50 m). It was originally furnished with a wide bench that stood next to the west wall. The bench (H. 0.30 m; L. 1.95 m; W. 0.90 m) was built of baked bricks [*Fig. 10.17*]. Its top surface and sides were covered with smooth lime plaster, which is partly preserved.

The arched passageway between the rooms was 2.06 m wide and its overhead arch rested on two pilasters measuring 0.90 m in width. The western pilaster bears a Greek inscription commemorating the meeting of Makurian bishops (AD 802–804). The inscription is placed 2.73 m above the floor and was therefore intended for posterity.

The entrance to the *diakonikon* was splayed towards the inside. On the side of the naos the passageway was 0.79 m wide and had a threshold built of large baked bricks originally covered with lime plaster. The inner threshold was a wooden beam inserted into the side walls. The beam, 15 cm by 12 cm in section, is considerably damaged and probably made of hard wood. The threshold was overbuilt in a later period, but only one course of baked bricks remains. The internal part of the entrance, 1.20 m wide, was topped with an arch, which is preserved only in the lower part. Inside, a wooden beam was fitted into the side walls above the level of the arch on the side of the naos.

The passage to the eastern corridor at the back of the apse was probably also topped with an arch. The doorway, 0.70 m wide, was additionally constricted by a wall measuring 0.60 m by 0.80 m, built to abut the outer corner formed by the apse walls. The wall, built in an early phase, was coated with lime plaster and white-washed like the other walls of the *diakonikon*.

Alteration of the *diakonikon*

The entrance to the *diakonikon* was fully bricked in during at least three phases, using baked



Fig. 10.16. Dedication to St John the Baptist in the diakonikon



Fig. 10.17. Bench in the diakonikon, view from the south



Fig. 10.18. Blocked entrance from the diakonikon to the eastern corridor

bricks in the lower part and mud bricks in the upper part. The blocking wall measures 0.95 m by 0.55 m at the base and has fairly even faces. In the upper part it appears to have been built to abut the fill inside the *diakonikon* [Fig. 10.18].

Relics of features from the second phase are preserved on the floor of the southern room:

► storage bin in the southeastern corner: lower part of the feature built of mud bricks; dimensions 1.20 m by 1.06 m; rounded outer corner;

► storage bin in the southwestern corner: poorly preserved; dimensions 1 m by 0.96 m; mud brick casing; rounded outer corner.

EASTERN CORRIDOR

The eastern corridor is a narrow passageway, 1.30 m wide, running along the eastern side of the apse wall. The entrances leading to it from the *prothesis* and *diakonikon* were topped with



Fig. 10.19. Representations of members of the royal court in the southeastern part of the naos

arches resting on the side walls. One spring of such an arch is preserved on the east wall, in the entrance from the *prothesis*. The entrance to the corridor from the *diakonikon* was reduced first to a width of 0.70 m and later completely blocked.

PAINTED DECORATION INSIDE THE CHURCH

Dozens of paintings in varying state of preservation are extant on the walls of the naos, mainly on the well-preserved south wall, pillars, engaged

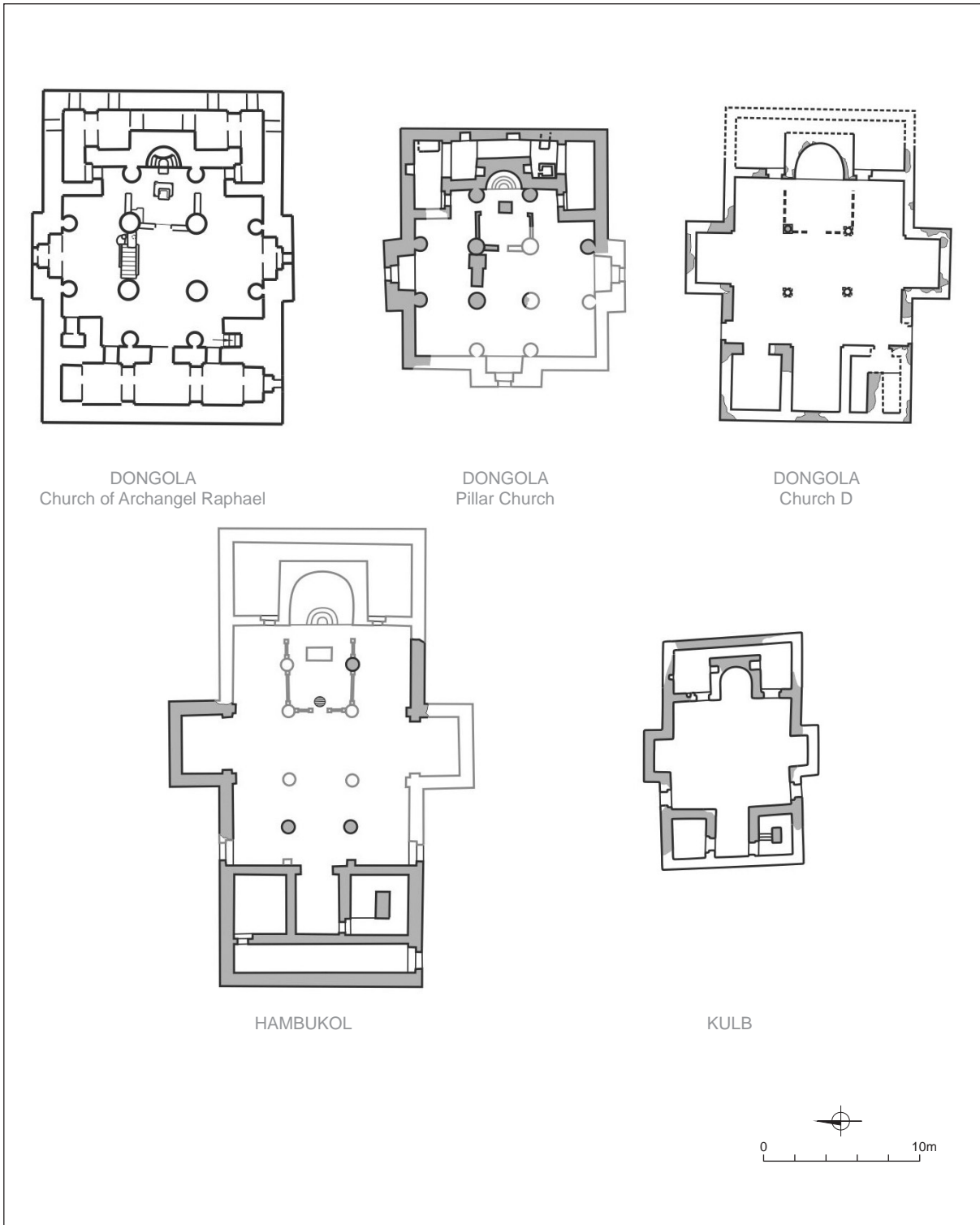


Fig. 10.20. Sacral buildings in Dongola: Church of Archangel Raphael, the Pillar Church and Church D, and churches in Hambukol and Kulb, inspired by Dongola church designs

pillars, in the apse, and on the walls of the pastophoria. Some of them require long cleaning and conservation treatment. No paintings survive on the destroyed walls of the narthex and on most of the north and west walls of the naos, making it impossible to establish the overall decorative program of the church. Nevertheless, two types of representations can be distinguished: those connected with the liturgy, including numerous archangels, mainly Michael and Raphael, apostles and Virgin, and living individuals associated with the royal court. The majority of the paintings may be dated to the end of the 8th century, soon after the church was built [Fig. 10.19].

CONCLUDING REMARKS

The Church of Archangel Raphael in Dongola (SWN.B.V) is part of the royal complex on the Citadel. It was built to the south of the Palace of Ioannes (SWN.B.I) at the end of the 8th century. At the beginning of the 9th century (AD 802–804) a synod of all Makurian bishops was held there under the leadership of the king Ioannes II and the archbishop Aaron. The metropolitan bishop of Pachoras, Ioannes I, and bishops of Upper

Unger, Zae, Phrim and Kurta also took part in this event (Godlewski forthcoming).

The Church was probably founded by the king, as is indicated by its location next to the palace. However, there is no foundation inscription. Without a doubt it was the work of a Dongolese architect, who was aware of past achievements in church architecture of Dongola and created a new type of sacral complex inspired by the third Dongolese Cathedral (Church of the Granite Columns [RC.I]). There is one more sacral complex in Dongola – the Pillar Church – that might have been the work of the same architect. In the 9th and 10th centuries, several sacral buildings inspired by the Church of Archangel Raphael were erected in Hambukol, in Dongola (Church D), and in Kulb [Fig. 10.20]. The Pillar Church in Dongola (see *Chapter 14*) lacks the western part, which is not preserved, yet it may have been the archetype for the Church of Archangel Raphael. Both the Pillar Church and the Church of Archangel Raphael remained in operation at least until the end of the 14th century with only slight structural changes to their interiors.

URSZULA KUSZ

CONSERVATION IN THE CHURCH OF ARCHANGEL RAPHAEL (SWN.B.V) IN SEASONS 2015–2017

Restoration work in SWN.B.V was launched in 2011 immediately after the discovery of wall paintings inside the church (Godlewski 2014: 269–271). At the beginning of the stage of work discussed in this report—four seasons, from 2015 to 2017—the area of the *prothesis* had already been unearthed in earlier seasons and the painted compositions in that space had been secured. In the course of three seasons (2015–2017), the church was completely excavated, covered with a roof and protected from external agents, making it possible to safely continue excavation and restoration work.

Dozens of painted compositions and inscriptions were found in the church. Their state of preservation varied. Most of them had to be cleaned and protected, while some surfaces presented challenges that called for more advanced treatment. The work should be viewed therefore as salvage protection rather than just proactive conservation measures. Many operations had to be performed simultaneously or even regular sequences of restoration work reversed owing to the poor state of the wall paintings, which dictated the manner and quickness of the treatment. The purpose of the conservation work was to secure the paintings, mainly by inhibiting their deterioration and removing threats; currently the murals are secured in a manner that enables more advanced work to be carried out addressing esthetic needs and exhibition purposes.

Data collected during the work adds to our knowledge of the technical aspects of wall painting, the materials used and technologies applied, and more generally contributes to our understanding of the building, its history and function.

STATE OF PRESERVATION

The fill layers that had accumulated over the centuries created stable conditions for the plaster and wall paintings they concealed. Constant humidity and no air access beneath the protective cover of the fill kept the substrate and paintings in good condition until the moment of their discovery. Exposure to air and rapid loss of humidity caused instant overdrying and crumbling of the thickest plaster layers, which buckled under their own weight. Particularly afflicted were the pillars, on which the layer of plaster reached a thickness of 5–7 cm.

Salvage works had to be performed by turns: removal of the fill was followed by consolidation of plaster or the plaster was consolidated first before removal of the fill. Excavation was frequently put on hold in order to allow for prompt securing of the plaster. Moreover, the fill was removed gradually to permit concurrent protection of the uncovered parts.

Most of the painted compositions were executed on a single layer of plaster. Two layers were identified in a representation of an archangel in the southern part of the naos, on the east side by the entrance to the *diakonikon*. In this case, the properties of the two layers differed significantly: the underplaster had a dense, solid structure and a finer temper than the overlying leveling layer, which is similar in nature to the other plasters (however, no laboratory tests were performed). The lack of traces of whitewash and paint coats between the layers suggests that both coats of plaster were laid at the same time. Two layers were also found on the wall of the sanctuary, but in this case a secondary layer of mud



Fig. 11.1. Examples of damage to the wall plastering:
 A – disintegrated plaster, detached and crumbling under its own weight;
 B – eroded plaster and mortar between bricks, the latter washed out and powdery;
 C – wall with visible deep voids caused by rising damp/water action; fissures are 10-odd centimeters deep;
 D – largest cavities on the pillars

plaster was laid over the lime plaster, and the place of application suggests this was done to “repair” the lime plaster when the church was still in use.

All the paintings in the church were executed on lime wash in the tempera technique, hence the surmise that they came into being at the same time and were painted by the same artists. A later date is possible for two compositions, which overlap without an intermediate layer of lime wash or clear compositional boundaries: St Menas represented as a holy warrior on horseback (southern part of the naos, southeast wall) and an archangel (southern part of the naos, east wall). Inscriptions constituting legends to these compositions overlap as well. In a single case—the robe of Christ (sanctuary, northeastern freestanding pillar, east side)—secondary overpainting is evident. These changes lead one to conclude that the interior decoration of the church was cared for, any deteriorating plaster was reinforced or replaced, and the images on the plaster were adjusted or painted anew.

RESTORATION ISSUES AND SOLUTIONS

Degradation of plaster

The most disintegrated lime plasters were the ones with coarse aggregate, in which small stones, shells, and organic particles were observed beside sand. After exposure, plasters of this kind exhibited the greatest fragility, the softest structure, the poorest adhesion to the base, and the greatest tendency to crumble and detach from the wall in fragments or in their entirety [Fig. 11.1:A]. The parts that had detached from the wall are completely disintegrated, loose, and irreversibly destroyed.

In the area of the *diakonikon* the plaster was very well preserved up to a 2.20–2.40 m above the floor. Despite some cracks and losses, it was hard and cohesive, adhering well to the wall; there were no gaps between layers and the painted decoration was well preserved with clearly legible composition. Above this level, the plaster was completely washed away, replaced with dirt that had entered inside, either in dry state or carried by rainwater. The borderline separating the two zones is clearly marked by a large horizontal crack running along all the walls of the *diakonikon* (south and east walls, west wall of room A with a representation of an archbishop of Dongola). It is probable that above this division the structure had been exposed to protracted, continuous dampness, which led to complete migration of the binder (lime) from the

plaster and bricks. In this zone little survives of the wall paintings, the compositions are unclear, and preservation of the remains of polychromy is problematic and tedious. Moreover, the walls on which the murals occur are still abutted by deposits on the outside and therefore are constantly exposed to higher humidity than the internal walls.

A serious threat to the plaster and a difficult conservation problem were the large voids found at different heights in the freestanding and engaged pillars of the naos. The voids were detected between the plaster and the brickwork; also the brick-binding mortar was washed out in these places [Fig. 11.1:C,D]. The cavities were probably caused by rainwater pouring inside the church when it had already been filled with soil deposits. They gradually filled with water-borne dirt, creating pockets full of silt in places of residue accumulation. The latter led to large cracks in the plaster and deep voids that reached the brickwork [Fig. 11.1:B].

Filling the voids with material that did not weigh down the plasters proved to be an efficient solution. The filler was introduced into the cavities gradually, rebuilding the technological layers. Tests using mineral filler (fine quartz sand) or glass filler (schotliche) with lime (lime caseinate) as binder brought very good results. Each of these operations was preceded by thorough cleaning (blowing out) of loose silt from between the plaster and the bricks. Lastly, the surface was smoothed and the plaster was shored up until setting of the applied mortar.

Previous restoration

Previous restoration work was a separate issue, especially in areas where synthetic consolidating substances had been used to secure paintings unveiled during the first few seasons.



Fig. 11.2. Example of salt efflorescence

The paintings were coated/consolidated with high concentrations of PARALOID B72 or/and polyalcohol, creating an impermeable film on their surfaces (as in the *synthronon*). The plaster under such film is soft, brittle, and powdery. Full removal of the applied adhesives and resins is not possible. It is only possible to partly dissolve and extract them from the structure of the wall painting. These are tedious and invasive measures due to the necessity of using potent and toxic solvents. However, artificially initiated accelerated ageing (high temperature, low relative humidity) occurs in desert conditions and it is hoped that natural degradation of the consolidating substances will proceed faster than in temperate conditions.

The collected data and experience from earlier work permitted the development of a program for the protection of plaster and murals eliminating the use of polymer-based substances assessed to be ineffective and invasive (MOWILITH, PRIMAL AC33, PARALOID B72, polyalcohol, and others). The technology and materials that were used for the present work are the most similar to those employed originally, taking into account the demanding external and internal conditions, especially the climate.



Fig. 11.3. The notable Abakuri, painting after cleaning

Salts

Shortly after removing the fill, salt efflorescence appeared on the surface and in cracks and pores in the plaster next to the entrance to the *diakonikon* (part of a painted representation of the Apostles). Salt crystals pushed out plaster fragments of different sizes in that area and caused their detachment [Fig. 11.2]. The process came to a halt after the walls had dried, the crystals were mechanically removed in a delicate manner, and as a result the accumulation of salts ceased to progress. Currently, the conditions inside the church are stable enough to be considered safe for the paintings.

The same phenomenon can also be observed on the wall in the southern part of the naos, above the entrance to the *diakonikon*. Unfortunately, in this case the wall is permanently



Fig. 11.4. St Menas: top, detail before cleaning and, bottom, during cleaning

damp due to deposits abutting its external face, so desalination and removal of crystals does not bring the desired results. A similar situation can be seen on the north wall of the *diakonikon*. In this case, however, salts had crystalized within a layer that had already been consolidated using the aforementioned synthetic resins. Having no way out, the crystals damaged the structure of the plaster underneath the film formed on the surface.

Cleaning accretions and surface dirt

The exposed paintings revealed a wide scope of accretions of various origin, reflecting extended

primary and secondary use of the building, and as a result of its gradual filling with deposits over the centuries. Evidence of bonfires, multiple soot and grease stains, remains of layers of ash, dirt and bones, as well as accretions due to animal and insect activity have obscured the composition. The unearthed whitewash was covered with a homogeneous dark coat, the removal of which unveiled more compositions and inscriptions.

The cleaning process was performed, mainly with mechanical methods, within several days after removal of the fill. During this time, the whitewash and paint layers underwent seasoning and drying, making accretions easier to remove and cleaning less invasive for the paint layers. The cleaning methods that proved efficient made use of fiberglass brushes of different gradation, erasers, Wishab sponges, and microstructural sponges. Additional chemical cleaning was necessary in the cases of persistent stains and dirt, mainly using C2000, ammoniac water (4–10%), and a solution of Marseille soap. In cases of powdery and flaking paint layers, initial consolidation was necessary before or during the cleaning [Figs 11.3, 11.4, and 11-5].

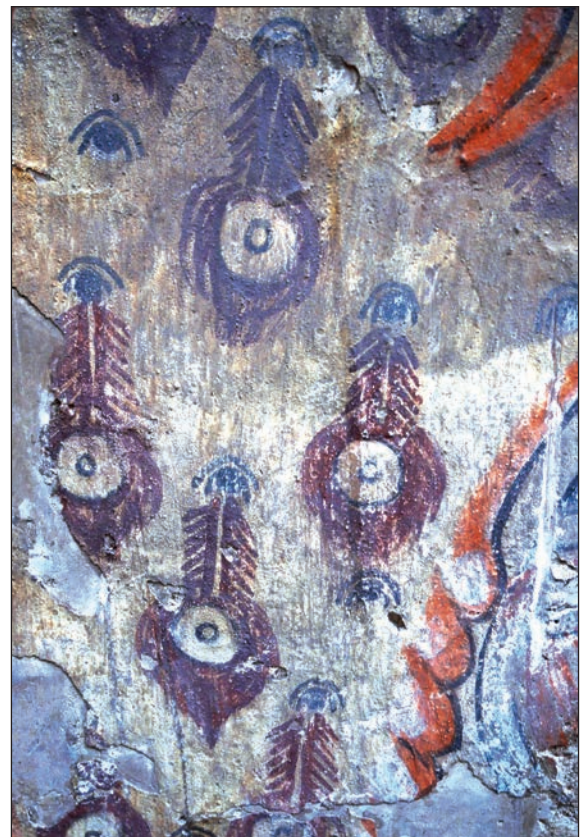
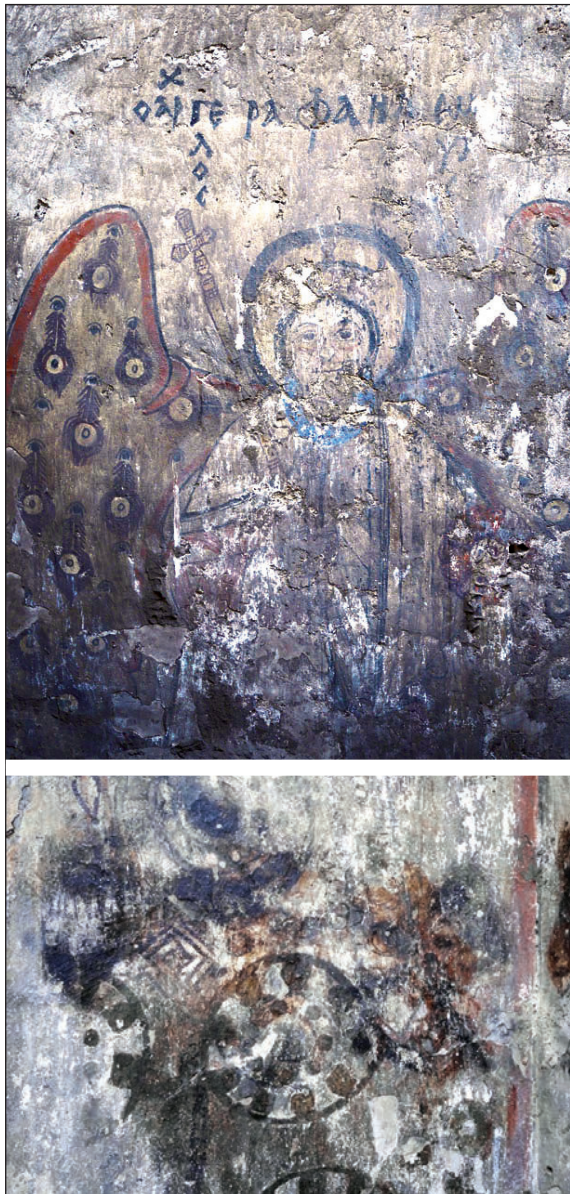


Fig. 11.5. The Archangel Michael: top left, condition before cleaning with accretions obscuring most of the composition and rendering the inscriptions barely readable; bottom left and right, detail of the composition during cleaning

Filling the voids

Voids were filled in accordance with the original construction method: in places where gaps reached the brickwork and bricks were damaged, the layers were supplemented in the following order: losses in the bricks were filled with brick fragments, joints were repointed with a mixture of aged lime, local lime (a binder used in local construction projects proven to contain the mineral huntite $\text{CaMg}_3[\text{CO}_3]_4$) and coarse sand as aggregate (1:1:3), then a layer of lime-sand plaster: aged lime + sand, 1:3 or 1:4, sand fraction dependent on the depth and location of the void. Putties were applied in two or three layers, their surfaces sunk 1–2 mm below the surface of the whitewash and rendering the surface in accordance with the texture of the original plaster. Edges of the plasters were secured in the same manner.

Consolidation of plasters and securing the paint layers

The best consolidation effects were obtained by injecting aqueous dispersions of silicic acid into different layers of plaster or under it. Due to the presence of water in the injected fluid, the injections were performed gradually, allowing the water to evaporate and the fluid to bind before the next application.

Flaking paint layers were thoroughly cleaned of surface dirt, the flakes were reattached, and the murals were secured with PARALOID B82 (1–2%) or KLUCEL G [Fig. 11.6]. The chemicals allow natural and necessary circulation of air and moisture in the plaster layers. The paintings with well-preserved paint and whitewash layers were not secured in this manner. The condition of the whitewash improved significantly with time due to the access of air and therefore consolidation in such cases was not performed.



Fig. 11.6. Mural of a saint on a pilaster on the east wall of the diakonicon, cleaned and secured with KLUCEL G

ROMUALD TARCZEWSKI

CONSTRUCTION OF A SHELTER OVER THE CHURCH OF ARCHANGEL RAPHAEL (SWN.B.V)

The Church of Archangel Raphael (SWN.B.V) is located within the walls of the Citadel, near the Palace of Ioannes (SWN.B.I) and the Commemorative Building (SWN.B.III). These structures form a coherent complex located on the high, rocky bank of the Nile [Fig. 12.1].

SWN.B.V is a rectangular building measuring about 24 by 15 m, with slight extensions at both ends of the north-south axis [see above, Chapter 10]. The narthex, which occupies the entire width of the building on the west side, is separated from the naos by a wall with three doorways. The naos, in turn, is divided into three aisles oriented east-west. The eastern part houses the apse and adjoining side rooms. In the central part, the building was crowned with a now-lost dome that rested on pillars with a circular cross-section. Circular engaged columns were also built against the walls surrounding the center of the structure.

The building stands on an exposed rocky surface in a spot where an artificial platform was made in order to level the steeply inclined surface of the riverside slope. The church was built of baked bricks. Special, curved bricks were used for the construction of columns and pilasters. The walls of the building in the eastern and southern parts are locally preserved to a height of about 3.60 m, while the brickwork in the western part of the building and in the western part of the north wall was mostly dismantled for reuse. The variation in the height of the preserved walls corresponds approximately to the inclination of the slope.

DESTRUCTION OF THE FIRST SHELTER

Church SWN.B.V is one of the most important monuments in the emerging archaeological park in Old Dongola. After the building's remains



Fig. 12.1. Location of the Church of Archangel Raphael (SWN.B.V) on a steep cliff overlooking the Nile: left, bird's eye view; right, side view

were partially unearthed, it proved necessary to construct a protective shelter, all the more so as valuable murals were discovered in its interior. The purpose of the shelter was to protect the structure against windblown sand and possible, though very rare, precipitation, as well as against theft or vandalism. A decision was made to construct a shelter over the excavation area and an additional shield wall at the top of the hill.

The shelter was made by local craftsmen. It was a lightweight steel construction, typical in this region and often used in the replacement of the traditional wood and palm-rib roofs of residential homes with new metal ones. This structure consists of a system of purlins supported on columns and connected in longitudinal direction by perpendicular elements. All steel elements were made of RHS profiles with a closed rectangular cross-section. The dimensions of cross-sections of the elements varied from 100 by 50 mm to 80 by 40 mm, and locally even 50 by 50 mm. Peculiar features of the elements were very thin walls, only 0.75 to 1.00 mm thick. These profiles are locally available on the market. The above proportions of cross-sections qualify them as class 4 according to the classification given in Eurocode 3 (EN 1993-1-1: 2005), i.e., sections that can be destroyed due to local loss of stability of thin walls before their plastic deformation begins. In the case of residential buildings, rolled parallel flange I-section profiles were also used, usually as primary beams. The height of available sections did not normally exceed 120 ÷ 140 mm. The structure was covered with a low-profile trapezoidal corrugated sheet, also of low thickness – less than 0.3 mm. Besides the roof structure, a woven metal mesh fence was built following the outline of the external walls of the

church to protect the interior against unauthorized access [see Fig. 12.1 right].

In addition to the shelter, a wall was constructed to act as a barrier protecting the building against encroaching sand. It was also built as a lightweight steel construction. Steel posts at a spacing of approximately 1.50÷2.00 m were driven into the sand and reinforced with bracing. The cover was made of corrugated metal sheets. The cross-sections of the posts and braces, as well as the type of corrugated sheets, were analogous to those used for the roofing over the building.

The posts holding up the roofing purlins had to be supported and anchored inside the church structure owing to the small cross-sections of the purlins. The contractor made cylindrical concrete blocks with a volume of about 0.4 m³ each, in which the lower parts of the posts were anchored. Anchoring blocks were placed partly on the exposed remains of the walls and partly on the fill layers between them. They served both as foundations and as ballast blocks counterbalancing the wind load.

The local contractor's experience with residential homes did not allow him to properly estimate the wind load. Since there were basically no walls on three sides of the building, only a wire fence, the wind load scheme corresponded basically to that adopted for an open shed. In addition, the location of the building on an exposed riverside slope meant that it was liable to receive strong gusts of wind.

The structure fulfilled its role for several seasons, but in the autumn of 2014 exceptionally strong winds accompanied by torrential rains, rarely encountered in this area, caused its complete destruction.



Fig. 12.2. Damage to the first protective structure: left, displacement of the concrete anchor block; right, destruction of the thin-walled section steel member

Visual inspection of the remains of the structure allowed the reconstruction of the causes and manner of its destruction. It became clear that, due to wind suction, reactions in the structural posts reached a value exceeding the weight of the concrete ballast blocks causing the displacement of some of them, even by about 0.90 m [Fig. 12.2 left]. This resulted in a change in the static scheme of the structure; the blocks hung suspended from it, causing additional local load by a significant concentrated force. Steel elements with very thin walls were destroyed in a manner typical for class 4 cross-sections [Fig. 12.2 right]. The corrugated sheet cover was almost completely torn off.

Interestingly, the wall protecting the building against encroaching sand survived in relatively good condition. Posts and braces were preserved, and only the cover sheets were partially damaged.

The extent of the damage prevented further use of the original roof structure over the church. Moreover, the method of anchoring the structure using local ballast blocks proved ineffective, and rebuilding the structure meant risking another failure of this method.

DESIGN AND CONSTRUCTION OF A NEW PROTECTIVE SHELTER

Following the damage analysis described above, a decision was made to construct a completely new protective structure. The prospective structure was to be much more robust than the previous one, properly anchored and secured against uplifting caused by wind suction. In addition, it was decided to partially reconstruct the walls

of the building to create a closed body, both for safety reasons and with a view to reducing the wind load.

The west wall (parallel to the Nile) was reconstructed to a height of approximately 3.10 m. Before the reconstruction, the remains of the original wall were preserved on the level of the floor of the narthex. The walls on the north and south sides were rebuilt, connecting them to the west and east walls into a continuous structure. The location of all the reconstructed wall fragments is based on the traces of the original walls located below the church floor, on bedrock.

The aim of this solution was to transmit the wind suction forces acting on the structure of the building through reinforced concrete elements down to the lower parts of the reconstructed walls, which constituted a type of anchoring block that would balance them [Fig. 12.3].

In order to achieve this, a continuous reinforced concrete beam was constructed in the lower part of the walls after repairing any defects and leveling the brickwork. On it, the remaining part of the walls was based. Pilasters with reinforced concrete cores were connected to the beam and located at the points where the projected supports of new roof girders were to stand. The pilasters had the form of brickwork shafts filled with reinforced concrete.

The new roof structure consists of steel girders covered with folded metal sheets. Single-span girders with parallel chords were designed, with a truss arrangement in the supporting parts, and the middle part free of cross-braces (frame-like). The girders have a total height of 1.00 m and a span of 14.90 m. Their spacing, adapted to the interior of the church, ranges from 2.40 m to

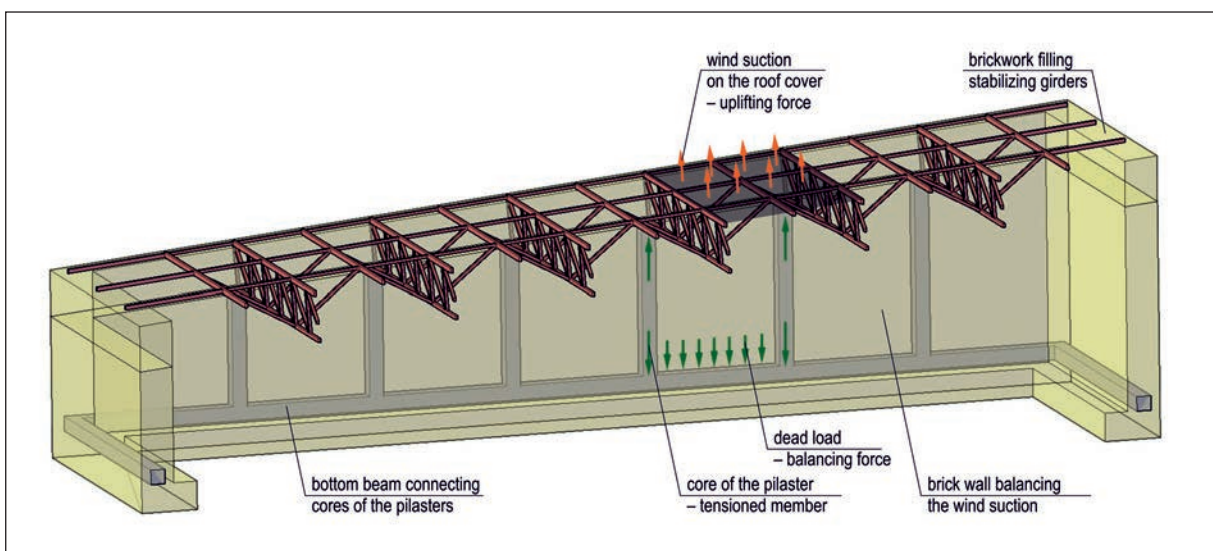


Fig. 12.3. General principle of balancing the wind load with self-weight of building walls

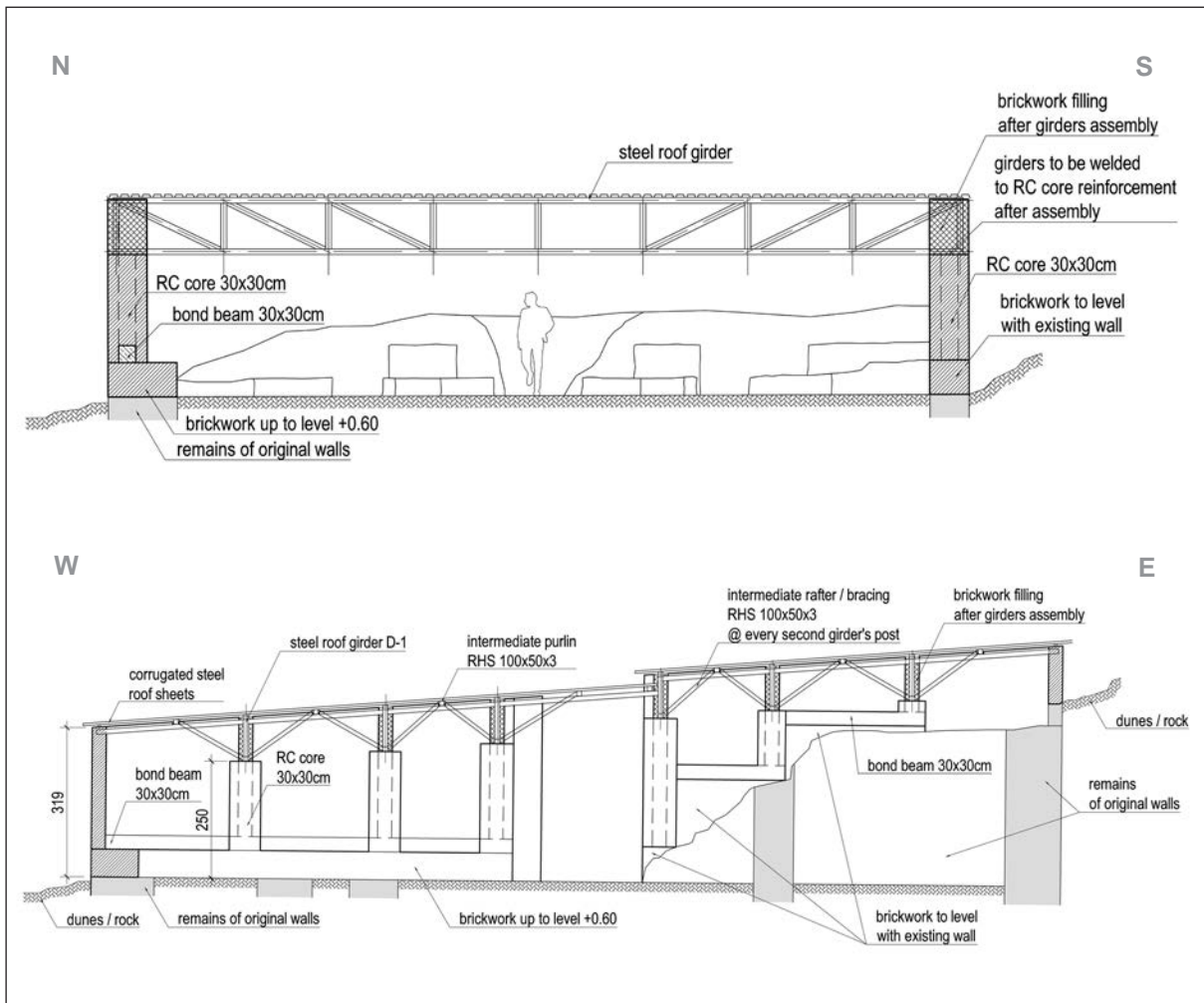


Fig. 12.4. Sections through the Church of Archangel Raphael (SWN.B.V) showing new structural elements

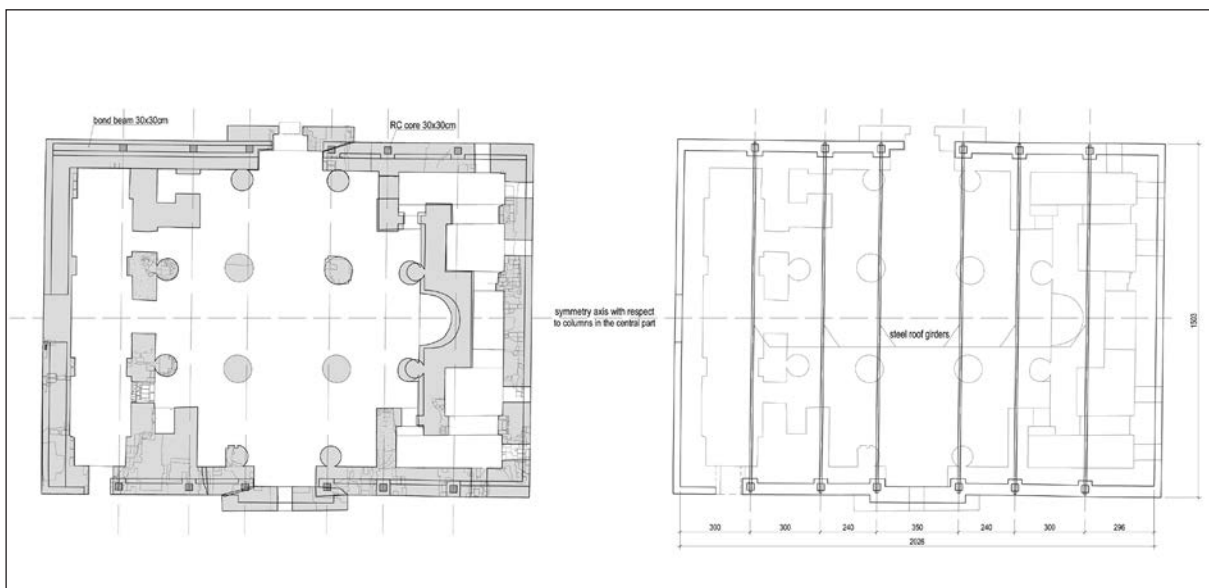


Fig. 12.5. Plan view of the Church of Archangel Raphael (SWN.B.V): left, distribution of reinforced concrete elements in relation to the preserved walls of the building; right, distribution of the steel girders on the walls

3.50 m. The beams rest on the aforementioned reinforced concrete cores of the pilasters. The reinforcement of the cores was extended above the level of the support of the girders so that they could be connected to the girders by welding. After installation, the support area of the girders was fixed by pouring concrete into specially prepared sockets in the wall and the space between them was filled with brickwork. This ensures the stability of the girders without the need for additional bracing in the support zone. The girders are joined together by means of purlins welded to the side surfaces of the upper chords and additionally supported by diagonal bars. The cover, made of corrugated metal sheets, is attached to the purlins as well as to the girders. The images show the general design of the structure [Fig. 12.3], as well as its cross-section, longitudinal section, and plan view [Figs 12.4, 12.5].

The girders are made of locally available steel profiles. As mentioned above, the range of sizes of profiles available on the market is very limited. Rectangular tubes (RHS) with dimensions of 100 by 50 by 1 mm were used. Although the profile walls remained thin, the new static scheme caused the axial forces in the girders' members to be lower than in the previous construction, allowing circumvention of the problem of local instability.

The use of single-span girders allowed the interior to be completely free of structural elements, enabling conservation and archaeological work in places where access was previously limited [see Fig. 12.12 left]. The selected solution for anchoring the roof girders limited the interference in the structure of the historic monument to the necessary minimum.

Both the design of the new protective shelter and the construction works were carried out in the 2014–2015 season, immediately after the damage occurred. The contractors were local builders supervised by members of the archaeological mission. Although this type of construction was new to them, and the lack of specialized training sometimes made it difficult to understand the essence of the solution, strict adherence to documentation allowed for a good final result.

The work started with construction of the walls to the level of the bottom reinforced concrete beam. New walls exactly followed the outline of the remains of the original walls [Fig. 12.6]. Next, a trough of bricks was built to serve as lost formwork for the beam [Fig. 12.7 left]. Once the reinforcement was placed in this formwork together with the pilaster starters [Fig. 12.7 center], the beam was concreted [Fig. 12.7 right].

The thickness of the original walls of the building was about 1.20 m. This was preserved in the newly built walls only to the height of the bottom reinforced concrete beam. Above the beam, wall thickness was reduced to 2½ bricks, i.e., approximately 0.70 m. Pilasters were made of brickwork with a thickness of one brick, leaving a 30 × 30 cm interior space for the reinforced concrete core [Fig. 12.8]. Reinforcement of the cores consists of rebars 4 #12 mm and stirrups #6 mm # 10 cm. The upper surface of the wall was inclined to match the slope of the riverbank on which the building is located and the height of the remaining walls and columns inside the building.



Fig. 12.6. West wall: bricklaying of the bottom part



Fig. 12.7. Construction of the lower beam: left, lost formwork made of bricks, center, installation of the reinforcement and, right, pouring the concrete



Fig. 12.8. Construction of the walls above the bottom beam: left, bricklaying of wall and pilasters, center, installation of the reinforcement in the cores of the pilasters; right, concreting the cores



Fig. 12.9. South wall: adjusting the layout of the new elements to the preserved remains of the original wall

Bricklaying on the western side did not meet with the same constraints, since the original wall only survived to the level of the floor and had to be reconstructed to its full height [Fig. 12.8 center]. The north and south walls were partly preserved above the floor level. The height of the preserved relics increased towards the east, i.e., into the slope. Particularly the south wall had better-preserved segments, and it was necessary to adjust the lower beam and the arrangement of the pilasters, as well as the height of the reconstructed walls, to the height of its extant relics [Fig. 12.9].

Once the tasks of bricklaying the walls and concreting the pilasters' cores were completed, the installation of the roof girders began. Due to the relatively light weight of the girders in relation to their span, they could be moved around the construction site by hand. After the girders were placed on the upper surfaces of the pilasters, the protruding sections of the reinforcing bars were welded to the lower chords of the girders, thereby transmitting the vertical uplifting load to the lower beam in the wall [Fig. 12.10].

After installation of the girders, roof purlins were installed. They were made of steel profiles similar to the profiles used for the chords of the girder. Purlins were welded to the side surface of the chords of the girder to protect it against lateral-torsional buckling [Fig. 12.11 left]. Low-profile folded sheets were laid on the purlins [Fig. 12.11 right].

CONCLUDING REMARKS

It should be emphasized that the constructed shelter for the church SWN.B.V is not a reconstruction of its original structure. It is designed to provide protection against atmospheric conditions without creating any constraints or obstacles to archaeological work carried out in the interior. The outer form of the shelter is integrated into the slope of the riverbank, on which the protected structure is located [Fig. 12.11 right]. The use of truss-frame roof girders enabled the omission of intermediate supports, allowing full access to the interior [Fig. 12.12 left]. Hiding the anchoring elements of the



Fig. 12.10. Installation of the roof girder: left, placing the girder on the pilaster; center, connection of the pilaster reinforcement to the lower chord by welding; right, fixing the girder in a socket in the wall



Fig. 12.11. Installation of the roof cover: left, assembly of purlins; right, general view from the river side

girders in the outer walls [Fig. 12.12 right] enabled the visual integration of new structural elements with the historical remains.

As an aside, it must be stated that the realization of the new protective structure for SWN.B.V, the royal church in Old Dongola, confirmed the need to adapt to local conditions and to go beyond routine solutions. Challenges to address included not only the limited availability of

materials and means of implementation, but also the traditional work methods of local contractors. Overcoming this obstacle through gradual introduction of new solutions and interacting with the contractors is a prerequisite for successful problem solving. In the case of works in historic buildings, in difficult terrain and climatic conditions, in places relatively distant from large centers, this is particularly important.



Fig. 12.12. Interior of the building after completion of works: left, general view; right, view of the girder mounted in the wall

WŁODZIMIERZ GODLEWSKI, URSZULA KUSZ, AND ADAM ŁAJTAR

A FRAGMENTARY WOODEN ICON FROM THE CHURCH OF ARCHANGEL RAPHAEL (SWN.B.V)

CONTEXT, ICONOGRAPHY AND DATING

Excavations in the Church of Archangel Raphael, around a late altar by the north wall of the *prothesis*, yielded a fragmentarily preserved wooden icon. Preserved are three fragments of the lower part of the object, as well as ten-odd small flakes of the ground layer with painted decoration detached from the board.

The function of the *prothesis* space in the late period cannot be determined. Unlike other parts of the church where clear evidence of household activity was found, the loose soil deposit in the *prothesis* floor was just about 0.80 m thick. The space seems to have been protected from damage, the altars were in good condition [see above, *Fig. 10.15*] and the wall paintings lacked traces of intentional defacing (Zielińska 2015: 103–108). However, this does not necessarily mean that it was used for sacral purposes.

Damage to the icon suggests that it had fallen from a height, yet there is no evidence for assuming that it was mounted on a wall. It may have been left standing on one of the altars after the church lost its sacral function.

The preserved traces of decoration in the lower part of the icon permit an estimate of its size and a reconstruction of the main elements of the composition on both its sides. A narrow band without decoration ran around the sides of the icon as a kind of border, but this hardly implies a frame. Indeed, there is no evidence of the latter. Neither the original width nor the full height of the icon are preserved, but the compositions preserved on the two sides lead to an estimated size of approximately 50 cm in height and about 24 cm in width.

The icon was painted on a plank made of palm wood. Both surfaces were primed with a thick ground, probably of chalk and casein tempera, on which the compositions were painted.

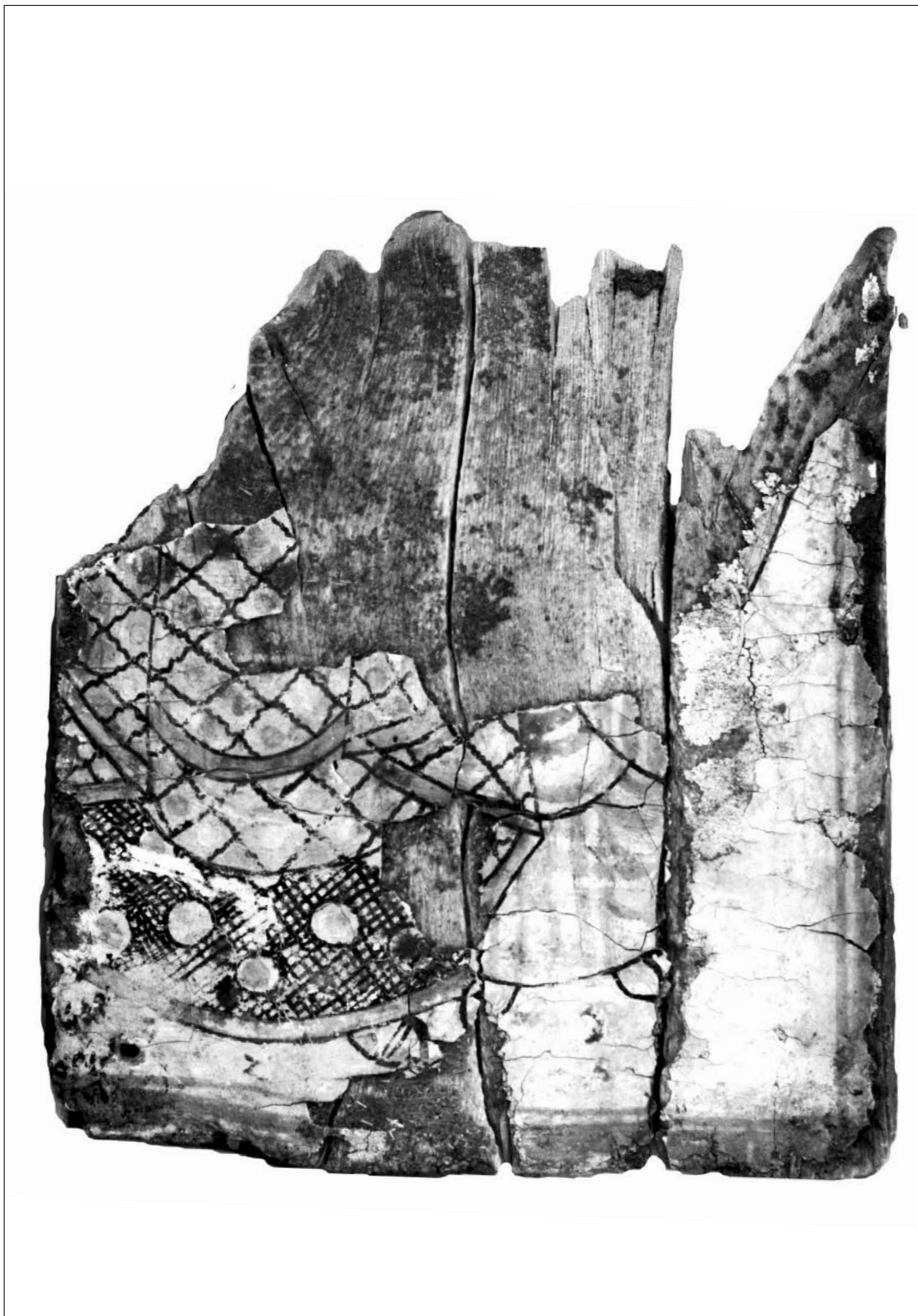
One side of the icon (obverse) preserves the lower part of a representation of an enthroned Virgin Mary identifiable thanks to her purple mantle [*Fig. 13.1* top left]. A Greek inscription located between the legs of the throne confirms this identification (see below).

The lower part of the composition on the other side (reverse) most likely shows two figures standing side by side. The one on the right may be an angel protecting the more centrally located figure [*Fig. 13.1* top right]. Judging by the robes, we may tentatively identify the protected individual as a layman, but this is merely a suggestion based on the title recorded in an inscription underneath the image, which reads „Proimos joknashil” (see below). It is most likely a representation of Proimos under the protection of an angel. Thus, the double-sided icon resembles painted representations in sacral spaces, where one finds an official, an archangel, and an inscription containing a plea for protection in a single composition. The only more frequent inscription type accompanies painted representations of Mary, Christ, or a saint whose protection the writer is seeking (Jakobielski 1974: 297–300). The walls of the naos of the Church of Archangel Raphael on the Citadel of Dongola carry several such representations of officials under the protection of archangels [see above, *Fig. 10.19*].

The icon from the Church of Archangel Raphael in Dongola finds parallels in double-sided ceramic “icons” uncovered in the Great



Fig. 13.1. Two sides of a wooden icon from the Church of Archangel Raphael (SWN.B.V) in infrared photography: top, front side; opposite page, back side



Monastery of St Anthony (monastery on Kom H) in Dongola (Ryl-Preibisz 2001: 382–384, Pl. 62). These objects had on one side a bust incised in the surface before firing and enhanced with paint, and on the other side a painted bust. The lack of inscriptions and the state of preservation of the fragments impede identification of the representations, but they generally appear to be busts of saints. Also small wooden plaques with representations of Christ, Cherubim or saints carved on one side are known from northern Makuria (Godlewski 1987). These plaques do not carry representations of lay persons, but sometimes they bear on the other side inscriptions asking for protection of a specific individual (Tsakos 2012). These plaques most likely played the role of pectorals worn on the chest.

The icon from Dongola is an exceptional find. It was undoubtedly produced in Makuria, most likely in Dongola, as indicated by the inscription it carries. The date of its execution may be placed in

the 13th–14th century on the basis of iconographic and stylistic parallels found in wall paintings. The manner in which the enthroned Mary was depicted and the decoration of the throne resemble paintings in the so-called Southwest Annex by the gate to the monastery in Dongola (Martens-Czarnecka 2011: 272–273, Cat. No. 86) [Fig. 13.2].

The composition on the reverse side of the icon and the representation of the robes of the central figure find a close parallel in a painting on the altar screen of the sanctuary in the Late Cathedral in Pachoras (Faras) (Michalowski 1974: 271–273) [Fig. 13.3]. The icon may have remained in the possession of Proimos's family for a long time. This is indicated by an Arabic inscription preserved in the corner of the icon, featuring the number 1177, perhaps a date in the Muslim era (about 1461). The inscription may have been written by the icon's last owner.

[WG]



Fig. 13.2. Two representations of the Enthroned Virgin and Child from the Southwest Annex of the monastery on Kom H in Dongola; boxes mark analogous renderings of the throne

CONSERVATION

The piece under conservation was a palm wood plank measuring about 0.8 cm in thickness, painted on both sides most likely in the tempera grassa technique. The object was incomplete [Fig. 13.1]; the preserved part was broken into three larger fragments, and several detached pieces of the ground with the paint layer were also found. The piece was uncovered in a deposit that ensured a constant humidity level until removal from the soil; despite seasoning, the object dried rapidly, which resulted in the appearance of numerous cracks and in detachment (flaking) of the paint and ground, particularly around the cracks in the wood. The paint layer also bore white efflorescence and stains of organic origin, which made the composition difficult to read.

Prior to cleaning, the wood was impregnated with 3% PARALOID B72 in toluene/alcohol.

Cleaning tests were performed using ammonia water (+), synthetic saliva (+), and C2000 (+ –). The best results were obtained by initial removal of the accretions with approximately 5% ammonia water and by final cleaning with a 4–6% solution of C2000, as well as using mechanical methods (removal of dirt from the surface of the paint layer using a surgical blade). Afterward, it was possible to reassemble the detached fragments and to attach them one next to the other. Adhesive (MOWILITH) was applied at the points of attachment. After the composition was cleaned, most of the detached flakes could be returned to their original position using a heated spatula and reattached using ACRYLKLEBER. Several fragments of painted decoration were kept for supplementing and later reattachment after all elements of the composition are identified.

[UK]

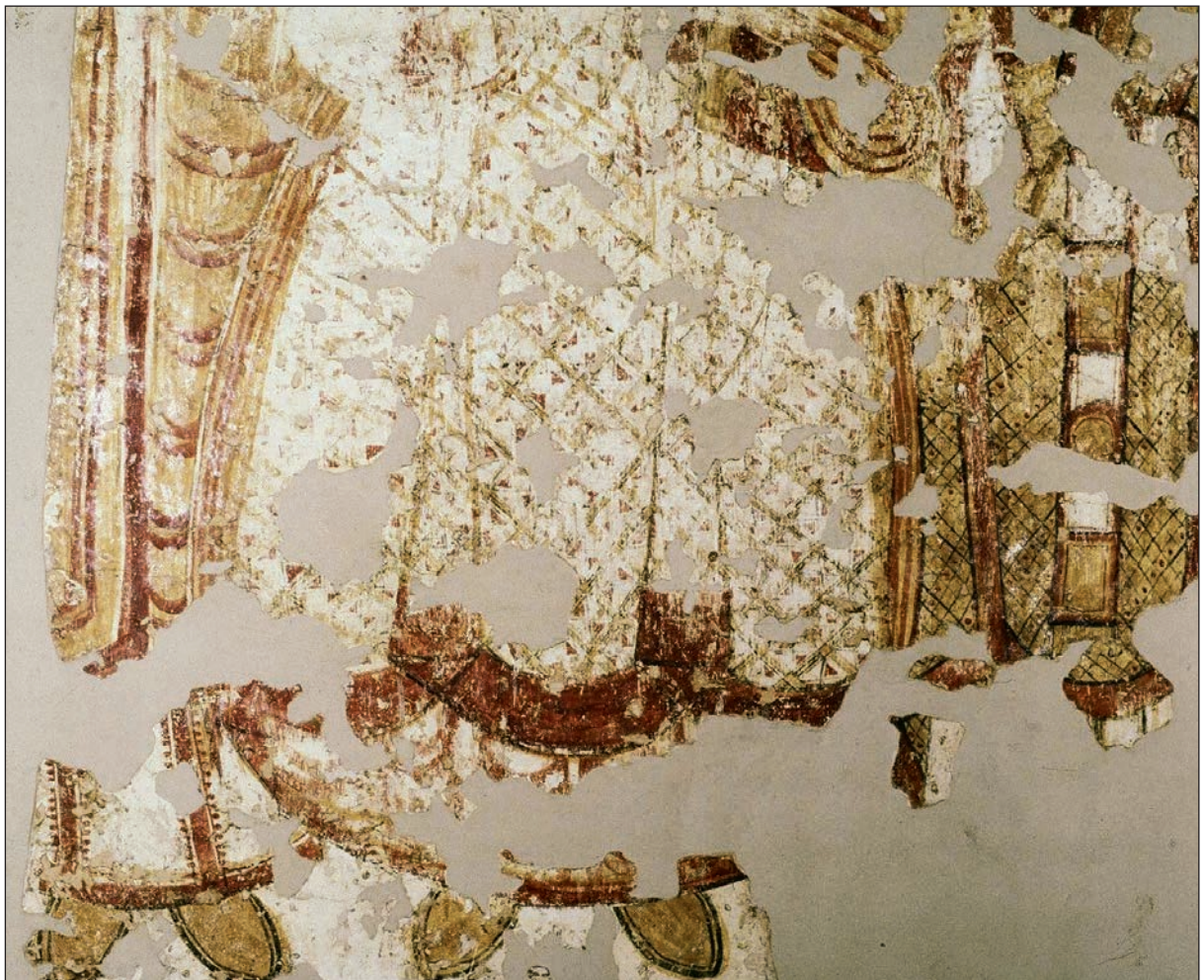


Fig. 13.3. Wall painting on the altar screen from the Late Cathedral in Faras

INSCRIPTION

A Greek inscription is found on the obverse side of the icon, between the legs of the bed on which Mary reclines perhaps after giving birth to Jesus. The inscription was executed with black paint on a white-cream background. The text is damaged on the right-hand side, but line 2 shows that the damage is not substantial (only two letters are lacking). In the present state, the inscription measures 3 cm in height and 11.5 cm in width. The height of letters varies between 0.3 cm (Δ in ΔΑΜΑΡ) and 0.6 cm (ω). As to their shapes, the letters may be designated as Nubian majuscules. This type of script was in use from the late 10th – early 11th century onwards and was particularly characteristic of the 12th–13th century. The script is well-formed and careful; regular letters are arranged in even lines. The words are consistently separated by spaces. The scribe frequently abbreviated words through suspension, marking the abbreviation

by shifting the last preserved letter. The only *nomen sacrum* occurring in the text (χ̄ϛ in line 2) was abbreviated, according to common rules, through contraction, and the abbreviation was marked with a dash. ι in πρώϊμον was regularly provided with the trema. In vowel clusters, the second element is marked with a dot to indicate that this element is the basis of a syllable (thus θεότοκε in line 1 and βοήϛ in line 2). This rule does not work in ηρώϊμον, in which the dot occurs over the first element of the cluster, probably because the second element has the trema. A dot is found also over c in ἐκεῖν at the beginning of line 3, where it undoubtedly marks the prothetic /i/ added by Nubian speakers to facilitate the pronunciation of the consonant cluster /sk/. The skilled writing resembling book script and the rich repertoire of scribal endeavors indicate that the inscription was executed by a professional scribe, one that may have been specialized in copying manuscripts.

Diplomatic transcript

ΜΑΡΙΑ ΠΑΡ'Θ' ΘΕΟΤΟΚΕ ΔΑΜΑΡ ΤΟΥ Χ̄ϛ
 ΦΥ'Λ' ΠΡΩΪΜΟΝ ΕΥ'Λ' ΠΡΩΪΜΟΝ ΒΟΗ'Θ' ΠΡΩΪΜ[ΟΝ]
 4 ΕΚΕ'Ν' ΠΡΩΪΜΟΝ ΟΙΚ'Τ' ΠΡΩΪΜΟΝ ΤΗΝ'Δ' ΠΡΩΪ
 ΪΜΟΝ ΔΟΚΝΑΩΛ.

Reading text

Μαρία παρθ(ένε) θεότοκε δάμαρ τοῦ Χ(ριστο)ῦ
 φύλ(αζον) Πρώϊμον εὐλ(όγησον) Πρώϊμον βοήθ(ησον) Πρώϊμ[ον]
 4 σκέπ(ασον) Πρώϊμον οἰκτ(είρησον) Πρώϊμον τὴν δ(ούλην) Πρώ-
 ἱμον δοκναῶλ.

Mary, Virgin, Mother of God, Spouse of Christ, guard Proimos, bless Proimos, help Proimos, protect Proimos, have mercy upon Proimos, (your) servant Proimos, jognashil.

The inscription is deprived of the initial cross, which otherwise is a constant element of Christian texts. Either the cross was omitted or the inscription is incomplete at the beginning. The missing part could have been placed, e.g., at the top of the icon.

The inscription is composed according to the pattern of the so-called dedicatory inscriptions accompanying paintings on the walls of Christian Nubian cult spaces. A particularly interesting collection of such inscriptions dating from the 11th/12th century is known from the Faras cathedral (Jakobielski 1972: 177–180; 1974: 297–299), and several examples datable to the 9th/10th century were discovered recently in the church SWN.B.V on the Citadel

of Dongola (unpublished). From the formal point of view, these dedicatory inscriptions are prayers for protection of the donor of the painting (here the donor of the icon). They consist of three elements: (1) invocation of an addressee, (2) a series of requests expressed with the use of aorist imperatives, and (3) the mention of a beneficiary of the prayer (the donor). In comparison with dedications of paintings, the inscription here discussed displays two interesting particularities. The first of these particularities concerns the invocation. Dedications of paintings usually contain an invocation of Jesus Christ, sometimes supplemented with the name of a saint represented in the painting the inscription belongs to. The invocation of Jesus is lacking in our

case, unless one assumes that it was contained in a lost part of the text placed at the top of the icon (see above). Instead of the invocation of Jesus we have an invocation of Mary, no doubt because of the subject of the painted representation. The second particularity can be observed in the series of requests. In dedicatory inscriptions, the requests usually assume the form of bare imperatives, deprived of any objects. Here, each imperative is followed by the name of the beneficiary of the prayer, which makes this part of the text somewhat similar to a litany. The name of the beneficiary is found also, as expected, in the final part of the text, where it is additionally provided with information about his social status. The selection of verbs of request used in the icon inscription is interesting when compared with dedicatory inscriptions from the Faras cathedral and the church SWN.B.V. In the Faras inscriptions, there are always five verbs: φύλαξον, εὐλόγησον, σκέπασον, βοήθησον, ἐνδυνάμησον, whereby the first three always occur in the sequence as above, and the remaining two sometimes change places with one another. In dedicatory inscriptions in church SWN.B.V, the number of verbs ranges from three to six. Two verbs — φύλαξον and εὐλόγησον — occur regularly, always taking the two initial positions. In addition to them, one frequently finds σκέπασον and βοήθησον, whereby σκέπασον tends to take the third position, after φύλαξον and εὐλόγησον. The verbs (ἐν)δυνάμησον, συγχώρησον, κυβέρνησον and οἰκτείρησον have a single attestation each. The above characteristics of epigraphic prayers for protection from Christian Nubia seem to suggest the existence of two traditions of such prayers: a fairly consistent Faras tradition and a more flexible Dongolese one. On the other hand, the occurrence, both in Faras and in Dongola, of the verbs φύλαξον and εὐλόγησον in fixed positions suggests the existence of a common Nubian model, most probably of liturgical provenance. The prayer in the icon inscription here discussed represents, as expected, the Dongolese tradition, recognizable by the use of the verb οἰκτείρησον, unattested in Faras but found in church SWN.B.V. The closest parallels to the prayer on the icon are provided by prayers in dedicatory inscriptions accompanying the representation of St Menas on the south wall of the south aisle of the church SWN.B.V (the sequence: φύλαξον, εὐλόγησον, βοήθησον, σκέπασον, συγχώρησον), and St John the Baptist

on the east wall of the south pastophorium of the same church (the sequence: φύλαξον, εὐλόγησον, δυνάμησον, σκέπασον, βοήθησον, οἰκτείρησον).

Three epithets are ascribed to Mary in the invocation, namely: παρθένος, θεότοκος, and δάμαρ τοῦ Χριστοῦ, unless we assume that παρθένος is not a separate epithet but an attribute of θεότοκος, which gives the translation: “Mary, the virgin Mother of God”. The first two epithets are typical and do not require a commentary,¹ the third one is unusual both in linguistic and semantic terms. δάμαρ is a literary word. It was used mainly in poetry, from the epics of Homer up to works by Late Antique and Byzantine authors (Gregory of Nazianzus, Georgius Cedrenus, Symeon Logothetes, Nicephorus Callistes, etc.), including epigrams preserved in the form of inscriptions. The late usage of the word in question was undoubtedly due to the formal school education of Greek youths, which, from the Classical period onwards, was based on reading poets, especially Homer, as is clearly attested by Greek papyri from Egypt (Cribiore 2001: 185–219, especially 194–204). School exercises from Christian Nubia show that the models of Greek education were adopted and maintained also in the middle Nile Valley in medieval times (Łajtar 2009). It should be observed that δάμαρ from this inscription is not the only element of “Homeric” vocabulary attested in Christian Nubia. Thanks to funerary inscriptions we know some poetic words such as οἰζυρός, “miserable” and μινυνθάδιος, “short-lived” (Firth 1912: 45, left column, first inscription from the top, and 49, right column, second inscription from the bottom; for the first inscription see also Łajtar 1992; SEG XLII 1658), even if their transmission to Nubia could have occurred both in the frame of school education and through the medium of funerary formulae. The meaning of δάμαρ is “spouse, wife”. The designation δάμαρ τοῦ Χριστοῦ, “spouse of Christ” with relation to Mary mother of Jesus is nonsensical, and there is no other possibility to explain this nonsense than to assume a lexical mistake made probably by the Nubian editor of the inscription. One can suppose that he wanted to provide Mary with a sophisticated epithet describing her relation to Jesus, unfortunately he chose a completely inadequate word, even if refined and referring to familial relations. A similarity of the words δάμαρ, “spouse”, and μήτηρ, “mother”, even if superficial, could have played a role in his erroneous choice.

¹ Stefan Jakobielski (1974: 282) observed that the use of the epithets παρθένος and θεότοκος for Mary has chronological significance in the legends accompanying murals in the Faras cathedral. The latter is essentially characteristic for the early period (8th–10th century) whereas the former occurs in later times (from the 10th century onwards).

As stated above, the prayer is in the name of a certain Proimos. As far as I am aware, the proper name Proimos has not been attested in the Greek world of ancient and medieval times; however, it is used as a family name among modern Greeks. The name Πρώϊμος equals the adjective πρώϊμος, “early, borne early, precocious”. One can suppose that the name in question came into existence as a nickname used in relation to a prematurely born child. It is rather improbable that the person mentioned in the icon inscription was a premature baby himself. A name, once invented, follows its own set of rules; it can, for example, be inherited within a family.

The designation τὴν δούλην recorded in habitually abbreviated form suggests that Proimos was a woman. However, this is unlikely in view of the title of *joknashil* held by this person (see below). Obviously a female noun was used here with relation to a man. The phenomenon is not unparalleled in texts generated by Christian Nubian culture and its relatively high frequency is attributed to the Nubians’ weak sense of grammatical gender resulting from the lack of this grammatical category in their native tongue (see, e.g., Łajtar 2003: xx). Similarly as in the inscription here discussed, the female form ἡ δούλη was used in relation to a man named Merki in his epitaph found by the Canadian mission in Hambukol, several kilometers to the north of Dongola (Łajtar forthcoming d). The male gender of Merki cannot be doubted in view of his career as state official described in the epitaph.

According to the inscription, Proimos was a *joknashil* (δοκναῶλ). The title *joknashil* has been attested five times in Christian Nubia so far. The list of attestations is as follows:

- Greek epitaph of Stephanos (Istephanou) from Dongola; AD 797; the deceased was a priest, *chartularios*, *notarios*, archimandrite of the Monastery of Mary at Timaeie, *choiakishshil*, and *joknaishshil* (δοκναῶλ) (Łajtar and Twardecki 2003: No. 110);
- Greek epitaph of Iesou also called Eittou from Dongola; AD 1257; the deceased was a deacon, *joknashil* (δοκναῶλ), and *archistablites* (Łajtar 2011: 46–54, No. 3);

► King Siti’s land decree in Old Nubian found in Qasr Ibrim; about AD 1333; Merk()añ *joknashil* mentioned in the protocol of the document (Ruffini 2014: No. 66, line 6); note that the editor of the document read मेर्क() ँ[खδ]ΟΚΝΑΩΕΙΑ, but I prefer the reading मेर्क() ँ[खδ]ΟΚΝΑΩΕΙΑ

► Old Nubian land inheritance from Qasr Ibrim; AD 1333; Merk()añ(a) *joknashil* mentioned in the protocol of the document (Ruffini 2014: No. 68, line 4); the editor of the document read मेर्क() ँ[खδ]ΟΚΝΑΩΙΑ, but I prefer the reading मेर्क() ँ[ख(Δ)]ΟΚΝΑΩΙΑ; we are obviously dealing with the same person as in the previous attestation;

► address of a letter in Old Nubian found in Qasr Ibrim; 11th century or later but exact date unknown; the writer of the letter was Papasa, *notarios* and *joknashil ouph()* (Ruffini 2014: No. 90); the editor of the document read δοκναωουφ(ι), but I prefer the reading δοκναω(ι) ουφ() .

The list demonstrates that δοκναῶλ occurring in the Dongolese attestations, i.e., the epitaph of Istephanou and the inscription here discussed, is the full form of the word in question. In the Qasr Ibrim attestations, two of which give the word in predicative form, the final -(ι)λ vanishes as is often the case in Old Nubian (Browne 2002: 21–22, § 2.5.6). The occurrence of people called *joknashil* in the protocols of documents among highest royal officials shows that *joknashil* must have been a prominent state office. In this context it is important to observe that all attestations of the title of *joknashil* except for those in the Qasr Ibrim documents come from Dongola, the capital of Makuria, which suggests that it was a court office or an office in the central administration of the kingdom. However, the sphere of competence of the official called *joknashil* remains unknown to us because we do not know the meaning of the word in question. It is only known that δοκναῶλ is a compound word consisting of two elements with unknown meaning, δοκνα- and -ῶλ, of which the second one is found also in other titles or names of offices (εικῶλ, χοιακῶλ).

[AL]

WŁODZIMIERZ GODLEWSKI

THE PILLAR CHURCH

The Pillar Church stands to the west of the Citadel wall, close to Tower NW. The east wall of the building abutted the face of the west curtain wall of the Citadel. It was erected on the so-called Northwestern Platform, atop a leveled residential area dating back to the 6th century [Fig. 14.1 inset]. The Northwestern Platform, created by filling in and covering the structures of the destroyed residential quarter, occupied a rocky slope descending towards the river. Wind erosion and the proximity of the Nile, in which the water level rose several meters each year after the rainy season in the south of Sudan, caused damage to the platform along the riverbank.

Weathering proved detrimental to the stability of the platform, as well as the foundations of the west part of the church. This problem occurred when the building was still in use, bringing about the need to reinforce the northwestern pillar in the naos. Later on, during the Funj period, erosion of the bank advanced further causing complete destruction of the western part of the church. Seekers of building materials likely contributed to the devastation of the building.

During structural alterations to the Citadel walls in the Funj period, the upper parts of the abandoned and partly sand-covered church were demolished, and new defensive walls were erected on the relics of its walls [Fig. 14.3] in order to protect the northern side of the river harbor (the main port of the Citadel), likely still in operation in this period (Godlewski 2015d: 195).

As a result of the damage, the eastern and northern parts of the Pillar Church are only partly preserved, while the western and southern parts are completely destroyed together with

the platform [Fig. 14.1]. The poor state of preservation hinders reconstruction of the full plan of the building, and prior to the discovery of the Church of Archangel Raphael (SWN.B.V) there was virtually no basis upon which to visualize the western part of the Pillar Church. A short form of the complex has been suggested, but currently it seems a less likely option (Godlewski 2006: 279–281; 2013: 67–69) [Fig. 14.2].

The walls of the church are preserved to the highest level in the eastern part of the building [Fig. 14.4]. On average, they rise 2.50 m above the floor of the church, but their maximum height is 4.00 m. The walls are best preserved in the east, and their height gradually decreases towards the west, where they ultimately disappear. Inside the naos, the northwestern pillar is preserved at a low level, and only scarce remains of the southwestern pillar are extant. No trace remains of the western engaged pillars or the floor in the southwest part of the naos.

BUILDING MATERIAL AND CONSTRUCTION TECHNIQUE

The Pillar Church was built of baked bricks (dimensions 36–37 cm by 19–20 cm by 7.5–8 cm), which were used to construct the external and internal walls, as well as features in the naos: altar screen, pulpit, and *synthronon*. In the external walls, measuring 0.70 m in thickness, bricks were bonded with mud mortar and laid in alternating courses of headers and stretchers [Fig. 14.5:A]. In the header courses, bricks were laid in pairs perpendicular to the faces of the wall, while in the stretcher courses they were placed parallel to the face along both edges, and the

space in between was filled with bricks laid perpendicular to the face.

The internal walls, 0.50 m wide, were also constructed of bricks bonded with mud mortar and laid in alternating courses [Fig. 14.5:B]. In this case, however, the bricks of one course were laid parallel to the wall on the external face and perpendicular to it on the internal face. The bricks of the next layer were laid in an opposite manner: parallel to the wall on the inside and perpendicular to the wall on the outside.

The bricks used in freestanding pillars and nearly circular engaged pillars in the naos were shaped to build the form of the features; they were wedge-shaped (24–25 cm by 11 cm by 6–6.5 cm) and semicircular (23–24 cm to 18–19 cm by 11.5 cm by 6.5 cm). In the pillars, the bricks were bonded with lime mortar, and like the walls they were laid in alternating courses: one layer contained only wedge-shaped bricks, and the next one had semicircular bricks laid along the perimeter and triangular bricks on the inside.

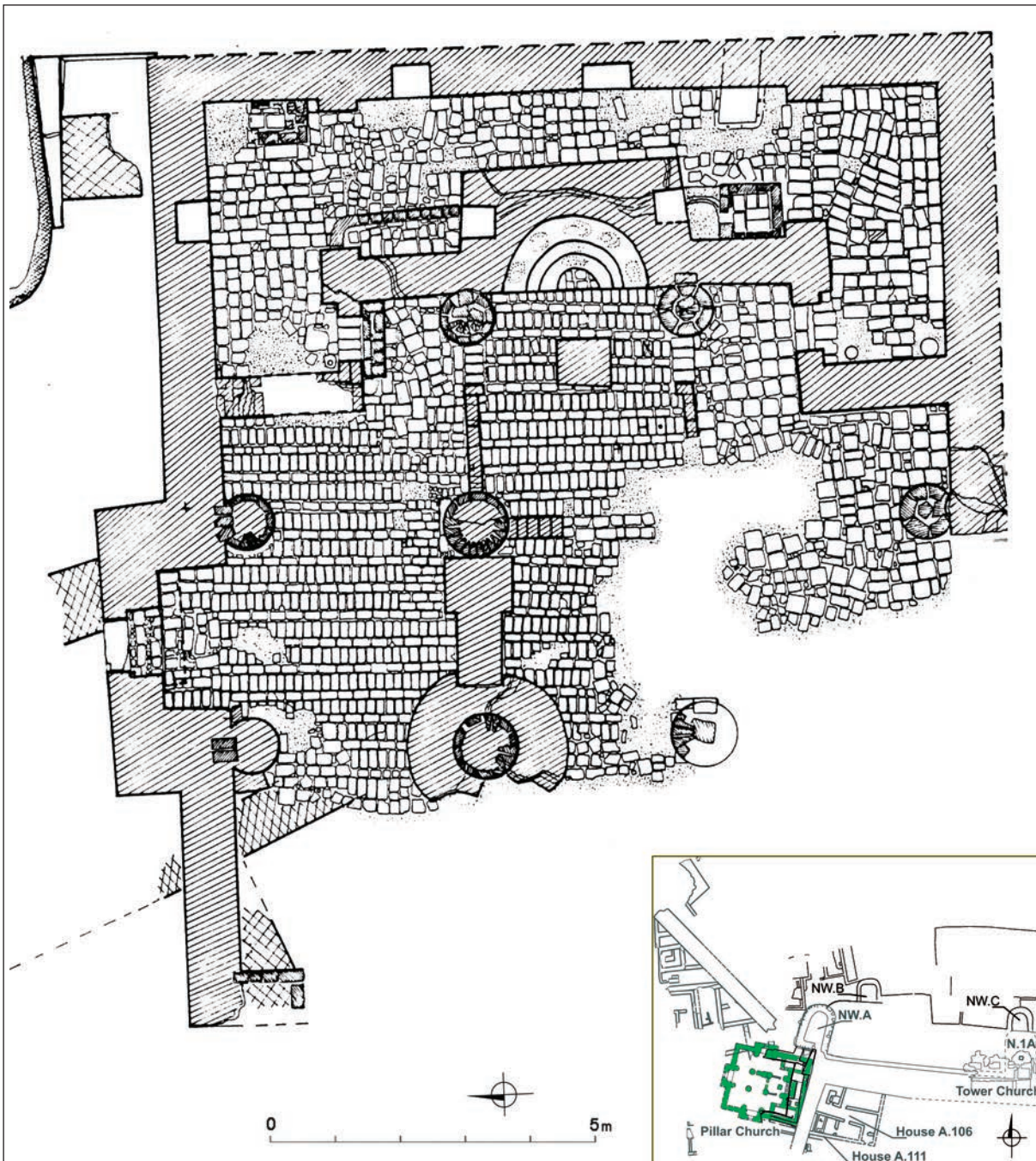


Fig. 14.1. The Pillar Church, excavation plan; inset, location of the church in the northwestern corner of the Citadel on the Northwestern Platform

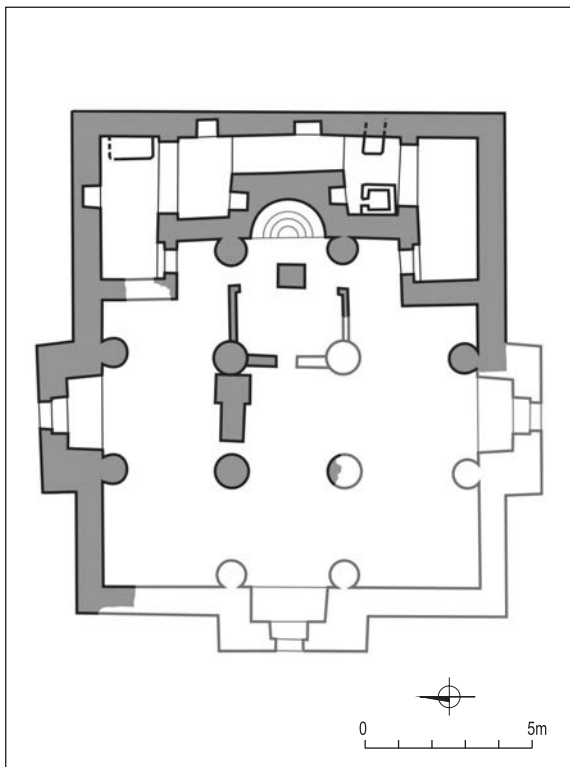


Fig. 14.2. The Pillar Church: reconstructed plan

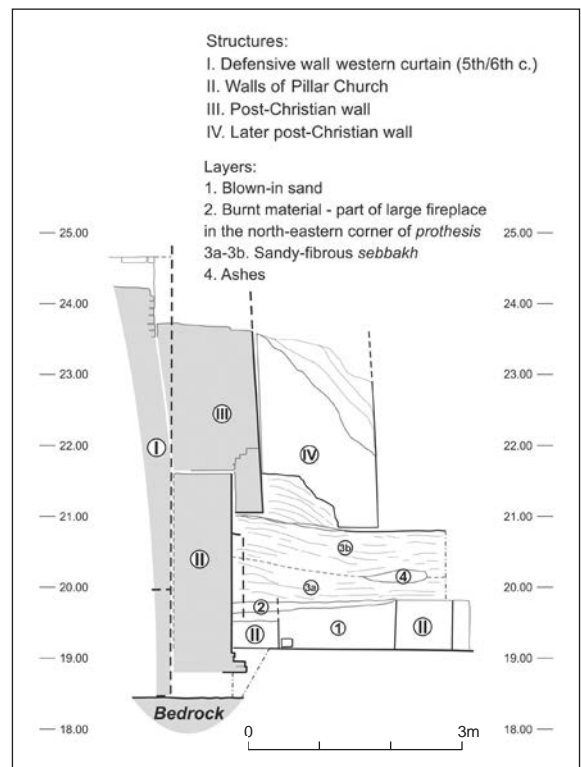


Fig. 14.3. Section through structures of the Funj period overlying the eastern part of the Pillar Church



Fig. 14.4. Eastern part of the Pillar Church

The engaged pillars were built in a similar manner, but also included rectangular bricks, which were mainly placed at the point of attachment to the walls. The masonry of the engaged pillars was bonded with mud mortar.

Also stone slabs in the shape of a quarter of a circle, with a radius of 43 cm and 4.5 cm thick, were found in the fill of the naos. They were probably used in the caps of the pillars, but their use is unclear from the technical point of view.

NORTH WALL

The preserved stretch of the north wall of the Pillar Church is 15 m in length. Its height by the face of the curtain wall is 2.90 m, and it decreases until its disappearance in the west [Figs 14.6, 14.7].

The northern entrance to the church is situated in the central part of a bay, which begins at a distance of 6.80 m from the northeastern corner next to the curtain wall and protrudes northward from the wall face by 1.10 m over a stretch

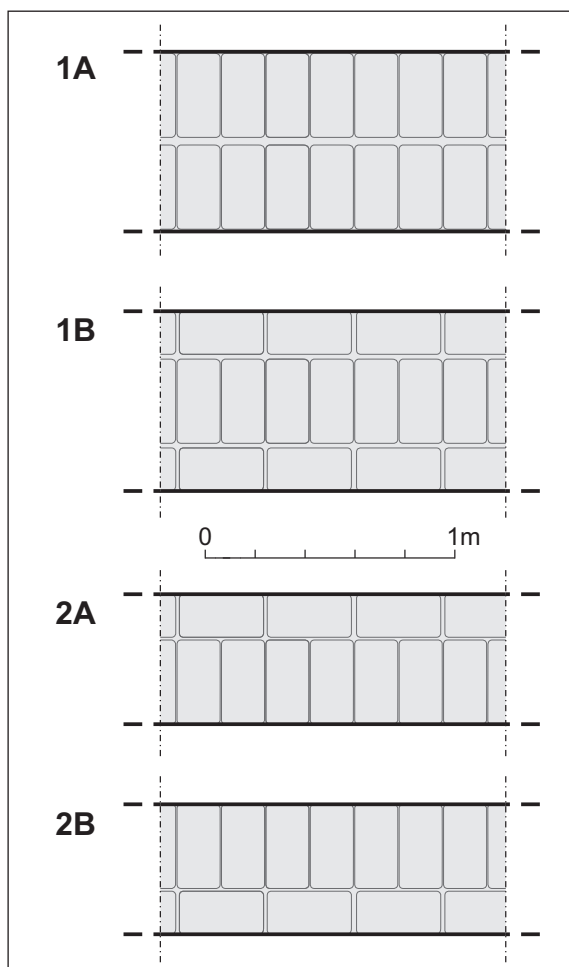


Fig. 14.5. Brick bondwork in alternating courses of the walls of the Pillar Church: 1 A,B – outer walls; 2 A,B – inner walls

of 4.50 m. To the west of the bay, the north wall continues for another 3.60 m. The northwestern corner is not preserved, but there are remains of a perpendicular wall protruding from the internal face of the north wall. The poor state of preservation of the walls makes it impossible to determine whether this was a corner of the building or merely evidence of internal features, but the latter is more probable. If so, then the north wall was several meters longer. The foundation of the north wall is not uniform. Next to the curtain wall, it is founded on bedrock, while in the preserved western part it stands on relics of mud-brick walls, at a level that is about 0.80 m lower than in the eastern corner.

SOUTH WALL

The preserved section of the south wall measures 7.75 m in length. It was founded on remnants of earlier mud-brick structures. Along the face of the curtain wall, it is preserved up to 2.20 m above the floor of the *diakonikon*. Damage to the western end of the south wall makes it impossible to ascertain the presence of a bay with a southern entrance to the church. However, the symmetrical form of the complex, supported by the presence of the southeastern engaged pillar against the south wall, suggests that there was

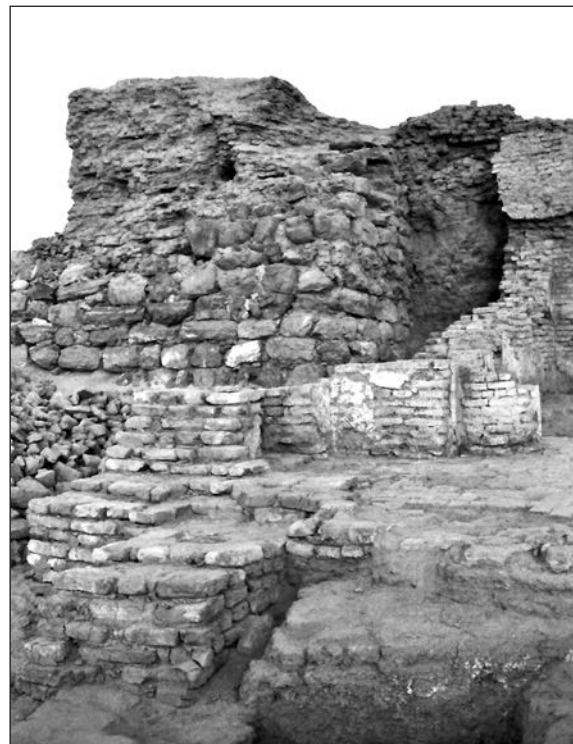


Fig. 14.6. Northern part of the Pillar Church with Tower NW of the fortifications in the background, view from the west



Fig. 14.7. North wall of the Pillar Church, view from the south

a doorway there [Fig. 14.8]. There is no data for a reconstruction of the southern part of the building except for an assumption of symmetry with the northern part.

ENTRANCE TO THE CHURCH

Of the two or more original doors to the church, only the one in the northern bay has been preserved. It was splayed [Fig. 14.9], with jambs 0.82 m apart on the inside and 1.05 m on the outside. A stone threshold of yellowish sandstone, 0.34 m wide, was placed between the outer jambs. On the inner side, the entrance was paved with a brick floor, 5 cm lower with regard to the threshold. A brick with a circular depression, 6 cm in diameter, formed part of the threshold in the inner western corner. It may have been placed there to mount the door pivot.

The threshold in the entrance was subsequently raised by laying new sandstone blocks. In the final phase, perhaps after the site was abandoned, the entrance was blocked from the inside with a wall of baked bricks. The wall, 0.30 m wide, is preserved to a height of over 0.80 m.

EAST WALL

The entire stretch of the east wall of the church is preserved (13 m in length on the inside). It rises



Fig. 14.8. South wall of the Pillar Church between the west wall of the diakonikon and the south entrance



Fig. 14.9. North entrance to the Pillar Church

to a maximum height of 3.90 m above the floor and is no lower than 2.30–2.50 m [Fig. 14.10]. The wall was founded on a soil deposit about 0.30 m thick, which lay on top of bedrock. It had a foundation foot, identified in a test trench excavated in the *prothesis*. The foot consisted of four layers of bricks, which projected by 0.20 m (two lowest courses) and 0.08 m (two subsequent courses) from the face of the wall. However, it is uncertain if the foundation foot continued along the whole wall. It may have existed only in the northeastern corner [see Fig. 14.1].

NAOS

The Pillar Church was probably built as a central domed basilica. The absence of the western part of the building makes it impossible to unequivocally determine its plan. The only certain elements are the naos and pastophories of the church.

The naos of the church, destroyed in its southwestern part, was nearly square and measured 11.20 m by 10.25 m. Its original length along the east-west axis has not been determined with precision due to the state of preservation of the

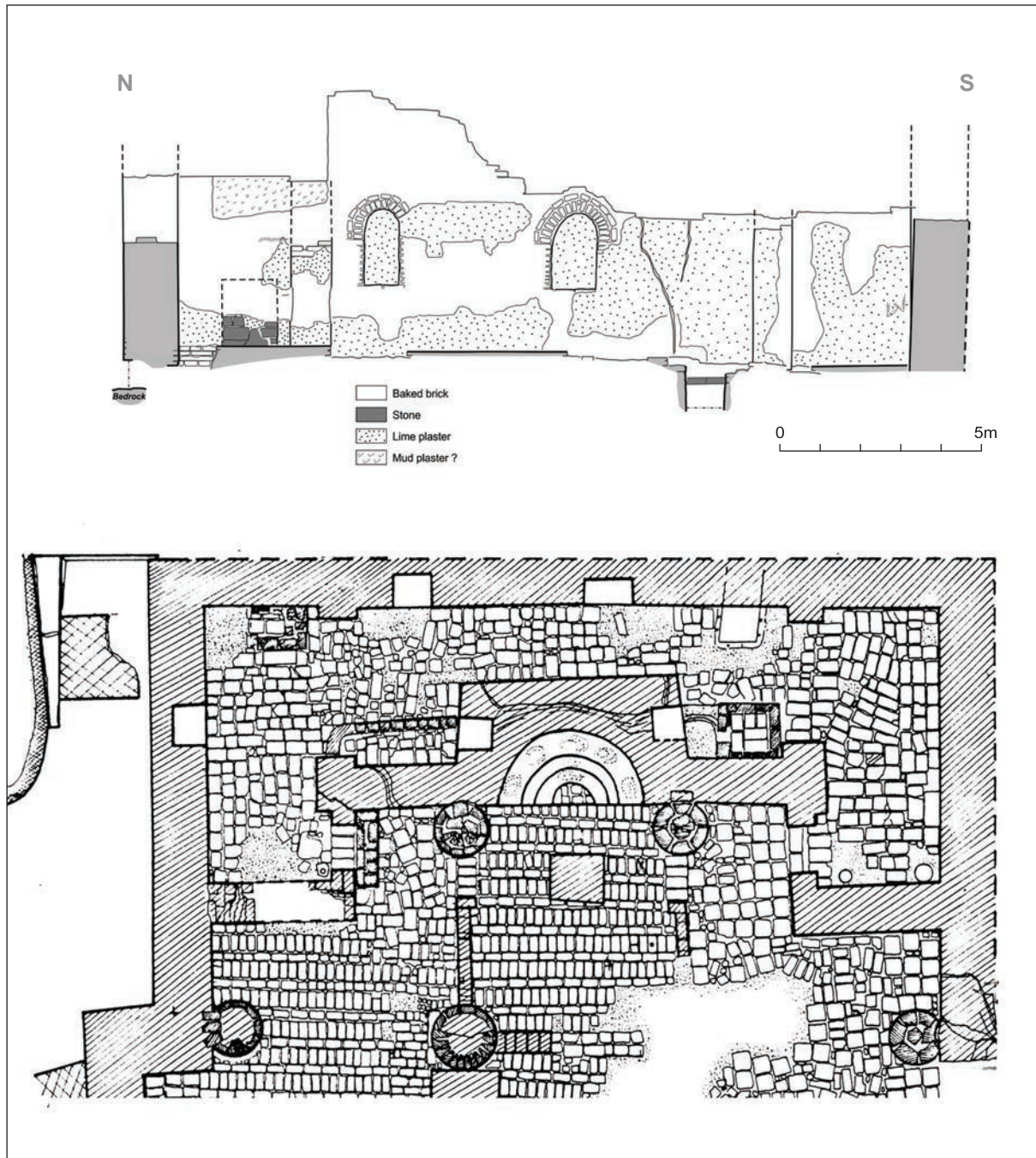


Fig. 14.10. East wall of the Pillar Church: top, section view from the inside; bottom, detail of the plan of the *prothesis*

northwestern corner. The entrance zones of the pastophories determine the shape of the naos space in the two eastern corners, hinting at the existence of corresponding elements in the now-lost western part. A similar solution is found in the Church of Archangel Raphael (SWN.B.V). If this assumption is correct, then the naos of the Pillar Church was built on a plan of a Greek cross with four freestanding pillars and eight circular engaged pillars supporting arches that held up the vaults of the building.

FREESTANDING PILLARS

The central part of the naos, with dimensions 3.50 m by 3.50 m, was delineated by four round, freestanding pillars, of which the two northern ones are extant and the southwestern pillar is fragmentarily preserved [see *Figs 14.1, 14.2*]. The southeast pillar, in turn, was dismantled to the level of the naos floor.

The northeastern pillar with a diameter of 1.00 m is preserved up to a height of 0.50 m above the floor. It was built of rounded baked bricks bonded in lime mortar [*Fig. 14.11*].

The northwestern pillar, 1.02 m in diameter, is preserved to a height of 0.40 m above the floor. It was also built of rounded bricks bonded in lime mortar. After some time in use it was encased in a circular reinforcement wall, 0.72 m high, founded on the floor. The diameter of the enlarged pillar was 2.45 m. The casing of

the pillar was built of rectangular bricks fully or partly bonded using mud mortar.

The southwestern pillar is partly preserved. It was also built of profiled bricks bonded in lime mortar. The pillar was founded on a square base measuring 1.02 m by 1.02 m, built of rectangular bricks bonded in mud mortar. The original height of this base was not determined. The other pillars likely had similar foundations below floor level.

ENGAGED PILLARS

Of the eight circular engaged pillars, only those on the east and the north, and one by the south wall are extant. The remaining three were completely dismantled. They measure 0.70 m in diameter and are preserved to a height of 0.88 m by the east wall. The northwestern engaged pillar by the north wall was preserved to a height of 0.20 m, but it had an external casing 0.20 m wide, parts of which survive.

The preserved engaged pillars were structurally connected to the church walls. Like the freestanding pillars they were built of curved bricks, but in the engaged pillars these bricks were bonded with mud mortar.

SANCTUARY

The sanctuary occupied the central-eastern part of the naos in front of an apse filled by a *synthronon*



Fig. 14.11. Sanctuary of the Pillar Church with the preserved northeastern pillar, view from the east

[Fig. 14.12]. The space between the eastern free-standing pillars and the engaged pillars flanking the entrance to the apse measured 3.11 m by 3.44 m and was sectioned off with screen walls built of baked bricks. In the screen walls there were three entrances: the main one from the west, and two lateral ones near the eastern engaged pillars [Fig. 14.12]. The screens are only partly extant.

The best-preserved north screen measures 0.22 m in width and reaches a maximum height of 1.20 m next to the northern entrance to the sanctuary. It was built before the floor in the naos was laid. The northern entrance, 0.64 m wide, had its western jamb reinforced and widened to 0.35 m. The threshold was built of bricks and raised 4 cm above the floor. The south screen is of similar construction and, though preserved only in parts, has the length of 1.30 m. The southern entrance is 0.69 m wide. The west screen wall has only its northern section preserved to a height of 0.51 m. It is 0.34 m wide, 0.72 m long and was also built before the naos floor was laid. The southern part of the screen is not preserved and the width of the central entrance is unknown.

APSE

The apse, 2.15 m wide and 1.20 m deep, was completely filled with a brick *synthronon*, which was built after paving the floor and plastering the walls [Fig. 14.13 bottom].

The *synthronon*, typically Makurian in form, consisted of four semicircular, concentric steps that were 0.87 m high. The feature is largely intact except for the first step, partly damaged in the northern corner. There was no central dais on the uppermost step that was 40 cm wide. The lowermost step was 36 cm wide and 28 cm high. The other steps were about 16–25 cm high and varied in width from 20 to 23 cm. The dark circular stains on the plaster surface of the *synthronon* steps were left by oil lamps [Fig. 14.13 top].

ALTAR

An altar of baked bricks was built on the floor of the sanctuary, 0.75 m from the *synthronon*. The *mensa* was not preserved. The base block measuring 0.75 m by 0.84 m is extant to a height of over 0.79 m [Fig. 14.14].



Fig. 14.12. Sanctuary of the Pillar Church: view from the south

PULPIT

The pulpit was located to the west of the north-eastern pillar. It was built of baked bricks on the floor of the naos and is preserved only in its lower part. The entire structure is 1.98 m long and up to 0.55 m high. It consisted of two parts, a platform base measuring 1.05 m by 0.85 m in the eastern part, and in the west a base for the steps, 1.12 m long and 0.70 m wide [Fig. 14.15].

PASTOPHORIES

Two *gamma*-shaped pastophories flanked the apse and were connected by a corridor running behind it. They were accessible from the church naos [see Fig. 14.1].

Prothesis

The *prothesis* to the northeast of the apse consisted of two rooms connected by a wide passage with an arch supported on pilasters [see Fig. 14.10].

The rectangular northern room, 4.32 m long and 1.51 m wide, was entered from the naos through a doorway that was 0.70 m wide on the

outside and 1.10 m on the inside. The threshold in the entrance was built of baked bricks. A stone in the inner western corner, a circular depression 6 cm in diameter hollowed in it, acted as a socket for a door pivot. In the final phase of use, the entrance to the church was bricked in with a 0.36-m-wide wall preserved to a height of 0.35 m and founded on the naos floor. It is unlikely to have been a raised threshold.

The north wall contained a niche, the floor of which was located 0.80 m above the church pavement. The bottom of the niche measures 0.63 m by 0.50 m and its preserved height is 0.63 m. The interior of the niche was carefully plastered.

An altar was constructed of baked bricks and ceramic tiles against the east wall. Only its lower parts founded on the floor of the room are preserved [Fig. 14.16]. The feature measured 0.84 m by 0.64 m at the base and it reached a height of 0.64 m. A block of sandstone with dimensions 53 cm by 21 cm by 13 cm was placed on the floor next to its western face. Amphora stoppers were found next to the altar.

The rectangular southern room of the *prothesis* was accessed from the north through an arched entrance 2.10 m wide. The space measured 1.52 m by 2.38 m and was connected with the *diakonikon* via an eastern corridor. An arched niche (H. 1.13 m; W. 0.56 m; D. 0.42 m) with a floor set 0.90 m above the church pavement is preserved in the east wall. The second niche was situated in the outer wall of the apse, in the south wall of the room, and its floor was located



Fig. 14.13. Synthronon: from above and from the west



Fig. 14.14. Altar, view from the west

1.02 m above the pavement. In size, the niche was 0.51 m wide and 0.52 m deep; it was preserved to a height of 0.21 m.

A feature 1.96 m long and 0.75 m wide, its height at least 0.30 m, was preserved by the west wall, between the pilaster and the outer wall of the apse. It was probably a bench faced with a wall one-brick thick and filled with sand. Its upper surface was not preserved.

The floor in both *prothesis* rooms was paved with bricks laid on bed.

East corridor

The east corridor at the back of the apse allowed communication between the pastophories. It measured 1.02–1.13 m in width and slightly narrowed towards the south. Its east wall, closer to the *diakonikon*, held a large, arched niche 1.10 m in height. Its floor (0.70 m by 0.41 m) was 0.94 m above the pavement [Fig. 14.17].

Diakonikon

The southern pastophoriy, that is, the *diakonikon*, consisted of two rooms connected by an arched passageway 1.82 m wide.

The southern room with dimensions 4.30 m by 1.75 m was accessible from the naos through an entrance measuring 0.70 m on the outside and 1.14 m on the inside. During the last stage

of occupation of the church, the entrance was bricked in [Fig. 14.18].

The northern room of the *diakonikon* with dimensions 2.30 m by 1.50 m had a niche in its north wall, which was also the outer wall of the apse. The floor of the niche measured 0.50 m by 0.50 m and was situated 0.80 m above the pavement [Fig. 14.19].

By the east wall of the room, next to the pilaster, there was a shaft (internal dimensions 0.42 m by 0.49 m) with walls faced with baked bricks. The shaft led to a crypt below the foundation of the wall, which rested in this place on a sandstone slab at least 60 cm long, 29 cm wide and 11 cm thick. The chamber had an irregular shape and was carved in rock below the curtain wall. It was empty at the moment of discovery and the shaft was filled with late pottery, indicating that the crypt was penetrated in the 14th century [Fig. 14.20].

An oven, probably for the purpose of baking Eucharist bread, was found by the west wall, on the floor of the room [Fig. 14.21]. It was 0.90 m long by 0.94 m wide and stood 0.28 m high. Built of baked bricks, it had a tiled floor that was heavily burnt. The opening in it was 27 cm wide on the inside. Ashes were removed from it through a hole, 15 cm by 14 cm, in the north wall. A large amount of ash was found on the floor of the room between the oven and the apse wall.



Fig. 14.15. Pulpit, view from the south



Fig. 14.16. Altar in the prothesis



Fig. 14.17. Northern niche in the east wall of the Pillar Church

The floor in both rooms of the *diakonikon* was paved with baked bricks laid on bed and bears traces of remodeling.

Two vessels, storage jar ADd.95.217 and *qaddus* ADd.95.216, were found interred in the southern room by the west wall. They were partly sunk below floor level and may have originally projected above the floor, but their rims were destroyed (ADd.95.217: +46 cm high; ADd.95.216: +36 cm high). Both measured 28 cm in diameter. Neither vessel was part of the original furnishings of the *diakonikon* [Fig. 14.22].



Fig. 14.18. Blocked entrance from the naos to the diakonikon



Fig. 14.19. Niche in the north wall of the diakonikon

DECORATION OF THE CHURCH WALLS

The walls of the naos and pastophories were rendered with lime-sand plaster with a smooth, white surface. The only remaining part of a painting – maybe the lower part of a robe – is preserved in



Fig. 14.20. Shaft of the crypt descending below the fortifications

the *diakonikon* [Fig. 14.23]. The sandy fill layers in the naos contained a dozen or so small fragments of painted plaster with geometric decoration against a golden background [Fig. 14.24].

Two inscriptions, carved in the plaster probably by visitors, were preserved on the eastern



Fig. 14.21. Oven in the *diakonikon*

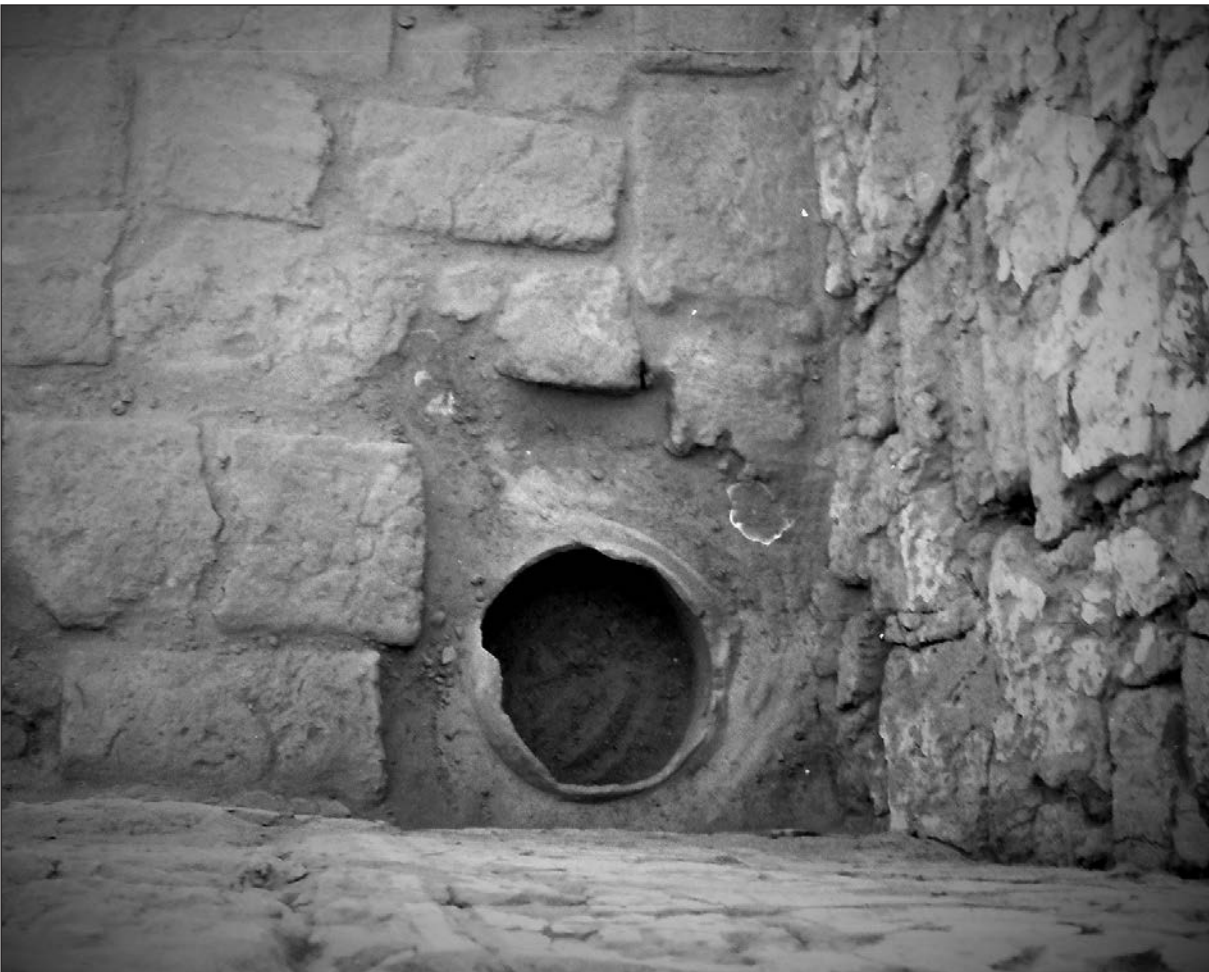


Fig. 14.22. Vessel sunk into the ground in the southwestern corner of the *diakonikon*

jamb of the entrance to the *prothesis* (see the appendix below) [Fig. 14.25].

DESTRUCTION OF THE CHURCH

The Pillar Church was probably destroyed by Mamluk raids, during which the Citadel was attacked from the riverside. At this time also the northwestern corner of the royal palace (SWN.B.I) was demolished. The only indication of damage to the Pillar Church, however, is a stone projectile found inside the church, which could serve as proof of the use of siege engines.

The church remained in service despite damage to its upper parts and the central dome. Its likely use without rebuilding the vaults is indicated by damage to wall plasters. Final destruction of the walls of the church took place in the 16th–17th century when the fortifications of the Citadel were expanded.



Fig. 14.23. Partly preserved wall painting in the diakonikon



Fig. 14.24. Fragment of plaster with painted decoration; bottom, reconstruction of the pattern

Appendix

ADAM ŁAJTAR

TWO WALL GRAFFITI FROM THE PILLAR CHURCH

The first of the two graffiti (A) is located on the eastern jamb of the entrance to the *prothesis*. Its exact position and measurements were not recorded. The hand is practiced but not very nice. The script rises to the right, the height of the letters varies. In palaeographic terms, the letters resemble Nubian-type majuscules, but are more angular than usual, no doubt because of the difficulty of scratching in a hard surface. The loop of the second *p* was corrected to make it bigger.

ΜΑΡΙΑ ΜΑΡΙΑ traces

The graffito may not be complete on the left-hand side. Moreover, traces of letters(?) on the right-hand side suggest that it may have continued in that direction.

The graffito obviously contains the name *ΜΑΡΙΑ* repeated at least twice. In all likelihood the name refers to the mother of Jesus and not to a particular living person in Christian Nubia. Multiple repetitions of the names of the Divinity and saints is a phenomenon well attested in Christian Nubian literacy, especially in less formal texts, such as graffiti on pottery and on walls of cult places. The most telling example of this phenomenon is presented by the series of the name of Michael containing up to five elements, which accompany signatures of high ecclesiastics on pots found in the Monastery on Kom H in Dongola (Łajtar and Pluskota 2001). Another example is yielded by visitors' inscriptions in the Upper Church at Banganarti with the name of the local patron Raphael repeated twice or thrice (Łajtar forthcoming a: Nos 72 and



Fig. 14.25. Graffiti on the jamb of the eastern entrance into the *prothesis*: top, graffiti A; bottom, graffiti B

590 respectively). Multiple repetitions of holy names most probably functioned as invocations; those inscribed on the pots might additionally have had an apotropaic value. A similar function can be suggested also for the graffito here discussed. It was likely an invocation written by an anonymous believer as a sign of his/her special devotion to Mary. It would probably be too farfetched to suggest on the grounds of this single inscription that the Pillar Church was dedicated to Mary.

The second graffito (B) is located in the same context as the previous one. Its exact position and measurements were not recorded. The fragmentary state of preservation of the graffito makes the description of the script difficult. The initial α , which is the only significant sign, suggests a practiced hand writing majuscules of the Nubian type.

† α . . . [- - -]
. . [- - -]

α most probably is the Old Nubian personal pronoun of the first person singular. This allows us to suppose that we are dealing with a visitor's inscription constructed according to the pattern: "I, so-and-so, wrote (this)", common for this type of texts in Christian Nubia. Providing this supposition is correct, after α one would expect the name of the visitor optionally provided with some other elements of personal presentation plus an appropriate verbal form. Any attempt at reading is impossible due to the lamentable state of preservation of the inscription.

PART III



THE CITY OF DONGOLA IN THE FUNJ PERIOD

WŁODZIMIERZ GODLEWSKI

BUILDINGS OF THE FUNJ PERIOD ON THE CITADEL

In the 15th–17th centuries, a quarter of residential and service buildings emerged on the partly destroyed tops of curtain walls and towers of Dongola's fortifications. This construction activity followed a significant rise of the occupational levels inside the Citadel. After damage inflicted during the Mamluk raids, some of the buildings on the Citadel were abandoned and some were filled with rubble, at least in their ground floor parts, up to 4 m above the original walking level. This was the case of the Palace of Ioannes I (SWN.B.I), in which the ground floor had been filled with debris (Godlewski, Danys, and Osypińska 2015: 77–84), while the level of the upper floor remained in use after some structural alterations. The deposit inside the ground floor rooms in the palace, which have yet to be excavated completely, was a uniform layer of hard-packed rubble filling the spaces to the preserved tops of the walls (Godlewski 2015b). The situation was likely similar in other buildings on the Citadel. The occupational level of the Funj-period dwellings is about 4.50 m above the walking levels inside House 106 located in the northwestern corner of the Citadel (Godlewski 2013: 97–99) and approximately 6.60 m above the floor level in the eastern part of the Palace of Ioannes I (SWN.B.I). Changes on the Citadel were even more pronounced in the eastern and northern sectors, atop the fortifications, the damaged tops of which were also used as building plots [Figs 15.1, 15.2].

The ruins of structures on the Citadel were not only filled with rubble but also buried beneath windblown sand, which had

accumulated in abundance at the foot of the original fortifications as well. The height of sand dunes at the base of the northern stretch of the walls was over 4 m. Sand barriers constructed outside the fortifications hindered the advance of the dunes and permitted to build residential quarters outside the Citadel walls. Thus, the city expanded beyond the Citadel and was protected by extramural fortifications, on which more new houses were built later on. Residential buildings were also erected atop the Citadel fortifications, on the curtain walls and towers. In the 2015 season, several such houses were uncovered on the northern stretch of the curtain wall and near Tower N.2.

HOUSES ON THE CURTAIN WALL OF THE ORIGINAL FORTIFICATIONS

In 2015, residential buildings of the Funj period designated as C.H.301–307 were uncovered on the curtain wall of the Citadel to the southeast of Tower N.2 [Figs 15.1, 15.3]. They formed a single row of buildings and were protected from the north by a mud-brick facing wall built against the original fortifications (Godlewski 2015d: 187–192). This wall was founded on a layer of sand that had accumulated against the face of the Citadel walls. Preserved to a height of approximately 4 m, the facing wall was certainly tall enough to protect the single-story houses built on top of the 5.70-m-wide curtain wall. At that time, the preserved upper level of the curtain wall was likely similar to the occupational level inside the Citadel.

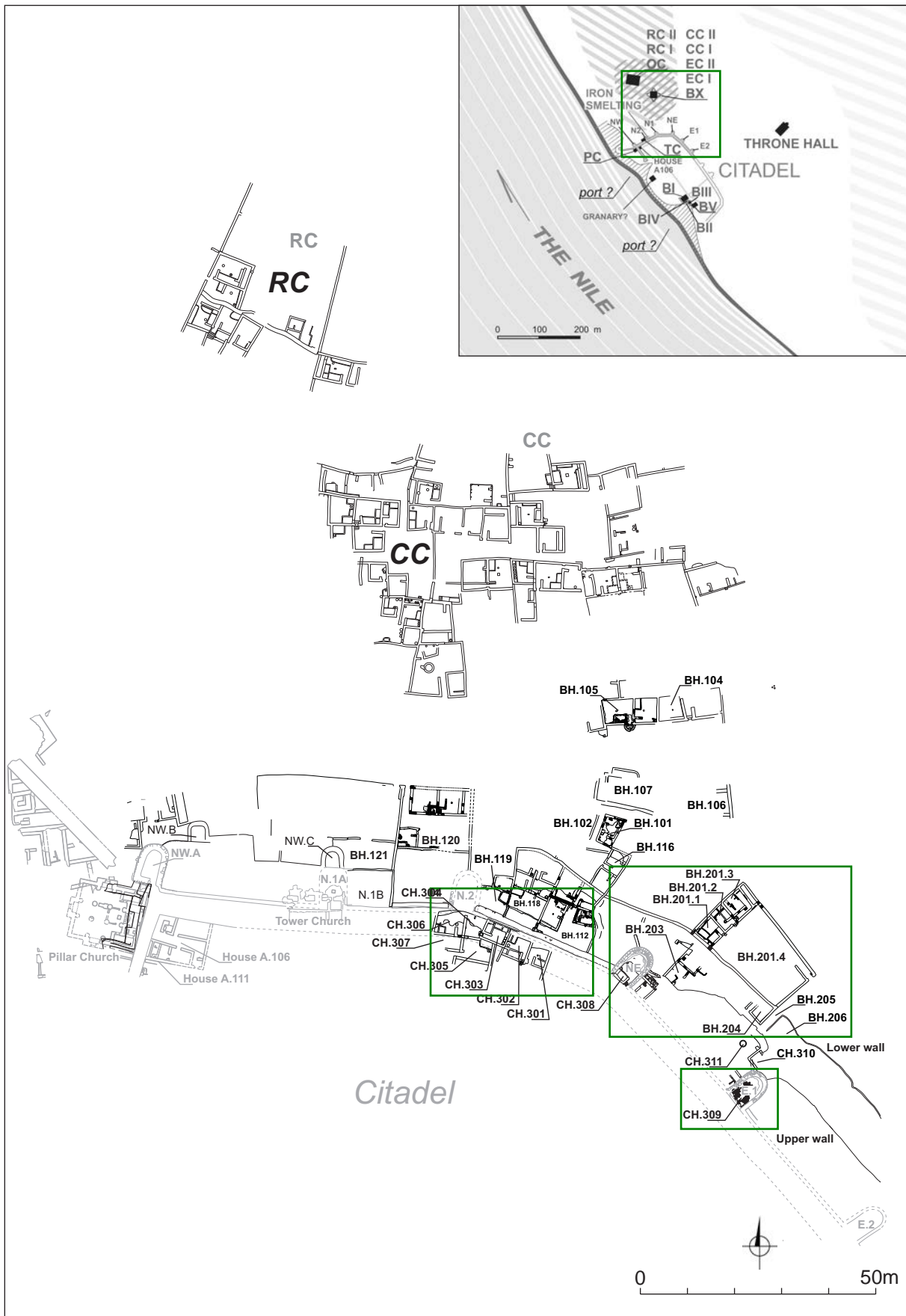


Fig. 15.1. Eastern part of the Citadel: general plan of the Funj-period architecture on top of and next to the fortifications; boxes mark architecture discussed in this chapter



Fig. 15.2. Eastern part of the Citadel, aerial view

House C.H.301

House C.H.301, consisting of one room with a courtyard on its southern side, was situated in a row of houses on the northern edge of the curtain wall to the west of Tower NE. Room C.H.301.1 with inner dimensions 4.35 m by 4.07 m (17.7 m²) was accessed from the south through a doorway in the northwestern corner of the courtyard (C.H.301.2). The mud-brick walls, 0.46 m thick, were poorly preserved, extant to a height of about 0.35 m above the mud floor. The entrance, measuring 0.76–0.82 m in width, was flanked on the inside by a stub wall (*tuddik*) 1.50 m long. The width of the resulting inner passageway was 1.20 m. The entrance had a threshold of two stone blocks (elevation 30.06 m). In a later phase, the west stub wall was structurally altered, while the threshold was raised (elevation 30.23 m) using baked and sun-dried bricks.

The interior was plastered and whitewashed at least four times, and the floor was of tamped mud. A sandstone block inserted in the floor occupied a central place in the room. The block, measuring 28 cm by 26 cm in plan, was a base

for a wooden post that supported a flat ceiling over the room. A mastaba (dimensions 2.50 m by 1.50 m) was found against the south wall between the *tuddik* and the east wall. Its perimeter was lined with a mud-brick facing rising to approximately 0.23 m above the mud floor.

Courtyard C.H.301.2 was partly excavated. On the east and west it was closed off with walls, which constituted extensions of the house walls. The inner walls of the courtyard were coated with plaster.

House C.H.302

House C.H.302 was accessed from the south, from a courtyard shared with C.H.301 to the west. A room with inner dimensions 5.30 m by 4.70–5.10 m, with an entrance 0.80 m wide, was located in the southeastern corner. The doorway had a stone threshold and was flanked on the inside by a stub wall (*tuddik*) 1.70 m long. The walls were poorly preserved, ten-odd centimeters above the level of the mud floor inside the room. They were covered with sand-lime plaster and three layers of lime whitewash (*gir*).

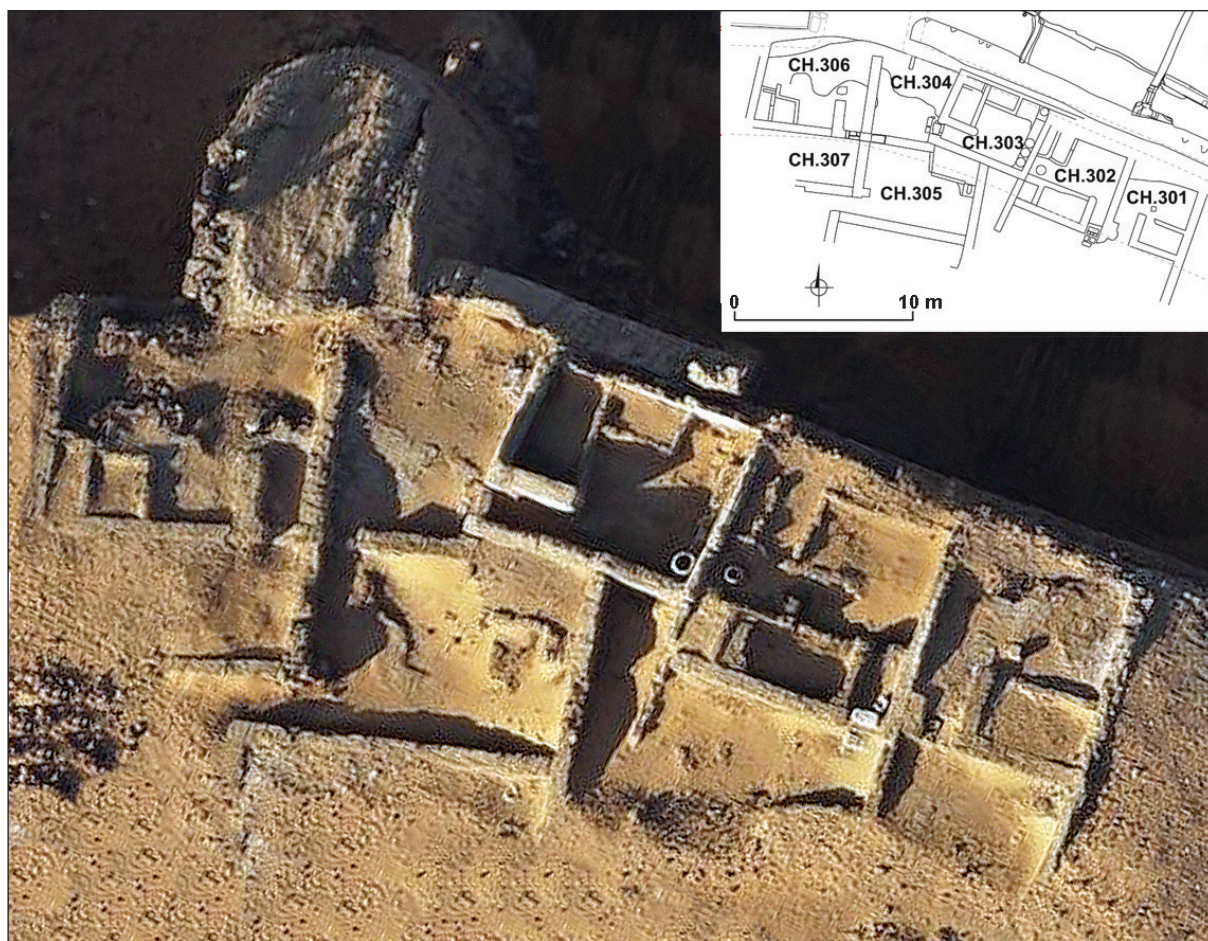


Fig. 15.3. Houses C.H.301–307 on top of the curtain wall, aerial view; inset, detail of the excavation plan

A mastaba against the south wall consisted of a brick facing wall and a sandy fill. It measured 3.75 m by 1.55 m and was divided into two parts. A large vessel 50 cm in diameter was found next to the mastaba, by the west wall. Low benches lined with bricks stood against the north and west walls. The tamped mud floor bore indication of two occupational levels.

To the west of C.H.302 there was a compound consisting of three spaces: likely two courtyards C.H.304–305 and dwelling space C.H.303.

House C.H.303

The earliest house in compound C.H.303–305, consisting of one room with inner dimensions 3.90 m by 5.20 m, was accessed from the west, through an entrance in the southeastern corner of courtyard C.H.304.

The mud-brick walls, 0.46 m wide, were coated with three layers of plaster and repeatedly whitewashed (six coats were counted). The walls stand to a maximum height of 1.20 m, but they are less well preserved in the northern part of the room. The entrance, 0.65 m wide, had a threshold built of sandstone blocks and was

flanked on the inside by a stub wall 1.78 m long. The level of the tamped mud floor inside the room was raised during a later phase of use.

The room had a mastaba (dimensions 1.62 m by 2.55 m) built along the west wall, with a facing wall one brick thick and 0.21 m high. Another mastaba, with dimensions 1.90 m by 1.08 m, was built along the north wall and abutted the western mastaba. It also had a facing wall one brick thick and 0.24 m high.

Along the entire length of the east wall there was a narrow bench measuring 3.90 m by 0.55 m and 0.26–0.20 m high. It served as a base for storage containers (*gessebas*) made of desert clay (*gir*). The bench most likely supported four such bins: two fragmentary, preserved only in the bottom parts, one complete, and one indicated solely by a depression in the surface of the bench [Fig. 15.4].

The completely preserved bin measured 0.48 m in diameter and 1.01 m in height. Its wall was thicker in the upper part. On the western side near the bottom the bin had an opening 11 cm in diameter. Fragments of a lid of dried mud, which

In the final phase of use of the room, a wall 1.30 m long and 0.43 m wide was built perpendicular



Fig. 15.4. Bench with storage bins in house C.H.303

to the south wall, on a higher occupational level. It closed off a space measuring 1.30 m by 1.72–1.82 m, which still contained the well-preserved *gesseba* that stood in the southeastern corner of the room. Against the wall was also a lower part of a large vessel measuring 55 cm in diameter and over 30 cm in height.

House C.H.304

C.H.304 was a room located to the west of C.H.303 and connected to it by a passageway. It was trapezoidal in plan, measuring 3.20–4.45 m by 4.40–5.00 m, with mud-brick walls and an entrance located in its southwestern corner. The south wall, built to abut the southwestern corner of room C.H.303, is preserved to a height of 0.50–0.60 m. The walls inside the room were plastered and whitewashed, and the floor is of tamped mud. The entrance had a stone threshold but lacked an inner stub wall. No furnishings were preserved, although a lower part of a storage vessel measuring 52 cm in diameter was found on a sand layer by the south wall.

The space was most likely a courtyard, from which an eastern entrance led to C.H.303 and another one on the north gave access to a very poorly preserved room on top of the structurally altered Tower N.2.

House C.H.305

C.H.305 is a space to the south of C.H.304, closed off with walls on the east and south. A one-meter-wide corridor on the west gave access to C.H.305 and further to C.H.304–C.H.303. On the western side the area is delimited by the walls of C.H.307. The space measured 4.20 m by 6.15 m; its walls were plastered and whitewashed, but the room lacked a tamped walking level and gradually filled with sand. A structure attributable to its final phase of occupation is preserved in the northeast corner, at a level of 29.15 m. It is a mastaba with dimensions 2.90 m by 1.70 m, with a facing wall of mud bricks. Next to the mastaba, against the east wall, there is a square structure (0.70 m by 0.75 m) that is higher than the mastaba wall (upper elevation 29.61 m) and has a circular interior measuring 0.40 m in diameter.

House C.H.306

A compound consisting of two spaces (C.H.306–C.H.307), to the west of C.H.304–C.H.305, was partly uncovered. It suffered heavy damage in the northern part where it abuts the wall of Tower N.2. The dwelling space C.H.306 with dimensions 5.00 m by 6.00 m is only preserved at the level of the floor (elevation 28.50 m) in its southern part.



Fig. 15.5. Entrance to house C.H.306

The entrance, 0.65 m wide, had a threshold of four sandstone blocks and was flanked on the inside by a stub wall (*tuddik*) 1.60 m in length. The vestibule inside the entrance was 1.02 m wide [Fig. 15.5].

The poorly preserved mud-brick walls of the room measured 0.45–0.50 m in thickness, and their inner faces were coated with plaster and whitewash. In the southern part of the interior, where the tamped mud floor is extant, there were relics of the brick facing of a mastaba with dimensions 2.40 m by 1.50 m located in the southwestern corner of the room by the south wall. In the central part of the room, a sandstone block was inserted into the floor; it was surrounded by relics of foundations of a circular structure built of baked bricks. It was most likely a base for a vertical post supporting the roof over the room.

House C.H.307

A space to the south of C.H.306 was preserved only in the eastern part. It measures 2.70 m by +3.00 m and is closed off with walls on the east and south, defining an area 2.65 m wide. No mud floor or furnishings were extant.

BUILDINGS BETWEEN TOWERS NE AND E.1

Between Towers NE and E.1 there is a vast extension of the fortifications referred to as the North-eastern Platform. Excavations in the 2015 season exposed only a wall surrounding this extension of the fortifications, as well as relics of buildings erected against the northern face of Tower E.1 and on top of Tower NE [Fig. 15.6].



Fig. 15.6. Sector of the Citadel walls between Towers NE and E.1 and the area at the foot of the fortifications; inset, detail of the excavation plan

Structures are also present below the Northeastern Platform, at the foot of its east wall. Relics of dwellings (houses B.H.203–B.H.205) were uncovered in the space delimited by the lower dune barrier wall. Further to the east, beyond the lower dune barrier, was a spacious residential building consisting of three rooms in the northern part and a large walled courtyard in the south.

NORTHEASTERN PLATFORM

The large Northeastern Platform, narrow in the vicinity of Tower NE and broader near Tower E.2, was surrounded by a wall of sandstone blocks, baked bricks and mud bricks founded on a deposit of windblown sand. The wall was a heterogeneous structure, erected hastily and carelessly [Fig. 15.7].

The entire surface of the platform was most likely occupied with structures, judging by the relics uncovered on the edges of the platform and on both towers, NE and E.1.

House C.H.308 on Tower NE

The house occupied the southern part of the mud-brick tower. The inner dimensions of this dwelling space were 4.00 m by 4.90 m. Stone facings of the tower's walls were reused as its side walls. The entrance by the eastern edge of the wall was 0.90 m wide, flanked on the inside by a stub wall (*tuddik*) and accessed by a flight of steps. The furnishings consisted of a mastaba by the south wall (2.60 m by 1.40 m), a circular hearth lined with bricks by the west wall, and a bench by the north wall. Preserved on the upper surface of the bench are the lower parts of two storage containers (*gessebas*) of desert *gir* clay

[Fig. 15.8]. The room had a floor of tamped mud. To the east of the tower, on the platform, there are relics of another room.

House C.H.309 on Tower E.1

The area of Tower E.1 is occupied by a single room that filled its entire space, but the sole relic of it is a partly preserved pavement of terracotta tiles, most likely recovered for reuse from some earlier building [Fig. 15.9]. The room was accessed from the west, from inside the Citadel.

The regular layout of ceramic tiles in the pavement suggests a relatively early date for the room inside Tower E.1. No house of the Funj period uncovered in Dongola to date had a similar ceramic pavement. Only mud-brick floors may serve as contemporary parallels.

House C.H.310

House C.H.310, located to the northeast of Tower E.1, is only partly preserved on its northeastern side [Fig. 15.10 top left; see also 15.1 and 15.2].

It has two extant walls on the north and the west, both built of mud bricks. The west wall, 0.46 m thick, is preserved to a height of 1.30 m. The north wall of the building, 0.45 m thick, is also preserved to a height of 1.30 m in its western part but slopes toward the east, where it is only extant to 0.60 m [Fig. 15.10 top right].

On an upper level, the entire space between the walls is filled with compacted rubble or bricks laid in layers without mortar [Fig. 15.10 bottom]. There is no evidence that its surface served as a walking level; it was rather a rubble fill intended to reinforce the Citadel fortifications in the vicinity of Tower E.1.



Fig. 15.7. Wall delimiting the Northeastern Platform on the east

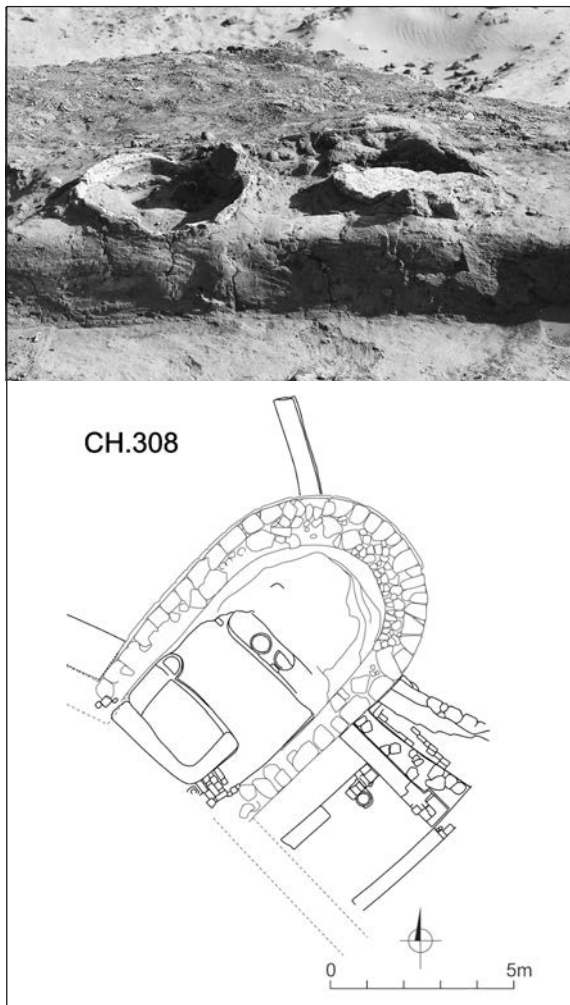


Fig. 15.8. House C.H.308 on top of Tower NE: plan of identified Funj-period remains; top, bench with storage bins, view from the south

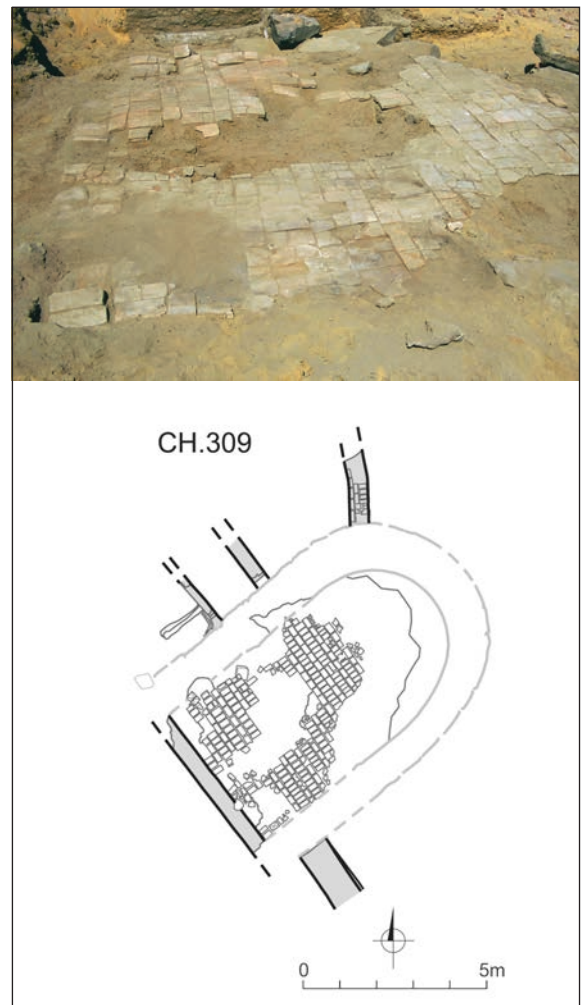


Fig. 15.9. House C.H.309 on top of Tower E.1: plan of Funj-period remains; top, ceramic-tile pavement viewed from the southwest



The lower level of the structure (elevation about 28.04 m) was reached after removal of the rubble fill. The walls of the house were plastered and whitewashed on the inner faces, though on the north wall the whitewash is preserved only in the upper part. Preserved at the same level is a fragment of an east wall, 1.00 m long and 0.37 m high, built to abut the north wall.

The partly preserved interior measuring 2.60 m by 2.80 m had neither a well-tamped floor nor furnishings. It was most likely accessed from the south or from the east, though the south-eastern corner of the structure was completely destroyed. The north wall was most likely abutted by a tall feature, as indicated by the extant level of whitewash on its plaster [Fig. 15.10 top right].

C.H.311: space north of House C.H.310

Only modest relics of structures were discovered in the vicinity of Tower E.1, in the area between the Citadel wall and the upper wall delimiting the Northeastern Platform between Towers NE and E.1. Fragments of structures preserved on various levels in this area seem to constitute part of furnishings of a courtyard with a domestic and service function [see Fig. 15.6]. This space was delimited on the south by house C.H.310 [Fig. 15.10] and on the east by a wall that stabilized deposits of windblown sand at the foot of the fortifications. This wall, 1.40–1.50 m wide, was built of baked brick and stone blocks. The preserved walls most likely

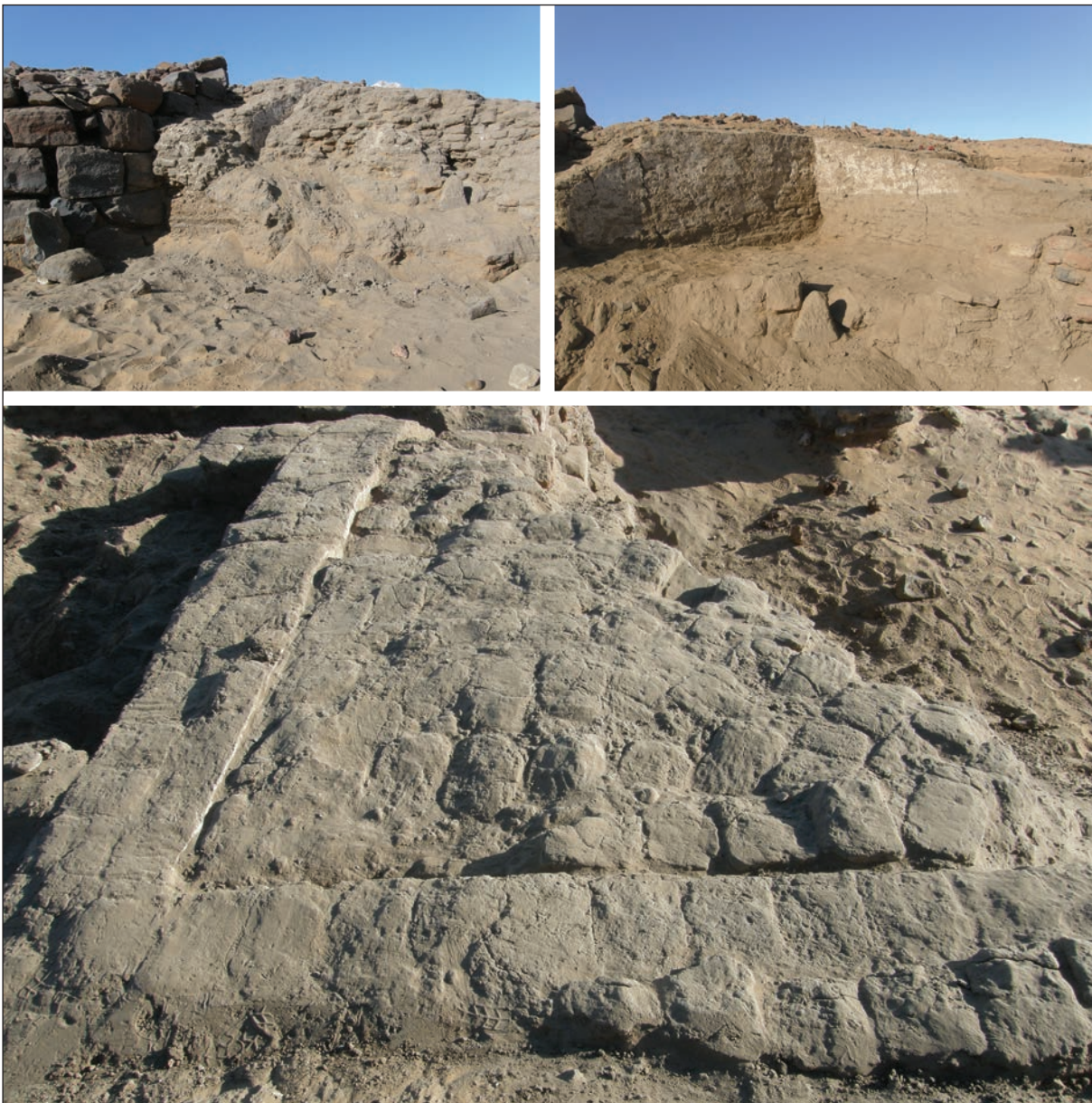


Fig. 15.10. House C.H.310 abutting Tower E.1: top left, remains next to the tower during excavation, viewed from the east; top right, north and west walls after clearing, view from the northeast; bottom, compacted rubble and bricks in the upper layer

enclosed a courtyard, which held a round, brick-lined storage pit (*matmura*), 1.20 m in diameter and preserved to a depth of 0.85 m. It was probably associated with an occupational level at an elevation of approximately 29.00 m.

BUILDINGS BETWEEN DUNE BARRIERS

A series of poorly preserved structures were found at the foot of the defensive wall, on a platform delimited by the upper dune barrier. Among the documented remains are five houses and a kind of gate in the south. The gate allowed communication between the upper and lower terraces created by building the dune barriers [see *Fig. 15.1*].

House B.H.203

The northern part of this relatively narrow plot is occupied by relics of house B.H.203 [*Fig. 15.11*]. It is a partly preserved house at the foot of the facing wall surrounding the extension of the fortifications on the eastern side of the Citadel, near Tower NE. Its occupational level is at an elevation of about 26.80 m, on a deposit of windblown sand abutting the wall against which the house had been erected. It consisted of two walled spaces added to an earlier north wall. The eastern room B.H.203.1 is preserved only in the western part and has inner dimensions 4.20 m by +2.10 m. The entrance to it was 0.65 m wide; it lacked an inner stub wall and had a brick threshold at an elevation of 26.89 m. The walls of the western room, B.H.203.2, are only partly preserved, and the south wall is lacking, but traces of its attachment to the west wall are extant. The interior measured 4.50 m by 4.60 m and was divided by

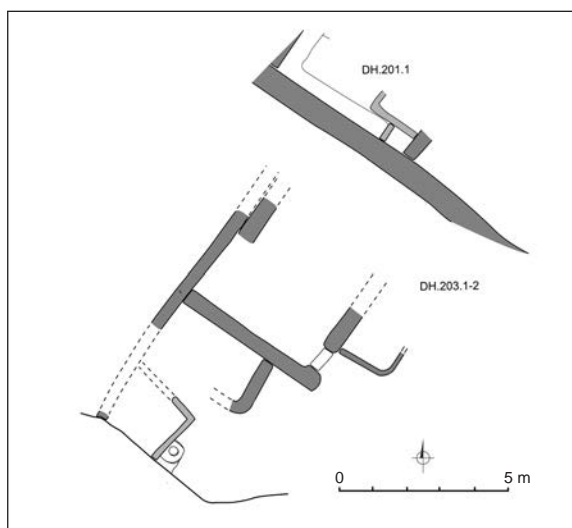


Fig. 15.11. Plan of house B.H.203

a wall perpendicular to the room's eastern boundary. A curve at the wall's western end indicates its continuation to the north; if so, then it most likely delimited a space measuring 3.40 m by 2.90 m. The level of the floor inside the room was at 26.64 m. Furnishings are preserved in the northwestern corner and include the brick lining of a mastaba. Only the southern part of the latter is preserved and measures 2.80 m by 2.10 (+1.00) m. There is also a vessel (cooking pot) embedded in the mud plaster next to the southern edge of the mastaba, by the wall [*Fig. 15.12*]. The function of the vessel is unclear, but its blackened interior suggests that it served as a small fireplace.

House B.H.204

B.H.204 is a house built against the facing wall that delimited the extension of the fortifications on the south. Between its west wall and the face of the defensive wall there is a 1.10-m-wide passageway or street running at the foot of the facing wall [see *Fig. 15.13*].

The house is preserved only in its western part. It consisted of a single room entered from the western street. Its walls, 0.40 m wide, were built of mud bricks. The external dimensions of the house were about 3.92 m by more than 3.00 m, and its south wall was founded on an earlier structure connected with B.H.205, most likely a gate through the lower wall.

The entrance to B.H.204 was 0.65 m wide and had a threshold at an elevation of 26.22 m. It led to a corridor (vestibule) 0.88–0.92 m wide. It is not certain whether its south wall, +1.78 m long, was a stub wall (*tuddik*) along the inner side of the entrance; doorways are frequently



Fig. 15.12. Fireplace inside a pottery vessel in house B.H.203

flanked with such stub walls, but they are usually shorter (up to 1.60 m long). The elevation of the walking level inside the room was similar to that of the entrance, but the surface was not tamped. The walls of the room are preserved to a height of about 1 m.

B.H.205: Gate(?)

To the south of B.H.204 there was a passageway through the lower wall, 1.90 m wide, connecting the occupational level between the dune

barriers with a tamped walking level below. On the eastern side of the gate, the level began at 25.18 m and rose steadily over a stretch 5.00 m long, to a level of 26.41 m in the street at the foot of the upper dune barrier wall, between houses B.H.204 and B.H.206. The side walls of the gate were built of roughly hewn stone blocks and are similar to the part of the lower dune barrier wall stretching on both sides of the gate.

The southern corner of the gate was founded on a deposit of windblown sand, at an elevation of 24.96 m; the walls tops were preserved at 26.30 m.



Fig. 15.13. Gate B.H.205(?) and adjacent buildings, including house C.H.311 with a courtyard featuring a *matmura*

The northern corner was founded at a level of 24.49 m, and its upper elevation was 25.64 m.

House B.H.206

House B.H.206 to the south of the gate is fragmentarily preserved. Its north wall was founded on top of the facing wall of the gate, while the west wall delimited the street at the foot of the upper dune barrier. The house interior was completely destroyed.

House B.H.201

Compound B.H.201 was erected on a sand deposit that had accumulated at the foot of the lower dune barrier wall to the north of the gate connecting the upper and lower terraces [Fig. 15.15]. It consisted of a large courtyard (B.H.201.4) and of three dwelling spaces (B.H.201.1–3) located in the northern part.

B.H.201.4: courtyard in the southern part of the compound

A vast space measuring 19.20 m by 13.72 m is adjacent to the lower dune barrier wall. It is delimited on the south and west by mud-brick walls and on the north by the southern façade of house B.H.201.1–3.

The entrance to the courtyard was located in its southeast corner, in the south wall [Fig. 15.18]. It was 1.10 m wide and had straight jambs; on the inner, western side the entrance was flanked by a long stub wall, 3.90 m long and 0.45 m wide. The vestibule at the entrance was 1.50 m wide. The threshold, built of two sandstone blocks (elevation 23.09 m), was later raised to a higher level using more stone blocks.



Fig. 15.14. Pivot block in the entrance to courtyard B.H.201.4

A square block located on the inner side of the eastern jamb had a circular depression in its upper surface and must have served for mounting a door pivot [Fig. 15.14]. The surface of the courtyard was not excavated, but a vast ash deposit was identified in its eastern part.

The area north of the courtyard was occupied by residential units: two houses (B.H.201.1 and B.H.2–3) entered from the courtyard in the south, most likely built at the same time on the surface of a deposit of windblown sand sloping toward the east [see Fig. 15.15]. The entire compound measured 5.55–5.90 m in width and 15.20 m in length.

House unit B.H.201.1

B.H.201.1 is the western of the two houses adjacent to the lower dune barrier wall. It consists of a single room with inner dimensions 4.65 m by 4.20–4.70 m, accessed from the courtyard. The mud-brick walls, 0.48 m thick, were plastered and coated with whitewash on their inner faces.

An entrance with straight jambs, measuring 0.67 m in width, was flanked on the inside by a wall 1.68 m long and 0.50 m wide. The inner part of the entrance, or the vestibule, measured 0.83 m in width. The stone threshold (elevation 23.50 m) was raised during later phases of use of the house.

The original floor inside the room was made of tamped mud (elevation 23.62 m). The furnishings on this level were as follows:

- Large mastaba. Located by the south wall, lined with a facing wall one brick thick; dimensions: L. 2.35 m, W. 1.65 m, H. 0.48 m; the feature remained in use through a later phase contemporary to the upper occupational level.
- Small mastaba. Located in the southwestern corner between the large mastaba and the west wall; dimensions: L. 0.70 m, W. 0.55 m; faced with bricks on the northern side and filled with sand.
- Western bench. Located against the west wall; dimensions: W. 0.55 m, L. 3.80 m, H. 0.32 m; faced with bricks; tamped upper surface.
- Northern bench. Located against the north wall; dimensions: W. 0.55–0.58 m, L. 4.25 m, H. 0.18 m; faced with bricks; tamped upper surface [Fig. 15.16].

The mud floor in the entire western part of the room between the north bench and the large mastaba was raised by 0.10 m.

House unit B.H.201.2–3

Two interconnected rooms [see *Fig. 15.15*] were accessed through one entrance from courtyard B.H.201.4 in the south [see *Fig. 15.14*].

Room B.H.201.2, with inner dimensions 4.70 m by 3.00 m, was entered from the south through a passageway 0.80 m wide, flanked by straight jambs and a narrow stub wall on the eastern side (L. 0.52 m; W. 0.12 m) [*Fig. 15.18*

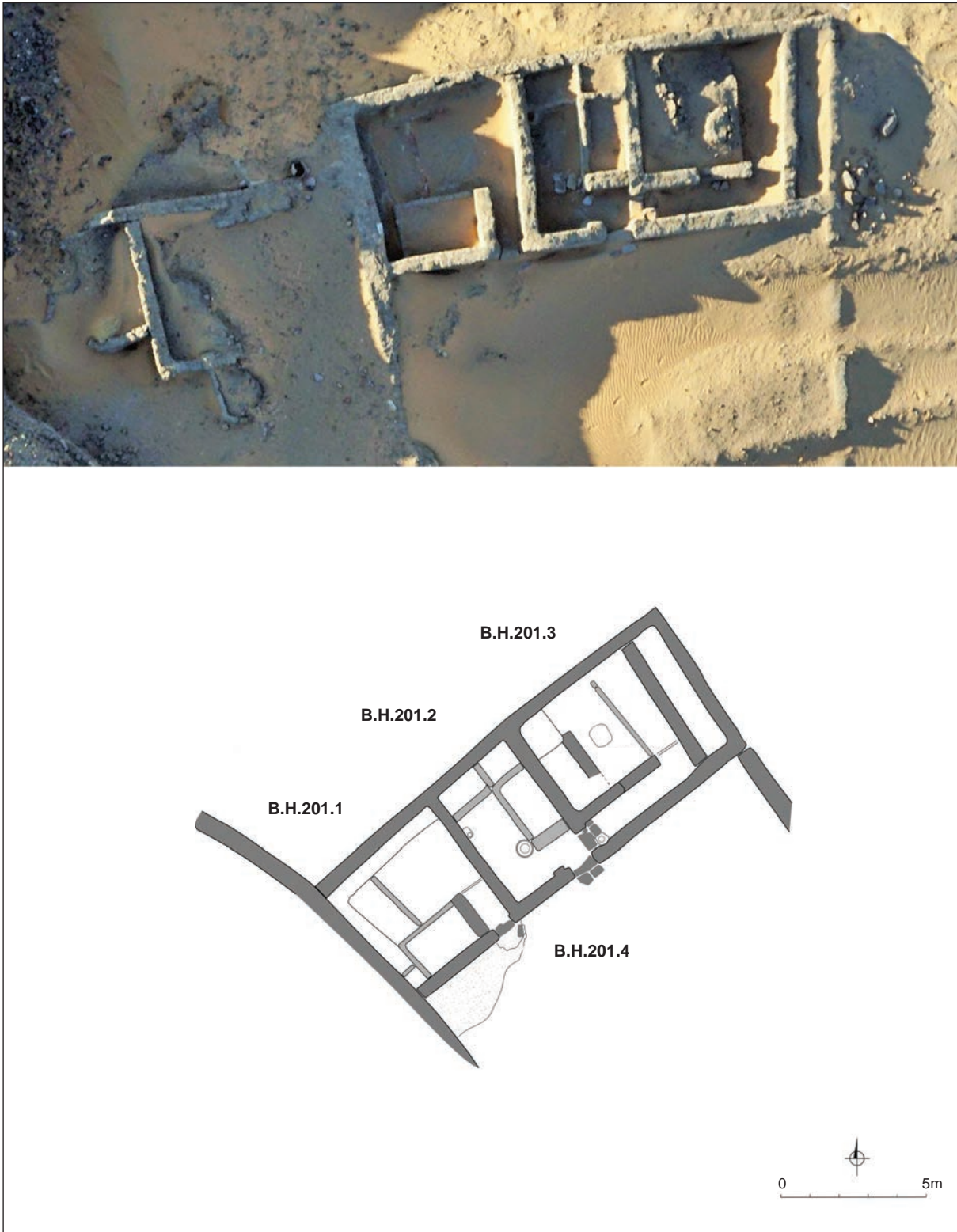


Fig. 15.15. House B.H.201.1–4: plan and aerial view

top]. The doorway had a threshold consisting of a single sandstone slab preceded on the courtyard side by steps built of two sandstone slabs. Across from the entrance, at a distance of 1.06 m from the threshold, a wall 1.30 m in length and 0.48 m in width was built perpendicular to the east wall of the house. East of the entrance,



Fig. 15.16. Northern bench in room B.H.201.1: view from the northeast



Fig. 15.17. Storage bin (gesseba) in room B.H.201.2

in turn, was the doorway to neighboring room B.H.201.3 [Fig. 15.18 bottom].

The floor of the room was of tamped mud and the walls were covered with mud plaster and lime wash. The furnishings corresponding to this level were as follows:

- ▮ Mastaba₁ Located by the east wall; dimensions: W. 1.40 m, L. 2.30 m, H. 0.40 m (upper elevation of brick lining 23.53 m); faced with bricks and filled with sand;
- ▮ Mastaba₂ Located in the northeastern corner; dimensions: W. 0.97 m, L. 1.40 m; brick facing on the eastern side;
- ▮ Mastaba₃ Located by the north wall; faced with bricks; dimensions: W. 1.10 m, L. 1.60 m, H. of brick facing 0.30 m;
- ▮ Pottery vessel (Diam. 26 cm) mounted in a circular casing, 0.44 m in diameter, located by the western face of the mastaba standing against the east wall;



Fig. 15.18. House B.H.201.2–3: top, entrance to the house viewed from the inside; on left, passage to the interconnected room; bottom, top view of the doorway to room B.H.201.3

- ▶ Small structure consisting of an inverted pottery vessel and a brick, located next to the mastaba adjacent to the west wall of the building;
- ▶ *Gesseba*. Lower part of a bin with massive walls of desert clay (*gir*), preserved next to the large mastaba, by the stub wall flanking the entrance; dimensions: H. +0.48 m, Diam. 0.68 m. The bin was found on a layer of sand overlying the mud floor, so it was rather not in its original location [Fig. 15.17].

Room B.H.201.3, with inner dimensions 5.04–4.90 m by 5.80 m, was accessed from B.H.201.2. The height of its plastered and whitewashed walls ranges from 1.80 m to ten-odd centimeters above the mud floor in the eastern part.

The entrance, located by the south wall separating the room from B.H.201.2, was 0.72 m wide. It had straight jambs and a stone threshold [Fig. 15.18]. On the inner side, on the north, the entrance was flanked by a wall that was 3.45 m long. Two steps led down to the floor inside the room. In the eastern part, the walking level was even lower, so more steps must have existed, though they are no longer extant.

The room had two floor levels: a lower one at an elevation of 22.38 m, and an upper one at about 22.86 m. Features corresponding to the lower level were partly investigated only in the eastern part of the room, where the walking level was identified at low elevations ranging

from 22.38 m to 22.35 m. Associated with this level is only a small wall abutting the north wall of the room, and possibly the wall that flanked the entrance on the north. It probably delimited the raised area in the western part of the room, which measured 3.25 m by 3.60 m in width and 0.40 m in height. After some time, an eastern wall 0.45 m wide was built inside the room. It may have been built to decrease the size of the room in a secondary phase of use or, alternatively, it may have been a facing of a bench 1.40 m wide, built against the east wall. This wall is preserved to an elevation of 22.76 m and is therefore located below the upper level (elevation 22.86 m), but this does not help to determine its function, as the external walls of this house are destroyed, and their tops are razed to even lower levels.

In a phase contemporary to the upper level, the wall flanking the entrance and steps was shortened to 1.80 m. The following features were associated with this higher floor:

- ▶ Large mastaba. Located by the west wall, fragmentarily preserved; reconstructed dimensions L. 2.35 m, W. 1.35 m; brick facing extant to an elevation of 23.12 m;
- ▶ Small mastaba. Located in the northwestern corner, also faced with bricks; dimensions: L. 1.20 m, W. 1.00 m, elevation 23.07 m.

KATARZYNA DANYS AND MACIEJ WYŻGOŁ

SMOKING PIPES FROM OLD DONGOLA

Prior to the mid-20th century, smoking pipes were no more than an ethnological curiosity of interest only to antiquities collectors. They were overlooked by professional archaeologists as “modern” until the launch of regular investigations of Ottoman levels at archaeological sites in Greece and the Near East. Studies on clay pipes developed in the 1960s and focused especially on Ottoman pipes. Crucial works concerned the pipes discovered at Istanbul (Hayes 1980), Athens (Robinson 1983) and Corinth (Robinson 1985). In the last few years, interest in ceramics of the post-medieval era has grown rapidly, bringing new publications, mainly from the Near East. These works also include the finds of tobacco pipes.

The Polish excavations in Old Dongola have yielded, since 1997, a numerous and diverse assemblage of tobacco pipes. The aim of this study is primarily to classify their forms and fabrics. Second, an attempt is made to trace their origins. Further, this paper considers their findspots, connections with other finds, and chronology.

All of the Dongolese specimens are of a hand-held and multicomponent type characteristic of the Eastern Mediterranean and the Near East. Generally, they are composed of ceramic bowls (this part is also called a head or *lüle*), mouthpieces of amber, stone, ceramic and wood, and organic stems made of fine wood, reed, or ebony. They were widespread from the late 17th century AD until cigarettes came into common use after the Second World War (Simpson 1990: 6). Pipe workshops are mentioned in textual sources, but archaeological evidence for them is scant (Simpson 1990: 6). A single discovery in Egypt came from Fustat, where a kiln and an

assemblage of pipes were recorded and dated to AD 1730–1760 (Pradines 2004).

Generally, chronological sequences for the pipes were established on the basis of finds from Mytilene (Lesbos Island): “Unlike the western tobacco pipe that was fashioned from clay in a single piece, including bowl, stem, and mouthpiece, the *lüle* typical of the eastern Mediterranean was designed to receive a separate long, wooden stem fitted with an amber mouthpiece, an arrangement that made the pipe cooler to smoke ... the earliest varieties, of greyish-white clay and quite small (in keeping with the high price of imported tobacco, early in its history), gradually evolved into the larger, more heavily decorated reddish-brown styles popular from the late 1700s until the early part of this century, when the *lüle* was finally replaced by the more practical western-European briar pipe” (Humphrey 1990: 2). It is noteworthy that, in contrast to tobacco pipes, hashish pipes had separate rims (chimneys) and three holes in rounded bowls (Humphrey 1990: 6). Chemical analysis of the pipes from Suba in Israel confirmed that they were used for tobacco (Simpson 2000: 150), while in a group of pipes from Jerusalem it revealed unburned organic matter identified as hashish (Robinson 1985: 151).

[KD]

ARCHAEOLOGICAL CONTEXT

The archaeological context of the smoking pipes from Old Dongola is unfortunately not very informative. Most of them were found on the surface, either on the Citadel (SWN sector and northern fortifications) or outside the city walls,

in the adjacent residential sector to the north. Only a scant number of the pipes can be attributed to particular structures, and their stratigraphic position in archaeological layers has not been well defined.

A group of pipes (ADd.11.001, ADd.11.067, ADd.11.072, ADd.15.001, ADd.15.032) discovered in sector SWN derived from the uppermost occupational level investigated inside the abandoned church SWN.B.V. These domestic layers were sealed by a layer of collapsed vaulting at about 3.50–3.70 m above the floor level. The church building was used long after the end of its original occupation. It remained uninhabited and was used for economic purposes such as animal husbandry until its final abandonment (Godlewski 2015a: 53).

Three pipes (ADd.10.112, ADd.10.190, ADd.10.191) were found in unit SWN.H.25 and one (ADd.14.435) in the street by this unit, while specimen ADd.16.188 came from unit SWN.H.26. Pipe ADd.13.005 was found in unit SWN.H.27, and both ADd.09.005 and ADd.10.211 were found in unit SWN.H.06. These units lie on the opposite sides of a courtyard and are part of an enclosure located in the vicinity of the Church of Rapahel (SWN.B.V). They are part of houses in sector 4 to the east of Building SWN.B.I (Godlewski 2015b: Fig. 16-2). This Funj-period living quarter in sector SWN is supposed to be associated with the domestic activities inside the reused interior of the church SWN.B.V (Godlewski 2015a: 53).

Houses located on top of the north curtain wall of the Citadel yielded a single pipe, ADd.14.405, attributed to house C.H.301. Two more pipes (ADd.99.047, ADd.99.053) were found in the house built on Tower E.2. Excavations in houses north of the Citadel walls revealed numerous finds of smoking pipes in the following locations: B.H.201 (ADd.14.383, ADd.14.384, ADd.14.385), B.H.100 (ADd.11.163), B.H.97 (BDd.16.264), D.H.95 (BDd.16.233, BDd.16.234, BDd.16.235), D.H.99 (BDd.16.217), D.H.100 (BDd.16.247) and B.H.151 (BDd.16.207, BDd.16.318) and the street between houses B.H.92 and B.H.100 (BDd.17.013, BDd.17.014).

Unfortunately, the stratigraphic location of the finds and their connection to specific archaeological layers cannot be readily determined for the vast majority of the pipe fragments. Most of them might be associated with contexts connected with the latest phases of occupation of the houses and with their abandonment. Pipes BDd.17.013 and BDd.17.014 were found in a debris layer coming from the collapsed wall of

house B.H.92, found in the street south of the house. Pipes BDd.16.217 and BDd.16.264 were discovered in the upper layers of the complex of houses B.H.97 and B.H.100 including courtyard B.H.99, so they were most probably discarded after the houses were abandoned. The pipe BDd.16.247 came from the fill between the latest floor levels in house B.H.100, suggesting a later date than the aforementioned two. Moreover, specimens from house B.H.95 were discovered in the layer of debris of the collapsed walls of this dwelling. A fragment of pipe BDd.16.207 came from house B.H.151, from a layer consisting of animal dung mixed with sand overlying an earlier layer where specimen BDd.16.318 was found. The complex of units comprising B.H.151 might have been related to structures B.H.100 and B.H.97, but an unexcavated area separates the two zones.

The chronology of the settlement of the Funj period in Dongola is based on written sources, specifically accounts left by European and Turkish travellers. The *terminus ante quem* for the houses on the Citadel and the quarter north of the walls seems to be the 19th century. This assumption is based on the narratives of the companions of the sons of Mohamed Ali (Frédéric Cailliaud, George Waddington, Bernard Hanbury, and Louis Maurice Adolphe Linant de Bellefonds) mentioning that in the first quarter of the 19th century the Citadel, as well as the quarter north of it were abandoned and concealed by sand dunes. Sources from the last decades of the 17th century confirm the habitation of the Citadel and the area surrounding the walls, although they differ in their assessment of the condition of the houses (Godlewski 2015d: 212–213). This chronology of the settlement constricts the dating of the specimens found in stratigraphic contexts to the still-vast timespan from the first half of the 17th century, the period of the introduction of tobacco pipes to Africa (Robinson 1985: 151), to the beginning of the 19th century, when the Citadel and the houses abutting the defensive walls were abandoned. However, this limitation does not apply to the surface finds constituting the majority of the assemblage of pipes from Old Dongola. The specimens collected from the surface may derive from the entire period spanning from the introduction of tobacco pipes to their replacement by cigarettes in the 20th century, owing to the fact that the town was still inhabited in its eastern part referred to as the Abandoned Village.

[MW]

METHODS

A comparison of the Dongolese assemblage to finds published in the aforementioned works crucial for pipe studies reveals dissimilarities in forms and fabrics, which point to a slightly different dating and origin of the objects from Dongola. Therefore, although the terms used to describe elements of pipe and clay bowl parts are derived from these publications [Fig. 16.1:A], a new typology was created in order to permit the study and classification of even very fragmentarily preserved pipes. Works on the finds from Corinth, Athens, Istanbul and Cairo–Fustat (Robinson 1983; 1985; Hayes 1980; Pradines 2004) focus on completely preserved specimens and distinguish between types on the basis of specific features that cannot be observed in the case of partly preserved pipes. Instead of fabrics, they concentrate on the shapes, which are often hard to establish and record when the object is incomplete. The proposed classification of the Dongolese finds is based primarily on the fabrics, while the shapes remain a secondary criterion. Such an approach allows categorization of pipes into production groups and their correlation with specific workshops or areas of production (e.g., Egypt or Syria). Decorative elements were described together with the types rather than as a separate subject of study. This paper also contains descriptions of other smoking implements, like stems and mouthpieces.

CLASSIFICATION

Bowls (heads) are the most common elements of pipes found during archaeological excavation. The stem parts were made of perishable organic materials. Descriptions by travelers mention cherry and jasmine wands, sometimes ornamented with silk, gold, silver, and pearls. For the mouthpieces, amber or, less frequently, precious stones or coral were used (Robinson 1985: 186). It seems that the clay bowls were the cheapest part of the pipes, as the numerous finds of these elements suggest.

Analysis of Dongolese specimens revealed three main types of material used to make this element: desert clay, alluvial clay, and stone. Types of **fabrics** are presented below [Table 16.1]. Types 1–2 and type 9 are of desert fabrics, types 3–8 are of alluvial clay, while type 10 comprises objects made of different kinds of stone.

The **typology** of the bowls is based on the aforementioned three main types of material. Subdivisions are made on the basis of the bowls' shapes and characteristic features even for the fragmentarily preserved examples. Variations of the fabrics among the subtypes may indicate different workshops using the same style.

Type 1 (desert fabrics)

Type 1 is composed of molded bowls, generally red-slipped, with fine incised and stamped decoration.

Table 16.1. Classification of pipe-bowl fabrics

Fabric no	Fabric type and color	Inclusions	Workshop
1	pinkish beige desert clay; fine, dense	red and black particles	Fustat (Pradines 2004)
2	grayish white desert clay; fine, dense	black particles	Egypt/Syria
3	brown alluvial clay; fine, dense	grains of quartz	Nile Valley (Nubia?)
4	brown alluvial clay; fine, dense	grains of quartz, large white particles	Nile Valley (Nubia?)
5	brown alluvial clay; fine, dense	grains of quartz, small flakes of mica	Nile Valley (Nubia?)
6	brown alluvial clay; fine, dense	large grains of quartz, carbonated small organics	Nile Valley (Nubia?)
7	brown alluvial clay; fine, dense	grains of quartz, large, numerous flakes of mica	Nile Valley (Nubia?)
8	red alluvial clay; fine, dense	grains of quartz, large cream and yellow particles	Nile Valley (Nubia?)
9	beige desert clay; fine, dense	red and black particles	Egypt
10	beige, red or gray sandstone with a carbonate binder (with one possible exception of a limestone specimen)	grains of quartz or pyrite	—

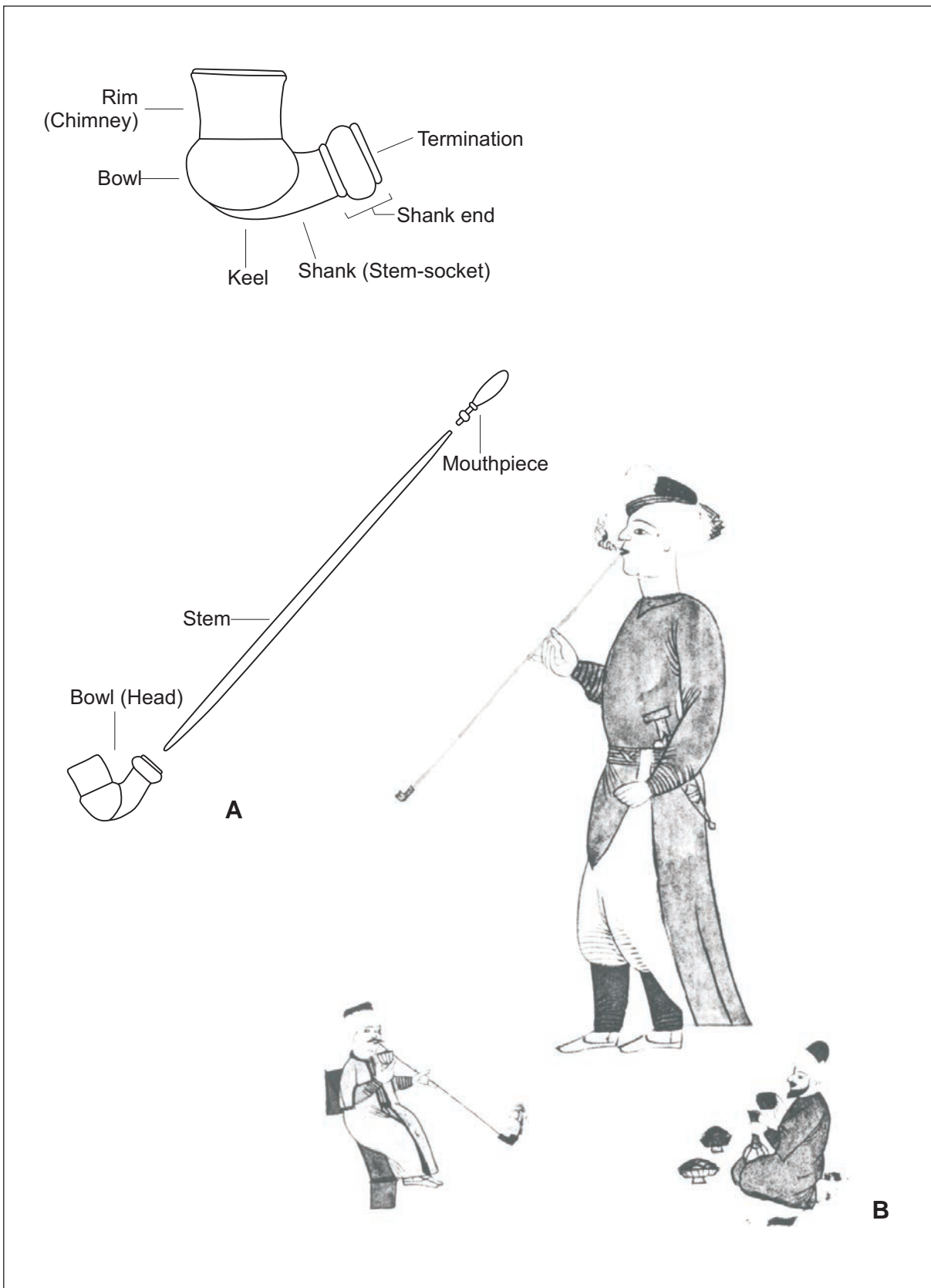


Fig. 16.1. Handheld, multicomponent type of tobacco pipe (A) and a scene of pipe-smoking and coffee drinking in the 17th century after a Turkish miniature (B) (After Robinson 1983: Fig. 1; Simpson 1990: Fig. 1 [A] and Robinson 1985: Pl. 33 [B])

► **Subtype A1** [Fig. 16.2:A1] is represented by **slender** forms, with short rims, rounded, rarely squared bowls, and **elongated shanks** (length over 1 cm) with **stepped-ring** terminations. They are made of fabric 1. The bowls are decorated with vertical grooves and rows of triangular stamps made by roulette (e.g., ADd.15.057) or with “palmette” stamps (e.g., ADd.12.173). Shanks also had grooves along the sides (e.g., ADd.15.057), featured a row of squared rouletting (e.g., ADd.11.067), or remained plain (e.g., ADd.12.173). Ring terminations bore vertical or diagonal grooves (e.g., ADd.15.057), squared stamps (e.g., ADd.12.173), or were plain with a row of squared rouletting on the step-end (e.g., ADd.11.067).

► **Subtype A2** [Fig. 16.2:A2] is **less slender** than subtype A. Bowls of this type have short rims, rounded bowls (rarely elongated or biconical), and **short shanks** (length less than 1 cm) with **stepped-ring** terminations. They are made of fabric 2. Variation 1 of this type has a “handle” or a kind of triangular keel with a hole, most probably for suspending purposes (ADd.14.194, ADd.14.434). Almost all specimens are decorated with vertical grooves of rouletting on the bowl, except for ADd.14.434 where stamps with a “palmette” motif cover the whole body. The upper part of the bowl often boasts elaborate rouletting (e.g., ADd.13.142, ADd.12.174), while rims remain plain (e.g., ADd.14.194) or carry circumferential grooves (e.g., ADd.13.142) and a row of rouletting (e.g., ADd.07.412). Circumferential stepped rouletting (e.g., ADd.12.174, ADd.13.142), as well as rounded stamps (e.g., ADd.15.135) appear on the shank. Biconical rings on the termination remain plain with rouletting only on the very end (e.g., ADd.07.412, ADd.12.174), while squared or rounded ones have diagonal grooves (e.g., ADd.14.194, ADd.15.135).

Other pipe bowls, unfortunately only partly preserved (lacking shanks), belong generally to type A [Fig. 16.2: A1–A2]. The bowls are covered with vertical grooves or rouletting, and the upper part has rows of circumferential rouletting (e.g., ADd.07.288, BDd.16.233). One specimen (ADd.14.058) has a thickened and rounded rim with diagonal grooves, a separated neck, and a distinctive keel outlined with a row of triangular rouletting on both mentioned parts of the pipe.

► **Subtype B** [Fig. 16.2:B] differs from the previous types in that it was made of desert fabric 9 of a slightly different shade than group A1. The form is stocky, has an incurved rim (e.g., BDd.16.217) and a shank without termination; however, it

should be remarked that no example in the Dongola assemblage was completely preserved. The decoration consists of a group of short grooves in the middle of the rim, terminating with a row of triangular stamps.

Type 2 (alluvial fabrics)

The second group of bowls comprises specimens made of different alluvial fabrics. In contrast to type 1, these bowls are all handmade, which is unusual for Eastern Mediterranean pipe forms.

► **Subtype A1** [Fig. 16.3A:A1] has a **semi-slender** form, short rim, rounded bowl, and a **short shank** (length less than 1 cm) with a **stepped-ring** termination (e.g., ADd.11.072). Objects of this subtype were made of fabric 4 of alluvial origin and are red-slipped. Their rims have rounded ring terminations with vertical or diagonal grooves (attested only in ADd.10.188, ADd.10.211). The bowls are decorated with roulette grooves, small keels are outlined with roulette rows (e.g., ADd.11.072), and circumferential squared rouletting appears on the shank and on the end of the termination. Rounded or biconical rings are often decorated with short, diagonal rouletting (e.g., ADd.90.058, ADd.13.059). An outstanding specimen, ADd.11.072 (variation 1), has a bowl ending with a solid base adorned with a fine, stamped rosette.

► **Subtype A2** [Fig. 16.3A:A2] features a **semi-slender** form, short rim, rounded bowl, and a **short shank** (length less than 1 cm) with stepped termination, but **no ring**. It was manufactured using fabric 5. A single example, ADd.03.274, is red-slipped and decorated with squared rouletting in the form of circumferential rows on the rim, and diagonal ones on the bowl, around the termination, and on the entire stepped-ring part. Fragmentary pipe bowls of the subtype A1–A2 [Fig. 16.3A:A1–A2] have bowls decorated with grooves (e.g., ADd.03.087, ADd.13.005) or different rouletting (ADd.10.022, BDd.16.247), while in the case of BDd.16.234 the preserved rim is decorated with rows of rouletting in its upper and lower parts.

► **Subtype B1** [Fig. 16.3A:B1] was a new shape, differing from the previous subtypes, featuring a **semi-slender** form, an **elongated, stepped** rim (length over 3 cm), a plain bowl, and a **short, plain shank**. All were made of fabric 6 except ADd.13.006, where fabric 7 was recorded. Example ADd.15.001 is red-slipped, and ADd.13.006 is black and carefully smoothed, but most of this

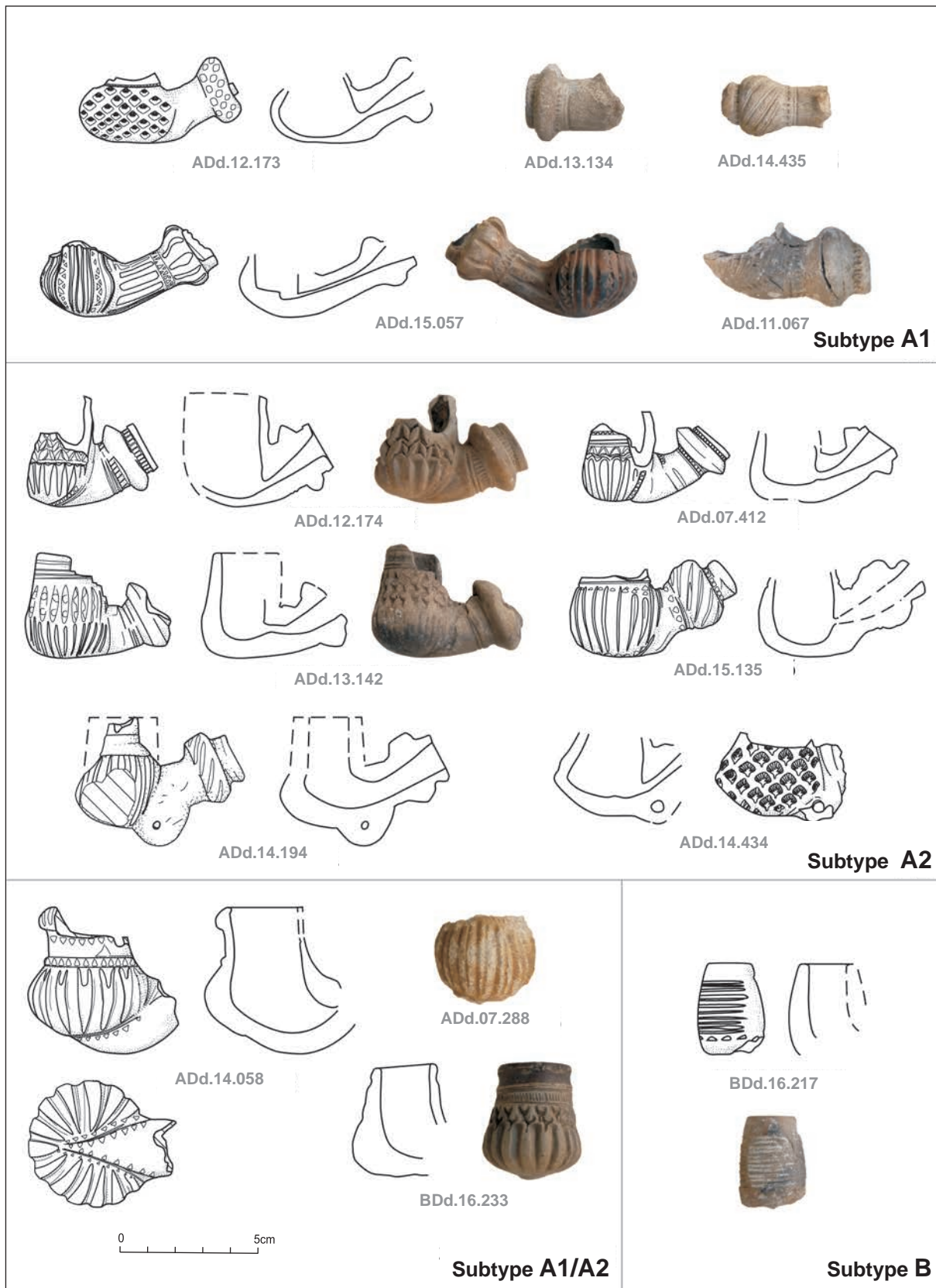


Fig. 16.2. Selected pipe bowls of type 1 arranged by subtypes: A and B

group has slightly smooth, brown-black surfaces (e.g., ADd.14.057). Moreover, most of them are undecorated; only ADd.13.006 has two rows of double almond-shape rouletting on the top of the rim and below the step.

► **Subtype B2** [Fig. 16.3B:B2] is of a **semi-slim** form, with an **elongated** rim (length less than 3 cm but over 1 cm), plain bowl, and **short plain shank**. It is made of fabric 6. Smoothed or polished plain brown-black surfaces either remain undecorated (ADd.09.005, ADd.15.054), or bear simple incised decoration on the upper part of the rim: a band with irregular cross-hatching (ADd.10.194) or short incisions in two registers (ADd.08.220). The object ADd.15.054 has a rim modeled into a semi-squared shape (see top view). An outstanding fragment of shank belonging generally to type B2 [Fig. 16.3B:B1–B2] had a black-brown smoothed surface completely covered with irregular incisions, which created a decorative pattern without any parallel. Another kind of pipe bowl is represented by types C1–C3 of a stocky form, with short, **massive** rims (length less than 1 cm), rounded bowls, and short, plain shanks. They were divided into subtypes according to rim shape.

► **Subtype C1** has an **incurved** rim [Fig. 16.3B:C1], and all of the examples were made of fabric 3 except ADd.11.163, in which case fabric 8 was recorded. The entire set lacks decoration, except for ADd.99.047, which has punctuated rows on the upper part of the rim and along the side of the bowl. Pipe ADd.11.163 is extraordinary, decorated with a group of grooves on the shank and groups of cross-hatching on the side and back of the rim. A small hole was pierced through the wall of the shank.

► **Subtype C2** [Fig. 16.3C:C2] is of a stocky form; it features a short, **outcurved** rim (length less than 1 cm), a rounded bowl, and a **short shank** probably (no longer preserved). A single specimen ADd.11.001 is made of fabric 6 and has smoothed, black surfaces. The decoration assumes the form of a continuous band of short incisions, placed in the upper part of the rim.

► **Subtype, C3** [Fig. 16.3C:C3], is **stocky**, with **short, plain rim** (less than 1 cm long), a rounded bowl, and a short, plain shank. It is made of fabric 6. They were carelessly made, and the brown-black surfaces are plain and lack decoration.

Type 3 (stone)

Pipe bowl **type 3** is represented by specimens made of sandstone with a carbonate binder and by a single specimen made of limestone.¹ Their shapes are similar to some of the ceramic bowls.

► **Subtype A** [Fig. 16.4:A] has a **slender** form, **elongated** rim, rounded bowl, and **short shank**. It was made of sandstone. All examples have relief decoration, but there is no repeating pattern. The rims were ornamented with rows of cross-hatching (ADd.90.146, ADd.10.193), wavy bands (ADd.08.005), rows of impressed dots and double zigzags (ADd.13.143) or hollows (ADd.14.385), and groups of impressed dots between grooves and zigzags (ADd.14.405). Noteworthy is the presence of a leather pouch on specimen ADd.08.005. The pouch could have been used as a buffer from the heated stone during smoking.

► **Subtype B** [Fig. 16.4:B] is represented only by a single example, ADd.10.112. It is of a stocky form, **massive, rectangular**, with a short rim, and a massive shank. It is made of limestone. No decoration was recorded, but in the upper part of the shank a hole is pierced, most probably for hanging purposes.

OTHER ELEMENTS OF SMOKING PIPES

Mouthpieces of pipes are fairly rare finds in archaeological contexts. Two specimens discovered in Dongola represent two types [Fig. 16.5:A]. The first one, ADd.15.032, is an elongated tube with a squared ring on one side, made of fabric 4. Its smoothed, brown surface bears no decoration. The second one, ADd.10.191, is a short tube with a narrow and flat ring at mid-height. It is made of fabric 9, and the surfaces have a fine red slip without any decoration.

According to textual sources, **stems** were made of organic material, especially fine wood, but like mouthpieces they are poorly represented in the archaeological evidence. Two finds of reed stems [Fig. 16.5:B] come from the exploration of the fill inside storage jar ADd.13.009 [Fig. 16.5:C], found *in situ* in house SWN.H.28. Such a reed could have been used as a third part of a multi-component pipe. Investigations in the neighboring house SWN.H.27 brought to light two ceramic pipe bowls. Moreover, the finds of pipes very frequently cooccur with small glazed bowls usually interpreted as coffee cups (Vroom

¹ Identification of the raw material based on photographs was carried out by Michał Ruszkowski from the Institute of Geochemistry, Mineralogy and Petrology of the University of Warsaw.

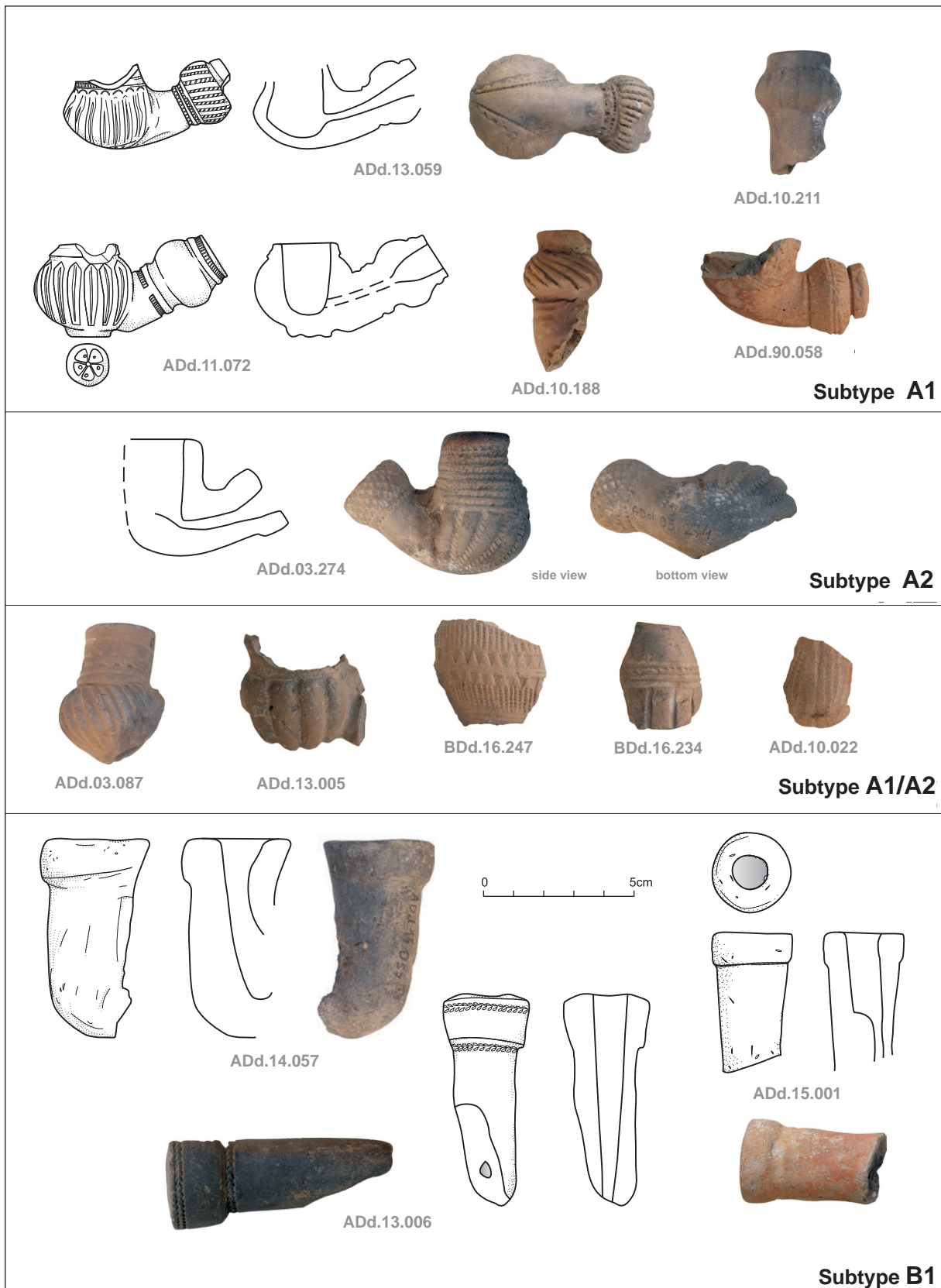


Fig. 16.3A. Selected pipe bowls of type 2 arranged by subtypes: A1, A2, A1/A2 and B1

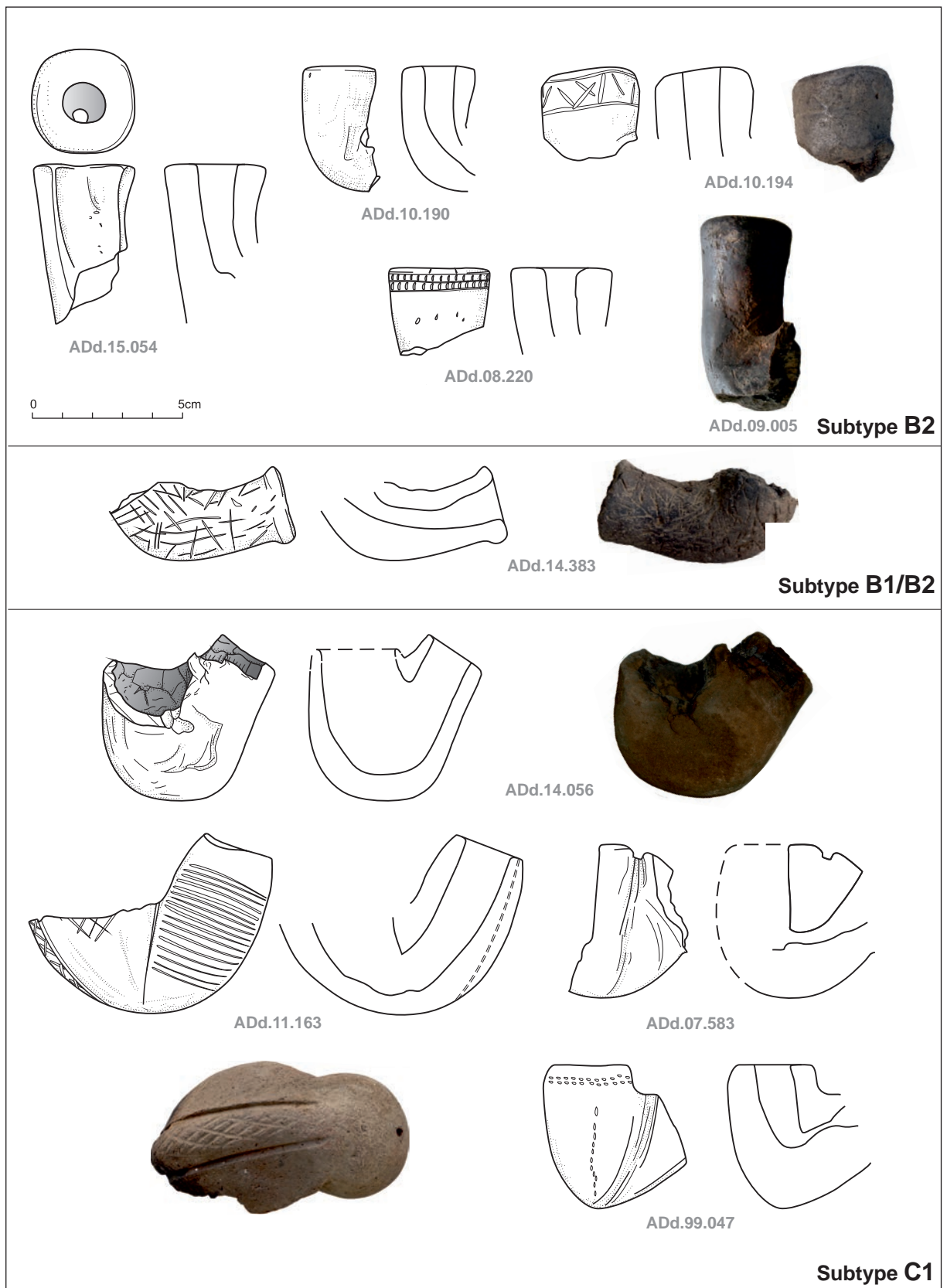


Fig. 16.3B. Selected pipe bowls of type 2 arranged by subtypes: B2, B1/B2 and C1

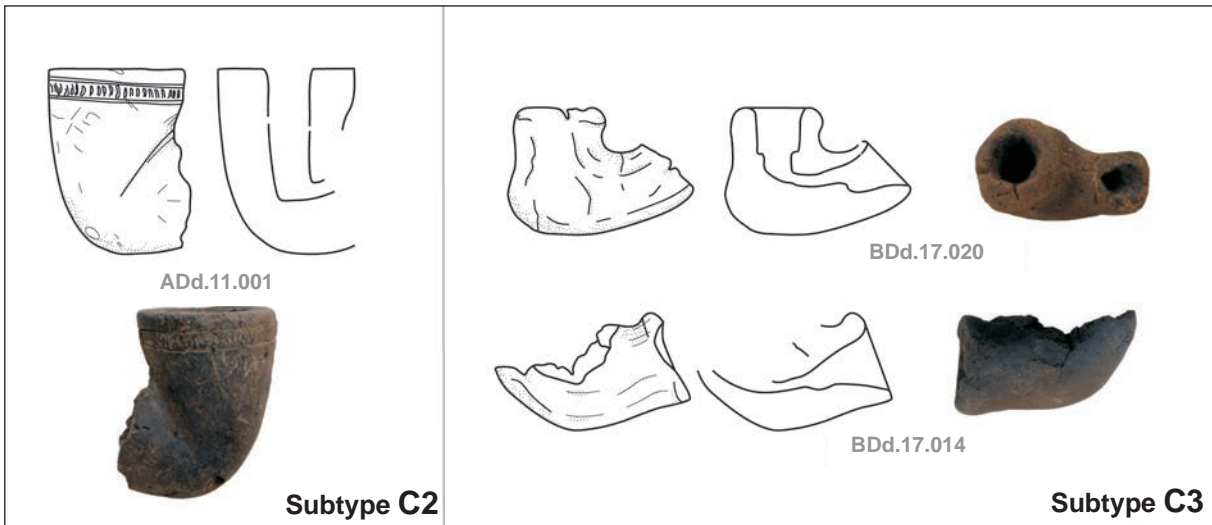


Fig. 16.3C. Selected pipe bowls of type 2 arranged by subtypes: C2 and C3



Fig. 16.4. Selected pipe bowls of type 3 arranged by subtypes: A and B

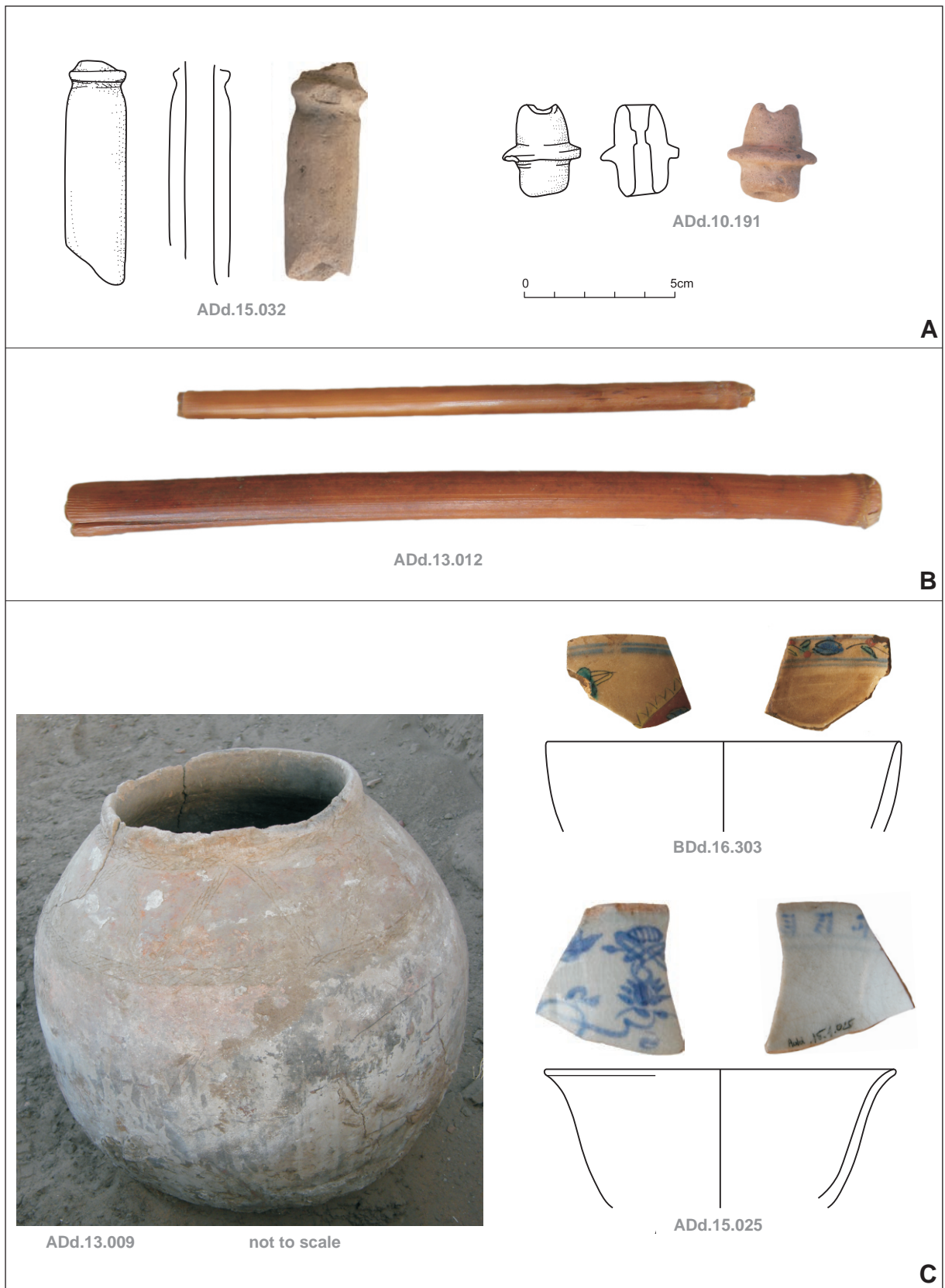


Fig. 16.5. Other elements of smoking pipes: A – mouthpieces; B – reed stem; C – storage jar containing reed stems and glazed bowls interpreted as coffee cups

2007: 84–86). Most of the Dongolese specimens [Fig. 16.5:C] represent one of the finest Ottoman wares, Kütahya, and blue-and-white Chinese porcelain of the 17th–18th centuries (Danys in preparation). [KD]

HISTORY OF TOBACCO SMOKING IN NUBIA

Tobacco and smoking implements spread to Africa through Europe by English agency, although it is worth noting that two forms of pipe developed: the multicomponent pipe in the Eastern Mediterranean, and the one-piece pipe in Europe. Tobacco smoking became common in Egypt between 1601 and 1603, and in 1605 it was introduced to Turkey (Lane 1860/2003: 331), where it was soon after prohibited as being irreligious. However, in the mid-17th century the ban was withdrawn, and smoking became widely accepted (Robinson 1985: 152).

The smoking of tobacco, along with the consumption of coffee, caused social changes and triggered a shift in the ways of spending time all across the Ottoman Empire. Coffee and tobacco were associated with hospitality and wealth, and their consumption was connected with particular spaces, called coffee houses, inspiring citizens of the empire to socialize and spend time in public spaces (Baram 1999: 139–141).

Stem-socket pipes could have been introduced to the Middle Nile Valley from West Africa or up the Nile from Ottoman Egypt (Shaw 1960: 294). Tobacco spread in two possible ways, unsurprisingly in parallel to the spread of smoking pipes. The first route led through Egypt, where tobacco was already in use at the beginning of the 17th century, while the second connection from Senegambia through Sudan to the Nile Valley is also dated to this period (Philips 1983: 318–319).

Tobacco smoking in Nubia was often mentioned by travelers since the beginning of the 18th century. Theodor Krump described the king of Argo Island as a person “riding in full splendour on the fine Arab steed and smoking tobacco-pipe” (Spaulding 1974: 233). Frédéric Cailliaud also observed that Shaiqia infantry carried long smoking pipes and tobacco pouches along with their sabres (Crawford 1951: 268). Johann Burckhardt gave an account of the trade in tobacco and tobacco pipes in the Sultanate of Funj. His description of a market in Shendi proves the production of tobacco in Sennar, as well as in Dongola, though the latter is identified as a production center of lesser importance.

The quality of tobacco from Sennar appears to have been sufficient to export it through Suakin for sale in Yemen (Crawford 1951: 97). Tobacco from Sennar is also mentioned by Jules Poncet (1709: 24) at the end of the 17th century as one of the main commodities exported from this region alongside elephant tusks and gold dust. Pipes were also said to have been manufactured in Sennar and sold on the market in Shendi (Crawford 1951: 97). This information is corroborated by George English, an American in the service of Ismail Pasha, who observed that bowls for tobacco smoking were among the limited number of products manufactured by the people of the Kingdom of Sennar (English 1822: 51).

However, the production of tobacco was not necessarily associated with smoking pipes. Two other methods of consuming tobacco were recorded by European travelers. Chewing of tobacco was observed by various travelers, among them Giovanni Belzoni in the area of Qasr Ibrim. He described it in detail as placing the tobacco, often mixed with *natron*, between the teeth and lips (Belzoni 1820: 78–79) in the manner commonly observed in modern Nubia. At almost the same time, English recalls it as causing an unpleasant appearance of the teeth of some villagers from the area of Berber (English 1822: 33).

Snuff was used as early as the 19th century by Nubians, who were said to be especially fond of it. This stimulant was produced out of tobacco reduced to a fine powder and mixed with *natron* (Burckhardt 1822: 34). These accounts confirm that tobacco consumption was well established in Nubia by the end of the 17th century, with internal production of pipes and cultivation of the tobacco plant.

Finds of smoking pipes were reported from a few sites in the Middle Nile Valley, both from the area under the influence of the Ottoman Empire, e.g., Kulubnarti (Adams and Adams 1998), Abkanarti (Presedo Velo 1965), and Qasr Ibrim (Alexander and Schlee forthcoming), and from the territories connected with the Funj Sultanate, e.g., Arbaji (Balfour Paul 1951), Sennar (Elzein 1982), Abu Geili (Addison and Crawford 1949), and Malakal (Kleppe 1981).

The internal trade or exchange of smoking pipes is also confirmed by the finds from Old Dongola and Arbaji, e.g., Dongolese specimen ADd.11.163 is analogous to an Arbaji specimen (Balfour Paul 1951: No. 4). At Abkur, a site in the vicinity of Dongola, a few different pipes were discovered on the surface (Wiewióra 2005: Fig. 30). The closest parallels to pipes made of stone

can be found in the Sinai Peninsula, where the Bedouin produced stone pipes, as demonstrated by ethnographical and ethno-historic sources (Saidel 2014: 260). [MW]

CHRONOLOGY

The diversity of fabrics recorded during the analysis of the assemblage of bowl-pipes from Old Dongola points to their production at different sites. As mentioned above, textual sources mention pipe-making in Sennar and in Dongola itself (Crawford 1951: 97), but the presence of pipes imported from Egypt together with local products should also be taken into consideration.

Most pipe workshops in Egypt are known from descriptions of European travelers, and only one, located in Cairo and dated to 1730–1780, is confirmed by archeological investigations (Pradines 2004). A century earlier, an association of tobacco sellers was registered in Cairo. Other pipe workshops in the Nile Valley were reported by 19th-century travelers in Asyut, Qena, and Aswan (Bavay 2010: 28–30; Raymond 1973). Published finds from the workshop at Bab el-Nasr (Pradines 2004) and from the *madrasa* Tatar al-Higaziya (French 2001) in Cairo, housed at Sheikh Abd el-Gurna (Bavay 2010), present pipes of the 18th–19th century with limited parallels to Dongolese examples.

However, the descriptions of the fabrics might help identify the origins of the pipes. Pipes of the desert fabric 1, of a pink color, may have been produced in a Cairo workshop (for the clay description of Cairene examples, see Pradines 2004: 283–284), and they represent type 1, sub-type A1. Those specimens seem to be the earliest, and the small size, as well as the use of fine, light colored clay suggest a 17th century date.

The simple evolution of the sizes and use of different fabrics and colors, as presented by St John Simpson (1990: 2), seems to be very likely: the small examples are connected with the 17th century, when tobacco was introduced, and reflect its rarity and high price. Larger, reddish-brown pipes were popular in the 18th century, finally evolving in the 19th century into large-sized pipes. Moreover, the latter boast fancy forms, disk-shaped bowls or lily-shaped rims, as is shown by examples from Corinth (Robinson 1985: Pls 54–58).

Generally, we can associate only pipes of type 1.A1 with the 17th century, while the rest of the assemblage represents 18th-century production. The lily- or disk-shaped pipes of the

19th century are virtually absent in Dongola. Nevertheless, some of them correspond to the so-called coffee cups originating from Chinese (Ming dynasty) and Ottoman Kütahya workshops, dated no earlier than the 18th century.

Pipes of type 1.A2 seem to be Egyptian products, as their fine, gray fabric finds parallels in Cairo workshops (Pradines 2004: 284). They are also among the finds from the house at Gurna (Bavay 2010: 34). Example ADd.14.434 stands out from this group with its well-levigated clay, larger quantity of black particles, grey surface, stamped palmette design, and handle on the keel. It resembles Syrian examples found at Ramla and dated to the 17th–18th centuries (de Vincenz 2011: 44, Figs 1: 1, 3: 24, 27).

Most of the pipes were made of alluvial fabrics, but type 2.A1–A2 is most likely to be recognized as Egyptian imports. They were mold-made (as were the aforementioned desert clay types), covered with a red slip, and finely decorated. Parallels can be found among the assemblage from Gurna (Bavay 2010: Cat. 2), where almost all of the pipes were made of alluvial clay. They resemble the shapes from the workshop in Cairo (Pradines 2004: Figs 8–10), dated to the 18th century. A stamped rosette on the flat base of pipe ADd.11.072 has a parallel in the assemblage collected at Gurna in Egypt, where the stamp was placed on the shank (Bavay 2010: Tab. 1: 2), while at Ramla in Syria the rosette was impressed on the bottom of the bowl (de Vincenz 2011: Fig. 2: 15). The Dongolese specimens may have a similar chronology, and they seem to have been imported from an unknown workshop in Middle or Upper Egypt.

Type 2.B1–B2 has no parallels in the published materials from Egypt. In contrast to the specimens mentioned above, these bowls are handmade, with elongated rims, and they are decorated with incised or engraved patterns. Some of them, such as ADd.10.194, resemble the decorative pattern of cross-hatching found on ceramic vessels of the so-called Funj period contemporary with those pipes. Such a shape with an elongated and narrow rim was recorded in Arbaji (Balfour Paul 1951: no. 10). Similar forms were also noted for pipes manufactured in Mali (Philips 1983: Fig. 1). Presumably they represented a local production in the Middle Nile Valley, and the diversity of the fabrics can indicate different workshops, or in general a middle African form of pipes. The same origins can be proposed for type 2.C2, in which the rim was shorter and wider.

Small, handmade pipes of type 2.C3 are of particular interest. They are made in a slapdash manner, with a visible seam where two pieces of clay were stuck together, and they were fired unevenly. It seems, in fact, that they were baked at the time of use, not before. The same technique can be observed in *mubhars* (incense burners) from Old Dongola, which are often found unfired or partially fired if the temperature obtained while burning the incense was too low. Such pipes could be made on an *ad hoc* basis, for “private” purposes rather than for trade. Presumably this type is of local, Dongolese origin.

Finally, the very massive type 2.C1 with horizontal grooves on the rim has a peculiar shape as seen in pipe ADd.11.163, analogous to the Arbaji specimens (Balfour Paul 1951: nos 4, 5). Perhaps those pipes were imported from Sennar, but a comparative analysis should be undertaken for a more thorough understanding.

CONCLUSIONS

A wealth of pipes in the Dongolese assemblage represents specimens of local, Nubian origin, and their diverse fabrics suggest different workshops. Pipe-making may have also taken place in Dongola itself, as mentioned in the descriptions of contemporary travelers. Scholars have suggested that “probably every town of any size had at least one pipe-maker. In lesser villages perhaps the potter would turn out a few pipes; he may have made his own molds from a pipe or pipes brought from a major center” (Robinson 1985: 153), which may support the idea that the pipes originated locally.

The second group is composed of moldmade pipes imported from Egypt. The earliest specimens known from Dongola are dated to the 17th century and constitute products of Cairo workshops that used desert clays. Later, 18th-century examples were made of alluvial instead of desert clays and might have been produced in different parts of Egypt, e.g., in Cairo, Asyut, and Aswan. It is worth noting that the Tahtawis family of traders in Cairo, well known from textual

sources dated to the 16th–18th century, operated between Egypt, North Africa, Syria, and Sudan (Walz 1979: 213, 216). It seems, therefore, that finds of Egyptian pipes and a single Syrian pipe in Dongola should not be viewed as particularly extraordinary. Lastly, the third group of pipes most probably came from Sennar.

Exchange between Egypt and Nubia (Dongola) could have taken place along the Nile trade route or the desert route, continuing earlier traditions. The second possible route along which the import of pipes may have occurred during the post-medieval period appeared together with the emergence of the important Red Sea port of Suakin linked with the Nile Valley (Ménage 1988: 145). Archaeological evidence speaks in favor of this second route. The cargo of the Sadana Island shipwreck (sunk c. 1765) contained Chinese cups of blue-and-white porcelain, as well as *qullae* and pipes, although these pipes were interpreted as personal belongings of the ship’s crew (Ward and Baram 2006: Fig. 2).

Both routes, one running north–south, the other east–west, are possible. Internal exchange should also be taken into account. The crossing of different trade routes in Dongola, the presence of fine (and expensive) ceramics like Chinese porcelain and its Ottoman rival from Kütahya, and the appearance of the tobacco smoking habit in the 17th century, so soon after it was introduced to Egypt, paint a picture of a rich society inhabiting Dongola in post-medieval times. The Kingdom of Dongola remained an important node in the trade network. Demand for extraordinary goods like tobacco and coffee also shows that the inhabitants were closely tied to and derived innovations from the Ottoman Empire, and that they did not remain on the periphery of the civilized world. Moreover, the findspots of the pipes and porcelain cups suggest that smoking and coffee drinking were popular habits in Dongolese households; however, archaeological evidence of the existence of coffee houses, so popular in the Ottoman Empire, has yet to be found. [KD]

KATARZYNA DANYS

GLAZED POTTERY OF THE 9TH-16TH CENTURIES FROM OLD DONGOLA

The excavations of the Polish Centre of Mediterranean Archaeology University of Warsaw in Old Dongola in the 1997 and 2003–2016 seasons yielded finds of glazed pottery.¹ They were discovered in different archaeological contexts, both original and secondary. Glazed ceramics were mainly found on the Citadel (SWN). A few fragments came from fills inside the western part of the Palatial Building (B.I) (e.g., in unit 44), as well as from layers of debris in its destroyed parts predating new occupation (Godlewski, Danys, and Osypińska 2015).

The majority of the pottery was found inside Funj-period (post-Makurian) houses erected on the ruins of the Palatial Building (Godlewski 2010: 321–326; 2015b) and to the north of the Citadel (Godlewski 2015d). Another location within the Citadel where a large group of glazed pottery was found was the royal Church of Archangel Raphael (SWN.B.V). The post-Makurian occupational layers and intrusions from later periods (when the church served as a source of building material) inside this building contained re-deposited materials of earlier periods. The central part of the Citadel, site C.01 with Building B.VI used for administrative purposes and storage, together with the later settlement of the Funj-period (Obłuski 2014: 307–309) revealed further finds of glazed pottery (Danys-Lasek 2014: 318–320). Recent examinations of Courtyard A at the Great Monastery of St Anthony on Kom H also brought new specimens.

Glazed pottery from Nubia was first classified by William Y. Adams in his seminal work

about medieval Nubian pottery (Adams 1986). Five groups (G.I–G.V) were distinguished and mainly characterized by features of their surfaces, such as glossiness or dullness, and further groups were added to account for Mamluk and Aswan Utility Ware. In general, each of these groups included different types of fabrics and surface treatment techniques. In the light of later works concerning glazed pottery from Egypt, especially that of Heba Mahmoud Saad Abdel Naby and Delphine Dixneuf (2013) describing vessels from Kom el-Dikka in Alexandria and Fustat, it became clear that a new system of description should be introduced for Nubian finds. The system of classification and method of illustration from Alexandria and Fustat was therefore adapted for use with Dongolese specimens. The main distinction was made between Egyptian and non-Egyptian examples, and these groups were further subdivided reflecting different surface treatment techniques, which allowed the comparison of Dongolese finds to others from the Nile Valley, placing them in a broader context and introducing them to the wider world of general studies on glazed pottery.

The Dongolese assemblage of glazed pottery was divided into groups representing different techniques of surface treatment as the most diagnostic features. Moreover, groups of fabrics were distinguished. The shapes of the vessels were rather simple and the rarity of completely preserved forms did not allow for a detailed typology. Descriptions of the pottery groups are in geographical and chronological order.

¹ Glazed pottery found in Dongola in the seasons under consideration also included pieces dated to 17th–19th century. This material, which represents a different historical and cultural reality, will be discussed in a separate study.

Classification: fabrics and wares

Macroscopic analysis revealed fourteen different groups of **fabrics** in the Dongolese assemblage [Table 17.1, Fig. 17.1]. Most of these represented desert/quartz (frit) pastes of differing textures, inclusions and colors. Alluvial and mixed alluvial/desert fabrics were rather rare. The finds were associated with diverse workshops located in Egypt, Syria, Iraq, Iran (?), and Turkey, where glazed pottery was manufactured between the 9th and 15th centuries.

Egyptian Glazed Wares

Only a few specimens represent **Splashed Ware** [Fig. 17.2] manufactured in Egypt. A very small fragment of a bowl (ADd.14.298) of DGF1 fabric is covered with a green glaze outside

and a yellow glaze inside, and green smudges are visible on the internal surface. Specimens of this type, the so-called Fayyumi Ware, are well known from many archaeological sites in Egypt, e.g., Alexandria (Zagórska 1990: 84), Fustat (Gayraud 1997: Fig. 6), Tebtynis (Rousset and Marchand 2000: Fig. 50a), Deir el-Naqlun (personal observation), and el-Ashmunein (Bailey 1991: 208, no. 8). A complete example of unknown Egyptian provenience is kept in the Keir Collection (Grube 1976: no. 73). In Nubia, they were discovered at Gebel Adda (Grzyski 2010: Fig. 8), Qasr el-Wizz (personal observation), and Debeira West (Shinnie and Shinnie 1978: Pl. XXXVII: b).

Other Splashed Ware fragments were made of DGF3 fabrics and belong to deep bowls or plates. Specimen ADd.12.004 is covered with a white, opaque glaze on a background of

Table 17.1. Classification of glazed fabrics from Dongola

Type	Paste/Color	Texture/Hardness	Inclusions
DGF1	quartz	medium (spongy)	quartz grains ≤ 0.5 mm
	creamy yellow, yellow	medium	
DGF2	quartz	medium (spongy)	quartz grains ≤ 0.5 mm, red particles < 1 mm
	creamy yellow, yellow	medium	
DGF3	quartz	medium (spongy)	quartz grains, red particles, white particles ≤ 0.5 mm
	pinkish beige	medium	
DGF4	quartz	medium to dense	quartz ≤ 0.5 mm, yellow particles ≤ 2 mm
	creamy yellow	medium	
DGF5	quartz	medium to dense	quartz ≤ 0.1 mm
	creamy yellow	medium	
DGF6	quartz	dense	–
	cream	medium	
DGF7	quartz	medium, grainy	quartz ≤ 0.5 mm, glass grains (?)
	pinkish beige, orange	hard	
DGF8	quartz	medium to dense	quartz, white particles ≤ 0.5 mm
	creamy white with a pinkish beige core	hard	
DGF9	quartz	dense or medium	–
	white, whitish grey	hard (stone-like paste)	
DGF10	stoneware	dense	–
	grey	hard	
DGF11	mixed	medium to dense	quartz ≤ 0.5 mm
	orange brown	medium to soft	
DGF12	alluvial	medium to porous	quartz, yellow particles ≤ 0.5 mm
	reddish brown, brown	medium	
DGF13	alluvial	medium to porous	quartz ≤ 0.5 mm, yellow particles ≤ 1 mm
	reddish brown, brown	medium	
DGF14	earthenware	dense	quartz ≤ 0.1 mm
	brick orange	hard	

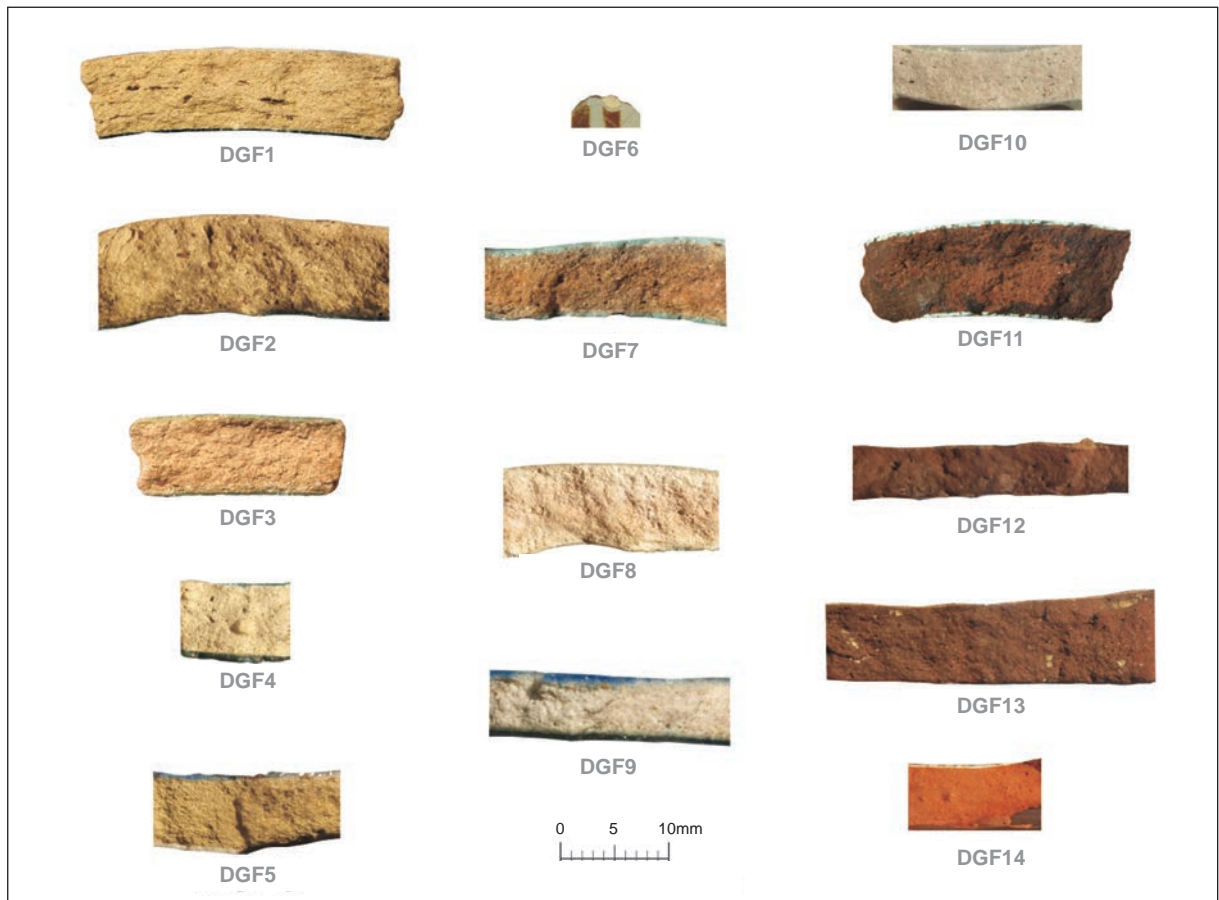


Fig. 17.1. Classification of glazed pottery fabrics

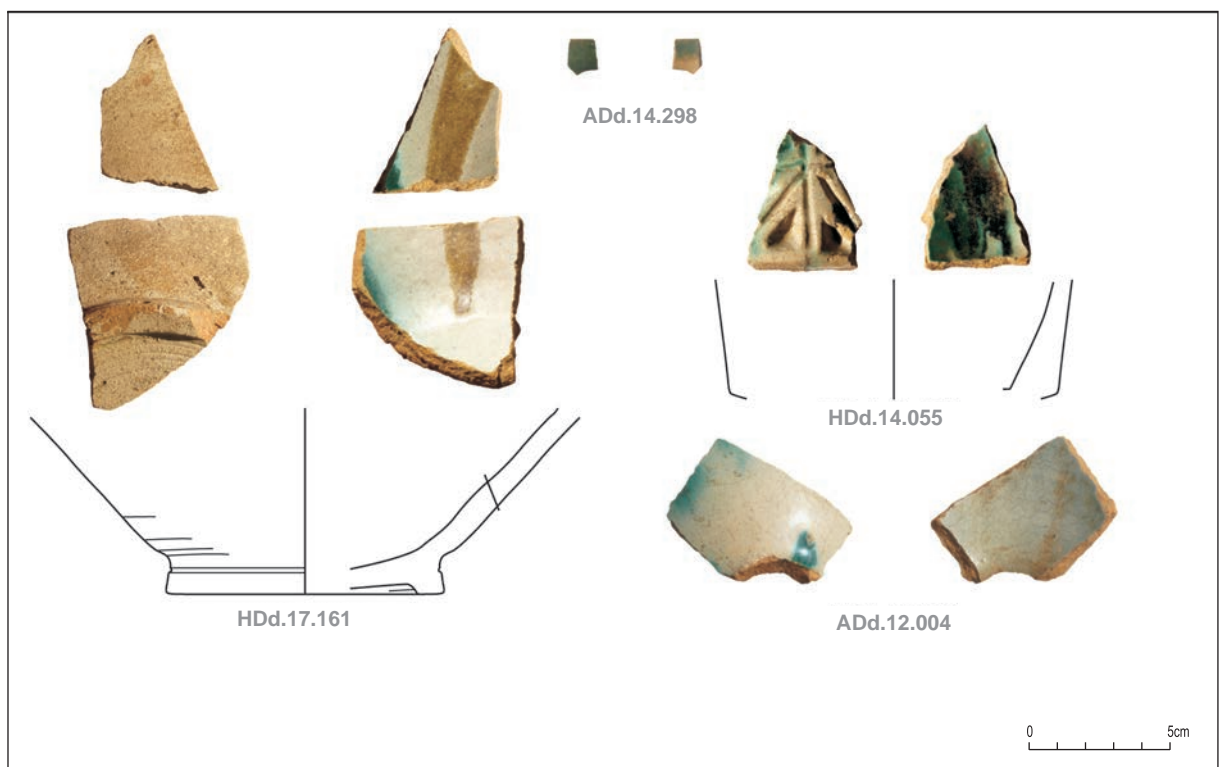


Fig. 17.2. Selected Egyptian Splashed Ware fragments

white slip and has small splashes of turquoise, while HDd.17.161 also has honey-brown or purple splashes accompanying the turquoise ones. Such wares, often with additional brown-purple splashes, were widespread throughout the Nile Valley (Watson 2004: Cat. D.13). In Nubia, they were noted at the sites of Skeikh Daud (Presedo Velo 1964: Fig. 1: 19, 20) and Arminna West (Weeks 1967: Pl. XXX: b).

An exceptional fragment, HDd.14.055, is decorated on the outer wall with deep-cut triangles, which formed part of a larger composition. Analogous vessels were discovered at Tod in Egypt and are dated to the 11th century (Pierrat 1991: Fig. 11).

The idea of Splashed Wares was widespread in the Middle East. The invention of this technique most probably took place during the 9th century in Iraq and is very often connected with the influences of Chinese pottery of the Tang period (AD 618–907), characterized by three-colored decoration (Watson 2004: 200; Saad Abdel Naby and Dixneuf 2013: 28). The production of “classical” Splashed Wares in Egypt is dated to the 10th–13th centuries (Scanlon 1993: 298–299; Gayraud 1997: 264); however, there are some indications of the so-called Fayyumi Ware continuing into the 15th century (Williams 2013: 18). Note that the term “Fayyumi” is misleading, as investigations did not confirm the presence of production centers of such wares on any sites in the region of the Fayyum Oasis (see Saad Abdel Naby and Dixneuf 2013: 28). In the light of Egyptian parallels, the Dongolese specimens seem to be dated to the 10th–11th centuries, but both fragments were found in disturbed, mixed layers alongside pottery with a broad chronology.

► **Monochrome Wares** constitute one of the most numerous groups in the glaze assemblage, with **turquoise** coloration being the most prevalent [Fig. 17.3:C]. These specimens are chiefly made of DGF1 (e.g., ADd.14.175) and DGF2 (ADd.10.209, ADd.10.210, HDd.15.132) fabrics, and occasionally of DGF3 (ADd.11.188), DGF5 (ADd.07.393K) and DGF7 (ADd.14.067D) fabrics. The diagnostic fragments of plates represent rounded, out-curved rims (ADd.10.117) and massive, low-ring bases (ADd.10.209), while other bases have the shape of small tall-ring bases (ADd.10.210), or are flat (HDd.15.132) and represent small bowls or cups. The majority of this group boasts a high-quality, non-transparent glaze applied on a background of white slip (ADd.10.117, ADd.10.209, ADd.10.210, ADd.14.067D, ADd.14.175, HDd.15.132). The remaining specimens have a thin layer of glaze

applied directly on the body. A characteristic feature is glazing the entire interior of a vessel and only the upper part of its external side.

The second group of Monochrome Wares is made up of **green**-glazed specimens [Fig. 17.3:A] observed to have varying shades. Although no diagnostic fragments have been found, three examples provide clues: ADd.11.078 is a part of a bowl and ADd.14.067C is a fragment of a cup. Two main fabrics are recorded: DGF1 (e.g., ADd.11.078, ADd.14.067C, HDd.14.159, ADd.16.312) and DGF11 (e.g., ADd.14.067B). Examples such as ADd.14.067C have a thin glaze without intermediate slip, while remaining specimens boast a non-transparent glaze on a background of white slip. Potsherd ADd.11.078 lacks glaze on the bottom exterior surface.

The third group [Fig. 17.3:B] consists of examples of different colored glazes including **blue** (ADd.14.076), **yellow** (HDd.15.542A), **olive green** (ADd.07.404), and **green inside and yellow outside** (HDd.15.542C). The blue example is probably a fragment of a bowl, the yellow one likely comes from a plate, while the two remaining pieces belong to cups. All fragments except one were made of the DGF11 fabric, while ADd.14.076 was of the DGF5 fabric. A surface treatment with a thick glaze applied on a background of white slip was observed in the case of the blue and yellow examples, while HDd.15.542C only has glazing inside. The cup ADd.07.404 is noteworthy as having an opaque glaze only inside, with a brown colored self-slip on the outside.

Monochrome Wares appeared in every chronological period of glazed pottery manufacture in Egypt (and in other countries). The determination of general chronology can be based on the forms and fabrics, but archaeological context would be a more certain indicator. Numerous examples have been found across the Nile Valley, in Egypt e.g., at Fustat (Kubiak and Scanlon 1989: Fig. 60), Deir el-Naqlun (Łyżwa 2002: 186, 187), Tebtynis (Rousset and Marchand 2000: Fig. 50g–k), el-Ashmunein (Bailey 1991: 208–212), and in Nubia e.g., at Qasr Ibrim (Frend 1974: 55), Sheikh Daud (Presedo Velo 1964: Fig. 1: 1–5), Qasr el-Wizz (personal observation), and Meinarti (Adams 2002: Pl. 17g), as well as on the Egyptian Red Sea coast at Quseir (Whitcomb 1979: 105). The phenomenon of partly glazed external surfaces was recorded and clearly demonstrated on completely preserved vessels found in the *madrasa* Tatar al-Higaziyya in Cairo (Gayraud 1986: Pl. XXI).

Among the Monochrome Ware specimens there were fragments that can be interpreted

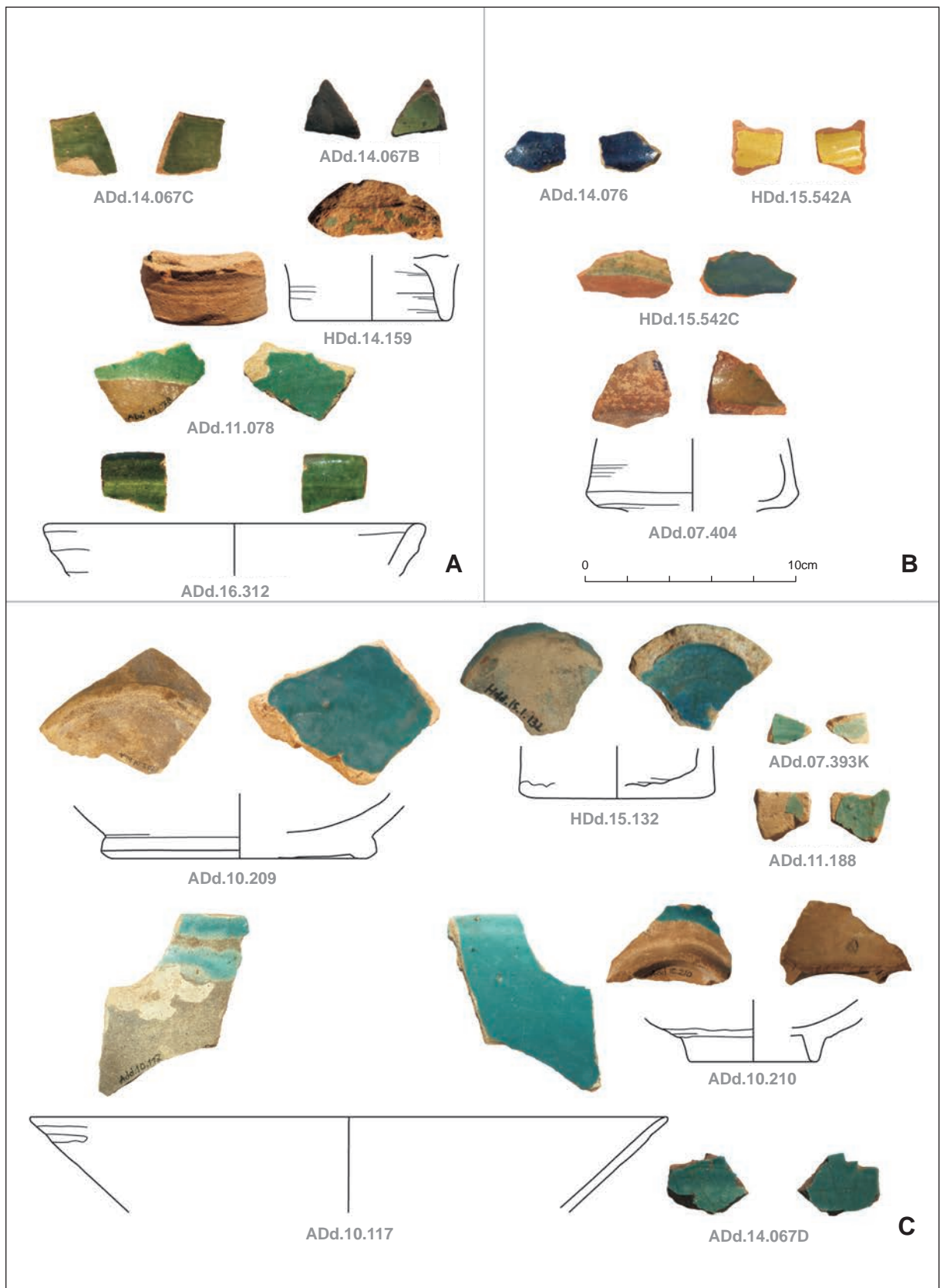


Fig. 17.3. Selected Egyptian Monochrome Wares: A – green; B – blue, yellow and olive; C – turquoise

as imitations of Chinese celadons. Color and decoration type, as well as cracked surfaces, were diagnostic features for this category, which was further divided into three subgroups: light green, green, and turquoise. The first and most numerous one [Fig. 17.4:B] imitates the jade green color of Chinese prototypes and, in the case of examples ADd.07.175, ADd.07.604 and ADd.09.012, also exhibits molded decoration. The inside of specimen ADd.07.175 carries broad grooves that imitate flutes, a very common decorative feature of Chinese vessels (Scanlon 1984: Pl. 2). Characteristic for this group are simple shapes of bowls and plates with low-ring bases (e.g., ADd.15.192).

Analysis of the fabrics demonstrated the dominance of DGF11 (e.g., ADd.07.604, ADd.09.012), while others were registered only as single examples: ADd.07.175 – DGF8, ADd.11.102 – DGF1. A light green, thick, high-quality glaze in a color reminiscent of jade was applied with an intermediate slip. It bears noting that the glaze covers whole surfaces, including bases and their interiors, in contrast to specimens of “regular” Monochrome Ware. Lines of cracking, especially observed inside, were an effect of firing, but the question remains open as to whether it was an intentional measure, as in the case of Chinese wares, or a failure of the firing process. The exceptional but very poorly preserved specimen ADd.11.102 has a white glaze-painted vegetal (?) motif. Last but not least is the reworked potsherd ADd.07.604. Its carefully worked circular shape and the hole pierced in the center leave no doubt that it was used as a spindle whorl.

Fragments with a **green** glaze [Fig. 17.4:C] are less numerous than the first subgroup. All of them were made of the DGF1 fabric (e.g., ADd.03.122, ADd.12.098) with the exception of ADd.07.063 made of DGF7. The latter, a fragment of a plate, has a wavy flared rim, and two examples, probably from bowls or plates, feature low ring bases. The quality of the glaze is the same as in the case of the previous examples, and the presence of a slip background is also noted. For example, molded decoration in the form of flutes appears on ADd.12.098, while ADd.03.122 seems to have an impressed central pattern (likely a rosette).

The third group of Chinese pottery imitations is composed of **turquoise** examples [Fig. 17.4:A] that differ from the aforementioned ones in quality. They also have a slightly different shade and a cracked surface. Two main fabrics were noted: DGF7 (ADd.07.556, ADd.08.222, ADd.16.156C) and DGF11 (e.g., ADd.07.339,

ADd.16.369). Distinctive features are, as in the case of the latter examples, the use of a white intermediate slip and a good-quality turquoise glaze. Lines of cracking are especially visible on ADd.08.222. The latter specimen has on its outer surface visible traces of a tripod stand used during the firing process. The exceptional ADd.16.156C is a reworked potsherd of an oval shape, with one tooth-like side, probably used as a token.

The phenomenon of Chinese celadon imitations was observed across the Middle East and concerned different types of wares, e.g., green jade with incised and molded decoration or “blue and white” style. The first imports appeared in Egypt in the course of the 8th century, but the Mamluk period abounded in their imitations, produced for instance at Fustat (Scanlon 1970a: 84; 1984: 118–119; Saad Abdel Naby and Dixneuf 2013: 63). The specimens from Fustat were found together with prototypes of Chinese origin (Gyllensvärd 1975; Scanlon 1970a: Pl. XVI a; 1984: 116–117) and imitated both their color, with different variations of green glaze (Scanlon 1970a: 84), and decoration, with flutes, incised vegetal patterns and applied representations of fish (Scanlon 1984: Pl. 2–4). Egyptian imitations of Chinese celadons can also be found in Alexandria (Saad Abdel Naby and Dixneuf 2013: Pl. 36: 89; François 1999: Fig. 13; Majcherek 2013: Fig. 1) and at Qasr el-Wizz (personal observation), as well as on the Egyptian Red Sea coast in Quseir (Whitcomb 1979: 107).

► The group of vessels **incised under a monochrome glaze** comprises only three specimens [Fig. 17.5:A]. Plate ADd.07.610 with a ledged rim was made of DGF1. Both surfaces are covered with an olive-green glaze, without a white slip background. A “guilloche” motif was incised on the rim. The body sherd HDd.15.543A of DGF1 fabric most probably belongs to a closed form, likely a cup or beaker. A light green glaze appears only on the outside, with a drip of glaze inside. Three vertical grooves are engraved on the outside. The small fragment ADd.16.114, made of DGF3, is a unique example of a miniature lid. A fine turquoise glaze covers both sides. A vegetal pattern is visible on the outside. Examples of such types of glazed pottery were found on various sites in Egypt: at Alexandria (Saad Abdel Naby and Dixneuf 2013: Figs 14–15), Fustat (Scanlon 1974: Pl. XXI: 4), Deir el-Naqlun (Łyżwa 2002: 185), el-Ashmunein (Bailey 1991: 208, no. 9), Tod (Jöel 1992: Fig. 8), Tell Edfu (Gascoigne 2005: Fig. 6: 6), and in

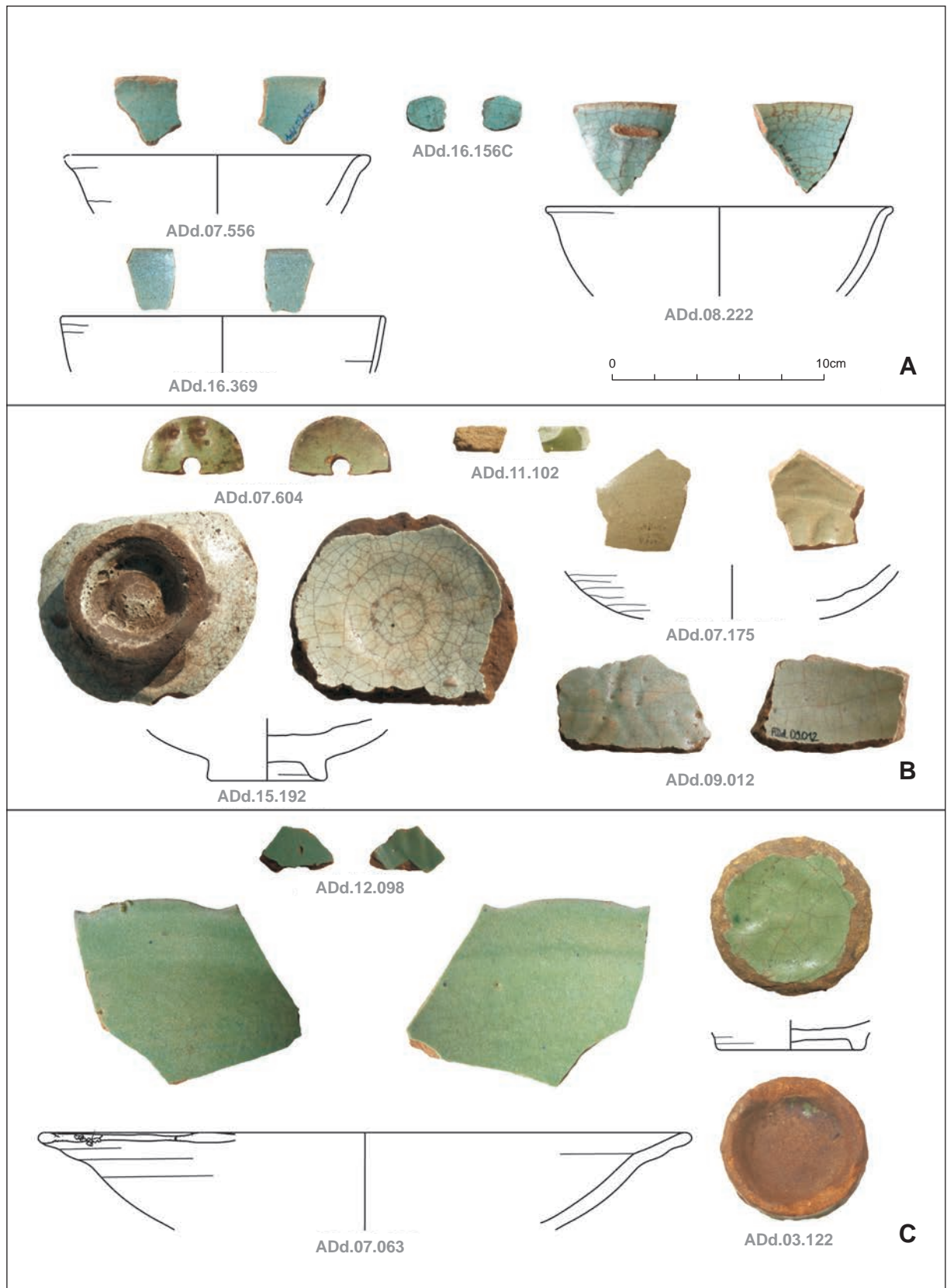


Fig. 17.4. Selected Egyptian Monochrome Wares, imitations of Chinese celadon: A – turquoise; B – light green; C – green

Nubia: at Qasr el-Wizz (personal observation), Serra East (D. Whitcomb, the Oriental Institute, University of Chicago, personal communication), Debeira West (Shinnie and Shinnie 1978: Pl. XXXVII: c), Meinarti (Adams 2002: Pl. 17e), as well as on the Egyptian Red Sea coast (Whitcomb 1979: 106).

► Pottery decorated with floral and vegetal motifs incised on the body and subsequently covered with a monochrome glaze has also been described as Fustat Fatimid Sgraffito (FFS), as evidence of its production was found in Fustat (Scanlon 1967: 75). The introduction in 10th-century Iran of decorative patterns incised on the body was most probably inspired by Chinese celadons of the Song period (AD 960–1279), and these appeared as imports in Egypt (Watson 2004: 253; Saad Abdel Naby and Dixneuf 2013: 31). The “guilloche” appears to be an intercultural and interregional decoration motif. It is found in different forms and techniques of execution, for instance in 9th–10th-century Tunisia (Louhichi 2010: Fig. 8), 11th–12th-century Iran, Eastern Iran in the 13th century (Watson 2004: Cat. Ia.5, Cat. L.17), Italian proto-majolica of the 13th–14th century (Avissar and Stern 2005: Pl. XX: 2), and on Syro-Egyptian vessels of the Mamluk era (Zagórska 1990: Pl. III: 4; Watson 2004: 413, 414; Saad Abdel Naby and Dixneuf 2013: Pl. 16: 38, 39). Specimens found in Dongola are rather connected with the 10th–12th centuries despite their secondary deposition in later archaeological layers.

► The homogeneous group of vessels with incised decoration under a monochrome glaze comprises fragments of **Mamluk Sgraffito Ware** (MSW) [Fig. 17.5:B]. An interesting example is the nearly complete bowl ADd.09.080, with a rectangular rim and a half-high ring base of type I.D3 according to George T. Scanlon’s typology of finds from Fustat (Scanlon 1980: Fig. 4:c). Other fragments have flaring rims, as with ADd.07.609, of type II.C (Scanlon 1980: Fig. 7:c) and straight and single-carinated bodies, as with ADd.07.038, of type III.C2 (Scanlon 1980: Fig. 10:b). All these finds were made of DGF12, except ADd.07.038, which was made of DGF13. A common feature is the presence of an intermediate slip and an olive-green, sometimes honey-colored glaze covering all surfaces, including the base with its interior. The decoration is composed of brown, glaze-painted elements: a rim band (e.g., ADd.09.080) or spots on the inside (ADd.07.038) or outside (ADd.07.609).

The Sgraff decoration, incised in the wall and then covered with glaze, represents a third type according to the classification of Saad Abdel Naby and Dixneuf: floral, animal and/or geometric patterns (2013: 35). A repeating motif is composed of a double groove and zig-zags below it (ADd.09.080, ADd.14.180), while a single example boasts “guilloche” decoration (ADd.07.609). It is noteworthy that ADd.09.080 has an applied rosette in the center of the floor, accentuated with grooves and circles on every petal. It could perhaps be interpreted as having been influenced by Chinese pottery, where applied motifs were put in the same place (Scanlon 1970a: Pl. 2). A single reworked body sherd ADd.14.251 was most probably used as a token.

Pottery of the MSW type was one of the major groups among the well-collected and studied wares from Mamluk workshops. The Dongolese finds represent “humble” variations inspired by those with armorial bearings or blazons, inscriptions, and calligraphic patterns, known from e.g., Fustat (Scanlon 1980), Alexandria (Saad Abdel Naby and Dixneuf 2013: Pls 8–29), and Tod (Décobert and Gayraud 1982: Pls VII–X). Similar examples to the Dongolese finds were discovered in Lower Nubia, at Gebel Adda (Grzymski 2010: Fig. 8), Qasr el-Wizz (personal observation), Serra East (Bruce B. Williams and Donald Whitcomb, personal communications), and on the Egyptian Red Sea coast at Quseir (Whitcomb 1979: 107). Zigzag patterns analogous to those on ADd.09.080 and ADd.14.180 were observed on specimens from Kom el-Dikka in Alexandria (Marzouk 1957: Fig. 2; François 1999: Figs 8: 60, 9: 75) and Quseir al-Qadim (Whitcomb 1982: Pl. 35: I, q), while an elaborate “guilloche” as on ADd.07.609 was recorded on Alexandrian finds (François 1999: Pl. 4: 75).

► The most numerous among Dongolese finds are **underglaze slip-painted wares** resembling the so-called **Silhouette wares**. They were defined first by the color of the glaze background, and then by the type and style of decoration.

One of the subgroups of **green glaze vessels** was decorated with black slip-painted **vegetal designs** [Fig. 17.6:D]. It is represented by large, plain bowls with slightly tapered rims (e.g., ADd.07.393O) and low-ring bases (ADd.08.262). All specimens made of DGF1 fabric have an intermediate slip. Glaze covers the interiors and exteriors, except for their lower parts. The decoration is composed of circumferential bands in the upper part below the rim and of a pair of

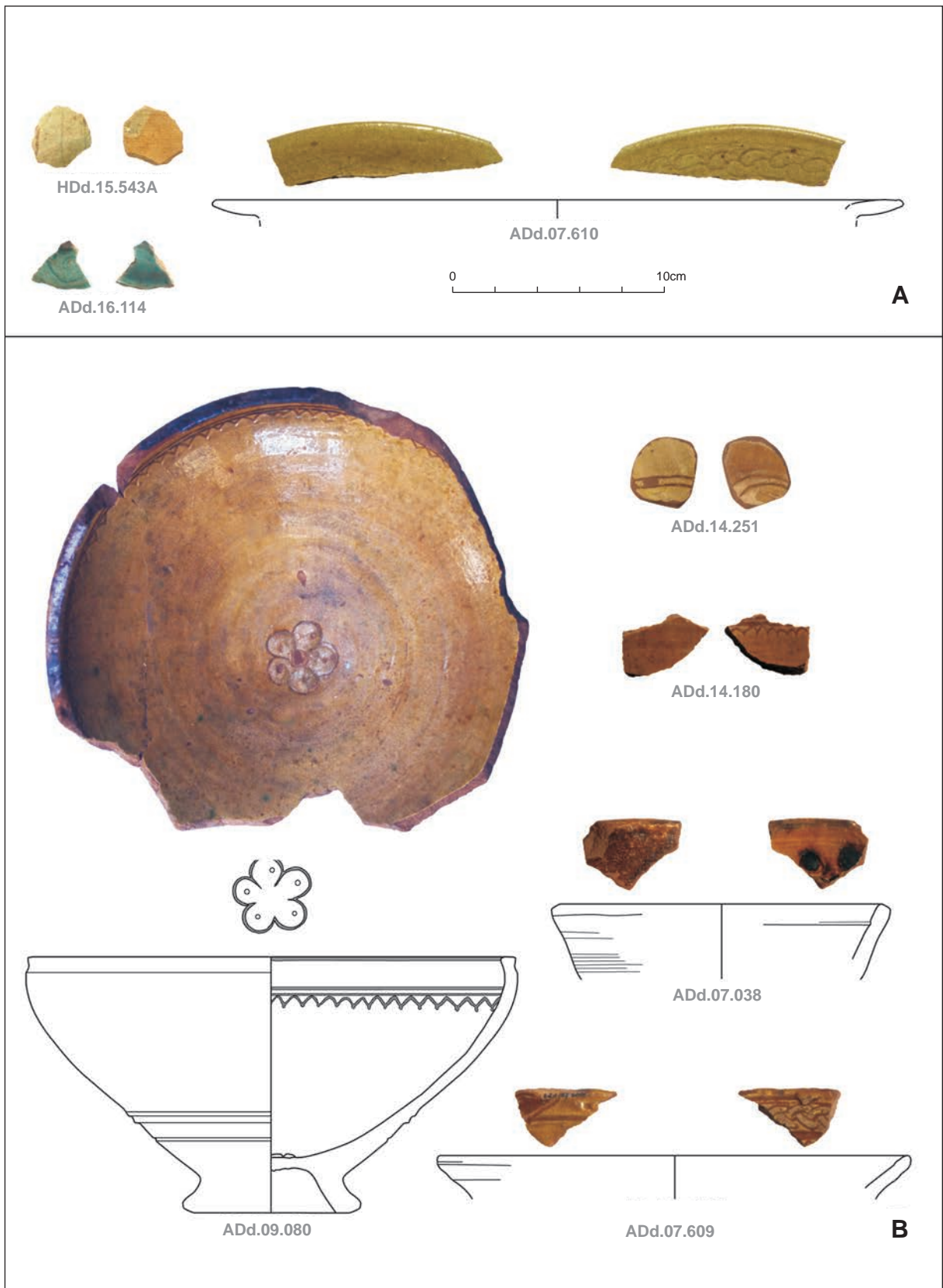


Fig. 17.5. Selected Egyptian Monochrome Wares with incised decoration: A – Fustat Fatimid Sgraffito; B – Mamluk Sgraff

diagonal or crossed stripes outside. Inner surface decoration consisted of leafed branches (ADd.07.077, ADd.07.393E) or a pair of concentric bands (ADd.07.077) surrounding a central composition placed on the floor (ADd.08.262). This group is characterized by its good quality and clear outlines of patterns.

Radial bands painted on the inside were characteristic of another distinctive subgroup [Fig. 17.6:A]. Almost all the fragments were made of DGF1 fabric, e.g., ADd.07.393G, and only ADd.07.393L was made of DGF2. No diagnostic elements were preserved, but body sherds suggest rather plain, bowl-like forms. A green glaze on a background of white slip was applied on both sides, except for the lower part of the external surface. Radial bands were painted inside, while single vertical stripes were painted outside. An exceptional example was a tapered, out-curved rim of a bowl ADd.07.393C [Fig. 17.6:B]. It was made of DGF1 fabric and featured a green glaze with an intermediate slip on both sides. The exterior bore horizontal and vertical black stripes, while the interior had a painted rim band and a **vertical panel with cross-hatching**.

Another variation was represented by fragments of ring-bases with black-painted **central piece designs** in the form of **rosettes** [Fig. 17.6:C]. Specimens ADd.07.057 and ADd.07.393B were made of DGF2. A green glaze with an intermediate slip covered the interior, while the exterior close to the bases remained unglazed. Their black-painted rosettes had triangular or rounded petals.

The second subgroup of **slip-painted** vessels consists of specimens with **turquoise** glazing. One of the variations had fine, black-painted vegetal designs [Fig. 17.7:B]. Most of the fragments were made of DGF2 (e.g., ADd.07.080, ADd.07.345), except specimen ADd.09.003 made of DGF3. Common features are the appearance of an intermediate slip and the lack of glazing on the lower external parts and bases. Clearly visible black designs composed of stripes or arcades adorned the outside, and different vegetal designs were observed inside, e.g., ADd.07.080 boasts a fine-painted branch. A single find ADd.09.003 with a rosette on the floor was reworked and used as a spindle whorl. Part of this variation presents similar features to those aforementioned, but the glazing was of a slightly different color, with a green shade and **vegetal** decoration that was executed without clear outlines of patterns, e.g., on ADd.07.036, ADd.07.393A, ADd.07.393AF [Fig. 17.7:C].

Different **geometric motifs** constituted another variation in this subgroup [Fig. 17.7:A]. Bowls were mainly made of DGF1 (e.g., ADd.07.170, ADd.07.393H) and DGF5 (ADd.16.086) fabrics. An intermediate slip was covered with turquoise glazing throughout the vessel apart from the base. Decoration is represented by vertical bands and stripes (ADd.07.170), or crossed stripes on the inside (ADd.07.393H), while specimen ADd.16.086 has a continuous band with zigzags in the upper part on the outside and hatched geometric designs.

The third subgroup of **slip-painted** vessels boasted **greenish turquoise glazing** and **bluish black painted vegetal designs**. Among bowls of this type, noteworthy examples are ADd.10.118 and ADd.07.078 [Fig. 17.8:A] made of DGF3 and DGF4 fabrics. Common features were the lack of an intermediate slip on the outside and glazing only in the upper external part. Splashes of bluish black are on the outside, while those inside have the form of vegetal patterns.

Another subgroup comprises specimens with a **light green glaze** and black, slip-painted **vegetal** motifs. Some of these had a more grayish-green shadow [Fig. 17.8:B], e.g., ADd.09.029 made of DGF7, without an intermediate slip and with decoration in the form of diagonal stripes and green smudges on both sides. Specimens with an opaque light green glaze, e.g., ADd.10.115, ADd.14.235 [Fig. 17.8:C], were made of DGF1 fabric and had a background of intermediate slip. Decoration in the form of pairs of diagonal stripes on the outside and vegetal patterns inside boasts fine and clear outlines. Moreover, ADd.10.115 has a trace of a tripod stand used in the firing process visible on the outside of the rim. Variations of the aforementioned vessel type include pieces on which the painted vegetal motifs have no sharp outlines, e.g., ADd.10.248, ADd.12.352 [Fig. 17.8:D]. They were made of DGF1 fabric and a very thin layer of light green glaze covers both surfaces with an intermediate slip. Fragment ADd.12.352 has a drop of glaze preserved on top of the rim. The quality was mediocre, and the application of the glaze was rather careless, as was the process of firing, which resulted in different shades of green surfaces.

The last subgroup presents fragments with **black or brown slip-painted designs** under an **olive-green glaze** [Fig. 17.8:E]. Examples ADd.15.002 and ADd.15.198 were made of DGF2. The glaze covers the inside and upper parts of the outside with no intermediate slip. In the case of the former, the decoration consists of

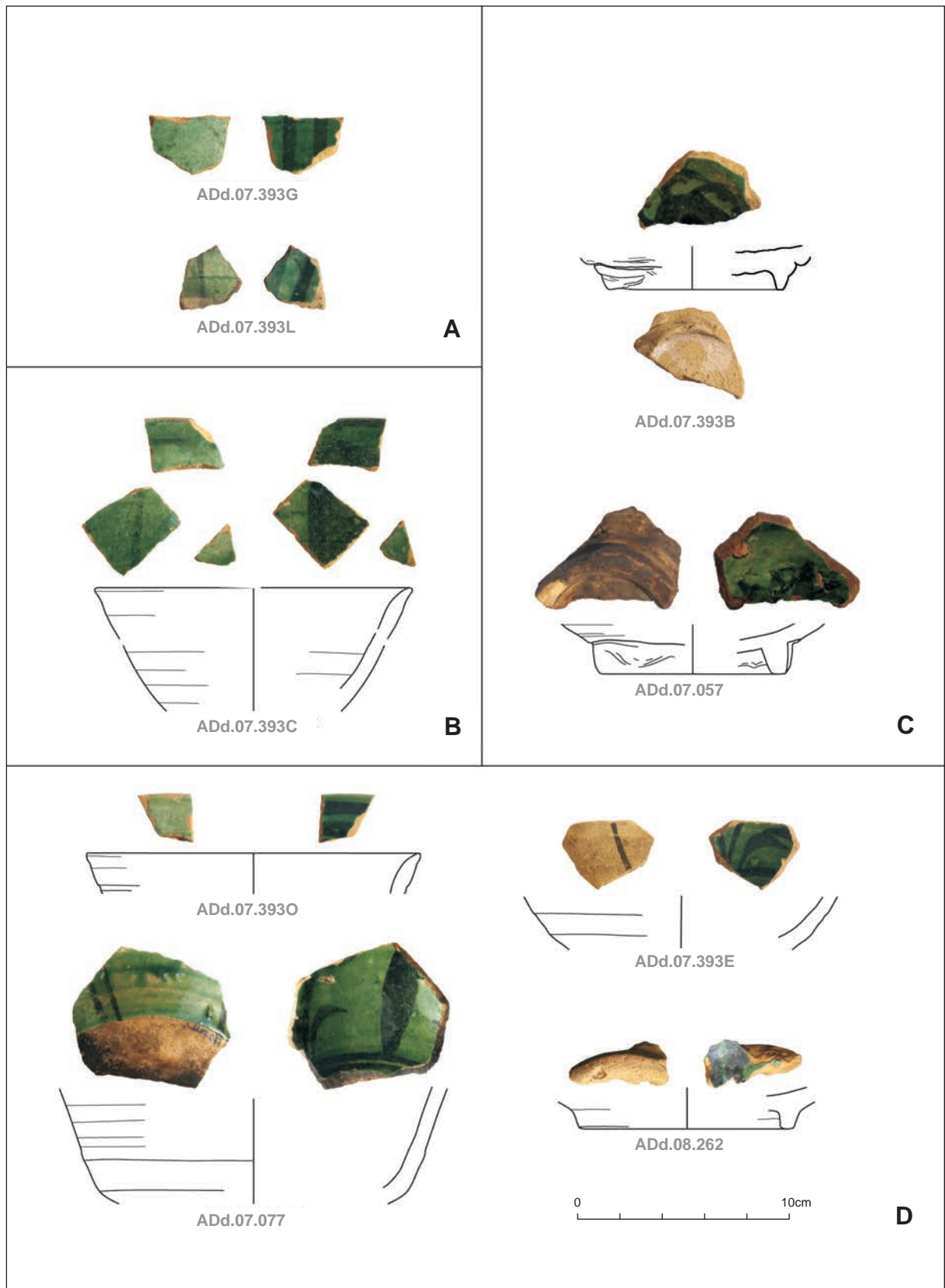


Fig. 17.6. Selected Egyptian black slip-painted wares under a colored glaze: A – green with radial bands; B – vertical panel with cross-hatching; C – central piece design, i.e., rosette; D – vegetal designs

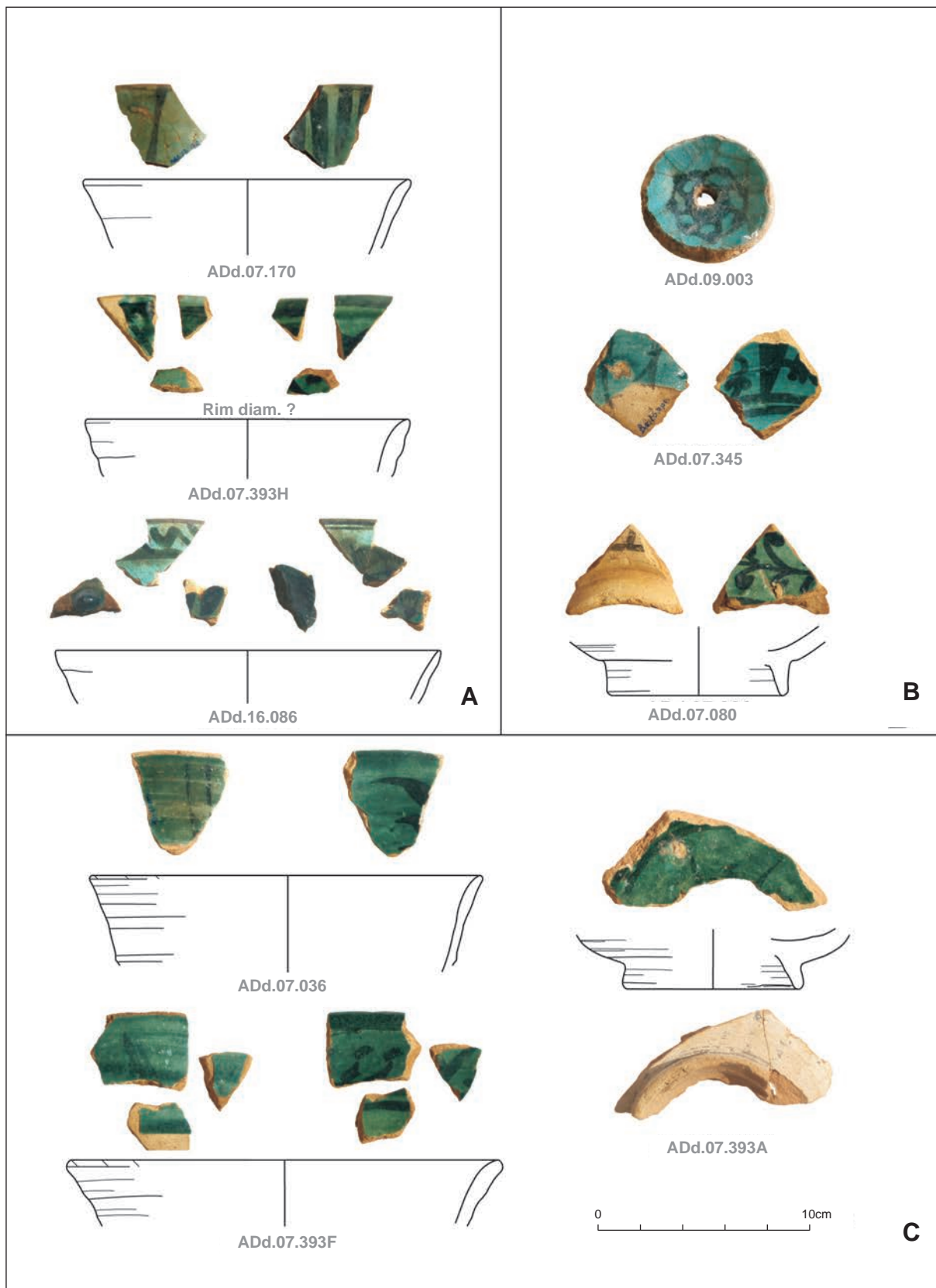


Fig. 17.7. Selected Egyptian black slip-painted wares under a colored glaze: A – turquoise with geometric motifs; B – clearly visible vegetal designs; C – not clearly executed

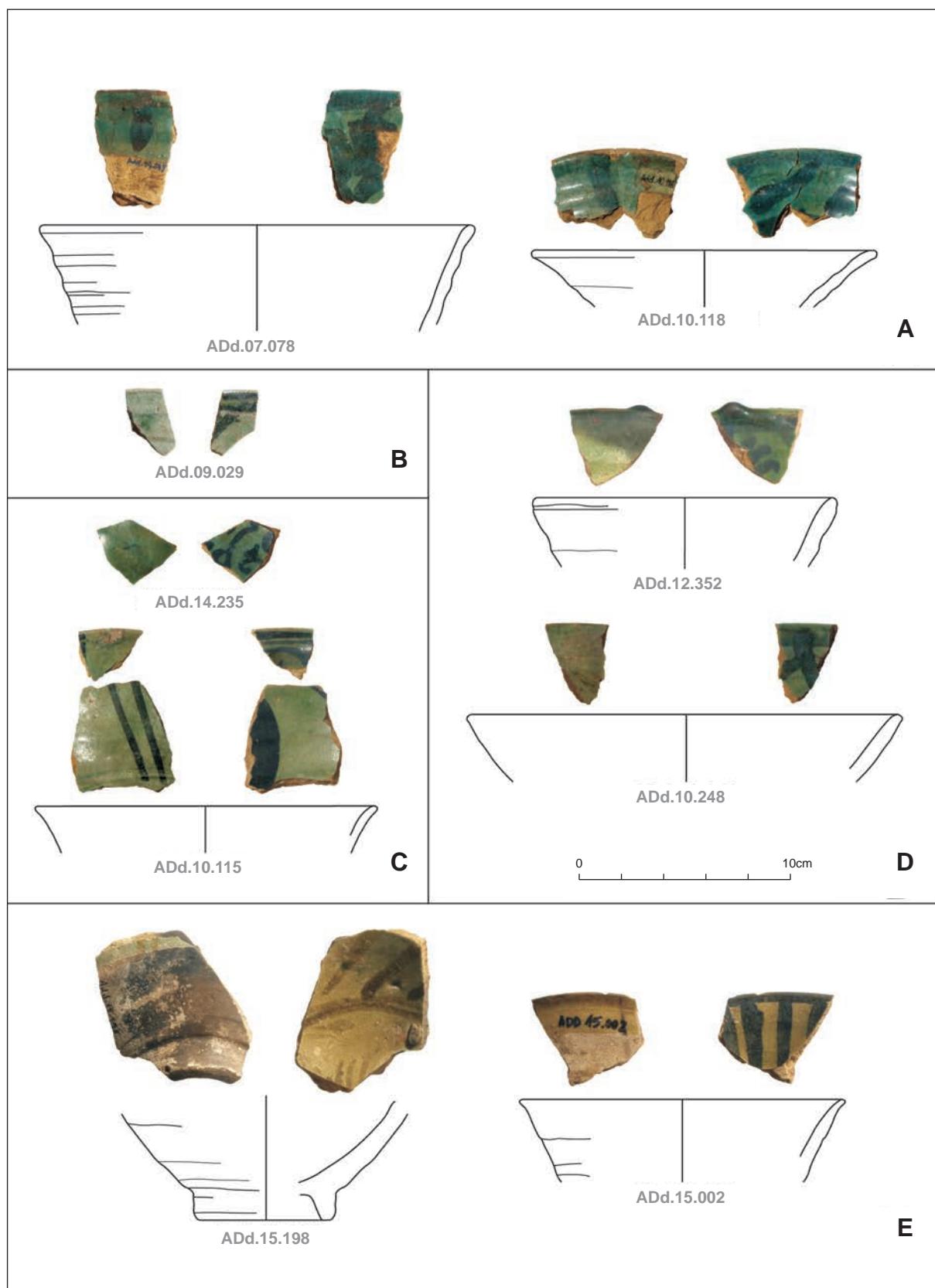


Fig. 17.8. Selected Egyptian slip-painted wares: A – with bluish black painted vegetal designs under a greenish colored turquoise glaze; B – black slip-painted vegetal motifs under a green glaze; C – light green or D – light green and vegetal motifs with blurred outlines; E – black or brown slip-painted designs under an olive-green glaze

black radial stripes inside, a single circumferential stripe outside, and a rim band. The latter has diagonal stripes and a concentric band inside.

Slip-painted underglaze wares with different-colored backgrounds (green, light green, turquoise, and black) and bluish black-painted designs, mostly of a vegetal character, represent a type similar to Silhouette wares. The originals, invented in Iran and dated to the 12th–13th centuries, presented a so-called “monumental style” (Watson 2004: 333). Their imitations were manufactured in Egypt and Syria and survived into the Ottoman period. Analogies to the Dongola finds came from Quseir al-Qadim (Whitcomb 1982: Pl. 38: k, l, m, s) and Qasr Wad Nimeiri (Smith 2003: Fig. 2: a). Radial stripes painted in blue and black glaze appeared on Iranian pottery of the 12th–13th centuries (Watson 2004: Cat.N.10), or were lustre-painted on an opaque white glaze (Watson 2004: Cat.O.20). The closest analogy came from Fustat and was dated to the 14th–15th centuries (Scanlon 1984: Pl. 16).

► The group of **glaze-painted wares** comprises different types of glazed vessels: Silhouette and imitations of Sultanabad or Chinese porcelain. Their common feature is decoration painted in a glaze of a blue, black or green color on an opaque background and covered with a transparent glaze.

A subgroup of the **Silhouette type** is represented only by two fragments of bowls [Fig. 17.9:A] made of DGF7 fabric. A fine, blue glaze was applied on an intermediate slip and black-glazed decoration was then executed: a rim band and a row of vertical, elongated, almond-like elements topped with a circumferential stripe on the outside (both in ADd.14.398 and ADd.12.187), and a row of triangles filled with curved lines on the inside (only in ADd.12.187).

Silhouette wares of the 12th–13th centuries were inspired by the luxury lustre-painted pottery. They were especially common in Iranian production (Watson 2004: 333) but were also manufactured in Egypt. Egyptian products analogous to the Dongola finds were discovered in Fustat (Saad Abdel Naby and Dixneuf 2013: Pl. 30: 72) and Alexandria (Redlak 2004: Fig. 1: type 1).

The second subgroup is that of vessels made of DGF5 fabric with a **blue and black glaze on white, under a transparent glaze (BBW)** [Fig. 17.9:E], with an intermediate slip and a white opaque glaze covering both sides. On the outside, the decoration takes the form of black vertical stripes (ADd.07.469, ADd.10.261), or black

and blue stripes and dots together with elongated, almond-like elements (ADd.16.084). The internal surfaces bear more elaborate motifs: horizontal bands below the rim, and panel-like radial bands filled with cross-hatching (ADd.10.261, ADd.16.068), stripes below the rim and a continuous frieze of spirals and dots in black (ADd.07.469), black triangles filled with blue horizontal lines (ADd.14.182), and blue vegetal (?) motifs (ADd.16.084).

The BBW group represented a stream of **imitations of Sultanabad wares**. It was produced in Iran during the Mongol Ilkhanid period and was characterized by the wedge-shape style, or the so-called “panel style”. The popularity of “Sultanabad wares” reached Syria, where imitations were produced, as well as Egypt in the 14th century (Saad Abdel Naby and Dixneuf 2013: 53; Scanlon 1984: 118). Specimens from Dongola belong to the Fustat production trend, probably of the later period, in which patterns were loosely based on the originals. Spirals and horizontal bands below the rim were noted on Fustat specimens (Saad Abdel Naby and Dixneuf 2013: Pl. 32: 78; Jenkins 1984: Pl. 12). Characteristic elongated, vertical elements on the outside were recorded on Alexandrian finds (François 1999: Fig. 14: 135).

A single example ADd.08.094 [Fig. 17.9:B] with **black-painted decoration on white** was made of DGF5 fabric. It has a background of an opaque white slip applied on both sides. Its decoration on the inside consists of a rim band, a circumferential stripe below, and a triangular panel filled with fine vegetal motifs; on the outside it has a vertical stripe. The decoration is additionally covered with a transparent glaze. The ornaments recall motifs on lustre wares from 10th-century Iraq (Watson 2004: Cat.E.20) and on 11th-century Egyptian wares (Watson 2004: Cat.Ja.5, 6). The coloration (white and black) resembles examples found in Fustat (Saad Abdel Naby and Dixneuf 2013: 55; Gayraud 1997: Fig. 17), Alexandria (Zagórska 1990: Pl. V: 2), Tod (Jöel 1992: Fig. 3), Quseir al-Qadim (Whitcomb 1979: Pl. 51: i), and Debeira West (Shinnie and Shinnie 1978: Fig. 1: 21).

A single specimen ADd.07.468 [Fig. 17.9:D] with **green-painted decoration on white** was made of DGF5 fabric. A background of white slip is covered with an opaque white glaze that drips to the base. Decoration in the form of very fine, detailed vegetal branches is executed on the floor. It resembles some of the motifs on 10th-century Iraqi lustre wares (Watson 2004: Cat.E.20) and on 11th-century Egyptian wares (Watson 2004: Cat.

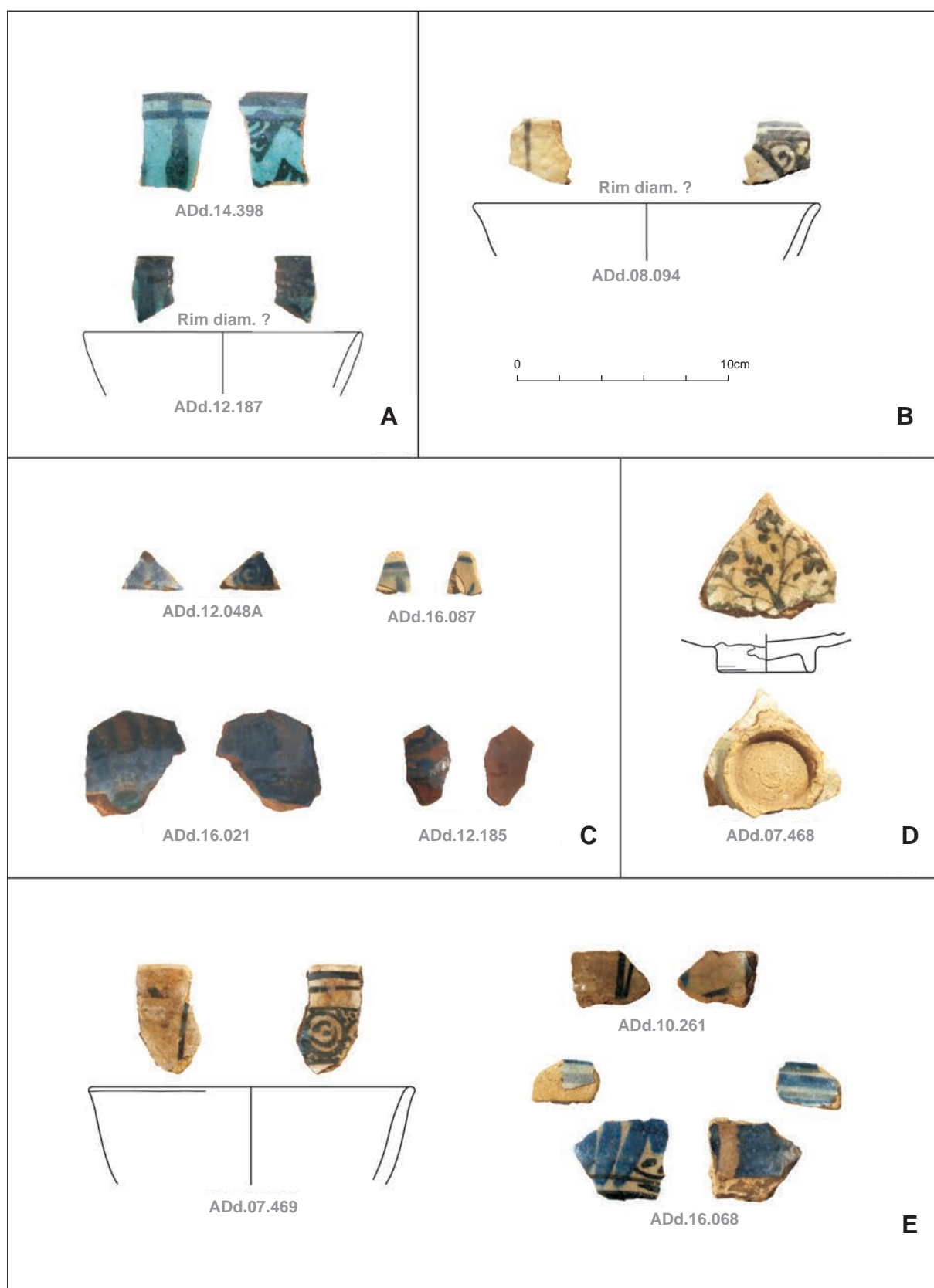


Fig. 17.9. Selected Egyptian glaze-painted wares: A – Silhouette type; B – black-painted decoration on white; C – blue designs on a white opaque glaze; D – green-painted decoration on white; E – blue and black glaze on white, under a transparent glaze (BBW)

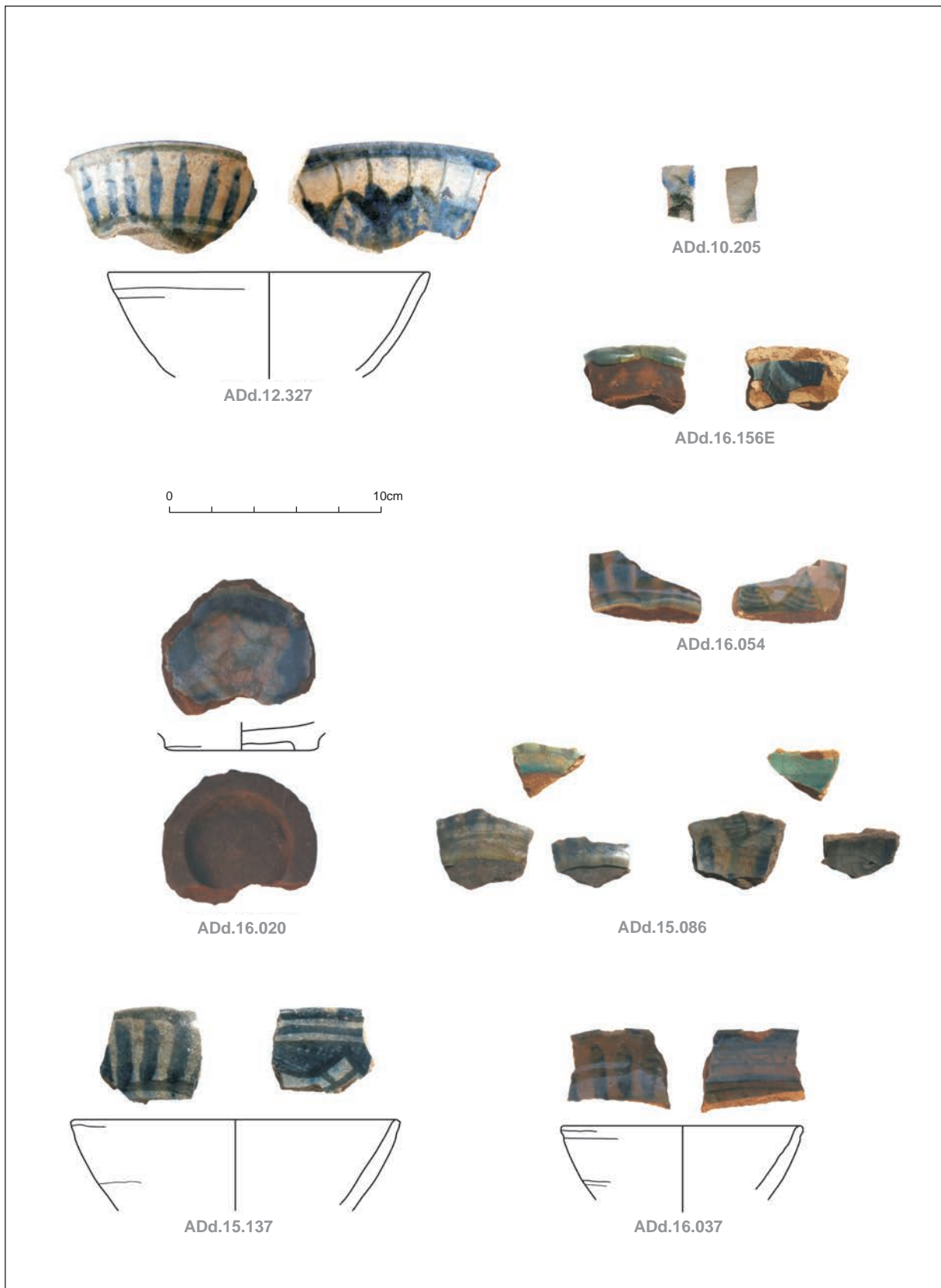


Fig. 17.10. Selected Egyptian glaze-painted wares with green and blue decoration painted on a white background

Ja.5, 6). The coloration (white and green) resembles examples found in Syria, where designs were painted in lustre (Redford and Blackman 1997: Table 2), or under-glazed pottery from the 15th century (François 1999: 25–26).

Another subgroup is composed of vessels representing various types, decorative motifs and levels of quality with one common feature: **blue designs on a white opaque glaze** [Fig. 17.9:C]. Bowls of different sizes were made of different fabrics: DGF1 (e.g., ADd.16.021), DGF5 (ADd.12.048A, ADd.16.087) and DGF11 (e.g., ADd.12.185). All fragments (with the exception of ADd.12.185) have an intermediate slip, and an opaque white glaze covers both sides. Decoration on the outside comprises vertical, elongated, almond-shaped elements (ADd.12.048A, ADd.16.021) or vegetal patterns (ADd.12.185, ADd.16.087), while inside it has the form of vegetal designs (ADd.16.087, ADd.12.185), spirals (ADd.12.048A), or circular motifs filled with cross-hatching (ADd.16.021). This type of glazed pottery is interpreted as an **imitation of the Chinese blue-and-white porcelain** of the Yuan dynasty (AD 1260–1368) and the beginning of the Ming dynasty (AD 1368–1644) that was being imported to Egypt (Saad Abdel Naby and Dixneuf 2013: 54). The production of these imitations in Egypt was confirmed by finds from Fustat (Scanlon 1984: Pl. 7). The filling of a cross-hatching motif appeared on examples from Fustat dated to the 14th–15th centuries (Scanlon 1984: Pl. 16). Spirals were observed on under-glazed pottery from Fustat (Jenkins 1984: Pl. 13: a). A blue-and-white sherd was also found at Qasr Wad Nimeiri (Smith 2003: Fig. 2: b).

The most numerous subgroup among the glaze-painted wares is represented by vessels with **green and blue decoration painted on a white background** [Fig. 17.10]. Plain bowls have rounded rims (ADd.12.237, ADd.15.137, ADd.16.037) and low-ring bases (ADd.16.020). A common feature is a background of white slip on both sides, with glaze covering all surfaces except the lower part on the outside and base. Different fabrics are recorded: DGF1 (ADd.15.086, ADd.16.037, ADd.16.054, ADd.16.156E), DGF7 (ADd.10.205), DGF8 (ADd.12.327, ADd.15.137), and DGF11 (ADd.16.020). The decoration on the outside conventionally consists of blue vertical, elongated, almond-like elements bordered with horizontal stripes (ADd.12.327, ADd.15.086, ADd.15.137, ADd.16.037, ADd.16.054) or green vegetal designs with blue shades (ADd.10.205). The decoration inside the vessels is composed of vegetal designs, often filled with lines,

leaves (ADd.16.156E), or petals and branches (ADd.15.086). In the case of ADd.16.054, triangles filled with lines form a continuous frieze. Specimen ADd.15.137 has semicircles filled with cross-hatching and placed as pendants below the rim, while ADd.16.037 features a “Greek meander”. The best-preserved decoration is recorded on ADd.12.327: a continuous band composed of triangular petals, filled with “leaves” and larger leaves between the petals. The use of a green color for painting designs was confirmed for Egyptian and Syrian workshops dated to the 15th century (Saad Abdel Naby and Dixneuf 2013: 54). The “Greek meander” motif and vertical, elongated, almond-like elements were recorded in Fustat finds of the 15th–16th centuries (Watson 2004: Cat.S.5; Mason and Keall 1990: Fig. 14). Cross-hatching-filled triangles were recorded at Qasr Wad Nimeiri (Smith 2003: Fig. 2: c). Moreover, similar decoration and colors were noted on bowls produced in Tunisia in the 14th century (Louhichi 2010: Fig. 123).

Non-Egyptian Glazed Wares

Glazed wares produced in Syria

The first group boasts **blue- and black-painted designs on white (BBW)**, under a transparent glaze [Fig. 17.11:A]. All fragments of bowls were made of DGF9 fabric and had an intermediate slip. Three are “luxury” Raqqa wares (ADd.07.504, ADd.08.081, ADd.08.082), and three are lower-quality products of an unknown Syrian workshop (ADd.07.444, ADd.15.033, ADd.16.318). The decoration of the latter fragments comprises vertical, elongated, almond-like elements and blue-painted horizontal stripes bordered with black on the outside, as well as rim bands with circumferential stripes below them and a row of spirals or black vegetal motifs with blue smudges.

The “luxury” Raqqa specimens feature three different types of decoration. Example ADd.07.504 has the most elaborate design: fine, blue, horizontal bands on the outside and a continuous frieze of geometric-vegetal patterns and spirals on the inside. Below it, a fragment with radial panels is preserved, and blue smudges can also be observed. Specimen ADd.08.081 has cross-hatched lines on the outside, while a black-and-white continuous frieze adorns the inside. It is composed of alternating bisected columns and tripod-circles with central dots (a so-called *Kufesque* band). Below it, a black continuous band appears, probably as part

of another composition. The partly preserved sherd ADd.08.082 is decorated with a black continuous band on the outside, and on the inside with black spot-like pendants and part of a zoomorphic depiction, as well as blue shadows.

Syrian imitations of Sultanabad Ware, like ADd.07.504, are well known from museum collections (Jenkins 1984: Pl. 3: a), as are the spirals of ADd.07.444 (Jenkins-Madina 2006: 168) and ADd.08.082 (Jenkins 1984: Pl. 1: c). The motif of a *Kufesque* band from ADd.08.081 is repeated on Syrian pottery (Jenkins-Madina 2006: W138; Watson 2004: Cat.K.5; Jenkins 1984: Pl. 8: a, 9: d), and has been recorded on imported pottery found in Alexandria (Choël et al. 2009: Fig. 1: 5) and Quseir al-Qadim (Whitcomb 1979: Pl. 51: d; 1982: Pl. 38: a). Syrian imitations of Sultanabad Ware were also found in Nubia, in Banganarti (Bagińska 2008b: Fig. 10: d) and Umm Melyekta (Fuller 2004: Pl. 6).

► **Blue and green painted decoration on white (BGW)** is found on a group of bowls or plates [Fig. 17.11:B] made of DGF9 fabric. An intermediate slip covers whole surfaces, while painted decoration in blue and green glazes, as well as a transparent glaze, are applied on entire surfaces, except the lower part. Example ADd.15.102 has vertical, elongated, almond-like elements bordered with horizontal stripes on the outside, while inside some geometric or floral motifs appear in the upper part, and the lower part probably had some central design. The technique and quality of the glaze resulted in a mix of colors and the decoration is poorly visible. On the other hand, specimen ADd.15.156 features clear horizontal bands on the outside and inside, and rounded motifs with central dots placed over lugs. The space between them is filled with geometric designs: lines, dots, zigzags and blue splashes. Example ADd.17.059 has blue and green decoration on a white background in the form of elongated, almond-like elements outside and triangular panels inside, filled with dots or spirals. These examples, especially ADd.15.156, find numerous analogies in pottery from Syria (Jenkins 1984: Pl. 3: c, 5: a), as well as Syrian examples found in Fustat (Watson 2004: Cat.R.4). Other specimens from the Islamic world presented similar designs (François 2009: Pl. 5: b, c). Example ADd.17.059 is an imitation of Sultanabad Ware, of which good quality items were manufactured in Raqqa (Jenkins 1984: Pl. 3: a).

► The last in the group of Syrian imports is **Silhouette Ware** [Fig. 17.11:C]. It is represented

by a single fragment of a bowl ADd.13.026 made of DGF9 fabric. An opaque turquoise-blue glaze was applied on an intermediate slip. Black glaze floral motifs were painted inside, and fragments of a black, horizontal band are visible outside. A transparent glaze covers both surfaces.

The quality of decoration recalls specimens of the Silhouette type originating from 13th-century Iran (Watson 2004: 333, Cat.N.1). Similar examples, produced in Egypt, are known from Alexandria (Zagórska 1990: Pl. IV: 2) and Fustat (Saad Abdel Naby and Dixneuf 2013: Pl. 30: 72) and are dated to the Ayyubid period. Syrian pottery of this type was discovered also in Jerusalem (Dolinka n.d.: Fig. 5: 2) and Raqqa itself (Jenkins-Madina 2006: W91), and was dated to the 13th century.

Glazed ware produced in Byzantium

A group of three specimens represents **Byzantine Sgraffito Ware** [Fig. 17.12:A]. The fine, dense, orange fabric DGF14 originated from the Northeastern Mediterranean. Similar clay was recorded on the site of Korucutepe in Turkey (Bakirer 1974: 100). Rounded rims (ADd.11.079, ADd.14.207) and a semi-ring base (ADd.07.244) belong to plain bowls. A thick cream glaze covers an intermediate slip and was applied on both surfaces, apart from the bottom, where a purple “self-slip” and a drip of white glaze is observed. The decoration has the form of a curved line incised on the body and accompanied by a smudge of reddish brown glaze (ADd.07.244), or engraved circumferential grooves, two and three of which are placed inside, below the rim, while on the outside a horizontal band of green glaze was applied (ADd.11.079, ADd.14.207).

Glazed pottery was not manufactured only in Islamic workshops; Byzantine and Crusader production has also been confirmed. The best-known among these non-Islamic wares is Byzantine Sgraffito Ware with glazing on both sides, rarely with none outside, and elaborate engraved motifs. This ware was recorded e.g., in Israel, on Crusader sites dating to the 12th–13th centuries (Avissar and Stern 2005: 41–44, Pl. XIII). Examples made in the Aegean had green splashes of glaze analogous to the Dongolese specimens (Avissar and Stern 2005: Pl. XIV: 1, 2), as did products from Paphos on Cyprus dating to the 13th–14th centuries discovered as imports on Syrian sites (Stern 2014: Figs 8, 10). A specimen published by Olivier Watson has a provenience reportedly from Afghanistan, but

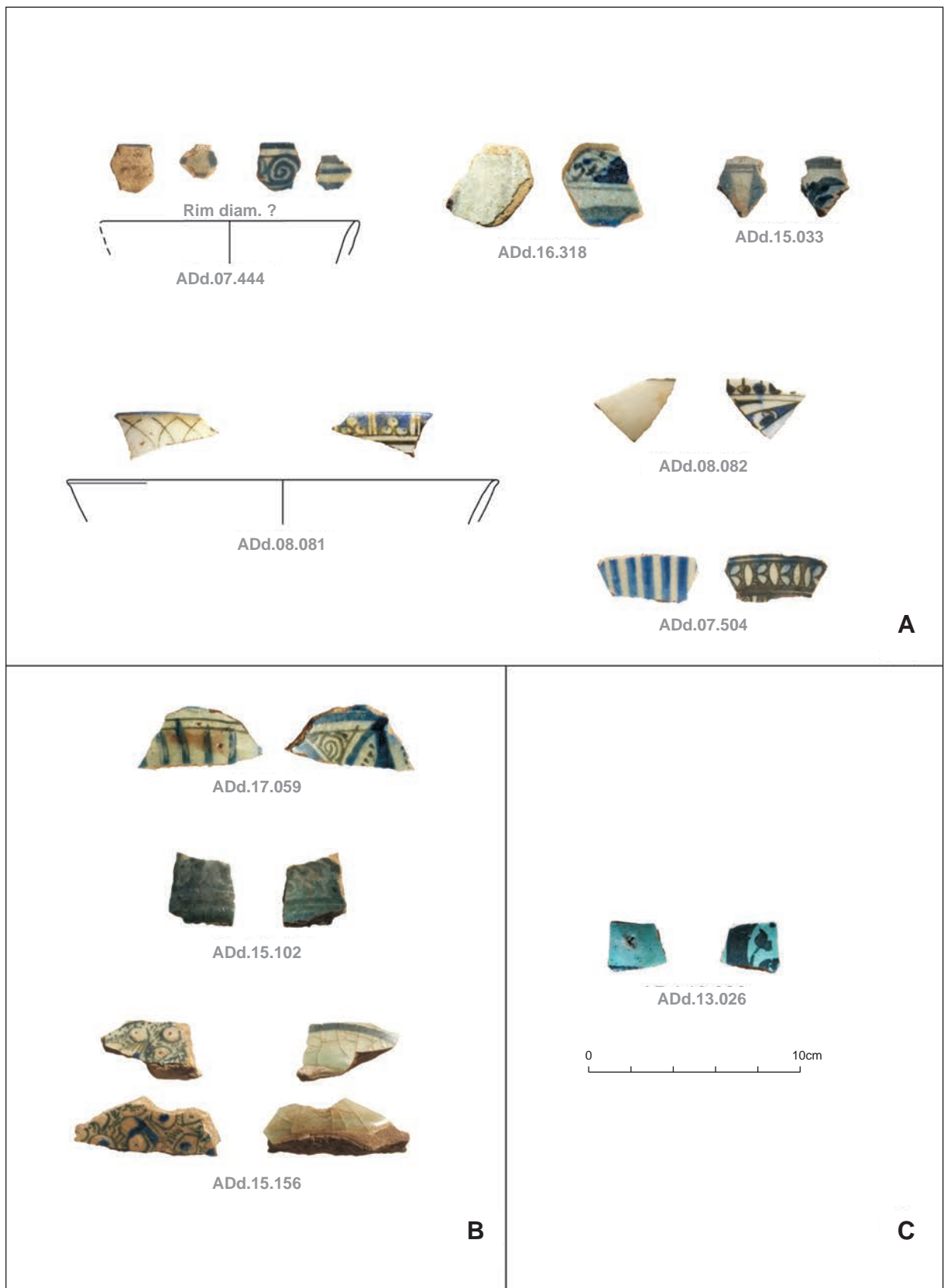


Fig. 17.11. Glazed wares produced in Syria: A – blue- and black-painted designs on white (BBW); B – blue- and green-painted decoration on white; C – Silhouette Ware

Eastern Iran was also mentioned as a possible origin, and its date was established as the 11th–12th century (Watson 2004: Cat.Ie.4). It seems that the museum collection record was incorrect, and this example should rather be connected with the Eastern Mediterranean.

Byzantine Sgraffito Ware was found on Kom el-Dikka in Alexandria (Kubiak 1969: 17; Redlak 2004: Fig. 1) and in Fustat (Saad Abdel Naby and Dixneuf 2013: 66, Pl. 30: 90), where Crusader pottery was also discovered (Kubiak 1970). The plain specimens from Dongola are simpler versions of the richly decorated Byzantine Sgraffito Ware described above. Examples analogous to those from Dongola were found in Alexandria, where they were identified as Miletus Ware (François 1999: 135, Fig. 31), and on the Red Sea coast in Quseir (Whitcomb 1979: 105).

Lustre Ware produced in Iraq

Only two fragments of Lustre Ware were found in Dongola [Fig. 17.12:C]. They were made of DGF6 fabric and featured vegetal motifs painted in lustre on an opaque white glaze. Specimen ADd.11.009 has reworked side surfaces and was probably re-used as a token. Polychrome, golden and golden-honey colors of lustre in drop-like spots appeared on the outside of vessels manufactured in Iraq during the 9th century (Watson 2004: Cat.E.4). The poorly preserved HDd.16.487, with a monochrome, honey-brown lustre paint, seems to belong to the 10th-century production in Iraq (Watson 2004: Cat.F.15).

Monochrome Ware produced in Iran

The single specimen HDd.15.544 [Fig. 17.12:B] is a unique example of a handle that belonged to a small form, most probably a jug. It is made of DGF9 fabric and is quite broad and flat, with an additional coil applied on the top. An opaque green glaze covers the whole surface, and lighter or darker shades, as well as cracking lines can also be observed.

Specimens of ewers and jugs equipped with an analogously shaped handle and sometimes bearing incised decoration on the body were of Iranian origin and dated to the late 12th–early 13th centuries (Watson 2004: Cat.I.12, 13).

Celadons from China

Pottery of Chinese origin, representing the celadon type, is characterized by a high quality jade-green glaze [Fig. 17.12:D]. It covers a hard-fired body of grey DGF10 fabric. Diagnostic fragments include rounded rims (ADd.09.078,

ADd.10.247), and the top edge of the first one is also wavy or serrated. The same technique was observed in the case of ADd.12.085. Fragment ADd.97.057 and specimens mentioned above belong to large ledged-rim plates, as does a broad base with a low ring ADd.16.019. The exceptional ADd.07.035 is a small high-ring base of a small bowl. A jade-green glaze covers all surfaces, including bases. On the grounds of surface treatment and decoration, three types of celadon production can be distinguished:

► **Longquan** (also transcribed Lu'ang Ch'uan) type, manufactured in the Zhejiang province, is characterized by colors varying from white to green, but the most common is jade green, imitating jade vessels. Molded, engraved and appliqué decoration is also a distinctive feature. Among the Dongolese assemblage, they are the most popular type (e.g., ADd.97.057, ADd.10.247, ADd.12.085, ADd.16.019), and two of them (ADd.97.057, ADd.12.085) have on the inner wall molded decoration in the form of broad flutes.

► **Guan** type, manufactured in Hangzhou, has cracked surfaces that serve as decorative patterns. Two examples from Dongola (ADd.07.035, ADd.09.078) belong to this type.

► **Fujian** type, manufactured in Anxi, was an imitation of the Longquan production. Decoration featuring engraved floral motifs appears on one fragment from Dongola (ADd.16.254).

Imported Chinese vessels, represented mainly by the production of Longquan, were well distributed throughout the Near East from the 8th century and rapidly imitated by local workshops (Scanlon 1970a; François 1999: 29–30). The forms, as those with wavy-shaped rims, were manufactured in Iran during the 13th–17th centuries (Watson 2004: Cat.Q.22, Cat.U.16–18). A specimen resembling ADd.97.057 was also discovered in Jerusalem and dated to the 14th century (Dolinka n.d.: Fig. 7: 4). Imports of celadons to Egypt (together with other Chinese wares, namely White and Blue-and-White porcelain) were recorded in Fustat (Scanlon 1970a: Pl. XVI: b; 1980: Pl. XI; 1984: Pl. 2), Alexandria, and the Sinai Peninsula (Saad Abdel Naby and Dixneuf 2013: 65; François 1999: 143, Fig. 34: 356–358), as well as on the Egyptian Red Sea coast in Quseir al-Qadim (Whitcomb 1979: Pl. 51: r).

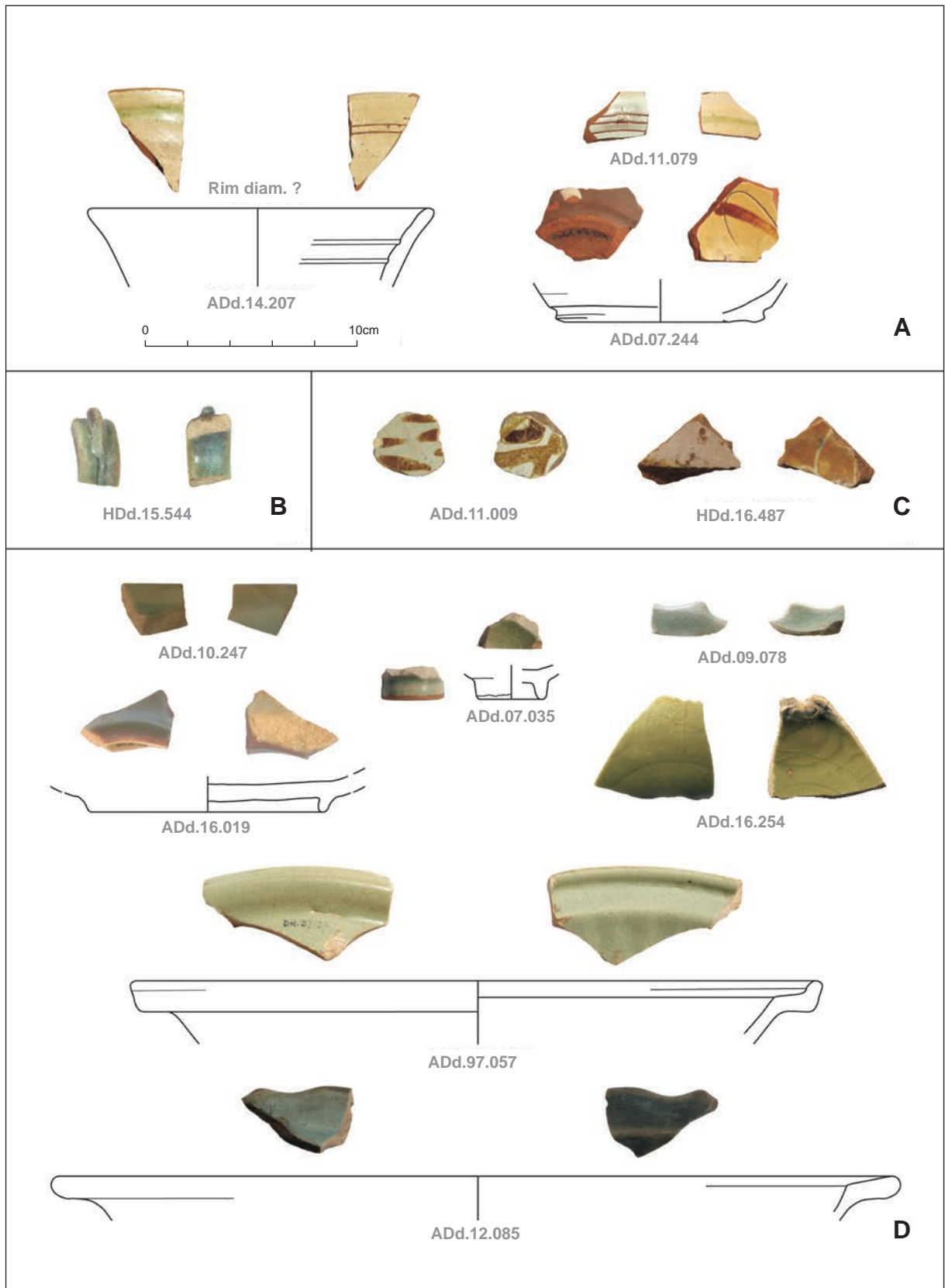


Fig. 17.12. Other imported glazed pottery: A – Byzantine Sgraffito Ware; B – Monochrome Ware produced in Iran; C – Lustre Ware produced in Iraq; D – Chinese celadon

CHRONOLOGY

The glazed pottery from Dongola excavated in the 1997 and 2003–2016 seasons was dated to the period from the 9th to the 16th centuries and occurred mainly in occupational phases connected with the Kingdom of Makuria. Nonetheless, glazed ceramics earlier than the 16th century were also found in re-deposition in the Funj-period settlement (16th–17th century).

The earliest evidence is connected with ceramic production that flourished under the Abbasid caliphate in the 9th–10th centuries and is represented by **Lustre Ware** imported from Iraq. The findspot in Building SWN.B.I, destroyed by Funj domestic activity (ADd.11.009), was disturbed, and layers in room 36 were chronologically mixed. In Courtyard A in the Monastery on Kom H, the find (HDd.16.487) came from a rubble layer.

Another group comprised Egyptian products of the Fatimid period (AD 967–1171), represented mainly by vessels with incised decoration under a **monochrome** glaze (e.g., ADd.07.610, ADd.16.114) including fragments of the so-called **Fustat Fatimid Sgraffito** dated to the 10th–12th centuries. Moreover, specimens of **Splashed Ware** (ADd.12.004, ADd.14.298, HDd.14.055, HDd.17.161) from the 10th–11th centuries belong to this period. A portion of the Monochrome Ware (especially turquoise, blue, and some green) was most probably connected with Fatimid workshops. Turquoise examples found in the 2010 season (ADd.10.117, ADd.10.209), during exploration of the fill in unit 44 in Building SWN.B.I, were from an undisturbed archaeological context. Other examples came from disturbed layers or secondary deposits in the Funj settlement, as well as from the Central Building in the Monastery on Kom H, where they seem to have been deposited in original layers.

In the Ayyubid period (AD 1171–1250), glazed pottery production was represented by blue and black painted decoration under a transparent glaze, the so-called **Silhouette Ware**, with fine vegetal patterns. They originated from Egypt (ADd.12.187, ADd.14.398) and Syria (ADd.13.036). Another specimen manufactured in Egypt was white-and-black under a transparent glaze (ADd.08.094). Part of the **Monochrome** group of pottery is believed to date from the Ayyubid period, but no evidence to prove this

assumption can be found besides a diagnostic fragment of a jug handle, HDd.15.544, recognized as an Iraqi product and dated to the end of the 12th–13th century. All sherds mentioned, except the last, were discovered in Building SWN.B.V together with mixed pottery of Funj and late Makurian date.

The bulk of the glazed finds belonged to the Mamluk period (AD 1250–1517), mostly to the 15th–16th centuries. The earliest examples were found on Kom H in Courtyard A, and later ones in occupational layers inside Building SWN.B.V, Building SWN.B.I close to the Citadel walls, as well as inside houses of the Funj period. Their long-lived presence was most probably connected with their “luxury” character. It seems that, given their eye-catching colors, they were considered attractive raw material for making weights (e.g., ADd.14.039) and other objects.

The majority of the **Monochrome Ware** and imitations of Chinese celadons belonged to Mamluk production, as indicated by finds from Fustat, which included both Chinese originals and Egyptian imitations dated to that period (Scanlon 1984). Moreover, a large assemblage of **Silhouette Wares** under a transparent green glaze was found in Mamluk pits investigated in Fustat (Scanlon 1984: 122, who remarks that “the preference for green indicates a purely Egyptian taste”).

Characteristic of the Dongola assemblage were specimens with **blue- and green-painted** patterns on white backgrounds, under a transparent glaze. The use of green color indicates 15th-century Egyptian and Syrian production (Saad Abdel Naby and Dixneuf 2013: 54). Diagnostic motifs were the “Greek meander” (e.g., ADd.16.037), vertical, elongated, almond-like elements adorning the outside (e.g., ADd.12.327), and cross-hatching patterns as the fill of different ornaments (e.g., ADd.15.137). Those decorative elements were surely connected with the Fustat finds, dated to the 14th–16th centuries (Watson 2004: Cat.S.5; Mason and Keall 1990: Fig. 14; Scanlon 1984: Pl. 16).

The numerous group of wares with **black slip-painted patterns under green glaze** (e.g., ADd.07.077), resembling earlier “silhouette” products and representing the long-lived tradition of this ware, most probably lingered to the end of the Mamluk period. Notably, well-known **Mamluk Sgraff** type pottery (e.g., ADd.09.080) was seldom recorded.

CONCLUSIONS

The assemblage of glazed pottery collected in Dongola is composed mainly of Egyptian products of the Mamluk period, monochrome and under-glaze-painted ware (mainly black under green, as well as green and blue on white). The repertoire of shapes is restricted mainly to plain bowls. Other vessel forms (plates, cups, jars, and a miniature lid) were infrequent. The fabrics mainly represented quartz clay in different shades of creamy yellow, while alluvial fabrics were rare. The absence of pink clay of the Aswan type is remarkable, as it is characteristic of the earliest glazed ceramics of the 8th–9th centuries in Egypt.

The second significant feature is the absence of multicolored wares (formerly known as “Fayumi” ware), frequently recorded on other Nubian sites located to the north, e.g., Qasr el-Wizz, Debeira West, Gebel Adda, and Meinarti. In their stead, a group of fine Splashed Ware, or wares featuring turquoise and brown splashes on white, was recorded. They are analogous to the finds from the Egyptian monastery at Naqlun in the Fayum Oasis (personal observation).

The assemblage of glazed pottery of the pre-Mamluk era excavated in Dongola came from archaeological layers unconnected with the 8th–12th centuries. All of them were re-deposited in later contexts dating to the 13th–14th centuries or the Funj period. The aforementioned Splashed Wares were the only ones discovered in their original contexts of deposition. The Abbasid and Fatimid finds were discovered in disturbed fills, alongside pottery of different chronological periods. Layers associated with occupation and later domestic activity in Building SWN.B.V (the Church of Archangel Raphael) yielded glazed pottery of the 13th–15th centuries (mainly the latter), of Egyptian and Syrian origins.

The majority of wares with black slip-painted decoration under a green glaze were discovered in fills inside houses of the Funj period. Their precise date is difficult to establish, but they seem to be connected with the 16th century. The presence of glazed pottery of this type might be associated with the earliest horizon of Funj-period settlement and their long-lived usage.

The evidence from the Mamluk pits in Fustat suggests that the quantitatively important group of semi-Silhouette ware, black-painted under green glaze, was produced in Egypt.

The rarity of Mamluk Sgraff ware is puzzling, as it was frequent in Serra East (Bruce B. Williams, personal communication) and widespread in Egypt. One is also struck by the absence of luxury types with incised armorial bearings or blazons and calligraphic designs. Variations in the pottery assemblage may depend on specific archaeological contexts, such as the church (Building SWN.B.V) and houses, or could be a result of a conscious selection of vessels bearing no symbolic (Arabic) decoration. The presence of Chinese celadons and their imitations is a reflection of the Mamluk-era Egyptian market and close trade relations with Egypt. Two routes should be considered: the river route along the Nile, and the Red Sea route. The first is an important trade route with a long-lived tradition (amphorae, other containers and vessels), and the second developed dynamically in modern times (later examples of Chinese porcelain, Ottoman imitations of porcelain). The shipwreck found close to Sadana Island off the Egyptian Red Sea coast (Ward and Baram 2006) from about 1765 contained imported goods known also from recent excavations in Dongola (porcelain cups, clay tobacco pipes), and confirmed import by the second route. Trade between Egypt and the Kingdom of Makuria, after intensification in the 6th–7th centuries, seems to decline towards the end of the first millennium and then flourish again sometime in the 13th century. Wars with the Mamluks of Egypt caused great destruction in Dongola, but they apparently were not detrimental to trade relations, since an increase in the quantity of glazed pottery is observable from that period onwards. Closer relations with the northern neighbor and the gradual Islamization of Dongola after the mid-14th century may have been tied with an increase in the import of glazed pottery. Future research and studies on glazed ceramics from other sites close to Dongola may help improve our knowledge on exchange between this region and Egypt.

BARBARA IDZIKOWSKA

A RECKONING COUNTER FROM NUREMBERG FOUND IN DONGOLA

Coin-like objects referred to as jetons or reckoning counters (Ger. *Rechenpfennig*) appeared in the coinage systems of medieval Europe in the early 14th century, first in Italy and subsequently in France, the Netherlands, England, and Germany. They were indispensable tools in accounting (addition and subtraction) using a board called abacus, which had its origins in antiquity. A reckoning set consisted of a board and 30–50 counters. Such sets were used in merchant shops, mints, taxation offices, castles, rural estates, and monasteries (Mikołajczyk 1977: 181; Dutkowski 1996: 15–16; Paszkiewicz 1999: 186–189). The repertoire of iconographic motifs on jetons was derived from devices on contemporary circulating coinage and included royal portraits, heraldry, religious symbols, and mythical creatures. Though vast, this repertoire was nonetheless recurrent over the centuries.

Jetons were struck in mints on special order and, since demand for them grew over time, their popularity was exploited by minting workshops in Nuremberg. Instrumental in this process was the Fugger family. The exploitation of copper sources in Central Europe, mainly in Hungary, made Nuremberg a nodal point on the trade route used for exporting copper ores to Western Europe. The opening of the Fugger factory in Nuremberg in 1486 contributed to the growing prosperity of the city as a brass production and trading center. Brass and copper products of the Nuremberg mint, including jetons, were exported to destinations throughout Europe from the early 16th century onwards (Mitchiner 1988: 307).

The earliest jetons of copper and brass, struck by families of Nuremberg mint masters since

about 1480, were not dated. They were characteristic for their fictitious, nonsensical segmented legends struck in Gothic script, they lacked mint marks, and if in later periods they bore devices like a cross, a rose, a fleur-de-lis, or a wedge, they represented anonymous workshops and carried no references to mints on record in archives of the period in question.

The earliest Nuremberg jetons bearing Latin inscriptions, names of their producers, and sometimes also dates, appeared on the market around 1550 and came from the workshop of Jorg Schultes. After 1580, following the so-called Krauwinckel family minting reform, all jetons produced in Nuremberg had a Latin legend with the name of the mint-master or workshop, the city, as well as a saying or proverb (Mitchiner 1988: 391; Mikołajczyk 1977: 182–183; Mielewczyk and Dutkowski 1995: 14). A distinctive iconographic feature of 16th-century jetons was an imperial orb within a three-arch tressure, modeled on a circulating gold gulden with orb (a florin) struck in Basel, Nordlingen, and Frankfurt in the 15th and 16th centuries, and/or a shield of arms; the reverse bore royal crowns, Bourbon fleurs-de-lis, rosettes, and figural representations.

Jetons struck in Nuremberg in the 16th century were divided by Michael Mitchiner (1988: 355–390) into five thematic groups depending on the imagery they featured:

- a) French shield jeton, about 1500–1525;
- b) Lion of St Mark jeton, about 1500–1570;
- c) Ship-penny jeton, about 1490–1550;
- d) Rose-orb jeton (five-petal rose in the center of the obverse surrounded by three crowns and three fleurs-de-lis alternating - imperial orb),

about 1500–1550 (–1585); three series can be distinguished within this group: Series 1) Large orb; Series 2) Normal orb, without an initial mark; Series 3) Normal orb, with Crown initial mark;

e. Venus-penny jeton, about 1540–1560.

The Dongolese specimen represents a 16th-century anonymous jeton of the group “d”, series 1, which was struck in 1500–1550 (–1585).

In the 18th century, the accounting board with reckoning counters began to slowly be replaced by the counting frame, but the production of jetons in Nuremberg continued, as old jetons became gaming counters (*Spielmarken*) and permeated into circulation as petty substitute

coinage in response to insufficient supply of low denominations in local coinage.

A jeton resembled a coin in appearance, but was not a coin. It had no buying power and could not be withdrawn from circulation through *Renovatio Monetae*. It presented a broad spectrum of decorative motifs, and was struck over a long period without major iconographic changes. It could, therefore, whether intentionally or by chance, assume the role of a coin (e.g., gold gulden with the imperial orb), but more commonly it lost its intended purpose and became a memento, a trinket, a numismatic element of jewelry – hence the drilled holes for suspension or attachment in some finds (Maué and Veit 1982: 118, 182–183).

Inv. no.	ADd.16.352
Findspot	Citadel, sector between the palace (SWN.B.I) and the Church of Archangel Raphael (SWN.B.V), upper fill
Obverse	Three crowns and three fleurs-de-lis alternating around a five-petal rose. Within a beaded border a fictitious segmented legend in Gothic script: BOVAR/ [..] /BOVAR/ annulet / mint mark “fleur-de-lis”?/ BOVAR / [..]
Reverse	Imperial orb under a three-arch tressure. Within a beaded border a fictitious segmented legend in Gothic script: B[.]NO/ annulet / mint mark “fleur-de-lis”?/ BVENO [.] / BVEN[.] / mint mark “fleur-de-lis”?/[.]
Material	Brass
Dimensions	D. 23 mm; Th. 0.5 mm; no weight given – reference weight 75–150 g
Date	Around 1550–1585
Origin	Germany, Nuremberg, anonymous workshop; mint mark blurred, probably a “fleur-de-lis”
References	Mitchiner 1988: 377–381, Nos 1190–1226; 1204 similar



ADd.16.352

Fig. 18.1. Nuremberg reckoning counter from the 16th century

The Nuremberg jeton of the rose-orb type [Fig. 18.1] was found in the upper layer of the sector between SWN.B.I and B.V datable to the late Funj period, outside regular architecture. It was recovered among glazed pottery and animal bones, which suggest a household and service function of its context. The jeton from Nuremberg reached Dongola and was subsequently lost there no earlier than in the second half of the 16th century and no later than the late 17th–early 18th century, when the Citadel was abandoned. The economy of this region in the Funj period was based on barter, so this piece most likely played the role of jewelry, as indicated by two perforations on its edge.

European jetons are rare but not unattested in Nubia. The collection of the Archaeological Museum of the University of Stavanger in Norway includes a piece from Abka. It is a pendant from a necklace or headdress composed of

coral(?) and glass beads with a suspended brass jeton from Nuremberg (Then-Obluska 2016: 592, Fig. 10). It is of the same type as the one found in Dongola, also a group “d” rose-orb with a fictitious segmented legend struck in Gothic script. The only difference is that the jeton from Abka had additional decorative elements in the form of three pairs of annulets in the space between the fleurs-de-lis and the inner border, which points to series 2 or 3 in Mitchiner’s classification, while the jeton from Dongola belongs to series 1.

It is assumed that European objects, including jetons from Nuremberg, owe their presence in Nubia in the 16th century to trade relations between Europe and the Ottoman Empire after the conquests of Suleiman the Magnificent (Then-Obluska 2016: 592), but questions as to when the jeton reached Dongola, for whom it was intended, who wore it, who lost it and when, remain unanswered.

WŁODZIMIERZ GODLEWSKI

AMULET FOR THE WIFE OF ‘ABD ALLĀH B. MARYAM

Amulet ADd.13.064 [Fig. 19.1] was found inside B.H.119.2, a small room of house B.H.119 inhabited in the Funj period (16th–17th century) (Godlewski 2015d: 202–204). The object was damaged; its external leather case (dimensions: H. 5.8 cm; W. 4.3 cm; Th. 0.7 cm) was preserved only in fragments, and the lower part of a twice-folded textile used to wrap the text was disintegrated, exposing a piece of paper with traces of Arabic text.

The leaf of paper on which the amulet had been written was folded several times (four times horizontally and eight times vertically), so that it could be inserted into the case [Fig. 19.2]. The leaf was folded by the writer of the text, as indicated by an inscription on the outside of the already folded sheet. In it, the author of the text informs that the amulet is meant for the wife of ‘Abd Allāh b. Maryam [see Chapter 20, Fig. 20.3]. The reverse side of the resulting rectangle carries a band of simple decoration and a magic square [Fig. 19.2 right].

At the time of discovery, the paper was in a state of advanced disintegration. The unfolding of the leaf in order to document the text inside could not be done in field conditions. After transporting the find to Warsaw, the amulet was unfolded by Grażyna Macander-Majkowska, art conservator, at the laboratory of the Academy of Fine Arts in Warsaw, following an investigation of the surface of the paper by an environmental biologist [see Appendix 1]. Analyses of the composition of the paper and ink used to write the text were also performed [see Appendix 2].

After unfolding, the dimensions of the leaf were 31.5 cm in height and 21 cm in width. The paper carried a text in Arabic written with small

letters in 47 lines. A summary assessment of the text was prepared by Naïm Vanthieghem [see Chapter 20].



Fig. 19.1. Amulet for the wife of ‘Abd Allāh b. Maryam (ADd.13.064), two sides of the leather case



Fig. 19.2. Partly unfolded leaf of paper bearing the text of the amulet on the obverse (left) and the address(?) and band of simple decoration and magic square on the reverse (right)

Appendix 1

BOGDAN FILIP ZEREK

RESULTS OF MICROBIOLOGICAL TESTS PERFORMED ON
THE DAMAGED MANUSCRIPT (ADd.13.064)

The analysis was commissioned by the conservator in charge Grażyna Macander-Majkowska.

Object of analysis: Samples collected from the face (entire upper surface from left to right: samples 1 to 4).

Objective: Determine the presence of microorganisms, particularly mold.

Method: Samples were collected using the contact method by pressing sterile squares of filter tissue, 5 cm by 5 cm in size, in places characterized by damage suffered (traces of potential microbiological activity, streaks, discolorations), subsequently depositing them on two synthetic media: MEA and Czapek-Dox without sugar. The samples were incubated at room

temperature for 14 days. Growth of microorganisms on the dishes was assessed after the period of incubation.

Conclusions: The study identified isolated units forming mold colonies of *Penicillium* sp. and the potentially pathogenic *Aspergillus* sp., as well as individual other mold colonies [Table 19.1].

Contact with the object should be minimized and it should be stored in conditions of relative humidity below 60% in order to remain microbiologically stable. All work on the object until completion of mechanical cleaning should be done using protective glasses, gloves, and laboratory coats, as well as face masks classed at least FFP2.

Table 19.1. Number of colonies on tissue paper squares 5 cm by 5 cm, observed growth of microorganisms on samples after two weeks

* K – control sample; ** NN – mildew fungus that lacks morphological traits permitting identification

Sample No.	Observed growth of microorganisms	
	Czapek-Dox without sugar	MEA
K*	0	0
1.	1 <i>Penicillium</i> sp., 1 NN**	1 NN
2.	1 <i>Aspergillus</i> sp., 1 NN	1 <i>Alternaria</i> sp.
3.	0	0
4.	1 <i>Aspergillus</i> sp.	2 <i>Penicillium</i> sp., 3 NN
K*	0	0

Appendix 2

ANNA NOWICKA

ANALYSIS OF FIBER COMPOSITION OF A PAPER SAMPLE AND INK FROM AMULET ADd.13.064**RESEARCH METHOD****Fiber composition analysis**

Paper samples were boiled in distilled water for 30 minutes. Then, the samples were dried and pulped on a plain glass slide. After adding the Herzberg stain, samples were observed in transmitted light at $\times 50$, $\times 100$ and $\times 200$ magnification. Three preparations were made from the paper sample. The microscope used was a Nikon Eclipse 50i. The study was conducted in accordance with norm PN-76/P-50125.

Ink analysis

Identification of the ink was conducted on the basis of the following observations and analyses:

- Microscopic observation in reflected light using Prolab MSZ stereoscopic microscope (maximum magnification $45\times$);
- Microscopic observation of smears in water and 4M NaOH in transmitted light using a Nikon Eclipse 50i biological microscope (maximum magnification $1000\times$);
- Reaction in acids (3M HCl and conc. HNO_3) and in a sodium base (4M NaOH);
- Microcrystalline and drop tests as follows, confirming the presence of given inorganic ions: identification of Fe^{2+} ions. A drop of 3M HCl is added to the sample, it evaporates and to the remnants a drop of a,a' dipirydyll is added. In the presence of Fe^{2+} ions, the drop stains pink.
- SEM-EDS elemental analysis (Marek Wróbel, University of Warsaw, Institute of Hydrogeology and Engineering Geology, Laboratory of Electron Microscopy and Microanalysis), using a scanning electron microscope JEOL JSM-6380LA coupled with an electron EDS microprobe in the following conditions: accelerating voltage: 20kV, beam current: 70mA, working distance: 10 mm, live time: 100 sec.

Analyses of chemical composition, together with the proper images collected in reflected

electron light, BEI COMPO, were conducted with the low vacuum technique (in this case 30Pa). This technique does not require sputter coating of the objects, hence the chemical analyses lack peaks attributable to the element used to coat the sample in standard SEM imaging.

ANALYSIS RESULTS**Sample No. 1. Paper vehicle**

The analyzed paper was found to contain very well-preserved cotton fibers (partly dyed various shades of blue and red, determined prior to adding the Herzberg stain) mixed with a different type of fibers in much worse condition [Fig. 19.3].

Morphological traits of most of the other fibers point to flax or hemp. Unambiguous determination of their type is not possible due to heavy damage.

Sample No. 2. Black ink

Microscopic view in transmitted light (aqueous smear): microscopic observation of the aqueous smear indicated the presence of clusters of very fine-grained black pigment.

Solubility in acids and bases: 3M HCl – the sample does not dissolve; concentrated HNO_3 – as above; 4M NaOH – as above.

Identification of Fe^{2+} ions: Result very weakly positive.

Elemental composition on the basis of SEM-EDS analysis [see Fig. 19.3] An. 1: C, O, Si, Al, Ca, Cl, Mg, Na, K, Fe, S, P.

CONCLUSIONS

The analyses did not demonstrate beyond doubt whether the ink was made from lamp black or from iron gall. A positive result of the identification of iron ions may point to iron gall ink, but it may also have to do with a high degree of sample contamination (soil). The visual, microscopic assessment of the ink rather points to lamp black.

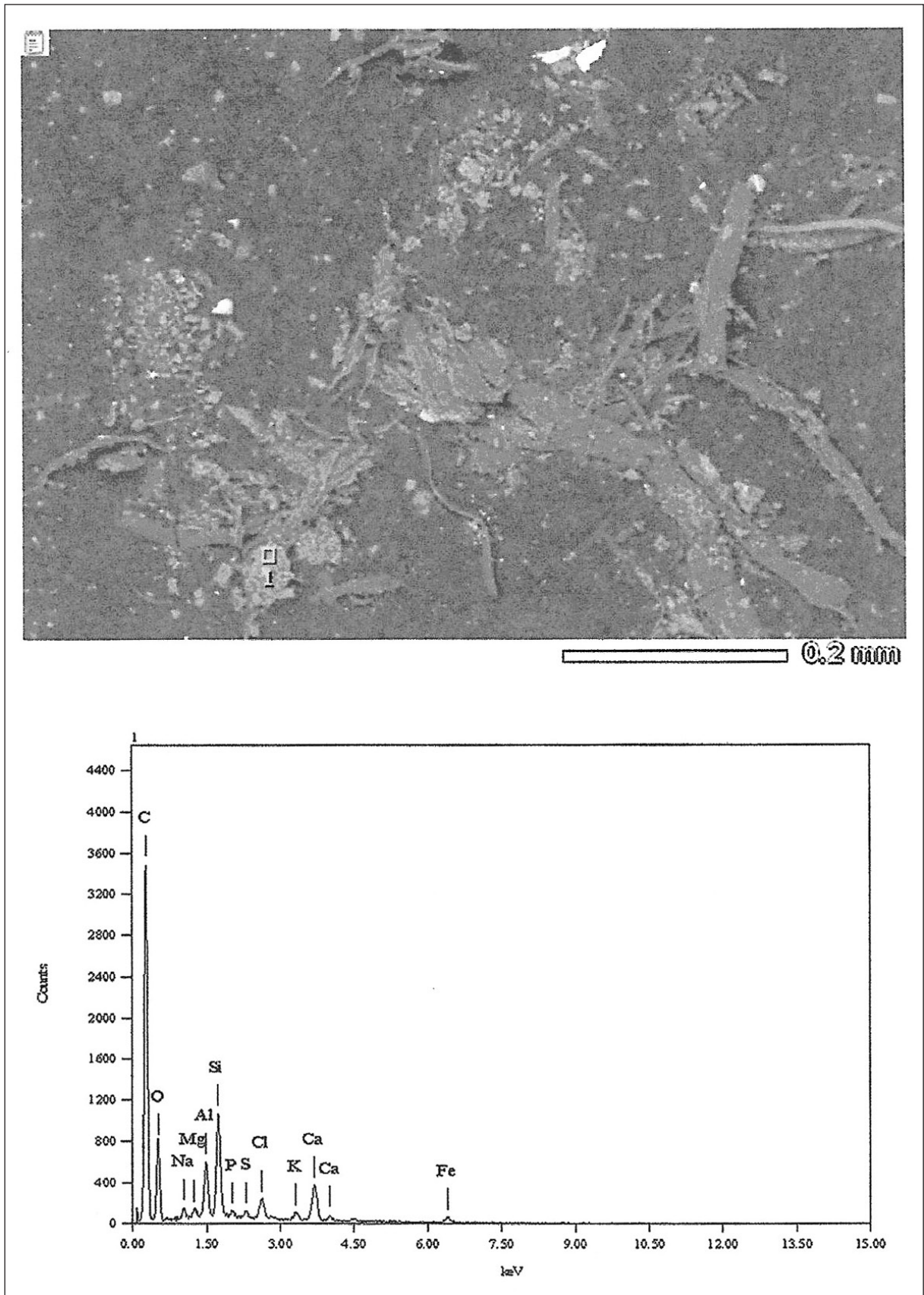


Fig. 19.3. Microscopic image of the paper vehicle and SEM-EDS analysis of ink on ADd.13.064 (Laboratory of Electron Microscopy and Microanalysis, Academy of Fine Arts in Warsaw)

NAÏM VANTHIEGHEM

TEXTES ARABES TROUVÉS À DONGOLA EN 2013-2016

Dans un précédent rapport, je présentais les textes arabes mis au jour en 2007 et 2010 par l'équipe polonaise qui conduit des fouilles dans la citadelle de Dongola sous la direction de Włodzimierz Godlewski (Vanthieghem 2015).

Les fouilleurs de l'Université de Varsovie ont à nouveau eu la bonne fortune de découvrir quatre nouveaux textes arabes en 2013, 2015 et 2016. Il s'agit d'amulettes : trois sont rédigées sur des tessons rouge vif, poreux et de piètre qualité



Fig. 20.1. Amulettes rédigées sur des tessons: ADd.15.072, ADd.16.335 et ADd.16.353



Fig. 20.2A. L'amulette sur papier ADd.13.064, recto



Fig. 20.2B. L'amulette sur papier ADd.13.064, verso

(ADd.15.072, ADd.16.335, ADd.16.353), tandis que la dernière est rédigée sur une ample feuille de papier (ADd.13.064). Le matériel provient de couches archéologiques datables de l'époque ottomane, plus probablement du XVII^e siècle. L'usage précis qui était fait des ostraca n'est pas évident : il paraît peu probable qu'ils aient servi d'amulettes portatives ; il est plus vraisemblable qu'ils étaient placés dans les maisons pour protéger les habitants du bâtiment. Quant au document de papier, qui donne des indications sur son propriétaire, il n'est pas impossible qu'il servait d'amulette portative.

L'ostracon ADd.15.072 [Fig. 20.1] a été mis au jour à l'intérieur de la maison B.H.97 dans le secteur nord de la citadelle. Trouvé à même le sol, il consiste en une série de lettres détachées, pourvues pour certaines de points, dont il est impossible de tirer du sens, probablement parce qu'il s'agit de pseudo-écriture comme on en utilise régulièrement dans les documents magiques.¹

Les deux ostraca ADd.16.335 (10,3 × 5,5 cm) et ADd.16.353 (9,2 × 12,8 cm) ont, quant à eux, été découverts dans le secteur situé entre le palais SWN.B.I et l'église SWN.B.V.

Leurs similarités paléographiques et formulaires suggèrent qu'ils ont été écrits par la même personne. Ils portent tous deux la formule *lā hawl wa-lā quwwa 'illā bi-llāh al-'alī al-'aẓīm* («Il n'y a de puissance, ni de force qu'en Dieu, le Très-Haut, le Grand»), qui est l'une des formules les plus

communément utilisées dans les documents magiques égyptiens. La découverte la plus spectaculaire a été réalisée en 2013 dans le secteur nord de la citadelle. Il s'agit de l'amulette sur papier ADd.13.064 (31,5 × 21 cm) [Fig. 20.2; voir aussi *Chapitre 19*, Fig. 19.1 et 19.2], qui a été mise au jour à l'intérieur de la maison B.H.119.2, trouvée à même le sol. Au moment de sa découverte, elle était encore pliée et emballée dans un morceau de tissu. Comme le montre une note écrite au verso [Fig. 20.3], ce texte était destiné à une femme, qui était peut-être la propriétaire de cette maison. Son nom n'est pas indiqué, mais cette dame est qualifiée «d'épouse de 'Abd Allāh b. Maryam» (*li-zawġat 'Abd Allāh b. Maryam*).

Le texte consiste en une série d'épithètes divines (entre autres *mālik al-dunyā wa-l-'āhira* [l. 2], *muḥyī al-'aẓām al-nāhira* [l. 2], *al-qādir al-qāhir* [l. 3], *al-ḥayy al-qayyūm ḏū al-ġalāl wa-l-karām*, ...), de formules religieuses (*basmala*, *ḥamdala*, *taṣliya*) et de formules coraniques (par ex. Coran X, 107 [l. 34]). Aucun indice ne permet de savoir à quelle fin l'amulette avait été conçue ; sans doute était-elle censée protéger son propriétaire contre toute forme de mal.

Il est notable que sur la dizaine de documents mis au jour sur le site depuis 2007, plus de la moitié sont des documents magiques, l'autre moitié étant constituée d'actes juridiques. Sans vouloir tirer des conclusions définitives, je serais tenté de croire que l'écrit en langue arabe était peu diffusé

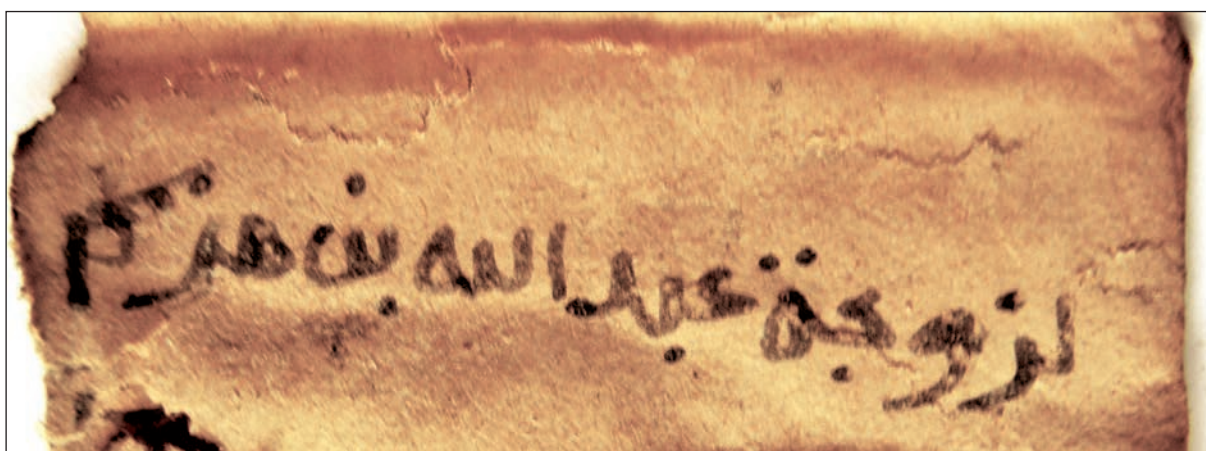


Fig. 20.3. Une note écrite au verso de l'amulette ADd.13.064

¹ L'apparence de cette pseudo-écriture a tout d'arabe, si ce n'est qu'elle est indéchiffrable. Elle conférait ainsi aux amulettes un caractère mystérieux.

² D'autres ostraca magiques inédits provenant du site de Dongola se trouvent au Musée national de Varsovie et seront édités prochainement par Magdalena Pinker et moi-même. Cette surreprésentation du matériel magique s'observe aussi sur le site de Faras, dont le matériel inédit se trouve lui aussi au Musée national de Varsovie.

PART IV



THE MOSQUE BUILDING

ROMUALD TARCZEWSKI

CONSTRUCTION WORK IN THE MOSQUE BUILDING (THRONE HALL) IN SEASONS 2015–2017

One of the assumptions of the plan to set up an archaeological park in Old Dongola, developed in 2010, was to make the Mosque Building accessible to visitors (Tarczewski and Dziedzic 2015). The Mosque Building, the former Throne Hall of Makurian kings, is a freestanding building dating from the 9th century AD (Godlewski 2015c). This two-story structure, with a ground floor about 6.50 m high and a first floor rising to about 3.10 m, is made of baked brick with later external mud-brick facings. The technical condition of the building varies. Most of the external and internal walls are preserved in good condition, though some local damages, which do not immediately require repair, have been identified. Ceilings over the ground floor level were originally made as vaults with nearly parabolic cross section. Over time they were partially destroyed and replaced by timber beams covered with pugging on palm-rib mats. These beams support an upper floor made of irregular ceramic tiles. The ceiling above the first floor serves as the roof of the building. It has a timber construction with a cover of palm-rib mats and pugging. Stairs leading from the ground floor to the first floor are vaulted, as are other spaces on this level, but local damages were supplemented with timber construction. Stairs from the first floor to the roof are not preserved in their original condition; they were replaced locally with a timber structure filled with bricks, and the remaining parts are missing.

To allow visitors safe access to the building, it was necessary to carry out protective works and partially reconstruct elements that are no longer extant. This applied especially to the upper part of the staircase leading from the first floor to the roof.

An additional task carried out within the frame of the archaeological park development program was to turn the roof of the Mosque Building into an observation deck. Due to the building's location on a rocky rise dominating the surrounding area, the observation deck on the roof gives an imposing view of the entire excavation site, the nearby Nile River, and the modern village of El-Ghaddar.

RECONSTRUCTION OF STAIRS LEADING FROM THE FIRST FLOOR TO THE ROOF

The stairs consist of three landings and two flights. The difference in height between the floor of the first story and the presumed roof level is 3.10 m. The original construction of the stairs did not survive. The timber construction that replaced it was partly made of beams of rectangular and circular cross-sections, on which bricks were laid. After analyzing the technical condition of this structure, it was decided to completely replace it with a new reinforced concrete construction with steel elements. Due to the desire to minimize the scope of intervention in the existing structure of the building and to facilitate the works, it seemed best to leave the existing timber beams in place and to build the new construction directly above it. Thus, in sections where the timber beams existed, they fulfilled the role of formwork. In sections where the timber structure was absent, prefabricated elements were used.

The preserved timber structure supported a part of the lower landing, the lower part of the flight of steps, and the intermediate landing [Fig. 21.1]. In the part of the lower landing, the

structure survived but in a state that precluded its use as a formwork—there was no pugging, and the timber beams were substantially weakened [Fig. 21.2]. The upper part of the flight of steps and the upper landing were not preserved. In the void where the upper section of the flight of steps used to be, only two timber beams remained – they served as a support for a steel mesh protecting the building against bats [Fig. 21.1].

The reconstruction of the stairs began from the lower landing, located on the level of the first floor. Due to its technical condition, the landing was divided into two parts. The first one, adjacent to the flight of stairs, was preserved but only in a residual state and could not bear any weight. The second, which provided access to the first, had a timber structure preserved in a condition that allowed its limited use. The new structure of the landing was accordingly divided into two parts, which corresponded to the parts of the landing described above.

The less damaged part was covered with a monolithic reinforced concrete slab 8 cm thick, based on two rolled-steel I-profiles mounted in mortises in the side walls. The reinforcement consists of rebars # 12 mm @ 10 cm and distribution rebars @ 20 cm. The existing timber structure of the landing was used as a lost formwork [Fig. 21.3 left]. The support of the plate in the more severely damaged part of the landing was shaped so as to allow the placement of prefabricated elements [Fig. 21.3 right].

The next stage consisted in constructing the part of the landing adjacent to the flight of stairs.

The poor technical condition of the timber elements preserved in this area prevented their use as a lost formwork, and it proved impossible for the contractor to prepare another formwork of suitable quality. In this situation, it was decided to construct the landing from precast elements.

A temporary prefabrication site was established in the corridor of the first floor, in the immediate vicinity of the reconstructed stairs. It consisted of three reusable steel molds of dimensions 240 cm by 40 cm by 8 cm [Fig. 21.4 left]. These forms were used to cast full-size and reduced-size elements, 20 cm wide (for the landing) and 220 cm long (for stairs). One end of each ready-made prefabricated slab was laid on the steel beam of the monolithic portion of the landing, and the other end was embedded in a groove made in the wall [Fig. 21.4 right].

Construction of the new structure of the lower landing allowed the temporary use of the preserved bottom flight of stairs and permitted the beginning of work on the intermediate landing. As in the case of the aforementioned part of the lower landing, the structural elements of the intermediate landing were preserved well enough to use them as permanent formworks for the new construction. The work was conducted in two phases. First, two steel beams were installed: one on the side of the preserved lower flight of steps, and the other on the side of the void where the top flight of stairs used to be. The beams were embedded in mortises in the walls with their upper flange at the level of the preserved structure of the landing [Fig. 21.5 left]. The ceramic tile layer was then removed



Fig. 21.1. Initial state of the stairs leading from the first floor to the roof: left, bottom landing and bottom flight of steps; right, intermediate landing and void in the place of the upper flight



Fig. 21.2. Bottom landing of the stairs leading to the roof from the first floor: left, view from the top and right, from the bottom



Fig. 21.3. Reconstruction of the less damaged part of the lower landing: left, steel beams and reinforcement and right, a ready reinforced concrete slab



Fig. 21.4. Reconstruction of the more damaged part of the lower landing: left, prefabrication site for casting reinforced concrete slabs and right, precast elements after assembly



Fig. 21.5. Reconstruction of the intermediate landing: left, assembly of steel beams; right, reinforcing and concreting of a monolithic concrete slab



Fig. 21.6. Detail of the finished reinforced concrete slab of the intermediate landing supported on a steel beam



Fig. 21.7. Upper flight of stairs leading from the first floor to the roof; view of the underside

from the landing, and subsequently the main reinforcement (# 10 mm @ 10 cm rebars) and the distribution reinforcement (# 10 mm @ 20 cm bars) were placed [Fig. 21.5 right]. After the pouring and setting of concrete, a good-quality reinforced concrete slab was obtained [Fig. 21.6]. Its thickness varied, ranging from 8 cm to 12 cm, due to surface irregularities in the existing landing used as a formwork.

The upper part of the staircase was not extant. In its place was a void covered only with a metal mesh [Fig. 21.1 right]. The vertical distance between the to-be-reconstructed upper flight of stairs from the first floor to the roof and the flight of stairs connecting the ground floor with the first floor was so large that construction of an adequate scaffolding and formwork for a monolithic structure proved impossible with the available technical means. For this reason, it was decided to again use prefabricated concrete elements.

The precast elements were produced in molds previously prepared for the prefabrication of elements for the lower landing. In order to adjust the length of the prefabs to the width of the flight of stairs, the mold length was reduced using inserts. The prefabricated elements were assembled sequentially, starting from the first step above the intermediate landing. After assembly, the step became the working surface for mounting the next step. The work was carried out sequentially up to the level of the roof, where the precast elements were laid up to form the upper landing. This method of installation allowed the complete avoidance of scaffolding and formwork in the construction of the upper flight of stairs. The risers were made of bricks placed between precast elements. The completed



stairs are visually neutral in regard to the preserved walls of the historic building [Fig. 21.7].

The last stage of reconstruction of the stairs leading from the first floor to the roof was the building of a new lower flight of steps. The timber framework of this flight was in good enough condition to be used temporarily for communication during the works. However, it was unsuitable for regular use by visitors due to its insufficient load-bearing capacity and incorrect geometrical profile. The preserved structure of the stairs was plagued by significant differences in the height of individual steps. Following the changes to the landings, these differences became even more pronounced. Therefore,

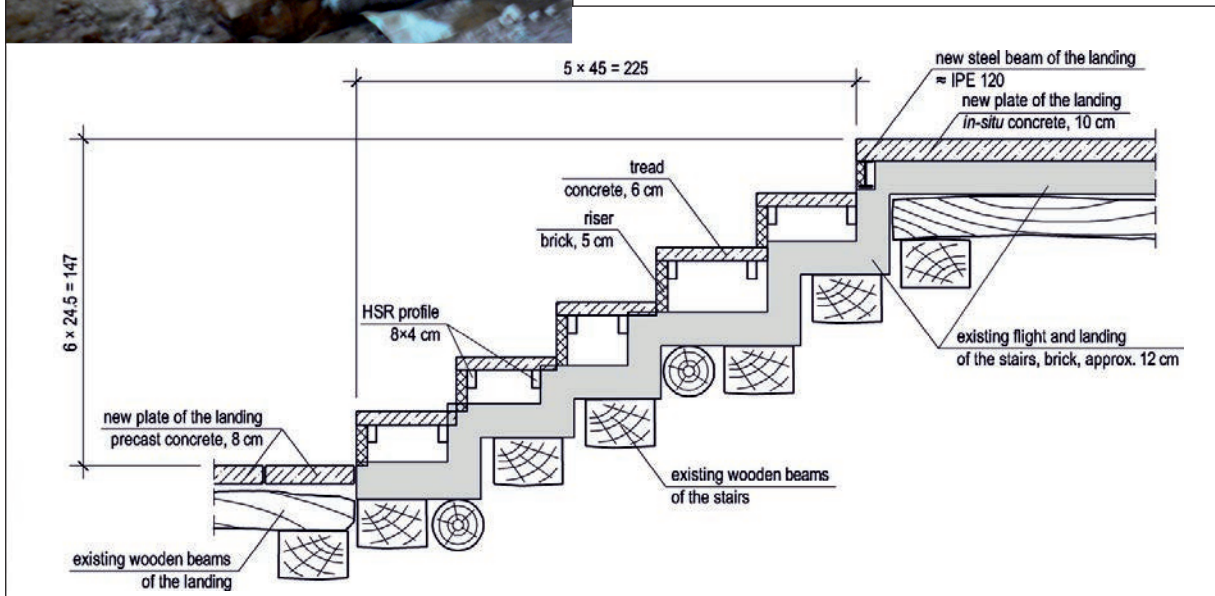


Fig. 21.8. Bottom flight of stairs: top, new geometric profile (marked on the wall in green) and, above, longitudinal section



Fig. 21.9. Reconstructed flight of stairs leading from the first floor to the roof: left, upper part and right, lower part

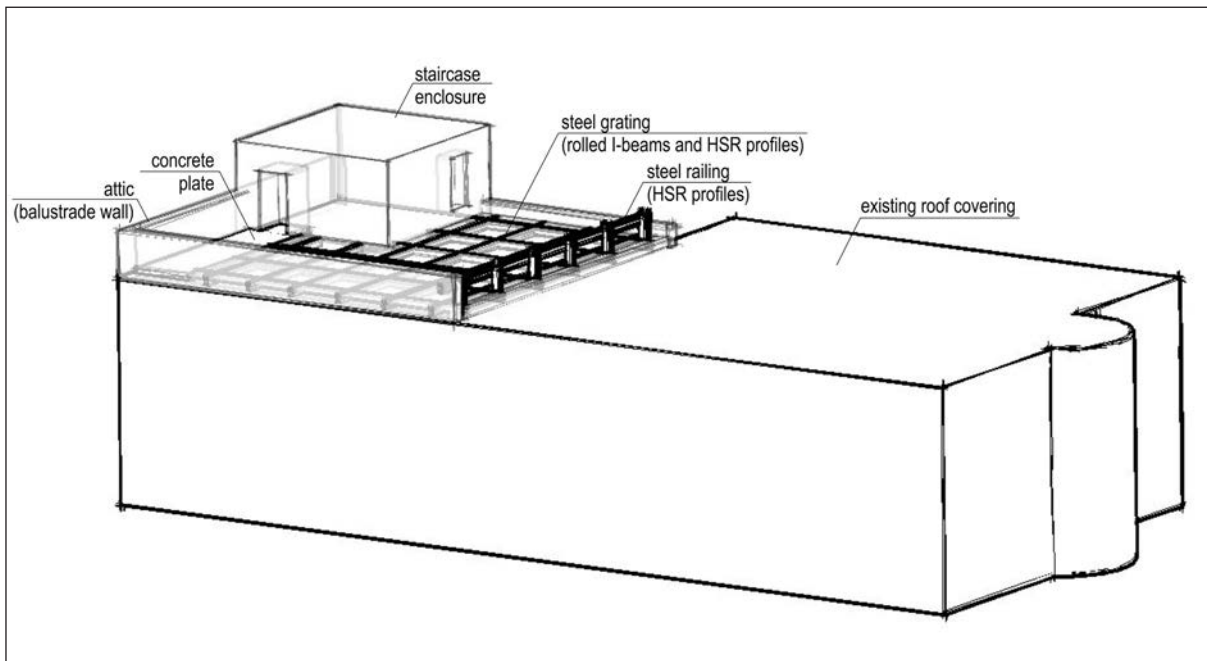


Fig. 21.10. Schematic drawing showing the concept of construction work in the western part of the roof

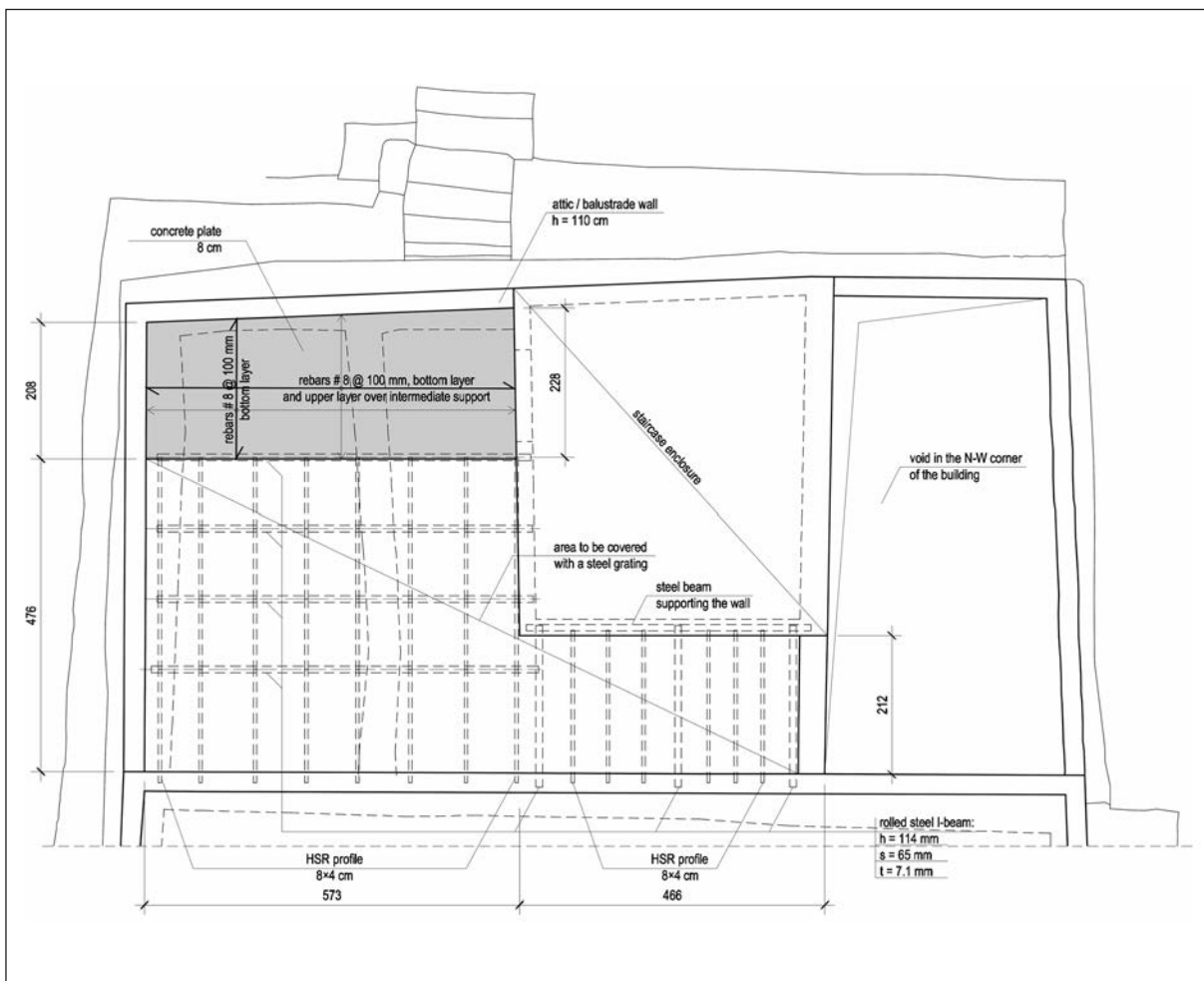


Fig. 21.11. Detailed arrangement of structural elements on the roof in the western part of the building, near the stairwell



Fig. 21.12. Rim on the outer wall with an additional compensatory layer of bricks and starters of the balustrade wall pilasters

a new profile of the stairs was established and, although the number of steps was maintained, their height was standardized [Fig. 21.8 left]. As the new profile collided to some extent with the original surface of the stairs, minor adjustments were made without damaging the structure.

The new framework for the lower flight of stairs was constructed of steel elements. Each step was built with two steel profiles, RHS 8 by 4 cm, on which a steel sheet was laid. This surface served as a lost formwork for making a reinforced concrete slab 6 cm thick, reinforced with rebars # 10 mm @ 8 cm. The risers were made of bricks [Fig. 21.8 right].

The reconstructed stairs had a load capacity enabling their use by a group of visitors, as well as a uniform character over their entire length while remaining a relatively neutral element in the structure of the building.



Fig. 21.13 Installation of the steel beams of the roof structure: left, for the staircase enclosure and right, for the observation deck



Fig. 21.14. Waterspouts in the south wall of the building

CONSTRUCTION WORK ON THE ROOF

Once the reconstruction of the stairs was complete, it was possible to carry out construction works on the roof. Two types of operations were planned: protective measures in the building, and work towards providing access to the roof for visitors. Due to the considerable scope of the project, the tasks were to be carried out in several stages. In the 2015–2017 seasons, the focus of activity was an area next to the stairwell in the western part of the roof.

The works conducted thus far aimed to complete three main tasks: protection of the building walls, protection of the interior of the building, and construction of a usable surface that would serve as an observation deck. A task to be



Fig. 21.15. Reinforced concrete plate of the observation deck: left, arrangement of the reinforcement and right, the slab after pouring concrete

completed in the future is to secure the roof over the Central Hall and surrounding corridors, but work toward this end has yet to begin. It is assumed, however, that tasks planned for a later stage will be a continuation of the works currently being performed and necessary bonders were left in place.

The scheme followed in the works is shown on the drawing [Fig. 21.10]. Successive stages included the construction of a rim on the walls to increase their stability, an enclosure over the reconstructed staircase to protect the interior against atmospheric conditions, an observation deck, and a parapet wall which doubles as a balustrade of the deck. A detailed arrangement of the components is shown in the plan of the roof [Fig. 21.11].

The construction of a rim designed to increase the stability of the walls began with a cleaning



Fig. 21.16. Fragment of the observation deck after the construction of the concrete slab and the parapet wall



Fig. 21.17. Observation deck with parapet and enclosure of the staircase viewed from the east

of the walls to remove pugging, dirt and other unwanted residues. Next, a trough was made by constructing two parallel brick walls, each with a thickness of half a brick, to be used as a lost formwork. This solution, implemented in order to visually integrate the newly constructed elements with the whole façade, was necessary because of the technical difficulties in the preparation of standard formwork at roof height. In the space between the walls a reinforcement of the rim was laid: 4 # 12 mm or 6 # 12 mm rebars, depending on the width of the wall, and stirrups # 6 mm @ 20 cm. Next, the trough was filled with concrete. Starters of pilasters stiffening the balustrade wall were made together with the rim and using the same technique [Fig. 21.12]. The upper surface of the rim served as a base for further structural elements.

After the rim was finished, it was possible to build the staircase enclosure. This enclosure was designed as a one-space room, rectangular in plan view, measuring 4.80 m by 5.30 m. Walls of the enclosure that did not stand on walls of the first floor but on the roof were built on lintels made of steel rolled I-beams supported on the rim [Fig. 21.13 left]. The walls of the stairwell enclosure are 1 brick (approximately 25 cm) thick, and their total height is 2.60 m. The roofing of the enclosure was made of low-profile corrugated metal sheets on steel beams made of RSH 10 × 5 cm profile. Two windows were made in the walls to provide natural ventilation for the interior of the building, and a door gave access to the roof level. All openings have a metal framework filled with a fine steel mesh [Figs 21.16, 21.17]. The plaster finish of the walls of the staircase enclosure is based on local lime with a small admixture of cement.

The observation deck was originally designed to have a reinforced concrete plate over the entire area. However, during the works it was decided to change this solution and to have reinforced concrete slab flooring only in a strip approximately 2 m in width, just in front of the staircase door. On the remaining part, a steel grating of HSS profiles (small cross-section) and flat bars was constructed. The reason for this change was to reduce the additional load transmitted onto the walls of the building and to ensure proper circulation of air and water vapor through the existing roofing. Additionally, this solution reduced the amount and mass of building materials transported during the works.

The steel grating was laid on steel beams that formed the main structure of the observation deck [Figs 21.13, right; 21.16; 21.17]. In addition, waterspouts made of steel sheeting were embedded in the parapet wall on the south side to ensure the drainage of rainwater accumulating on the surface of the observation deck [Fig. 21.14].

The reinforced concrete slab of the observation deck was designed as a two-span structure working in two directions. The slab is supported on the west and south walls of the building, a wall of the staircase enclosure, and an inner wall parallel to the south wall [Figs 21.13 right, 21.15 left]. Additional support is provided by a steel beam running underneath the deck [Fig. 21.16]. The reinforcement of the slab is composed of rebars # 10 mm # 10 cm laid crosswise in two layers, one on the bottom and an additional one as an upper layer over the intermediate support [Fig. 21.15 left].

On the remaining part of the deck, a steel grating was mounted on I-section and RHS profiles. To ensure a level surface of the terrace, the support level of the secondary beams was lowered. For this purpose, additional L-section profiles were fitted alongside the main beams [Figs 21.13 right, 21.14, 21.16].

The completed observation deck was provided with a parapet wall, which also functioned as a balustrade protecting visitors from falling off the edge. It rises 1.10 m above the level of the deck and is 1½ bricks thick. Pilasters of reinforced concrete with a cross section of 30 cm by 30 cm propped up the parapet wall and were placed at approximately 3 m intervals. The pilasters were cast in the lost formwork of bricks. Their reinforcement consists of 4 # 10 mm rebars and # 6 mm stirrups. The main reinforcement of the pilasters is connected to the reinforcement of the rim. In the sections between the pilasters, the parapet wall is reinforced with 2 # 8 mm rebars placed every second layer of bricks [Fig. 21.12]. Horizontal reinforcement in the wall increases its ability to carry the horizontal loads that may occur when a large group of visitors leans against the wall. The parapet wall was plastered similarly to the walls of the staircase enclosure.

The observation deck was closed on the eastern side with a lightweight RSH profile railing. This handrail can easily be dismantled to allow for future work on the remaining part of the roof [Fig. 21.17]. The platform will ultimately be surrounded by a brick wall analogous to the parapet wall.

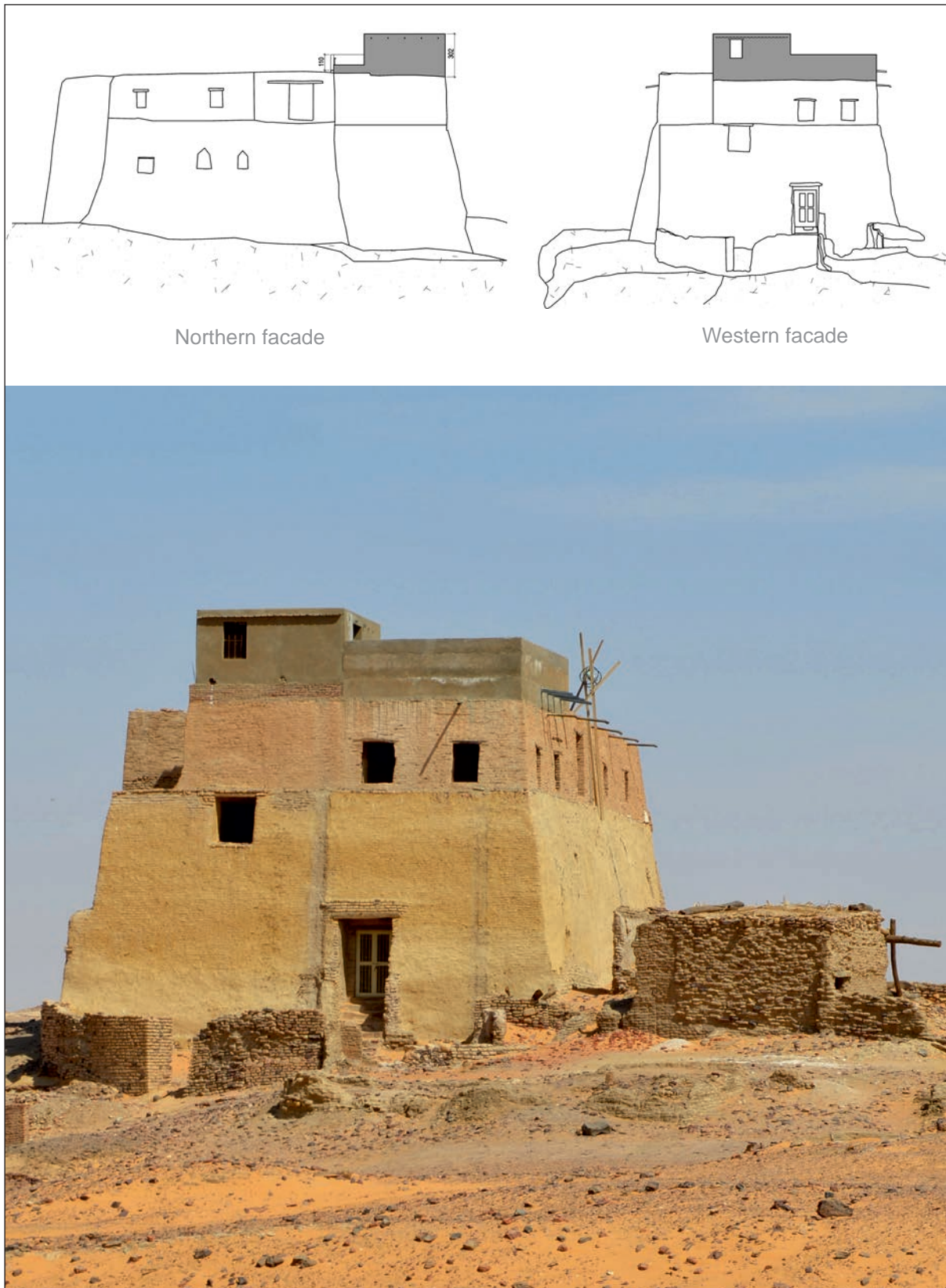


Fig. 21.18. The Mosque Building from the southwest after completion of the work; top, the northern and western building façades

INTEGRATION OF NEW ELEMENTS WITH THE EXISTING BUILDING

Work on the Mosque Building, former Throne Hall of Old Dongola, called for reconciliation of many different and sometimes contradictory demands. On the one hand, there were requirements related to the functioning of the monument within the emerging archaeological park. Making it available to groups of visitors required ensuring their safety while in the building. In addition, the most spectacular attraction included in the visit to the monument – the view of the entire archaeological park, the Nile, and the nearby desert – required the construction of a suitable observation deck. On the other hand, the importance of the Mosque Building for Sudanese culture and tradition and its unique historical value made it necessary to exercise the utmost caution when introducing any technical

or visual changes to the monument and to minimize their impact on its social perception. For this reason, any alien forms were avoided. The only visible external architectural intervention on the roof of the building is, in a sense, a continuation of the preserved walls of the building [Fig. 21.18 top]. This was, among others, the reason for choosing a parapet wall over an open-work metal railing. The parapet is an extension of the building walls, and it covers all the internal elements. In addition, its connection with the staircase enclosure visually reduces the height difference between the latter structure and the roof level, thus allowing the new components of the building to blend in more easily [Fig. 21.18 bottom]. As the works on the remaining part of the roof continue, the parapet wall will perform the same function of covering all new construction elements.

THE TEAM

Seasons 2015 and 2016



FIELDWORK SEASONS

1 – 3 January 2015–6 February 2015

2 – 9 November 2015–14 December 2015

3 – 10 January 2016–18 February 2016

4 – 14 November 2016–20 December 2016

CO-DIRECTORS

Prof. Włodzimierz Godlewski (seasons 1–4) (Institute of Archaeology, University of Warsaw)

Prof. Adam Łajtar (seasons 1, 3) (Institute of Archaeology, University of Warsaw)

Dr. Dorota Dzierzbicka (seasons 2, 4) (Institute of Archaeology, University of Warsaw)

NCAM REPRESENTATIVES

Shawgi Tawalbed (season 1)

Alsamani Ezeldeen Kara (season 2)

Abubakr Abdelrahman Adam Abdalla (season 3)

Shahed Hamdi (season 4)

ARCHAEOLOGISTS/SPECIALISTS

Prof. Włodzimierz Godlewski,

archaeologist (Institute of Archaeology, University of Warsaw; seasons 1–4)

Prof. Adam Łajtar, epigraphist (Institute of Archaeology, University of Warsaw; seasons 1, 3)

Dr. Dorota Dzierzbicka, archaeologist (Institute of Archaeology, University of Warsaw; seasons 2, 4)

Prof. Tomasz Derda, papyrologist (Institute of Archaeology, University of Warsaw; season 3)

Dr. Dobrochna Zielińska,

archaeologist and art historian (Institute of Archaeology, University of Warsaw; seasons 1, 3)



Szymon Lenarczyk, MA, archaeologist and topographer (independent researcher; seasons 1–4)
Piotr Makowski, MA, archaeologist and art historian (independent researcher; season 1)
Agata Deptuła, MA,
archaeologist and epigraphist (doctoral student, University of Warsaw; seasons 1–2, 4)
Katarzyna Danys, MA, archaeologist and ceramologist (independent researcher; seasons 3–4)
Agnieszka Ryś, MA,
archaeologist (student of archaeology, Institute of Archaeology University of Warsaw/
independent researcher; seasons 1, 3)
Maciej Wyżgoł, MA,
archaeologist (student of archaeology, Institute of Archaeology University of Warsaw/
independent researcher; seasons 1–3)
Mateusz Reklajtis,
archaeologist (undergraduate student of archaeology, Institute of Archaeology
University of Warsaw; season 3)
Dr. Marta Osypińska,
archaeozoologist (Institute of Archaeology and Ethnology,
Polish Academy of Sciences, Poznań, season 4)

RESTORERS

Jolanta Kurzyńska, wall painting restorer (freelance; season 1)
Urszula Kusz, wall painting restorer (freelance; seasons 1–4)
Maciej Karpiński, assistant restorer (freelance; season 2)

ARCHITECT

Dr. Romuald Tarczewski,
construction engineer (Wrocław University of Science and Technology; seasons 2, 4)

ABBREVIATIONS

BAR IS	<i>British Archaeology Reports International Series</i> (Oxford)
CCE	<i>Cahiers de la céramique égyptienne</i> (Cairo)
GAMAR	<i>Gdańsk Archaeological Museum African Reports</i> (Gdańsk)
JEA	<i>Journal of Egyptian Archaeology</i> (London)
JJP	<i>Journal of Juristic Papyrology</i> (Warsaw)
PAM	<i>Polish Archaeology in the Mediterranean</i> (Warsaw)
PG	J.-P. Migne, <i>Patrologia Graeca</i> , 161 vol., Paris 1857–1866
SEG	<i>Supplementum Epigraphicum Graecum</i> (Amsterdam–Leiden)
TAM	<i>Tituli Asiae Minoris</i> (Vienna)

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PART I

THE MONASTERY ON KOM H

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PART II

THE CITADEL IN THE TIMES OF THE KINGDOM OF MAKURIA

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THE TEAM

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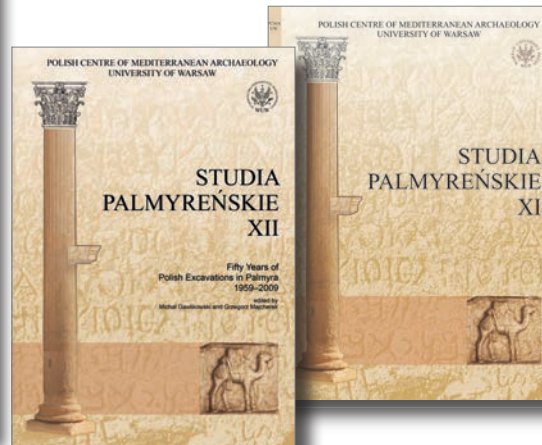
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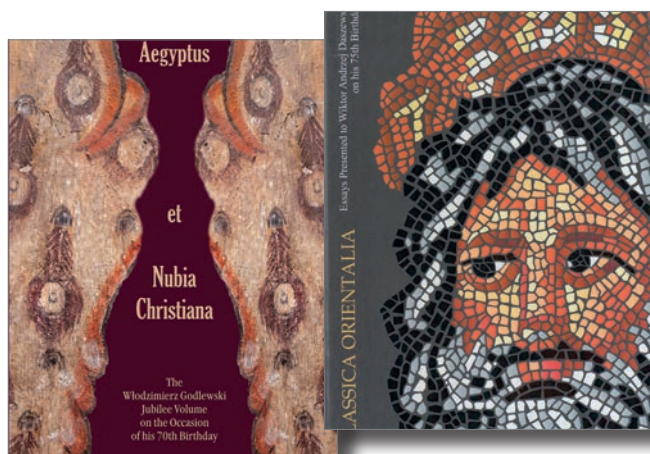
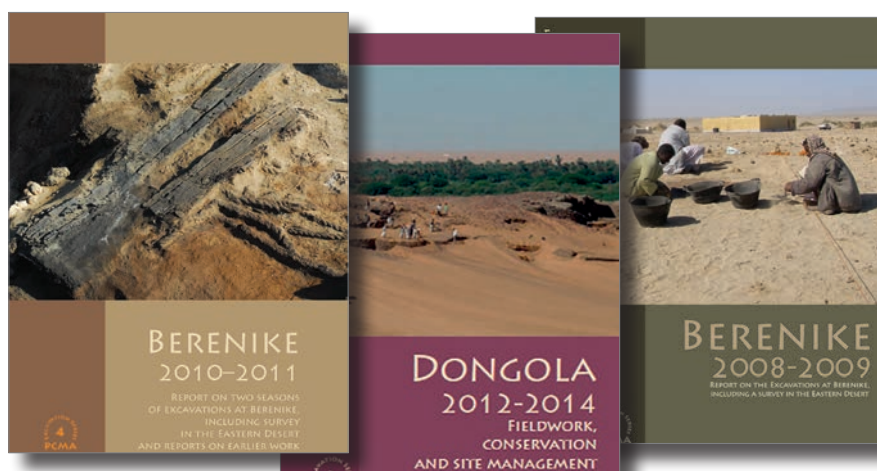
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