

Who gets the lion's share? Thoughts on Meroitic water management and its role in royal legitimization

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From the mid 4th century BC to about the 4th century AD the Meroitic Kingdom exercised political control over the banks of the River Nile south of Egypt. Instead of confining itself to the river banks the Meroitic Kingdom established and maintained cult centres in a savannah area between the Rivers Nile, Blue Nile and Atbara. The area is today known as the Butana and was referred to as the Island of Meroe in antique accounts. Far from leaving the prospect of water in this semi-arid environment to the goodwill of their gods the Meroites took water management into their own hands. This might not only have served economic purposes. One of the cult centres – Musawwarat es-Sufra – shows a possible socially integrative aspect of this kind of water management.¹ Based on the depictions on the lion temple dedicated to the indigenous god Apedemak the following discussion shows how the cult centres could have transported the concept of divine kingship to pastoral nomadic groups via the medium of religiously transformed water. Furthermore it suggests how the control of water and the integration of pastoral people could not only have secured the subsistence in the Meroitic heartland but even supported the Meroitic engagement in long distance trade, one of the kingdom's major economic activities.²

1. The Meroitic Kingdom in the Middle Nile Valley

The Meroitic Kingdom – named after its administrative centre Meroe that held the royal burial grounds – flourished from the 4th century BC to the 4th century AD. The length of the country was dominated by the River Nile (Fig. 1). Yet, the core area was established in the Butana, the area between the Rivers Nile and Atbara that is also known as the Island of Meroe. Apart from the fertile banks of these rivers and some minor tributaries, it was dominated by semi-arid savannah during antiquity.³ After an introduction about the political outline of the kingdom, it will be argued here that the royal capability of maintaining this area by strategic water management formed a key aspect in the concept of royal legitimization and thereby for the social, economic and religious integrity of the Meroitic Kingdom.

The Meroitic sovereigns strategically positioned themselves as mediators in long-distance trade. Connected to several trade routes, they mediated between Egypt subsequently addressed as Ptolemaic and Roman, and eastern, western and central Africa, as well as Arabia and Asia through the Red Sea. Concerning the political organisation of the kingdom this study follows the analysis of David Edwards who pointed out its structure as a segmentary state with core areas and fringe provinces.⁴ The sovereigns directly controlled the centre where they also commanded over subsistence production through the management of resources. They established relations among the highest social ranks and placed their relatives strategically throughout the kingdom.⁵ To these elites the sovereign delegated control over the fringe areas.⁶ One fringe area was the northern middle Nile Valley today known as Lower Nubia. Bordering to Egypt, and with the settlements seemingly being placed with respect to Nile currents and trans-shipping needs it provided

1 Steffen Wenig, having been my Professor in Sudanarchaeology gave me the opportunity to work at Musawwarat es-Sufra. Thanks to his dedication to this extraordinary site many questions concerning Meroitic civilization could be solved and many more can be asked.

2 I thank Claudia Näser for discussing some of the points raised in the argument.

3 Today the area is dominated by semi-arid desert conditions (cf. Scheibner 2005, 17). This change might not have been caused by a significant decrease of rainfall (cf. Berking & Schütt 2011, 38; Näser & Scheibner 2012, 384) but could be the result of manmade processes of soil degradation.

4 Edwards 1996.

5 This socio-political network is traceable in the northern fringe, where Meroitic title-holders left inscriptions in Demotic and Greek (Burkhardt 1985, 77-86) and in the quality and distribution of prestige goods in burials in the northern and the southern fringe areas (Edwards 1996, 43-47, 90).

6 Edwards 1989, 20-38.

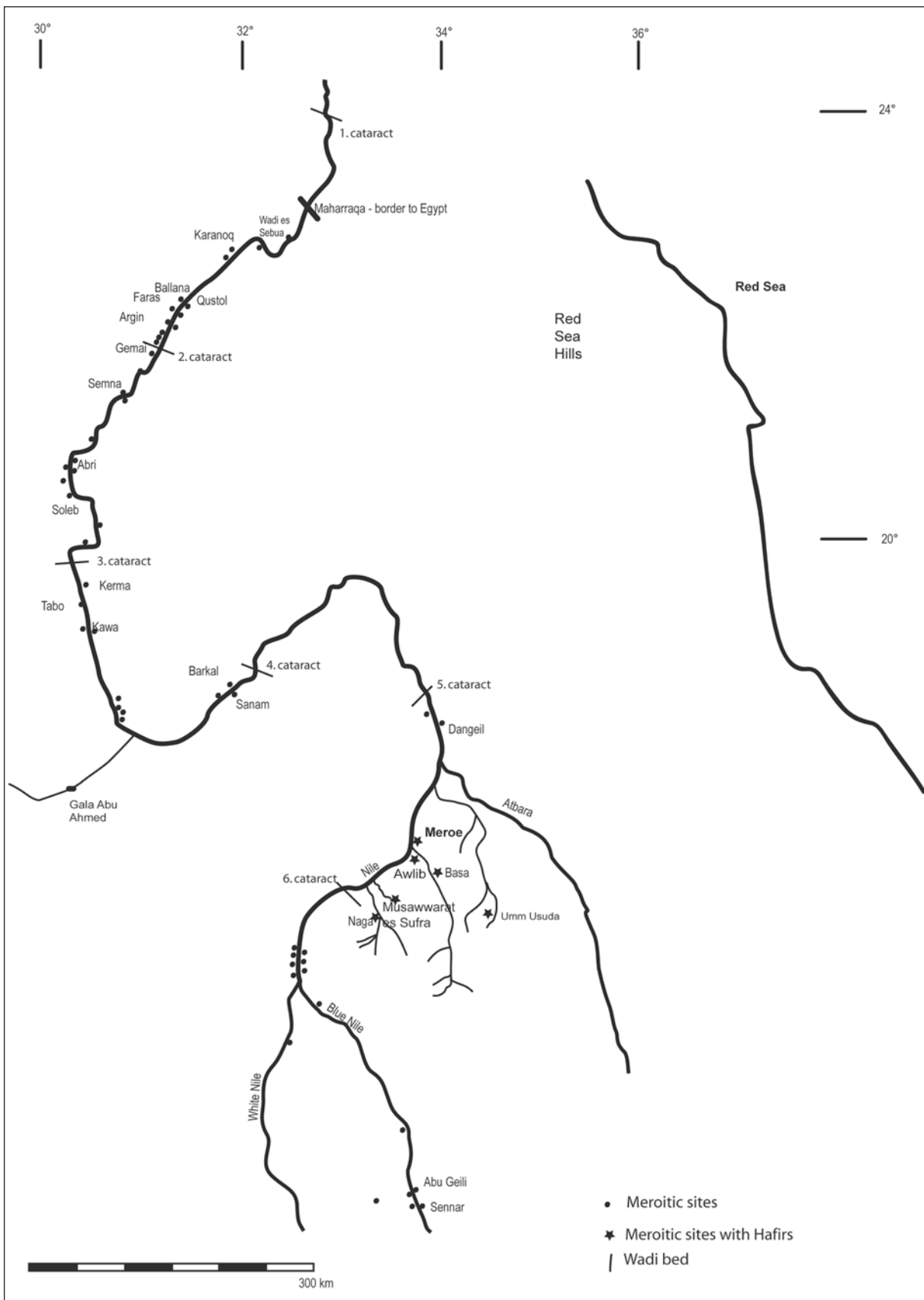


Fig. 1: The Meroitic Nile Valley with Hafir sites; location of the ḥafāyir according to M. Hinkel 1991: fig. 2

the gate to Mediterranean export markets.⁷ From the south areas,⁸ the Meroitic rulers probably procured slaves, animal skins, ivory and further luxury products that they traded to the Mediterranean.⁹ The royal supremacy over warfare and raiding presumably was a prerequisite to establish control over these resources.¹⁰ By these means the Meroitic rulers controlled long-distance trade and managed imports by a policy of redistribution and reciprocity among the high social ranks throughout the country.

This policy provided for the royal political and economic control over the local rulers in the fringe provinces. These local rulers also conveyed the religious suzerainty of the Meroitic sovereigns.¹¹ The religious suzerainty of the royal family drew upon their role as mediators between the gods and the benefit of the Meroitic people. This role as mediators derived from their kinship to the gods, which again legitimized their political role.¹² Since the Nubian Nile Valley had been the focus of Egyptian colonial investment for long periods the Meroitic religion had

inherited the Egyptian pantheon. Yet the Egyptian gods were appropriated by the local Pharaohs of the 25th Dynasty and the succeeding Napatan Kingdom, named after its royal burial grounds in Napata. Into this transformed pantheon the Meroites being the successors of the Napatan Kingdom introduced several indigenous gods that were especially addressed and worshiped on the Island of Meroe.¹³

2. The Island of Meroe: water and its management

The Meroitic Kingdom established centres on the Island of Meroe. Despite its savannah conditions, this area held a density of religious complexes.¹⁴ Their management within this environment was a challenge.¹⁵ The main water sources in the Meroitic heartland were the Rivers Nile and Atbara. Furthermore the Island of Meroe received seasonal rainfall from the Inter-Tropic Convergence Zone, which also

7 Edwards 1996, 86.

8 Due to the limit of archaeological investigation the extent of the southern, eastern and western provinces are not known. Greek geographers refer to different peoples whose areas lay between Meroe and the Red Sea (cf. Eratosthenes in Strabo, *Geographia* 17.1.2 = FHN II.109, in: Eide et al. 1996, 557-561). Even though some were reported as having been subjects of the Nile Valley kingdom their relations with the court and whether Meroe maintained trade relations with the other groups to get excess to the Red Sea are not clear. About the southern fringes little is known. Antique sources refer to Roman expedition in search for the sources of the Nile who were recommended to local kings by the Meroitic ruler (Seneca, *Naturales quaestiones* 6.8.3-5 = FHN III.209, in: Eide et al. 1998, 891-895). Yet the relations of the king to these rulers are not understood from the sources.

9 Our understanding of the Meroitic language is not yet advanced enough to interpret the texts of this period that might refer to the products exchanged. The exchange goods listed here however, were among the products that were extracted from or traded through this area in earlier and later periods (cf. for the period of the New Kingdom Sethe 1909, 1099; for the middle Islamic period Al-Mas'ūdī, *Murūj al-dhahab wa ma'ādin al-jawāhir*, in: Vantini 1975, 132-135 and Weschenfelder 2012a, 221f.). Therefore its ongoing demand is assumed here.

10 Edwards 1996, 90.

11 Among those regional elites several individuals bore administrative as well as religious titles. This is exemplified by Manitawawi of the Wayekiye family who was entitled among others as strategus of the water, priest of the king and consort of the king's mother (cf. inscription of a Meroitic embassy to Philae = FHN III.267, in: Eide et al. 1998, 1024-1031).

12 The treasure of the queen Amanishakheto exemplifies the divine kinship by a group of signet rings. They depict scenes that refer to the divine birth of the ruler (Priese 1992, 44f.).

13 Both centres, Napata and Meroe, were of political and religious importance in both periods. Yet, since the transfer of the royal burial grounds coincided with new concepts of royalty and new artistic styles, we can suggest that a new period began at this time. The chronology of the Meroitic period is debated (e.g. Wenig 1967; Wenig 1973; Hofmann 1978).

14 Habitation sites on the Island of Meroe like that of Naq a have not been thoroughly archaeologically studied so far so that their connection to the cult centers are not understood.

15 The outreach of the preceding Napatan Kingdom beyond the Nile is not established so far. The fortress Gala Abu Ahmed in the Wadi Howar west of the Nile Valley that was built around the end of the New Kingdom seems to have been used until the end of the Napatan period only. The finds point towards its involvement in long distance trade (Eigner & Jesse 2009, 154, 156; Lohwasser 2009, 162; Jesse 2013, 344-347). A couple of so-called luxury residences investigated in Meragh in the Wadi Muqqadam date back to the late Napatan period as is suggested by C14 dates. Yet while some architectural elements show parallels to Napatan architecture other do not (Kendall 2006/ 2007, 202-4). The Napatan political supremacy over this area cannot be conclusively assumed by this single example especially since the occupation of these buildings was short lived and ended abruptly by a destructive fire event. Another region that so far was assumed to have been under Napatan political control is the Bayuda Desert. While it might be assumed that certain roads connecting Meroe and Napata via desert ways through the Bayuda were secured for the royal transport, the nature of this control is far from clear. The written records suggest a direct royal control by not referring to any difficulties during the travels of the kings or by their recording of the submission of desert inhabitants. So far the archaeological records in the Wadi Abu Dom that still need further investigation rather seem to suggest political alliances with independent local chiefs or kings (Lohwasser & Karberg 2012, 44f.).

provided the rains in the Ethiopian highlands that fed the seasonal Nile flood. Yet, the rainfall in the Butana, further north than the Ethiopian highland's seasonal rainfall, until today is brief, erratic, local and intense. In their intensity, the rains exceed the infiltration capacity of the earth due to the lack of vegetation and the shallow soils.¹⁶ The rains come down in mountainous areas, from where the water is transported to the rivers and dispersal areas via wadis, i.e. seasonal river beds.

To construct and maintain the centres in the core area the Meroites used means to control and manage this runoff water. To control it *hafāyir* or reservoirs received the run-off water. The *hafāyir* consist of a ditch serving as a reservoir that was dug into the ground; the fill was used to form an earthen, often horseshoe-shaped wall surrounding and protecting the storage area.

Several *hafāyir* exist on the Island of Meroe (Fig. 1).¹⁷ The Great Hafir of Musawwarat in the Wadi es-Sufra is among the largest of these monuments (Fig. 2) and so far the only installation of its kind to be archaeologically investigated.¹⁸ It was placed outside the main current of the runoff-water to protect it from erosion and the current's destructive power. The current was slowed down via stone alignments that directed the water into the storage facility. A settling basin in front of the Great Hafir was a further feature of the installation.¹⁹

The Great Hafir is part of a religious landscape within the Wadi es-Sufra. The main feature is the Great Enclosure, a religious complex with several temples and courtyards.²⁰ The Great Hafir as well as one of the other, smaller versions of the valley, the so-called Small Hafir, provided water for the Great Enclosure via a system of subterranean sandstone pipes and channels of flank stones and capstones.²¹ Having been rebuilt in different shapes and outlines the Great Enclosure itself seems to have been partly constructed over a reservoir that fell into disuse but during its time of use it seems to even have maintai-

ned a garden in one of the courtyards.²² A further feature of the complex is the Small Enclosure – a service area with cooking places and storage facilities.²³

There are further smaller *hafāyir* in the Wadi es-Sufra. The existence of one of these smaller *hafāyir* could be taken as a prerequisite to construct the Great Hafir since the number of workmen necessary to build the Great Hafir has been estimated at between 500 and 2500, depending on the construction period, and the water to supply the workers and the work was calculated at up to 17,500m³.²⁴ Apart from the logistics, the construction required knowledge of currents, stream velocity and the physical properties of building materials, of the bedrock, etc. Furthermore the different *hafāyir* in the Wadi es-Sufra were directed towards different catchment areas to increase the chances of filling them, despite the highly local variability of rainfall.²⁵ This shows that specialized local knowledge was applied in the architectural outline of the valley.

The extent of the royal control in building these reservoirs is not established so far. If royal initiative was employed in the construction of the *hafāyir* it had to be paired with local knowledge and the ability to provide the necessary logistics. This might have been provided as well by local elites who were obligated to the royal family. Nonetheless the religious institutions were provided with the necessary water by the *hafāyir* as is shown by water pipes from the reservoir to the Great Enclosure. These institutions, as will be further demonstrated, confirmed the royal legitimacy by divine election and kinship. Therefore the construction and maintenance of the *hafāyir* was at least of royal interest.

In a prominent position close to the Great Hafir stands the so-called lion temple, a one-room temple dedicated to the indigenous god Apedemak (Fig. 2). It was initiated by king Arnekhmani who reigned contemporaneously with Ptolemy III or IV.²⁶

16 Berking, Beckers & Schütt 2010, 818.

17 *Hafāyir* are used until today. Therefore the dating of these installations to the Meroitic period especially without further archaeological investigation relies on their closeness to Meroitic architecture in their vicinity (cf. Bradley 1992, 175f.).

18 cf. Näser & Scheibner 2012.

19 Scheibner 2004, 43f.; see Näser & Scheibner 2012, 368–391 for technical detail about its construction and maintenance.

20 A discussion of the various interpretations for the Great Enclosure is given by Wenig 1999.

21 Scheibner 2002, 31, 33.

22 Wolf 2004b, 437–439.

23 Fitzenreiter, Seiler & Gerullat 1999.

24 Cf. Hinkel 1991, 37f.; Scheibner 2004, 61–62. Palaeo-environmental studies of Berking, Beckers & Schütt 2010, 829 show that *hafāyir* with a capacity of 45x10³ m³ like that of neighbouring Naq'a could be filled annually even under today's conditions.

25 Scheibner 2004, 46.

26 Arnekhmani is known from an inscription in Kawa as mrj Jmn. Yet in the inscriptions on the outer western wall of the Apedemak temple his name is followed by mrj Js.t, a title used by Ptolemy IV. This wall was restored after damage and the name was added. Hintze 1962, 9f. assumed that the restoration was started during the life time of Arnekhmani and stopped after his death in 218 BC. Hofmann 1978, 56 argued that the wall might as well have been restored by Arnekhmani's successor Arqamani who

One-room-temples in the Meroitic Kingdom were devoted to the indigenous Meroitic gods and mainly occur on the Island of Meroe.²⁷ Even though several Egyptian gods and goddesses were addressed in the depictions of these temples, indigenous gods like Apedemak, Arensnuphis and Sebiuameker take the prominent positions.²⁸

At least one one-room-temple seems to accompany the large *hafāyir*. There seems to be a link between these small temples and the close by water retainers.²⁹ Yet, the nature of this link remains to be established. In Musawwarat es-Sufra the archaeological record could not provide conclusive information about the architectural

connection between the Great Hafir and the temple of Apedemak. It was established that the enclosure wall of the temple (II E in Fig. 2) was built when the Great Hafir already stood in place.³⁰ Yet this wall is of a rather uncommon outline and it was not established if it was built simultaneously with the lion temple or later during the attested rebuilding phase of the temple.³¹ Yet the temple seems at least to

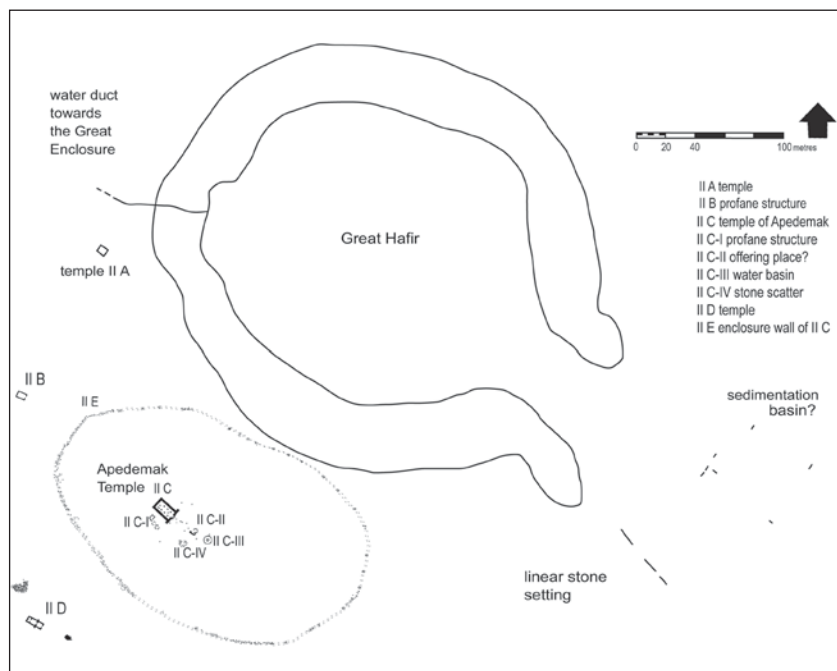


Fig. 2: Great Hafir and temple of Apedemak in Musawwarat es-Sufra with immediate environs; adapted from Hintze 1971: Tbls. 2, 3 and Scheibner 2005: 23 fig. 15

have been aligned to the Great Hafir. Since the other *hafāyir* were not archaeologically investigated their links with the nearby one-room-temples has yet to be established. The following interpretation of their connection suggested by their alignment and further features can therefore only be tentative.

3. Where the lion goes for water

In Meroitic cult practice water and libations of liquids were of importance.³² They were a prominent part of offerings and rituals in temple cults as well as in burial rites and rites of commemoration of the deceased. Both areas of use were depicted at the temple walls and the walls of burial chapels respectively; offering

also used the addition *mrj Js.t*. By the change in the title of his predecessor into his title *Arqamani* might have underlined his own legitimacy.

27 Wenig 1984b, 381-384. So far one-room temples outside the Butana were only recorded at the Gebel Barkal (Wenig 1984b, 397 tbl. 2), a sacred areal that featured temples and shrines as well as palaces and royal burial grounds of the Napatan and the Meroitic period.

28 An exception to this rule is the temple M 6 in Meroe, which was dedicated to Apedemak. In its first building phase around the late 2nd century BC it was outlined as a one-room-temple yet in a second building phase that seems to have been initiated sometimes after the 1st century AD it was rebuilt as a two-room-temple while remaining dedicated to Apedemak (Török 1997, 48).

29 Näser 2011, 334.

30 Priese 1993, 67-69.

31 Priese 1993, 52-56; cf. the discussion in Näser & Scheibner 2012, 391-394. The dating for the Great Enclosure that was provided with water from the Great Hafir is currently debated as well. It was suggested that Arnekhmani also initiated the sixth building phase of the Great Enclosure based on a part of a cartouche found in the Great Enclosure that could be reconstructed as *hpr k' r' a* a title used by this king (Hintze 1971b, 227ff.). Karberg's recent study of the masons' marks of the Great Enclosure showed parallels to those of the Mandulis temple of Kalabsha dating to the

Augustan period, therefore Karberg argued that Natakamani dating to the time around the beginning of the Christian era might be the initiator as well since he also used that king's title (Karberg 2010, 573f.). Natakamani and queen Amanitore also initiated the building of the lion temple in Naq'a (cf. below).

32 A political dimension of the control of water is reflected in the title 'strategos of the water' recorded as Meroitic *pelmos atolis* and Demotic *p3 mr-mšc n p3 mw* (cf. Griffith 1912, 38). The title is for example born by members of the Waikye-family that judging from its titles was strategically positioned in the administration, yet in Lower Nubia (cf. Eide et al 1998, 1029). With regard to Lower Nubia this title might more likely refer to the control of water transport than to the kind of water management addressed above. Rilly however, prefers a sacerdotal over a military interpretation (Rilly 2010, 159).

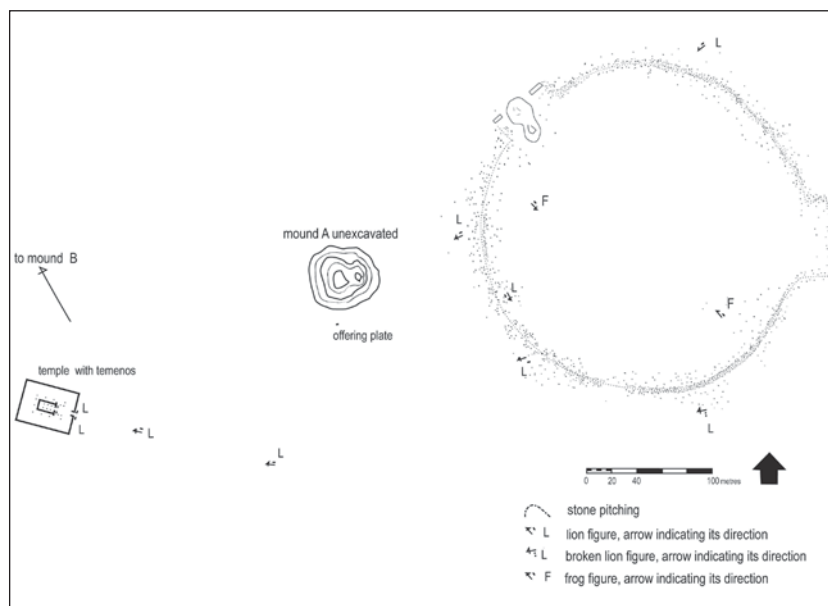


Fig. 3: Basa site; adapted from F. Hinkel 1977: fig. 1

tables and libation vessels and trays were part of temple equipment as well as of burial equipment.³³ Especially on the semi-arid Island of Meroe featuring temple complexes and burial grounds water might have been difficult to secure. The role of the *hafayir* in the urbanisation of the savannah has yet to be comparatively analysed yet it can be assumed that the reservoirs were crucial in the maintenance of the Meroitic lifestyle in the area.

Water and libations played a role in the cults of Apedemak as well as for the other gods worshipped in the Butana. Yet, in Musawwarat es-Sufra the architecture and the positioning of the temple point towards a prominent link between Apedemak and water management. There is not only the close proximity of the lion temple and the Great Hafir and their similar alignment speaking for a symbolic connection of the two buildings. Further records in front of the temple like offering basins suggest elaborate cult practices concerned with libations.³⁴ Due to the positioning of the temple these installations were also aligned with the Great Hafir (cf. II C-II and II C-III in Fig. 2). Further clues are to be found at the reservoir where the sculpture of a seated lion was found on its western edge.³⁵ Two further statues of seated lions flanked the entrance of the Apedemak temple and further lion statues flanked an alley leading towards the temple.³⁶

Similar connections are implied in the building arrangement on the site of Basa, where a one-room temple stood west of the reservoir (Fig. 3). The archaeological investigation undertaken there in 1907 has only been published as a general architectural description without detailed analysis of the temple's relation to the reservoir in terms of chronology.³⁷ A further investigation was made when some of the lion statues were brought to the National Museum of Khartoum to be re-erected in front of the museum's entrance.³⁸ Even though the distance between the temple and the reservoir at

Basa is greater than between the Apedemak temple and the Great Hafir in Musawwarat es-Sufra the same link between the two buildings on the Basa site is established. Several statues of sitting lions, made of sandstone were found standing on the reservoir. Two statues were placed in front of the temenos of the one-room temple at either side of its entrance. Two more lions stood along the way leading to the temple. The latter could be the remnants of an alley of lion statues leading towards the temple. Inscriptions on one lion refer to king Amanikhabale who is dated around the mid 1st century BC or before the mid 1st century AD.³⁹ Among the lion statues on the reservoir several were facing the temple entrance. Crowfoot assumed that their positioning on the reservoir was in situ while Hinkel could only confirm that for two of the lions that were standing on a foundation layer of bricks.⁴⁰ One of them stood at the temple entrance, the other one is the only lion figure inside the reservoir facing towards its inlet; nevertheless Hinkel did not rule out that the positioning of the other lions facing the entrance of the temple was intended. Furthermore five statuettes of lions being miniature versions of the lion figures outside were placed inside the temple in front of the altar.⁴¹ The positioning of lion statues at the entrance of the temple is paralleled by the Apedemak temple in Musawwarat es-Sufra. Thereby the Basa temple

33 Yellin 1990; Näser 1996, 29.

34 Cf. Mucha 2005, 14, fig. 2.

35 Hintze 1963, 68-69, fig. 8, Pl. Va-b; Näser 2010, 71.

36 Hintze 1971a, tpls. 18, 19; Priese 1993, 65-67; Onasch 1993, 260f.

37 Crowfoot 1911, 14-17.

38 Hinkel 1977.

39 For the first date see Wenig 1967, 43; Wenig 1973, 157f.; the second date is suggested by Hofmann 1978, 109.

40 Hinkel 1977, 179.

41 Crowfoot 1911, 16f.

is generally accepted as having been dedicated to Apedemak.⁴²

The lion temples of Basa and Musawwarat es-Sufra were directed in a roughly parallel alignment to the *hafāyir*. Several sites in the Butana that featured big water reservoirs also feature one-room-temples yet the link between these buildings can only be suggested due to the lack of archaeological investigation. At the site of Naq'a near Musawwarat es-Sufra the most prominent lion temple initiated by Natakamani and Amanitore is not situated near the Great Hafir yet this reservoir nevertheless features an accompanying temple.⁴³ The temple in alignment is the temple 400 – Lepsius' temple g – that has not been archaeologically investigated so far. A plan of Lepsius confirms the outline of the temple as a one-room-temple yet without further reference as to which god it might have been dedicated to.⁴⁴ The basic outline of the peripteral temple with front colonnades and a temenos is comparable to the lion temple in Basa (Fig. 4) and suggests its possible dedication to the same god.⁴⁵

A further link between the lion cult and water, again not archaeologically investigated can be assumed in Umm Usuda where sculptures in the shape of lying and sitting lions were featured at the reservoir.⁴⁶ Even though a temple was not documented at this site a stele in Meroitic script was found there that contained the word *ato* for water and points towards its use during the Meroitic period. The size of the Umm Usuda Hafir is comparable to those of Basa and Musawwarat es-Sufra.⁴⁷ Yet its outline differs with respect to the transport of the water into the reservoir. Wall alignments flanking two inlets probably show the locally required adaptation of the reservoir's outline and point back to the use of specified local knowledge in the construction of the *hafāyir*.⁴⁸

The royal city of Meroe even though situated at the Nile featured a big earthen water reservoir as well. The cult practice in the city could have been maintained by the Nile water yet the reservoir was constructed in a wadi outside the city in the vicinity of burial grounds. In Meroe we find the same situati-

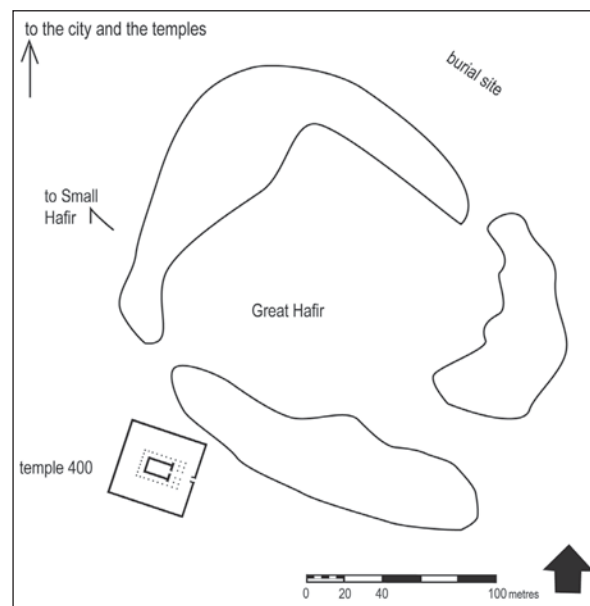


Fig. 4: Temple 400 and Great Hafir in Nag'a; temple plan adapted from Lepsius 1849: tbl. 145, outline of the Great Hafir and distance to the temple adapted from Wildung 2011: fig. 3 and collated with Google Maps 2013a: <http://www.goo.gl/maps/SWIRj>

on as in Naq'a – the archaeologically most prominent lion temple M 6 was situated in the city itself. Next to the reservoir we find the temple M 250. The outline of this 1st century BC-building might still reflect that of a preceding building from the Napatan period since it shows several stylistic references to earlier periods.⁴⁹ This temple provides no signs that point towards a dedication to the lion god and consequently its connection to the Hafir of Meroe was of another nature than that between the Great Hafirs and the Apedemak temples in Musawwarat es-Sufra and Basa. Yet in about 60 to 70 metres distance south of the Hafir the remains of what might once have been an one-room-temple were recorded.⁵⁰ The superficial impression of the unexcavated area relates in size to the outline of the Apedemak temple in Musawwarat es-Sufra yet as it seems without a pylon and does not leave any further clue neither towards its designation nor towards its alignment. Therefore a link between the lion god and water cannot be concluded from the Hafir and an associated temple in Meroe. However, in the royal city itself we find a further cult installation – a water sanctuary also known as the Royal Bath – which takes up this association again. It features sandstone-made protomes in the form of lions near a basin and an en-face relief of a lion head

42 Cf. Wenig 1987, 54; Török 1988, 263.

43 For the temple decoration see Gamer-Wallert 1983a, b.

44 Lepsius 1849, tbl. 145.

45 Cf. Török 2011, 220 who furthermore suggests that the association of peripteros type temples with Apedemak and royal legitimacy was inspired by the building 101-102 of the Great Enclosure.

46 Cf. Hinkel 1991, 41, 44.

47 Cf. Google Maps 2013b: <<http://goo.gl/maps/ooHkp>>.

48 An overview of different *hafāyir* forms is provided in Hinkel 1991, tbl. 12.

49 Cf. Török 2004.

50 Cf. Hinkel 2001a, 129.

as a faience inlay interpreted as Apedemak on the moon crescent.⁵¹

4. The links between water, the lion, and the royal family

On the Island of Meroe the association of the lion god with water could point to various interpretations. The interpretation that the lion watched over the water and secured it against enemies comes to mind by the positioning of the lion statues at the *hafāyir* in Basa and Musawwarat es-Sufra. This assumption is further supported by two of the lion statues from Basa: One lion at the temple entrance devoured a captive, another at the southern edge of the reservoir trampled down enemies.⁵²

Apart from this seemingly obvious interrelation further interpretative connections point north towards Ptolemaic Egypt. Beside the trade contacts a vivid cultural and political exchange existed between the Meroitic Kingdom and Ptolemaic Egypt. This is reflected in the religious as well as in the political realm. Several iconographic details on the lion temple of Musawwarat es-Sufra show that link. Not only do the titles of Arnekhmani at the temple walls parallel those of Ptolemy IV, the depictions also show the first Nubian adaptation of the hemhem-crown - so frequent in earlier and contemporaneous Ptolemaic temple relief - for the lion god, while several aspects of the Egyptian lion god Mahes seem to be reflected in the nature of Apedemak.⁵³ Further architectural aspects of the temple point towards the Ptolemaic links between water and lions.⁵⁴ Lion protomes serving as water spouts were a feature of Egyptian temples at least from the New Kingdom onwards. During the Ptolemaic period such lion protomes were integrated more prominently into the temple program by providing them with inscriptions that not only name the protomes but also give detail about their secular and religious functions.⁵⁵ Furthermore quotations of antique writers like Plutarch and Horappolo establish a calendar link stating that the inundation arrives when the sun crosses the lion and

relating that to the Egyptian practise of equipping fountains with lion mouths.⁵⁶

These architectural elements we find in the Apedemak temple of Musawwarat es-Sufra as well: At the edges of the roof two waterspouts in the form of lion protomes collected the rainwater and directed it through the lions' chests from the roof.⁵⁷ Two waterspouts were located on the northern side of the temple and two on the eastern side: The first spouts on each side were located above the representation of Apedemak. The second waterspout on the northern side was applied above the ram-headed and thereby presumably Meroitic Amun.⁵⁸ At the southern side we find the second waterspout applied above the Meroitic god Arensnuphis. Whether this positioning of the waterspouts was meaningful in relation to the gods represented remains to be demonstrated by further comparative research of Meroitic temples.⁵⁹ A link of another nature might be true for the reservoir and the temple at Basa. Waterspouts seems not to have been a feature of this site that dates, if the reference to Amanikhabale on the lion statue relates to him as the initiator of the temple, two or three hundred years later than the Apedemak temple in Musawwarat es-Sufra. Yet at Basa a sundial found in the temple near the sanctuary might be a further link towards the solar calendar and its connection with the inundation.⁶⁰

The link to water and the inundation leaves room for an interpretation of Apedemak as a solar deity. That might be supported by statuettes and temple decorations of lions crowned with sun disks throughout the kingdom.⁶¹ Yet, lions depicted with a sun disc cannot per se be identified as Apedemak and a link between water and Apedemak remains yet to be established.⁶² Further clue might be provided by a comparative analysis of the depictions of lions and lion gods crowned with solar discs or moon crescents or crouching on moon crescents. The inscriptions below and above some of the Egyptian waterspouts

51 It is among a series of faience inlays that might have been added during a later building phase but with a clear reference to the protomes (cf. Wolf et al. 2008, 179f.; Török 2011, 153f.).

52 Hinkel 1977, 178f., 181.

53 Žabkar 1975, 62-70, 104f.

54 Cf. Török 2011, espec. 184f. where he draws on the ideas of Hibbs 1985.

55 From the Old Kingdom and Middle Kingdom lion protomes can at least be reconstructed as features of mortuary temples and chapels (Ventker 2012, 1, 23-26).

56 Hibbs 1985, 154-157. This idea might have been reflected in the inscription of one waterspout on the temple of Isis in Philae (Ventker 2012, 176-178).

57 Cf. Onasch 1993, 261 who also traced further reference to Ptolemaic religious concepts at the lion temple of Musawwarat es-Sufra where the texts show Hellenistic models (Onasch 1993, 239).

58 Onasch 1993, 242.

59 Waterspouts with lion protomes were found for example in Naq'a near the Hathor chapel, in the northern necropolis and near the temple of Amun (cf. Wildung 2011, 58f.). Whether they were a feature of the lion temple in Naq'a could not be demonstrated so far.

60 Crowfoot 1911, 17, pl X.

61 Žabkar 1975, 67f.

62 Onasch 1993, 236.

differentiate between the rain of the day and the rain of the night, which could have inspired the choice of these crowns.⁶³ The triple protomes of two lions and a ram between them that were found in the lion temple of Apedemak could also reflect an adaptation of that idea in their differing crowns.⁶⁴

Yet, a major problem in the interpretation of Apedemak as related to the inundation of the Nile certainly is the confinement of the Apedemak temples to the Butana that is reflected in the archaeological record so far. If a link between the god and the annual inundation of the Nile was to be established one would assume this cult to be positioned along the river banks and all over the Meroitic Kingdom. Therefore the predominance of the Apedemak temples in the Butana points towards another nature of the link between this god and water. The nature of that link might be found in the nature of the god itself. The presumably wild nature of a god half-man half-lion that is further addressed in relief showing him wearing weapons could reflect the unpredictability of the erratic rainfall in the Butana.

With the help of *hafāyir*, the strong and wild current of run-off water was 'tamed'. This taming might have been associated with cults in those lion temples that were placed near the *hafāyir*: Inside the temple of Musawwarat es-Sufra the lion-headed god is depicted pacified by the presence of the ruler and providing him with life coming from his was-sceptre.⁶⁵ If the lion god in the Butana, at least in the temples near the water reservoirs, personified the wild current the royal cult pacifying the god would parallel the pacification of the wild water by the *hafāyir* and thereby would ritually transform and convert the current into the fertile life source without which the Meroitic peoples could not sustain.⁶⁶ This Meroitic reinterpretation of the Ptolemaic link between water and lions might have been incorporated into the Meroitic perception of divine election and divine recognition of the ruling family. The royal ability to

maintain cult centres in semi-arid environments and thereby to communicate with the gods was based on that divine recognition. The divine recognition again formed the base for the royal ability to maintain the cult centres since it provided for the royal legitimization in the eyes of the subjects. Thereby the royal ability to control and maintain water seems to be closely related to the concept of divine kinship and of its recognition by the Meroitic subjects.

5. Who gets the lion's share?

The immediate benefit for the ruling family from the establishing of cult centres in the Butana appears their presenting and maintaining their righteousness as rulers over the country. The means taken – the maintenance of water reservoirs and the constructing of temple areas in the savannah however, appear rather disproportionate given that the Nile Valley provided easier logistics. So why go through all that trouble? A further look into the decoration of the Apedemak temple in Musawwarat es-Sufra provides some detail that might hold an answer to that question.

The relief decoration shows the ruling family presenting offers to the gods and being recognized by them. Interestingly some of these scenes virtually stand upon a further scene that depicts cattle and people attending these animals.⁶⁷ This layout of upper scenes of royal-divine interaction with cattle herding scenes below suggests that these animals and their herders form a base that the ruling family and their contact to the gods rest upon. Of further importance is that the cattle are shown heading out of the temple towards the temple entrance, therefore they were not depicted as offerings but as gifts from the gods.⁶⁸

This idea might have been taken up in a further temple in Musawwarat es-Sufra – the temple II A (cf. Fig. 3) – that is also situated near the Great Hafir. While this one-room-temple was not decorated with relief scenes on the outside, the inner walls show scenes of royal election by gods. The upper block layers are missing so that the identity of some of the gods is not always recognizable while others can be identified by parts of their regalia. Wenig suggested that the temple was dedicated to the Meroitic god Sebiuameker.⁶⁹ Török further points towards the

63 So for example at the temple of Hathor in Dendera (Ventker 2012, 83, 86, 94) and the temple of Chons in Karnak (Ventker 2012, 122-126).

64 Cf. Török 2011, 201 who directly addresses these representations as that of the solar and the lunar Apedemak.

65 Hintze 1971a, tbls. 50c, 71.

66 While such connection was probably not established to Apedemak per se who also incorporated aspects of war and hunting it might be the incarnation of Apedemak in the temples near the *hafāyir* that provided his identification with the wild current. Since the Apedemak temple in Musawwarat es-Sufra is the only lion temple close to a reservoir providing detail of the cult in depiction this idea has to be further substantiated by statistical analysis of the god's regalia and items in relation to their placing on the different walls.

67 See Hintze 1971a, tbls. 50-53, 56-59, 63-68.

68 Onasch 1993, 260.

69 Despite some of the gods being identified as of Egyptian origin like Thot, the one-room-temple should have been dedicated to a Meroitic god. While the regalia did not point

selection of scenes emphasizing the divine election of the royal heir and therefore suggests that this temple was connected with the royal cult rather than being dedicated to a certain deity.⁷⁰ In either case the remnants of the temple reliefs also show cattle depictions in the lower part. Yet there the cattle look inside and can therefore be interpreted as a royal offer to the gods. If the positioning of the scenes in the lower relief row can be paralleled to the ones on the inner walls of the neighbouring lion temple also occupied with royal legitimacy we again find the everlasting circle of divine and royal interrelatedness: The royal ability to provide offerings to the gods was the prerequisite to their acknowledging the royal heir and providing him or her with the ability to maintain the country. This royal ability in turn depended on the demonstration of royal legitimacy and its divine acknowledgment.

Similar scenes emphasizing the importance of cattle as offerings in the communication with the gods or the deceased appear manifold in Meroitic religion and funerary cult. Yet there are also further examples for religious links between the lion and cattle. One was established in the water sanctuary of Meroe addressed above in chapter 3. The interior south wall of the tank building not only featured the aforementioned lion protomes but alternating bull protomes with interceding water inlets. These might have belonged to one building phase or to two subsequent phases with the water inlets in situ being an addition to the already existing interceding lion and bull protomes.⁷¹

Yet, the cattle depictions in the Apedemak temple stand apart by directly showing cattle and the benefits of cattle herding as given by the gods. Another example of a depiction showing cattle being oriented from a sacred building towards the outside world might be a depiction at the royal chapel of Beg N 2, a pyramid assigned to the king Amanikhabale, who is also attested on the Basa lions.⁷² Yet, since the

towards the god Arensnuphis and a temple of Apedemak already stood close by Wenig 1984a, 186f. suggested Sebi-umeker as the reasonable choice.

70 Török 2002, 203f.

71 The first interpretation is given by Wolf et al. 2008, 178-182, the second by Török 2011, 150f., 153f.

72 Dunham 1957, 103-106. Wenig 1993, 218 suggested a similar sujet at the forecourt on the chapel of Beg N 11, a pyramid today assigned to the queen Shanakdakhete. Yet, the information given for the orientation of the depictions in the primary publication point out that the depictions being on the inner north wall show cattle heading left (Chapman & Dunham 1952, tbl.8b) and on the inner south wall show cattle heading right and might therefore be reconstructed as heading inside the chapel (Chapman & Dunham 1952, tbl. 8c; also The Oriental Institute of

depiction is on the outside wall heading towards the entrance, it might be disputed whether the cattle go towards the inside or outside of the temple.⁷³

In Musawwarat es-Sufra the depictions not only point to simple cattle herding but even suggest scenes of pastoral nomadic lifestyle. Items like bowls in nets hanging on a stick two of the herders carry over their shoulder can be interpreted as belonging to the equipment of a mobile lifestyle.⁷⁴ The dominance of female cattle over male points towards one aspect of pastoral nomadic herding strategies – the concentration of pastoral diet on dairy products – which is further supported by the scenes showing men milking the cows.

With the reference to cattle pastoralism the scenes in the Apedemak temple⁷⁵ support a thought that was proposed in the archaeological interpretation of the *hafāyir* in the semi-arid landscape: The *hafāyir* are thought to have provided water for nomadic and semi-nomadic groups and to have transported the idea that the water in the *hafāyir* was given by the gods and the kingdom.⁷⁶ Moreover the placement of the *hafāyir* is even supposed to have been oriented towards nomadic and semi-nomadic needs and provided for the seasonal nomad-sedentary interaction.⁷⁷ If this was indeed the case the Meroitic politics stood in a marked contrast to the Napatan politics towards nomadic groups. During the Napatan period mobile pastoralists seem to have been perceived as threats to the sedentary Nile Valley population.⁷⁸ Even though in everyday life they might have had trade contacts with the sedentary people, written records only describe how these groups were raided for their products by royal troops. During the Meroitic period the integration of the savannah into the area of royal influence might

the University of Chicago 2010: <http://oi.uchicago.edu/gallery/pa_egypt_bees_meroe/index.php/II1F8_72dpi.png?action=big&size=original>).

73 Cf. Chapman & Dunham 1952, tbl.15c; The Oriental Institute of the University of Chicago 2010: <http://oi.uchicago.edu/gallery/pa_egypt_bees_meroe/index.php/II1C5_72dpi.png?action=big&size=original>.

74 Hintze 1971a, tpls 58b, 59, 68a, 69b; cf. Wenig 1993, 106.

75 Cattle depictions are lacking in the temple of Apedemak in Naq'a. Yet this temple is not directly linked to the Naq'a Hafir. The aspect of the god connected to water and cattle might have been addressed on temples close to the reservoirs. The decoration in Naq'a provides evidence for the appropriation of Roman artistic styles and points towards the ongoing contact with Egypt.

76 Welsby 1996, 148.

77 Bradley 1992, 208.

78 Cf. the stele of Anlamani = FHN I.34, in: Eide et al. 1994, 221f.; the stele of Irike-Amanote = FHN II.71, in: Eide et al. 1996, 401.

have changed that relationship. Instead of posing a threat to the Meroitic cult installations and settlements the nomadic groups could have been pacified by the provision of water.

But why integrate nomadic groups into the Meroitic society? As discussed above the Napatan society perceived nomadic groups as threats. Of course, by integrating the nomadic groups these threats could have been banished. But why bother if military action could provide the same result without further trouble?

Presumably the ruling family aimed at integrating pastoral groups into the society to exercise immediate control over subsistence production in the area. To make full use of that the priests of the temples might have collected taxes and revenues from the pastoralists meeting in the vicinity of the *ḥafāyir* and directed it to the Meroitic court, where it might have been consumed or redistributed. It might be disputed whether pastoralism had a greater impact on the economy of the Meroitic heartland than agriculture,⁷⁹ yet at least in the semi-arid parts, pastoralism is the only sustainable economy that enables full usage of the marginal resources available.⁸⁰ In the heartland the owning of cattle might have been connected to high status.⁸¹ Cattle played a major role in the religious sphere and was thereby depicted in royal chapels and temple reliefs, and placed as offerings and substituted by cattle bells in royal burials.⁸² Even the aforementioned concentration on milk production as a feature of pastoral life style could be reflected in the decoration of the royal burial chapels in the southern and northern royal cemeteries of Meroe. Among the cattle depicted as offerings dominate male cattle at least where the sex is indicated.⁸³ The pastoral reference might also be underlying the aforementioned cattle depicted on the chapel of Amanikhabale. Apart from it possibly going out of the

chapel into the world, it stands out among the cattle depicted in the royal burial chapels of these sites by its showing of different horn forms pointing to intended horn deformation as it was until recently recorded among Sudanese pastoral groups.⁸⁴ Cattle depictions at the temples and at the pyramid chapels of members of the royal family and officials as indicators of Meroitic high culture as well as the dominance of cattle depicted in secondary pictures and rock pictures clearly suggest at least a focus on pastoralism that was widespread throughout different layers of Meroitic society.⁸⁵

Pastoralists could not only have provided a basis for immediate subsistence for the Meroitic subjects in the heartland but might as well have played a role in the transport of goods in long distance trade. While so far Napatan remains outside the Nile Valley that could be related to long distance trade were found beyond the western riverbanks of the Nile (cf. chapter 2), the Meroitic outreach onto the Island of Meroe rather points towards the instigation of routes to the Red Sea. These routes were addressed in the texts of prominent writers during Antiquity who also wrote about different ethnic groups living in the Eastern Desert and along the coast between the Nile Valley and the Red Sea (cf. section 1). The integration of nomadic groups that go into these areas might have extended the Meroitic influence to the southeast but possibly also to the south as is suggested by the site of Abu Geili.⁸⁶

The further benefits of integrating the nomadic and semi-nomadic groups of that area into the Meroitic sphere of influence become obvious by their possibility to provide transport. However, as Bradley had pointed out, conflicts between different nomadic groups meeting in the Butana might have occurred.⁸⁷

79 Cf. Ahmed 1999, 295-300.

80 Scholz 1995, 21.

81 Karberg 2004, 66.

82 For the chapels see Yellin 1990, 363-365; Näser 1996, 41. While the Napatan reliefs were not preserved a prominence of cattle as a sujet cannot be ruled out. Bells associated with cattle are depicted for example in the relief scenes in Musawwarat es-Sufra but seem to appear as royal grave good only during the middle Meroitic period (Beg N56 & 16) where they also appear in close association with horses or riding equipment (Lenoble 1994, 273-281; Näser 1998, 155-157).

83 An exception is the chapel of Beg N 17, burial of king Amanitenmemide, which shows one cow indicated by its odder (Chapman & Dunham 1952, tbl. 21A). However, the person walking in front of the cattle holds a situla, which might indicate that the female cattle was not intended to be slaughtered but to provide milk for the deceased.

84 The deformation as well as the concentration of pastoralists' diets on dairy products is paralleled by the ethnographic example of the Nuer (Evans-Pritchard 1940, 21). The diet is also true for Beja-groups in the Eastern Desert among whom moreover milking is restricted to men while women may only receive the milk inside their house and process it (Weschenfelder 2012b, 354f.). This could have been practiced during the Meroitic period where it is not only reflected in the aforementioned temple scenes showing men doing the milking but also on a bronze bowl found in the Meroitic grave no. 187 at the Lower Nubian cemetery of Karanog (Pennsylvania Museum of Archaeology and Anthropology inv. no. E 7156). The engraving on the bowl shows men attending cows and milking them while women in front of a tent receive the vessel that contains the milk (cf. Roccati 1999, fig. 475).

85 For cattle in Nubian rock pictures see Kleinitz 2008b, 95-96.

86 Cf. Bradley 1992, 212.

87 Bradley 1992, 211.

Thereby the integration of nomadic groups into the Meroitic society might have provoked unrest that hindered the trade. Yet a comparable situation from the recent past shows that the bringing together of conflicting groups might be a strategy to provoke or at least support peaceful relations between them.⁸⁸ During the 18th century AD seasonally fertile wadis in the Eastern Desert had been used as the meeting places of pastoral-nomadic Beja groups. During that time the Bishareen and Ababda Beja-groups were at constant war. The Ababda engaged in caravan trade but their fights with the Bishareen and the Bishareen attacks on the caravans hindered the development of the trade. Their subgroups usually moved as small families but annually assembled in a fertile wadi near a water reservoir that also hosted the burial of a saint.⁸⁹ The meeting of several of these related subgroups during an occasion connected to the life of the saint brought together several aspects. It served as rare occasions to exchange news but also served foremost for religious celebrations and to arrange and celebrate marriages. During the mid 19th century such bonds were also formed between members of the Bishareen and the Ababda subgroups. This forming of marriages brought peace into their relations. After the establishment of peaceful relations between these two groups the number of caravan roads increased and the Bishareen supported the trade actively. Their seasonal meeting at the religious site near the water renewed their peaceful relations. Since these meetings at the well coincided with the fertile season after the rains that provide nearby pasture the arranging of marriages occurred in the fertile season and the celebration of the saint coincided with the forming of social bonds. If the *hafāyir* were accessible for pastoral people they might not only have served as water places but could have had a similarly strong integrative power for the mobile population. The meaning of the lion cult for the pastoral groups can hardly be reconstructed without an understanding of the written sources. And the scenes on the inner temple walls showing cattle and pastoralism were presumably only addresses to the gods, the ruling family and priests performing the rituals so that a direct integration of pastoralist into the cult is unlikely.⁹⁰ Yet, the religious landscape of the Wadi es-Sufra might provide a hint for the

integration of the nomadic groups into the Meroitic religious sphere. In the Great Enclosure an erotic graffito called the royal wedding at one of the inner walls shows a mating scene of a royal couple or of a royal and divine person.⁹¹ This scene might provide a clue for the nature of the cult practice in the Great Enclosure. Such fertility rituals might well have coincided with the presence of the pastoral population in the region since the cults appear closely connected to the seasonal waters that also provided pastures for the pastoral groups. Thereby possible aspects of nomadic interaction focusing on marriage even among different groups could be reflected in the royal cult practice in the Great Enclosure. Therefore the idea of bringing together nomadic groups and establishing peaceful relations between them might have played a further role in the maintenance of religious sites featuring water reservoirs on the Island of Meroe.

The link to the caravan trade might be further suggested by the temple decoration inside the lion temple in Musawwarat es-Sufra where the relief of the pastoral scenes seems to support the royal and divine interaction on the southern and the northern walls. The scene of the inner eastern wall of the first pylon shows a god holding an elephant and captives on a leash, a sujet that is taken up even stronger on the outer western wall where Apedemak stands on two saddled elephants that lead captives on a leash.⁹² The elephants and the captives are part of the smaller lower relief scene that interacts with the upper scene of the king paying tribute and homage to the god through the elephants being slightly elevated in height and providing the foot stand for the god. The elephants and the captives are facing the same direction as the god being directed towards the king, thereby indicating the elephants and the captives as gifts of the god. Yet the captives are faced with three other captives that face the same direction as the king – being an indication of them being his tribute to the god and indicating again the concept of reciprocity underlying Meroitic royal-divine interaction. The scenes relate to the exchange items procured by the Meroitic Kingdom from the south and traded with Ptolemaic Egypt – slaves, ivory and possibly war elephants. Their parallel alignment with the pastoral scenes suggests that the activities were considered as equally important and possibly interlinked.

88 Cf. Weschenfelder 2012b, 347; Weschenfelder i. prep.70-80.

89 This burial of Abu'l-Hasan al-Shādhilī, who died in the Eastern Desert after a pilgrimage to Mecca, was mentioned during the 14th century AD by Ibn Battūta (Tuhfat in Ibn Battūta & Gibb [transl.] 1962, 24f.).

90 Cf. Andrassy 2007, 32.

91 Kleinitz 2008a, fig. 11.

92 Hintze 1971a, tpls. 47f., 76f.

6. Conclusion

The Meroitic Kingdom extended its sphere of influence and control beyond the Nile Valley into the adjacent south-eastern savannah environment by managing run-off water during the rainy season. There the *ḥafāyir* and the royal cult practise dedicated to the lion-headed god Apedemak, who presumably personified the wild current, seemed to have tamed the rapid run-off water. By the royal cult practice that pacified Apedemak the rapid water seems to have been transformed into a religious mediator to the gods, as well as was suggested into a cultural mediator to nomadic groups by providing water for their cattle. Depictions at temples and burial chapels suggest at least the symbolic integration of pastoralism into the society. This integration was supported by the local water management that was associated with the sovereigns, who again drew on this ability to legitimize their reign. By pacifying its nomadic inhabitants and even integrating them into long distance trade the Meroitic rulers could have controlled a main part of production in the semi-arid heartland as well as further areas strategic for long distance trade. Accordingly, the close link between the control of water and cattle pastoralism was part of the Meroitic concept of divine kingship. The royal power to pacify the gods and provide water, the divine gift of fertile cattle and the security of the trade routes appear to have been closely interrelated. Thereby the management of water in the Butana could have helped the Meroitic sovereigns to legitimize their political, economic and religious supremacy over the country.

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HERAUSGEGEBEN VON

ANGELIKA LOHWASSER & PAWEL WOLF



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TITELBILD: Säulenbasis mit Löwe, Große Anlage von Musawwarat es Sufra, Raum 108
(Foto: Claudia Näser)

FRONTISPIZ: Der Jubilar im Garten seines Hauses in Berlin-Karow
(Foto: Jane Humphris, Bildbearbeitung: Frank Joachim)

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