



CITADEL AND FORTIFICATIONS

Dongola. Foundations of the northwestern tower on the rock

The citadel of Dongola was raised on a flat stretch of ground on top of a rocky crag that rose steeply from the river edge. On the north and northeast, the terrain dropped gently toward a sand-filled wadi, while on the south and southeast it was just slightly elevated above the wide plateau stretching to the south. Excavations so far have uncovered the fortifications, complete with the founding, only in the northwestern corner of the citadel. The wall circuit in the northern and northwestern part of the town has been traced based on the surviving tops of the fortifications, preserved here to about 8 m in height. On the south side, the extent of the citadel has been traced, but no regular excavations have been undertaken. So far no evidence of occupation earlier than the fortifications has been recorded, but the investigations have been limited. Studies of the uncovered part of the fortified circuit have determined the technical parameters of the original fortifications, as well as the stages of development and alterations introduced most likely at the close of the 12th and in the 13th century.

The citadel walls were founded straight on bedrock without any work on leveling the surface. The defense circuit ran all around the plateau, wall construction in particular sections being adapted to the location. And so, on the river side, which was naturally defended, the walls were clearly less massive. Care was taken to protect the river harbors, of which the northern one was of a commercial character, whereas the southern one appears to have served the private needs of the royal establishment, including providing direct access to the royal residences (see plan, page 18).

The curtain wall of Dongola was a very massive structure of mud brick, each brick measuring 41–42 x 18–19 x 9 cm, and of undressed blocks of local ferruginous sandstone, both big and small, used for the external coat. At the base, the wall measured about 5.70 m, narrowing to

5.30 m at the preserved top six meters up. A slight inclination of the outer face of the rampart has been noted, but erosion of the inner surface throws a shade on measurement accuracy. The stone coat was built as one with the brick core, the two parts being bonded in mud mortar. At approximately 0.80–0.90 m in width, the stone facing constituted about 15% of the curtain thickness. Substantially bigger blocks were used for the towers and lower parts of the curtain. The upper sections were constructed of small blocks and slabs of stone. It should be expected that the rampart originally rose much higher than the currently preserved 6 m, attaining a height of more or less 11 m, as at Faras. There is no way of telling what the construction technique of this un-preserved part of the fortifications was.

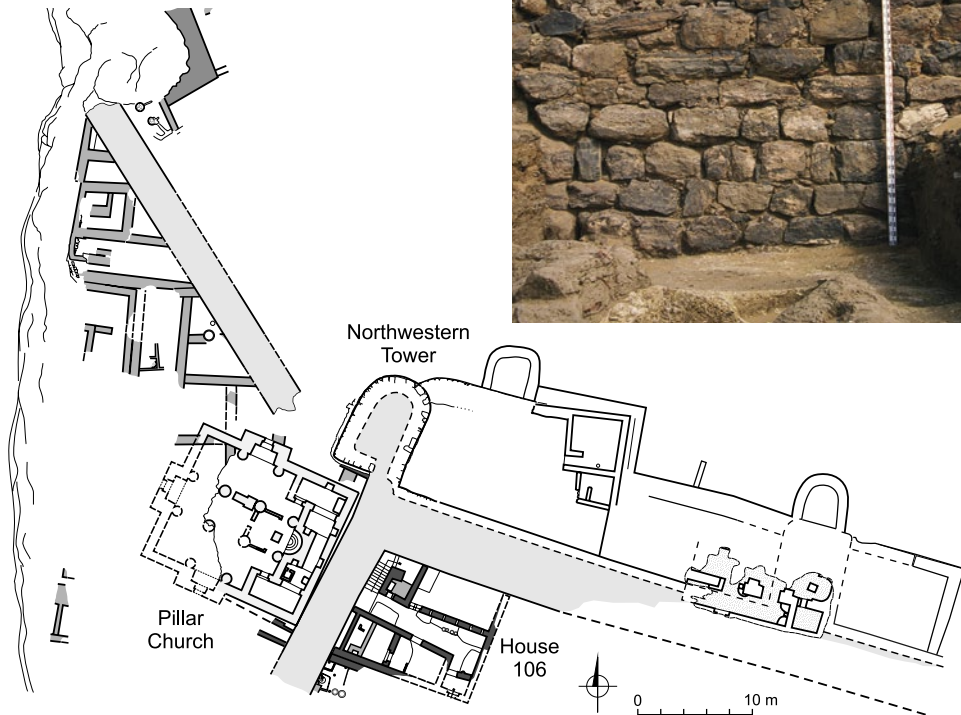
The curtain was reinforced with projecting towers set at fairly regular intervals of 32 to 35 m. These massive structures with rounded outer face were solid-built inside, 5.70–6.30 m wide and projecting from the face of the rampart 8.50–8.90 m. The two northern towers, N.1 and N.2, were only 22 m apart, presumably because they secured the entrance gate to the citadel arranged in tower N.2. The northwestern tower was somewhat more massive than the others, most likely because it was a corner bastion. This part of the circuit extending north of the commercial harbor was further reinforced with a mud-brick wall running at an angle, 3.10 m wide and terminating in a massive tower on a small rocky eminence rising high above the river bank. This tower, which has survived only in foundations, must have been built after AD 652, that is, after the siege laid to Dongola by the troops of 'Abdallah b. Abi Sarh. Fragments of architectural decoration, mainly from column shafts, but also from capitals and bases, believed to constitute the original interior decoration of the Dongolan Cathedral (EC.I), which was heavily damaged in this raid, were found reused in the preserved foundations.

The angled wall and tower on the rock defended an artificial platform erected on the slope of the plateau rising on the north side of the main river port. This platform was constructed on a grid of casemate walls filled with earth for stability.

The western fortifications were built on the edge of a steep rock cliff rising above the river bank. They were narrower and without towers thanks to a naturally defensive location. Parts of this curtain wall, constructed of mud brick with a stone coat, were uncovered in the northwestern corner of the citadel and in the central-southern part. It was 3.70 m wide at the northern end, narrowing to 2.10 m at the southern excavated end.

Initially the architecture inside the citadel left empty space running against the inside of the ramparts. But at least from the 7th century, buildings started to use the wall

as a structural support (e.g., House A.106 and Building I). This arrangement reflected a typical fortified settlement with a circuit street providing entry to various structures; similar arrangements were discovered at Ihmindi and Sabagura in the north of Nubia, and were used in Roman military camps from the time of Valentinian. The Dongolan citadel must have had regular architecture standing inside the walls already in the middle of the 6th century, as the great church complexes of the period when Makuria converted to



Plan of the northwestern part of the fortifications; above, the northwestern tower seen from the west

Christianity (Old Church and Building X, see pages 59–64) were constructed outside the stronghold, on a spot to the north of the citadel, where later the cathedrals were located as well.

The fortifications of Dongola were raised by builders, who had honed their skills on earlier complexes known from Merowe, Sheriq and Bakhit in the Napata region. The actual technique of construction differed, because the earlier complexes had the lower parts of ramparts built of broken stone and the upper parts of mud brick with an outside stone coating being added at some point. It should be remembered, however, that compared to Dongola these were quite modest examples of military architecture. In all likelihood, the ramparts at Dongola were raised at the close of the 5th century (Godlewski 2008).

Once the Makurian kings signed the *baqt* treaty with the Caliphate in AD 652 (the peace treaty was observed by both sides for 520 years), they chose the citadel with all of its economic resources as their royal residence. The religious center with the cathedrals, the town and various workshops was located outside its walls, mainly to the north. Even the Throne Hall of the Kings of Makuria was erected away from the fortified rock, in a prominent location further to the east.

During the extended peace the walls fell into disrepair, but things changed dramatically after the fall of Fatimid Egypt. Salah-ed-Din, who took power in 1171, broke the treaty and invaded Makuria, occupying the northern reaches of the kingdom for several years. The threat prompted widespread rebuilding and alteration of the fortifications in all of Makuria. In the capital, the weakened outer stone face of the ramparts was given an additional coating of mud brick to soften the impact of catapult projectiles; additional towers were built, presumably in places where the damaged curtain posed a risk, and the space between the walls was filled with earth. These new sections of the defenses were erected on

top of sand dunes blanketing the earlier rampart. In the northern and northwestern part of the Citadel, these highly developed reinforcements appeared next to the northwestern corner bastion, by the northern gate and next to the northeastern tower; they have also been noted along the southern stretch of the fortifications. An extensive mud-brick structure (B.II), furnished presumably with an upper floor, closed the road running from the private harbor, protecting the palace entrance (B.I) and the facades of the Cruciform Building (B.III) and Building V. A river attack had obviously been anticipated in those troubled times.

Thus reinforced, the citadel remained the residence of choice of the rulers of the late Kingdom of Dongola Town, which existed from the end of the 14th through the 17th century. A new circuit wall was constructed in the northwestern corner of the old rampart, near the corner bastion, on top of the ruins of the Pillar Church (PC). New constructions can be presumed to have been constructed also in the northern and eastern parts of the citadel.



Northeastern tower, seen from the north