

# SUDAN & NUBIA

The Sudan Archaeological Research Society



*Bulletin No. 16*

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*Front cover:* Excavations in progress in the *Kerma Ancien* cemetery at site H29 in the Northern Dongola Reach (photo D. A. Welsby).

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# A Survey in the Western Bayuda: The Wadi Abu Dom Itinerary Project (W.A.D.I.)<sup>1</sup>

Angelika Lohwasser

The region within the large bent of the river Nile, approximately between the cities of Omdurman and Korti, is called the Bayuda. This extensive desert is formed by rocky areas, sandy plateaus, and some *wadis* which lead the seasonal rain-falls into the Nile. The most prominent *wadis* are the Wadi Muqqadam and the Wadi Abu Dom. It seems clear that the Wadi Muqqadam was one of the main trading routes but lost importance in medieval times (Mallinson 1998). A Napatan administrative centre with buildings and cemeteries was identified by T. Kendall, who started excavation at the site of el-Meragh which lies about halfway between Tamtam and Korti (Kendall 2006).

## The survey

The focus of the W.A.D.I.- project, which was inaugurated in 2009, is to explore the Wadi Abu Dom as part of the route between Meroe and Napata, the two capitals of the Kingdom of Kush.<sup>2</sup> Meroe, north of the Sixth Cataract, was the administrative headquarter with the royal residence and, in the Meroitic period, with the royal cemeteries. Napata, in the north at Jebel Barkal, is not identified with certainty yet. This was the sacred centre with the temples of the main gods. The temples around Jebel Barkal date back to the time of the Egyptian colony in the New Kingdom, but the ruins of the temples visible today were erected during the Kushite period. Situated close by are the royal cemeteries at el-Kurru and Nuri, which were used during the Napatan period. The designated Kushite king had to travel from his palace in Meroe to Napata to receive the crown from Amun in the great Amun temple B 500 at Jebel Barkal. The trip from Meroe to Napata was recorded repeatedly on Napatan royal stelae, but not described in detail.<sup>3</sup> Only the stela of Nastasen gives two place names on the route: he mentions *jsd-rst* as well as *t-kš*, but both are not identified yet on the ground. Since the mouth of the Wadi Abu Dom is exactly opposite Jebel Barkal and, therefore, also opposite the supposed locality of Napata, it is generally assumed that the King's road runs along this *wadi* (Chittick 1955, 86; Welsby 1996, 50). Moreover, easy water supply as well as a way

which cannot be missed, supports this. Therefore, one aim of the project, besides the mapping of ancient features, was to identify structures connected with this so called "King's road". We hoped to find installations like caravansaries, wells, storage buildings, control posts, etc. which should indicate a route for trade and royal travel.

Up to now, the survey along the banks of the Wadi Abu Dom itself covers a total of about 20km upstream from the Nile confluence (Figure 1).<sup>4</sup> We also prospected the areas about 2-4km north and south of the *wadi*, depending on the topographical conditions. Moreover, we have chosen several tributary *kbors* for comparison with the main *wadi*, and surveyed each of them at both banks up to their catchment area.

We identified numerous sites, mostly very small ones like single burials or shelters etc. Their time range stretches from the Palaeolithic to the Medieval period, which are mentioned here only in passing. We identified at least two Palaeolithic sites which may be identified as workshops for tools. We found single Palaeolithic artefacts like blades scattered over several slopes, but at two loci they were so plentiful and so densely spread over the outcrops that we can interpret this as remains of a concentrated production process (Gabriel 2009). The Neolithic phase is represented by sherds and lithic artefacts as well as, for example one stone axe (Plate 1). The Neolithic material was found mostly on higher elevated terrain than the remains of later periods. This is comparable to the situation at the Fourth Cataract (Gabriel and Karberg 2011, 90).

The Kerma period left several traces; we identified quite a number of tumuli (Plate 2) with associated sherds (Plate 3). These tumuli are located on top of the ridges, whereas the so called Post-Meroitic tumuli were erected on the flat plain (Plate 4). Moreover the appearance of the types of tumuli are different: Kerma tumuli are conical mounds consisting of fist- to head-sized stones, the Post-Meroitic tumuli are flat topped and with a greater diameter. Some of them, although not all, are surrounded with a ring of stones and the central part consists of finer material. Very interesting was



Plate 1. Neolithic remains: a stone axe, pottery and lithics (© W.A.D.I.-Project).

<sup>1</sup> I want to thank Tim Karberg for his valuable comments on the draft and Julie Anderson and Derek Welsby for correcting my English!

<sup>2</sup> The preliminary campaign of the survey project was funded by the Gerda-Henkel-Stiftung, the following campaigns by the German Research Foundation.

<sup>3</sup> "Dream-Stela" of Tanutamun, l. 6 (Breyer 2003, 101, 235); inscription of Irike-Amanote in Kawa IX, l. 4-5 (Macadam 1949, pl. 22); stela of Nastasen, l. 4-8 (Peust 1999, 61-62).

<sup>4</sup> Preliminary reports of the campaigns since 2009: Lohwasser 2009; 2010; 2011.

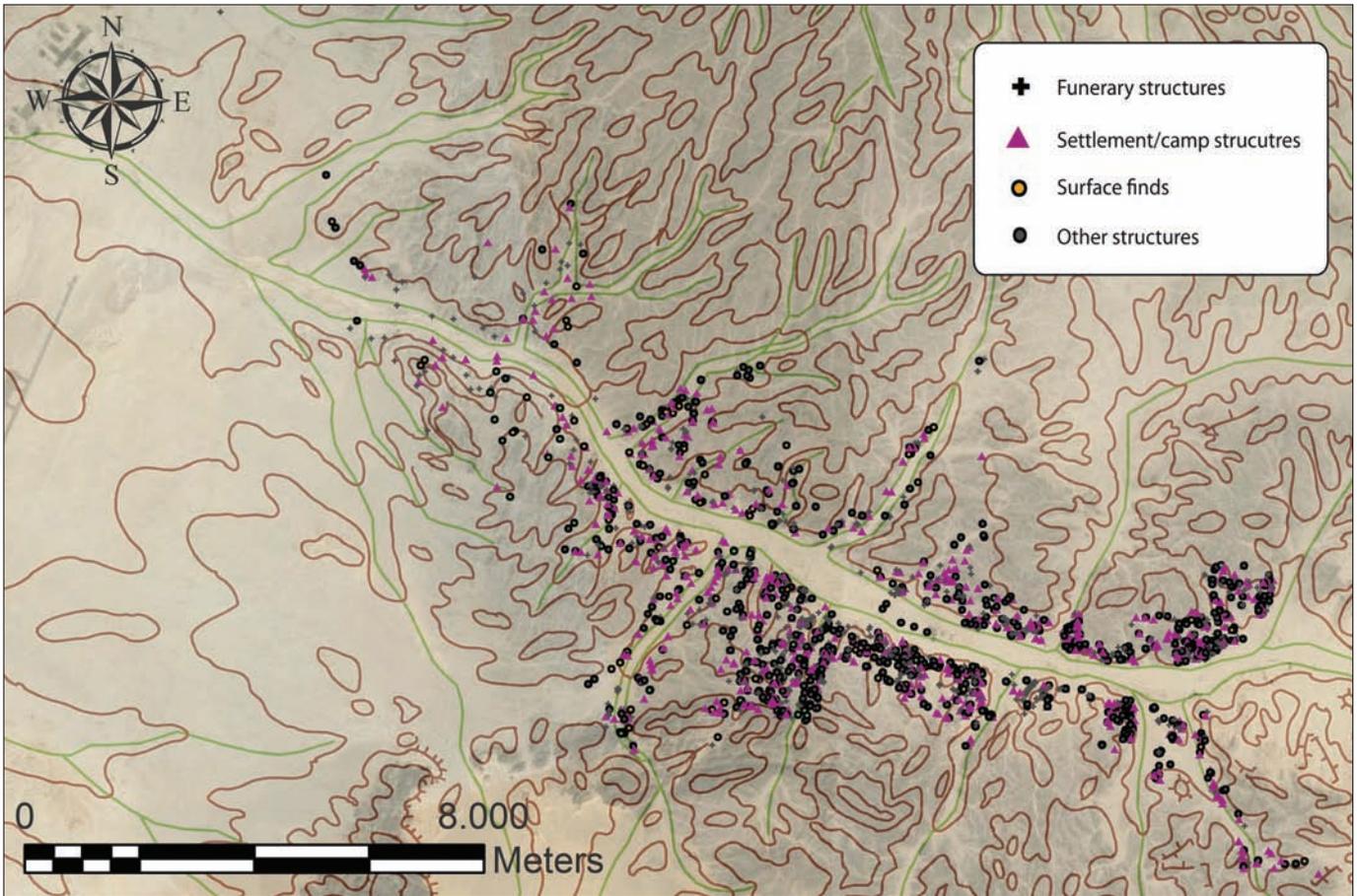


Figure 1. Survey map of the Wadi Abu Dom (© W.A.D.I.-Project).

the cemetery site 12/13, which consists of tumuli and graves of the Kerma, early Napatan and Post-Meroitic periods (Lohwasser 2009, 109-110). The Kerma tumuli are located more to the west, situated on small hills, the Napatan graves are cleft burials between the boulders of the rocky area and the Post-Meroitic tumuli are distributed outside the rocky area across the plain. We found sherds of pottery from all these phases near the graves. Most remarkably, we did not find any clear evidence of material commonly connected to



Plate 3. Kerma sherd (© W.A.D.I.-Project).



Plate 2. Kerma period tumulus (© W.A.D.I.-Project).

the Meroitic phase as yet. This culture was neither present at that cemetery nor found at any other site investigated during our survey. Of course, until now our results are limited by the fact that we have only undertaken a surface survey, but after about 70km<sup>2</sup> of careful reconnaissance at least some evidence should have been observed. In light of this, the archaeological record in the Wadi Abu Dom questions the established concept of chronology of historical phases from the 1<sup>st</sup> millennium BC to the 1<sup>st</sup> millennium AD. As already discussed against the background of the results of the surveys at the Fourth Cataract, new concepts for late Meroitic cultural development become even more obvious in the Wadi Abu Dom where we lack any cultural traces of what



Plate 4. Post-Meroitic tumuli (© W.A.D.I.-Project).

we call Meroitic in a historical sense. A possible solution to these problems would be to rethink such terms as “Meroitic” and “Post-Meroitic”, which are mostly interpreted strictly chronologically. It was already suggested that at least some of the still so-called “Post-Meroitic” material is contemporary to the classical “Meroitic” phase. For such a cultural concept, I would suggest the term “Rural Meroitic”. Thus we would interpret these relicts not as successive, but contemporary, determined not by a chronological development, but the social background and the way of life outside the centres of the Meroitic kingdom.<sup>5</sup>

The main aim of this project is to identify the tracks and paths people of the past used for travelling and trade, and how the logistics for that traffic were installed and controlled. Therefore, at the beginning of the project we thought about looking for *alamat* to lead the way, and for wells to provide the travellers with sufficient water. It was already in the first campaign that we realized that both types of features are not essential in the Wadi Abu Dom. Travelling through the desert, one needs *alamat* not to lose the way and die. But the green *wadi* is of course a kind of *alam* by itself, one has only to follow the broad green line in the desert. Additionally, despite the fact that we found a lot of wells, several dry and full of sand, others recently in use with plenty of water (Lohwasser 2011, 61), they do not document the presence of a centralized authority: since the subsurface flow in the wadi is on a quite high level, it is easy to dig a well, even for the farmers of today. One does not need a central administration of labour and resources like a kingdom to plan the construction and control of a well, as recorded at the outposts in the eastern or western desert. Within those areas, wells are defended by walls and most likely controlled by soldiers.<sup>6</sup> The Bayuda, however, may be a desert in general, but the Wadi Abu Dom is a green oasis where the logistics for travelling or at least to

survive a journey are easy to maintain and not of necessity controlled by a state authority.

But what about the road or the roads themselves? Already while prospecting by Google Earth, we recognised significant tracks along the banks of the *wadi*. Doing the groundcheck, we realised that, at least, some of these paths seem to have been in use for a long time. Near the pathways, we found most examples of rock art, which is in general quite rare within our concession area (Karberg 2009). Another category of finds closely associated with the paths are tethering stones to tie up valuable cattle, donkeys or camels, and, most interestingly, we found significant concentrations of pottery of different periods in close proximity to the paths. The potsherds were mostly scattered near small obstacles, probably the man or donkey carrying pots may have stumbled there. It was really interesting to find Kerma as well as Post-Meroitic and Medieval sherds at these loci. Not surprisingly, if the people of today walk or ride, they use the same tracks already incised deeply in the ground (Plate 5). Our conclusion was that the historical tracks which were used since long ago are also suitable for the people today, thus the traffic and communication



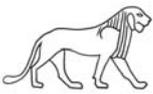
Plate 5. A path at the bank of the Wadi Abu Dom (© W.A.D.I.-Project).

patterns are quite comparable over the centuries. Therefore, we recognised that we would not be able to understand ancient traffic without a broader, more general view of the social and economical structures of the past and present, and comparing the life in the past with recent life.

Today, the Wadi Abu Dom is inhabited by some farmers who cultivate fields with tomatoes, cucumbers and onions, as well as some date palms. These farmers live in huts of mud bricks, made from local mud extracted from the *wadi*. Beside that sedentarian population, there is a second group of people living in the Bayuda and using the Wadi Abu Dom.

<sup>5</sup> This is discussed more broadly in Lohwasser 2011, 66-67.

<sup>6</sup> As at Gala Abu Ahmed, see Jesse and Kuper 2006.



These are nomads, migrating with their herds of sheep and camels through the desert and building *rakubas* to inhabit when they stop for a while.

These two groups of people using the region of the Wadi Abu Dom are present in the archaeological record, too. On the one hand, we found the bases or foundation walls of small huts (Plate 6). These are mostly situated on a higher

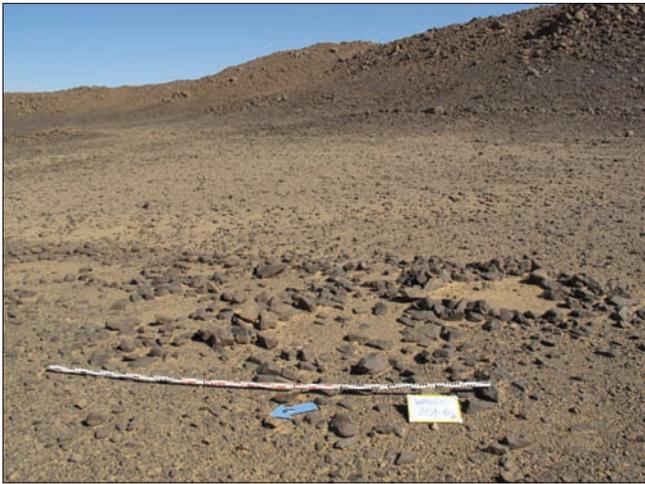


Plate 6. Remains of ancient huts (© W.A.D.I.-Project).

level, where the water could not reach them even if the flood in the *wadi* was extreme. On the other hand we found traces of several campsites, where people stopped for a short time and left fireplaces, stones to support or fix reed huts or tents and scattered pottery (Plate 7).<sup>7</sup> A comparable campsite was



Plate 7. An ancient campsite (© W.A.D.I.-Project).

excavated at the Fourth Cataract (Wolf and Nowotnick 2005, 25-30). The visible remains at the surface are identical and although we have not excavated a campsite in the Wadi Abu Dom up to now, we can suggest a similar situation there.

As an analogy, we can conclude that the usage of the land did not differ very much between the past and present.

<sup>7</sup> Of course the litter of the nomads today does not consist of pottery but parts of the recent material culture, like glass, broken plastic and shoes.

The two groups of people inhabiting the *wadi* with different lifestyles interact, but live separate from each other. But we have to bear in mind that we do not know the chronological situation of these different site categories (huts and campsites). Since we have not made any excavations up to now, we do not have precise dates for the different sites. At the remains of huts no finds were noted. At the campsites, the pottery ranges from “Rural-Meroitic” to Medieval or even post-Medieval times. Since we cannot be sure that huts and campsites are contemporary, we can suggest a parallel use of the Wadi Abu Dom by farmers and nomads only in analogy with the recent situation. On the other hand both categories might be the remains of the same population group, who had to adapt their way of living to changing conditions.

### The ruins in the Wadi Abu Dom

H. N. Chittick and P. L. Shinnie made an exploration journey in 1951 through the Wadi Abu Dom and followed the track through the Bayuda to Meroe. They visited the ruins of Umm Ruweim, Quweib, and Umm Khafour, and made short descriptions and sketch plans of the visible remains (Chittick 1955, 88-90). They interpreted the enclosures on the one hand as caravansaries, but stated on the other that the four ruins are too close to each other to serve as overnight stops. Up to the 1990s, there was no further archaeological investigation in this region of the Bayuda. In 1989, Patrice Lenoble together with Ossama el-Nur and Hassan Bandi excavated one tumulus near Umm Ruweim, which was empty, but probably Post-Meroitic (El-Nur and Bandi 1989). Two sondages in the ruin of Umm Ruweim I as well as one in Quweib were excavated. No datable material came to light, but, at least, Lenoble published sketch plans of these two ruins which were much better than those of Chittick (Lenoble 2004, 132-135).

Since we have observed some destruction at these ruins and since they were not documented in an adequate way, we decided to generate an architectural subproject to produce a measured plan and a description of the visible remains.<sup>8</sup> During the project, we were not able to excavate larger trenches, but undertook only removal of sand for clearance of details and some small sondages to detect the absolute elevation of the walls. For the future, we plan to excavate these ruins in some parts.

#### Umm Ruweim I

In 2011, we carried out the architectural documentation of the complex Umm Ruweim I (Eigner and Karberg 2011). Today, the walls of Umm Ruweim I have an elevation of about 1m above ground level and, as shown by the sondage, of about 2m above the natural soil. The length and width of this building is about 67m, which means it covers nearly

<sup>8</sup> The architectural documentation of Umm Ruweim I was financed by the Federal Foreign Office, Germany, the sub-project in Quweib, Umm Ruweim II and Umm Khafour by the Schiff-Giorgini Foundation of the United States.

4,500m<sup>2</sup> (Figures 2, Plate 8).

As already mentioned by Chittick (1955, 89-91), the ruin of Umm Ruweim consists of two rectangles with rooms and a central building. The whole complex has four entrances with L-shaped passageways. The main entrance is to the east. We cleared the sand and debris from the main entrance, without digging a sondage, but it is clearly visible that the two entrance rooms are offset (Plate 9). The other three entrances were blocked in a later stage of usage. The complex is built in dry stone masonry; the joints and hollow spaces are filled with pieces of stone partly mixed with clay, but no mortar. All parts of the building are built in the same kind of masonry, and, although there are clearly different building phases visible, it seems that the building was planned and built with one method of construction.

Within the ruin of Umm Ruweim I there are staircases in each corner of the outer enclosure, but also staircases or ramps in three corners of the inner courtyard (Plate 10). Within the central building there is one staircase/ramp of the same type. Some of them are not clearly visible, since they are covered by a mound of sand and debris and only traces are left.

Today, the courtyards are empty, but magnetometer and GPR soundings done this year recorded rows of regularly distributed anomalies, most probably to be interpreted as pits. One of the pits within the southern courtyard is surrounded by a circular structure which could be a flat ring made of bricks. Within the western courtyard some similar structures occurred, but were not as regular in shape and distribution. It is difficult to interpret them, but perhaps the pit with the brick ring could be a planting pit. This may be true also for the other pits, but of course they could have many other functions.

In the center of the inner enclosure a building is situated. It is exactly square (14 x 14m), but at the eastern side a staircase and a small room is attached to it. We want to stress that the central building is clearly orientated differently compared with the enclosures. Within the courtyard of the central building, there is a cuboid platform of stones. This massive platform is difficult to interpret; it may be a throne base or an altar – or something else entirely.



Plate 8. Umm Ruweim I: general view (© H. Paner).

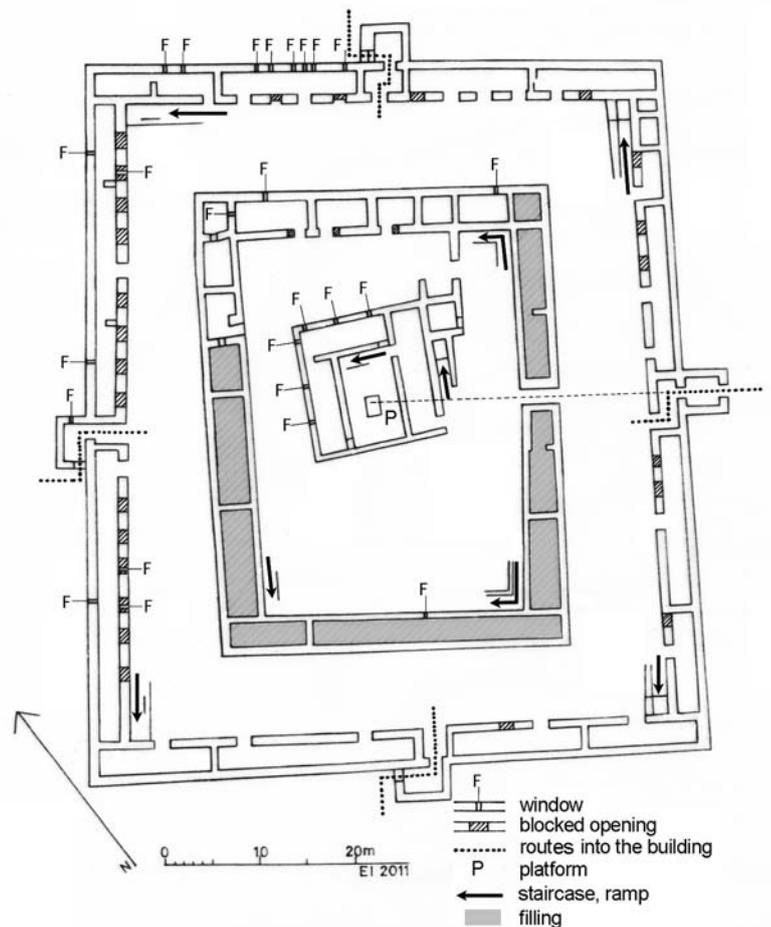


Figure 2. Umm Ruweim I: general plan (by D. Eigner, © W.A.D.I.-Project).

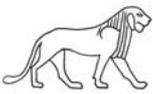


Plate 9. Umm Ruweim I: main entrance (© W.A.D.I.-Project).

Both enclosures have rooms of a constant width of approximately 2.2m but very different lengths. One room in the outer western border reaches 30m! While in use, the rooms were modified from time to time, some were provided with intermediate walls, others had their doorways blocked. Within the inner enclosure, all rooms except the ones in the north were filled intentionally at a later building phase to construct an elevated terrace. From the evidence in the sondage, at least one window was blocked and the rooms were filled with soil and gravel. Only the rooms in the north range were still accessible.

In various parts of the building there are many doorways, about 1.5m wide. Some of the doorways were blocked with dry-stone masonry. These blockings occur in two types:

1. blocking like the masonry of the building with long slabs of gneiss, probably finished during the primary construction phase. We suggest that these openings were intended only for the transport of material during the primary construction phase, since in some of these blockings small windows were installed.



Plate 10. Umm Ruweim I: a staircase (© W.A.D.I.-Project).

2. blocking done with small blocks of quartzite, probably installed later during the usage of the building.

In every wall of the building there are small openings, about 200 x 200mm (like in Quweib, cf. Plates 13 and 14). They provide ventilation and some light. As these openings are quite irregular in their spacing and in some parts quite rare, we can exclude considering that they were holes for beams of scaffolding.

It seems that the dry-stone masonry was topped by brickwork, since a few mud bricks were documented. Moreover, the debris of the stones is generally too little for the walls to reach a sufficient height in the rooms. Flat timber roofs or mud-brick barrel vaults will have been provided above the long rooms in the outer range, but this can be verified only with excavations.

We also found evidence of plaster. The inner wall of the inner enclosure was plastered on both sides. It seems clear that at least the northern face of the wall were plastered independently in two different chronological phases, since two layers of plaster relate to different floor levels. It seems that we can speak of a building phase with the first layer of plaster and a restoration phase with the second layer of plaster. Directly on the stratum corresponding to the later layer of plaster we found a sherd which was covered with residue of this plaster. The sherd was used as palette for the material (Plate 11).



Plate 11. Umm Ruweim I: sherd with plaster (© W.A.D.I.-Project).

We found charcoal directly under the first course of stones in the walls as well as in the layer of construction debris under the primary occupation layer, which is already dated. The date range is AD 240-330,<sup>9</sup> thus the late Meroitic to early Post-Meroitic period. Moreover, the sherds found in the sondages confirm this date. Up to now, there was no definite assignment of Umm Ruweim as well as the other ruins to a specific period. The interpretations ranged from Meroitic to

<sup>9</sup> <sup>14</sup>C-dating done by Dr Tomasz Goslar, Poznańskie Laboratorium Radiowęglowe. (1): cal. AD 240-333: 68.2%; cal. AD 212-387: 94.2%. Calibration OxCal v4.1.5., (2): cal. AD 261-395: 68.2%; cal. AD 256-413: 95.4%. Calibration OxCal v4.1.5, (3): cal. AD 255-345: 68.2%; cal. AD 240-391: 95.4%. Calibration OxCal v4.1.5.

the Ottoman period. Now we have the first – although only punctual – evidence for the date of Umm Ruweim I into the late Meroitic to early Post-Meroitic period.

### *Quweib*

About 6km to the east of Umm Ruweim, the ruin of Quweib is situated (Plate 12). This is a rectangular structure, with the measurements 50 x 80m. The enclosure consists of 16 rooms, arranged in a rectangle around an open courtyard with a platform situated in the middle of the western wall. As far as we can see without further excavations, the platform is built of massive stones and like that at Umm Ruweim I, its function is unclear.

There is only one entrance on the east side. Today, the walls are visible up to 1.7m, but a sondage revealed that the



Plate 12. *Quweib: airphoto* (© B. Żurawski).

total surviving height is about 2.2m. The masonry technology as well as several features like the platform resemble closely Umm Ruweim I; in fact, Quweib looks very much like a simplification of that building. Unlike Umm Ruweim I, we lack traces of mud bricks (but this could be clarified through further sondages) as well as ramps and staircases. Like Umm Ruweim I, there are several windows in the walls. On the outer wall, these openings are at a level of about 1-1.5m above the original floor (Plate 13), but within the inner wall, the windows are situated 2m above the original floor (Plate 14). Therefore, we can suggest that the windows were perhaps intended to provide a view to the outside, but denied people the ability to look through the windows into the courtyard.

### *Umm Ruweim II and Umm Khafour*

In the Wadi Abu Dom there are two more stone structures which are quite similar to each other, one of them very close to Umm Ruweim I. This *hosh* is called Umm Ruweim II (Plate 15). The other, more to the south east, is called Umm Khafour (Plate 16). At the surface today, we can recognize square



Plate 13. *Quweib: windows in the outer wall* (© W.A.D.I.-Project).

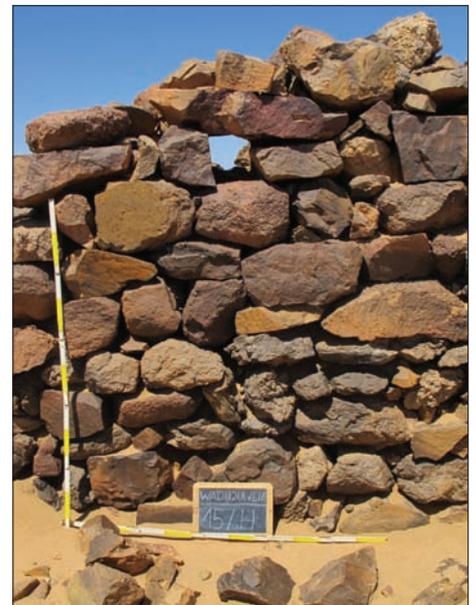


Plate 14. *Quweib: window in the inner wall, room 15* (© W.A.D.I.-Project).

enclosures with two entrances east and west, but with, at first sight, empty courtyards. In both cases the magnetometer and GPR soundings were very helpful, since they were able to correct this superficial impression: they revealed a large rectangular building within the courtyard of Umm Ruweim II, c. 12-13m away from the enclosure walls, with rectangular rooms (Figure 3). In the center of the structure, two round huts were visible, connected to the abovementioned rectangular structure by several smaller walls. These radar and magnetic echoes most probably show the remains of mud-brick architecture.

After the results at Umm Ruweim II, the investigation of the enclosure courtyard at Umm Khafour was carried out very carefully. There are some very weak anomalies probably similar to the rectangular mud-brick walls from Umm Ruweim II, but the results are still unclear. The data is at the moment



Plate 15. *Umm Ruweim II: kite photo* (© H. Paner).

subject to further processing at the Institute of Geosciences, CAU Kiel, which hopefully might clarify this record.

## Conclusions

The interpretation of these ruins is far from clear. It seems that a funerary function can be excluded, since no burial ground except some few tumuli and box graves are located in the vicinity. Also to be excluded is a military function, since there is no evidence for fortification or defense elements. On the contrary, there is a disadvantage in the topographical situation, since the ruins are located close to hills which can hide enemies easily and allow them a covered advance to



Plate 16. *Umm Khafour: general view* (© W.A.D.I.-Project).

positions quite close to the buildings or the use of long-range weapons from the elevated terrain. Another possibility is an economic function, but there are neither big storerooms like the treasury in Sanam, nor an adequate means of access. No large animal can enter the enclosures because of the narrow L-shaped entrances. Of course it is possible that only people entered the enclosures, but even then the few and narrow rooms are not suitable for a store building.

What about a residential function? None of the structures looks like a palace, as far as we can compare them with Egyptian and Kushite ones. There are some elements which we know from Meroitic architecture, like elevated terraces and ramps, but the complex as a whole does not look Meroitic. In fact, we may have to deal with the architectural manifestation of another independent culture; but we will have to wait for the excavations to obtain a greater insight. The same is true for the interpretation as religious complexes. The

structures do not look like temples, although there are some elements which are known from the heartland of Meroe, for example temple M 250 in Meroe itself (Hinkel 2001). This so-called Sun Temple is built within a square temenos-wall. The central building can be reached with a ramp, the sanctuary with a staircase. These similarities let us suggest that at least Umm Ruweim I had a ritual function – though whether in connection with a natural or supernatural authority it is difficult to say.

One of the problems concerning the interpretation is that up to now we do not even know if these ruins are contemporary or differ chronologically from each other. If they are contemporary, each structure may have served different functions. If they are successive, they all could have served a similar function, but were built by different rulers or chiefs.

After we will have finished the survey project, hopefully we will start with excavations at these structures. Then, we hope to find the key to understanding the ruins in the Wadi Abu Dom.

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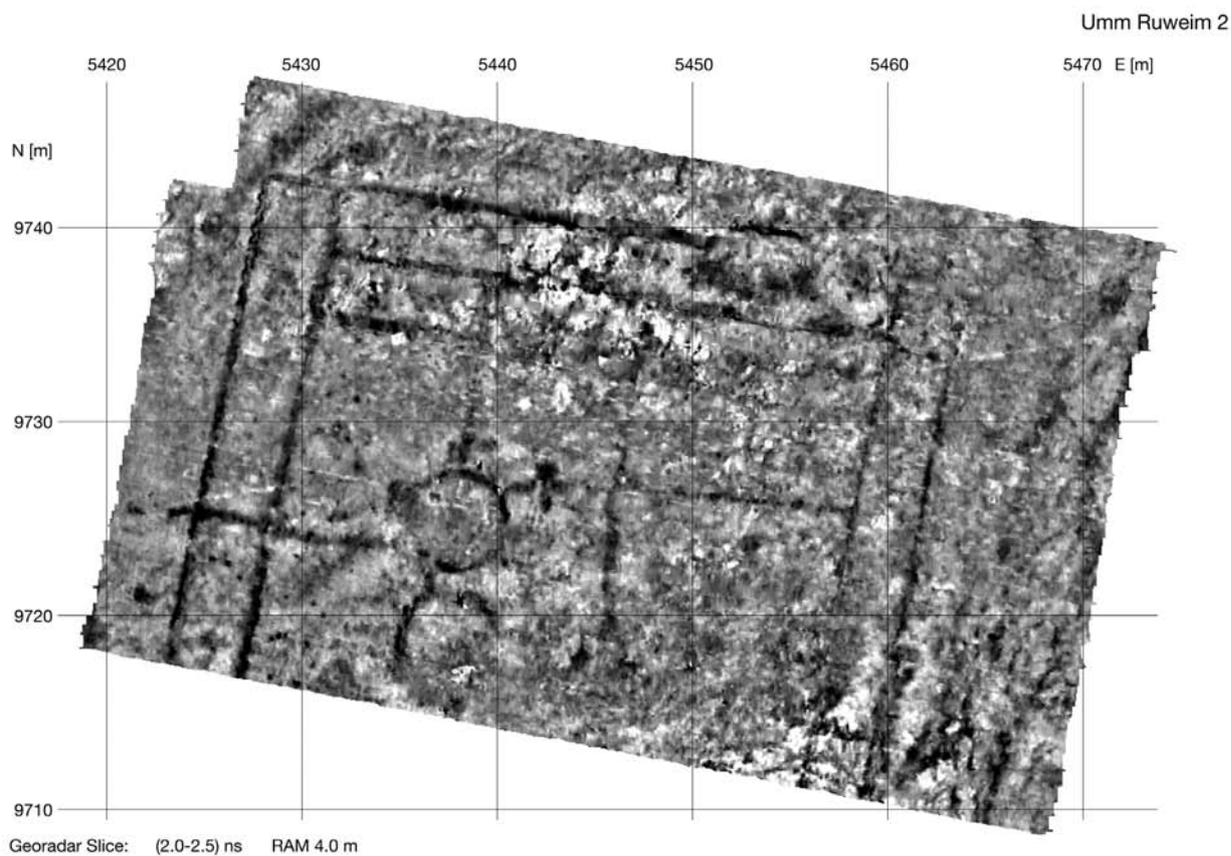


Figure 3. Umm Ruweim II: magnetometer (© W.A.D.I.-Project).

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