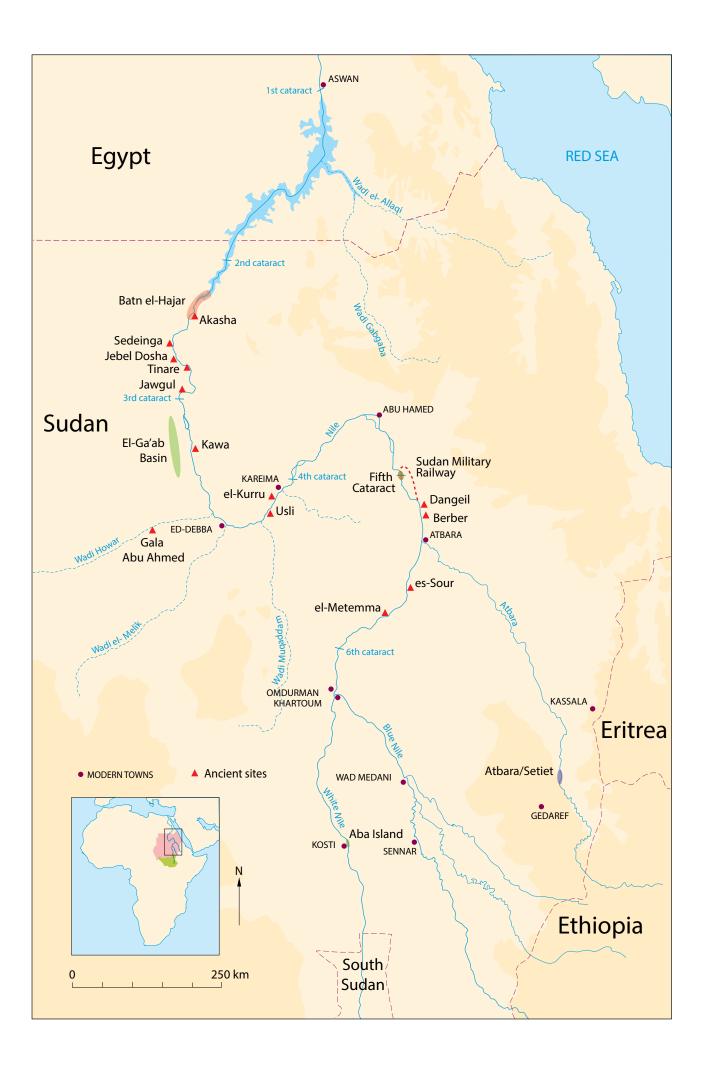
## SUDAN & NUBIA

The Sudan Archaeological Research Society

Bulletin No. 17 2013



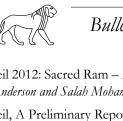
# SUDAN & NUBIA

## The Sudan Archaeological Research Society

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Front cover: The descendary of Tomb IV T 1 near Sedeinga under excavation (© V. Francigny / SEDAU).

Sudan & Nubia is a peer-reviewed journal



## Dangeil 2012: Sacred Ram – Avatar of the God Amun

### Julie Anderson and Salah Mohamed Ahmed

Last season, October-December 2012, the team<sup>1</sup> at Dangeil continued excavation of the 1<sup>st</sup> century AD Amun temple complex and the associated cemetery WTC, initiated bioarchaeological analysis of the human remains uncovered there and conducted conservation work in the temple and kiosk. A preliminary petrographic analysis of Dangeil's ceramic fabrics was also conducted and, as the results are reported elsewhere in this volume by M. Brand, will not be discussed here.

Excavations continued within the precinct of the Amun temple, concentrating upon the area just to the west of the temple, between the kiosk and the temple's entrance (Figure 1). The purpose was to expose the processional way which led from the main temenos gate through the kiosk to the temple, and to determine if, as with other Amun temples, this route had been flanked by a series of ram statue pairs. Statues of rams, the avatar of Amun, are usually associated with temples dedicated to this god.<sup>2</sup> One further purpose was to clarify and expand upon discoveries made in this area in 2003 (Salah Mohamed Ahmed and Anderson 2005; Anderson and Salah Mohamed Ahmed 2008, 40).

Although much of the site is covered with debris, little was visible on the surface in this area. A 6 x 7m square designated ET6<sup>3</sup> was laid out and at first much of the excavation involved the removal of rain-hardened laminations and crumbly earth with few inclusions (literally two pot sherds, tiny bone fragments and some very small irregularly-shaped sandstone and red-brick fragments). The underlying earth layer was more compact but again was relatively homogeneous. A small hearth,<sup>4</sup> little more than ashes and charcoal, situated in the south side of the square, provided evidence for transient human occupation in an otherwise featureless environment (Plate 1).

As excavation progressed, however, red-brick fragments and numerous irregular sandstone pieces, ranging from 10mm



Plate 1. Small hearth in square ET6 (photo S. Maillot).

to 150mm in size, began to appear. These overlay the remains of a rectangular white, lime-plastered, red-brick platform and were distributed in a north-east direction. The platform measured 1.7m north-south and 0.90m east-west, including the plaster facing. The bricks, which measured  $350 \ge 170 \ge$ 90mm, were organized as alternating headers and stretchers. The platform stood three courses high (approximately 300mm), including plaster and mortar. Remains of a paved route, of sandstone flagstones now broken, appeared in the north-east corner of the square (Plate 2).



Plate 2. Brick platform beside paved processional way overlain by sandstone statue fragments (photo S. Maillot).

These results confirmed discoveries made in 2003 when two low rectangular brick platforms flanking a paved sandstone processional way, and hundreds of small sandstone fragments were exposed. These platforms were aligned with each other, sat 1m back from the pathway and were presumably pedestals upon which ram statues formerly stood (Salah Mohamed Ahmed and Anderson 2005, 22-23). Brick pedestals similar both in size and composition have been uncovered in the avenue of rams in front of the late Kushite Amun temple at el-Hassa (Plates 3, 4 and 5) (Sackho-Autissier 2010, 71, pl. 70).<sup>5</sup>

<sup>&</sup>lt;sup>1</sup> The team consisted of Julie Anderson, Salah Mohamed Ahmed, Hajar Saleh, Intistar Tagelsir, Sébastien Maillot, Mahmoud Suliman Bashir, Anna Pieri, Julian Reade, Rihab Khidar, Saifeldola Abdelgfar Baineer, Tracey Sweek, Tsnim Hamed, and Tajasir Mohamed. The mission is grateful for assistance and support provided by the National Corporation for Antiquities and Museums, Sudan; the British Museum, UK; Archeology4All, Italy; the Institute for Bioarchaeology, UK; the Petrographic Laboratory of the Royal Ontario Museum, Canada; and the Sorbonne, France.

<sup>&</sup>lt;sup>2</sup> For discussion concerning the role of the ram in Meroitic art, see Hofmann and Tomandl 1986. See also Rocheleau (2008, 57-60) concerning the identification of Amun temples in Nubia and their association with ram statues.

<sup>&</sup>lt;sup>3</sup> This square was excavated under the supervision of Sébastien Maillot, with assistance from Hajar Saleh, Saifedola Abdelgfar Banineer and Tsnim Hamed.

<sup>&</sup>lt;sup>4</sup> Designated ET6 4-(3).

<sup>&</sup>lt;sup>5</sup> We are grateful to Vincent Rondot for our fruitful and ongoing discussion about el-Hassa versus Dangeil and for his permission to

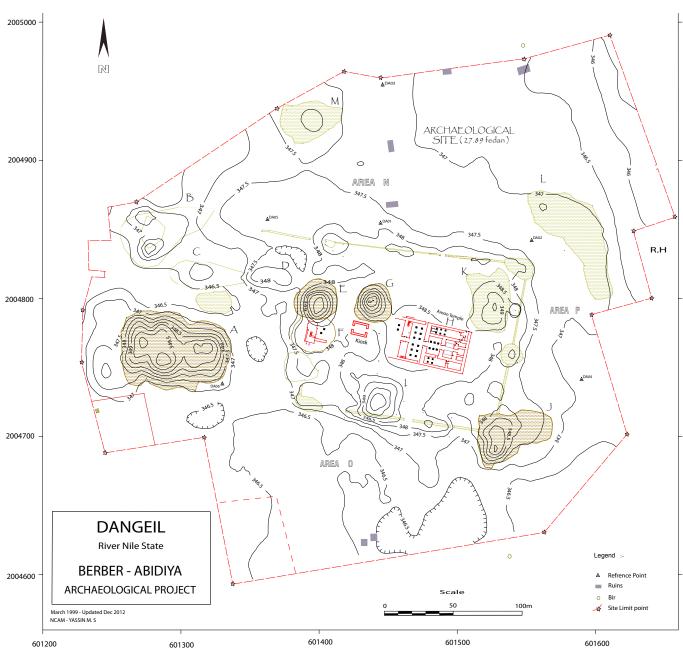


Figure 1. Plan of Dangeil (drawn by Yassin Mohamed Saeed).

The sandstone fragments were primarily small and badly damaged, with few visible remains of the original surfaces; however, after careful examination, pieces of carved fleece were identified, followed by the curves and intricacies of a ram's legs and eyes. The fleece is depicted in a fish-scale pattern similar to that found on the rams at el-Hassa (Plates 3 and 6).<sup>6</sup>

Rams from Naqa 100, Meroe M260 and fleece fragments from Muweis Temple J show spiralling curves and are believed

to date to the reign of Natakamani in the first half of the 1<sup>st</sup> century AD (Baud forth.) (Plate 7). Vincent Rondot has suggested that Amanakhareqerem initiated the use of the fish-scale fleece pattern during his reign, which was originally believed to date to the late 2<sup>nd</sup> century AD (AD 190-200) but which has recently been re-dated to the late 1<sup>st</sup> century AD (AD 80-90) by Claude Rilly (Rondot 2011a; Bourdon *et. al.* 2010).<sup>7</sup> He interprets the usage of the fish-scale as an archaizing trend hearkening back to rams of the 18<sup>th</sup> Dynasty (providing the example of the Amenhotep III rams at Soleb and noting that Amanakhareqerem also took the pronomen *neb-maat-ra* of Amenhotep III) and to the early Kushite period such as those of Taharqo at Kawa (Rondot

include images taken while visiting the site, both at the SARS May 2013 colloquium and in this paper.

<sup>&</sup>lt;sup>6</sup> The fish-scale pattern is also present on the 'Soba ram' (identified as having originated at el-Hassa and thus is similar in appearance to those found *in situ*). For the history of the 'Soba ram' see Griffith 1911, 52-53; Hoffman 1981, Kormysheva 2006, 211-213 and Leclant *et al.* 2000, 2-3. It is currently situated in the garden of the Sudan National Museum.

<sup>&</sup>lt;sup>7</sup> For additional discussion concerning reigns and building activity in the 1<sup>st</sup> century AD see Baud 2008, 60.



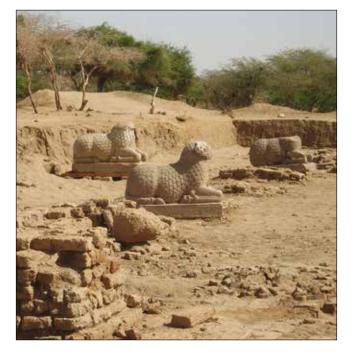


Plate 3. Avenue of rams at el-Hassa (photo J. Anderson, courtesy V. Rondot).



Plate 6. 'Soba Ram' statue with fish-scale fleece in the garden of the Sudan National Museum, Khartoum . Originally from el-Hassa.



Plate 4. Rectangular brick platform excavated at Dangeil in 2003, overlain by sandstone statue fragments.



Plate 5. Rectangular brick pedestal for ram statue at el-Hassa (photo J. Anderson, courtesy V. Rondot).



Plate 7. Ram statues with spiral curving fleece from the avenue of the Amun temple at Naqa.



Plate 8. Ram statue from Kawa (EA 1779 © Trustees of the British Museum).

2011b, 438; Bourdon et. al. 2010) (Plate 8).8

Accelerator Mass Spectrometry and conventional radiocarbon dating have placed the most recent Dangeil temple in the 1<sup>st</sup> century AD.<sup>9</sup> If the temple at Dangeil was built or modified by Amanitore and Natakamani as the presence of cartouches and the AMS dates from within the temple might suggest, and if Rondot's dating of the use of the ram-scale pattern is correct, then the Dangeil avenue of rams may have been a later addition to the temple complex. It should be noted, however, that the techniques and materials used in architectural construction of the kiosk, the last phase of the temple and the podia upon which the ram statues sat do not exhibit any substantial differences. Thus far it appears that the temenos enclosure and structures within were constructed at the same time, though it is not beyond the realm of possibility that the sandstone statues themselves were added later.

One large piece of fleece displayed evidence of having been struck repeatedly with a blunt tool further indicating that the statue had been intentionally destroyed (Plate 9).



Plate 9. Ram fleece with traces of blue pigment on a white plaster base and displaying evidence of purposeful damage.

This is not inconsistent with damage discovered within the temple itself where altars had been smashed and robber pits dug through floors by individuals unknown, prior to setting the structure alight. This fleece also had traces of white lime plaster with matte blue pigment in the grooves between the scales.

Examination of other fleece fragments also revealed traces of blue pigment on a white plaster base (Plates 10 and 11). Ex-



Plate 10. Ram fleece fragment with traces of blue pigment.



Plate 11. Ram fleece fragment with traces of blue pigment.

aminations were made visually or by using a 10x magnifying lens. No microanalysis has yet been conducted. The presence of colour should not have been surprising as it is well known that many ancient statues were painted. Recent polychromy studies of microscopic traces of preserved pigments have led, for example, to reconstruction of the decorative program of a Horus figure (EA 51100) in the British Museum (Dyer 2012; O'Connell 2012) (Plate 12). Several late Kushite statues from the 'Royal Baths' at Meroe also bear traces of pigment.<sup>10</sup> Among them are statues contemporary with the second building or phase of the 'Royal Baths' which has been approximately dated from the second half of the 1<sup>st</sup> century BC to the early 1<sup>st</sup> century AD (Török 1997, 71) making these figures roughly contemporary, if perhaps slightly earlier, than those at Dangeil.

The statue may have been covered with plaster to hide

<sup>&</sup>lt;sup>8</sup> For further comparison see the rams, also dated to the reign of Amenhotep III, in the dromos of the Khonsu temple, Karnak West, Luxor (Cabrol 2001, 239-241, pl. 24b).

<sup>&</sup>lt;sup>9</sup> Two carbon samples from the temple were submitted for dating. The 2 sigma calibrated result (95% probability) of the first sample was 30 Cal BC to Cal AD 130 and of the second sample was Cal AD 10 to 240. The analyses were performed by Beta Analytic Radiocarbon Dating Laboratory, Florida. See further Anderson and Salah Mohamed Ahmed 2008, 40.

<sup>&</sup>lt;sup>10</sup> See the catalogue of sculptures from the 'Water Sanctuary', and the cachette finds as recorded on the site excavation cards in Török 1997, 77-99.





Plate 12. Horus figure prior to colour pigment reconstruction on the left and after the decorative programme was reconstructed from preserved pigments on the right (courtesy E. O'Connell). (EA 51100 © Trustees of the British Museum).

imperfections in the stone, but why was the colour blue used? 'Blue is the most prestigious painted colour; it is also employed in the most obviously non-realistic way' (Baines 2007, 252). It has been postulated that blue or blue-grey may have been used to represent grey when applied to animals, though in Egypt early usage (*c*. 2150-2040BC) of the actual colour grey on animals is attested.<sup>11</sup> Another suggestion is that the colour blue was representative or symbolic of lapis lazuli (Baines 2007, 252, 271) which as an import was precious, highly valued and esteemed, perhaps second only to the metal gold.<sup>12</sup>

Research has been devoted to the study of colour symbolism in Egypt and includes (but is certainly not restricted to) for example, S. Aufrère (1991), J. Baines (2001; 2007), G. Robins (2001) and M. Dolińska (1990) in addition to numerous articles such as those by S. Quirke and G. Pinch in W. V. Davies (ed.) (2001). The degree to which the Kushites' interpretation and symbolic use of colour was similar to that of the ancient Egyptians is uncertain and some similarities between the various usages by each culture may be merely superficial. In Egypt, from the post-Amarna period, beginning during the reign of Tutankhamun, the god Amun's skin is normally depicted in blue (as opposed to red) (Dolińska 1990;

Robins 2001, 292). This is thought to symbolize Amun's role as a fertility god and to be representative of lapis lazuli as having a skin of lapis lazuli 'set the god apart from the other deities, emphasizing his status as 'king of the gods': the most important god was given a body of the most precious stone' (Robins 2001, 293). The colour yellow, representing the metal gold (*nbm*), was used in a similar fashion when representing other deities, particularly those associated with the solar cult.

Other fragments with visible traces of pigment remaining were identified in an effort to visualize the original polychrome appearance of the rams. Examination began with an attempt to identify fragments from the rams' heads. Unfortunately, heads of roughly contemporary Kushite ram statues to which comparisons might be made, are seldom well preserved

(Plates 6 and 7). Several eyes bore traces of red paint, likely from a hematite ochre (Plates 13 and 14). The red may have been used to depict the reflection of light seen to glint off a live animal's eyes, especially at night. Red was perceived by the ancient Egyptians to be a powerful colour symbolizing numerous, often contrasting or dissimilar ideas:



Plate 13. Ram eye with red pigment.

Plate 14. Ram eye with red pigment and traces of blue pigment on the head.



<sup>&</sup>lt;sup>11</sup> See Baines 2007, 248-249 for several examples of grey or blue-grey used for animal colouring. See also Lee and Quirke 2000, 113 for various examples of the use of grey.

<sup>&</sup>lt;sup>12</sup> We are grateful to Marcel Marce and Susanne Woodhouse for discussing this issue and for their suggestions regarding colour symbolism on Egyptian statuary, animals and wall paintings. For a detailed discussion of the interpretation of *hsbd*, an Egyptian word translated into English as the colour term 'blue' see Baines 2007, 248, 252-253; Quirke 2001, 188-189.

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'hot and dangerous, but also life-giving and protective. It is both the color of blood, a substance that relates to life and death, and of fire, which may be beneficial or destructive'

(Robins 2001, 292).

Blue pigment, preserved on one of the fragments, indicated that the heads had been blue (Plate 14). The horns, or what has been interpreted as the tips of horns, bore traces of yellow pigment (likely goethite ochre) on white lime plaster (Plates 15 and 16). Horn fragments discovered at Muweis appeared to show traces of red pigment (Baud forth.).



Plate 15. Horn tip showing traces of yellow pigment.



Plate 16. Horn tip showing traces of yellow pigment.

The rams were depicted in a couchant pose and their knees appeared to be yellow which again was probably a goethite ochre (Plate 17). The identification of knee shape was made by comparison with the roughly contemporary, more complete, ram statues from el-Hassa (Plate 18). The hooves, which were carved in a distinct readily identifiable shape, bore traces of blue pigment as did the statue base (Plates 18, 19 and 20). Unlike the statue bases from el-Hassa, no traces of Meroitic hieroglyphic inscriptions, that might hopefully name a ruler, have yet been found.

Plate 17. Ram knee with yellow pigment.

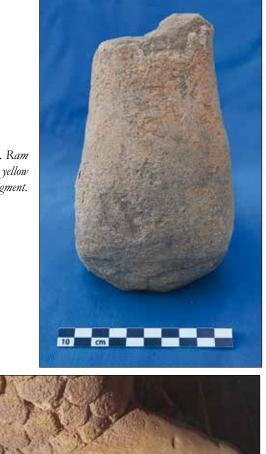




Plate 18. Ram knee and hoof from ram statue at el-Hassa (photo J. Anderson, courtesy V. Rondot).

Plate 19. Ram hoof from Dangeil with traces of blue pigment.



Normally, the ram, as Amun's avatar, protects the ruler and this connection is made manifest by a small representation of the king nestled between the ram's knees (Plate 8).



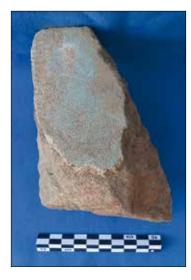


Plate 20. Blue statue base.

Some fragments found might be part of a ruler's headdress and ear, but this identification is far from certain and the fragments bear no visible pigment traces. Similarly, rams have ears and tails but thus far no fragments have been identified, although of note, when investigating depictions of rams, like sphinxes, all rams appear to have tails carved on the right side of the animal, except for Taharqo's rams at Kawa, which were arranged in

symmetrical pairs. This arrangement is visible in the excavation photographs of the rams taken *in situ*. For example, the ram (excavation number 0497), now in the Ashmolean Museum (1931.553), has its tail on the right side while the ram opposite (excavation number 0463), now in the Sudan National Museum (SNM 2681), has its tail on the left side (Macadam 1955, vol. II, pl. L, b, c).<sup>13</sup>

Based upon the pigment traces visible on identifiable fragments found thus far, the decorative programme of the ram statues flanking the processional way can be reconstructed

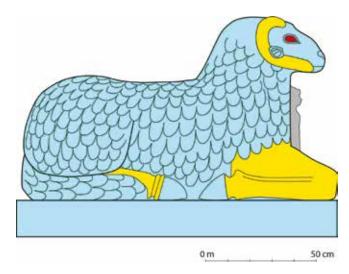


Plate 22. Reconstruction of the decorative programme of the rams at Dangeil. (Drawing C. Thorne, adapted from Rondot and Török 2010, 228, fig. 296).

and may have appeared somewhat similar to the ram shown in Plate 22. As no securely identifiable fragment of a ruler has yet been discovered, the ruler depicted in Plate 22 has been provided with a neutral colour. Taking this further, pigment and plaster discovered during excavations of the kiosk in front of the temple enabled the reconstruction of part of the kiosk's decorative programme (Anderson and Salah Mohamed Ahmed 2008). If the rams are added to this kiosk reconstruction, an initial idea of the appearance of Dangeil's sacred landscape during the late Kushite period can be achieved as seen in Plate 23 (the ram, being rotated 90°).



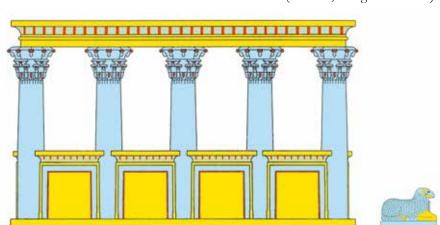


Plate 23. Reconstruction of decorative programme of the kiosk and avenue of rams (ram rotated 90°, diagram not to scale). (Kiosk after F. Hinkel's reconstruction of Naqa kiosk 151 in Wildung and Schoske 1999, 58).

Plate 21. Tail of the 'Soba Ram'.

Kushite Dangeil was a very colourful place indeed and it would be interesting to discover how broadly colour was applied to other Kushite sacred structures, palaces, and other complexes. What were the criteria used to determine whether a sculpture or structure was coloured?<sup>14</sup> Hopefully future

<sup>&</sup>lt;sup>13</sup> For further discussion of the excavation of the Kawa rams see Macadam 1955, vol. I, 60, 71. For a discussion of the ram in the Ashmolean Museum see Whitehouse 2009, 131-133, though the ram's findspot listed in the latter appears to be at odds with the excavation report placing it on the opposite side of the entryway; regardless the tails are still carved on different sides of the sculptures.

<sup>&</sup>lt;sup>14</sup> Rams associated with the Amun temple at Naqa, for example, ap-

microscopic polychromy studies of the material will provide more clues as to the appearance of features, both sacred and profane, in the Kushite landscape.

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pear to have been unpainted (K. Kroeper, pers. comm.), while those at Dangeil and statues in the 'Royal Baths' at Meroe, as mentioned above, were painted. Like Dangeil, Temple J at Muweis appears to have been painted (Baud forth.) as were at least parts of the palace of Natakamani at Jebel Barkal (Donadoni 1993, 105).



## Gabati

A Meroitic, Post-Meroitic and Medieval Cemetery in Central Sudan. Vol. 2: The Physical Anthropology

by Margaret A. Judd, with a contribution by David N. Edwards London 2012

xii + 208 pages, 110 tables, 15 figures, 66 maps, 73 colour plates ISBN 978 1 901169 19 7

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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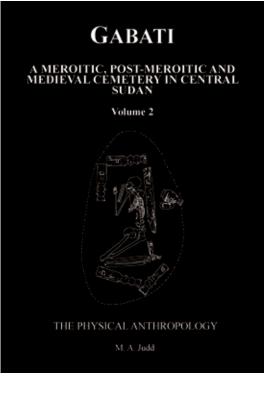
## Sudan's First Railway The Gordon Relief Expedition and The Dongola Campaign

by Derek A. Welsby

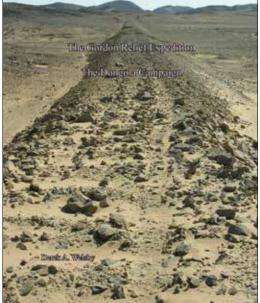
London 2011

149 pages, 6 tables, 47 figures, 173 colour and 19 b&w plates ISBN 978 1 901169 1 89

Begun in 1875 by the Egyptian khedive, Ismail Pasha, the railway played an important role during the Gordon Relief Expedition of 1884-5 and Kitchener's Dongola Campaign in 1896. It was abandoned and cannibalised to build other railways in Sudan during the first decade of the 20<sup>th</sup> century. For much of its course it runs through the desert and in those areas the roadbed, the associated military installations and the innumerable construction camps are extremely well preserved. This book is the result of a photographic survey of these installations together with the detailed archaeological surveys undertaken within them. A report on the artefacts, which includes personal equipment, ammunition, fragments of rolling stock, bottles, tins and ceramics, completes the volume.



### SUDAN'S FIRST RAILWAY

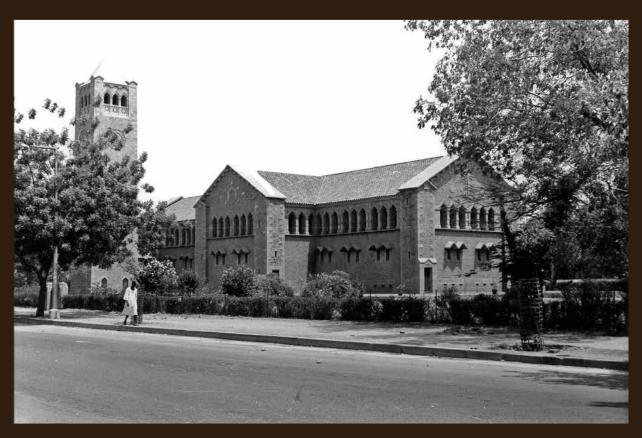


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Khartoum. The Republican Palace, once the Governor General's residence, in 1968 (photo SARS Hawkes Archive HAW P091.01).



Khartoum. The Anglican cathedral in 1968. Now minus its bell tower it houses the Republican Palace Museum (photo SARS Hawkes Archive HAW P090.01).

THE SUDAN ARCHAEOLOGICAL RESEARCH SOCIETY

ISSN NUMBER 1369-5770