



DIETER EIGNER

# WHERE KINGS MET GODS

## THE GREAT ENCLOSURE AT MUSAWWARAT ES SUFRA<sup>1</sup>

The Great Enclosure is the most enigmatic architectural monument of the Meroitic culture. Ever since it became known to the world outside Sudan, which was through the visit of Linant de Bellefonds in the year 1822, various ideas on function and use of the building complex have been put forward by various authors. The most recent overview on these ideas was presented by St. Wenig (1999): monastery or priest's seminary, teaching institution, hunting palace for the king, "town", hospital, pleasure palace of the Kandake, a khān or desert rest-house, centre for training of elephants, palace with zoological garden. All these theories are based more or less on mere speculation and show that little or not proper study and analysis of the complex's architecture was done, if it was done at all.

But there should be also mentioned G. Erbkam, architect of the Lepsius expedition. In his map of the Wadi es Sufra he calls the Great Enclosure "Combinirte Gebäudeanlage" – "Combined building complex".<sup>2</sup> This sober designation is to the point, conveying two properties of the enclosure – large size and a variety of functions. No fantasy is added – during the short stay of the expedition nothing more could be said about the enclosure on a serious basis.

Only in recent time some more serious theories were put forward:

Hintze, F. (Hintze & Hintze 1970: 50): "pilgrimage centre", where from time to time large crowds congregated to partake in religious ceremonies.

Priese, K.-H.<sup>3</sup>: "normal cult temple" with daily ritual, no visits by the king.

Wenig, St. (1999: 41, and 2001): "National shrine", cult temple, now and then the king and his court were present.

Wolf, P. (2001): "The lion's den". Cult temple for Apedemak (temple 100), for his female companion (temple 200), mammisi (temple 300).

Török, L. (2002: 173-186): desert- (hunting-) palace of the king, and place of his investiture and legitimation. Török has changed his opinion about function of architectural elements of the Great Enclosure several times (cf. Török 1990: 157, Török 1997: 400, see also Wenig 1999 and 2001), until he came to this final conclusion. But Török never had doubts about the king being present at the Great Enclosure at times.

### DESIGN

Most buildings of the Great Enclosure are erected on terraces or on podia (shaded grey in fig. 1). The terraces are accessible by ramps and are connected by elevated corridors (fig. 3). Török (1997: 401 and 2002: 174) wants terraces and ramps to be an Egyptian tradition, but it is clearly Hellenistic influence which shaped the monument. Besides the terraces and podia it is above all the types of temple buildings rising on top of them: peripteros (pseudodipteros) for temple 100, prostylos for Temples 200 and 300. K. H. Priese (2003: 63-64) has found a prototype in Greco-Roman Egypt for the "Chapels" 104, 106, 107, 517, 205.<sup>4</sup>

Terraces or podia rise for 3,00 m (Central Terrace), for 2,30 m (Rooms 518 and 519), for 2,00 m (Complex 200), for 1,50 m (parts of complex 400) and 1,00 m (Temple 300) above the surrounding surface level (fig. 1). A certain hierarchy can be seen in these levels, from the "profane" ground level (where only few buildings exist) up to the "sacred level" of the Central Terrace. Temple 300 is a cult temple accessible to the public (at least its courtyard), and therefore on a low level.

1 This article is based on a paper presented at the 11<sup>th</sup> International Conference for Meroitic Studies, Vienna 2008. It will not appear in the Proceedings of the Conference.

2 Lepsius, C. R. (1849-1859): *Denkmaeler aus Aegypten und Aethiopien*. Berlin: Abth.I.BI.140. Under the command of Erbkam the Lepsius expedition reached Musawwarat in 1844. Lepsius himself never was in Musawwarat.

3 Personal communication.

4 It appears convenient to continue using the terms „temple“ and „chapel“, introduced by F. Hintze for certain buildings in the Great Enclosure. More appropriate would be a more neutral term like „sacral space“ or „sacred space“.



Fig. 1: The Great Enclosure. Shaded areas show terraces, ramps (R) and elevated corridors (cf. fig. 3). Elevation in m above surrounding ground level is given. Numbers 100 – 600 are numbers of areas given by Hintze 1968: Karte II and Karte V. (Design: D. Eigner, computer graphics: F. Joachim).

One striking feature of the complex is its attitude of concealment and secrecy. The straight processional axis of a cult temple does not exist, temple 100 can be reached from the main entrance gate of the complex only by a very devious route (fig. 2). From the main gate to the front of temple 100 the visitor has to: make a right turn, left turn, pass a door hidden behind a screen wall, pass a door, right turn, left turn, pass a

door, left turn, finally pass the door to the central terrasse, left turn, right turn. Between main gate and temple 100 only a vague virtual axis exists. In the same secretive way the parapet walls of terrace, corridors and ramps are so high that any communication between inside world and outside world is prevented (fig. 3). Conclusion must be that terraces were never meant for “ordinary” visitors.

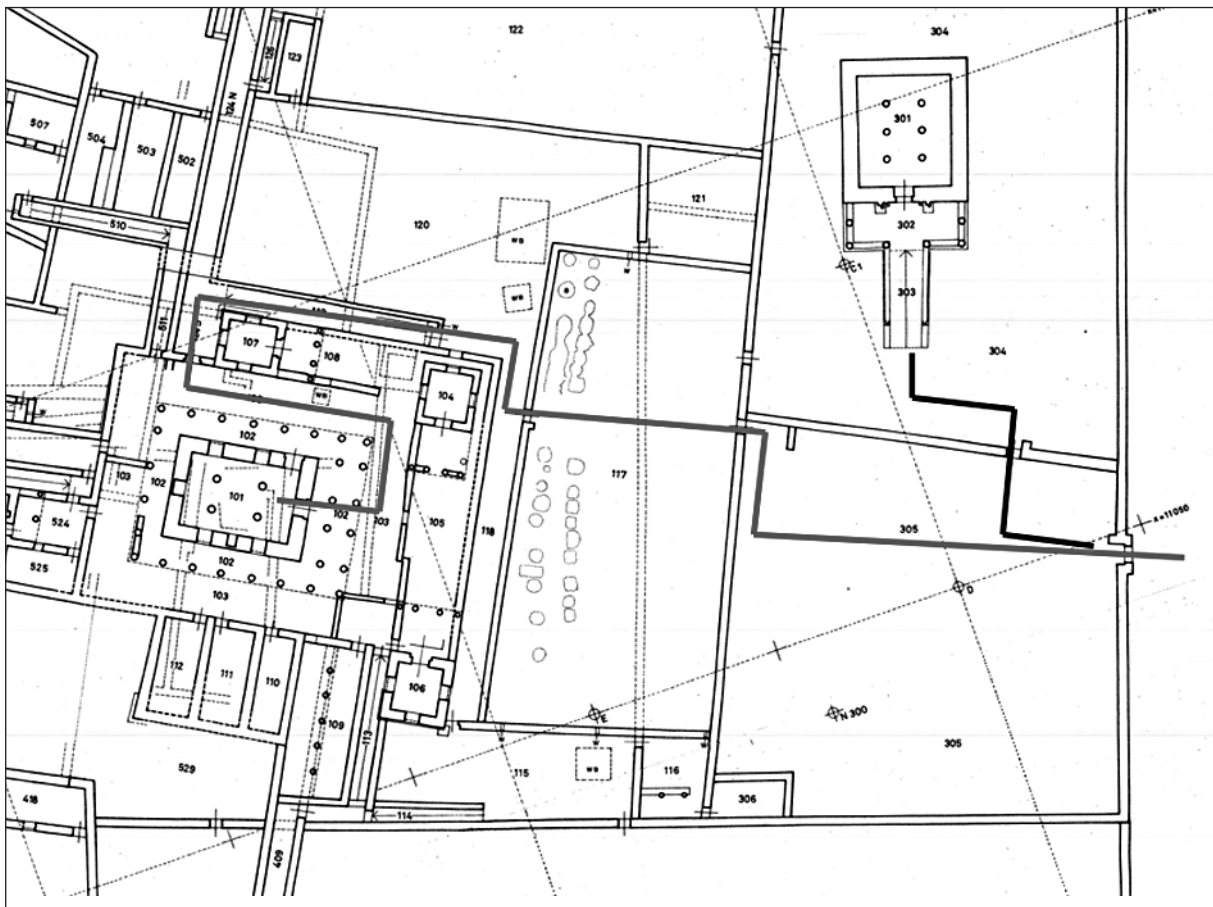


Fig. 2: The route from the main entrance of the Great Enclosure to the “Central Temple” 100. Five doorways have to be passed and eight right-angled turns have to be taken. (Design: D. Eigner).

Details of architectural decoration come partly from Egypt (torus roll, cornice, friezes of uraei and others) or are on the other hand purely indigenous Nubian creations, probably executed by Hellenistic craftsmen. Outstanding examples of these unique architectural sculptures are the columns in front of temple 100 (fig. 4), the statue columns in front of chapel 107 (Priese 2003: Abb. 18), the colossal statues of Arensnuphis and Sebiameker guarding Temple 300 (Priese 2003: Abb. 20), and the “triple head sculptures”, which once crowned doorways (fig. 4).

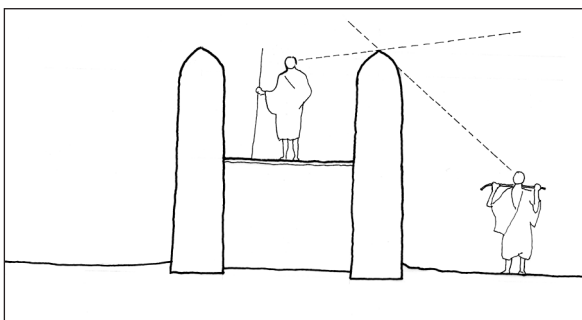


Fig. 3: Concealment and secrecy: section through the elevated corridor 124/214. No contact between sacral sphere and the outside world. (Design: D. Eigner).

Except for the scenes on the columns in front of temple 100 (fig. 4) and on the columns in front of Chapel 517 (Hintze 1971: Abb. 20, drawing by K.-H. Priese) the whole complex is “silent”, beside these few occurrences there exists no primary decoration of scenes or texts (Török 2002: 176).

### CONSTRUCTION

Speed and economy appear to determine the methods of construction, at least for building period 6 (period no. according to Hintze & Hintze 1970), which in a ruined state makes up the present appearance of the Great Enclosure. Walls have outer faces of sandstone blocks which are cut with extreme anathyrosis, i. e. the sides of the block are cut back at an angle. Finally the block has the shape of a truncated pyramid, the base of the pyramid forming the face of the wall (fig. 5a). In this way the amount of work to produce an even surface of a wall is reduced to a minimum. The joints where the blocks touch are only about 1 to 3 mm deep. The inner core of the walls is filled with sandstone rubble and earth mortar. Walls of court-





Fig. 4: The “Triple head sculpture” or “triple protome” once crowned the eastern entrance of “temple” 100. The columns with animal bases on the front side of “temple” 100 show the royal “investiture cycle” (Török 2002: 180). (Photos left: St. Wenig 1999: Abb. 18, Abb. 26; Photo right: F. Joachim, Titelbild, MittSAG13/2002).

yards were executed in this way in a manner which can be called “sloppy” (fig. 5a). Walls of buildings on the terraces were built in the same technique, in a little bit more careful manner.

Walls were always topped by a curved “donkey-back” to prevent rainwater from penetrating the interior of walls. But for this purpose also a coat of plastering is necessary. For building period 6 of the Great Enclosure this coat was never executed, although it was intended.<sup>5</sup> F. Hinkel (1988: 827) states that “the use of plaster was an unconditional part of the finishing work in Meroitic building construction”.

In earlier building periods (no. 1 or no. 2) of the Great Enclosure this coat of plastering (lime plaster) was executed (fig. 5b). Also rectangular blocks were used at this time, providing a structurally stable wall. The blocks of fig. 5b come from the fill of the masonry of the “Western Chapel” no. 517 (Building

Period 6), where blocks obviously coming from the predecessor of this building were used. In Building Period 6 only blocks of architectural sculpture were plastered and painted, before they were put into their final position.

Another example for cheap and fast building is the construction of ramps. The inclined courses of their parapets appear at first glance to be an extravagant feature. But the only purpose of using inclined courses was to avoid extensive work of stone-masons, which would have been necessary for horizontal courses. The same reason has the choice of ramps, just with a floor of soil. A staircase of stone would have required elaborate and extensive work done by stone-masons.<sup>6</sup>

Elaborate floors do not exist, in the best case they are of compacted soil.

<sup>5</sup> This is an observation made by K.-H. Priese, personal communication.

<sup>6</sup> The question “why ramps and not stairs?” was once raised by Prof. St. Wenig in the course of a discussion at Musawwarat.





Fig. 5a: Section through wall 601/512, Building Period 6 (Hintze). Blocks of local sandstone in the shape of a truncated pyramid form the outer shell of walls. The core of the wall consists of sandstone rubble and earth mortar. No coat of plaster.



Fig. 5b: Rectangular sandstone blocks with lime-plaster coating from an early building period.

were erected at the same time (Wolf 2001b: 18).<sup>7</sup> P. Wolf (2001b: 19) draws the (false) conclusion: period 2 has to be deleted from Hintze's building history of the Great Enclosure, replaced by period 5 including "tower" and attached walls.<sup>8</sup> This statement unfortunately met general agreement (Priebe 2003: 53, Näser: in press).

If period 2 is eliminated and period 5 stays on, this would result in an inversion of stratigraphy: suddenly the older periods 3 and 4 would sit on top of the younger period 5. Or in other words: if period 2 is deleted and becomes 5, periods 3 and 4 will also stop to exist and will have to become automatically period 6.<sup>9</sup> This problem became acute, when T. Scheibner (2003: vol. II, 38) had to redate wall 122/227 of former period 3 to period 6, "because it is obviously younger than the architectural remains around room 123, which were originally assigned to building period 2, but are now allocated to period 5" (quoted from Näser, in press: note 39). The same problem arises in relation to radiocarbon dates (Näser, in press: note 16).

The only possible conclusion is: period 5 has to be deleted, "tower" 107-108 and attached walls have to become period 2! Only then periods 3 and 4 are allowed to exist until they are (partly) replaced by period 6.

This is now the point to propose a revised sequence of building periods. Their number has to be reduced, the final result comes in fact quite near to Hintze's (1968) first draft.<sup>10</sup> In order to avoid

#### BUILDING PERIODS

F. Hintze in his first preliminary report (1968) construes a sequence of five (I – V) building periods (Hintze 1968: 667-670 and Karte V). Most remarkable is Hintze's attribution of the "tower" chapel 107 to period II. Later on Hintze revises this first more or less "ad hoc" sequence and creates a new set of eight (1 – 8) building periods based on the results of all three excavation seasons (Hintze 1971: 228-245 and plans III-VI, see also the excellent presentation of "sketches" in Hintze & Hintze 1970: 51-62). Remarkable is the creation of building period 5, which comprises now, separated from former period II, only "tower" chapel 107 and its portico 108.

Excavations of the second expedition of Humboldt-University (1993-2004) revealed that the walls of the terrace ("tower") for Chapel 107 and Room (Portico) 108 are in bond with walls of Hintze's building period 2, i. e. they are part of one plan and

<sup>7</sup> This observation was already made by K.-H. Priebe during the Hintze-expedition, but his statement was neglected. Personal communication.

<sup>8</sup> Which actually would be "Period II" of Hintze's first draft.

<sup>9</sup> A chronological order of numbering is of course assumed.

<sup>10</sup> Also K.-H. Priebe is in strong favour of a reduction of

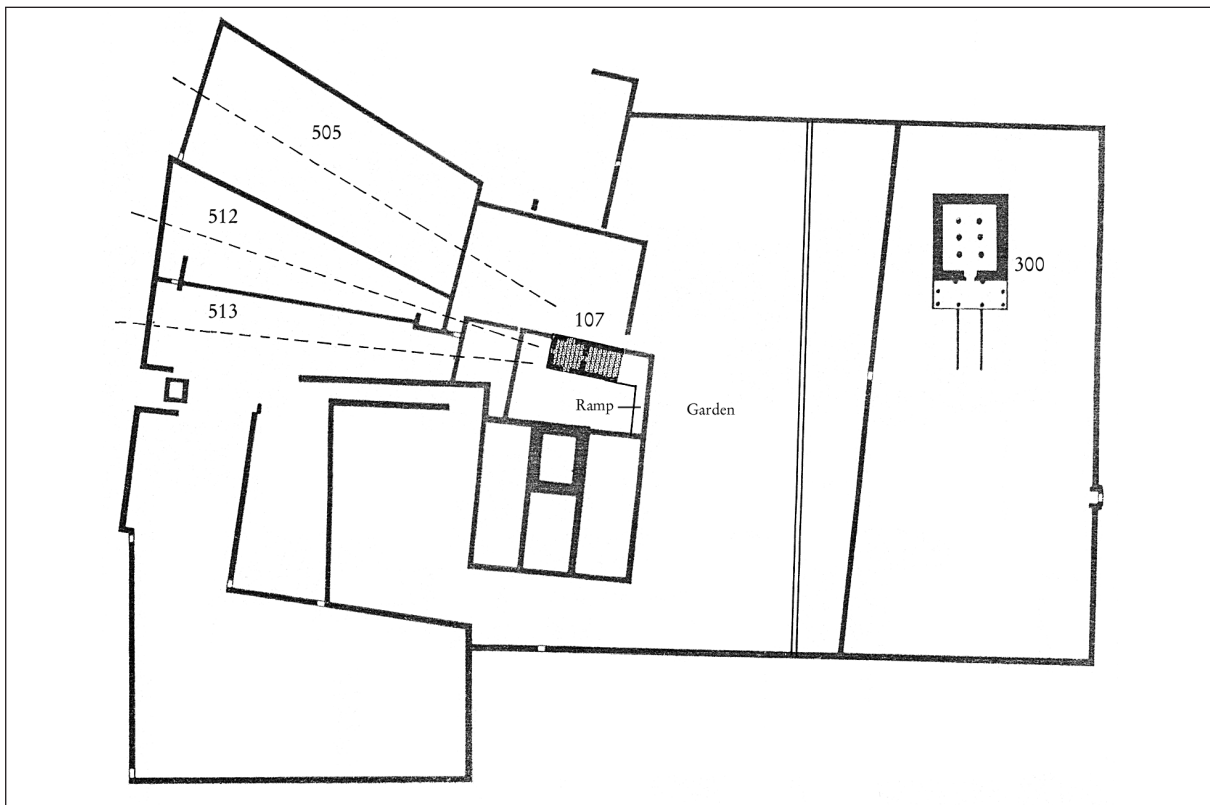


Fig. 6: Proposal for Building Phase 2. Courtyards 505, 512 and 513 are oriented towards “Chapel” 107. Temple 300 belongs to a later Phase. After Hintze & Hintze 1970, Skizze 3.

confusion the term “building phase” is used instead of “building period”:

#### Phase 1

Identical with Period I and Period 1

#### Phase 2

Comprises Period 2 (= Phase 2a), Period 3 (= Phase 2b) and Period 4 (=Phase 2c). Walls of these periods are mostly of the same plan (see Hintze & Hintze 1970: Skizze 1, Skizze 2, Skizze 3) and can be considered as various stages of one Phase. Period 2 (=Phase 2a) of course includes former Period 5, the “Tower” 107-108. When Building 107-108 is added to the plan (fig. 6), an explanation for the irregular shapes of Courtyards 505, 512 and 513 comes to the eye: the courtyards are oriented towards “Chapel” 107-108, or, in other words, radiate from that building.<sup>11</sup> In order to avoid extreme angles, the orientation of Courtyard 505 towards “Tower” 107-108 is more symbolic than strictly geometric.

#### Phase 3

is the equivalent of Period 6. Hintze has rated stages of construction as building sub-periods 6a, 6b, 6c. If

building periods. Personal communication.

<sup>11</sup> Hintze & Hintze (1970: 50) speak of „walls, which run without motif at odd angles“. The question about odd angles was raised by Hintze (1971: 228), but not answered.

it appears convenient, they could be kept as Phases 3a, 3b, 3c. Hintze’s Period 7, the addition of Ramp 113, Building 109 and Courtyard 415 should be classified as Phase 3d.

Hintze’s Period 8 comprises just minimal restorations, changes, additions and deserves no rating as a sub-phase.

In the building history of the Great Enclosure there are two decisive steps: 1. The transition from Phase 1 to Phase 2, i. e. from ground level to terrace level. 2. The transition from Phase 2 to Phase 3, i. e. the shifting of position of sacral spaces (fig.7). The “Central Temple” 100 of Phase 3 is a replacement in function of “Chapel” 107-108 (Phase 2), not of the earlier temples on ground level (Phase 1 and 2), as is generally assumed (Pries 2003: 53). These are replaced by temple 300 (Phase 3), which is quite obvious by the same position on ground level and by the same orientation of the buildings (fig. 7).

A third decisive step can be seen in the changes of architecture in Phase 3d. Ramp 409, which transported provisions for rituals on the Central Terrace, is blocked by Building 109. This means a profound change in function for the buildings on the terrace (see below section “Function”).



Fig. 7: Transition from Building Phase 2 to Phase 3: shifting of sacral spaces. Chapel 107 is replaced by Temple 100. Older cult temples in “central” position are replaced by Temple 300, (basic plan by Hintze & Hintze 1970).

#### DATE

Hintze (1968: 679) claims a lifespan for the Great Enclosure from 500 BC to 350 AD. Hintze & Hintze (1970: 63) would like to see the start of building activities at Musawwarat under the reign of king Aspelta (593 – 568 BC), shortly after the capital had moved from Napata to Meroe. In his second preliminary report Hintze (1971: 240) stresses only the discovery and deciphering of a badly damaged cartouche on a column of Portico 516 in front of “Western Chapel” 517. Hintze and Priebe read the throne name of king Arnekhamani Hpr-K3-R<sup>c</sup> (235-218 BC) and

thus obtain a date for Hintze’s building period 6c.

Tim Karberg (in press) argues that Hpr-K3-R<sup>c</sup> is also the throne name of king Natakamani (0 -20 AD), and furthermore presents some good arguments, based on stone-masons marks, to date building period 6 of the Great Enclosure into Augustean time.

More arguments for redating Period 6 to the time proposed by T. Karberg come from the side of stratigraphy and pottery studies. In 1997 a pottery workshop was excavated in courtyard 224 next to the northern enclosure wall. A stratigraphic section through the workshop area shows a layer of dark ashes (layer 627) directly atop the floor of Courtyard 224 (fig. 8).

Layer 627 abutts against the northern enclosure wall (dating to building period 6) just above the foundation layer. This means that pottery production started quite immediately after erection of the wall. Layer 627 contains sherds of fine ware, which has to be dated to the first half of the first century AD (Edwards 1999: 40). The same date is to be applied to the wall. Edwards (1999: 40) further mentions ledge-rimmed bowls with closely parallel examples from the Palace of Natakamani at Gebel Barkal, and an absence of distinctively late forms.

Looking at Hintze’s chronology (Hintze 1969: 679 and Hintze & Hintze 1970: 63) in a general way it appears very improbable that the Great Enclosure

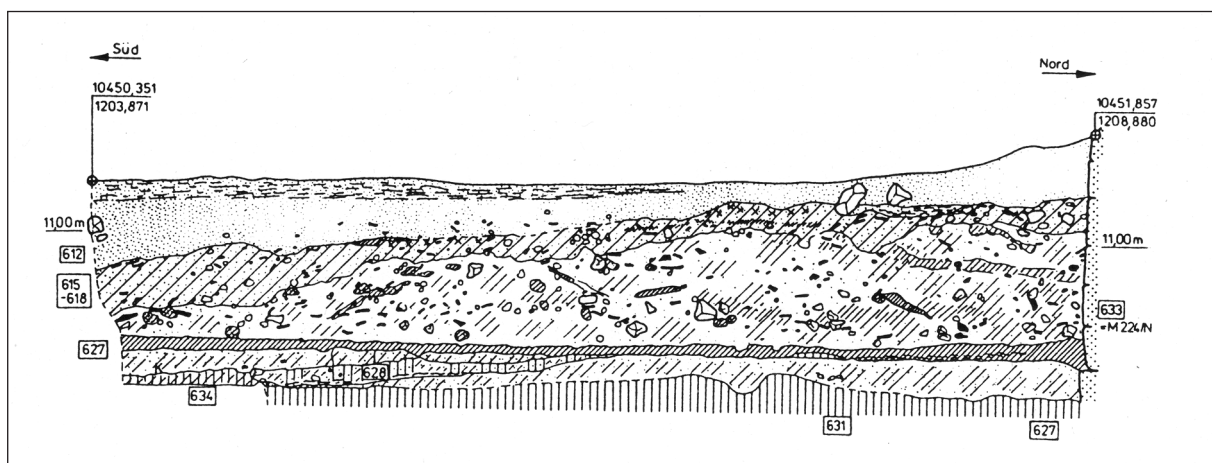


Fig. 8: Stratigraphical profile through pottery workshop in Courtyard 224. A layer of dark ashes (layer 627) lies directly atop the courtyard floor. Layer 627 contains sherds of fine ware, which has to be dated to the first half of the first century AD (from Edwards 1999: fig. 6).



first went through a timespan of about 300 years with several profound changes in its architecture, then was in use for more than 500 years (220 BC – 350 AD) in the shape of building period 6 without any remarkable change in its architecture. About 10 AD to maybe 200 AD would already be a very respectable lifespan for Period 6.

Also Claudia Näser (in press) finds several further indications to support a re-dating of Period 6. C. Näser also is in favour of postponing the start of building activities (to the Meroitic Period?) at Musawwarat, as there are no traces of Napatan building activities in the Keraba.

To sum it up: there exists a trend towards a “short chronology” for the Great Enclosure.

### FUNCTION

For the best part of rooms/spaces of the Great Enclosure their function can be determined, based on analysis of architecture and, if that is not sufficient, also including archaeological evidence.<sup>12</sup>

Spaces under the open sky are:

1. Corridors and ramps: they serve in the first place as a means of communication, their layout and use is conditioned by the rituals performed in the Great Enclosure. In most cases they have doors at both ends, only authorized persons are allowed to use them. Doors are about 1,20 m wide, one can hardly imagine a large ritual procession in these corridors and ramps. For their atmosphere of concealment and secrecy see fig. 3.

2. Terrace areas before and around temples, chapels: a space for circulation, but probably also a space for ritual. Again no visual contact to the outside world.

3. Small courtyards in residential units are part of the habitation.

4. The large courtyards are generally considered to be a space of congregation for large crowds of pilgrims. Török 2002: 175 – “...provide shelter for masses of pilgrims”. As far as courtyards have been investigated up to now, their archaeological record presents a somewhat different image. Stratigraphy is poor, no distinct floor levels, almost undisturbed strata of rain- and wind-sediments. No traces of a longer human presence, like occupation floors, fireplaces, rubbish-pits etc. So if “pilgrims” were

present inside the Great Enclosure, which is quite certain at least for Courtyards 505, 512, 513 (s. section “Building Periods”) and definitely for Courtyard 601, it was only for a very short time. There can be no idea of putting up camp for longer time inside the courtyards.

But the courtyards serve also other functions. Courtyard 224, next to the northern boundary wall of the Great Enclosure, was a place of ceramic production (Edwards 1999). Most remarkable are the finds of impressed and painted fine ware, to be dated to the first century AD. Courtyard 117 held a garden (Wolf 1999), courtyard 304 is part of the cult complex 300, courtyard 305 the same and entrance area for the Great Enclosure. Some courtyards (223, 224, 226, 529) can be considered as attached to residential quarters. A supply function providing goods for operating the Great Enclosure can be ascribed to Courtyards 416 and 417. Courtyard 415 (not yet investigated archaeologically) may have served as encampment space for visitors in the time after the original function of the Great Enclosure had come to an end (see below section “Function”). There still remain some courtyards without apparent function.

For the roofed spaces of the Great Enclosure four categories of function can be discerned. Fig. 9 shows the distribution of the four main functions for roofed spaces:

#### 1. Sacral

Sacral buildings are defined by the presence of the architectural elements of torus moulding and cavetto cornice (Wenig 1999: 30).

In the Great Enclosure we meet two types of sacral spaces:

- a. The “normal” Nubian one-room temple, as represented by Temple 300 and its predecessors below “Temple” 100, on or near ground level. It is a cult temple whose forecourt is accessible to the general public.

- b. A peculiar sacral space/building without parallel in Meroitic architecture.<sup>13</sup> It is an edifice with windows, marked as sacral by torus roll and cornice, situated on a terrace not accessible to the general public. It is evident that it served as a space for a specific and extraordinary ritual. Of this type are “Central Temple” 100, “Temple” 200 and the “Chapels” 107, 104, 517, 106 and 205. K. H. Priese (2003: 63-64) has found a prototype in Greco-Roman Egypt for the “chapels”. This may explain their architectural

<sup>12</sup> First steps in that direction were taken by D. Eigner, 1999 and 2001. Final result is our fig. 9. K.-H. Priese has independently presented a very similar plan in MittSAG 14, 2003.

<sup>13</sup> Török (2002: 177) claims that a similar edifice exists at Naqa. But unfortunately it was never published.

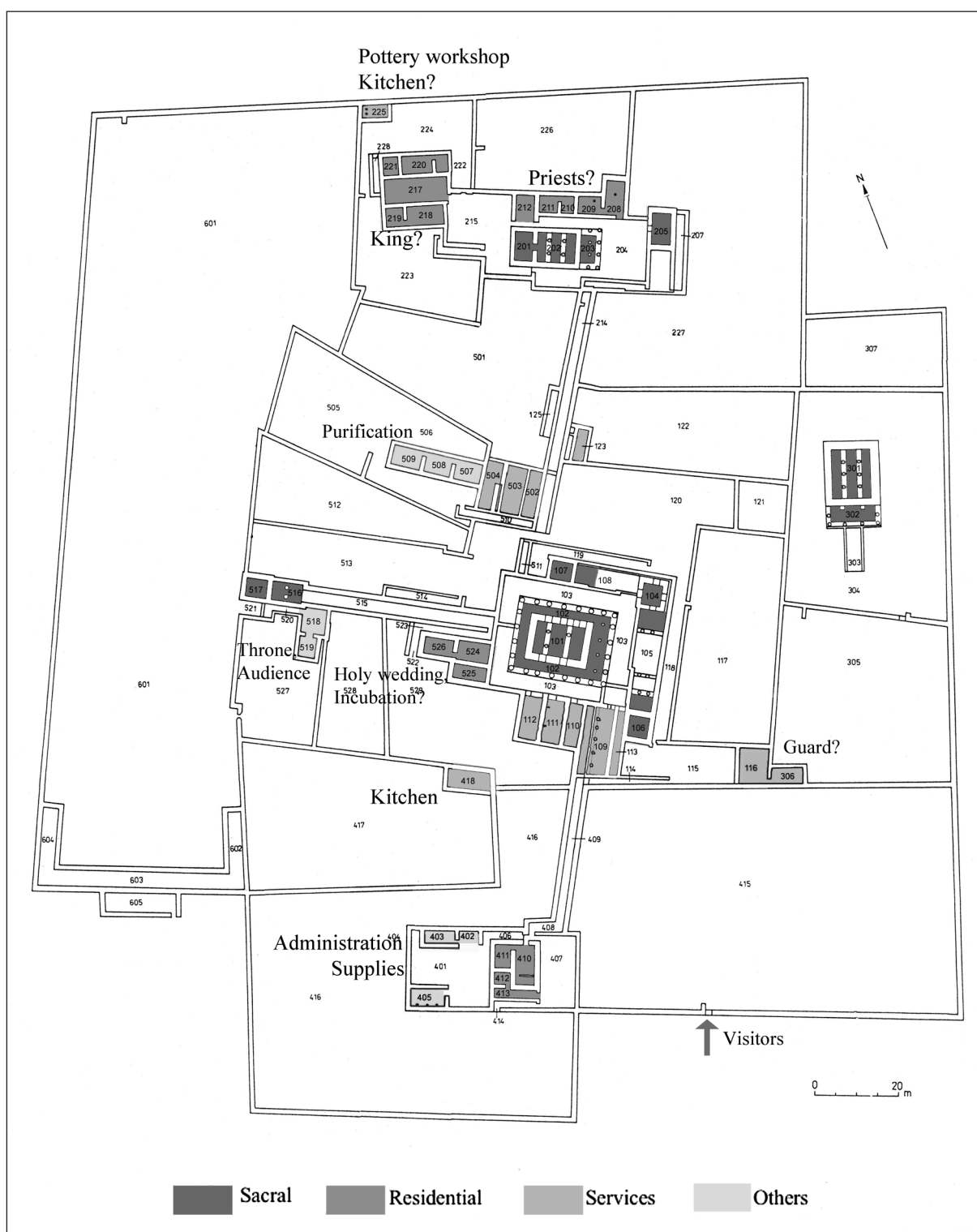


Fig. 9: Functional analysis of roofed spaces in the Great Enclosure. (Design: D. Eigner, computer graphics: F. Joachim).

design, but still gives no clue to their actual function.

## 2. Residential

Several buildings of the Great Enclosure can be qualified without doubt as habitations (Eigner 1999 and 2001). In the first place it is the complex of rooms 217 to 222 with the surrounding Courtyards 215, 223 and

224 (marked “King?” in fig. 9). On two sides of the central Courtyard 217 there are two “apartments” of two rooms, the northern one with a small vestibule. Rooms 219 and 221 can be identified as bedrooms on account of their high-positioned windows (above eye-level). Rooms 218 and 220 have windows with a low sill. The window of room 218 is probably

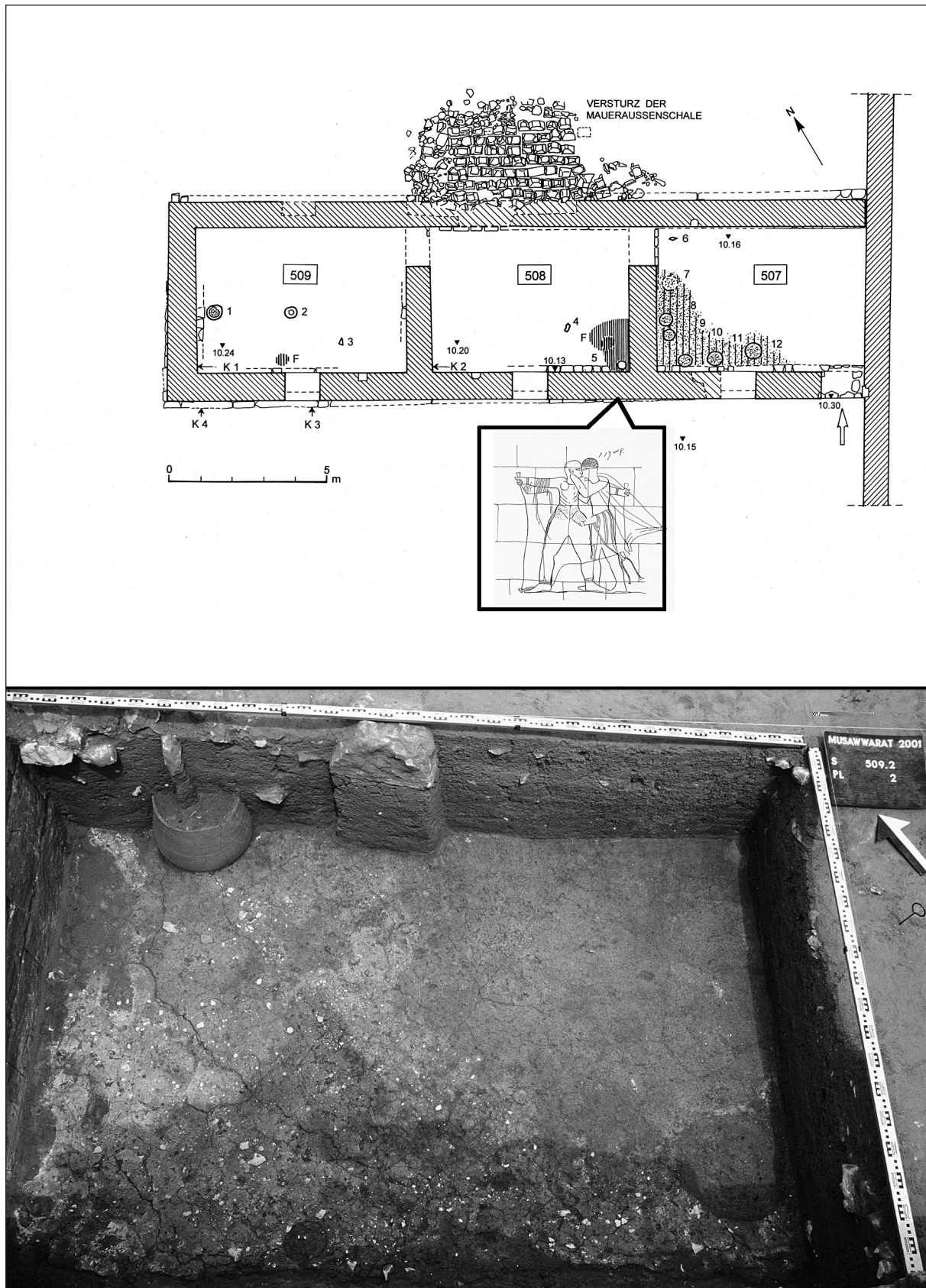


Fig. 10: Purification building. Room 509 contains a vessel (1 in plan, see also photo of archaeological section) sunk into the ground for an incense cleaning ritual (“hufret el dukhān” in modern Sudan) and another vessel (2 in plan) for waste water. In room 508 a sandstone headrest in the shape of a recumbent lion gives evidence that it served as a bedroom. In room 507 several fireplaces for cooking. On the south wall of the building the famous erotic graffito. (Design: D. Eigner, computer graphics: F. Joachim).





the only spot which enabled a view over the whole complex of the Great Enclosure. Room 212 is the vestibule for another sequence of two “apartments” of two rooms each (“Priests?” in fig. 9). Rooms 524-525-526 form another “apartment” on the “sacred” level of the Central Terrace (marked “Holy wedding, Incubation?” in fig. 9). The close proximity of these rooms to “Central Temple” 100 implies a role in the rituals performed there. The building containing rooms 410-411-412-413 and courtyard 407 has not yet been explored archaeologically. But it may well be assumed that it is the residence of the administrator who supervised services for the Great Enclosure (marked “Administration, Supplies” in fig. 9).

### 3. Services

Rooms 225 and 418 (“Kitchen” in fig. 9) can be designated as kitchens on account of fireplaces found there, which definitely served as cooking devices. Room 225 temporarily served also as pottery workshop.

Store rooms can be identified as such by their elongated plan and by their arrangement in rows. The single room 123 was maybe a storage, while rooms 502-503-504 and rooms 110-111-112, arranged in rows, definitely served for storage purposes.

To determine function of room 109 (fig. 12) is somewhat of a problem. Added in Building Phase 3d, the double-storeyed building could have been an accommodation for visitors (see below).

### 4. Others

There remains a number of rooms whose function does not fall into the above three categories. Of course they are of utmost interest, and in most cases a function could be allocated to them, be it by architectural features or by archaeological investigation.

Rooms 507-508-509 (fig. 10) were designated by St. Wenig as rooms for the “Holy Wedding” (Eigner 2002). Actually it was already U. Hintze (1979) who, animated by the erotic graffito on the south wall of the building, proposed such a function. But in fact there exists no proof for the existence of this ritual in the Meroitic sphere. Archaeological investigation provided evidence that Room 509 served for an incense purification ritual which is still today popular in Sudan (“hufret el dukhān”, Eigner 2002). The find of a stone headrest in the shape of a recumbent lion appears proof enough that Room 508 served as a bedroom. Windows of all three rooms are above eyelevel. The entrance Room 507, probably a columned loggia (Eigner 2003), served as a kitchen, as is proved by a number of cooking fireplaces. The position of the building on “profane” ground level is an argument against its being the location of the sacred ritual of “Holy Wedding”, if it ever existed. The ideal rooms for the “Holy Wedding” would be the “apartment” 524-525-526 on the sacred level of the “Central Terrace” (fig. 13). Nonetheless building 507-508-509 has a privileged position in being linked

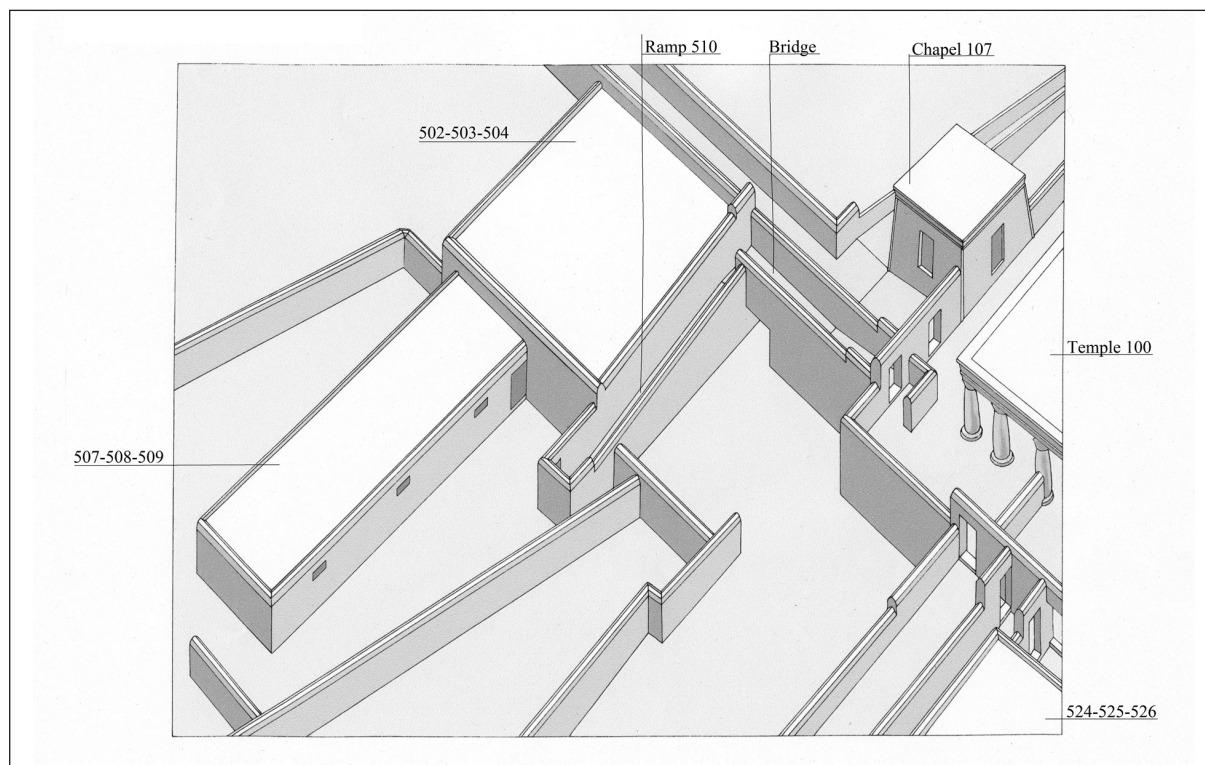


Fig. 11: Bird's eye view of purification building and its special ramp and bridge up to the “Central Terrace” (cf. fig. 13). In the right hand lower corner is the roof of “apartment” 524-525-526. (Design: D. Eigner, drawing: I. Säuberlich).

directly by its own ramp and bridge to the “Central Terrace” (fig. 11 and fig. 13). So there can be little doubt that the building served as a place of purification for persons involved in the rituals on the “Central Terrace”.

Forecourt 518 and Room 519 are situated on a terrace level about 70 cm lower than the “sacred level” of the Central Terrace, they are linked by Ramp 520 to Courtyard 601 (fig. 13). An access was also possible from Corridor 515.<sup>14</sup> Room 519 is a free standing building on a terrace, labeled as “profane” by the absence of torus roll and cornice. Room 519 has the widest doorway in the Great Enclosure – measuring 1,80 m, without doubt it was a double leafed door. All these architectural features suggest an audience room where clients from a crowd assembled in Courtyard 601 were received. The famous graffito of the winged lion on the north wall of Ramp 520 can be seen in significant relation to the proceedings in Room 519 (fig. 13).

Rooms 116 and 306 pose somewhat of a problem in definition of their function. They may have served as guard’s rooms in the last functional stage of the Great Enclosure (see below and fig 12).

Rooms 403 and 402 can be identified as the office of the administrator of the Great Enclosure, who was responsible for provisions for the rituals on the “Central Terrace” (Eigner 2003 and 2004).

The function of Room 405 still remains a mystery, a kind of workshop for provisions for the ritual can be supposed.

For the **function** of the Great Enclosure as a whole there can be established in concordance with the building phases four stages:

1. Cult temple on surface level: Building Phase 1

<sup>14</sup> The door connecting corridor 515 with forecourt 518 is documented in the plans both by Cailliaud and by Erbkam. Today the evidence is destroyed. Somewhat of a problem remains how the difference in level of 70 cm was mastered.

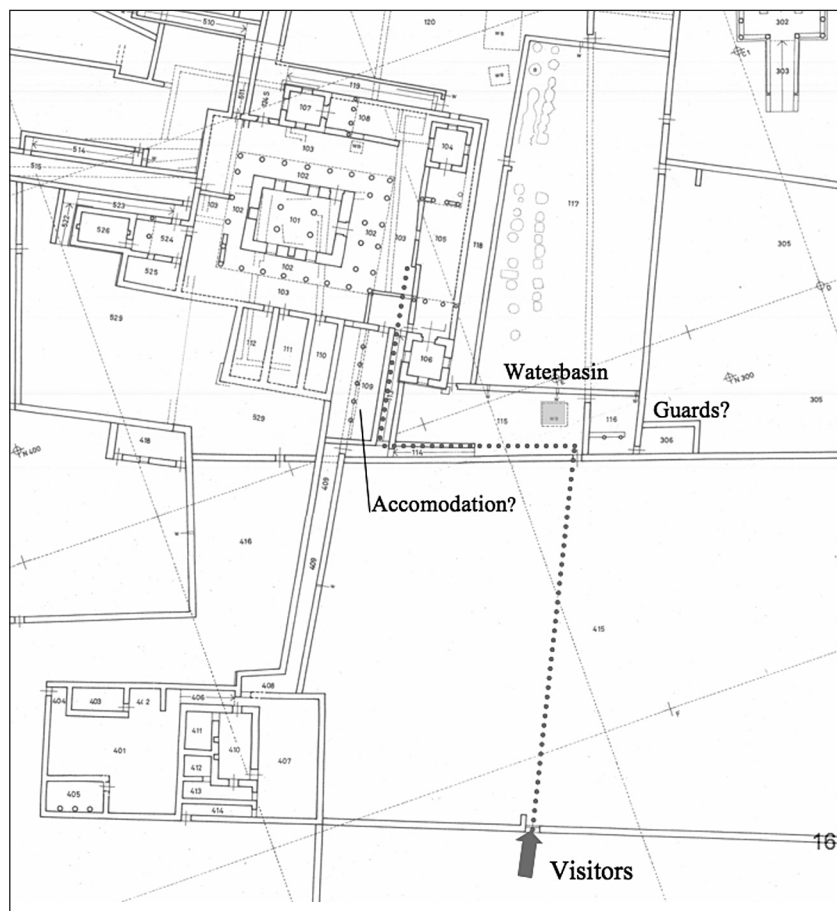


Fig. 12: Building Phase 3d: transition in function from investiture and coronation to “pilgrimage centre”. The terraces are opened for visitors.

2. Cult temple on surface level (predecessors of Temple 300) and sacral space of special function on elevated terrace level ( “Chapel” 107): Building Phase 2

3. Cult temple on surface level (Temple 300) and sacral spaces of special function on elevated terrace level (“Temples” 100 and 200, “Chapels” 107, 104, 106, 517 and 205): Building Phases 3a – 3c.

4. Cult temple on surface level (Temple 300). Building 109 is blocking Ramp 409, which transported provisions for rituals on the Central Terrace: Building Phase 3d (fig. 12).

This means that the original function of sacral spaces on the terraces has come to an end. Ramp 113 is providing a new access to the Central Terrace, it ends in a small entrance courtyard formed by screen walls on Terrace 103. From there also the double-storeyed Building 109 is accessible, which may have been an accommodation for visitors. Rooms 116 and 306 probably were guard’s quarters, a waterbasin in Courtyard 115 served for water-supply of visitors and for ritual washings. Courtyard 415 may have served as an encampment space for visitors.



So the changes in architecture of Building Phase 3d, minor as they may be, testify a profound change of function for the Great Enclosure. The complex is no longer the stage for a concealed ritual, but becomes a “pilgrimage centre” for visitors who revere the historical and sacral significance of the site. This is the time when the multitude of graffiti was applied to walls of spaces which were formerly inaccessible.

### CONCLUSION

The question is: what was the ritual which was performed in these concealed sacral spaces?

Concerning the architectural setting, explained above, there appears little doubt that the Great Enclosure was the perfect stage for a station in the coronation journey of the king. This inference from the architectural record is complemented by L. Török’s approach by inferring from the relief scenes on the columns in front of “Temple” 100 (fig. 4) that the Great Enclosure (especially “Temple” 100) was the stage for “investiture, legitimization, coronation and confirmation of royal power” of the king (Török 1997: 441 and Török 2002: 180-185). The relief scenes are known to anyone dealing with the Great Enclosure, but it is only Török who sees in them a depiction of rituals which actually were performed in the “Central Temple”. St. Wenig (1999: 35-38 and 2001: 81-84) deals extensively with these reliefs and states on one hand “...that the scenes relate to cultic activities which perhaps took place in the temple”, but on the other hand “...we need not conclude from the representations at Temple 100 that it is there that he was crowned”. Török (2002:183) is convinced that the king was crowned there, but then states a little more cautious (Török 2002: 184): “... the relief cycle seems to indicate that Hall 101 was a place where the king’s power, that derived ultimately from his divine father Amun, was confirmed by the deities of Musawwarat es Sufra, Arensnuphis and Sebiuwerker, prominent in the Great Enclosure, and the third “local” god, Apedemak...”.<sup>15</sup>

Török’s (2002: 176) suggestion that the Great Enclosure was a sort of royal “desert (hunting) palace” disregards the actual architectural setting, which is presented above in this article. Residential parts are few and small, the whole complex comprises a large number of sacral spaces and is laid out according to requirements of a ritual, of which little is known.

About the actual proceedings of the ritual exists not much information. Török (1997: 216) states: “The form and contents of the individual rituals belonged, however, to the realm of concealed knowledge and were described in allusive manner.” Zibeli-us-Chen (2002: 113) speaks of an “intimate dialogue” between King and God. This sphere of concealment and secrecy is well provided by the architecture of the Great Enclosure (see above section “Design”). A seeming contradiction is the necessity of the presence of large crowds (Kormysheva 1994: 192, Török 1997: 217, Zibeli-us-Chen 2002: 113). They were not meant as spectators of the ritual, but their presence was essential. The courtyards of the Great Enclosure provided space for them. In Building Phase 2 it was courtyards 505, 512, 513, centered on “Chapel 107” (fig. 6). In Phase 3 the large courtyard 601 was added, having contact to “Western Chapel 517”, and some other courtyards also allowed space for crowds.

Kormysheva (1994: 194) considers a ritual purification as necessary for the king before entering the ceremonies. Building 507-508-508 (figs. 10, 13) provides this facility. As it contains also a bedroom and a kitchen, one may well assume that the king stayed there for some days.

After purification the king was allowed to pass on to the sacral terrace sphere by a special ramp and bridge (figs. 11, 13), to enter “apartment” 524-525-526 (fig. 13). There we may suppose a temple incubatio (Török 1997: 218). These rooms receive service and provisions from complex 400 via ramps 522 and 523.

Then we may assume that Apedemak came from his domicile in the Lion Temple, by his portable shrine,<sup>16</sup> and took temporary residence in the sanctuary niche of “Central Temple 101”. The ritual of “investiture, legitimization, coronation and confirmation of royal power” could be performed by the meeting of the king and Apedemak in “temple” 100. The meeting with Arensnuphis and Sebiuwerker was maybe afterwards in “temple” 200. All three gods are depicted in the “investiture cycle” (Török 2002: 180) on the columns in front of “temple” 100 (fig. 4).<sup>17</sup>

Several crowns were used in the coronation ritual (Török 1987: 35-42, Kormysheva 1994: 195-196, Zibeli-us-Chen 2002: 113), they were kept in the custody of a particular sanctuary (Török 1987: 35).

15 St. Wenig notes only Sebiuwerker as the local god of Musawwarat (Wenig 2001: 84).

16 The stone support for this portable shrine is still *in situ* inside the Lion Temple.

17 These scenes have been discussed extensively by Kormysheva (1994: 205), Wenig (1999: 35-39, 2001: 81-84), Török (2002: 180-185). All three authors come to somewhat different interpretations.



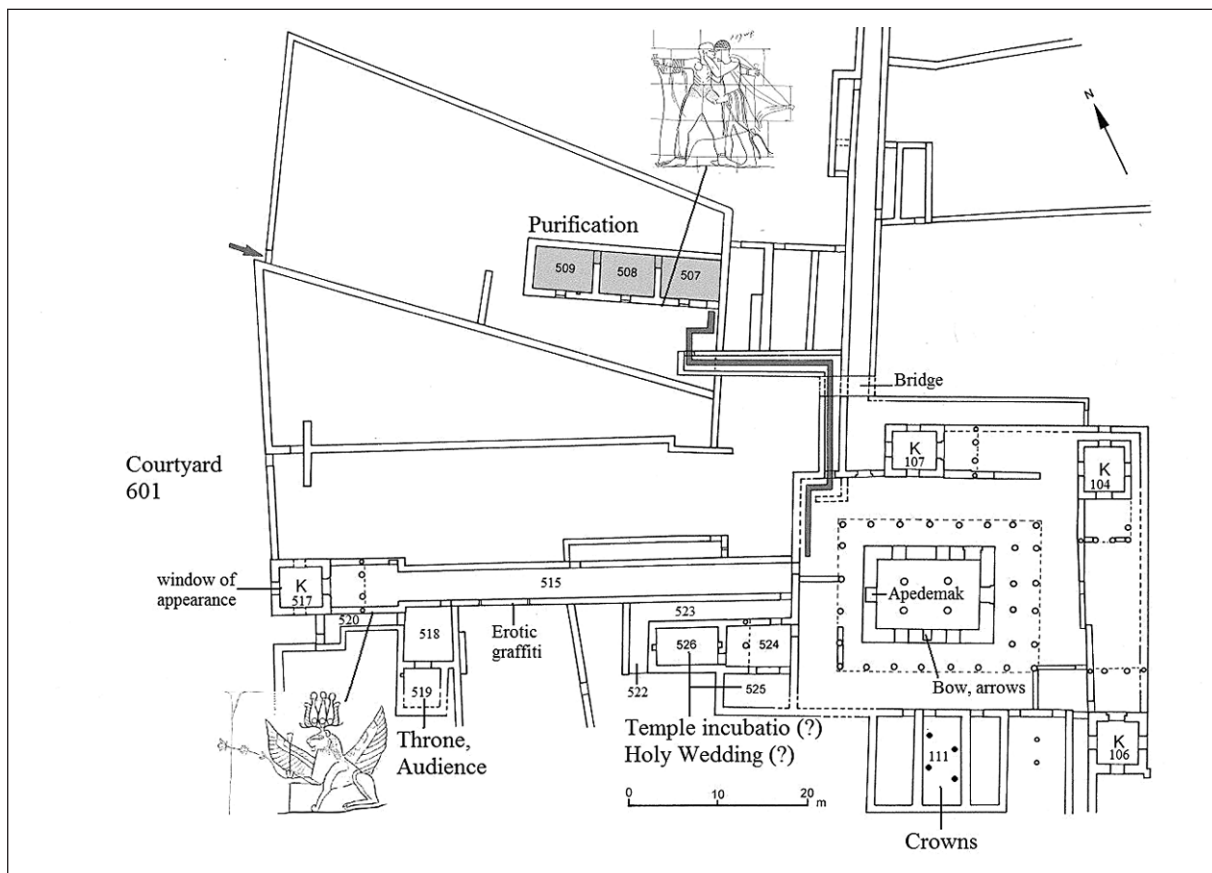


Fig. 13: Function of rooms on and near the “Central Terrace” for the ritual of investiture and coronation. (Design: D. Eigner, computer graphics: F. Joachim).

And in fact there is on the “Central Terrace” of the Great Enclosure a room where crowns were kept: store room 111 (fig. 13 and fig. 14). In this room there are the remains of four sandstone columns which have obviously no structural function in the architecture.<sup>18</sup> They stand close to walls, have no proper foundation (fig. 14), diameter is about 40 cm, present height (1 drum) is about 50 cm, original height may be assumed with 1 m (two drums). There is little doubt that they served as supports for some objects, crowns is the best guess.

Other objects mentioned for the ceremony are a bow and arrows (Kormysheva 1994: 197, Zibeliush-Chen 2002: 113), which were presented by the gods to the king. Hintze (1971: 245 and Abb. 26, 27) reports the find of arrow heads both of bronze and carnelian from “Temple 100”, coming mostly from the floor near the niche in the south wall. This niche, 125 cm deep and 90 cm wide, base at eye level, may well have held these symbols of royal power.

The four cardinal points South, North, West and East (quoted from the stela of Arike-Amenote by

Kormysheva 1994: 198, Zibeliush-Chen 2002: 113) played a role in the ritual. After his coronation, investiture by Apedemak in “temple” 100 and by Arensnuphis, Sebiuwerker in “temple” 200 (?) the king returned to “temple” 100 via the north entrance, left it towards the East, then visited “chapels” 106 (South) and 104 (North). “Chapel” 107, original place of the complete ritual during Building Phase 2, probably played no longer an important role.

What kind of ritual was performed exactly in these “chapels” is unknown, but it certainly had the meaning of taking possession of “all countries” (Zibeliush-Chen 2002: 113). For “East” stands the main entrance (or in this case main exit) of “temple” 100.<sup>19</sup>

Windows in “temples” and “chapels” provide a link to the outside world. They convey to “all countries” the utmost importance of the rituals going on inside the buildings. For “temples” the contact to the outside world is spiritual and symbolic, because of the high parapet walls of the terraces (cf. fig. 3). Windows of “chapels” offer an actual visual contact.

<sup>18</sup> Neglected by all excavators and (partly) omitted in plans.

<sup>19</sup> It must be admitted that function of „chapel“ 205 still finds no satisfying explanation.



Next station in this hypothetical itinerary of the king would be the “Holy Wedding” in “apartment” 524-525-526. As already stated, there exists no proof for this ritual in the Meroitic sphere. But on the south wall of corridor 515 are some erotic graffiti (Wenig 2003: Abb. 10), which give a hint in such direction (fig. 13). They are in such a high level on the wall that they could have been applied only during construction.

On quite firm architectural basis are the next stations. Visit to “West Chapel” 517, Török’s (1997: 521) idea of a “window of appearance” to the crowd assembled in courtyard 601 seems quite convincing. Then the king proceeded to audience/throne room 519 (fig. 13, see also section “Function”) to receive there deputies from the crowd assembled in courtyard 601. Via ramp 520 they had access, probably to give their vows of allegiance to the new king.

Construction of Phase 3 is marked by haste and economy. Maybe the complex of Phase 3 was just used once for the investiture/coronation of king Natakamani.<sup>20</sup> The absence of plastering (see section “Construction”) clearly indicates that no permanent monument was in mind of the builders. Phases 3a, 3b, 3c are just steps of construction. Phase 3d (see section “Function” and fig. 12) finally turned the Great Enclosure into a “pilgrimage center” where pilgrims venerated the historical and sacral significance of the site.

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20 Claudia Näser (in press) suggests a function of the Great Enclosure as a stage for Sed-celebrations. The architectural setting would fit quite well, but is definitely more adapted to the rites of investiture. There remains the question of any proofs for Sed-celebration of Meroitic kings. My sincere thanks to Claudia Näser for permitting access to her unpublished manuscript.



Fig. 14: Store-room 111 (cf. fig. 13). Small sandstone columns served as supports for crowns.

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## ZUSAMMENFASSUNG

Die Große Anlage von Musawwarat es Sufra zählt zu den geheimnisvollsten Schöpfungen der meroitischen Architektur. Nach einigen absurden Deutungsversuchen war die Meinung der Fachwelt geteilt zwischen „Palast“ und „Kulttempel“. Im Zusammenhang mit „Palast“ wies schon L. Török auf die Möglichkeit eines Ortes der königlichen Investitur und Krönung hin. Eine systematische Analyse der Architektur lässt die Große Anlage mit einiger Sicherheit als Ort der Krönungsrituale erkennen. Es sind alle räumlichen Voraussetzungen vorhanden, wie Reinigungshaus, Räume für Tempelschlaf bzw. „Heilige Hochzeit“, Magazine u. a. für Kronen, und vor allem die als „Tempel“ bzw. „Kapellen“ bezeichneten Sakralräume für die Begegnung von Königen und Göttern. Durch die Fenster dieser Räume wurde die Bedeutung der Ritualhandlungen für die gesamte Umwelt nach außen transportiert. Für die Durchführung des Rituals war die Anwesenheit einer großen Menschenmenge erforderlich, die in den Höfen der Anlage ihren Platz fand.

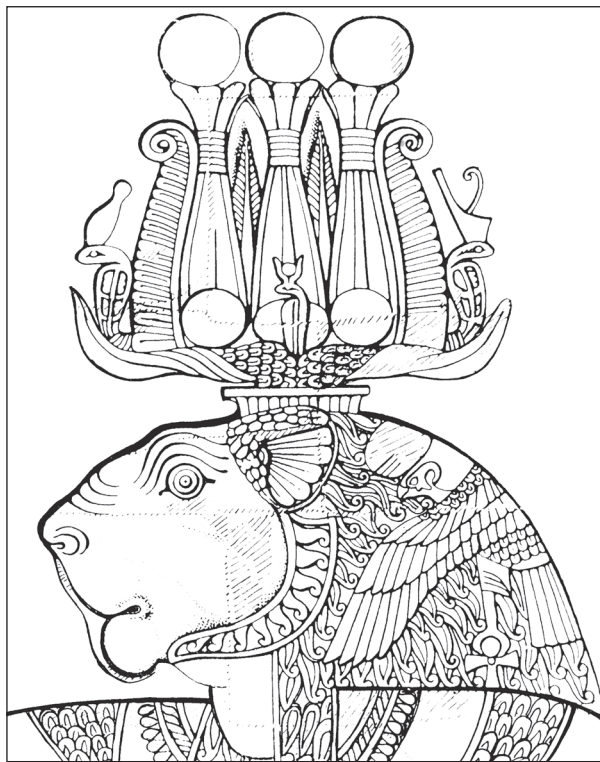
Als Kulttempel ist nur Tempel 300 anzusehen.

Es gibt einige gute Argumente, um König Natakamani als Erbauer der Anlage in ihrer derzeitigen Form (Hintzes Bauperiode 6) zu sehen. Die Anlage wurde in ihrer geplanten Funktion vielleicht nur einmal, eben durch Natakamani, benutzt. Ein Hinweis darauf ist die sparsame und rasche Bauausführung.

Danach erst wurde die Anlage zum „Pilgerzentrum“, waren doch die Räume des Krönungsrituals, d. h. alle auf Terrassen liegenden Bauten, vorher für die Allgemeinheit unzugänglich. Die von Hintze postulierten 8 Bauperioden sollten auf eine Zahl von 3 Bauphasen reduziert werden, wobei Kapelle 107 der Phase 2 zuzurechnen ist. Sie ist der Vorgängerbau von Zentraltempel 100. Die darunterliegenden älteren Tempel wurden durch Tempel 300 ersetzt.



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## IMPRESSUM

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Angesichts der Tatsache, daß die globalen wirtschaftlichen, ökonomischen und politischen Probleme auch zu einer Gefährdung der kulturellen Hinterlassenschaften in aller Welt führen, ist es dringend geboten, gemeinsame Anstrengungen zu unternehmen, das der gesamten Menschheit gehörende Kulturerbe für künftige Generationen zu bewahren. Eine wesentliche Rolle bei dieser Aufgabe kommt der Archäologie zu. Ihre vornehmste Verpflichtung muß sie in der heutigen Zeit darin sehen, bedrohte Kulturdenkmäler zu pflegen und für ihre Erhaltung zu wirken.

Die Sudanarchäologische Gesellschaft zu Berlin e.V. setzt sich besonders für den Erhalt des Ensembles von Sakralbauten aus meroitischer Zeit in Musawwarat es Sufra/Sudan ein, indem sie konservatorische Arbeiten unterstützt, archäologische Ausgrabungen fördert sowie Dokumentation und Publikation der Altertümer von Musawwarat ermöglicht. Wenn die Arbeit der Sudanarchäologischen Gesellschaft zu Berlin Ihr Interesse geweckt hat und Sie bei uns mitarbeiten möchten, werden Sie Mitglied! Wir sind aber auch für jede andere Unterstützung dankbar. Wir freuen uns über Ihr Interesse!

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## INHALTSVERZEICHNIS

---

KARTE DES NORDSUDAN .....	4
EDITORIAL .....	5
NACHRICHTEN AUS MUSAWWARAT	
DIETER EIGNER <i>Where Kings met Gods</i> <i>The Great Enclosure at Musawwarat es Sufra</i> .....	7
CORNELIA KLEINITZ, HEINZ RÜTHER UND CLAUDIA NÄSER <i>Die 3D-Laserscan-Erfassung der Großen Anlage und weiterer Monumente von Musawwarat es Sufra – ein Beitrag zur virtuellen Erhaltung und Präsentation des sudanesischen Kulturerbes</i> .....	23
FRITZ-HINTZE-VORLESUNG	
SIMONE WOLF UND HANS-ULRICH ONASCH <i>Neues zu den Royal Baths in Meroë.</i> <i>Die Ergebnisse der zurückliegenden Grabungskampagnen.</i> <i>Eine Zusammenfassung der Hintze-Vorlesung vom 13. November 2009</i> .....	33
AUS DER ARCHÄOLOGIE	
ANGELIKA LOHWASSER <i>Das Projekt Wadi Abu Dom Itinerary (W.A.D.I.) Kampagne 2010</i> .....	37
BALDUR GABRIEL UND ANGELIKA LOHWASSER <i>Google Earth und Groundcheck: Beispiele aus dem Wadi Abu Dom (Bayuda, N-Sudan)</i> .....	51
MIROSLAW MASOJC <i>First note on the discovery of a stratified Palaeolithic site from the Bayuda Desert (N-Sudan) within MAG concession</i> .....	63
JANA EGER, JANA HELMBOLD-DOYÉ UND TIM KARBERG <i>Osttor und Vorwerk der Festung Gala Abu Ahmed</i> <i>Bericht über die archäologischen Arbeiten der Kampagnen 2008/09 und 2009</i> .....	71
ANNETT DITTRICH <i>Using functional aspects for the classification of Meroitic pottery from Hamadab, Sudan</i> .....	87
VARIA	
ALEXEY K. VINOGRADOV <i>A Rare Epithet of Amun in the Temple of Sanam: A Comment on the Dedication Stela</i> .....	97
NACHRUF <i>Jürgen Becker (1936-2010)</i> .....	107