

# SUDAN & NUBIA

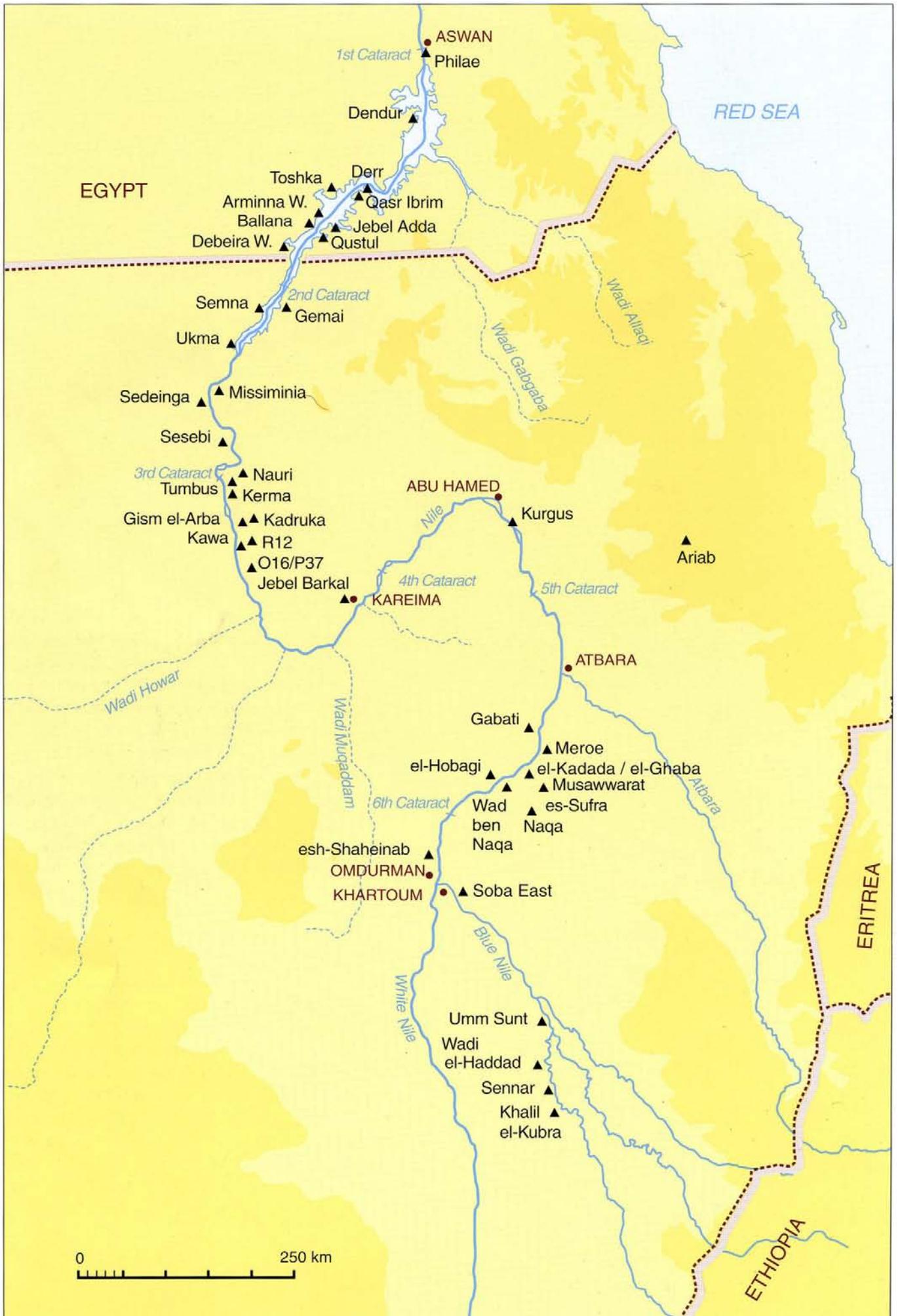
The Sudan Archaeological Research Society



*Bulletin No. 5*

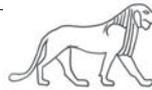
2001





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## Introduction

*Vivian Davies*

The appearance of this, the fifth, issue of the Bulletin coincides with the tenth anniversary of our Society's founding. It has been an extraordinary first decade, remarkably productive in terms both of fieldwork and publication - one in which we have worked closely with our colleagues in the National Corporation for Antiquities and Museums of the Sudan to fill gaps in the archaeological record and meet, wherever possible, the threats posed to archaeological sites by modern development. We have organized and supported eight major field-projects (in Soba East, the Northern Dongola Reach, Kawa, the Shendi-Atbara Reach, Gabati, the Bayuda Desert, the Fourth Cataract, and Kurgus) and published five memoirs (two others are in press at the time of writing), as well as *Sudan & Nubia*, an annual bulletin of reports 'fresh from the field'. Furthermore, we have held each year an international colloquium on current fieldwork and research, and we now additionally host the annual 'Kirwan Memorial Lecture', in memory of our distinguished first President.

The considerable funds needed to carry out this extensive programme have been forthcoming most substantially from the Bioanthropology Foundation and the British Museum, upon whose generosity we continue to rely, as we do also on that of the Society's individual Patrons. We intend to mark the Society's achievements with a special publication to be issued in the coming year. As to the future, the reports in this volume, on sites ranging in date from the Neolithic to the Mediaeval Period, amply demonstrate the huge potential for important new discoveries and scholarly progress in our area of interest, both in Sudan and Egypt, promising a second decade as exciting and rewarding as the first.

# Musawwarat es-Sufra<sup>1</sup>

## Interpreting the Great Enclosure<sup>2</sup>

Steffen Wenig

The valley of Musawwarat es-Sufra lies amid the heavily dissected sandstone plateau in the western Butana (Keraba), about 35km east of the Nile and some 160km north of the confluence of the White and Blue Niles (Fig. 1). It contains a wadi that runs from north-east to south-west and is now much covered in sand (Fig. 2). Here there are numerous ruins, especially from the Meroitic period of the Kingdom of Kush (c. 270 BC – c. AD 330).

The most important monument in this valley is the Great Enclosure, which covers approximately 55,000m<sup>2</sup> and is a very unusual cluster of buildings. Partly perched on terraces, there are a number of temples and long corridors that

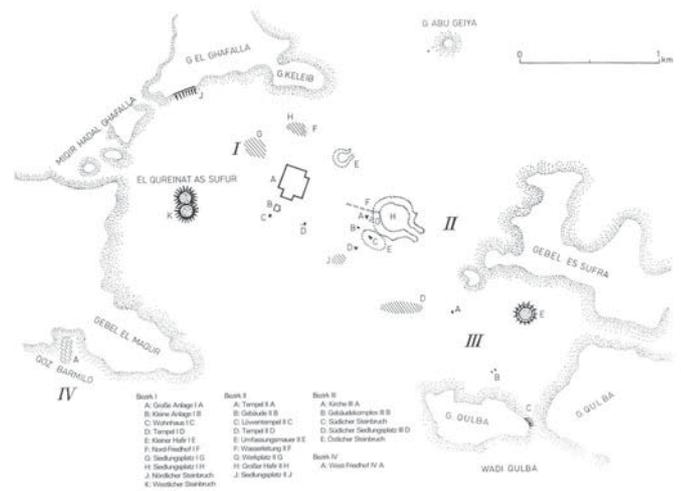


Figure 2. The valley of Musawwarat es-Sufra.

connect individual groups of buildings. It is noteworthy that the walls of these corridors are so high that those who moved through them could not be seen from outside. Also, it is not stairways but ramps that led up to these terraces - a peculiarity found only here.

The central buildings are surrounded by numerous rooms which undoubtedly served as storerooms, workshops and kitchens, and by great courtyards of which many have no right-angled corners (Fig. 3). These buildings were constructed from the soft, locally available sandstone of the Nubian formation, which is white inside whereas the outer surface, because of its content of iron-oxide, after sufficiently long exposure to the air develops a light to dark brown patina and becomes hard. The walls were once protected against

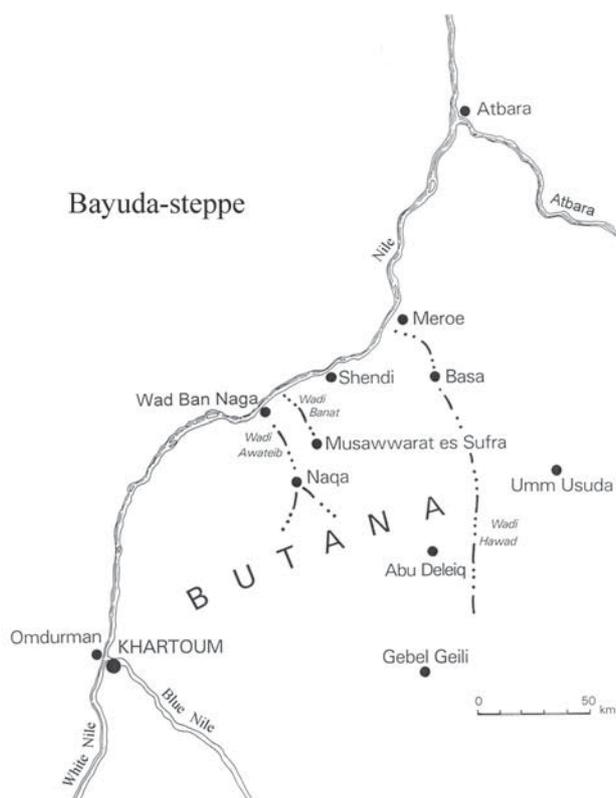


Figure 1. Map of the Butana.



Figure 3. Plan of the Great Enclosure after Hintze.

<sup>1</sup>This article, including the contribution by D. Eigner, appeared in the *Nürnberger Blättern zur Archäologie*, Sonderheft Sudan, 1999: 23-46. I wish to thank the publisher, Dr. Klaus Dornisch, for his permission to reprint it in English in *Sudan & Nubia*. The text was translated from the German by Marcel Marée to whom the editor is most grateful.

<sup>2</sup>I wish to thank my colleague Dr. Dieter Eigner for critically reading the manuscript and for various suggestions, as well as Dr. Angelika Lohwasser and Martin Fitzenteiter for some stimulating discussions. Special thanks go to my friend Klaus Dornisch, publisher of the NBA, for adjustments to the new ideas on the interpretation of the Great Enclosure.



the extreme weather conditions by a very hard white plaster, but hardly anything of this survives, so that today the Great Enclosure looks very much undecorated. The conjecture, already expressed by Hintze, that the plastered walls bore paintings in antiquity finds support from recent finds at Naqa.

Already in the 19<sup>th</sup> century, when the first European travellers came to Musawwarat es-Sufra, the interpretation of this complex played an important role in the discussion and it captured the imagination of its visitors. The first traveller, Linant De Bellefonds (1958, 119), thought “*que ce grand édifice était une espèce de couvent où collège*” (see Fig. 4). Cailliaud (1826,

insights into its construction history,<sup>5</sup> but also identified the ancient name of the place. It was once called *Aborepe*. Among the most important results of Hintze’s research was the observation that underneath the terraces and in the sand-covered courtyards there were remains of earlier building phases.<sup>6</sup> The excavations revealed that several times in its history the complex had been razed to the ground to be re-erected and expanded on the same spot, yet each time with a slight change of orientation ranging between 4° and 5° 20’. In other words, the Great Enclosure had already existed in the Napatan period (c. 664 – c. 270 BC). The orien-



Figure 4. View of the Great Enclosure in a drawing by Linant de Bellefonds.

158) suggested “*que ce lieu était consacré à l’enseignement*” (see Fig. 5). Lord Prudhoe (Diary, p. 94) felt “*that the ruins we were in was a Palace of a king of later times built here for his diversion in the chase*”. Callot (1855, 81) spoke of a “*Stadt*”, while Hoskins (1835, 109) believed “*that it was a hospital, to which invalids, particularly those suffering from malaria, were sent during the rainy season*” (see Fig. 6). Pückler-Muskau (1844, 181) saw the ruins as the “*Lustschloß der gebildeten und lebenslustigen Candace*” (see Plate 1), while Lepsius apparently abstained from any view.<sup>3</sup> In the opinion of Budge (1907, II, 148), which has so far remained unique, it could have been “*a khân, or desert rest-house*”<sup>4</sup>

Fritz Hintze (1915 - 1993) was the first explorer to carry out excavations here. In the three campaigns of 1964, 1966 and 1968 he dug a total of 420 trenches within the Great Enclosure, and he managed not only to obtain fundamental

tation of the temples must have been determined by certain stars, whose position in the sky changed over time, and this orientation was so quintessential that the temples of the earlier complexes had to be re-erected several times. It was not dilapidation that motivated the repeated construction work, but a religious necessity to follow the stars in the orientation of the temples.

Since the start of Hintze’s excavations at Musawwarat es-Sufra in 1960, various new hypotheses have been put forward for interpreting this structurally unique complex of buildings without a single parallel across the face of Africa.

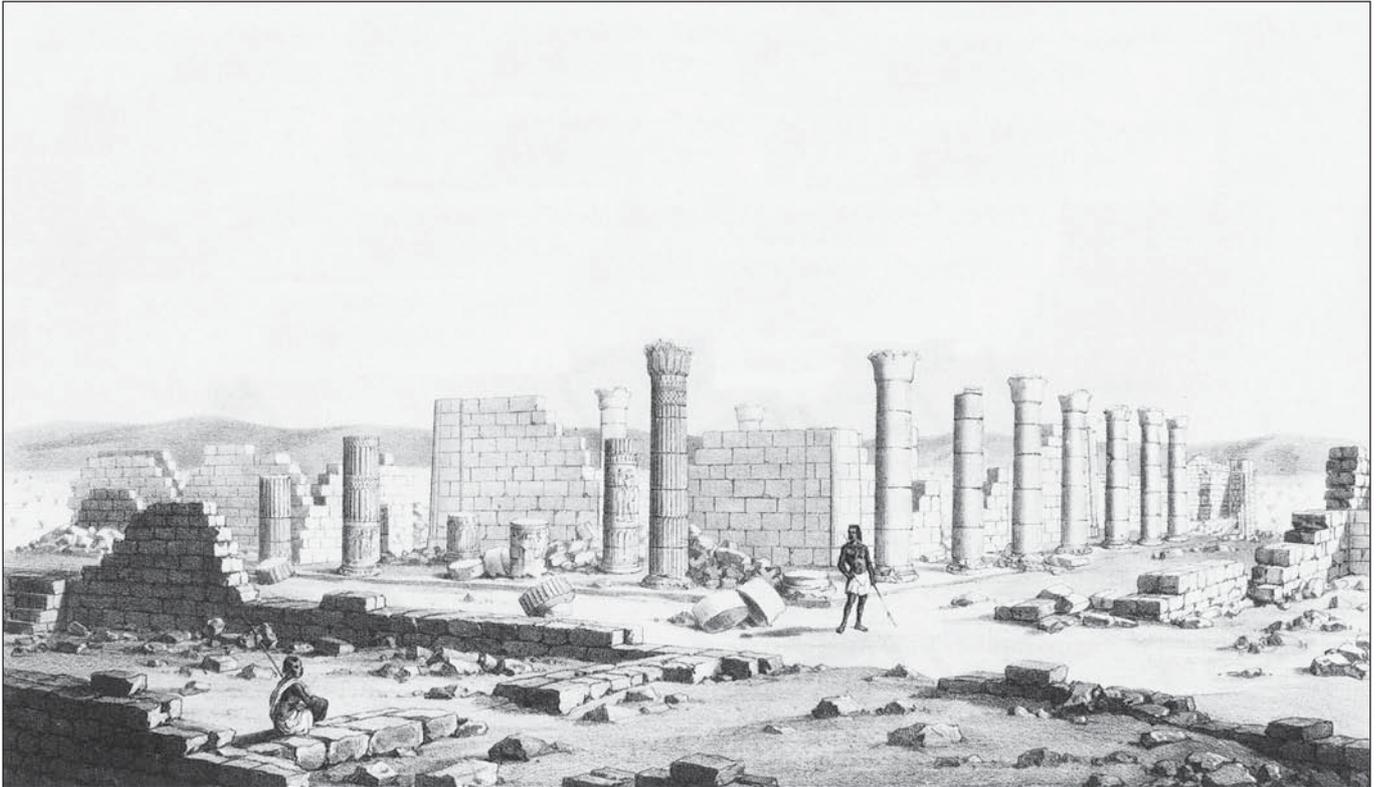
1. Hintze himself explained the Great Enclosure as a centre of pilgrimage for celebrating religious festivals:

<sup>5</sup> The excavations in Musawwarat es-Sufra were carried out by the Institut für Ägyptologie der Humboldt-Universität zu Berlin from 1960 to 1968. The final publication is yet to appear. On individual results in the Great Enclosure, see the preliminary reports Hintze 1968; 1971; 1984; Hintze and Hintze 1970.

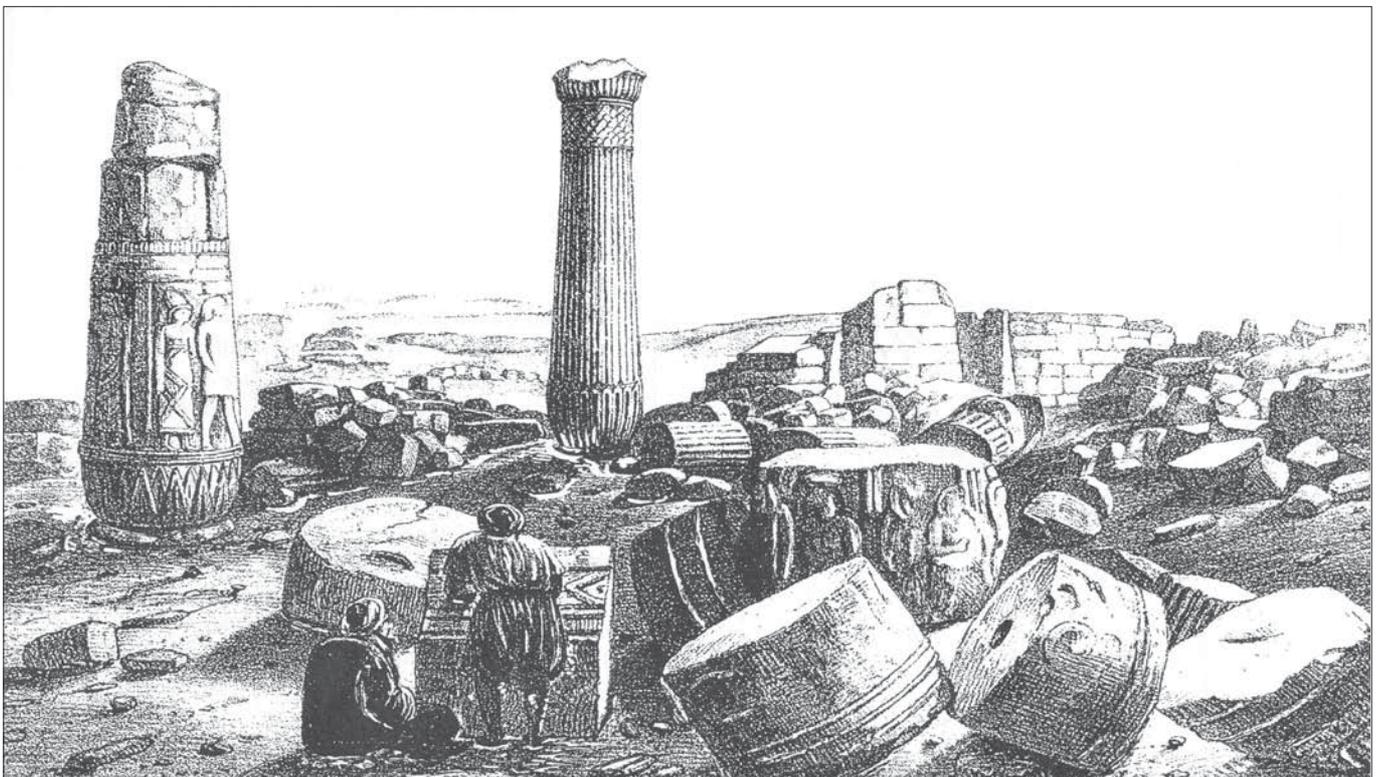
<sup>6</sup> A total of eight phases have been identified, while some of these can be divided in various further sub-phases.

<sup>3</sup> At least I have found no opinion of Lepsius expressed on this issue.

<sup>4</sup> But to a certain degree his opinion matches the views professed by Klaus Dornisch.



*Figure 5. View of the Great Enclosure in a drawing by Tremaux.*



*Figure 6. View of the Great Enclosure in a drawing by Hoskins.*

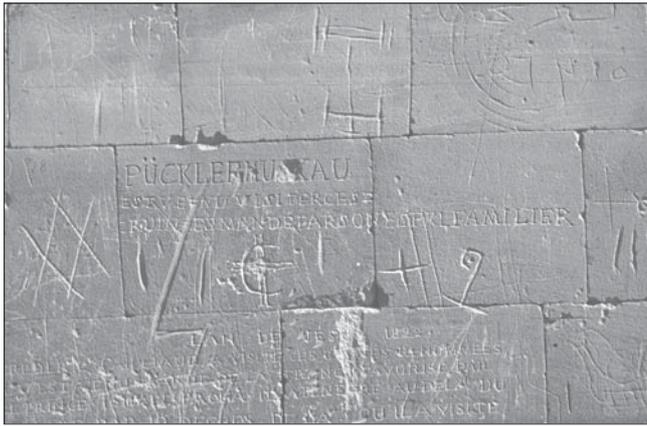


Plate 1. Inscription recording the visit of Pückler-Muskau.

“Musawwarat war ein Pilgerzentrum, wo sich zu bestimmten Zeiten im Jahr viele Menschen versammelten, um ein heiliges Fest zu feiern und ihren Göttern zu opfern”.<sup>7</sup> The following points speak in favour of this:

a) In the valley of Musawwarat there are no tombs from the Meroitic period. This can probably be explained only by assuming that the valley was a sacred place where no one was allowed to be buried.<sup>8</sup>

b) No sizeable settlements have been found in the valley. Admittedly, there are various indications of some occupation in the Meroitic period, but apart from the Small Enclosure, which undoubtedly had a very official character and possibly served as the living and representative abode of the high priest (Figs 7-8), no secular buildings of stone were erected in Musawwarat.<sup>9</sup> This is remarkable and contrasts with the situation at, for example, the city of Naqa (old *Tolkte*) some 20km away. The habitation traces in Musawwarat undoubtedly go back to the priests and workmen who lived here probably in simple huts.

c) There were, nonetheless, large numbers of people in Musawwarat from time to time. This is especially borne out by the two *hafirs*, of which one ranks among the largest in the Meroitic Empire and whose construction demanded a large, surely governmentally organised, effort. These *hafirs* were reservoirs for catching rainwater, sufficient for a large number of people and to water fields.<sup>10</sup> The large *hafir* of Musawwarat had a diameter of about 250m and its walls an estimated height of 11-12m. In it could be collected a volume of water estimated at 130,000m<sup>3</sup>.

<sup>7</sup> Hintze and Hintze 1970, 50; see also Hintze 1984, 337.

<sup>8</sup> Meroitic cemeteries that may have been associated with Musawwarat have been found outside the valley, but up to now they have not been examined further. As well as a small post-Meroitic cemetery excavated by Hintze, the valley also features Neolithic graves.

<sup>9</sup> The Small Enclosure (I B) was examined more closely by M. Fitzenreiter, for which see Fitzenreiter *et al.* 1999.

<sup>10</sup> At the Great *Hafir*, which dates with certainty from the Meroitic period, there is a water pipe from the Christian period that leads to the wadi and which was found and examined during Hintze's excavations.

A further indication that there were numerous visitors is provided by the 2000-3000 pictorial graffiti and some 160 secondary inscriptions that were left behind on the walls in the Great Enclosure, many of them dating from Meroitic times (Plates 2-5).

2. Shinnie (1967, 94), however, posed the question whether the complex might have served to tame elephants: “It may be that here was a centre for the training of elephants for military and ceremonial purposes”. He based his view on the numerous representations of elephants in Musawwarat es-Sufra. Indeed there are many of them, such as a wall near the central temple which ends in an elephant (Plate 6), in the column bases before the central temple of the Great Enclosure (Plate 7) and in the chapel-like Room 108 (Plate 8), as a semi-plastic relief in Temple 300, in reliefs as found especially in the temple of Apedemak, and in all sorts of graffiti (Plate 5).



Figure 7. Plan of the Small Enclosure.

It must be stated that we know nothing about a cultic significance of elephants in the Meroitic kingdom. Nor do the relatively slight walls of the courtyards or the narrow ramps of the Great Enclosure favour this theory. It would also fail to explain the absence of a settlement at Musawwarat, notwithstanding the presence of two water reservoirs, or explain the absence of Meroitic graves as opposed to

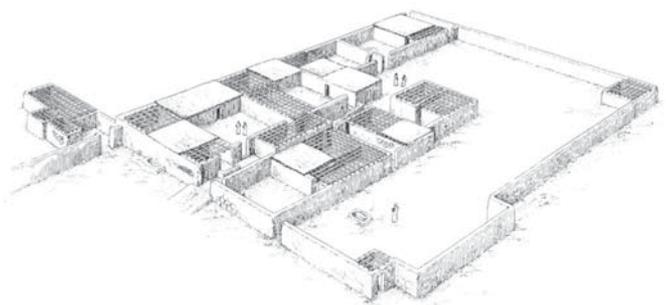


Figure 8. Reconstruction of the Small Enclosure.

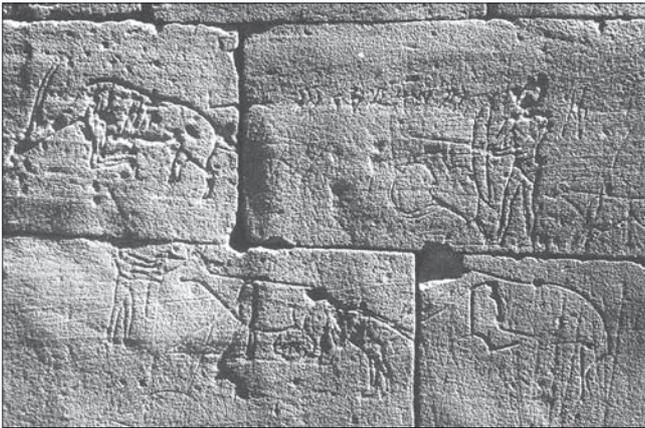


Plate 2. Group of graffiti.



Plate 4. Graffito showing a royal triumphal scene.



Plate 3. Graffito of a horse.



Plate 5. Graffito of an elephant.

numerous graffiti.<sup>11</sup>

In his latest book, Shinnie (1996, 111) is much more cautious. He states only: “*Musawwarat es Sufra, perhaps the most remarkable group of buildings in Nubia, is something of a mystery*”.

3. On various occasions, the original purpose of the Great Enclosure has also been commented upon by Adams. He feels Shinnie’s idea of a complex for taming elephants is “*somehow far-fetched, [but] it is difficult to propose a more logical explanation for them [viz. the courtyards]*” (Adams 1977, 320), and he thinks “*the function of the Great Enclosure was certainly in part religious*”.

In his article on *Meroitic Architecture*, Adams (1984, 266f.) reckoned the Great Enclosure among the “*Enigmatic monumental structures*”, and this immediately elicited Hintze’s astonished response: “*aber die Zweckbestimmung des Baus als heilige Stätte und Pilgerzentrum dürfte doch inzwischen mehr als wahrscheinlich sein*” (1984, 337).

4. Next came Lenoble who, in the late 1980’s and early

1990’s, attempted another new interpretation of the Great Enclosure, expressed in a small and popular work. He mentions the hypotheses of Hintze and Shinnie, but he questions these and refers to the Great Enclosure as “*Palais d’el Musawwarat*”. The animals depicted in the many graffiti would have been kept in the courtyards as symbols of royal power,



Plate 6. Wall terminal in the form of an elephant, central terrace of the Great Enclosure.

<sup>11</sup>The graffiti have to date been examined only imperfectly. It is my impression that there are at least as many lion figures as elephants.



Plate 7. Column base of elephant-and-lion form in front of the central temple.

which would have been celebrated in the Great Enclosure.<sup>12</sup> More specifically, he holds: “*Le grand ensemble serait donc l’architecture indispensable à la réalisation périodique de ces fêtes, entourée des cours nécessaires au gardiennage des animaux employés. En termes savants, un paradis (“jardin”) contenant un palais et des theiotrophia (“enclos à animaux”) à ne pas confondre avec un zoo moderne où la fonction des animaux est bien différente. De tels parcs caractérisent la royauté égyptienne, puis hellénistique et romaine; celui d’el Musawwarat montre que l’idéologie royale méroïtique évolue au contact de la Méditerranée*” (Lenoble 1991, 16).



Plate 8. Musawwarat es-Sufra. Great Enclosure. Unfinished column base from Room 108.

In the English version of this work, Lenoble (1994, 22) says: “No doubt this place must have been related to some special hunting event”. “The Great Enclosure has not yet revealed its function. Archaeologists have presented several hypotheses but none of them take all evidence into account” and proceeds: “So the Great Enclosure might have been a place for the Meroitic Ruler to prove his physical ability e.g. by hunting animals that had been gathered and kept in the

<sup>12</sup> “La symbolique complexe attachée aux animaux à l’époque méroïtique mérite un déchiffrement patient: on ne dispose pas de textes explicatifs” (Lenoble 1991, 16).

basin for that purpose” (Lenoble 1994, 23).<sup>13</sup>

Regarding the central temple of the Great Enclosure he states (1994, 22): “Behind the portico is a single chamber temple (?) with a niche on the west side; its 5 doors suggest that it might not be a temple. An enthrone-ment room?”<sup>14</sup>

At the time that this theory was being formulated, nothing was known about the purpose of the courtyards. During excavations carried out since 1995, however, the function of some courtyards was for the first time examined more closely and clarified, so that this uncertainty has been partially removed.<sup>15</sup> It must also be pointed out that the majority of those graffiti, which we consider to be Meroitic, are positively connected to the cults of deities. Had we really been dealing with a ceremonial place for displaying royal power, and with courtyards occupied by wild animals, then we would have expected corresponding representations - and these we do not have. Many of the animal depictions are also Post-Meroitic and may have been left by people who so reflected their nomadic world.<sup>16</sup>

5. Török, in two articles (1990; 1992) and his sizeable book of 1997, not only subscribed to Lenoble’s view and advocated it within the framework of his concept of *Ambulatory Kingship* among Meroitic kings (Török 1992),<sup>17</sup> but actually developed it together with Lenoble.<sup>18</sup>

In his article of 1990 he states: “Being the central feature of the Great Enclosure, which is interpreted by the excavators as a temple complex that was visited annually by pilgrims who dwelled during the time of religious festivals in the vast courts of the Enclosure, Temple 100 is considered to have been a cult temple. Its unusual ground plan suggests, however, a different interpretation, for the building is in fact a

<sup>13</sup> The idea that the Great Enclosure was a “hunting-palace” is actually quite old. According to the MS. of Burton (p. 89) this was already suggested by Major Orlando Felix (1790-1860), who visited Musawwarat in 1829 together with Lord Prudhoe (1792-1865).

<sup>14</sup> In his description of the central temple, Lenoble erroneously describes it as a room with five entrances. I will show further below that the room has only two entrances and four windows.

<sup>15</sup> In one of the earlier building phases, Courtyard 117 was an extensive (temple) garden, while Courtyard 120 comprised at least two reservoirs of burnt bricks for collecting and distributing the water needed for its irrigation. Discarded pottery from the garden was deposited outside the Great Enclosure, where Courtyard 305 was constructed later. In later times, Courtyard 224 (with Room 225) housed a ceramics workshop, which subsequently served as a rubbish depository. I will come back to this further below. The original idea that the courtyards accommodated pilgrims may need to be completely reconsidered.

<sup>16</sup> It must be noted that we are not yet in a position to make definitive statements on the graffiti. It is remarkable, for example, to find large numbers of giraffe figures in the “Western Chapel” and in Temple 200. However, these graffiti can only have been added at a time when the rooms had lost their original purpose, and so they must be post-Meroitic. Most of the camel figures are of Arab origin.

<sup>17</sup> I rejected this view immediately (Wenig 1992). Nor does it convince me today.

<sup>18</sup> “We had an opportunity to collect further arguments for our hypotheses during our visit at the site in January 1989” (Török 1990, 157, fn. 5).

four-columned hall surrounded by a colonnade and provided with **six** entrances and a **deep rectangular wall niche** situated opposite the main entrance in the main axis... It would thus appear that it was rather a **throne room** occupying the functional centre of a temple-palace complex that is typologically reminiscent of the temple-palace type developed in the New Kingdom in Egypt.<sup>19</sup>

And two years later Török writes (1992, 124): “Besides building 300, however, there is no absolutely clear evidence of temple buildings in the vast complex and hence it cannot be ruled out that the Great Enclosure should be regarded as one of the temporary royal residences”. Török feels, in brief: “While the central hall with its six entrances cannot be explained without great difficulties as a cult building, it has features that suggest that it was a throne room. The same function may be ascribed to building 200, which was modelled obviously on the central room complex” (*ibid.*, 124).<sup>20</sup>

What was in 1990 and 1992 still presented with a certain query has only five years later become a certainty, for now the Great Enclosure is described as “a royal palace complex including at least one temple (300)” (Török 1997, 437) and as “more probably a seasonal royal residence” (*ibid.*, 400). Török goes on: “[it] seems to suggest that the edifice was principally used as a hunting palace”.

Already this hypothesis is being cautiously adopted by other colleagues: “There is little to recommend the identification of this structure [intended is Temple 100] as a temple and ‘Temple 200’ has many features in common with it” (Welsby 1996, 145). So one sees how quickly opinions, if stated frequently enough, may become a *communis opinio*.<sup>21</sup>

At the Nubiologists’ conference at Geneva in 1990 I already refuted the idea that the Great Enclosure was a royal palace and the central temple a throne-room (Wenig 1992, 139-140), but it was not done at the time with a presentation of all the possible objections. As will be demonstrated below, the architectural details of Temple 100 are actually so telling, that we should not have any further doubts that structures 100 and 200 of the Great Enclosure, like 300, are really temples.

First of all, it should be noted that the central temple of the Great Enclosure (Temple 100) has neither five nor six entrances, but only two - one in the middle of the eastern wall and one at the eastern end of the northern wall (Fig. 9).<sup>22</sup> The other four openings (two on the northern and two

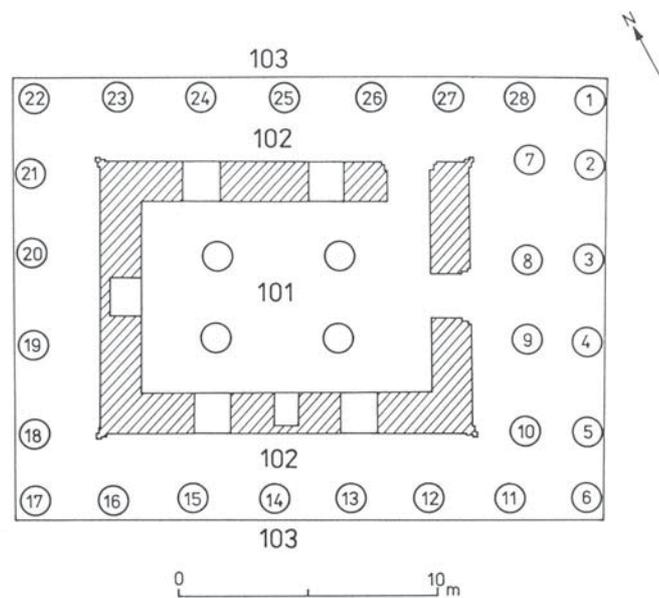


Figure 9. Musawwarat es-Sufra. Central temple, plan (drawing I. Säuberlich).

on the southern side) are windows.<sup>23</sup> This is obvious on three counts:

1. In all four cases there is a window-sill, which of course is absent from the two entrances.
2. In the walls there are traces of where window-frames were once inserted, which must have been of wood.
3. Over each window-sill lay - in the same plane as the outer wall surface - a wooden beam, which at both sides was set into the stonework. The recesses for these beams are everywhere visible.<sup>24</sup>

In this way the room received sufficient light, although it may not have been possible to see from outside the events that took place within. The windows may have consisted of a wooden frame while the inner space was certainly filled with bars like the comparable stone windows grilles such as have been found in Faras.

There are architectural details, however, which prove that buildings 100 and 200 were sacred installations, that is temples for gods, and not palace rooms. For both at Temple 100 (central temple) (Plate 9) and at Temple 200 (Plate 10) there are architectural elements that occur only on sacred and funerary buildings, i.e., on individual building elements such as pylons or walls, on shrines, chapels, gates, false doors,

<sup>23</sup> This view was already claimed by Hintze (1968, 676). But also the early travellers recognized this feature of the central temple. James Burton wrote the entry: “In the centre was a room with two doors and four windows” (MS., p. 89). This was also noticed, for example, by Pückler-Muskau (1844, 158) and by Davies, the companion of Breasted. Even Garstang, who is so eagerly criticized in modern days, gives correctly in his drawing a room with two entrances and four (window) openings.

<sup>24</sup> The doors had otherwise been constructed in the same way. Remnants of wood have survived in one of the recesses for the thresholds in the side-walls, and they are presently being analysed.

<sup>19</sup> Pg. 157. The highlights in bold type are Török’s. - The whole argument seems to me altogether vague, not only for lack of convincing evidence, but also because the room is simply misinterpreted, as will be shown below. Török’s remark on temple palaces from New Kingdom Egypt refers to a work in preparation by myself.

<sup>20</sup> He once describes the central temple as a building with five (*ibid.*, 122) and once as having six entrances (p. 124).

<sup>21</sup> It may further be objected that palaces as well as other secular buildings are usually built of mud-brick (and only very important elements may be of stone blocks). For the Meroitic sphere, one may compare the palaces in Wad Ban Naqa and at Gebel Barkal (I will come back to this later). See also the study by Fitzenreiter (Fitzenreiter *et al.*, in press).

<sup>22</sup> So correctly Welsby 1996, 145.



Plate 9. Musawwarat es-Sufra. Central temple, southern side, architectural detail.

pyramids and the like - namely the *torus* moulding, the *cavetto* cornice, the *lisene*<sup>25</sup> and the *uraeus*-frieze.

In Egyptian and Kushite temples alike, the horizontal *torus* moulding is topped with a *cavetto* cornice that goes round the entire temple building.<sup>26</sup> If the entrance is made up of pylons, then their corners also have torus mouldings and the *cavetto* cornice at the top. “*Schon vom Mittleren Reich an wird das Bauornament der ägyptischen Hohlkehle zum Erkennungszeichen eines ägyptischen Tempels*” (Arnold 1992, 15-16; emphasis by the author). Cornice and *torus* are “*eine Leitform der äg. Baukunst*” (Arnold 1994, 108). The same elements are found with Temples 100 and 200. In

<sup>25</sup> The *lisene* (pilaster strip) is a narrow undecorated strip which often, but not always, borders relief surfaces along the sides and the top, lying higher than the relief surface itself. We can find *lisenes* on Meroitic temples everywhere. *Torus* moulding and *lisene* together defined the (once) decorated wall surfaces. By way of example I refer only to the Apedemak-temple of Musawwarat es-Sufra.

<sup>26</sup> The *torus* moulding is a “*Rundgesims an der oberen oder seitlichen Gebäudekante*” (Arnold 1992, 61) and is traced back to the technique of building in mud-brick, but “*denkbar wäre auch eine Ableitung aus dem Mattenbau*” (*ibid.*). Like the *torus* moulding, the *cavetto* cornice too is an essential element of sacred architecture. “*Aus dem [waagerechten] Rundstab wächst die eigentliche Hohlkehle empor, die wohl auf eine Reihe von Palmwedeln zurückzuführen ist, die der Mauerkrone aufgepflanzt wurden*” (Arnold 1992, 60).



Plate 10. Musawwarat es-Sufra. Temple 200, architectural detail.

this respect both edifices are related to Temple 300 and also to the Apedemak temple, to mention only the structures from Musawwarat itself.

Above the horizontal *torus* and the *cavetto* cornice there was usually the *uraeus* frieze (Plates 11-12), which defined the top border of the edifice (the snakes always carry a sun-disk on their head). This row of cobras had an apotropaic character and was placed to magically protect the building. To my knowledge, *uraeus*-friezes have never been found on secular buildings.

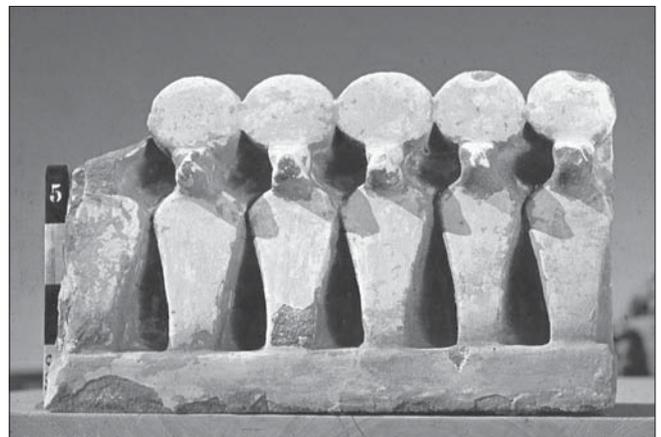


Plate 11. Uraeus block from Room 108.

Over the middle of the entrance, the *cavetto* cornice is normally decorated with a sun-disk flanked by uraei.<sup>27</sup> In the ‘illusional’ architecture of the Egyptian Late Period as well as in the Meroitic period of Kush, entrances may also display a plurality of *cavetto* cornices placed one above the other, and resting on tent poles. As the most beautiful example from Musawwarat may be mentioned the design of Temple 300 (Figure 10).

In conclusion, wherever these elements occur, we are

<sup>27</sup> For examples, see Arnold 1992, 62 with figure.

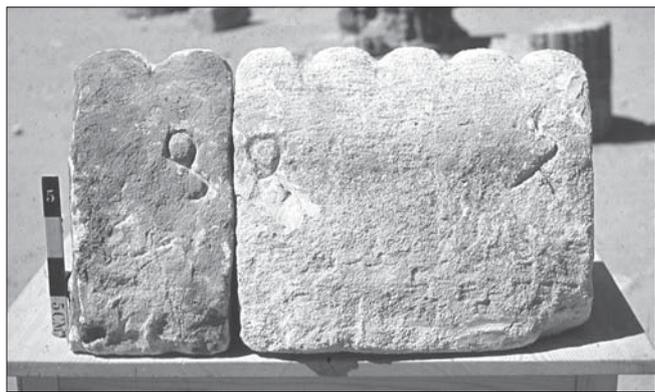


Plate 12. Mason's marks on the back of the uraeus blocks.

dealing with temples of gods or with “chapels”,<sup>28</sup> that is with structures for cult activities. Indeed it is precisely these architectural attributes that enable us to identify the purpose of rooms in the Great Enclosure and to distinguish cultic rooms from magazines, workshops, residential units and the like.

excavations and in the 1960's (and they are partly stored in the magazine at Musawwarat).<sup>29</sup> Precisely around the central temple was found such a mass of *cavetto* cornice blocks that a reconstruction of the building with a corresponding cornice appears inevitable. An important find was also made in Room 108. Under the floor had been deposited uraeus-friezes that had been left there as “sacred objects” after a fire had broken out, either before or soon after the completion of the room. These uraeus blocks are of great interest because they still carry the original yellow-painted plaster, which has suffered little weathering, and their backs bear mason's marks. For the latter symbols and letters from the Greek and Meroitic alphabets had been used (Plates 11-12).

All the discussed architectural elements originate from Egyptian architecture. We may assume that the essential outline of Egyptian temple architecture - taken over by the Kushites during the XXV<sup>th</sup> Dynasty and carried on in the Napatan Period - was employed until the end of the Meroitic Period.

There is, however, an additional Meroitic element, which

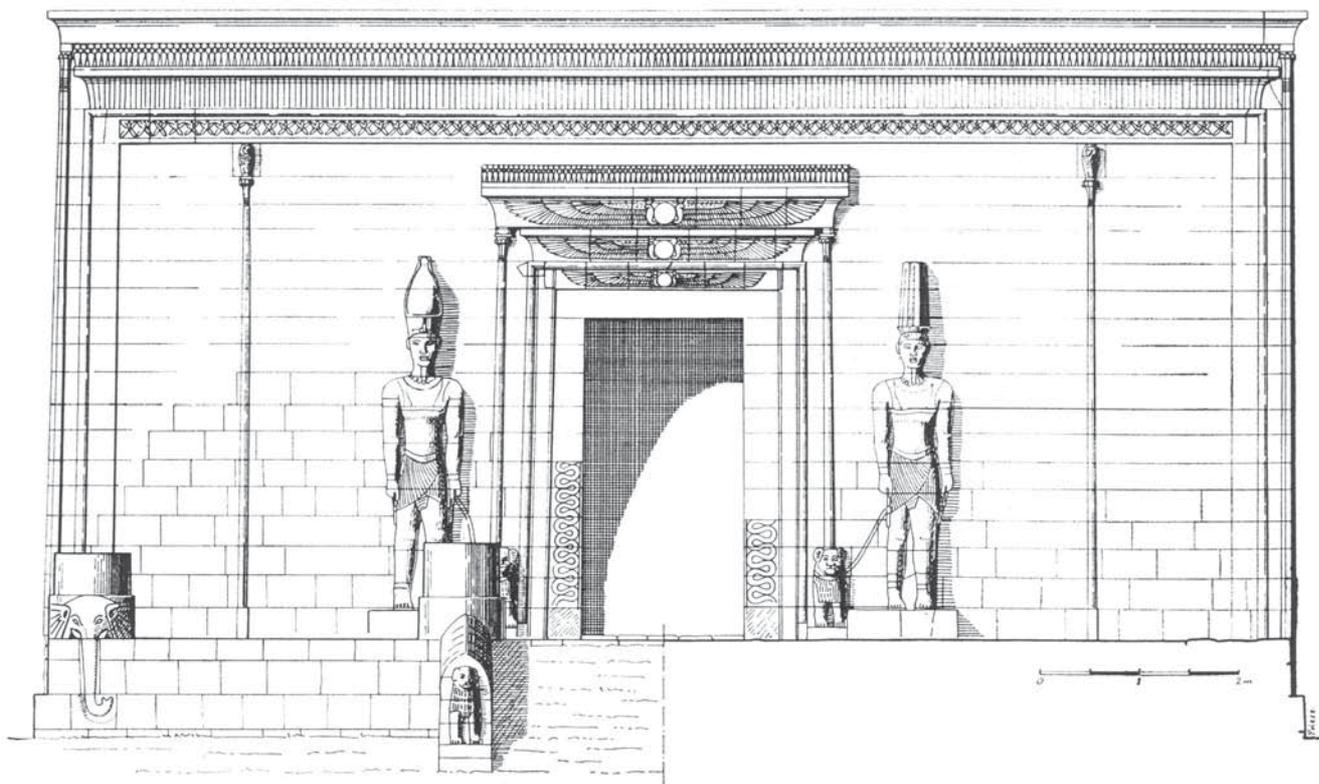


Figure 10. The facade of Temple 300 in the reconstruction by K.-H. Priese.

In Musawwarat, the architectural elements discussed above, such as *cavetto* cornices and uraeus-friezes, have not generally been found *in situ*. However hundreds of fragments of such architectural elements were found during the current

<sup>28</sup> The term “chapel” is only used by us to denote smaller sacred structures within the Great Enclosure and has nothing to do with the “station or barque chapels” in Borchardt's sense. We know nothing about the cult proceedings in these “chapels”.

appears to be typical of sacred buildings in Musawwarat and which we cannot trace back to the Egyptian building style, namely the “triple protome”.<sup>30</sup> These are sandstone slabs that were set into the wall above the entrance, and adorned with

<sup>29</sup> They have been registered and documented; the data are available to those interested.

<sup>30</sup> Such “triple protomes” have so far been only found in Musawwarat es-Sufra.



three sculptured heads. The two examples from the Apedemak-temple show the head of a ram with a sun-disk (as a symbol of the god Amun) flanked by two lion-heads,<sup>31</sup> and they derive from the first and second versions of the pylon.

The entrances to the central temple of the Great Enclosure were quite similarly decorated. Here Hintze found two “triple protomes”. The one that was once placed over the main entrance on the eastern side is completely preserved (Hintze 1968, 676 with fig. 20 on p. 678) (see Plate 13).



Plate 13. Triple protome from the central entrance of Temple 100.

Beside the ram-head, it has the human heads of the gods Arensnufis and Sebiuemker, who may be regarded as temple protectors (Wenig 1974). The “triple protome” from the side-entrance of the central temple had been broken into several pieces. Instead of Arensnufis and Sebiuemker, it has two goddesses who may perhaps be identified as Isis and Hathor or Nephthys (Plate 14).



Plate 14. Triple protome (fragment) from the side entrance of Temple 100.

<sup>31</sup> The interpretation of the lions is disputed. While some authors think of the two Egyptian gods Shu and Tefnut, there is every reason to take them for the sacred animals of the gods Arensnufis and Sebiuemker.

An additional argument was brought to my attention by D. Eigner. The niche in the back-wall of Temple 100 has quite clearly been a shrine. The bottom of the niche is placed higher than the floor of the room, and down both sides of the niche there are recesses for holding a threshold into which fitted the lower bolts of a double door. The recess for the frame of such a double door is clearly visible (Plate 15). Of course it is impossible to say what was held within this shrine, but, like in Egypt, it could have been a divine statue that was concealed most of the time, the shrine being opened only for the daily ritual.

The main entrance was situated to the east and was undoubtedly meant for the king. It is more difficult to deter-

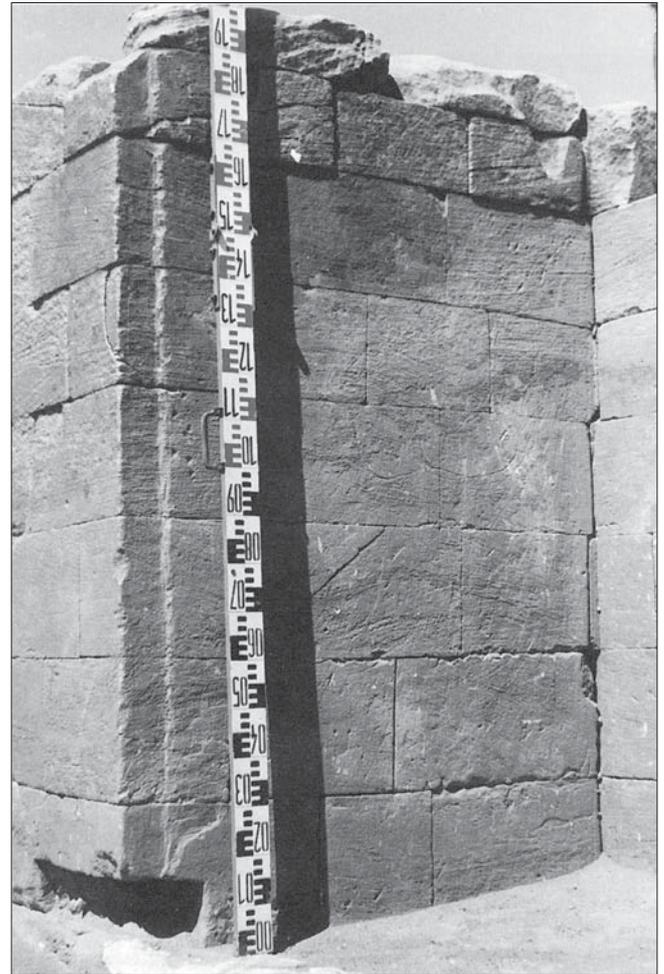


Plate 15. Musawwarat es-Sufra. Central temple, detail of the niche at the back.

mine the meaning of the side entrance. One would readily assume it was used by the priesthood on duty (this would correspond with the Egyptian temple plan), but the “triple protome” over the side entrance shows two female deities, and so one could also think of it having been intended for the queen.

Finally, all sacred buildings in Musawwarat es-Sufra are distinguished by standing on a slightly protruding plinth – a feature which is always overlooked. It can be seen clearly at

Temple 100, but has also been established for the adjacent “chapels”.

Thus, a sacred meaning does not only apply to the aforementioned Temples 100 and 200 as well as 300, but also the so-called Western Chapel (Rooms 516 and 517 = Plate 16) and Rooms 104 - 106, 107 - 108 and 205 - 206, that we call “chapels”. They are all decorated with *torus* mouldings at the corners - sometimes also with *lisenés* - and were intended for special cult activities. That these elements are absent from secular buildings and functional rooms such as magazines, kitchens and the like, is (by no means novel) information, which in future discussions on the purpose of rooms in the Great Enclosure will hopefully play the role it deserves.



Plate 16. *Musawwarat es-Sufra*. “Western Chapel”, architectural detail, view from the south west.

This is not to deny that there are certain features that seem to contradict the interpretation of the Great Enclosure of *Musawwarat es-Sufra* as a sacred complex. Firstly, Temple 100 has an unusual plan, which cannot otherwise be found among temple buildings. Together with the niche in the western wall, this is the most important argument for authors such as Török to consider it a throne-room. Admittedly, I cannot yet offer an explanation for the plan of Temple 100. Just the same, it cannot be claimed that no parallels exist, for one cannot rule out that once they did, and also the Great Enclosure itself is so unusual that we do not know what needs were to be met by a terraced temple in the middle of a sacred centre. There is no doubt, however, that the niche in the west wall was not intended for enthronement.

There are, however, rooms in the Great Enclosure that certainly served profane purposes. Some of the rooms even possess “palace-like” features (see also the remarks by Eigner in this volume). Could we thus after all be dealing with a palace, as thought by Lenoble and Török? It must finally be pointed out that architectural elements such as *torus* mouldings and *cavetto* cornices occur also in buildings that are rightly deemed royal residential palaces - I am especially thinking of the complexes of *Wad Ban Naqa* and building B. 1500 at *Gebel Barkal*. All this we must try to explain.

The rooms in the Great Enclosure that have a non-

religious character will be discussed by D. Eigner below. Here it need only to be pointed out that every large Egyptian temple had rooms for keeping temple equipment, for accommodating and taking care of its priests and for preparing the king to perform the cult ceremonies. Therefore the situation is not unusual. In our case it must also be kept in mind that the royal family had to make a relatively long trip to reach the complex, and it is not to be expected that the king and queen with their entourage were lodged in tents.

It is more difficult to explain the fact that architectural elements which I consider attributes of sacred buildings appear also in indisputable royal palaces. How can that be interpreted? Let us look, for example, at Palace B. 1500 at *Gebel Barkal*. A gate with various *cavetto* cornices and winged sun-disks and also a separate block with *cavetto* cornice were located at the southern entrance, to which access was gained by a stairway flanked by lion statues. Taking a closer look at the plan, one notices that the two columned rooms behind the gate are structured differently from the others. To all appearances we are dealing with a temple that has been integrated with a palace. But are sacred and royal residential architecture perhaps so closely related that the two formed a dialectic unity? I do not believe so. Palace B. 1500 is for the most part built of mud-bricks, which speaks in favour of a domestic complex. Part of it is of two storeys, like the residential palace in *Wad Ban Naqa*, and this too supports the assumption of a domestic purpose, as does the room lined with columns in the middle of Palace B. 1500, which Donadoni reconstructed as a kiosk and interpreted as a “*salle d’audience*”, and which is now interpreted by Roccati as a two-storey atrium-hall.

But what should a temple be doing inside a palace? We may again refer to Egyptian parallels, but I also see parallels, for example, in Baroque palaces. These too are primarily intended as a dwelling-place yet often, or almost always, include a (private) chapel where the owner of the house and his family practised their religious devotion. The temple in Palace B. 1500 may well allow a similar interpretation, being accessible both from outside and from the atrium. The inclusion of “sacred” architectural elements comes thus as no surprise.

A final word must be said regarding the second part of Török’s thesis, which asserts that the representations on some of the columns in front of Temple 100 are closely linked with kingship.<sup>32</sup> Examining more closely these representations, we notice that they do certainly have something to do with kingship. But in what manner? On the four columns 7 - 10 with reliefs in front of the central temple (see Table 1) we see:<sup>33</sup>

<sup>32</sup> *The column scenes in front of the central hall as well as the character of the surrounding rooms indicate a royal, and not a divine dwelling* (Török 1992, 124). The subject is more thoroughly discussed in 1990 and 1997.

<sup>33</sup> My explanation of the reliefs here also differs from Török’s interpretations (Török 1997, 439-40).



**Column 7, Fig. 11:**

Scene 1 (left): The king, facing left, stands in worship before the ram-headed Amun-Khnum and the goddess Satis. The king wears on his right thumb the archer's ring. Amun-Khnum grasps the king by his elbow, so here we have an election scene.<sup>34</sup> D. Eigner regards the motif of a youth squatting on a papyrus flower as a representation of the Nile source. This explanation is particularly likely because (Amun)-Khnum and Satis were worshipped at the First Cataract.

Scene 2: The king, facing right, is shown in royal vestments and with the archer's ring on his left thumb. He stands between the crowning deities Horus and Thot, while Isis stands behind Horus. The two gods grasp the king by his elbows. The intimacy of the scene is expressed by the overlapping feet of the king and Horus. The king receives from Isis the Lower Egyptian crown, so the scene represents his coronation.

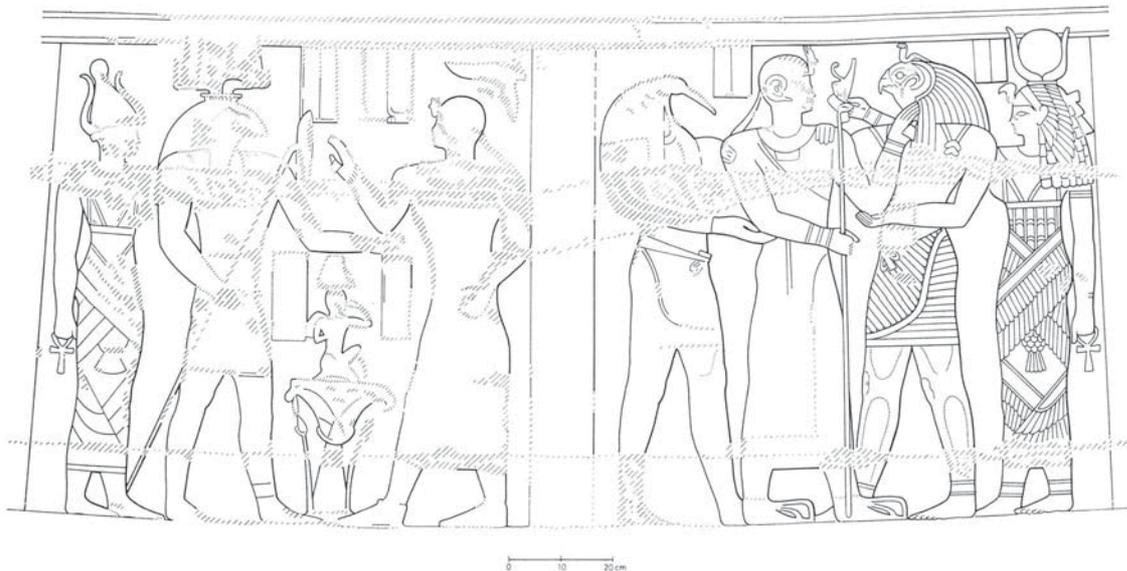


Figure 11. Scenes on column 7 in front of the central temple (drawing K.-H. Priese).

**Column 8, Fig. 12:**

Scene 1 (left): The king, facing left, holds a prisoner by a rope and stands before Apedemak and his consort, the goddess with two falcons on her head. It is a greeting scene.

Scene 2: The king, facing left, is shown in royal vestments and stands in worship before a human-headed deity with the double crown, perhaps Sebiuwerker, the local god of *Aborepe*. Behind the king can be seen the goddess Isis. We are again facing a greeting scene.

**Column 9, Fig. 13:**

Scene 1 (left): The king, facing left, is equipped with weapons and he wears the same type of sandals as worn by hunting deities. He stands in worship before the ram-headed

Amun-Khnum, who grasps the king by his elbow, and the king is embraced by Arensnufis, who stands behind him. This is another election scene.<sup>35</sup>

Scene 2: The king, facing right, is shown in royal vestments, with weapons and with the sandals of the hunting gods. He greets a divine couple. The god cannot be identified with certainty, but the goddess may be Isis.

**Column 10, Fig. 14:**

Scene 1 (left): The king, facing right, is shown in royal vestments, and stands in worship before Apedemak and opens his garment. The king is followed by a small figure who shakes a sistrum (crown prince?).

Scene 2: The king, facing right, is shown in royal vestments, standing before the ram-headed Amun and the goddess Mut. The god hands to the king the *ankh*-sign, while the king offers him a pectoral. This scene, according to Lohwasser,

belongs to the coronation (1995, 175).

The eight scenes on the four columns before the central temple show the king in communication with the gods, the election of the king by a god, the coronation and the transfer of power to the king (opening of the garment). These scenes correspond closely with the scenes on the interior walls of the Apedemak-temple of Musawwarat (Cf. Wenig in Hintze *et al.* 1993: 103ff., 133ff., 149ff.), apart from the omission there of the offering of the pectoral and the opening of the garment. And this comparison bears out that the scenes relate to cultic activities, which perhaps took place in the temple.

Also in Kushite temples, wall reliefs and the functions of

<sup>34</sup> The election is expressed by the grasping of the elbow. I have touched on this subject at various occasions, such as Wenig 1981; 1993.

<sup>35</sup> Also in this scene, D. Eigner suspects we are dealing with a representation of the Nile source.



Figure 12. Scenes on column 8 in front of the central temple (drawing K.-H. Priese).

rooms were interrelated, and the rules of orientation<sup>36</sup> were still observed. It must, therefore, be explained why the coronation is here represented on columns in front of the temple, while this otherwise occurs inside the temple.<sup>37</sup> I assume

columns in the interior of the temple have no reliefs, but they were undoubtedly once painted.

The represented actions hence undoubtedly depict the ritual coronation. However, just as there is no evidence to

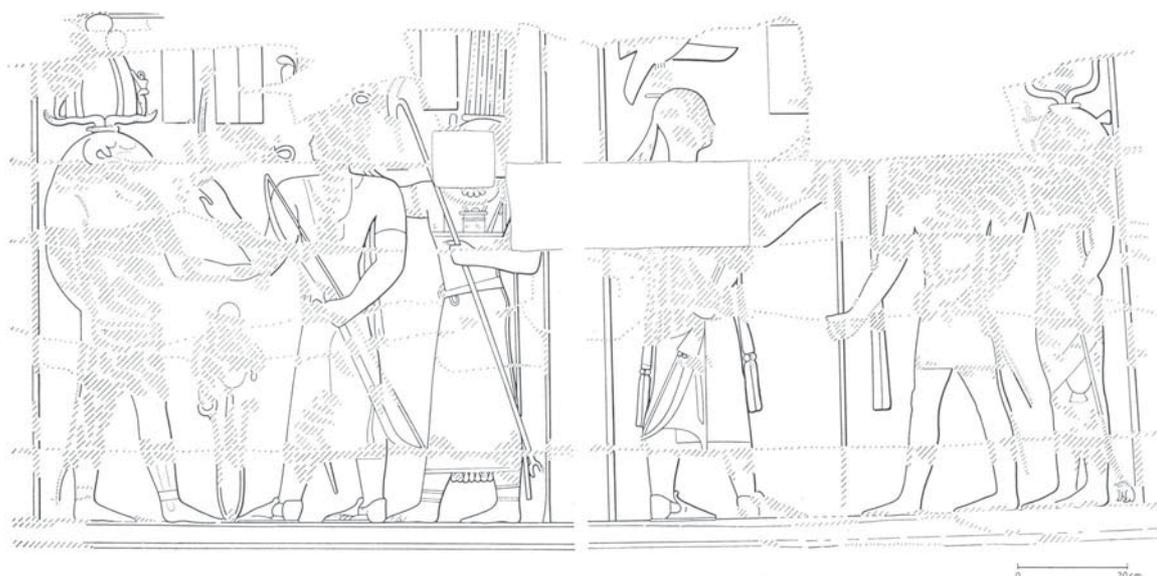


Figure 13. Scenes on column 9 in front of the central temple (drawing K.-H. Priese).

that in this case the pronaos was incorporated in the cultic performances and, as the top of column 8 exhibits a uraeus frieze, which may be assumed for the other three columns, the action is actually taking place inside the temple.<sup>38</sup> The

suggest that the king was actually crowned in the Apedemak-temple of Musawwarat es-Sufra or in the Amun-temple of Naqa, where similar images occur, we need not conclude from the representations at Temple 100 that it is there that he was crowned.<sup>39</sup> We are dealing with a symbolic depiction of the important event of coronation, which of course in reality took place in Meroe.

<sup>36</sup> It shows that the king is always facing the interior of the temple, while the gods emerge from it.

<sup>37</sup> I mean especially the Apedemak-temple of Musawwarat es-Sufra. For a more thorough discussion, see Wenig in Hintze *et al.* 1993.

<sup>38</sup> Suggestion of D. Eigner.

<sup>39</sup> So long as we have no extant representations from palaces, it cannot be claimed we are dealing with "a royal, non-divine dwelling".

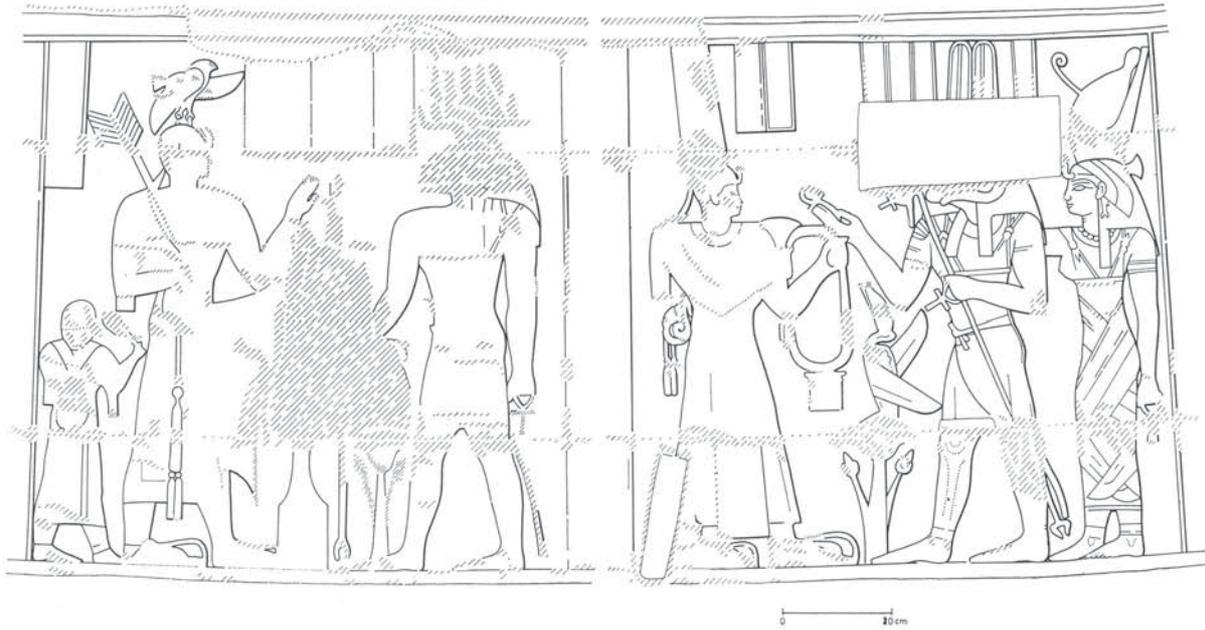


Figure 14. Scenes on column 10 in front of the central temple (drawing K.-H. Priese).

It remains to determine the correct order of the individual scenes in Temple 100 (Table 1). The following correspondences appear to exist:

with the reliefs in the Apedemak-temple of Musawwarat. This would confirm the assumption already expressed by Hintze and Priese that the central temple and the “Western Chapel”

Table 1. Summary of the themes represented on columns 7-10 in front of the central temple.

Column	Scene	Theme	Apedemak temple inner walls
8	1	Greeting Apedemak	Scene 1 SW: Greeting Apedemak
8	2	Greeting Sebiumecker	Scene 2 SW: Greeting Sebiumecker
9	2	Greeting a divine couple	Scene 1 NW: Greeting Amun
9	1	Election by Amun-Khnum	Scene 2 NW: Election
7	1	Election by Amun-Khnum	Scene 2 NW: Election
7	2	Coronation	Scene 4 NW: Coronation
10	1	Opening of garment before Apedemak	absent
10	2	King offers pectoral	absent

This overview makes clear that there are no essential differences between the themes of the representations on the columns in front of the central temple (Temple 100) and those of the cult-related scenes on the inner walls of the Apedemak-temple. In the light of this then we also no longer have reason to consider a special connection to the royal cult.

There is, however, a further connection between the two groups of representations. In both cases, the gods who are being greeted are Amun-(Khnum), Apedemak and Sebiumecker. This is undoubtedly no coincidence. Amun, who was the “national god”, and Apedemak, who was the most prominent god in the south of the empire, not only enjoyed worship here but also in other places such as Naqa and Meroe, and Sebiumecker was the local god of Musawwarat.

Without a systematic study one can only guess how the reliefs are to be dated, but I see close stylistic connections

date from the late 3<sup>rd</sup> century BC.<sup>40</sup>

The discovery of an extensive garden complex in Courtyard 117 certainly does not contradict the identification of the Great Enclosure as a sacred ensemble (see Wolf 1999, XX ff). This garden, of which large portions were exposed between 1995 and 1997, consisted of an avenue with two rows of pits for plants, linked on the eastern side to a large area with smaller pits for plants. We can demonstrate that the plants were obtained by the Nile at “tree nurseries”, and then transported to Musawwarat. The inner filling of the pits consists of fertile Nile mud, and several times there were sherds sticking to the undersides. What is more, there were remains of plant pots of varying size, in which the plants had been brought. They had been shattered on the spot

<sup>40</sup> An iconographic comparison would be requisite but cannot be carried through within the scope of the present study.

before the plants were placed into their pits. The discarded sherds were found in a deposit in the nearby Courtyard 305. Strangely, there were no remnants of roots. There is nothing unusual about a garden near a temple; judging from Egyptian temples, it was even a necessity.

In 1997 and 1998, in Courtyard 120, the remains were found of two water reservoirs, which belong to one of the earlier building phases (Plate 17). According to our interpretations so far, they served for the storage of water needed for the garden. A well-preserved drain associated with the smaller reservoir and numerous small channels make this interpretation highly probable. What still remains unclear is how the water came into the reservoir. Through a canal?



Plate 17. *Musawwarat es-Sufra*. Great Enclosure, water reservoir, found in Courtyard 120

To our great surprise, as we carried out two sondages in Courtyard 224 in 1996, a large quantity of ceramic material was found, including painted and stamped ware of the finest quality (Colour plates, back cover). As finds of this Meroitic fine ware have hitherto been few in the Great Enclosure, we made a trench in 1997 of about 5 x 5m to thoroughly examine the area. Mixed with large amounts of ash, we found about 22,500 pottery sherds of every kind. With about 4000 sherds, the proportion of fine ware makes up about 15% of the total.<sup>41</sup> The presence and production of the finest Meroitic pottery in *Musawwarat* permits only one conclusion: from time to time the royal court was present in *Musawwarat*. This does not make the complex a palace, but the fact underscores its previous importance as a religious centre of the Meroitic kingdom.

At this point, I would like to add a general remark on the character of Meroitic architecture. It is not simply copying an Egyptian model. Although the architectural elements and basic structures employed demonstrate an observance of Egyptian practice, the Meroitic buildings show a variety of differences (we have already noticed the “triple protomes”). Especially in *Musawwarat* do we find a large number of architectural novelties, which no longer follow the Egyptian

model. Some of these may be mentioned here.

While in Egypt the freestanding column had always been shaped as a plant (an exception being the Hathor-column), placed on a rounded base and with a capital continuing the plant shape of the shaft, the Meroitic equivalents could also, for example, have the form of divine statues. Besides numerous uraeus-frieze blocks, two such column statues were found, for example, in Room 108 (Fig. 15), where they had once stood on animal-shaped bases (see Plate 8). Both are also unambiguous indications of the sacred character of this room.



Figure 15. Column-statue of *Arensnufis* from Room 108 (drawing K.-H. Priese).

The column bases in the Meroitic style are more diverse than in the Egyptian style. This applies to their form and design. Apart from the fact that the materials used could be quite varied (carved stones, *Lesesteine*, burnt and unburnt bricks), there is also the square form besides the rounded form.<sup>42</sup> Animal-shaped column bases, as known from *Musawwarat*, are unimaginable in Egyptian architecture. For example, in front of Temple 100 of the Great Enclosure there are two column bases which are shaped either as an elephant flanked by two lions or as a lion flanked by two elephants.

<sup>42</sup>This has not so far been attested in *Musawwarat*, but it has in Naga and Meroe.

<sup>41</sup> For comprehensive preliminary report see Edwards 1999.



6. The cultic character of substantial portions of the Great Enclosure has now been proven. It is time, therefore, to present the arguments posed by Dornisch. In a long discussion based on the first draft of this article, Klaus Dornisch made adjustments to new ideas for a possible interpretation of the Great Enclosure. With reference to numerous graffiti depicting such animals as elephants, lions, giraffes, gazelle and antelopes, and to the Mediterranean elements in the design of architectural details, he deemed it not impossible that the Great Enclosure was multifunctional, serving both cultic and profane purposes. In Musawwarat es-Sufra, he thinks, traders from the Mediterranean could have met their Kushite trading partners to obtain living African animals, which in Meroitic times, as already in Pharaonic Egypt, were desirable merchandise. On the other hand, in such a complex, one could also imagine connected cult activities such as “harvest festivals”. Dornisch expresses this even more stridently. The sending of expensive animals on a long, uncertain trip required a cultic safeguard and elevation. And just as the driving down of oxen from the alpine meadows was originally closely related to the harvest festival, something similar may have obtained in Musawwarat es-Sufra.

These thoughts are quite tempting, for we know that Ptolemaic expeditions for catching elephants came to the “Island of Meroe” to obtain the animals for use in war against the Seleucids. And of course Musawwarat belongs in the broadest sense to the “Island of Meroe”. In this way the present attempt at an interpretation requires consideration.

Let us recapitulate. There can be no doubt as to the interpretation of the Great Enclosure as a complex of sacred purpose, complemented with palace, magazine and workshops, and of the central temple as a cultic installation. The cultic activities in the Great Enclosure must have been sumptuous and intensive. The central temple was surrounded by a series of “chapels”, which were not only marked as cult-places on the outside, but which also had a special interior design. This applies in particular to Room 108 with the two unfinished animal-shaped column bases that were found there (Plate 8), and with the column-statues portraying the gods Arensnufis and Sebiumecker (see Hintze and Hintze 1970, 63, fig. 4) (Fig. 15).

Of course many questions still remain, especially regarding the status of this pilgrim centre within the religious world of the Kushites, but also regarding the identity of the gods who were worshipped here or the point in time when the divine festivals were celebrated. Hintze has already pointed out that a very high percentage of the Meroitic written graffiti mention the god Apedemak (Hintze 1984, 338).<sup>45</sup> Nonetheless we do not know which gods were worshipped in the individual temples of the Great Enclosure. I cannot share Hintze’s assumption that the central temple (100) could have

been a sanctuary of Amun (Hintze 1968, 676, right-hand column). Hintze based his suggestion on the triple protome found before the main entrance, which shows in the middle a ram’s head with a sun-disk (Plate 13). In fact, the two triple protomes that were found in and before the Apedemak-temple also have a ram-head in the middle, but this temple has never likewise been deemed a sanctuary of Amun. To date there has been no rebuttal of my previously posed hypothesis that, in Kush, deities of Egyptian origin received multiple-room temples while temples with a single room-structure were only erected for indigenous gods (Wenig 1984). Should this assumption be correct, then the three temples of the Great Enclosure (100, 200 and 300) must have been for the worship of indigenous gods. Who they were can now only be conjectured.

I think it highly likely that the Great Enclosure of Musawwarat es-Sufra was not a mere centre of pilgrimage, but a Kushite cult-place of the highest rank. The religious festivals, which were celebrated here after the harvest or possibly after the rain season, were attended by numerous pilgrims from all over the country and also by the Court. This lends an exceptional significance to the complex. It may have been a kind of national shrine (to use a modern term), a sanctuary that was so important for the religious-spiritual existence of Kushite society that it was rebuilt over and over, with old parts being demolished and new complexes placed in their stead.

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## *Notes on the “non-sacred” parts of the Great Enclosure*

*Dieter Eigner*

Although Török’s interpretation of the Great Enclosure as a palace seems no longer tenable, the complex possesses a large number of rooms or room-sequences of obvious profane purpose. That does not disprove the sacred character of the complex as a whole, which is already borne out by its having been built in stone, as pointed out above by Wenig. Some of the mentioned room-sequences can be described as “palatial” or “palace-like”, others have at least a domestic character. The fact that stone has also been used here consistently betokens the cultic-ritual function of these rooms.

Mention must be made in the first place of the complex of Rooms 217 to 222 with the surrounding Courtyards 215, 223 and 224. On two sides of the central Courtyard 217 there are room-sequences which recur in the same form in the Small Enclosure, and which have there been characterised by M. Fitzenreiter as “passage rooms” and “chambers” (Fitzenreiter *et al.*, in press). These modest designations do

<sup>45</sup> Of the 140 inscriptions found at that time – since then many more have been identified - 124 are Meroitic, of which 19% contain invocations of Apedemak.

little justice to the function and significance of the rooms in the Great Enclosure, given their size alone. 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. Domestic or palace complexes that are arranged around a central courtyard seem to be a fixed element in Meroitic architecture; one need only compare the “priest house” M. 251 and palaces M. 998 and M. 999 at Meroe.

Remains of demolished walls in Courtyards 215, 224 and 226 indicate that the residential (palace) complex was originally larger and more diverse. At least part of the vast amount of pottery sherds in Courtyard 224 may have been deposited there in the course of the demolition works.

Room 212 represents the entrance to a room-sequence in which the combination “passage room + chamber” is twice repeated (Rooms 210 + 211 and 208 + 209). Rooms 212 and 208 are both marked by a centrally placed papyrus column, which presumably underscored their importance in a sacred sense. Indeed the column is not essential for construction reasons (the span of the ceiling). Rooms 208 and 209 served most probably as a “royal sacristy” and as a make-up and dressing room, so as to prepare the king for his cultic appearance in the temple. An indication of this function of the rooms is given by a graffito on the southern exterior wall of room 209, which shows an over-life-size figure of the king in a gesture of worship (Fig. 16).

What has been said above about Complex 200 has its clear, if distant, parallels in the temple palaces of Theban mortuary temples, whose function has been represented so convincingly by R. Stadelmann (1973, 221 ff). Because of the

absence of kitchen, storage and sanitary facilities, he concludes that these palaces were only to (briefly) prepare the king for cultic events, but certainly were not practical as a residence, not even for a brief sojourn. Certain circumstances in Musawwarat suggest that the king (with his closest entourage) may have stayed here for some days to attend the cult proceedings. The isolated location of the site made a longer stay inevitable, and this seems to have been possible through the proper design of the rooms of the “palace”. The large amount of pottery fragments in Courtyard 224 is indicative of a longer stay. The kitchen may have been in Room 225, even if it had been used as a ceramic workshop from time to time. Further places for cooking may be suspected in Courtyard 224, which was quite obviously used as a household provisioning courtyard. Via ramp 228, it connects directly to the domestic complex of the king. A bath and toilet have not yet been identified.

Rooms 507, 508 and 509 are comparable to bedrooms 219 and 221 on account of the high position of their windows. They are rather isolated, but ramp 510 links them directly to the central terrace and the cult proceedings. The high windows and the well-known erotic graffito on the south-wall of the rooms support P. Wolf’s surmise that we are dealing with rooms for a cultic wedding.

Rooms 524 - 526 appear to have acted as a “royal sacristy” to prepare the king for the cultic proceedings in the central temple or in the western chapel.

The room sequence 518 - 519 has a representative character through the wide and centrally placed door to Room 519. We may be dealing with an audience room, approached by the king’s visitors via ramp 520 from Courtyard 601.

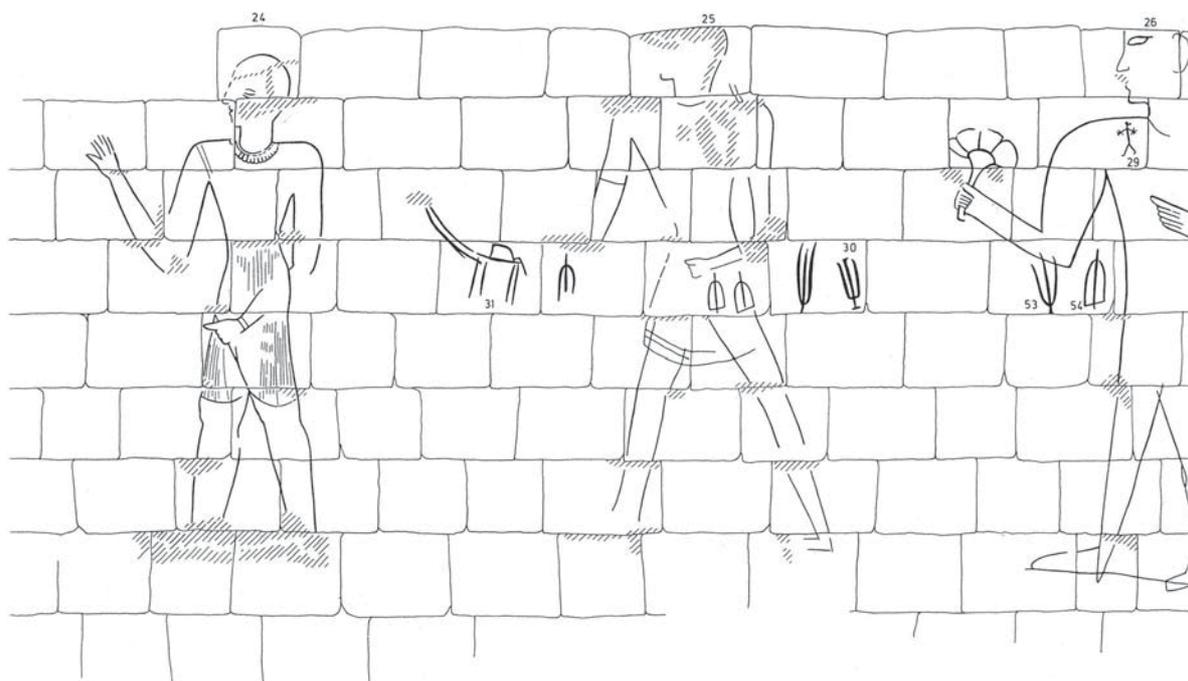


Figure 16. Musawwarat es-Sufra. Great Enclosure, graffito on the southern exterior wall of Room 209, with an over-life-size representation of the worshipping king



Rooms 502 - 504 and 109 - 112 appear to have been magazines because of their elongated shape, their grouping and their location.

Complex 400, to conclude, had a purely domestic and economic function. One could designate it as an “administrative and provisioning centre” for the Great Enclosure. In Courtyard 401 and in Room 418 were found some of the storage and cooking vessels characterised by Fitzenreiter as “*gulla*” or “tubs”. Their number must have been much greater. Complex 400 is the latest part of the Great Enclosure and one would suspect that, on the occasion of rebuilding of the Small Enclosure, some of its functions were directly connected to the Great Enclosure. The connecting corridor to the central terrace seems to confirm Fitzenreiter’s assumption that the Small Enclosure provided services for the cult proceedings in the Great Enclosure.

## Bibliography

- Adams, W. Y. 1977. *Nubia. Corridor to Africa*. London - Princeton.
- Adams, W. Y. 1984. ‘Meroitic Architecture. An Analytical Survey and Bibliography’, *Meroitica* 7, 255-279.
- Arnold, D. 1984. ‘Rundstab’, *Lexikon der Ägyptologie* 5, 320–321.
- Arnold, D. 1992. *Die Tempel Ägyptens. Götterwohnungen, Baudenkmäler, Kultstätten*. Augsburg.
- Arnold, D. 1994. *Lexikon der ägyptischen Baukunst*. Munich - Zürich.
- Budge, E.A.W. 1907. *The Egyptian Sudan*, 2 vols. London.
- Burton, J. Manuscripts in the British Library (unpublished).
- Cailliaud, F. 1826. *Voyage à Meroë, au Fleuve Blanc, au-dela de Fazoql...fait dans les années 1819, 1820, 1821 et 1822*, vol. III. Paris.
- Callot, E. F. von, 1855. *Der Orient und Europa. Erinnerungen und Reisebilder von Land und Meer*. Siebenter Theil. Leipzig.
- Edwards, D.N. 1999. *A Meroitic Pottery Workshop at Musawwarat Es Sufra*. *Meroitica* 17.2. Wiesbaden.
- Fitzenreiter, M., A. Seiler and I. Gerullat 1999. *Musawwarat Es Sufra II. Die Kleine Anlage*. *Meroitica* 17.2. Wiesbaden.
- Hintze, F. 1968. ‘Musawwarat es Sufra. Vorbericht über die Ausgrabungen des Instituts für Ägyptologie der Humboldt-Universität zu Berlin, 1963 bis 1966 (vierte bis sechste Kampagne)’, *WZHU Ges.-Sprachwiss.* Vol. XVII, 667-684.
- Hintze, F. 1971. ‘Musawwarat es Sufra - Vorbericht über die Ausgrabungen des Instituts für Ägyptologie der Humboldt-Universität zu Berlin 1968 (siebente Kampagne)’, *WZHU Ges.-Sprachwiss.* Vol. XX, 227-245.
- Hintze, F. 1984. ‘Diskussionsbeitrag zum Thema “Meroitische Architektur”’, *Meroitica* 7, 332-346.
- Hintze, F. and U. 1970. ‘Einige neue Ergebnisse der Ausgrabungen des Instituts für Ägyptologie der Humboldt-Universität zu Berlin in Musawwarat es Sufra’, in E. Dinkler (ed.). *Kunst und Geschichte Nubiens in christlicher Zeit*. Recklinghausen, 49-70.
- Hintze, F. et al., 1971. *Musawwarat es Sufra. Vol. I,2: Der Löwentempel*, Tafelband. With the collaboration of Ursula Hintze, Karl-Heinz Priese, Kurt Stark. Berlin.
- Hintze, F. et al. 1993. *Musawwarat es Sufra. Vol. I,1: Der Löwentempel*, Textband. With contributions by K.-H. Priese, St. Wenig, C. Onasch, G. Buschendorf-Otto, U. Hintze. Berlin.
- Hoskins, G. 1835. *Travels in Ethiopia*. London.
- Lenoble, P. 1991. *Meroe - Naqa - Musawwarat es Sufra*. Khartoum.
- Lenoble, P. 1994. *A Brief Guide to Naqa, Musawwarat-es-Sofra, Meroe*. Khartoum.
- Linant de Bellefonds, L.-M.-A. 1958. *Journal d’un voyage a Meroe dans les années 1821 et 1822*. Sudan Antiquities Service. Occasional Papers no. 4. M. Shinnie (ed.). Khartoum.
- Lohwasser, A. 1995. ‘Die Darstellung der kuschitischen Krönung’, in D. Kurth (ed.). 3. *Ägyptologische Tempeltagung /Hamburg, 1.-5. Juni 1994*. *Systeme und Programme der ägyptischen Tempeldekoration*. Hamburg, 163-185.
- Lord Prudhoe. *Journal from Cairo to Sennar*. Type-written copy.
- Pückler-Muskau, H. F. von, 1844. *Aus Mehemed Ali’s Reich*. 3 vols. *Nubien und Sudan*. Stuttgart.
- Shinnie, P. L. 1967. *Meroe. A Civilization of the Sudan*. New York - Washington.
- Shinnie, P. L. 1996. *Ancient Nubia*. London - New York.
- Stadelmann, R. 1973. ‘Tempelpalast und Erscheinungsfenster in den Thebanischen Totentempel’, in *MDAIK* 29, 2, 1973, 221 ff.
- Török, L. 1990. ‘The costume of the ruler in Meroe. Remarks on its origins and significance’, *Archéologie du Nil Moyen* 4, 151-202.
- Török, L. 1992. ‘Ambulatory Kingship and Settlement History. A Study on the Contribution of Archaeology to Meroitic History’, in C. Bonnet (ed.). *Études Nubiennes* Vol. I. Geneva, 111-126.
- Török, L. 1997. *The Kingdom of Kush. Handbook of the Napatan-Meroitic Civilization*. Handbuch der Orientalistik, vol. 31. Leiden.
- Welsby, D. A. 1996. *The Kingdom of Kush. The Napatan and Meroitic Empires*. London.
- Wenig, S. 1974. ‘Arensnuphis und Sebiuameker. Bemerkungen zu zwei in Meroe verehrten Göttern’, *ZÄS* 101, 130-150.
- Wenig, S. 1981. ‘Das Verhältnis von Wandrelief und Raumfunktion am meroitischen Amuntempel in Naga’, in W. K. Simpson and W. M. Davis (eds). *Studies in Ancient Egypt, the Aegean, and the Sudan. Essays in honour of Dows Dunham on the occasion of his 90th birthday, June 1, 1980*. Boston, 200-210.
- Wenig, S. 1984. ‘Gedanken zu einigen Aspekten der kuschitischen Tempelarchitektur’, *Meroitica* 7, 381-408.
- Wenig, S. 1992. ‘Kommentar zu Török 1992’, in C. Bonnet (ed.). *Études Nubiennes* Vol. I. Geneva, 137-140.
- Wenig, S. 1993. ‘Die Darstellungen. Untersuchungen zu Ikonographie, Inhalt und Komposition der Reliefs’, in Hintze et al., 74-227.
- Wolf, P. 1999. ‘Götter und Graffiti’, *Nürnberger Blätter zur Archäologie*. Sonderheft Sudan, 47-52.

## ***Meinarti I***

The Late Meroitic, Ballaña and Transitional Occupation

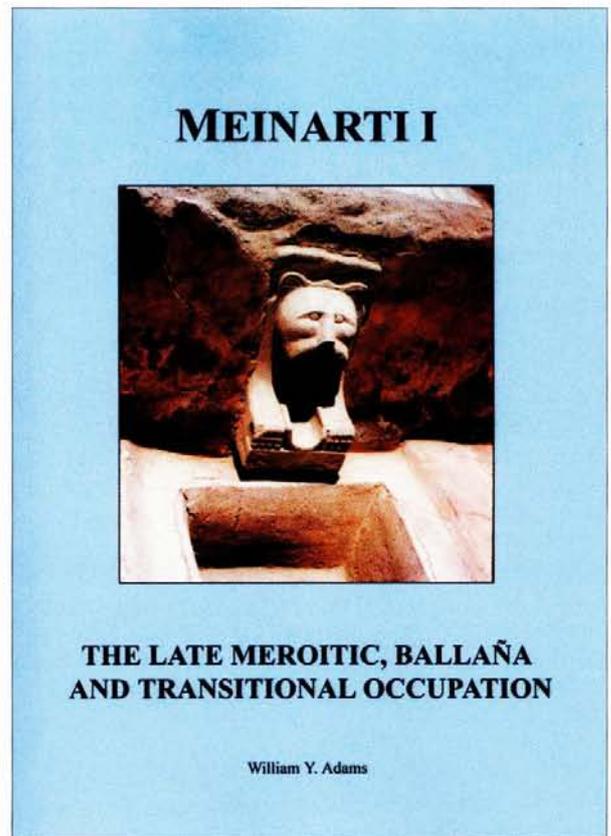
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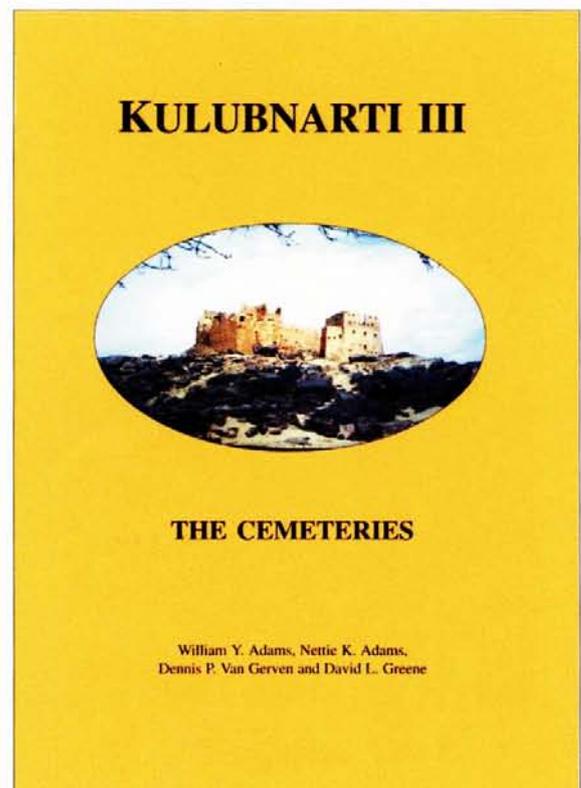
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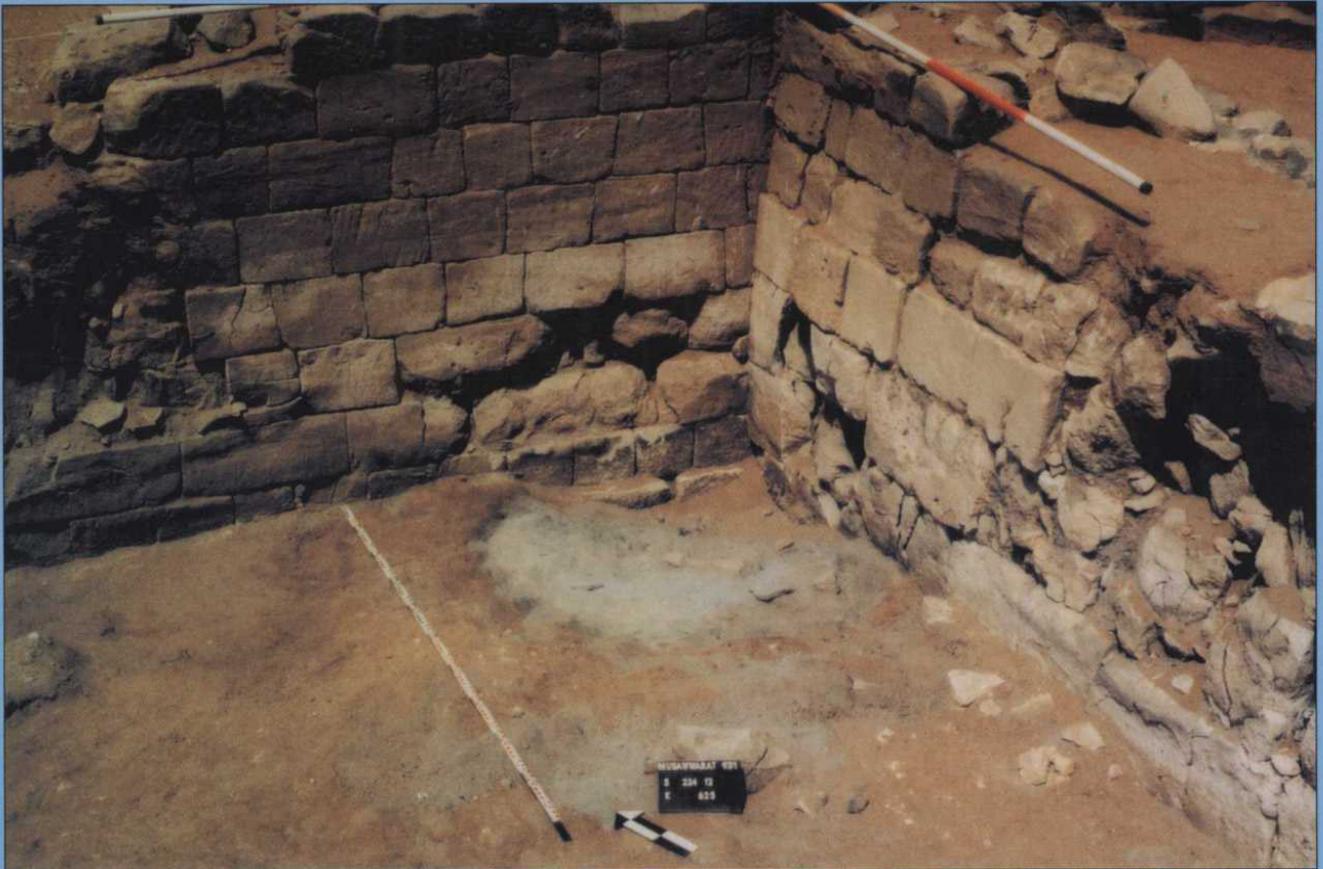
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*Musanwarat es-Sufra. North-east corner of Courtyard 224; detail of firing place.*



*Musanwarat es-Sufra. Stamped fine ware pottery (ZN 322 B).*