

# SUDAN & NUBIA

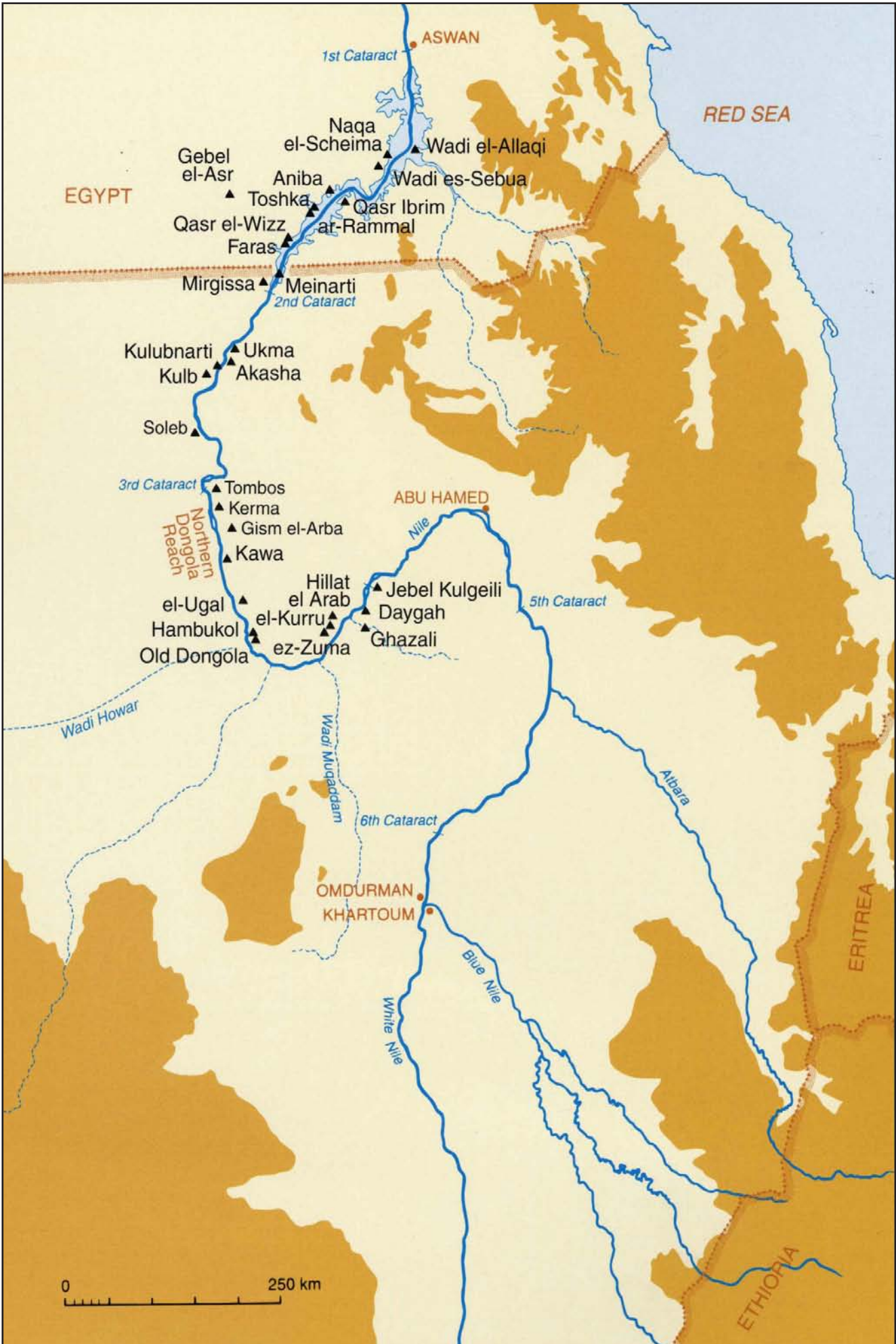
The Sudan Archaeological Research Society



*Bulletin No. 3*

1999





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*Front Cover:* Temple of Amenophis III at Soleb visited by  
F. W. Green in 1909 (Photo D. A. Welsby).

## Introduction

As the contents of this year's issue clearly demonstrate, *Sudan & Nubia* goes from strength to strength with a developing international profile. The Society's own work in the Dongola Reach is represented by two papers; the first, based on the analysis of human remains, provides fascinating insights into living conditions during the Kerma Period (Judd); the second outlines progress on the continuing research into the geomorphology of the region (Treves *et al.*). A complementary project, carried out in the same region by a French Expedition, has among other things identified a rare native settlement dating to the period of Egyptian conquest (reported on by Gratien). At Kerma itself, exciting new work, uncovering remains of the Napatan and Meroitic Periods, is dramatically extending the history of the site (Salah Ahmed), while of equal importance historically are the results from Hillat el-Arab (near Gebel Barkal), a cemetery with elite burials of the New Kingdom and very earliest Kushite Period (Vincentelli). Research into quarrying and stones receives fresh impetus from work at Gebel El-Asr in Lower Nubia (Shaw and Bloxam) and in Tombos and Daygah at the Third and Fourth Cataracts respectively (Harrell). Surveys in the latter region, threatened by a new dam, are confirming its great archaeological potential (Abdel Rahman and Kabashy Hussein). Among other possibilities, sites in the Abu Hamed Reach can be expected to shed important new light on Nubian monasticism, until recently a neglected subject (Julie Anderson). Further north, Qasr Ibrim, which has long been partially submerged, continues to repay the Egypt Exploration Society's commitment under difficult circumstances (John Alexander). Far from the Nile Valley, museum basements can also be a source of significant 'discoveries' (Wardley and Davies), as may unpublished archival material and archaeological diaries (Welsby Sjöström).

During the course of the year, SARS suffered a serious blow with the passing of its distinguished President, Sir Lawrence Kirwan. Larry was a source of encouragement, support and inspiration for us all. We salute his memory and his contribution to Sudanese and Nubian archaeology (see Obituary, by Harry Smith). We also regret the loss of Prof. Jack Plumley, a specialist in Christian Nubia, who for many years directed the EES excavations at Qasr Ibrim (see Obituary, by John Alexander).

## The Napato-Meroitic Remains at Kerma

*Salah Eldin Mohammed Ahmed*

### The site of Kerma

The ancient site of Kerma (Fig. 1), located on the right bank of the Nile about 30km south of the Third Cataract, is very famous owing to its antiquities dating from the 3<sup>rd</sup> - 2<sup>nd</sup> millennia BC. These are the remains of one of Africa's most ancient urban centres and its related cemetery. The site was partly excavated for the first time by the Archaeological Mission of the University of Harvard and the Museum of Fine Arts, Boston, between 1913 and 1916. Since 1973 it has been investigated by the Mission of the University of Geneva and this work continues. The town site is dominated by the Western Deffufa (Fig. 1.1) the function of which remained a matter of discussion for a long time. The building has recently been reconsidered by Prof. Charles Bonnet, the director of the Swiss Mission, who suggested that the Deffufa was the main temple of the city. The town of Kerma had gradually developed during the millennium of its existence around this very important cult centre. The cemetery containing more than 20,000 individual graves also witnessed a parallel evolution of very rich burial customs.

### The Napato-Meroitic remains

Lepsius was the first to note the presence of the later remains at Kerma:

*'Vom landungsorte zieht ein gewaltiger Damm aus Sand und Erde den Fluss hinauf und Scheidet das Uberschwemmungsland von der dahinter liegenden Ebene, die auch Ziemlich tief liegt und deren Boden Nilerde ist, mit leichten Sandwellen bedeckt, welche Zum Teil den Schutt verbergen. Es muss ältester Nilniederschlag sein; auf ihm sind auch die beiden kolossalen Grabgebäude gegründet, wie in einem modernen loche, das Schatzgräber unter Deffufa ausgegraben haben, zu sehen ist'*

(Lepsius 1849, 245-7)

It seems that Lepsius was referring to the actual centre of the modern town of Kerma. This area was certainly free of modern constructions at the time of his visit and constituted a part of the vast plain of Kerma. We can still see a clear elevation of the ground in this zone. This area had been the centre of our rescue excavations during the 1980's. Curiously enough, Reisner failed to distinguish these remains in 1913-1916:

*'But the bank of sand and earth to the south along the Nile was gone, and the ring of stones similar to those of the graves at the Upper Deffufa was not to be found. The bank, I suspected was never anything but a sand drift'* (Reisner 1923, 21)

The Archaeological Mission of Harvard-Boston excavated an area about 80m square within a Meroitic cemetery in the 'plain of potsherds' situated to the north west of the Western Deffufa. The graves were found in a very bad state of preservation and, according to Reisner, the cemetery covers an area of 200m (east-west) x 130m (north-south). The tombs generally follow a north-south orientation but this rule is not respected absolutely. The deceased were laid on their backs with their hands on the pelvis, with the exception of tombs K32, K33 and K34 where three women were placed in a contracted position. Three types of tombs were distinguished:

- a) a funerary chamber approached by a sloping shaft
- b) a simple pit with a side niche closed on one side by a brick wall
- c) a large rectangular burial pit

By comparing these graves and their funerary furniture with the discoveries in the cemetery at Karanog (Woolley and MacIver 1910, 22-25), Reisner was able to date his cemetery to the 3<sup>rd</sup> - 4<sup>th</sup> centuries AD (Reisner 1923, 41-57).

Tombs of the Meroitic period were excavated in 1976 by the Swiss Mission in the courtyard of the girls' elementary school of Kerma. The tombs were arranged in three or four parallel lines. They differed from the tombs excavated by Reisner and consist of a shaft with a lateral niche; the deceased were oriented north-south. Traces of wooden sarcophagi were found in certain tombs. The funerary furniture also shows some differences.

Charles Bonnet has suggested a 1<sup>st</sup> century BC date for this cemetery:

*'Le décor peint sur les jarres, les types de bols de bronze, ou le filet de perles recouvrant un défunt, sont autant d'éléments qui peuvent se rattacher à une époque antérieure à l'occupation romaine en Egypte'*

(1978, 120-122)

Other Meroitic tombs were rescued by the Swiss Mission in a courtyard of a house under construction in 1980. The 27 graves excavated did not furnish comparable material to the cemetery in the girls' school. They seem to belong to a secondary part of the cemetery.

Following the ploughing of land to the north west of the ancient town in 1981, the burial shafts of many Meroitic tombs were uncovered. Other tombs were destroyed by quarrying activity 300m north of the town. We were able to save some painted pottery vases of the classical Meroitic period. Napato-Meroitic tombs are currently being excavated in the western part of the ancient town.

The Napato-Meroitic cemetery extends to the north as well as to the south of the girls' school. The recent discoveries have enlarged considerably the limits of the cemetery excavated by Reisner. It is necessary to verify whether the necropolis had developed from the south towards the north, as is suggested by many elements furnished by the excavations of the Swiss Mission. What is clear is the vastness of the zone occupied by this cemetery (Bonnet 1999).

A parallel research programme dealing with the Napato-

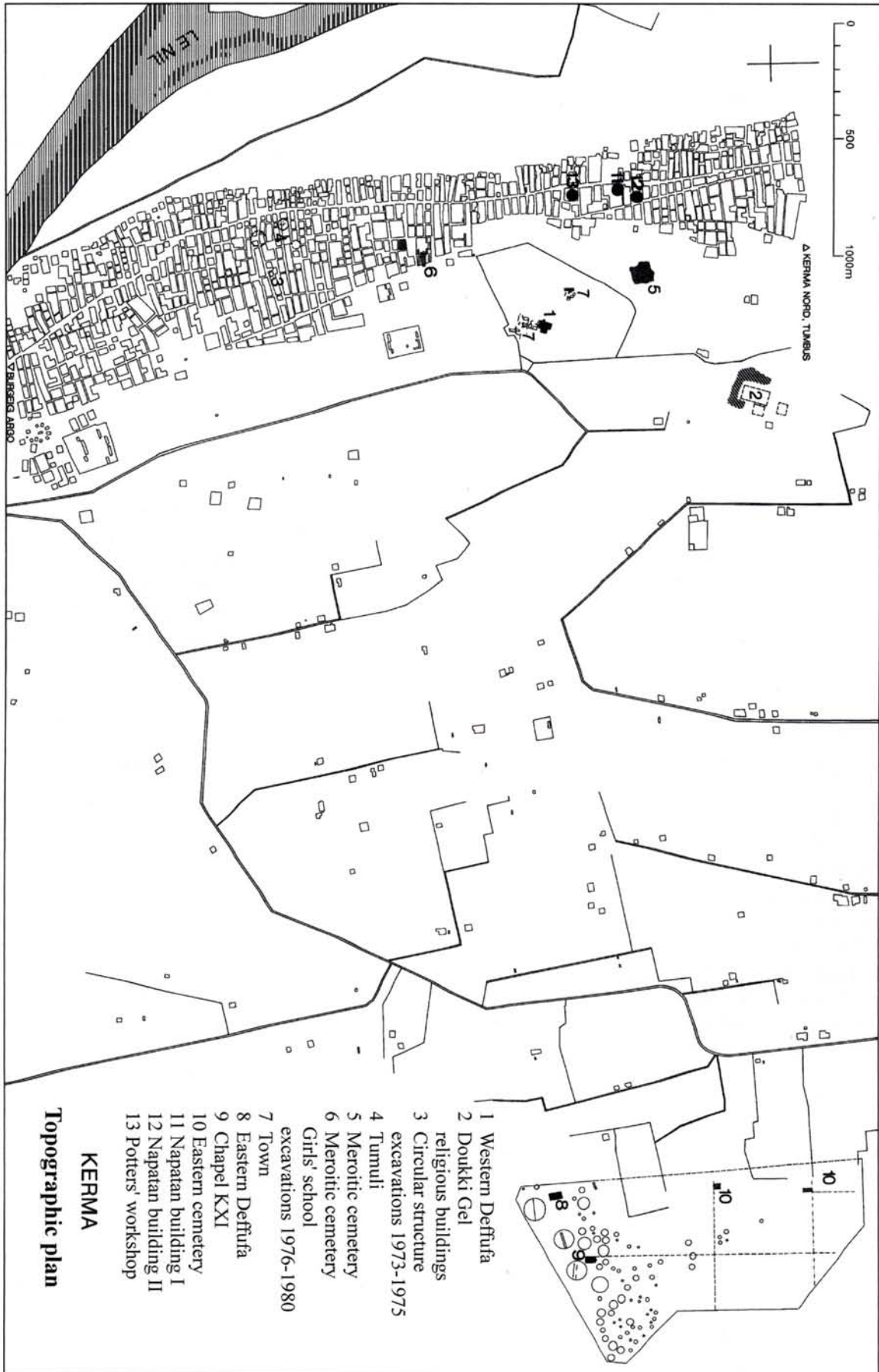


Figure 1. Topographical map of Kerma.

Meroitic remains at Kerma has been maintained by the Swiss Mission since 1982. This activity has resulted in the excavation of the remains of two residential buildings and a pottery workshop in the modern town, and a palace and a temple on the site of Doukki Gel.

#### Excavations in the modern town of Kerma

The sites concerned are situated in the centre of the modern town of Kerma Al-Balad, about 700m to the west of the Western Deffufa and less than 2km from the bank of the Nile (Fig. 1, 11-13). As has been mentioned above these antiquities comprise the remains of two residential houses and a pottery workshop of the Napatan period. The site was later occupied by a vast cemetery of the Christian period.

#### The first Napatan house

The remains of this building (Fig. 1, 11) are located immediately to the east of the main road (Burgeig-Kerma Al-Nuzul) and were seriously endangered by the passage of vehicles and by the construction of new houses in the village. The excavation during the 1982-1985 seasons uncovered the remains of a mud-brick building reconstructed or restored four times in the same place (Salah M. Ahmed 1992, 33-65).

The building retained its square plan and its function during all the phases of its occupation (Fig. 2). During the later period of its existence, the house was probably of more than one storey. Ramps, staircases and small doors facilitated the circulation between the two storeys of the residence and

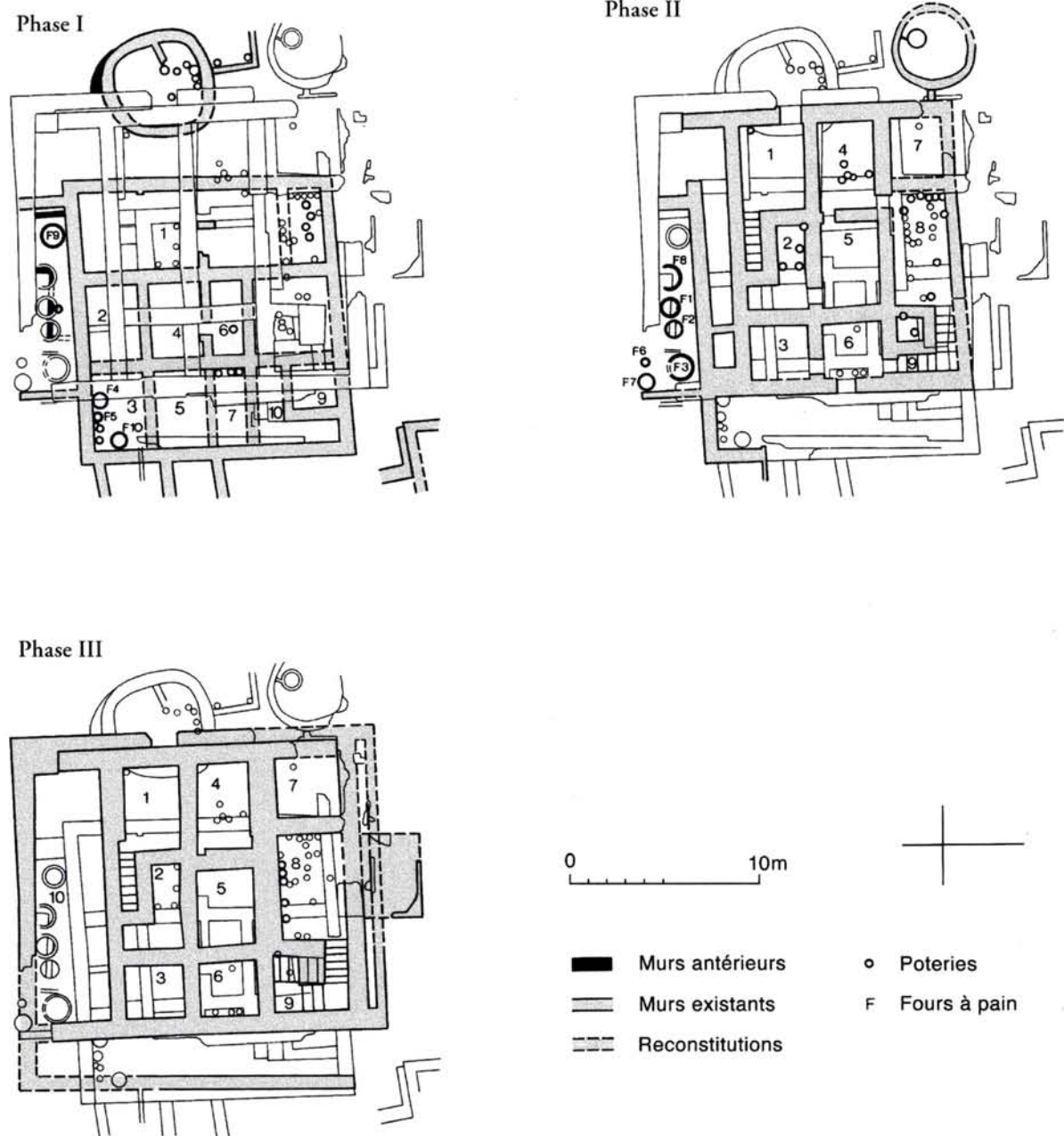


Figure 2. Plan of the different phases of the first Napatan house at Kerma.



the different rooms. The kitchens were situated to the south and were later displaced to the west of the building. Trees had probably been planted on the northern side.

The remains of an earlier structure was found under the ovens on the western side of the building. These consisted of a thin wall (400mm) oriented north-south which turned to the west at right angles under one of the ovens. It was impossible to follow these first installations westwards because of the main road which lies only 2m from the building. In the other parts of the site the walls of the earlier building were covered by the remains of the later phases. Fragmentary walls of the early building were excavated a few meters to the north of the ovens together with traces of a drainage system. In spite of the fact that we did not understand the architectural organisation of this phase, a considerable quantity of archaeological material could be attributed to the first occupants of the site.

As already noted, the house was reconstructed three times after the destruction of the earlier building. The house of phase I is almost square in plan (12.50 x 13.90m) and possessed more than ten rooms. Four ovens, connected with this phase, were found at the south-west corner of the house. A circular structure of about 4.50m in diameter was excavated on the northern side. This structure might have been used to house a tree. Fragmentary walls were excavated to the south and south east of the building. It seems that the house of the first phase was surrounded by structures of less importance while the main occupation had taken place in the central part.

The house of phase II is also square in plan (13.50m). It appears that the building of the first phase had been completely destroyed: some walls of the second phase were built directly on the levelled foundations of the previous phase. Only the foundations of the eastern and western walls of the first phase were partly retained. The new house was displaced about 4m to the north. The residence of this phase consisted of nine rooms and other structures. Two doorways were situated on the northern and southern sides and five small doorways facilitated communication between the different rooms. Access to the first floor was by two internal staircases and a ramp along the western side. Six domestic ovens were located on the western side of the building. A circular structure, similar to that of the first phase, was located on the north-eastern side of the house.

The phase III building was merely a restoration of the second phase structure. A wall was built around the house on three sides (north, east and west) while the southern wall was completely reconstructed. Almost all the walls were repaired and enlarged. The western staircase continued in use while the south-eastern one was modified in a way that suggested that another storey was added to the building at this time. The ramp was replaced by another on the southern side. Fragmentary walls were excavated to the east of the building. Unfortunately this part of the site has greatly suffered from natural erosion and also from penned animals.

Four radio-carbon determinations have been obtained from samples taken from two of the ovens (F4 and F9) and from jars in rooms II/1-3 (Salah M. Ahmed 1992, 65, n. 75). They confirmed, after calibration, occupation of the site from 800 to 300BC. Comparative studies of the archaeological material also confirmed these dates.

Early building	first half of 8 <sup>th</sup> - beginning of 7 <sup>th</sup> century BC
Phase I	beginning of 7 <sup>th</sup> - end of 7 <sup>th</sup> century BC
Phase II	end of 7 <sup>th</sup> - mid 6 <sup>th</sup> century BC
Phase III	mid 6 <sup>th</sup> - beginning 5 <sup>th</sup> century BC

### The second Napatan house

The second house is situated about 80m north-east of the first one (Fig. 1, 12). The remains were in a very bad state of preservation (Plate 1). Only the north-eastern corner of the building was preserved. The other part of the site was completely destroyed by the construction of a modern house. Although the interior organisation of this habitation is rather different, the width of the walls and the technique of construction, as well as the associated ceramics, are similar to those of the first house. The two houses might have constituted part of an important quarter of the Napatan town of Kerma. The comparison of the archaeological material with



Plate 1. Remains of the second Napatan house at Kerma.

that of the first house enabled us to propose the occupation of the second house from the beginning of the 7<sup>th</sup> to the first half of the 5<sup>th</sup> century BC (Salah M. Ahmed 1992, 68-73).

### The pottery workshop

This site is located inside the courtyard of a modern house about 120m to the south of the first Napatan house (Fig. 1, 13). It was excavated during the 1988-1989 season. The excavations resulted in the uncovering of a Napatan pottery workshop consisting of a kiln, a small potter's habitation and pits for the preparation of mud. The kiln (Fig. 3; Plate 2) consisted of a circular pit with vertical sides, 2.4m in diameter and with a depth of 0.6m. Four brick pillars (600 x 850mm) were built against the sides of the pit. The kiln is oriented east-west. To the west, an opening (door) 420mm wide is accessible via a sloping shaft about 1.77m in length and approximately 0.7m wide. On the opposite side, another semi-circular access (pit) led to a door of comparable

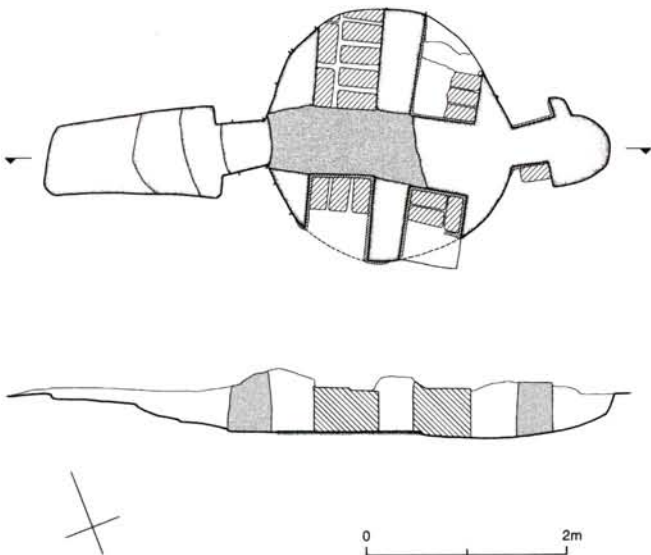


Figure 3. Plan of the Napatan pottery kiln at Kerma.

dimensions (400mm). The sides of the pit have been reinforced by a revetment of bricks which were, together with those of the pillars, covered by a layer of mud plaster. A layer of hardened mud was found in the central part of the kiln.

The Kerma kiln is similar to other examples of later periods excavated further to the north during the last 'Nubian Archaeological Survey' (Adams 1961, 33; 1962, 65; 1986, vol. I, 13-25, figs 4-7). It is likely that the four pillars of the kiln at Kerma supported a brick vault, attested by the presence of complete and fragmentary bricks found in the filling of the furnace chamber. The kiln was supplied with fuel (essentially animal dung and wood) and cleaned through the western shaft. The vault of the furnace chamber had certainly been pierced by many perforations to conduct heat up into the firing chamber. The 'niche' on the eastern side may indicate the beginning of a chimney to evacuate the gases and to regulate the heat inside the kiln.

The remains of a small building were excavated about

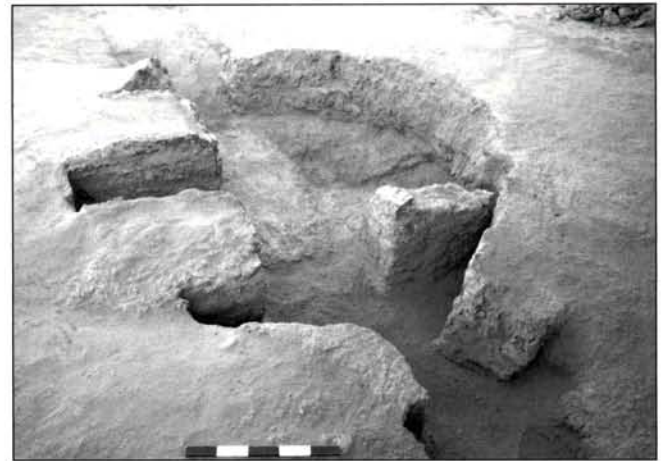


Plate 2. Remains of the Napatan pottery kiln at Kerma.

15m to the west of the kiln and consisted of the foundations of a mud-brick house with at least three rooms. This house was replaced, after its destruction, by circular wooden huts as witnessed by the post-holes excavated on the northern side of the potter's house. At least four huts were located in this part of the site. Two pits for the preparation of mud for the manufacture of ceramics were excavated in the area lying between the kiln and the habitation. The comparative study of the ceramics coming from the workshop with those excavated in the two Napatan houses suggests that the site was occupied in the period between the second half of the 6<sup>th</sup> to the end of the 5<sup>th</sup> century BC (Salah M. Ahmed 1992, 85).

### Excavations at the site of Doukki Gel

The site of Doukki Gel, previously known as the site of Bodega, is located about 1km north of the Western Deffufa (Fig. 1, 2). The remains present on the site cover an area of more than 80,000m<sup>2</sup>. Surface observations suggest the presence of a large religious complex with probably many temples in the centre and big mounds composed of fragments of bread moulds on the southern side of the site. With the exception of a small trial pit executed by Reisner in 1915, the site has never been explored.

'Lepsius has mentioned several mounds covered with potsherds, and a grey granite altar near them. These are still visible on the western side of the middle depression about 600m north of the Deffufa and a little east. We dug into the mounds and found them to be heaps of potsherds nothing more: ..... These objects and the altar appeared to me to be Ethiopian in date. I have no doubt that a small and poorly built temple of the Ethiopian period once stood on this site and that the heaps of potsherds are the temple dump heaps'

(Reisner 1923, 37).

The recent excavations on this site have resulted in the discovery of two large buildings of the Kushite period: a palace of the classical Meroitic period and a temple with a long history of occupation.





## The palace ( D.G.I)

The building, excavated in 1992-1996, is situated at the north-eastern corner of the site and was seriously endangered as the area was used as a football field by the children of the neighbouring village. The palace was entirely built of mud bricks and was found in a very bad state of preservation (Colour Plate XXIV). The western part was completely destroyed while only the first layer of the foundations of the eastern part was preserved. The residence seems to have been oriented east-west (Fig. 4) at a right angle to the temple discovered in 1997, hence following the sacred planning of many Egyptian and Kushite towns (O'Connor 1989, 73-87; Kendall 1991, 302-313; Bonnet 1994, 41-43). This palace was certainly composed of more than one storey judging from the thickness of the walls, the remains of vaults in the corridor n° 7 and the fragmentary ruins of what could be a staircase in the south-eastern corner of the building. The central part of the palace was occupied by a large room (n° 3) which could have been an open light well, resembling examples of later Meroitic date excavated at many sites in Lower Nubia, notably at Karanog (Woolley 1911, figs 31-3).

Painted potsherds suggested the dating of the last occupation of the site to the classical Meroitic period. Remains of an older building (a, b and c) were uncovered in the north-eastern quarter of the palace. The general organisation of this earliest phase could not be clearly defined due to the bad state of preservation of the remains. A circular structure (d) 19m in diameter was excavated in and beyond the southern part of the building. The structure seems to be earlier in date and was cut by the southern wall of the palace. Its function is unclear but it might have served as a communal storage bin. The lower layers of the palace have produced potsherds of classical Kerma date, pointing to a long period of occupation of the site.

## The temple (D.G.II)

The remains of this temple have been excavated since 1996 (Colour Plate XXV). They are located at approximately the centre of the site of Doukki Gel and are bordered on the southern side by the large mound of bread moulds. The later temple is oriented north-south (Fig. 5), with its entrance pylon on the northern side and was built of a mixture of mud and red bricks. The northern face is a monumental pylon more than 20m long (east-west) and nearly 4m thick. The northern gateway gives access to a courtyard approximately 16 x 13m in size. Within the courtyard are the bases of 14 columns. A doorway on the southern side leads to a second (hypostyle) hall of comparable dimensions. The third hall (sanctuary) on the southern side was found in a very bad state of preservation. A granite altar was located approximately in the centre of this hall. Remains of a stone chapel were partially excavated on the eastern side of the temple. It was probably oriented east-west and could be of an earlier

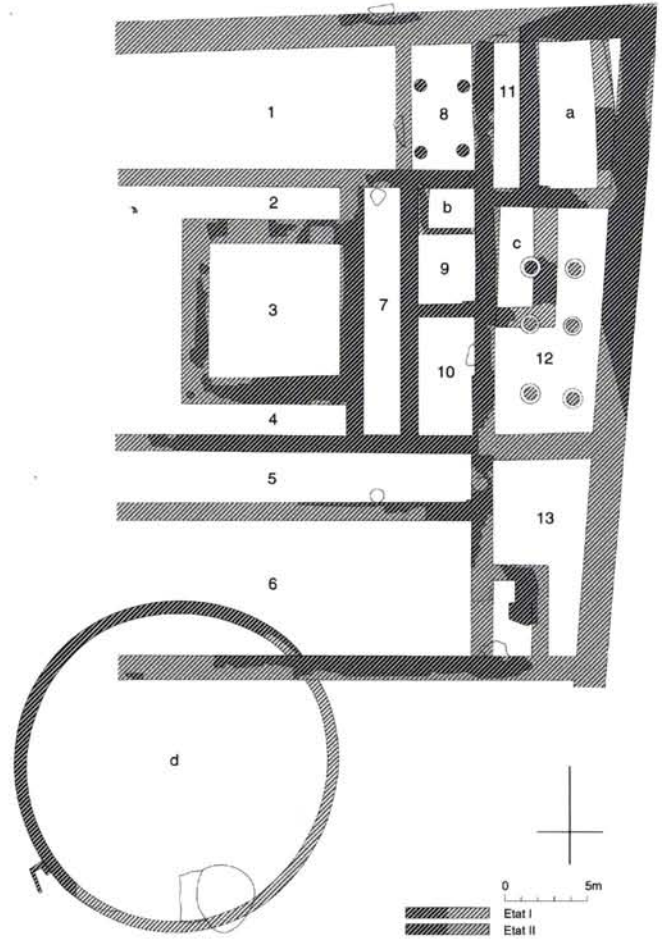


Figure 4. Plan of the Meroitic palace at Doukki Gel (Kerma).

date being subsequently integrated into the complex of the later temples. The latest known occupation of the temple could be dated to the 1<sup>st</sup> century AD, based on the ceramic remains and some fragmentary inscriptions.

Remains of an older structure were found beneath the foundations of the classical Meroitic temple (Colour Plate XXV; Fig. 5). This is also a temple built of mud bricks with a monumental pylon and a sandstone doorway. This part of the early temple is enclosed within the courtyard of the Meroitic temple built on the same axis and following the same orientation. It is unfortunate that the southern part of this early temple was also found in a very bad state of preservation. It seems that the ancient courtyard was abandoned and replaced by a larger one during the classical Meroitic period, while the southern part of the early temple was retained and restored.

An inscription in cursive Meroitic on a sandstone block of the eastern jamb of the ancient doorway may suggest a 2<sup>nd</sup> century BC date for the end of the occupation of this phase while a fragment of a cartouche probably of Shabaqo or Shebitqo, found in the lower levels of the building, may relate the early occupation of the temple to the Napatan period.

Antiquities of many periods have been brought to light on the site. The ceramic collection contained sherds ranging in date from classical Kerma, through the New Kingdom and the Napatan periods into the Meroitic. The epigraphic material and the sculpture span almost the same periods with the discovery of Egyptian statues dated to the Middle Kingdom (Plate 3), cartouches and other inscriptions of New Kingdom date and others which could be related to the Third Intermediate Period. It is not clear whether the blocks of New Kingdom date reused in the construction of the above

described Napato-Meroitic temples belonged to an earlier phase of the same complex or were collected from a neighbouring ruined Egyptian temple. The epigraphic material is being studied by Prof. D. Valbelle.

### Conclusion

The capital of the Kerma kingdom (3<sup>rd</sup> - 2<sup>nd</sup> millennia BC) seems to have retained much of its importance during the Napato-Meroitic period (8<sup>th</sup> century BC - 4<sup>th</sup> century AD). The vast cemeteries suggest a dense occupation of the region

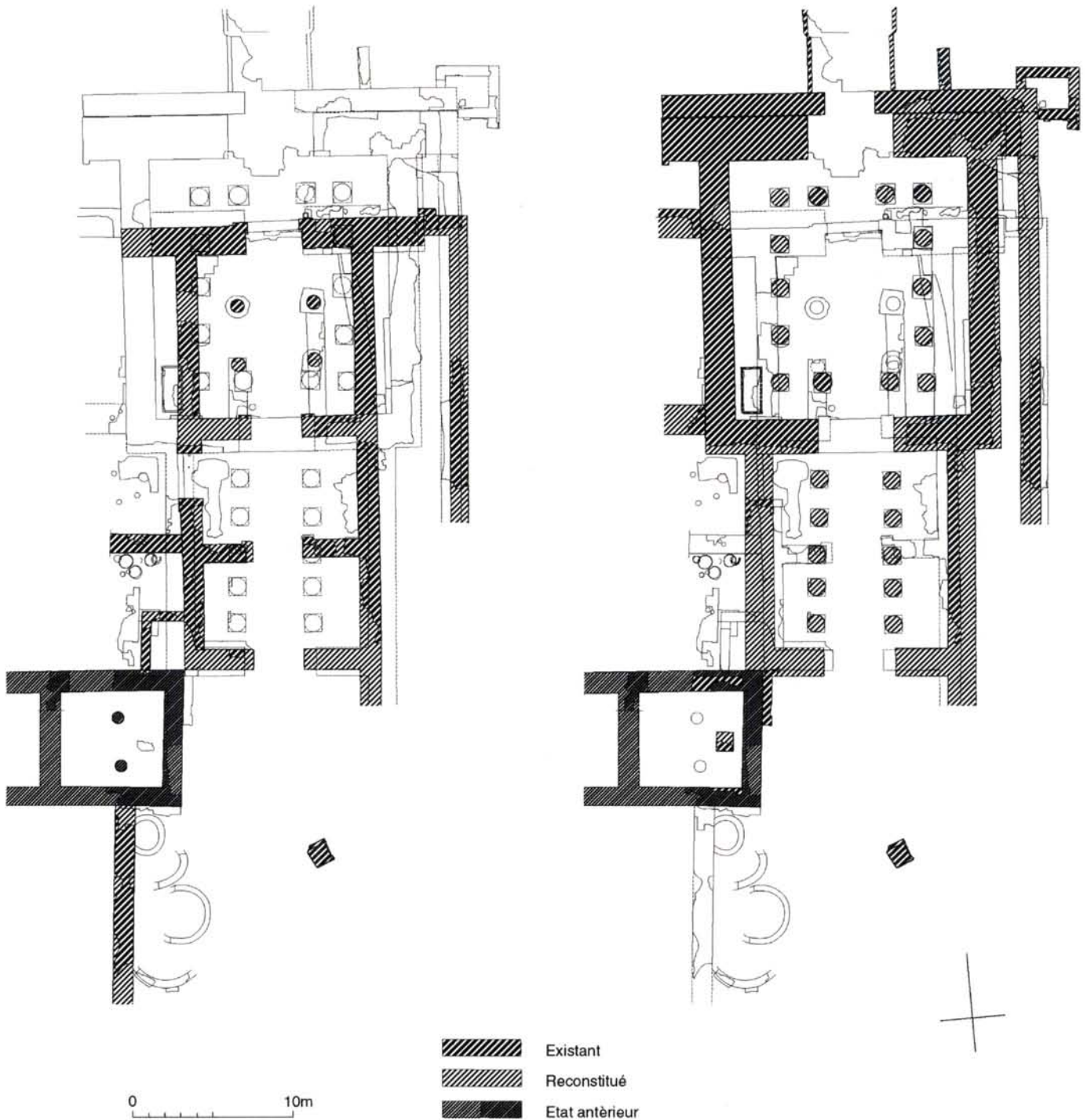


Figure 5. Plan of the temples of Doukki Gel (Kerma).



Plate 3. Fragment of an Egyptian Middle Kingdom statue from the temple (D.G.II).

from the beginning of the Napatan to the end of the Meroitic periods. The antiquities within the modern town also testify to the importance of this region. It is unfortunate that the major part of this archaeological site was lost under the houses of the modern town. The religious complex of Doukki Gel is comparable to other provincial centres of the kingdom such as Kawa and Tabo. The importance of this site resides in the long period of occupation extending from Classical Kerma times to the late Meroitic period. We hope that the exploration of this complex will add considerably to our knowledge and contribute to a better understanding of many chronological problems in the history of the country.

### Bibliography

- Adams, W. Y. 1961. 'The Christian Potteries at Faras', *Kush* 9, 30-43.  
Adams, W. Y. 1962. 'Pottery kiln excavations', *Kush* 10, 62-75.  
Adams, W. Y. 1986. *Ceramic Industries of Medieval Nubia* (2 vols.). Kentucky.  
Bonnet Ch. 1978. 'Les fouilles archéologiques à Kerma (Soudan), rapport préliminaire de la campagne 1977-1978', *Genava* n.s. 26, 107-128.  
Bonnet Ch. 1994. 'Palais et temples dans la topographie urbaine. Les exemples du Bassin de Kerma', *Revue d'égyptologie* 45, volume dédié à la mémoire de Charles Maystre, 41-48.  
Bonnet Ch. 1999. 'The funerary traditions of middle Nubia', in D. A. Welsby (ed.). *Kushite Studies. Proceedings of the Eighth International*

*Conference of Meroitic Studies*. London.

Kendall, T. 1991. 'The Napatan palace at Gebel Barkal. A first look at B1200', in W. V. Davies (ed.), *Egypt and Africa. Nubia from Prehistory to Islam*. London.

Lepsius, K. L. 1849. *Denkmäler aus Aegypten und Aethiopien*. Berlin.  
O'Connor, D. 1989. 'City and palace in New Kingdom Egypt', *CRIPEL* 11, 73-87.

Reisner, G. A. 1923. *Excavations at Kerma* (2 vols.), Cambridge Mass.  
Salah eldin M. Ahmed 1992. *L'agglomération napatéenne de Kerma*.

*Enquête archéologique et ethnographique en milieu urbain*. Paris.

Woolley, C. L. 1911. *Karanog. The Town*. Philadelphia.

Woolley, C. L. and D. Randall-MacIver 1910. *Karanog. The Romano-Nubian Cemetery*. Philadelphia.



*Plate XXIV. Doukki Gel. Remains of the Meroitic palace (D.G.I).*



*Plate XXV. Doukki Gel. Remains of the temple (D.G.II).*