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Tracks in the Bayuda desert. The project 'Wadi Abu Dom Itinerary' (W.A.D.I.)

#### Abstract

From the archaeological point of view, the Bayuda desert is an unknown part of the northern Sudan. The project 'Wadi Abu Dom Itinerary' focuses on the investigation of the so-called 'King's Road' between the two capitals of the kingdom of Kush, Meroe and Napata. The journey between these two centres is repeatedly mentioned in Napatan royal texts, and the road is considered to be the major trade route through the Bayuda as well. Having now the survey data of altogether 70 km² along the road, we began to recognise a pattern in site distribution. The permanent and seasonal settlement sites are concentrated at the wadi banks. Here the four known stone structures, namely Umm Ruweim I and II, Quweib and Umm Khafour, are situated. Although they used to be interpreted as caravansaries, their function is as yet unknown. Near the wadi banks we found remains of huts and sites which we would explain as camp sites of nomads. In the hinterland, the archaeologically discernible human activity is restricted to travelling: we found tethering stones at camel and donkey tracks, sometimes with small fireplaces nearby. In the overall pattern we can very clearly distinguish the 'land for settling' from the 'land for crossing'.

Keywords: archaeological survey, 'King's Road', shortcut, trade route, stone structure, northern Sudan, Kush, Napatan period, Meroitic period

## 1. In search of the 'King's Road'

The region within the large bend of the river Nile in northern Sudan, approximately between the modern cities of Omdurman and Korti, is called Bayuda. This wide desert is formed of rocky areas, sandy plateaus, and some wadis which lead the seasonal rainfalls into the river Nile. The most prominent wadis in the Bayuda are the Wadi Muqqadam and the Wadi Abu Dom [Fig. 1].

The focus of the W.A.D.I. ('Wadi Abu Dom Itinerary') 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. Scholars phase the history of the kingdom of Kush in the Napatan (9th – 4th century BC) and the Meroitic (4th century BC – 4th century AD) periods. The city of Meroe, north of the 6th

Cataract, was the administrative headquarters with the royal residence and, in the Meroitic period, with the royal cemeteries. Napata, in the north at Jebel Barkal, is the sacred centre with the temples of the main gods. 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. Only the stela of Nastasen gives two place names on the

<sup>1 &#</sup>x27;Dream stela' of Tanutamun, l. 6 (Breyer 2003: 101; 235); inscription of Irikeamanote in Kawa IX, l. 4f. (Macadam 1949: pl. 22); stela of Nastasen, l. 4–8 (Peust 1999: 61f.).

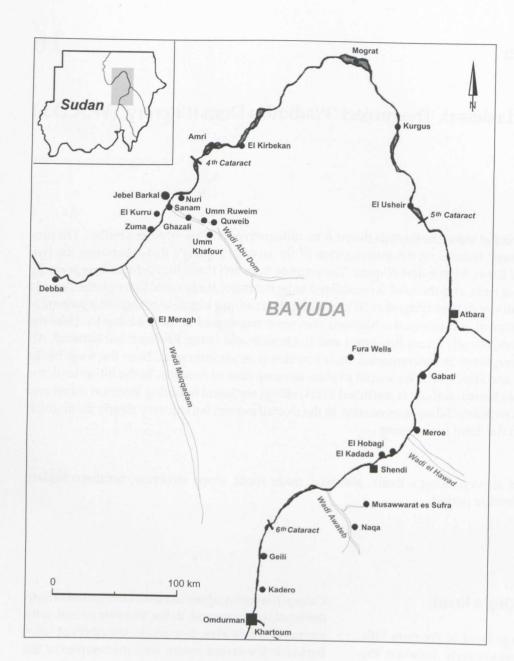


Fig. 1 Map of the Bayuda, northern Sudan.

route: it mentions *isd-rst* as well as *t-k*′, but both are not yet identified. Since the water mouth of the Wadi Abu Dom is exactly opposite Jebel Barkal and therefore also opposite the supposed location of Napata, it is generally assumed that the 'King's Road' runs in this wadi (cf. Chittick 1955: 86; Welsby 1996: 50). Moreover, an easy water supply, as well as a route which cannot be missed, argues for the Wadi Abu Dom as the location of the 'King's Road'. 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, sacral installations and control posts as well as inscriptions by members of the escort 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 20 km wadi-upwards. We also prospected the areas about 2–4 km north and south of the wadi, depending on their topographical condition. Moreover, we have chosen several side *khors* (small wadis) for the comparison with the main wadi, and surveyed each of



Fig. 2 The landscape in the Wadi Abu Dom (© W.A.D.I. Project).

them at both banks up to the catchment area of these *khors*.

We identified numerous sites, mostly very small ones like single burials or shelters, etc. Their time range stretches from the Paleolithic to the Medieval period. We failed to find alamat (landmarks; cairns as route markers), which should lead the way in the desert. But being in the Wadi Abu Dom for the first time in 2009, we realized that there is no need for signs, since the wadi itself is an alam [Fig. 2]. The sometimes flimsy, sometimes rank green line is not to be missed. Concerning the water supply, we found many wells, several dry and full of sand, and others recently in use with plenty of water [Fig. 3]. But since the subsurface flow in the wadi is at a quite high level, it is easy to dig a well, even for the recent farmers. One does not need a central administration of labour and resources like a king with the authority to plan the construction and to control the wells as at the outposts in the eastern or western desert. Within those areas, wells are defended by walls and most likely controlled by soldiers.<sup>2</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 necessarily controlled by a state authority.

After about 70 km<sup>2</sup> of detailed survey, we failed to find clear evidence of any remains of the Kushite kingdom. Neither sacral installations nor inscriptions or pictures connected with the Kushite culture were documented. We did not find a single sherd of Meroitic fine ware or any other sign of elitist material culture! Thus we conclude that the 'King's

<sup>2</sup> Like at Gala Abu Ahmed in Wadi Howar (cf. Jesse & Kuper 2006) or at the hydreuma in Wadi Kalalat (cf. Sidebotham 2003).

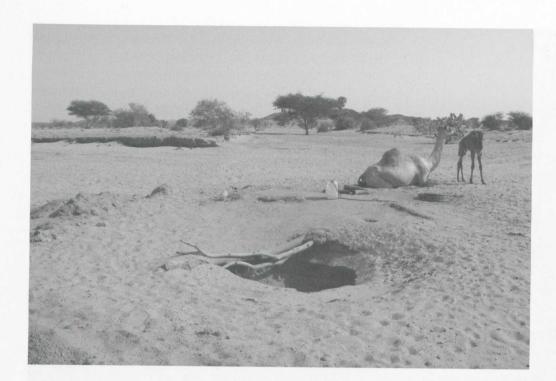
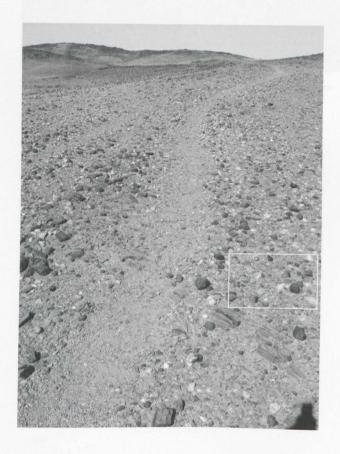


Fig. 3 A well in the wadi, dug by nomads (© W.A.D.I. Project).



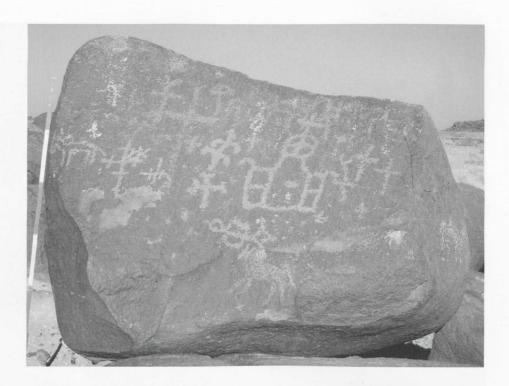
**Fig. 4** A typical path with broken pottery left by travellers (© W.A.D.I. Project).

Road' did not lead through the Wadi Abu Dom. Since the climate at least in the Meroitic phase was more humid than today, we can suggest that the Kushites used a route more to the south (pers. comm. Dorian Fuller). This fits with the fortress of Fura Wells as well as with some Meroitic burials near the southern transit through the Bayuda (cf. Crawford 1953; Chittick 1955). On the other hand, the Wadi Abu Dom is and was an easy way to cross the Bayuda. Although it might not have been the 'King's Road', the Wadi Abu Dom may well have been a trading route, as it is today.

## 2. 'Land for settling' and 'land for crossing'

Already while prospecting by means of 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 since a long time ago [Fig. 4]. Near the pathways, we found some examples of rock art [Fig. 5]. This type of feature is in general quite rare within our concession area (cf. Karberg 2009; Gabriel & Karberg 2011: 94–97). Another category of finds closely associated with the paths are tethering stones to tie up valuable cattle or camels

Fig. 5 Medieval rock art on a boulder at a path (© W.A.D.I. Project).



[Fig. 6]. And, most interestingly, we found significant concentrations of pottery of different periods in the close vicinity of the paths. It was really interesting to find Kerma as well as post-Meroitic and medieval sherds at these spots. And, not surprisingly, if the people of today walk or ride, they use the same tracks, which are already dug deeply into the ground. Our conclusion was that the historical tracks which were used since a long time ago are also suitable for the people of today, thus the traffic and communication patterns are quite comparable over the centuries.

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 brick, made out of local mud from the wadi. Beside that sedentary population, there is a second group of people living in the Bayuda and using the Wadi Abu Dom. These are nomads, migrating with their herds of sheep and camels through the desert and building *rakubas* (reed huts) for dwelling 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 [Fig. 7]. These are mostly situated on a higher level, where the water could not reach them even if the flood of the wadi was extreme. On the other hand, we found traces of several campsites, where people stopped for a short



Fig. 6 Tethering stones (© W.A.D.I. Project).





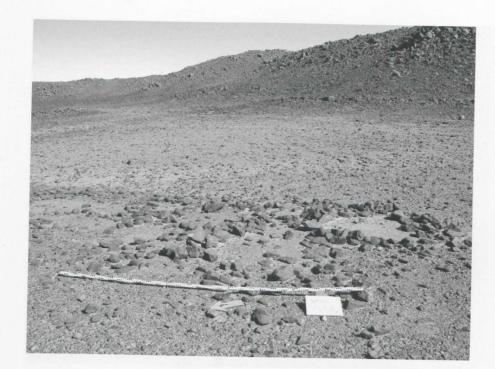


Fig. 7 Remains of ancient huts (© W.A.D.I. Project).



**Fig. 8** An ancient campsite (© W.A.D.I. Project).

time and left fireplaces, stones to fasten reed huts or tents, and scattered pottery [Fig. 8].<sup>3</sup> A comparable campsite was already excavated at the 4th cataract (Wolf & Nowotnick 2005: 25–30). The visi-

3 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.

ble remains at the surface coincide, and although we did not excavate 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 has not differed very much from the past to the present. The two groups of people inhabiting the wadi with different lifestyles interact, but live

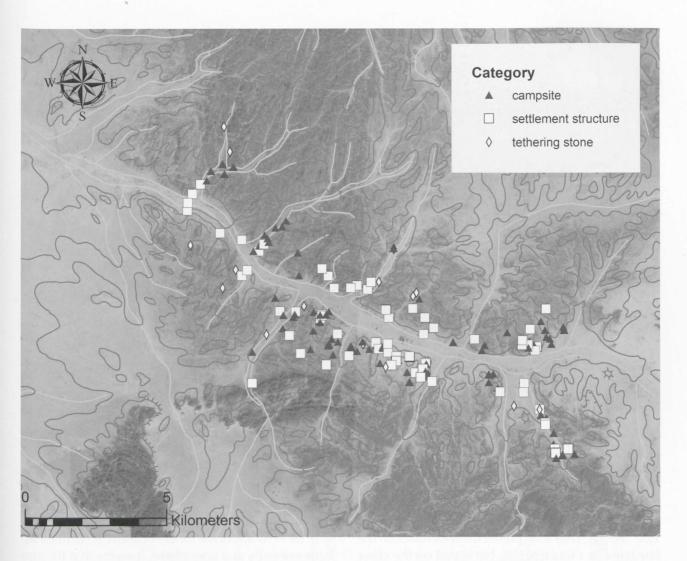
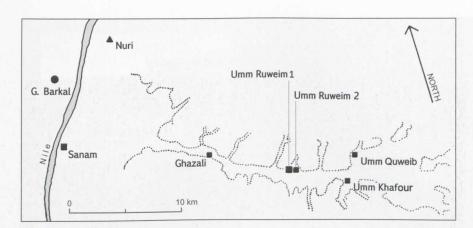


Fig. 9 Distribution of three site categories along the Wadi Abu Dom (© W.A.D.I. Project).

separated 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 did not make any excavations up to now, we do not have precise datings for the different sites. At the remains of huts there are no finds up to now. At the campsites, the pottery ranges from the 1st millennium BC to the 1st millennium AD, or even up to post-medieval times. Since we cannot be sure that huts and campsites were contemporary, we can suggest a parallel use of the Wadi Abu Dom by farmers and nomads only in analogy to 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. Looking at the spatial distribution of the site categories 'hut remains', 'campsite' and 'paths' (with installations like fireplaces, tethering stones, etc.), we can recognise that campsites are situated mostly on the terraces at the banks, preferably at the junction of side *khors*, where there is more grazing area, and in the vicinity of the large ruins [Fig. 9]. The huts are near the banks, but always on a higher level. In the hinterland, far away from the wadi or side *khors*, most traces of human activity we found were fireplaces and tethering stones, representing the remains of overnight-stops. Moreover, a path network overlays the rocky desert, leading from the Wadi Abu Dom to the north and south, and presenting shortcuts be-



**Fig. 10** The location of the stone buildings in the Wadi Abu Dom (drawing: D. Eigner).

tween side *khors*. Thus, in the overall pattern we can quite clearly distinguish the 'land for settling' from the 'land for crossing'.

# 3. The stone buildings 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 up 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 hand that the four ruins are too close to each other to have served as overnight-stops [Fig. 10].

Since these ruins 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 (Eigner & Karberg 2011). 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 structures in some parts.

These four buildings may have been connected with trade, as Chittick suggested. To our mind, the function of all of them is not settled yet. In the following I will present a very short description and a conclusion about their possible function(s).

Umm Ruweim I consists of two squares with elongated rooms and a central building [Figs. 11;

12]. The outer enclosure has four entrances; three of them were blocked and only the main entrance in the east gives access to the structure. There are staircases in each corner of the outer enclosure, but also staircases or ramps in three corners of the inner enclosure. In the centre of the inner enclosure a building is situated. It is exactly square, 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 as compared to the enclosures. Within the courtyard of the central building, there is a cuboid built of stones. This massive platform is difficult to interpret; it may be a throne or an altar.

Most rooms of the inner enclosure were filled up intentionally at a later phase. It seems that the aim had been to construct some kind of elevated terrace. This could have involved a change in the function of the structure.

In every part of the building there are small windows. They provide ventilation and some light. As these openings are quite irregular in their spacing and in some parts quite rare, we can exclude holes for beams of scaffolding. Moreover, these openings are not omissions of stones in the wall but intentionally built with small architraves.

The ruin of Quweib, about 6 km east of Umm Ruweim, is a rectangular enclosure consisting of 16 elongated rooms around a free courtyard. The only entrance to the enclosure is located on the east side. In the courtyard, there is 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.

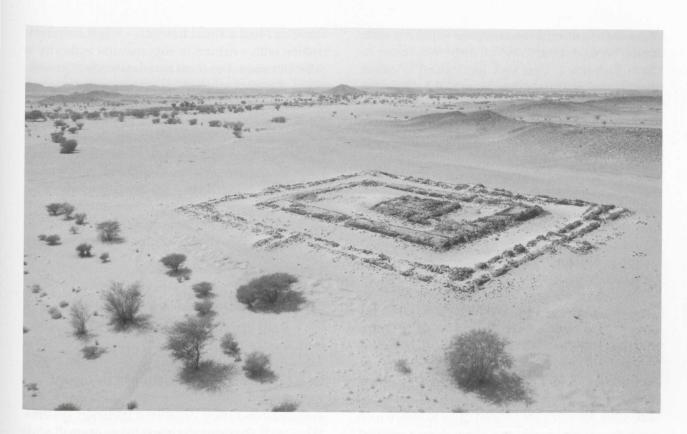
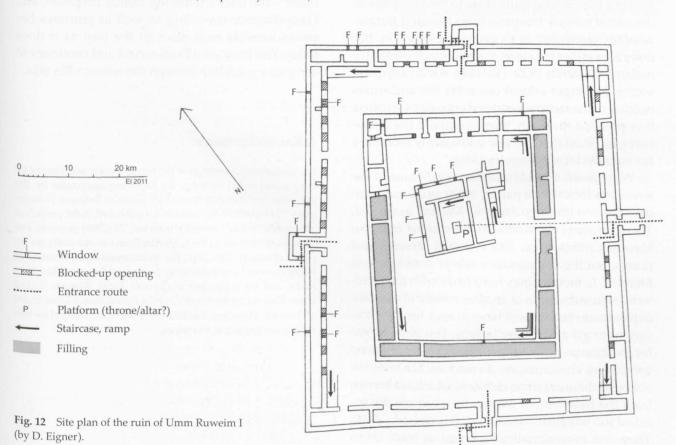


Fig. 11 The ruin of Umm Ruweim I (kite-photo by H. Paner).



Tracks in the Bayuda desert

There are two more stone structures which are quite similar to each other, one of them very close to Umm Ruweim I. This *hosh* (enclosure) is called Umm Ruweim II. The other, more to the southeast, is called Umm Khafour. On the surface today, we can recognise square enclosures with two entrances east and west each, but with, at first sight, empty courtyards. In both cases the magnetometer and ground penetrating radar corrected this impression: they revealed remains of mud brick architecture. A large rectangular structure including two round huts was built within the courtyard of Umm Ruweim II. Although the geophysical results in Umm Khafour are less clear, we can suggest a similar installation.

The interpretation of these ruins is far from clear. It seems that a funerary function can be excluded, since there is no burial ground in the vicinity except some box graves. 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 positions quite close to the buildings or the use of ranged weapons from elevated terrain. Another possibility is an economic function, but there are neither big storerooms like in the treasury in Sanam (Griffith 1922: 116-124), nor an adequate access: No larger animal can enter the enclosures because of the narrow L-shaped entrance. Of course it is possible that only people entered the enclosures, but even then the few and narrow rooms are not suitable for a storage building.

What about a residential function? None of the structures looks like a palace, so far as we can compare them with Egyptian and Kushite examples. There are some elements which we know from the Meroitic architecture, like elevated terraces and ramps, but the complex as a whole does not look Meroitic. In fact, we may have to do with the architectural manifestation of another culture of some independence; but we will have to wait for the excavations to get any further insight. The same is true for the interpretation of the structures 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 the socalled sun temple in Meroe itself (Hinkel, ed., 2001). There are several indications that at least Umm

Ruweim I had a ritual function – whether in connection with a natural or supernatural authority is difficult to say. The same may be true for Quweib, where the platform and the eastern entrance seem to have a ritual connotation. Also the different levels of the windows could hint at this interpretation.

One of the problems concerning the interpretation is that up to now we do not even know if these ruins are all 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 the same function, but built by different rulers or chiefs.

### 4. Conclusion

We cannot confirm the suggestion that the stone buildings in the Wadi Abu Dom served as caravansaries or as storage buildings for trade goods. Of course future excavations might change this impression, but at this stage we do not have any clear evidence concerning organized transport systems. What we do have are the many traces of small-scale traffic – the tracks, tethering stones, fireplaces, etc. Long-distance travelling as well as journeys between hamlets took place in the past as it does today. The Wadi Abu Dom served and continues to serve as a guideline through the western Bayuda.

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### References

- Breyer, F. (2003) Tanutamani. Die Traumstele und ihr Umfeld. Ägypten und Altes Testament 17 (Wiesbaden: Harrassowitz).
- Chittick, H.N. (1955) An Exploratory Journey in the Bayuda Region. Kush 3: 86–92.
- Crawford, O.G.S. (1953) Field Archaeology in the Middle Nile Region. Kush 1: 2–29.
- Eigner, D. & T. Karberg (2011) W.A.D.I. 2011: Die Bauaufnahme in Umm Ruweim. Der antike Sudan Mitteilungen der Sudanarchäologischen Gesellschaft 22: 69–84.
- Gabriel, B. & T. Karberg (2011) Archäologischer Survey in der nördlichen Bayuda (Sudan) – Wadi Abu Dom und 4. Katarakt im Vergleich. Der antike Sudan – Mitteilungen der Sudanarchäologischen Gesellschaft 22: 89–104.
- Griffith, F.L. (1922) Oxford Excavations in Nubia VIII–XVII: Napata, Sanam Temple, Treasury and Town. Liverpool Annuals of Archaeology and Anthropology 9: 67–124.
- Hinkel, F., ed. (2001) Der Tempelkomplex Meroe 250. Archaeological Map of the Sudan, Suppl. I (Berlin: Akademie-Verlag).
- Jesse, F. & R. Kuper (2006) Napata in the West? The Gala Abu Ahmed Fortress in Lower Wadi Howar (NW-Sudan). Archéologie du Nil Moyen 10: 135–159.

- Karberg, T. (2009) Die Felskunst im unteren Wadi Abu Dom. Der antike Sudan – Mitteilungen der Sudanarchäologischen Gesellschaft 20: 131–140.
- Lohwasser, A. (2010) Das Projekt Wadi Abu Dom Itinerary (W.A.D.I.), Kampagne 2010. Der antike Sudan Mitteilungen der Sudanarchäologischen Gesellschaft 21: 37–50.
- (2011) Das Projekt Wadi Abu Dom Itinerary (W.A.D.I.),
  Kampagne 2011. Der antike Sudan Mitteilungen der Sudanarchäologischen Gesellschaft 22: 59–68.
- Macadam, M.F.L. (1949) The Temples of Kawa. Vol. 1: The Inscriptions (Oxford: Griffith Institute, Ashmolean Museum).
- Peust, C. (1999) Das Napatanische. Ein ägyptischer Dialekt aus dem Nubien des späten ersten vorchristlichen Jahrtausends. Texte, Glossar, Grammatik (Göttingen: Peust & Gutschmidt).
- Sidebotham, S.E. (2003) Ptolemaic and Roman Water Resources and Their Management in the Eastern Desert of Egypt. In: M. Liverani (ed.), Arid Lands in Roman Times. Papers of the International Conference, Rome, July 9th–10th 2001. Arid Zone Archaeology Monographs 4 (Firenze: All'insegna del giglio) 87–116.
- Welsby, D.A. (1996) The Kingdom of Kush. The Napatan and Meroitic Empires (London: British Museum Press).
- Wolf, P. & U. Nowotnick (2005) The Second Season of the SARS Anglo-German Expedition to the Fourth Cataract. Sudan & Nubia 9: 23–31.