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Kirwan Memorial Lecture
Meroitic royal chronology: the conflict with Rome and its aftermath
Janice W. Yellin

Reports
Middle Stone Age and Early Holocene Archaeology in Central Sudan: The Wadi Muqadam Geoarchaeological Survey
Rob Hosfield, Kevin White and Nick Drake

Newly Discovered Middle Kingdom Forts in Lower Nubia
James A. Harrell and Robert E. Mittelstaedt

The Pharaonic town on Sai Island and its role in the urban landscape of New Kingdom Kush
Julia Budka

In a Royal Cemetery of Kush: Archaeological Investigations at El-Kurru, Northern Sudan, 2014-15

Introduction
Geoff Emberling, Rachael J. Dann and Abbas Sidahmed Mohamed-Ali

Cultural Heritage at El-Kurru
Abbas Sidahmed Mohamed-Ali

Documentation and Conservation of the Painted Tombs: Progress Report
VII. and XRF Analysis of the Painted tombs
Rikke Therkildsen

Visualizing the Painted Tombs
Sarah M. Doffy

Excavation of Pyramid Ku. 1
Geoff Emberling

The Pyramid Chapel Decorations of Ku. 1
Janice W. Yellin

A Mortuary Temple at El-Kurru
Geoff Emberling

Meroitic Graffiti in the Mortuary Temple
Sebastian Anstis

Some Remarks on Stonemasons’ Marks in the Mortuary Temple
Tim Karberg

Conclusions and Prospects
Geoff Emberling, Rachael J. Dann and Abbas Sidahmed Mohamed-Ali

The Qatar-Sudan Archaeological Project – Excavations and other activities at Kawa in the 2014-15 season
Derek A. Welsby

The Meroitic Palace and Royal City
Marc Maillot

The Qatar-Sudan Archaeological Project at Dangeil Satyrs, Rulers, Archers and Pyramids: A Miscellany from Dangeil 2014-15
Julie R. Anderson, Mahmoud Suliman Bashir and Rihab Khidir elRasheed

Dangeil: Excavations on Kom K, 2014-15
Sébastien Maillot

The Meroitic Cemetery at Berber. Recent Fieldwork and Discussion on Internal Chronology
Mahmoud Suliman Bashir and Romain David

The Qatar-Sudan Archaeological Project – Archaeology and acoustics of rock gongs in the ASU BONE concession above the Fourth Nile Cataract, Sudan: a preliminary report
Cornelia Kleinitz, Rupert Till and Brenda J. Baker

The Qatar-Sudan Archaeological Project – The Meroitic Town of Hamadab and the Palaeo-Environment of the Meroe Region
Pawel Wolf

The 2015 Season of Excavations at Kurgus
Andrew Ginn

Plant Macro-remains Recovered from El-Hamra Christian Complex Excavation in El-Ga’ab Depression, Sudan
Ikrum Madani, Yabia F. Tahir and Hamad M. Hamdeen

QSAP Dam-Debbâ Archaeological Survey Project (DDASP). Preliminary Results of the second season
Fawzi Hassan Bakhiet

Archaeology at Selima Oasis, Northern Sudan – recent research
Friederike Jesse, Coralie Gradel and Franck Derrien

Results from the re-investigation of Henry Wellcome’s 1911-14 excavations at Jebel Moya
Michael Brass

Miscellaneous
Obituary
Denver Fred Wendorf, Jr. (1924-2015)
Romnald Schild

Front cover: QSAP Dam-Debbâ Archaeological Survey Project. Site DS7, Ganati: the re-erected columns in the church (photo: Fawzi Hassan Bakhiet).

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The Meroitic Palace and Royal City

Marc Maillot

Introduction

Urban sites within the Kingdom of Meroe contain a large number of palaces (Figure 1). This is the case in the capital, Meroe, with both buildings M294 and M295 in the ‘royal city’, and the large structure M750, close to the Amun temple. They are also found in several religious centres such as Jebel Barkal and Naqa. Medium-sized cities in the ‘Island of Meroe’ such as Wad ben Naqa, el-Hassa or Muweis are also provided with palaces. Some of these palaces are of the same period, implying that Meroitic kings had several palaces, and/or that they were built for the benefit of governors to whom royal power was delegated (Maillot 2014, 788-790). Since the discovery of a palace at Muweis, we know that these structures could be built with striking similarities in their plans (Hinkel and Sievertsen 2002, 70) (Plate 1).

The outline of Meroitic royal palaces is based on the classic square plan with floors arranged around a central space, storage rooms available in the ground floor and official areas on the upper floor/s (Baud 2011, 343) (Figure 2). This pattern is also found in other monumental civil buildings, as observed especially in Meroe and in Lower Nubia (such as M990 – Török 1997a, 219; Hinkel and Sievertsen 2002, 132-133, M998 – Török 1997a, 228; Hinkel and Sievertsen 2002, 140, M9502, Karanog – Woolley 1911, 11-14, Ash-Shaukan – Jacquet 1971, 122). The palace also has entrances on each of its facades, these openings being arranged in the structure according to predetermined patterns. However, this model is not uniform, and the characterization above is essentially based on three palaces, namely Wad ben Naqa, Muweis and B1500 at Jebel Barkal. Indeed, from the beginning of the Meroitic era, the emergence of this architectural pattern develops in autonomous models (for example building M995 dated at the beginning of the 2nd century BC: Hinkel and Sievertsen 2002, 134). The selected architectural solutions are standardized, but applied differently according to the function of the final building.

A shared architectural pattern

The similarities in plan between these buildings are numerous, and may indicate the existence of a common architectural pattern for buildings of great dimensions (40m to 65m a side: Hinkel and Sievertsen 2002, 70; Maillot 2013a, 66-71; 2014, 788-790). Jebel Barkal B1500 and those palaces at Wad ben Naqa and Muweis, all square in plan, integrate a series of rooms with common elements (Baud 2008, 56-57; Vrtal 2014a, 164-177). Among them, the most significant is the main entrance ramp leading to a large central rectangular room (lightwell or court) sometimes with a colonnade (Shinnie and Bradley 1980, 93). These features are flanked, on the left and right of the entrance, by elongated and narrow rooms which can be identified as casemates and storerooms. From the monumental entrance, one can reach an intermediate rectangular room, a sort of vestibule, placed between the central court and the entrance (Baud 2011, 343; Maillot forth. a, 287; Vrtal 2014a, 164-177).

1 For preliminary comments on palatial structures, see Baud 2011; Maillot 2013 a and b.

2 Török 1997a, 210: ‘a monumental square block [...] standing to a height of c. 1.5m to 2.5m, the walls unearthed by Garstang belonged to a podium-like ground floor, the rooms of which could only be approached from above’. Also Hinkel and Sievertsen 2002, 131-132.
At Wad ben Naqa, J. Vercoutter identified the vestibule as a sanctuary (Vercoutter 1962, 279-280, figs 9 and 10). This room with its rectangular pillars is very similar in shape and position to its counterpart in B1500, where there are six pillars aligned in two rows (Donadoni 1993, 104, 107). This room of palace B1500 was identified by S. Donadoni as a reception hall preceding the central court. The similarity between the two rooms is enhanced by the presence of a ramp on the west side, leading to the first floor. The central parts of the Wad ben Naqa and Muweis palaces also have very close similarities, especially in the thickness of the masonry (Baud 2011, 343; Maillot forth. a, 285-286). The common presence of a central light well, unlike the peristyle court of the palace B1500 (a monumentalization of the central light-well), reinforces the standardization of the model. Based on these considerations, we can consider a similar floor plan for these contemporary structures (late 1st century BC / 1st century AD) (Figure 3).

This model with two or three storeys, square in plan and having entrances on each of their facades, including a monumental entrance opening onto the central range of corridor/vestibule/central space, finds its most obvious expression with B1500 (Hinkel 1984, 247; Donadoni 1993, 104, 107). This palace is a crucial milestone in the development of the model, because of two main architectural features. The first is its central foundation platform 1.8m high, indicating the planning of an open space in the very heart of the building at the earliest stages of building construction (Barberini 2010, 169; Roccati 2014, 295). The second is the central peristyle court with two levels, implying a regular use of wood, especially in the area between the lower portico and the upper colonnade (Barberini 2010, 170-173).

The study undertaken by S. Barberini proposed a restoration of the upper parts of the courtyard with the presence of a parapet surmounting the entablature of the lower portico and of columns supporting the upper gallery. This Hellenistic feature is, however, modulated according to local building methods, such as the crucial role played by a lime-based mortar between the bases of the upper columns and the balustrade, enabling this dual colonnade level.

The presence of the foundation platform confirms the desire to raise the building, not for defensive reasons, but rather to emphasize its majesty and to isolate it from the surrounding structures (Baud 2011, 341-343; Maillot 2013b, 80). The distance separating the palace from the city centre is certainly significant, but it may be explained pragmatically by the availability of a sufficiently large vacant plot needed for such a construction, only to be found outside the core of ancient Napata (Hinkel and Sievertsen 2002, 67-70).

One can, therefore, assume that Natakamani’s palace B1500 represents an archetype of palatial architecture, both in size and in plan, in which are incorporated Hellenistic and...

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Figure 2. Comparative plans of Meroitic palaces.

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3 The use of wood in this context is interesting, especially if we consider that vaults are also a well-mastered solution at the time in monumental architecture. On this matter, see for example the roof of House B in Meroe: Török 1997a, 57; Maillot forth. a, 171.
Roman elements (Barberini 2010, 170-173). It can be noted that the building was to be at the centre of a new urban complex, the main entrance on the north side opening onto a dense zone of buildings amongst which is the palace B2400 (atypical compared to the Muweis and Wad ben Naqa palaces, whose main entrances are to the south) (Plate 2). Similarities in plan with other palaces dated to the beginning of the 1st century AD show a common pattern, adjusted according to the specific needs of the individual buildings, as demonstrated by the innovations in B1500.

**Casemates and cellular platforms**

Another common feature of these palaces is the use of the so-called 'casemate foundation technique'. Buildings including a foundation platform are common in monumental architecture of the Meroitic period (Baud 2011, 349-352). Wad ben Naqa is one of them (with casemates adjoining several storage rooms), as are numerous structures in Meroitic city, such as the palace M750 where all the rooms in the basement have no communication between them. As we saw before, B1500 in Jebel Barkal has its first functional level raised on a 1.8m high platform. This holds true for the palace of Muweis, where the palace stood on a platform built of casemate rooms, forming a raised platform at least 2m high. Above this platform was the first level, equivalent to the ground floor at Wad ben Naqa, then presumably a second level (Maillot 2014, 790; Vrtal 2014a, 164-177).

Meroitic palaces in the Shendi Reach or at Jebel Barkal show the same specificities: large dimensions (50-60m), square plan with several storeys and some of the basement rooms having no access except perhaps from above. This choice of structures built on casemate foundations (Spencer 1999), also called ‘cellular platforms’ (Arnold 2003, 49-50) is not a model which can be only attributed to Hellenistic or Roman periods.

This building style is particularly well attested in the Egyptian Delta since the beginning of the New Kingdom at palaces in Tell el-Daba (Bietak 2005, figs 15 and 16) and Deir el-Ballas (Lacovara 1997, fig. 1.6). While the origin of this architecture style remains unclear, a Hyksos – and thus Levantine (Aurenche 1981, 206-209; Oren 1984, 37-56) – influence is regarded as the most likely contender, the earliest structures at Tell el-Daba belonging to the end of the Hyksos period – to the 17th Dynasty. This type of construction is often considered particularly widespread in the Late Period, at which time it is found very regularly in monumental installations, especially on sites of the Delta (Marouard 2010, 381-382). These buildings, particularly large and composed of dozens of casemate foundations (Spencer 1999), are often equipped with a sloping ramp which is found leading up to the main entrance on the central perhaps ‘processional’ axis, but especially designed for room distribution on the first floor.

The distribution of casemates is usually symmetrical on each side of the central axis, and the organization of these spaces provides a relatively accurate projection of the room organization on the first floor (Leclère 2008, 660-668). This

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1 Roccati 2008, 251; 2014, 296. However, the identification of the main entrance has to be taken with caution, considering recent excavations: E. Ciampini, communication to the Nubian Studies 2014. Further comments on the matter will be presented in a forthcoming paper, concerning the materials and techniques used in Muweis palace: see Maillot forth. b.

5 For example, the replacement of the peristyle court by a central lightwell in several buildings is meaningful, as well as the orientation of the store rooms in ground floor plans. Even if the store rooms can be situated in the same room cluster in Muweis and Wad ben Naqa, they are not necessarily oriented in the same way, probably for pragmatic reasons: see Maillot forth. b.
pattern can also be found throughout Egyptian territory, for example in Kôm el-Ahmar or Qasr 'Allam (Smoláriková 2008, 101-122; Colin 2011, 47-84). Among these structures, some buildings were particularly massive, and their main feature was an elevated platform. This kind of construction was already used in earlier times, especially for palatial buildings (Jánosi 1996, 93-98; Lacovara 1996, 139-147; Kemp 1977, 71-82), but this solution seems to become widespread among common housing, especially during the Graeco-Roman period.

The temple/palace relationship

Although it is important to consider these palatial structures individually, they cannot be understood outside their urban context. It is essential to place them with regard to their connection with the temple, this relationship conditioning the very core of the city. A royal city is above all characterized by the presence of a main temple, usually dedicated to Amun, and possibly with smaller shrines, and the presence of one or more palaces as in Jebel Barkal or Meroe (Welsby 1996, 148-151). Some have a distinct residential character, others a mainly ceremonial function, and reflect the centralised management of resources. In addition, palace buildings are erected according to the strong connection desired between them and the temple (Bonnet 1994, 41-48; Török 2002, 19-34), highlighting the close relationship between the house of god and of the king (Török 1997b, 518). Temples and palaces are connected by processional avenues (Muweis, M750/M260, M251-253, M950/M920, B1200/B800 in Jebel Barkal etc.) sometimes embellished with statues of rams, following the model of Pharaonic cities (Bonnet 1994, 41-48; Kendall 1991, 302-313).

If one follows the Pharaonic model, the Meroitic palace can be understood according to two functional models: the ceremonial palace, usually placed to the right of the Amun temple’s entrance (on the ‘starboard side’: O’Connor 1989, 84-85), stressing the symbolic union of god and the king, or the administrative residence, with storage rooms and large living areas. Even if this binary scheme could be applied to M251 in Meroe (Török 1997a, 114; Hinkel and Sievertsen 2002, 99-100) (Figures 4 and 5) - situated in the temenos of the temple and directly connected to it - the actual state of the documentation only allows us to presume that most of the buildings that we call ‘palaces’ could have housed both ceremonial and administrative functions.

In any case, the palace is often positioned perpendicular to the temples (Kendall 1991, 302-313), as observed in Meroe with the palace M750 and Temple M260 (Török 1997a, 182; Hinkel and Sievertsen 2002, 123; Grzymski 2005, 52) (Fig-
This is proof of theological determinants of urban architecture, or more precisely on the urban network (Török 1992, 16-17). The position of the royal residence, facing the processional avenue and on the ‘starboard’ side, according to Egyptian tradition confirms the process.

This holds true for the site of Muweis (Baud 2014, 765), where a potential processional way is expected close to a side temple or shrine (Temple J). Temple J may formerly have flanked, with other similar buildings, a processional way leading to a main temple. One can expect, considering other examples in the region, the presence of a kiosk and several stone bases for ram statues (Baud 2014, 775 and pl. 10). The discovery of several fragments of stone bearing ram curls in the area, confirms our hypothesis (Plate 3).

Considering the similar orientation shared by a monumental complex (Figure 7) identified by magnetometry/excavations in the city centre and the royal palace (28.5° north), the assumed avenue connecting the two structures is certainly the main axis of the city in the 1st century AD (Baud 2014, 781). This avenue passed in front of the northern facade of the palace, according to the Pharaonic model mentioned above, on the starboard side. It is, therefore, not surprising that a ramp was identified on the northern facade of the Muweis palace, leading directly from the outside to the first floor (Maillot 2014, 785-786 and pl. 1; forth. b).

If this whole group in the city centre is connected to the palace by a processional way, this is one example of the vast construction program initiated at the turn of the 1st century AD (Baud 2014, 769). This resulting city centre, considering the quality of the buildings, modeled Muweis as a royal city (Baud 2014, 771), integrated into a regional network (Maillot 2014, 793). The famous ‘chaîne des installations étatiques’ (Lenoble 2009, 59-66), on the right bank of the Nile would then be verified (Török 2002, 19-20).

The temple/palace relationship can also be enhanced by the presence of independent storage buildings as M740 in Meroe located in the temenos of the temple and contemporary with palace M750 (Török 1997b, 518). The circular structure situated in kom F at Wad ben Naqa may have had a similar function, given the presence

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\[84\] Baud 2010, 216; 2014, 771, 781. Another sondage is showing a similar orientation to Temple J (39°).

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\[10\] Baud 2014, 773. Clearly visible on the magnetic survey, see fig. 6.

\[11\] Also in Naqa, Meroe and Wad ben Naqa; to the north, Jebel Barkal and Amara East; see Eide et al. 1998, 896-904; Török 2002, 226-227. One can add the data at Dangeil in the Amun temple, see Anderson and Salah Mohamed Ahmed 2007, 31-32. The blocks from a temple in Sai also confirm this policy in Lower Nubia, see Francigny 2011, 404 fn.1; forth.
of a series of elongated and narrow rooms adjacent to the kom (Nur 1962, 76; Vercoutter 1962, 275; Vrtal 2014b, 152-163).

It is likely that this kind of structure is present in all royal cities, although they are not always well preserved. Indeed, the presence of an independent storage building in Meroitic towns, near a temple and a palace, is significant as it reflects a particular ideological economic policy, where the storage building is a key element in managing the resources of the kingdom, alongside the palatial stores (Török 2010, 165-166). However, this idea has to be treated with caution, in light of the presence of important storage facilities in non-royal contexts (Jacquet 1971).

**Conclusion**

To conclude, we can sum up in the following manner. Numerous Meroitic palaces are contemporary or close in date, and are designed to a common outline, or at the very least with common architectural patterns being present. These architectural patterns can be adapted in a very local way, according to the needs of the structure, as we can observe with the monumentalization of the central lightwell with the peristyle court in Natakamani’s palace at Jebel Barkal. The regular presence of the central space combined with the use of the elevated platform, usually divided into casemates, indicates that there was a desire to standardise Meroitic palace plans, at least in the early stages of the building construction. This standardised model has striking comparisons in contemporary Egypt, where the model is widespread in monumental buildings. The analogy with Egypt is also pertinent considering the very urban network, and especially the relationship between the main temple, the palace and the individual storage buildings.

In fact, in the present state of documentation, we are...
considering a modular functional pattern, where the concept of the palace is strictly enforced in the major state centres (B1500), and followed broadly in major provincial centres (Muweis). The palace is a kind of multi-tasking entity that can both be the scene of ritual ceremonies (M251-253, mentioned here as a ceremonial palace, even if it can be considered architecturally as an adjunct to the temple complex), and include residential and storage uses. However, this is applicable only when we can identify common planimetric features. As it stands, it is only possible for the period between the 1st century BC and the 1st century AD (Maillot forth. a, 530). These observations are only a first step towards a better understanding of Kushite palatial architecture, and many avenues remain to be explored. For example, a potential connection between major palaces, temples and waters sanctuaries such as the double-basin complex B2200 in Jebel Barkal, connected to Natakamani’s palace B1500 (Sordi 2010, 181-186 and fig. 2-4; Ciampini and Bąkowska-Czerner 2014, 695) is currently under investigation. Recent excavations such as those at Muweis and el-Hassa constitute, therefore, an opportunity to bring new archaeological data and enable a better understanding of urban Meroitic sites.

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The cemetery at Gabati, dating from the Meroitic, post-Meroitic and Christian periods was excavated in advance of road construction in 1994-5, the detailed report being published by SARS in 1998. This complementary volume provides an in-depth analysis of the human remains. A final chapter, a contribution from David Edwards, the field director of the project, in conjunction with Judd, assesses the archaeological results in light of continuing research in the region over the last decade and more.

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Members of the University of Ghana Expedition to Sudan. John Alexander (centre), James Anquandah (left), Tony Bonner (right) (photo: SARS Alexander Archive, ALE P003.05).

The Debeira West excavation team 1964 with amongst others, Peter and Margaret Shinnie, John Alexander, John Anquandah and Tony Bonner (photo: SARS Alexander Archive, ALE P003.04).