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A Visitor's Guide to The Jebel Barkal Temples

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(Cover: Gold amulet, 1.5 x 1.2 cm, representing a warrior god, recovered in 2013 during the sifting of a dump from the Reisner excavations in B 1200. Small eyelets on the reverse indicate that it was sewn to a fabric, probably a royal garment. Identical amulets appear on the corselet of the Meroitic king Tarekeniwal, as he is represented on the pylon of his pyramid chapel at Meroe (Beg. N. 19)

Introduction

Jebel ("Mt.") Barkal (variously rendered "Gebel Barkal", "Gebel el-Barkal", and in some early sources "Gebel Berkel/Birke") is the modern Arabic name of a lone sandstone butte on the western edge of Karima, Sudan, about 365 km north of Khartoum and 23 km downstream from the Merowe Dam at the fourth cataract of the Nile. Its coordinates are 18° 32' N, 31° 49' E. Situated about 1 1/2 km from the right bank, just below the mid-point of the Nile's Great Bend, it rises to a height of 104 m above ground level and confronts the river with a sheer cliff 80 to 90 m high and approximately 200 m long (**fig. 1**). The mountain's unusual appearance – its isolation, sharp profile, and spire-like pinnacle – made it a natural wonder in ancient times, and these attributes, combined with its location, at a point on the river where the stream flows "backwards" (from NE to SW), excited intense theological speculation.



fig. 1. *Jebel Barkal from the air, looking north (Photo: Enrico Ferorelli)*

When the Egyptians in the early 18th Dynasty conquered northern Sudan (known as Upper Nubia, or, anciently, "Kush"), they identified Jebel Barkal as the birthplace and chief southern residence of their state god Amun of Karnak. As part of their program of conquest, they established the cult of Amun in many places in Nubia, but Jebel Barkal seems to have had a unique importance for them as a creation site and home of a primeval aspect of Amun, whom they typically represented here as a man with a ram's head (to distinguish him from his anthropomorphic Theban counterpart.) Jebel Barkal had the distinction of being the "first" (i.e. uppermost) religious sanctuary in the Egyptian empire; it was also its most remote.

Beneath the Jebel Barkal cliff the Egyptians constructed a modest religious center, to which they gave the same name as Karnak (*Ipet-Sut*: "Most Select of Places"), Amun's great sanctuary at Thebes, some 1260 km downriver. Surprisingly, they promoted the belief that the Nubian "Karnak" was the more ancient of the two! The hill itself the

Egyptians called variously *Dju-Wa'ab* ("Pure Mountain") and *Nesut-Tawy* ("Thrones of the Two Lands."), which was sometimes rendered simply *Neset-Tawy* ("Throne of the Two Lands"). In this way it was identified (retroactively) as the source of the Theban god's most ancient epithet "Lord of the Thrones of the Two Lands." The settlement which grew up around the mountain was called Napata, and the god was called "Amun of Napata, who resides in Pure Mountain."

Jebel Barkal's most distinctive feature is its gigantic free-standing pinnacle, 75 m high, which rises from the south corner of its cliff. This towering monolith, unparalleled in the Nile Valley, was anciently perceived as a colossal natural statue having many overlapping identities - and combining the supernatural powers of all of them. It was recognized, for example, as the phallus of the Creator; it could be seen from the west as a squatting god or a rearing serpent; from the east it evoked a standing royal or divine figure, crowned with a White Crown. Most conspicuously in public art, however, it was represented as a uraeus (or rearing cobra), wearing either a Sun Disk (when seen from the west) or a tall, knobbed White Crown (when seen from the east) (figs. 2,3). Because the uraeus, worn on the front of the king's crown, was the primary symbol of his royal authority, and because the White Crown was the symbol of his authority to rule Upper Egypt (or generally "the South"), the "uraeus" on Jebel Barkal, when discovered by the pharaohs, seems to have "proved" to them not only that "Upper Egypt" extended as far south as Jebel Barkal but also that Amun, since primeval times, had intended them to rule all of Kush as part of "Upper Egypt."

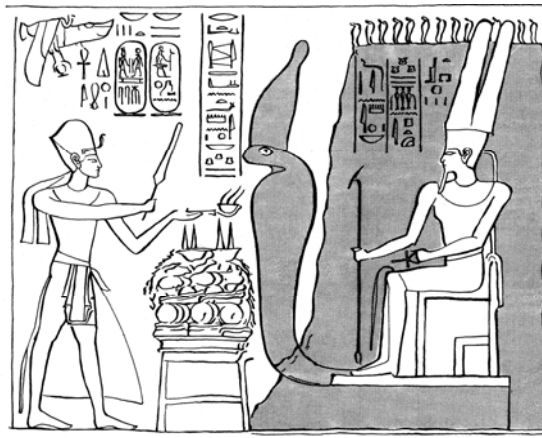


fig. 2. *The Jebel Barkal pinnacle as seen from the NE, looking downstream ("north").*
fig. 3. *As proven by this depiction of Jebel Barkal, which appears on the south wall of the Great Hall of Ramses II's temple at Abu Simbel, the pinnacle was perceived as a colossal rearing uraeus crowned with the White Crown, protecting "Amun-Re, Lord of Karnak," who sits enthroned inside the mountain (Drawing by Peter D. Manuelian).*

For about five centuries (ca. 1446-940 BC), the Egyptians occupied Napata and operated the Barkal sanctuary as a far-flung Nubian outpost of Karnak, identifying the hill as a manifestation of the mythical "Primeval Mound," where the creation of the world was said to have taken place. (The Jebel Barkal stele of Thutmose III [now in Boston], which is dated to about 1432 BC and is the earliest Egyptian text known from the site, describes the god of the mountain as "the great god of the first time, the primeval one.") Since the

Egyptians equated Creation with the Nile's inundation, and since the inundation came from the far south, it is not surprising that they would identify Jebel Barkal (at the southern limit of their empire) as an original home of their state god, who at the beginning of time (as well as annually each summer) gave new life to Egypt by releasing the Nile flood. Since the mountain also lay partway up the reverse curve of the river, they were also keenly aware that here the traditional symbolic meanings of the riverbanks were reversed, which gave further "proof" of its meaning. For in Egypt the left bank was the west bank (land of "sunset," and hence, metaphorically, of old age and death) while here in this part of Nubia it was the east bank (land of "sunrise," and of new life, birth and rebirth). And whereas at Thebes Karnak temple occupied the right or east bank (associating its Amun with present time), at faraway Napata the same bank became the west bank, associating its Amun with ancient or primeval time. Jebel Barkal thus became a place where the kings felt compelled to go not only to solidify their Nubian empire but also to unite ritually with their "father" Amun in his procreative form, an act which was thought to provide each with a mystical "rebirth" through coronation.

Towards the end of the 20th Dynasty (about 1100 BC), the Egyptian pharaohs, seated in Lower Egypt and increasingly estranged from the Theban clergy, began to withdraw their forces from Kush, an action which ultimately set Napata and its "Pure Mountain" politically adrift. For a time, perhaps even as late as the tenth century BC, the Theban high priests were able to keep Jebel Barkal linked with Karnak (as suggested by a newly found block from the site representing the Theban high priest Menkheperre [ca. 1045-992 BC]). But eventually direct ties were reduced or broken, and Jebel Barkal with its resident god fell under the control and patronage of a family of local Nubian chiefs, whose ancestral seat was el-Kurru, about 15 km downstream from Napata.

Apparently under the guidance of the Amun priests still running things at Jebel Barkal, the Kurru chiefs were brought under the thrall of the god and "egyptianized." By about 780 BC, these chiefs were actively engaged in restoring Amun's temples at Jebel Barkal (and elsewhere in Nubia) and establishing Napata as the center of an independent kingdom of Kush. Reviving and promoting the New Kingdom royal traditions linked to the mountain, the Nubian kings, like the pharaohs before them, now claimed Amun of Jebel Barkal as their divine father. Also claiming the pharaohs as their "ancestors," they, too, began promoting themselves as the rightful heirs to the kingship of "Upper Egypt," which had not really existed since the end of the New Kingdom.

If the Egyptian kings had locally promoted the belief that the "uraeus" on Jebel Barkal, by authority of Amun, proved their right to rule all of Kush as part of Upper Egypt, the Napatan kings now promoted the same belief: that the "uraeus," by the same divine authority, proved their right to rule all of Upper Egypt as part of Kush! (This was, of course, the very political situation in evidence at the start of Piankhy's reign, as revealed in his Victory Stele, now in Cairo.)

By 750 BC, the new kings of Kush, now supported by the Amun clergy at Thebes, easily assumed the "Upper Egyptian" throne in a bloodless coup through the combined oracular authority of Amun of Jebel Barkal and Amun of Karnak. By about 716 BC they had fully

conquered Lower Egypt, reuniting the entire country, so that their rule was now counted as Egypt's 25th Dynasty. At this point their empire, which united a territory extending probably from the confluence of the Blue and White Niles to the Mediterranean, was the largest ever achieved on the Nile in Antiquity.

As a novel badge of their legitimacy, the Kushite kings chose to wear a peculiar type of skull-cap crown, which was intended to evoke the shape of Jebel Barkal (**fig. 4**). In their minds, the mountain was the original source of Egyptian kingship, which had been granted by the resident god to his "sons" since the moment of creation. This crown, thus, was meant to identify the Kushite kings as the possessors of Egypt's most ancient kingship (as they imagined it). The twin uraei, always worn on this crown, symbolized the union of "Upper and Lower Egypt" (which here probably meant "Kush and Egypt"). Although there is only one "uraeus" on Jebel Barkal, there is considerable evidence to indicate that that it was thought to represent both royal uraei simultaneously. Thus, according to Kushite propaganda, a "complete" Egyptian kingship could only be granted by Amun of Jebel Barkal.

Five Napatan kings ruled Egypt and Kush until about 661 BC, but after ten years of repeated devastating invasions of Egypt by Assyria, the ruling family and its court were finally forced to flee Egypt and to take up residence again at distant Napata, where, for the next six decades, they and their successors would continue to make fictive claims to Egyptian kingship. Meanwhile, in Egypt, after the withdrawal of Assyrian forces, much of the country fell under the control of a native Egyptian prince from Sais in the Delta. This was Psamtik I (664-610 BC), a former Kushite foe and Assyrian collaborator, who founded Dynasty 26. During his long reign he extended his authority south to Thebes and Upper Egypt, traditional bastions of Kushite support, moves which exacerbated tensions on the frontier between the two rival dynasties.



fig. 4. *The shape of the Kushite "cap crown" was evidently inspired by the shape of Jebel Barkal, which was said to have been established by Amun at Napata as a "ka" (or 'divine double') of the crown of Re-Horakhty, the youthful sun god (Right photo: T. Kendall)*

War finally broke out between them in 593 BC, when the new Egyptian king Psamtik II (ca. 595-589 BC) invaded Kush with his army. The extensive evidence for smashed statues and destruction by fire in the contemporary Jebel Barkal temples and palace

suggests that the site was one of several primary targets of Psamtik's raid. One suspects that a major goal of the Egyptian king was to put an end, once and for all, to Kushite pretensions to his throne and to destroy the Amun oracle at Jebel Barkal, which was thought by the Kushites to confer it. (After Psamtik's victory, he had his agents chisel out the "Lower Egyptian" uraeus from all portraits of the Kushite kings in Egypt, clearly stating that, in his mind, they had no right to wear it - and never had [fig. 4]).

After 593 BC, the Kushites established a new political capital at Meroë, about 270 km SE of Napata, and spread the cult of Amun far to the south. Abandoning their historic claims to Egypt, subsequent kings were content simply to maintain their kingdom in the northern Sudan, which survived unbroken for another millennium, until the fourth century AD. Throughout the long existence of the "Meroitic" state, however, Napata and its Amun sanctuary remained the kingdom's chief religious center and the premier site of its royal coronations. Throughout this time, the Meroitic rulers (knowing little of Egyptian history) always clung to the belief that their own kingship, granted by Amun of Jebel Barkal, was older than Egypt's and had descended directly to them from the sun god at the moment of creation. (Echoes of this legend - and its resulting confusions - appear in the writings of the Greek historian Diodorus [III 2-7], who observed that the Kushites ["Aithiopians"] were the first men created on earth because they were "closest to the sun," and that it was they who had colonized Egypt [bringing with them "Egyptian" civilization], and that their leader was Osiris [the first Egyptian king]! This, he stated, explained why both the Egyptian and Kushite kings [in the manner of Osiris] "use tall pointed felt hats ending in a knob" [i.e. the White Crown]). In the Nubian mind, "proof" that Osiris was one of their own was revealed by his "statue" at Jebel Barkal. (See below, pp. 30-35, 95-104)



fig. 5. *The later Meroitic pyramids at Jebel Barkal, with the mountain in the background (Photo: T. Kendall).*

The Archaeology of the Site.

Jebel Barkal, the chief landmark of ancient Napata, is one of the largest archaeological sites in Sudan, occupying over one square kilometer of concentrated ancient remains. Although no traces of a pre-Egyptian settlement have yet been identified there, they are surely to be expected. At present, the earliest known buildings on the site date from mid-

Dynasty 18. Most of the major sacred buildings have Egyptian foundations, which were overbuilt repeatedly throughout Napatan and Meroitic times. The sanctuary in front of the mountain contains a very large number of buildings (temples, chapels and palaces), of which twenty-five have thus far been fully or partly excavated. On the mountain's west side, there is a field of royal pyramids, which date from late Napatan to Meroitic times (**fig. 5**). The lower field contains at least fourteen pyramids, dating from about 320 to 260 BC; the upper field contains eight, dating from about 130 BC to 115 AD.

Napata's urban remains have not yet been significantly probed, but the rolling rubble heaps extending from the present dirt road in front of the temples to the line of palms bordering the riverbank probably indicate the area of major ancient settlement. Vestiges of large Napatan and Meroitic temples and houses have also been found far to the east of the mountain, among the modern houses of Karima.

Because of the enormous size of the Jebel Barkal site, Sudan's National Corporation for Antiquities and Museums (NCAM) has granted licenses to five international teams or "missions" to conduct archaeological explorations there. Beginning in 2013 these (and many other teams working elsewhere in Sudan) were funded by Qatar on behalf of Sudan to promote archaeological discovery, conservation and publication of Sudan's ancient monuments. The five teams currently working at Jebel Barkal are:

1) The NCAM Jebel Barkal Mission (part A), co-directed by Timothy Kendall, an American, and El-Hassan Ahmed Mohamed, Assistant Director of NCAM: a project to excavate the buildings within the ancient religious sanctuary (**fig. 6**). This is essentially the area explored a century ago by the American archaeologist George A. Reisner for Harvard University and the Museum of Fine Arts, Boston. It consists chiefly of Egyptian and Napatan temples, most with Meroitic restorations, as well as two royal palaces (B 1200 and B 100) and a structure thought possibly to be a high priest's house (B 1700).

2) The NCAM Jebel Barkal Mission (part B), co-directed by Mrs. Iglal Mohamed Osman El-Malik, head of Conservation for NCAM, and Dr. Maria Concetta Laurenti and a team of Italian conservators for ISCR (*Istituto Superiore per la Conservazione e il Restauro in Rome*): a project to conserve and restore the wall paintings inside Temple B 300 of Taharqa,

3) The Mission of the University of Venice, Italy, directed by Prof. Emanuele Ciampini, which since the 1970's (under previous directors, Prof. F. Sergio Donadoni of the University of Rome, *La Sapienza*, and Prof. Alessandro Roccati of the University of Torino) has been excavating the large palatial structures and their associated buildings north and east of the main sanctuary (B 1500 through B 3200).

4) The Archaeological Mission of Wahat Projects, Spain, in collaboration with the University of Dongola (Karima Branch), directed by Dr. Montserrat Diaz de Cerio: a project to excavate the several large Napatan/Meroitic domestic and religious buildings approximately 700m NE of Jebel Barkal in the Abbasiya district of Karima, and

5) The Mission of the German Archaeological Institute, co-directed by Dr. Alexandra Riedel and Mahmoud Suliman: a project to record and conserve the Jebel Barkal pyramids.

B 100: a Meroitic palace.

When Reisner began his work at Jebel Barkal in 1916, the first building he excavated was a large Meroitic structure, which he numbered "B 100." Dating to the early or mid-first century AD, it was nearly square in plan, 33.2 m (NE to SW) by 37.1 m (NW to SE), with a doorway in each exterior wall (**fig 1**). Although at the time he could describe B 100 only as an "administrative building," it is now clear that it was a palace. In its square plan it parallels all other known Meroitic palaces that have been found since, and in its orientation (90° to the left of the gateway of an Amun temple) it parallels Egyptian palaces.

B 100 had two staircases leading to a second floor, but Reisner found this upper level entirely lost to erosion. The lower floor had 23 rooms, most of which were door-less foundation cells, built only to support the rooms on the upper level and to protect the building from Nile floods. Two large halls, each with six columns (3 x 2), reveal the main axis, leading to the northeast side, where a main doorway led in a straight line to the main gate of the Great Amun Temple (B 500) (**fig. 2**).

After fully recording B 100 in 1916, Reisner reburied it three years later in order to use it as a dump site for the earth he would remove from his excavations in B 500. B 100 has thus remained buried and hidden from view ever since.

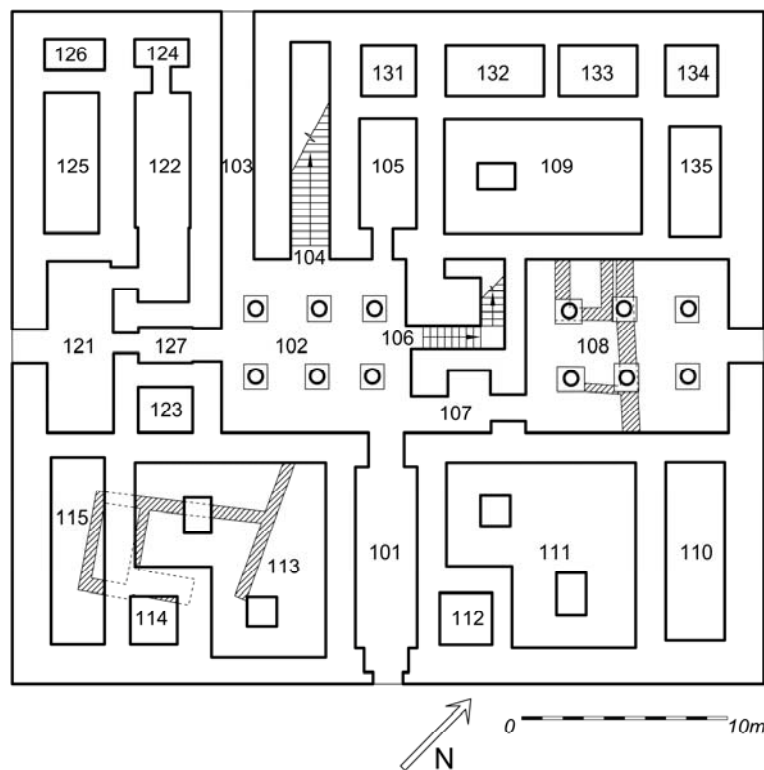


fig. 1: Ground plan of B 100, reconstructed from Reisner's diary notes and original survey map (Geoff Kornfeld).



fig. 2: *Photograph of B 100 following excavation, March 15, 1916, looking north toward B 500. Photo A 2326, from the photographic archive of G. A. Reisner's Harvard University-Museum of Fine Arts, Boston Expedition. Courtesy of the Museum of Fine Arts, Boston.*

Ref. T. Kendall, "B 100: A little-known Meroitic palace at Jebel Barkal," *Orientalia* 83, fasc. 1 (2014), 63-75.

B 200 and B 300: Temples of the goddesses Hathor and Mut

The adjacent temples B 200 and B 300 were built by Taharqa (ca. 690-664 BC) to honor the goddesses Hathor "of Pure Mountain" and Mut "of Napata" respectively, both of whom, as consorts of Amun, were believed to dwell together with him inside Jebel Barkal. Hathor and Mut were not only closely associated with each other but they were also identified with a goddess called the "Eye of Re" (or "Sun's Eye"), who personified the god's uraeus (cobra diadem), which was worn on his crown and was believed to protect him from his enemies. In the Egyptian language, the words "eye" (*iret*) and "uraeus" (*i'ret*) were nearly identical, which explains how the "Eye" and Uraeus goddesses were conceived as the same being.

Both temples were built on the west side of the Jebel Barkal pinnacle because, when viewed from its west side, this towering rock resembled a colossal statue of a uraeus crowned with a sun disk, which was the typical form of the "Eye of Re" (**fig. 1a**). A relief inside the first rock-cut chamber of B 300 actually represents the pinnacle in just this way - as a sun-crowned uraeus hanging from the Jebel Barkal cliff (**fig. 1b, 2**). (Just east of B 200 and 300 lie the ruins of another temple in the same series: B 1100 (q.v.), which was dedicated to the goddesses of the king's uraeus, known as the "Eye of Horus." This temple was built directly in front of the pinnacle, from which angle the rock assumed the shape of a royal uraeus wearing the White Crown of Upper Egypt.)



fig. 1a: The Jebel Barkal pinnacle, seen from the west (and from the site of B 200).

fig. 1b: The Jebel Barkal pinnacle, as represented inside B 300 (see fig. 2).



fig. 2: *Relief scene on the eastern wall of the first rock cut chamber of B 300, as it appears today. Here Taharqa (at right), followed by his chief queen, make offerings to Amun and Mut, who are pictured inside Jebel Barkal, which takes the form of a flat-topped shrine with the pinnacle shown as a sun-crowned uraeus (the "Eye of Re"), hanging from the cliff (fig. 1b). (Note: the masonry blocks in the center belong to an early 20th century fill of a hole in the wall). (Photo: Bryan Whitney).*

The interior reliefs of both temples allude to the myth of the "Eye of Re," which went something like this: At the beginning of time, the Creator and ancient Sun god (here personified by Amun) had a daughter called the "Eye," who was his protector. In time, they quarreled and she left him, taking up residence in distant Nubia, where, in her anger, she transformed into a raging lioness (and became one of the frightful lion-headed goddesses Tefnut and/or Sekhmet). Her father, now blind, was desperate to make peace with her so that she would return again to his forehead and resume her role as his protector. He thus dispatched to Nubia his son (and her brother) Shu to find her and to bring her back. Discovering her hiding place, and charming her with his powerful magic, he managed to pacify her and to coax her back to Egypt. On the journey, as her anger subsided, she transformed from lion to human form. And once back in Egypt, she reconciled with her father, assumed serpent shape, and again took her place on his crown as his protective "eye"/uraeus.

Already in Dynasty 18, the pinnacle on Jebel Barkal had been identified as a giant natural statue of a uraeus, which seemed to prove to ancient onlookers that this remote mountain was the place in Nubia where the "Eye" had dwelt. On the back walls of both B 200 and B 300 each goddess's transformation from lion-headed to human-headed form was represented, as she traveled from Nubia (i.e. Jebel Barkal, whose gods appeared on the right or upstream walls) to Egypt (whose gods appeared on the left or downstream walls) (**fig. 3**). In both temples Taharqa had himself depicted as Shu, wearing that god's tall, four-feathered crown (see **figs. 2 and 3**) and escorting the goddess down to Egypt on behalf of his "father" Amun. In this way the king presented himself as the reincarnation of Amun's first-born son, who saved the world by restoring to the god his protective goddess.

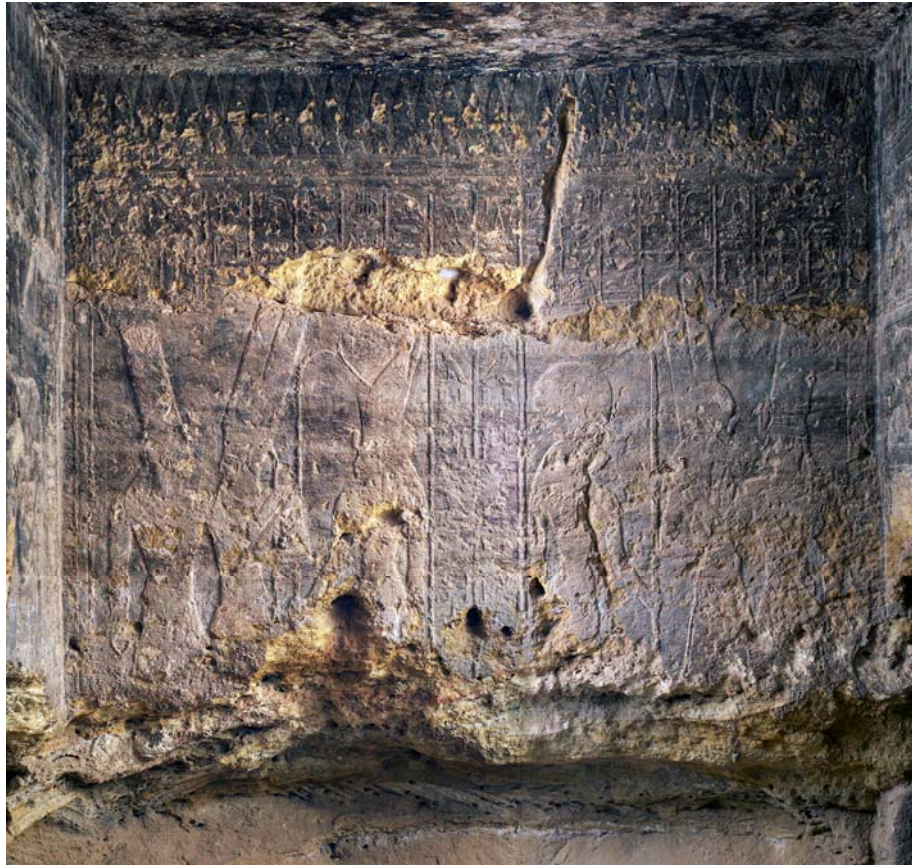


fig. 3: *View of the unpublished back wall of B 300. It depicts Taharqa at right (i.e. in the south=Nubia), wearing the crown of Shu and embraced by the ram-headed Amun of Jebel Barkal, accompanied by the goddess Mut in lion form (as Sekhmet). At left (in the north=Egypt), the king, still wearing the crown of Shu, is embraced by the human-headed Amun of Karnak and accompanied by the goddess Mut in her human form. In each case, the goddess holds the hieroglyph for "year," indicating that the temple served some special purpose during the New Year festival - or rather, during the five epagomenal days before New Year's Day, when the world was imagined to be threatened by the dangerous leonine goddess Sekhmet (Mut's alter-ego), who had to be appeased with elaborate spells and offerings in order to avert her destructive powers. (Photo: Bryan Whitney)*

Taharqa's temples to Hathor and Mut at Jebel Barkal were of highly original design and conception. Both had outer courts and pylons built of cut stone masonry and inner chambers cut directly into the mountain. Tragically, during the nineteenth century, both temples were so severely plundered for stone by the local people that today most of their exterior structures have disappeared, leaving mainly only those parts hewn from the mountain.

Of the two temples, that of the goddess Mut (B 300) is the best preserved. It was originally about 35 m in length. Sketches left by European travelers in the early nineteenth century (**figs. 4, 5**) reveal that it was fronted by a pylon with portico and two outer courts lined with columns in the form of sistra (i.e. sacred rattles topped with heads of the cow-eared Hathor) and of Bes, the dwarf god of music and dance. A pair of smaller Bes columns also supported the roof of the first rock cut chamber (**fig. 5**). These unusual columns were designed to assuage the imagined destructive anger of the resident goddess before she even emerged from her temple.



fig. 4: *View of the ruins of B 300 in 1821 by Frédéric Cailliaud, Voyage à Méroé..., plates, vol. 2 (Paris, 1827), pl. LXVII.*

Today two of the Hathor columns still survive in front of B 300 (**fig. 6**), but sadly, all the large Bes columns from the outer court have disappeared - except for a single face fragment, now in the Jebel Barkal Museum. One of these columns, however, still survived complete in the early nineteenth century, when it was carefully sketched by several of the early European travelers (**fig. 7**).



fig. 5: View inside the first rock cut chamber of B 300 as it was in 1821 by Frédéric Cailliaud, *Voyage à Méroé*, plates, vol. 2 (Paris, 1827), pl. LXXIV.



fig. 6a. The surviving Hathoric columns in front of B 300 (Photo: Enrico Ferorelli).
fig. 6b: The single standing Bes column from the outer court of B 300 as recorded in 1844 by the Royal Prussian Expedition of C.R. Lepsius, *Denkmaeler aus Aegypten und Aethiopien... Abt. V, Bl. 6*. Berlin: 1849-59.

The five carved and painted rock-cut chambers of B 300 are presently (2015-2018) being cleaned and restored by a conservation team from the *Istituto Superiore per la Conservazione e il Restauro* in Rome under the joint direction of Mrs. Iglal Mohamed Osman El-Malik, Director of Conservation at the Sudan National Museum, and Dr. Maria Concetta Laurenti. The spectacular results of their work are soon to be published in a separate guidebook.

The Temple of Hathor (B 200), which was originally about 27 m in length, has almost entirely disappeared (**fig. 7**) All that remains of it now are its pylon foundations and the badly worn walls of its three parallel sanctuaries, but it is clear that its main level was built on a rock shelf 3 m above its pylon gate. After passing through this door at ground level, visitors apparently climbed a stairway, which led up through the floor of the first court. This court, built up of masonry on the rock ledge behind the pylon, probably had six columns (2 x 3). After passing through this room, the visitor then entered a second chamber with four columns. Although the columns here no longer survive, there can be little doubt that they were very similar to those in the outer courts of B 300, representing figures of Bes and sistra with Hathor heads. The two temples - like their resident goddesses - were, after all, conceptual twins.

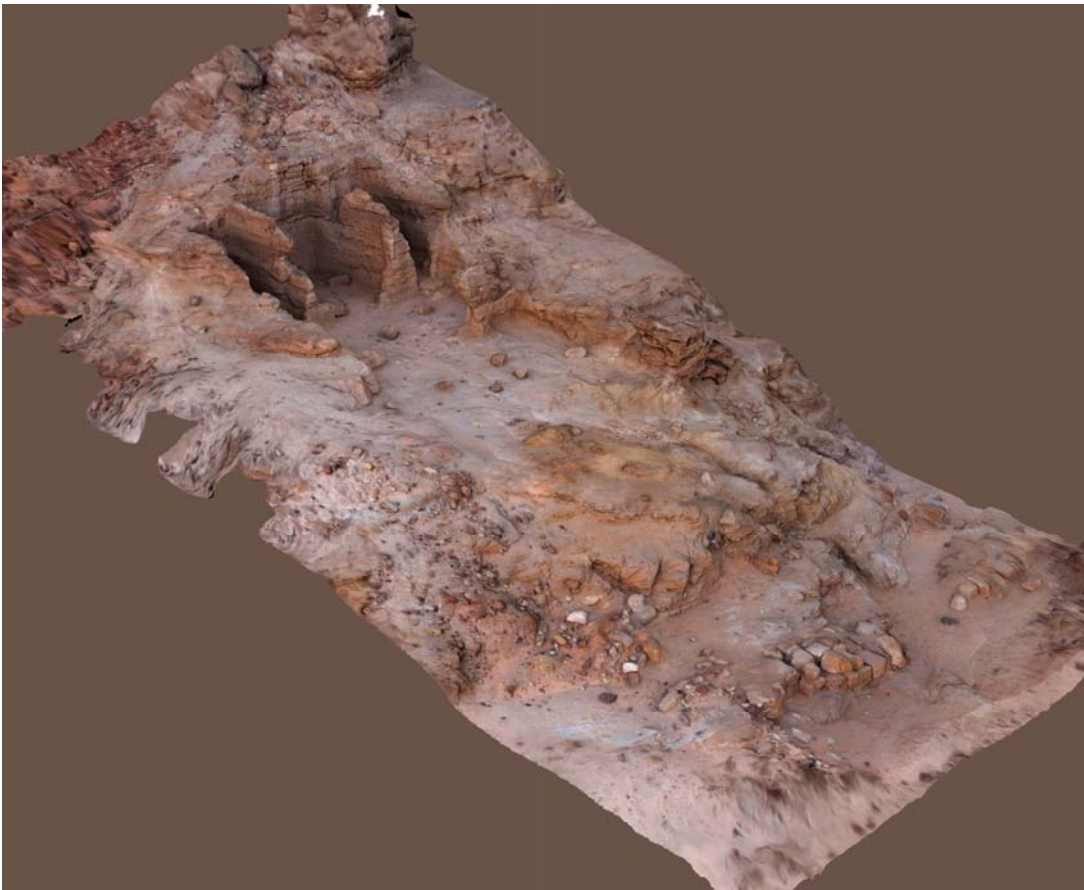


fig. 7: *Photograph of the present state of B 200 (2015). (3D Photoscan: Mohamed Osman Abdulla 2015)*

Passing through the second room, the visitor stood in an antechamber facing doorways giving access to three parallel sanctuaries, each sacred to a form of Hathor in one of her transformations. As in B 300, the goddess appears in the right chamber with a lion's head (embodying the leonine goddess Tefnut), and in the central she appears as herself, crowned with a pair of horns and a sun disk, while followed by a leonine alter-ego crowned with a uraeus - a personification of the uraeus. In the left chamber, her final image has unfortunately been lost to erosion.

The three sanctuaries were rock cut, but, unlike those in B 300, they required built roofs of wooden beams, overlaid by woven mats and mud brick. Being perishable, these roofs would have quickly disappeared when the temple ceased to be maintained, leaving the interiors exposed to centuries of scouring wind and sand. The reliefs inside B 200, thus, are in very poor condition today.

Despite the heavy damage suffered by the two neighboring temples over the centuries, both can be restored with a fair degree of confidence in computer models, which can convey some idea of their ancient grandeur (**figs. 8-16**).



fig. 8. *B 200 and 300 in their proper relationship, as they are thought to have appeared from the outside. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*



fig. 9. *B 200 and 300 from the west, as they are thought to have appeared in relation to the Jebel Barkal pinnacle, with B 500 in background. (Compare with fig. 1) (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*

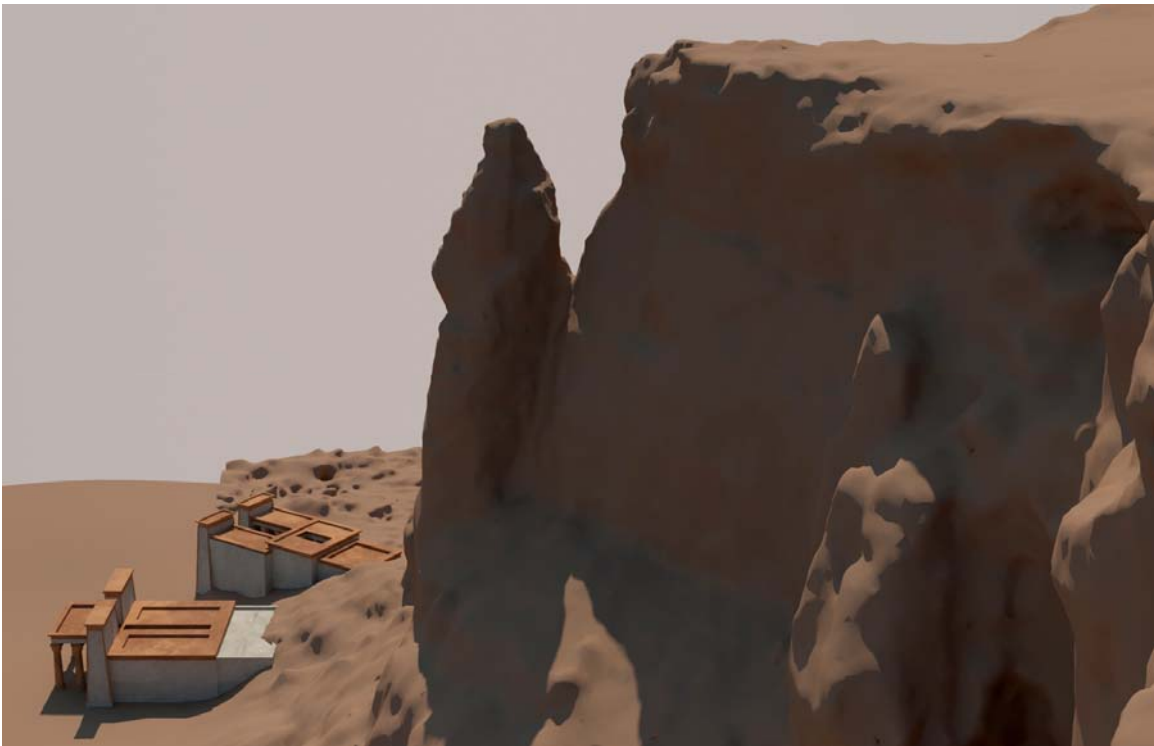


fig. 10. *B 300 and 200 as seen from the Jebel Barkal cliff. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*



fig. 11. *Cut-away view of B 300, restored. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*



fig. 12. *Interior view of B 300, looking through the axis of the first court to the sanctuary. (Model by Geoff Kornfeld © NCAM Mission and 2015 Learning Sites, Inc.)*



fig. 13. *View from the first rock-cut chamber of B 300 into the central sanctuary, with its cult statue visible (hypothetical). (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*



fig. 14. *Cut-away view of B 200, as it is thought to have looked. (Compare with fig. 7). (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*



fig. 15. *Hypothetical view into the first court of B 200 from the pylon gate and stairway. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*



fig. 16. *Hypothetical interior view of the landing of first court of B 200. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*

B 300-sub. The Eighteenth Dynasty antecedent of B 200 and 300.

Inside B 300 a preserved building inscription of Taharqa records that he built the temple "for his mother Mut" of "beautiful, fine, white sandstone" to replace an older temple "built by the ancestors in humble workmanship." The foundations of this older temple, which is known as "B 300-sub", can be seen today where the paved floors of the outer courts of the later temple would once have been laid (**fig. 17**). The blocks of this older temple are all white sandstone, of the type called *talatat*, comparable to those used in B 500-Phase II, which indicates that it was built in the late 18th Dynasty. B 300-sub had three parallel sanctuaries, much like B 200 and B 500, and, from its location, we can see that it must have honored the same goddesses as Taharqa's temples. This confirms, what was noted above, that even in the 18th Dynasty visitors to the site must have believed that Jebel Barkal, with its uraeus-shaped pinnacle, was the place in Nubia where the "Eye of Re" had sought refuge and dwelt in all her forms: serpentine, leonine, and human.

The brick-like *talatat* blocks from which B 300-sub was built were the invention and preferred building medium of Amenhotep IV/Akhenaten, who is most famous in history for attempting to eradicate the Amun cult and for demanding that his subjects worship as sole deity a new sun god, called the Aten (or "Sun Disk"). Because B 300-sub was built of *talatat* but was also dedicated to multiple goddesses, we should probably suspect that it was built shortly after Akhenaten's death, either by his presumed son Tutankhamun (1336-1327 BC) or by that king's near successor Horemheb (1323-1295 BC), both of whom restored the old pantheon, with Amun again at the center. At Jebel Barkal, *talatat* buildings believed to be assignable to Akhenaten's reign are built of yellowish or grayish sandstone, like B 500-Phase I, B 520-sub, and B 700-sub 1 and 3. Temples assumed to have been built soon after his death are built of white sandstone *talatat*, as here, and in 500-Phase II, B 1100-Phase I, and B 700-sub 2 (q.v.).



fig. 17. *The entrance to B 300, as it looks today. The small white "talatat" blocks lying under the level of the standing Hathoric columns belong to the foundations of the late 18th Dynasty temple "B 300-sub".*

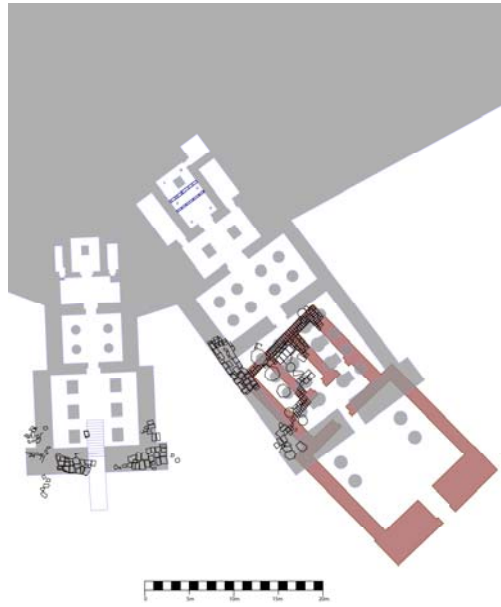


fig. 18. Restored ground plan of Taharqa's temples B 200 and B 300, with hypothetical plan of the New Kingdom version of B 300 ("B 300-sub") (red). Traces of its sanctuaries are well-preserved, but its outer court(s?) and pylon have completely disappeared. (Plan: R. C. Rosa III and Geoff Kornfeld).

B 350: The Pinnacle Monument of Taharqa

One of the most remarkable monuments at Jebel Barkal was constructed by Taharqa on the virtually inaccessible summit of the pinnacle, 75 m above the temples (**fig. 1**). This included an inscribed panel, 1.20 m x 2.70 m, originally overlain by gold sheet, and a small statue (now lost), probably representing the king, centered in a manmade alcove just beneath the panel and flanked by built stone walls to protect it from the incessant wind and to place it within a recess. The inscription, which commemorated the king's victories east and west, was too high to be read from the ground, but its gold surface would have made it one of the most conspicuous features of the mountain. Today the gold is gone, and the inscribed surface of the panel is badly eroded, but its vertical register lines can still be seen with the naked eye. The statue, too, is lost, but the alcove in which it stood can still clearly be seen from below, as can the white mortar of the stone walls that were once built to flank it.

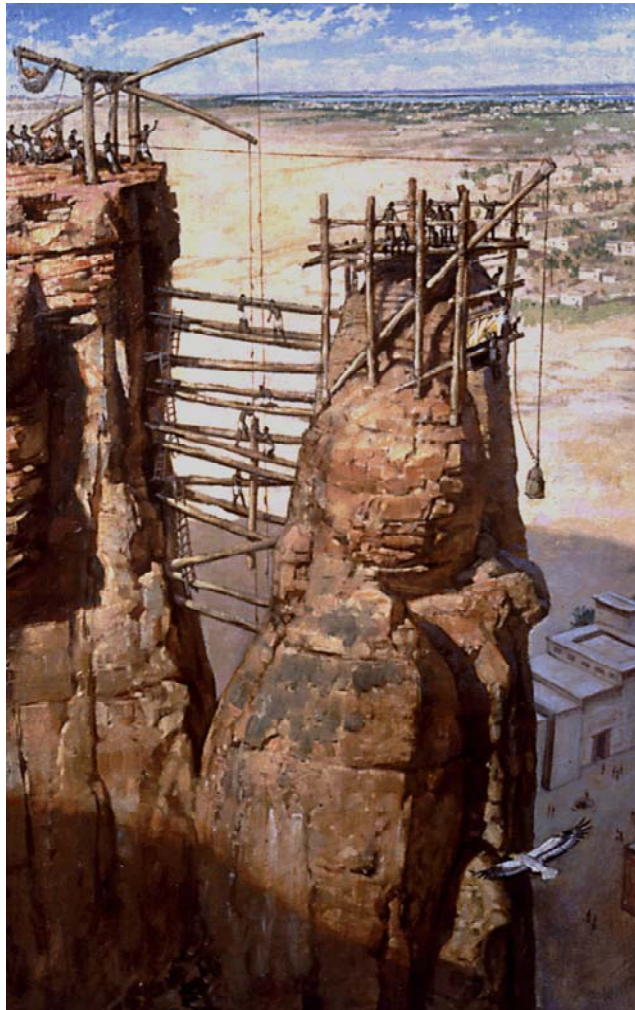


fig. 1: *Artist's conception of the pinnacle monument under construction (Painting by James Gurney for National Geographic, Nov. 1990)*

The pinnacle peak, when observed from the top of Jebel Barkal, is 11 m distant from - and 5 m below - the cliff edge across a deep gorge. Under normal conditions the peak is inaccessible. It was first climbed (in modern times), and the Taharqa monument was first examined at close range, in 1987 by this writer (Kendall) with alpinist Paul Duval, using modern climbing apparatus. It was this exploration that revealed how the king's engineers were able to achieve the "impossible" (**fig. 2**).

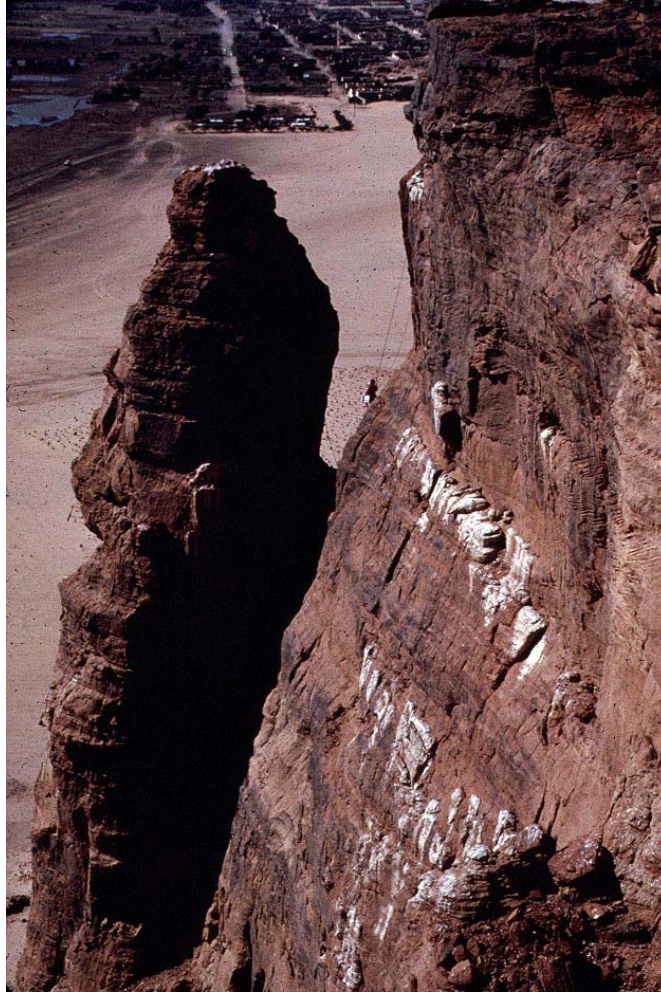


fig. 2. *Climber Paul Duval rappels off the Jebel Barkal cliff in February 1987, seeking an ascent route to the top of the pinnacle. (Photo: Cynthia Shartzer)*

On the cliff edge, directly opposite the pinnacle peak, one can see a line of three cut holes, which had supported three vertical wooden posts. These posts had clearly supported a cross-beam, propped at each end and in the middle, which had suspended a pair of hanging *shadufs*: weighted, seesaw-like lifting machines. Between the cliff walls inside the gorge, one can also see many pairs of opposing cut holes, which indicate that up to nineteen horizontal beams had been raised by the *shadufs*, working in tandem, and set firmly in the holes between the cliffs (**fig. 2**).

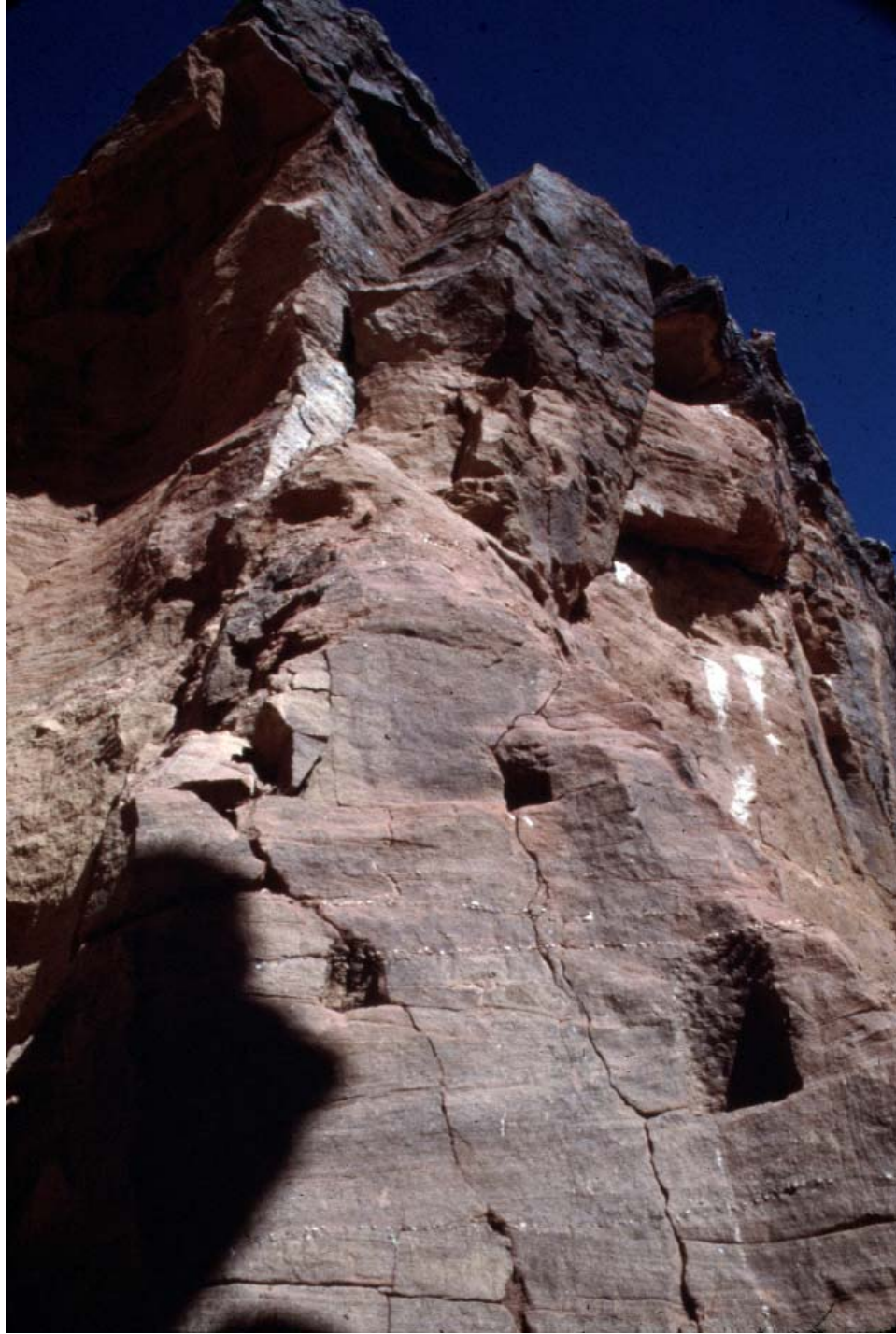


fig. 3. *Holes cut on the cliff wall, with opposing holes on the pinnacle shaft, for the insertion of wooden beams raised into the gorge to create stages, allowing for the ascent of the pinnacle by ancient workmen. (Photo: T. Kendall)*

By means of these stages, workmen were able to climb to the pinnacle summit, where they set still more beams into still other chiseled holes or grooves, which encased the summit in a wooden structure, the form and purpose of which is not entirely clear. The smoothed panel was then prepared, inscribed and covered in gold sheet (as revealed by rows of nail holes still visible in the stone) (**figs. 3, 4**). The text, now very fragmentary, reveals that Taharqa had used the panel to boast of his conquests over his enemies east and west.



fig. 4. *Panel with very worn texts of Taharqa, preserving rows of holes for nails, which had fastened gold sheet to the stone (See fig. 4). (Photo: T. Kendall)*

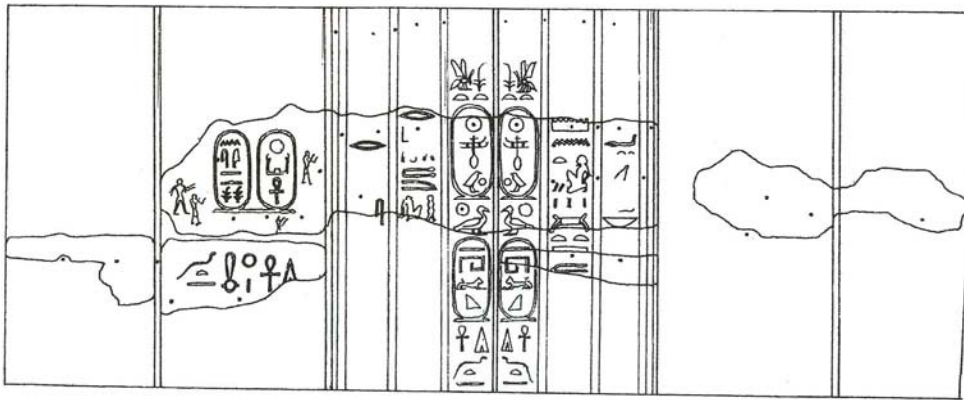


Fig. 5. Drawing of the preserved sections of the panel of inscription on the pinnacle summit, revealing mirror-image texts of Taharqa in the central sections, with the panel of Nastasen's name at left, and the rows of holes for bronze nails, used to fasten gold sheet to the stone. In the right (eastern) and left (western) sections Taharqa proclaimed his victories over his eastern and western enemies respectively. (Drawing: T. Kendall)

A diagonal channel cut deeply on the west side of the pinnacle peak was used to support a stout beam that served as a crane arm (with pulley). It was by this means that a small statue, as well as substantial amounts of mortar and stones used in artificial fills on the pinnacle face, had been raised up from the ground - lifted by means of a rope hauled by a gang of men on the cliff top, receiving instructions shouted to them by men stationed on the pinnacle summit (**fig. 1**). When the monument was complete, all the wooden staging would have been removed, rendering the pinnacle again inaccessible - except to birds. It is evident, though, from the appearance of the name of Nastasen (ca. 335-315 BC) on one of Taharqa's panels that this later Napatan king undertook and restored Taharqa's work three centuries later.

The Taharqa monument is so unusual that one might ask what meaning it had for the royal builder or what purpose it might have served. A recent theory (also proposed by this writer) suggests that it had a function closely tied to the king's pyramid at Nuri, which can be seen from the summit of Jebel Barkal on the other side of the Nile at a distance of 9.7 km to the northeast.

Ever since 1917, when the American archaeologist George A. Reisner excavated Taharqa's tomb at Nuri, Egyptologists have wondered why his pyramid was built 26 km upstream and on the opposite side of the Nile from el-Kurru, where all the other members of the king's family were buried. When it was built, Taharqa's tomb and pyramid at Nuri stood completely alone. Was he buried there because he was not of the direct royal line of the kings at el-Kurru, as some have supposed? Was he relegated to Nuri because of the shame of having lost Egypt to the invading Assyrian armies, as others have suggested? But the pyramid itself was the largest ever built in Sudan. It was raised in two or three stages, the last one surely posthumous. It stood 63 m high, and it was double the size of any other royal pyramid, which suggests that Taharqa was actually the most honored of kings. Here was an enduring mystery, without apparent solution - until one

realizes that the pyramid created a solar alignment with the Jebel Barkal pinnacle that, in the ancient mind, would have seemed to guarantee the king's eternal annual resurrection from the dead.



fig. 6. *The pyramids of Nuri. Taharqa's ruined pyramid is the very large mound at rear right. (Photo: Enrico Ferorelli)*

In Taharqa's day, as we have seen, the Kushites interpreted the pinnacle on Jebel Barkal as a powerful magical effigy with multiple meanings, depending on the angle from which it was seen. On the one hand, they perceived it as the erect phallus of Amun in his role as Creator, which identified Jebel Barkal as the perennial source of fertility and the place where, at the beginning of time, the god had self-engendered the other gods. Because the Kushites also believed that Amun was the source of divine kingship and the father of every reigning king, they would also have concluded that Jebel Barkal was the place where kingship began. Proof of this in their eyes was the fact that the pinnacle resembled a rearing uraeus, symbol of royal authority, worn on the king's crown. This association drew them to another: that the mountain was itself an effigy of a royal head or crown with its uraeus. But the pinnacle could also be seen as the vague figure of a colossal standing king - in particular, the figure of the mythical first king, Osiris, wearing his typical headgear: the tall, knobbed White Crown, symbolizing a ruler's authority over the South (or "Upper Egypt") (**figs. 7, 8**). All these meanings, and others, seemed to confirm for the Kushites that Jebel Barkal was not only the place where Time began but also the place where kingship had first appeared on earth - a tradition echoed by the Greek historian Diodorus (II.2.3), who transmitted the Nubian fable that Osiris was actually a native Kushite, who came from the South to colonize Egypt and brought "Egyptian" civilization with him.



fig. 7. *The pinnacle with the vague shape of Osiris, wearing the White Crown.*



fig. 8. *Funerary stele of Senkamanisken (ca. 640-620 BC), from his pyramid chapel at Nuri, in which the king is represented as Osiris - a form thought manifested in the Jebel Barkal pinnacle. Sudan National Museum, Khartoum (Photo: Enrico Ferorelli)..*

It has long been noted that Taharqa's subterranean tomb at Nuri has all the characteristics of an "Osireion," that is, the legendary tomb of Osiris - exemplified by its re-creation, built by Seti I at Abydos. This tomb type, unique among all royal tombs in Sudan, apparently allowed Taharqa, in death, literally to merge himself with Osiris, who, after his death, became god of fertility and god of the Underworld. It is also a fact that when one stands on the summit of the pyramid (now a ruined mound) and looks to Jebel Barkal in the southwest, the pinnacle has the pronounced profile of Osiris as a mummiform man (or a standing king) wearing his characteristic White Crown.

It is also a fact that between the pinnacle and the pyramid there exists a perfect astronomical relationship, coincident with the official ancient dates for the rising and falling Nile, events which were also thought to mark the supposed annual rebirth and death dates of Osiris!

In death every king was believed literally to become Osiris, just as in life every king was believed literally to be his son Horus. According to legend, Osiris was assassinated by his brother Seth, god of Chaos, and was relegated to rule the Underworld. His death was avenged by Horus, whom the gods mandated to rule the terrestrial world. Due to the prominence of Taharqa's pyramid and its unusual underground tomb, it is perhaps not unreasonable to suspect that this king was more closely identified with Osiris than other kings of his day, for just as Osiris was thought to have been assassinated by Seth and the forces of Chaos, Taharqa had been figuratively "assassinated" by the armies of Assyria, the latter day "forces of Chaos," whose invasions of Egypt were unprecedented in Egyptian history, having almost no parallel except in the Osiris legend. By having himself buried in a tomb simulating that of Osiris, and by merging himself in statue-form with the Jebel Barkal pinnacle (which appeared to be a vague statue of Osiris), the king was probably thought literally to have "become" Osiris, the tragic first king of Egyptian myth. In this role, despite the misfortunes that marked his later reign, he could perhaps anticipate a happy future in which he would be avenged by a new Horus, which would signal the beginning of a new and glorious age - a complete renewal and renaissance of the Egyptian state under Kushite rule.

Aside from being ruler of the Underworld and mythical first king, Osiris was also a god of fertility, who was believed to come back to life every year during the flood season. Every year he was thought to be reborn on New Year's Day - the day when the Nile began its rise - and to "die" three and half months later at the time of the Khoiak festival, when the Nile began to recede. In the Egyptian civil calendar, New Year's Day was calculated officially as the moment when the bright star Sirius first appeared above the horizon just before dawn in its heliacal rising, when observed at Karnak. In 664 BC, the year of Taharqa's death, this moment occurred on August 7. (Due to a slight wobble in the earth's rotation over the last 2680 years, this moment now occurs on July 31, which can be confirmed by modern astronomical software.) In Taharqa's day, the Khoiak festival, which marked the end of the inundation season and honored Osiris' "death," began about November 23. In our own time this moment has become November 16.

Today if one stands on the summit of Jebel Barkal - on the cliff edge directly opposite the pinnacle - at sunrise on July 31 (the modern astronomical equivalent of the ancient New Year's Day in the ancient Egyptian civil calendar) and looks to the northeast horizon, one will see the sun rise directly over Taharqa's pyramid (**fig. 9**). In the ancient Egyptian mind, this would have been the perfect metaphor for the king's rebirth as Osiris. Conversely, if one stands on the summit of Taharqa's pyramid at sunset on November 16 and looks to Jebel Barkal, he will see the sun set directly behind the Jebel Barkal pinnacle, silhouetting the rock spire, which appears as a figure of the god, wearing his tall knobbed crown (**fig. 10**). The god silhouetted by the setting sun was the normal Egyptian way of representing the "dying" sun god, Atum, with whom Osiris (and the deceased king) were thought to be merged (**fig. 11**).



fig. 9. *The sun rising over the Nuri pyramids on August 1, 2015, when viewed from the summit of Jebel Barkal. One day earlier, on July 31, the sun would have risen slightly to the left, directly over Taharqa's pyramid (the large mound at left), which metaphorically signified that the king had been reborn. Unfortunately, on July 31, 2015 the sunrise was obscured by heavy haze. (Photo: Bryan Whitney.) The sunrise over the pyramid marked the official start of the New Year, when the Nile began its flood; it was also celebrated as the birth and rebirth day of Osiris, the god with whom Taharqa was identified.*



fig. 10. *The sun, when viewed from the summit of Taharqa's pyramid on Nov. 16, sets behind the pinnacle on Jebel Barkal, silhouetting the rock spire like a "dying god" (see fig. 11). The date approximately coincides with the ancient Khoiak festival, which signified the end of the inundation and commemorated the annual "death of fertility" and of Osiris, the god thought to supply it. (Photo: T. Kendall).*

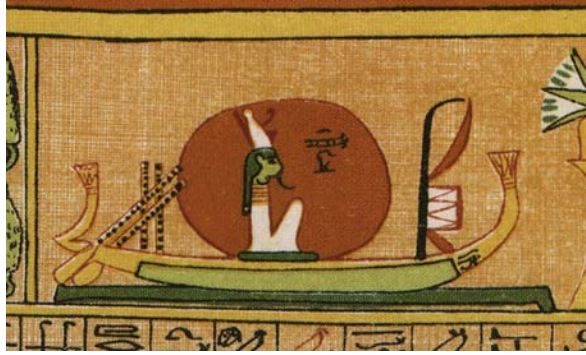


fig.11. *The god of the setting sun, Atum, who embodied both Amun (as Re, "Sun") and Osiris, shown in his divine boat passing into the Underworld at sunset, as depicted in the Book of the Dead, Spell 17; Papyrus of Ani, British Museum. (R. O. Faulkner, trans. The Ancient Egyptian Book of the Dead. New York: 2005, 45). (On Atum, see also B 700, p. 102).*

The temple B 700 (q.v.) at the foot of the Jebel Barkal cliff, just beside the pinnacle, seems to have been a temple to Osiris, built by Atlanersa, Taharqa's presumed son and second successor. Here fragments of an extensive hymn to Osiris (quoted below) were discovered in the sanctuary - a hymn which can be taken to allude to Taharqa both in his tomb and in his pinnacle monument. In both places, he was thought to be physically merged with Osiris. (The text is especially revealing when we realize that in his tomb Taharqa's mummy and coffins were deliberately laid in a crypt filled with ground water!)

"Greetings to you, Osiris, Lord of Eternity,
 King of the Two Lands (i.e. Egypt and Kush),
 Chief of both banks (i.e. Jebel Barkal and Nuri?), ...
 Youth, King, who took the White Crown for himself ...
 Who makes himself young again a million times ...
 What he loves is that every face looks up to him...
 Shining youth, who is in the primordial water,
 Born on the first of the year ...
 From the outflow of his limbs both lands drink.
 Of him it is arranged that the corn springs forth from the water
 In which he is situated
 Who causes to be established [the years?] of
 eternity in his name as 'Pillar' (i.e. Pinnacle?)"

Refs.

- T. Kendall, "The Monument of Taharqa on Gebel Barkal." In Steffen Wenig, ed. *Meroitica 21: Feldforschungen im Sudan und in Eritrea, Akten des Symposiums Berlin, 13-14.10.1999*. Berlin 2004, 1-45.
- T. Kendall. "Why did Taharqa Build his Tomb at Nuri?" In *Between the Cataracts: Proceedings of the 11th Conference for Nubian Studies, Warsaw University, 27 August – 2 September 2006. Part One: Main Papers*. Polish Archaeology in the Mediterranean, Supplement Series 2:1. Warsaw 2008, 117-147.

B 500: The Great Temple of Amun of Napata: New Kingdom Phases.

The Great Temple of Amun of Napata (B 500) was the largest temple ever built in Nubia, with an overall length of 156 m. It did not reach its final size, however, until the reign of the Kushite king Piankhy (ca. 747-716 BC), who completed its hypostyle hall (502) and added its outer court (501). These additions enlarged by two-thirds the original nucleus temple, which had been built in at least six stages by the Egyptian pharaohs from the mid-18th to the 20th (possibly even 21st) Dynasties (ca. 1446-950 (?) BC). The surviving remains of the Egyptian temple are clearly visible in B 500's innermost rooms (fig. 1).

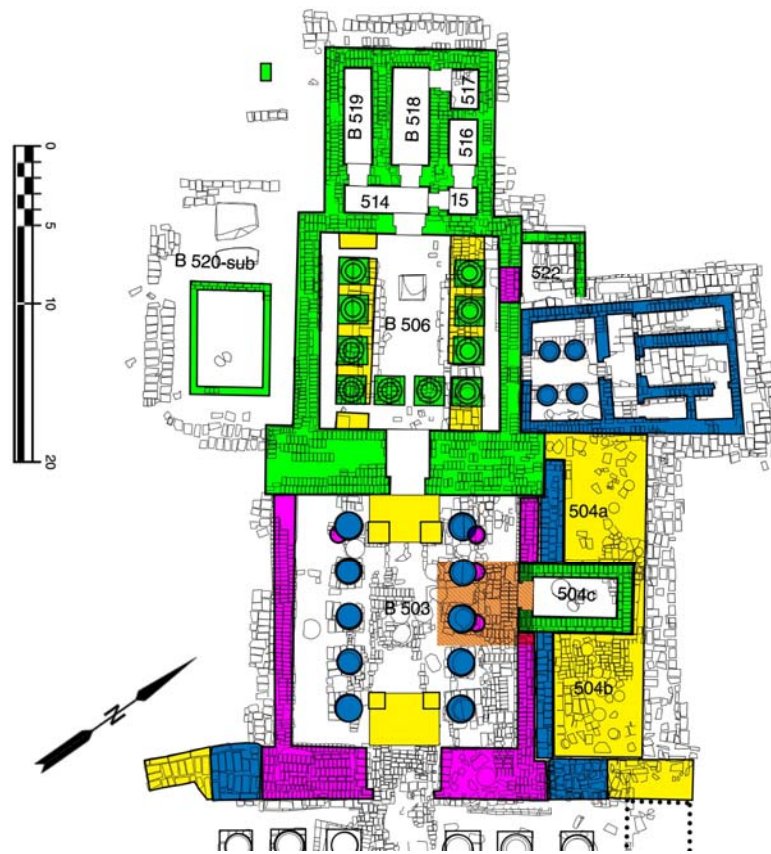


fig. 1: *The New Kingdom phases of B 500: 1) Brown: "B 500-sub," traces of an early mud brick structure under the existing pavement, probably a vestige of the first temple erected by Thutmose III; 2) Green: "B 500-Phase I," elements of the first stone temple, built entirely with grey or yellow "talatat" blocks, suggesting a date early in the reign of Amenhotep IV ("Akhenaten"); 3) Purple: "B 500-Phase II," additions made with white sandstone talatat blocks, probably datable to the reigns of Tutankhamun and/or Horemheb; 4) Blue: "B 500-Phase III," additions probably made by Seti I and likely completed by Ramses II early in his reign; 5) Yellow: "B 500-Phases IV-V," additions made later in the reign of Ramses II or in Dynasty 20. (The uncolored outer blocks are assumed to have been added by Piankhy: "B 500-Phase VI") (Survey plan by Robert C. Rosa III and Geoff Kornfeld, based on field observations of Heather Wilson).*

B 500-sub: Thutmose III (?)

The earliest remnant of a temple within the ground plan of B 500 is a fragmentary mud brick foundation, called "B 500-sub," which was discovered under the late 18th Dynasty stone pavement in court B 503 (**fig. 1: brown**). What remains of this structure is assumed to be a fragment of the first Amun temple known to have been built on the site, which was ordered by Thutmose III (1479-1427 BC) shortly after his military occupation of Jebel Barkal, about 1446 BC. The king mentions this temple in his Jebel Barkal Stele (now in the Museum of Fine Arts, Boston), where he called it Amun's "Resthouse for Eternity." Although there is no indication from the surviving remains how large this building was, or what it looked like, it stood on the NE side of what would become the axis of the later temple. Its presence is indicated in the rendering below (**fig. 2**) as the small gray building (*purely hypothetical* in form) on the right of the later ramp.

B 500-Phase I: Amenhotep IV/Akhenaten

"B 500-Phase I" is the first stone phase of B 500 and the first whose remains are actually visible on the surface (**fig. 1: green**). This temple may actually have been built in two stages: the first (Phase Ia), 30.5 m long, being the complete small temple built behind B 500-sub, as pictured in **fig. 2**. Because no earlier remains could be found under its foundations, it was apparently built on virgin ground while B 500-sub may still have been standing in front of it, functioning as the god's first cult place.

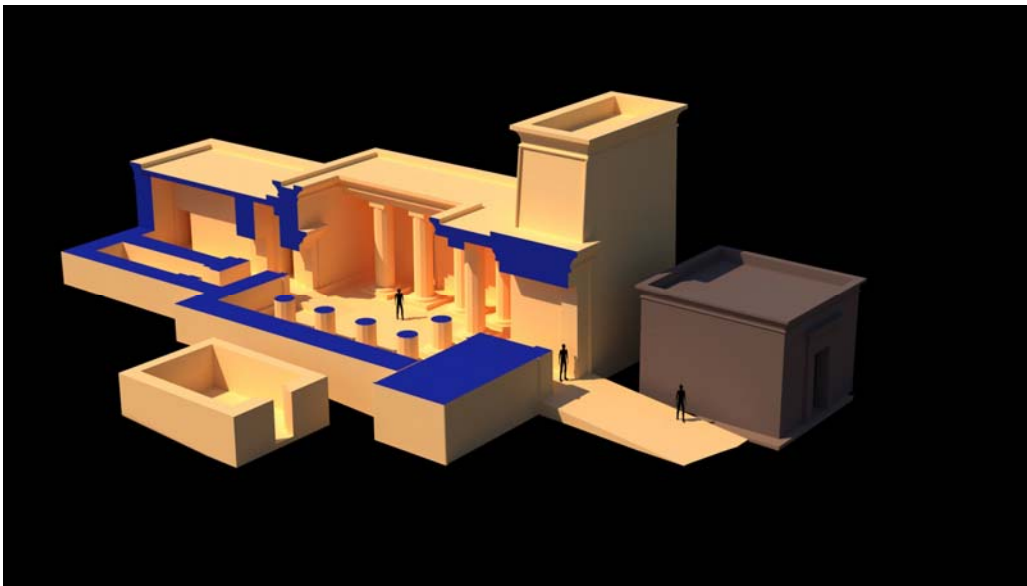


fig. 2. The original temple of Amun, built by Thutmose III, was probably of mud brick. A vestige of it may be the mud brick foundation ("B 500-sub"), found under the floor in court B 503 on the northeast side of the later temple axis (**fig. 1**). Its presence is suggested above by the small structure at right, which seems to have been replaced early in the reign of Amenhotep IV with the first stone temple (B 500-Phase Ia), shown behind it in cutaway view. (Model by Geoff Kornfeld © 2015 Learning Sites, Inc.)

B 500-Phase Ia had three parallel sanctuaries (516-519), an antechamber (514-515), an open forecourt with a peristyle of ten faceted columns (506), an open porch on the northeast side (522), an unroofed(?) structure (B 520-sub) on the southwest side and a stone pylon (**fig. 1**). When this temple was completed, B 500-sub was probably then dismantled and replaced with further additions to Phase I. This included at least the stone chapel 504c (built perpendicular to the temple's axis), which was constructed over the place where B 500-sub had stood. That this chapel belongs to Phase I is clear because it is built with the same yellowish sandstone blocks employed in the original temple. Since it is doubtful that 504c (judging by its later importance) would have been built to stand outside the Phase Ia temple compound, one suspects that it was incorporated into it by a later mud brick extension (Phase Ib) that would have included an outer court wall and a second pylon (**fig. 3**). If this mud wall and pylon actually existed, they would themselves have been removed without a trace and replaced with stone in Phase II (**fig. 6**).

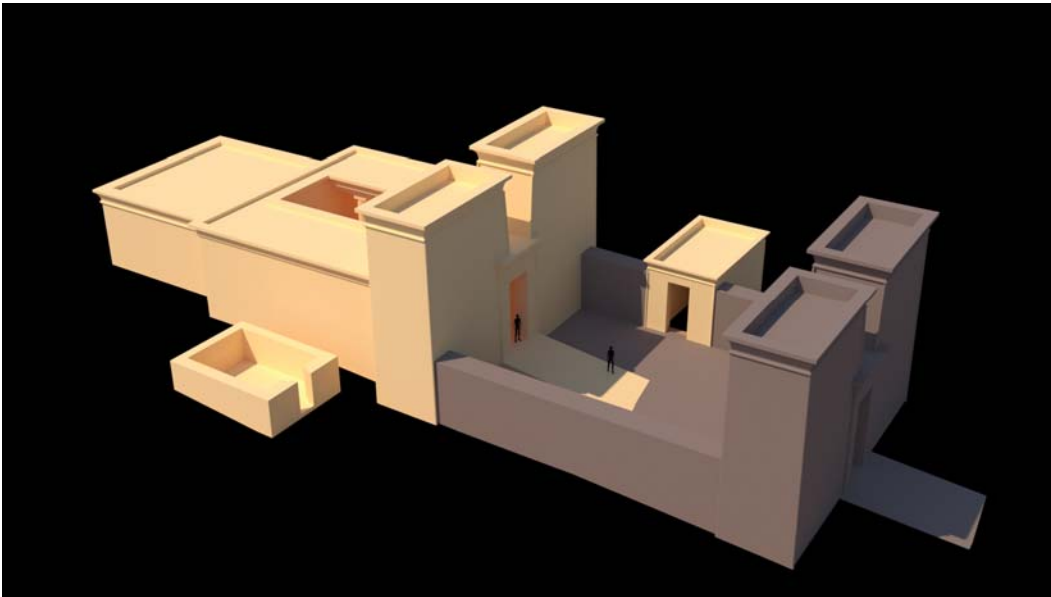


fig. 3. *B 500-Phase Ib (hypothetical). This restoration is based on the assumption that following the completion of B 500-Phase Ia, the old mud brick building B 500-sub was removed and the small chapel B 504 was built over the site where it had formerly stood. Given the importance this chapel assumed in Phase II, it seems doubtful that it would have stood outside the temple in Phase I, so this mud brick extension ("Phase Ib") is postulated, which was replaced with stone in Phase II (see fig. 6). (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*

B 500 Phase Ia and the chapel B 504c were built entirely with the small brick-like stone blocks known as *talatat*. Well known in Egypt, these blocks were regularly one Egyptian cubit (about 52.3 cm) in length by 1/2 cubit (26 cm) in width. Since they were invented and used mainly by Amenhotep IV/"Akhenaten" (ca. 1352-1336 BC), with only brief later use by his immediate successors, their presence here allows us to date B 500 Phase I

fairly precisely to the late 18th Dynasty. That all of the stone features identified here as "B 500 Phase I" were built more or less contemporaneously is suggested by the fact that all were constructed with *talatat* of grayish or yellow sandstone (**fig. 4**). These blocks differ markedly in color from those used in Phase II, which are all white sandstone (**fig. 8**), making the two phases easily distinguishable.

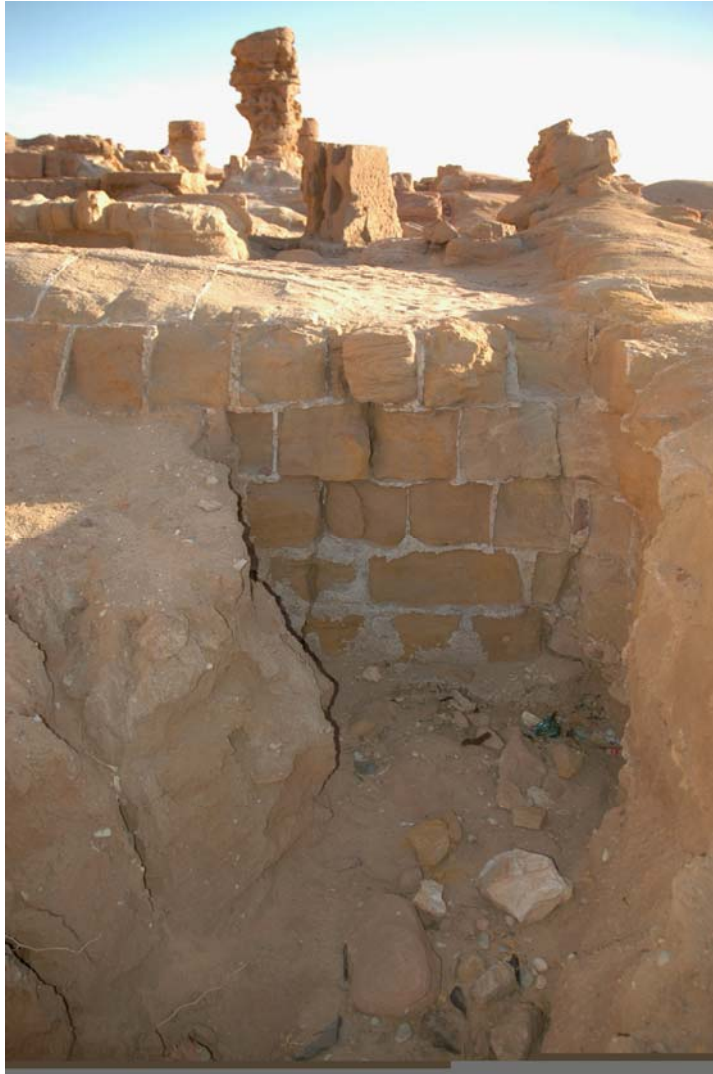


fig. 4. *Yellow sandstone talatat blocks in the foundations of B 500-Phase I.*

Amenhotep IV, who changed his name to "Akhenaten," was the king most famous in Egyptian history for attempting to eradicate the Amun cult and to replace it with direct, open-air worship of his new sun god, the deified sun disk, known as the Aten, which he considered the sole god - to the virtual exclusion of all others.

Because B 500 Phase I appears to have incorporated both closed and open-air sanctuaries, it gives the impression of having been built to incorporate both the traditional cult of Amun (as Re, "Sun"), who was worshiped in closed sanctuaries, and the Aten, who was worshiped in open-air sanctuaries. In Phase I the closed sanctuaries are rooms 516-19

and 504c, while the open air sanctuaries or offering places would seem to be B 520-sub and terrace 522 (**figs. 1, 2, 5**). B 500 Phase I may well belong to the "proto-Amarna" period: that is, to the period very early in the reign of Amenhotep IV, before he changed his name to "Akhenaten" - and before his complete break with the Amun priesthood - when he was likely ruling jointly with his father Amenhotep III (ca. 1388-1351 BC) and when the worship of both gods "under one roof" may have been possible.

Other near contemporary structures on the site are the roofless chapels B 700-sub 1 and 3 (q.v.), which were built with the same gray and yellow sandstone *talatat* blocks seen in B 500-Phase I. These appear to be roofless offering chapels for the Aten. The presence of these on the site, and examples of the erasure of Amun's name from a number of local monuments at the site, clearly indicate that during the king's seventeen year sole rule the Aten must have supplanted Amun as the chief god of Jebel Barkal, just as it did elsewhere in Egypt.

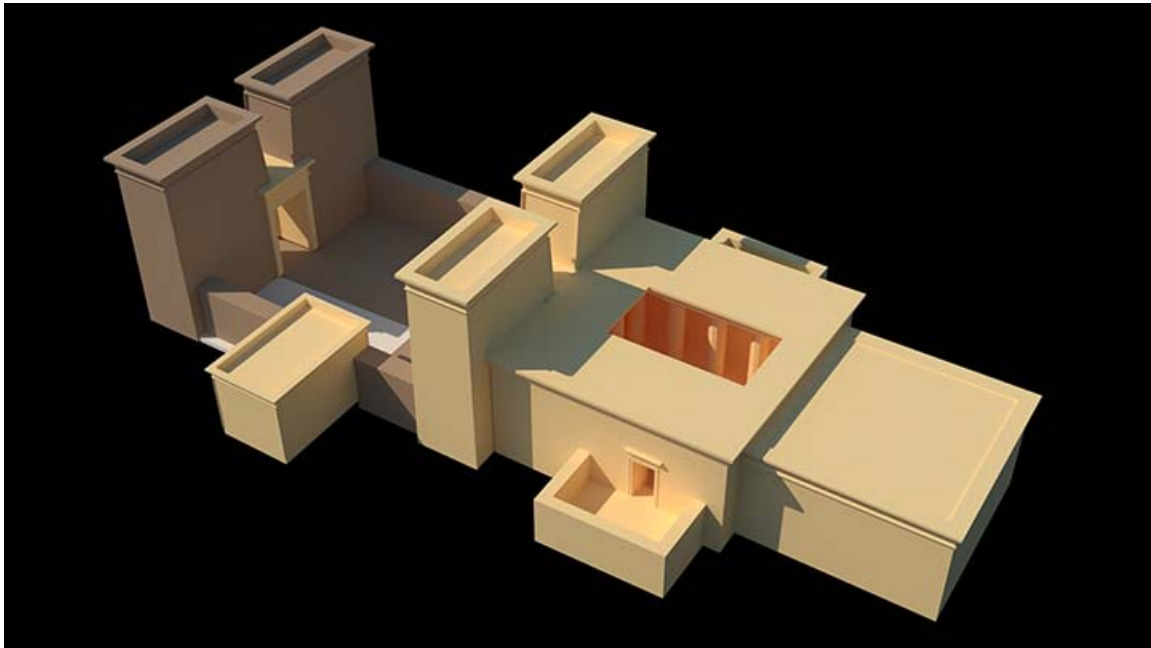


fig. 5. *If B 500-Phase I appears to be a conventional Amun temple with enclosed sanctuaries, it seems to have had open-air sanctuaries on either side - possibly for making direct offerings to the Aten. The terrace in the foreground, B 522, was deliberately overbuilt in Phase II and its doorway sealed up with the white stones of Phase II - suggesting that its use (i.e. for Aten worship?) had ceased after Phase I (See fig. 13).*

B 500-Phase II: Tutankhamun and Horemheb

"B 500-Phase II" is believed to be the temple as it was rebuilt and refurbished for Amun after Akhenaten's death by his presumed son Tutankhamun (1336-1327 BC) and his successor Horemheb (1323-1295 BC) (**fig. 6, 7**). Its features consisted of a new open court (503) and forward pylon built with white sandstone *talatat* blocks (**fig 8**). These

additions are thought to have replaced the theoretical earlier mud brick wall and pylon of Phase Ib (**fig. 3**). The new stone additions increased the length of the original temple to 50 m.

In Phase II, the new outer court 503 was open and paved with white *talatat*. Now, however, it featured a pair of columned porticos in front of the inside pylon and another in front of the chapel 504c. Fragments of these columns still remaining in place under later pavements reveal that the columns of the pylon porticos were round in section while those of the chapel portico were of fine, sculptured papyrus-bundle type. The floor under the 504c portico roof during Phase II was also entirely paved with green-glazed tiles, emphasizing the cultic importance of this chapel (**figs. 6, 7, 9**). From its elongated shape, one suspects that 504c may have housed a portable bark (i.e. boat shrine) of Amun, which on festival days would have been carried outside the temple on shoulder poles by files of priests (See B 500 kiosks, pp. 74-75).

In the seemingly empty southwest corner of court 503 there may have stood another small *talatat* chapel, for under the floor here were found a number of finely carved blocks that had apparently belonged to a small dismantled structure dedicated to Amun by Amenhotep-Huy, Tutankhamun's Viceroy of Kush, and his wife (**fig. 10**).

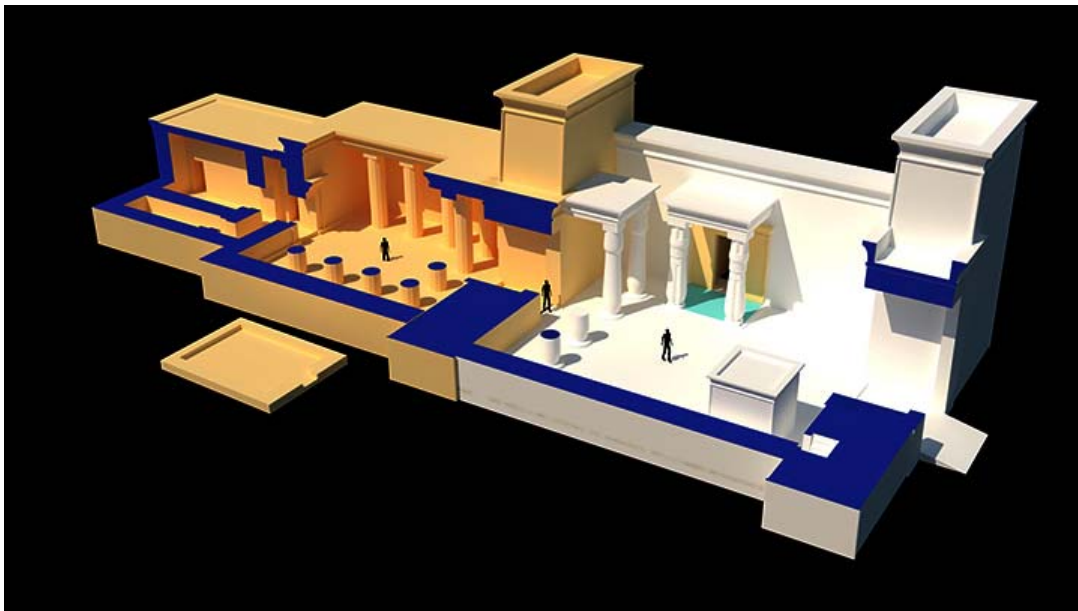


fig. 6. *Cutaway view of B 500-Phases I and II, showing the contrasting colors of the talatat blocks they employed. The earlier phase used blocks exclusively cut from grey and yellow sandstone; the later phase used blocks exclusively of white sandstone. In Phase II the open-air offering platform 522 (for Aten worship ?) ceased to be used (see **figs. 5, 13**); the same may have been true of B 520-sub (left foreground), which may also have been an open-air offering chapel for the Aten comparable to B 700-sub 1 and 3 (q.v.). (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*



fig. 7. Reconstruction of court 503 in the time of Tutankhamun and Horemheb. Note the elaborate papyrus bundle columns and green tile floor in front of chapel 504c. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)



fig. 8. View of the white talatat blocks used in the southwest wall of 503, B 500-Phase II. (Photo: T. Kendall).



fig. 9. *Green tile flooring and a papyrus bundle column base from B 500-Phase II, visible under the Phase III sandstone pavement and column base. (Photo: T. Kendall).*



fig. 10. *Finely carved talatat block from a small chapel probably erected in the southwest corner of court 503 during Phase II by Amenhotep-Huy, Tutankhamun's Viceroy of Kush, and his wife Ta-em-wadj-sy. The blocks were found reused in the pedestals for the portico columns at the rear of the first pylon in B 500-Phase IV (figs. 1, 15).*

B 500-Phase III: Seti I

Seti I (ca. 1294-1279 BC) of Dynasty 19 seems to have been responsible for eliminating the Phase II porticos in court 503, replacing them with two rows of five massive columns, and bringing an end to *talatat* construction in the temple (**fig. 11**). The formerly open court 503 was now roofed on two sides while remaining open over the central aisle (**fig. 12**). The same royal builder seems to have increased the width of the front pylon and added, on the northeast side of court 506, a large second sanctuary complex (rooms 508-511) (**figs. 1, 13**). If this feature was indeed initiated by Seti, it was certainly completed by his son Ramses II (ca. 1279-1213 BC), who signed many of the blocks. A badly broken stele of Seti I (now in Khartoum), found reused in a later pavement in 503 describes the king's renovations of the temple and has recently been shown to date to the king's Year 3 (ca. 1291 BC).

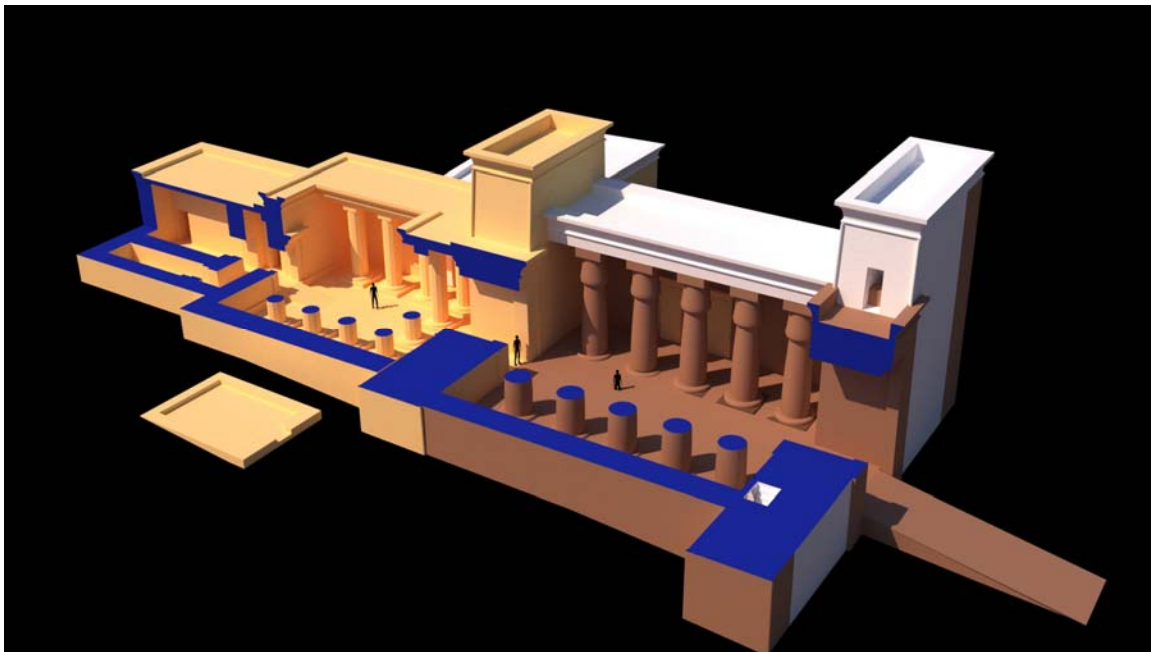


fig. 11. Cutaway view of B 500-Phase III, attributed to Seti I. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)



fig. 12. *The court 503 of B 500-Phase III, attributed to Seti I. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*

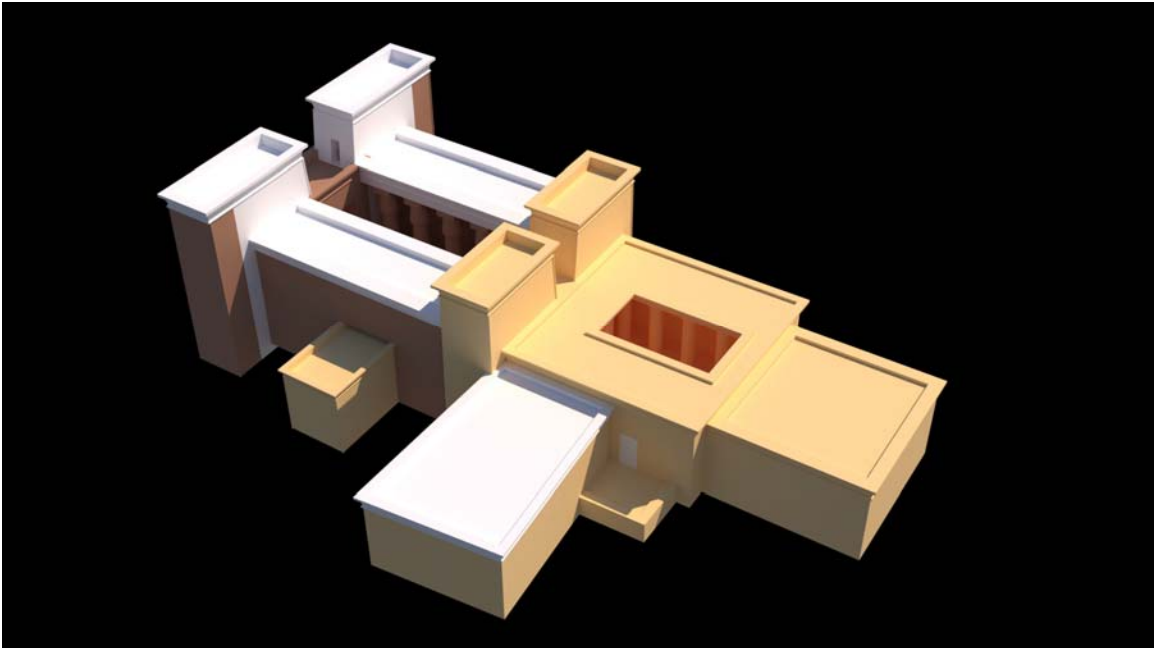


fig. 13. *B 500-Phase III, viewed from the northeast side. During this phase the temple's original triple sanctuary, directed toward the mountain (i.e. northwest) was augmented by a new triple sanctuary directed to the northeast (see fig. 1). Note that this new structure was built over the former open-air porch 522 of Phase I, which may have been used for open-air Aten worship. The door to 522 had already been blocked up with white sandstone talatat blocks in Phase II; the new sanctuary rendered it even more obsolete. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites)*

B 500-Phase IV: Ramses II

B 500-Phase IV saw significant modifications to the temple made probably by Seti's son Ramses II (ca. 1279-1213 BC). The front pylon was widened and a huge unfinished hypostyle hall of between 56 and 60 columns, was built in front of Phase III in what later became court 502 (**fig. 14**). The construction of this hall, which was planned to have a stone roof, was probably begun late in Ramses' reign and halted at his death. Not one of the columns was built higher than its foundation or circular base. Had it been completed, however, it would have doubled the size of the old temple to 104 m (i.e. 200 Egyptian royal cubits).

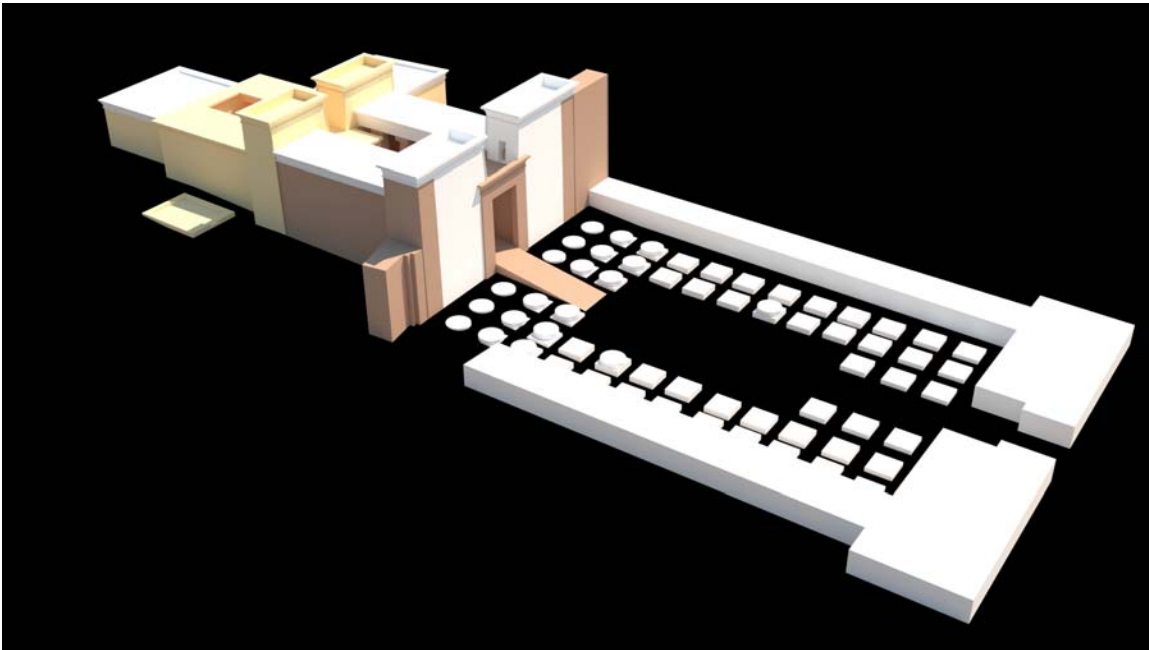


fig. 14. *B 500-Phase IV included foundations for an unfinished hypostyle hall of 56-60 columns. This construction was probably initiated by Ramses II and abandoned at his death. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*

B 500-Phase V: Dynasty 20

During Dynasty 20 (ca. 1187-1064 BC), minor additions continued to be made to the Phase III-IV temple. A pair of porches, for example, was added to the northeast side of the temple, and porticos shading the rear side of the first pylon and the front of the second pylon were added in the center aisle, which was repaved in white sandstone (**figs. 1, 15, 16**). The last known Egyptian addition to the temple may have been a small chapel sponsored by the Theban High Priest of Amun (later "King") Menkheperre (ca. 1045-992 BC) of Dynasty 21. Several of its blocks were found reused by Taharqa in the pylon of B 200 (**fig. 17**).

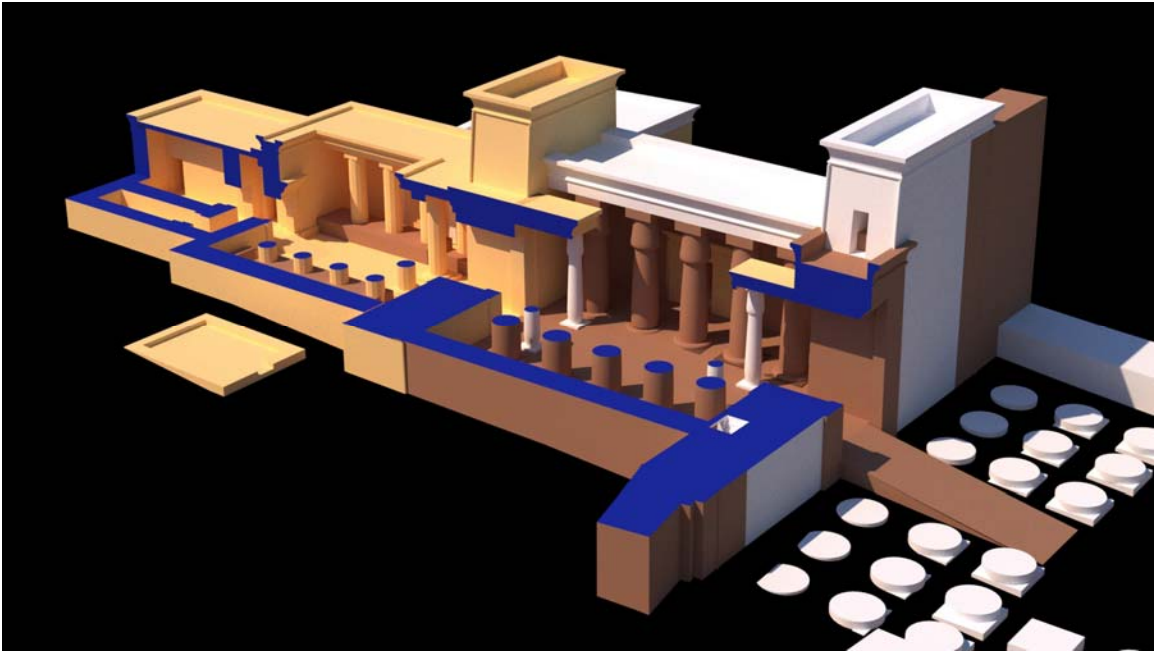


fig. 15. *Cutaway view of B 500-Phase IV: the Amun temple in Dynasty 20. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*



fig. 16. *Court 503 as it may have looked in Dynasty 20. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*



fig. 17. Relief block reused in the pylon foundation of B 200, apparently representing the Theban High Priest of Amun, Menkheperre, of Dynasty 21. (Photo: T. Kendall)

Ref. Timothy Kendall and El-Hassan Ahmed Mohamed, with Heather Wilson, Joyce Haynes, and David Klotz, "Jebel Barkal in the New Kingdom: An Emerging Picture," in N. Spencer and A. Stevens, eds. *Nubia in the New Kingdom: Lived Experience, Pharaonic Control, and Local Traditions*. London, 2016. pagination unavailable.

B 500: The Great Temple of Amun under the Kushites

B 500-Phases VI and VII: Piankhy

Not until the rise of the Kushites in the early 8th century BC were new renovations undertaken on B 500. By this time the old Egyptian temple was probably in need of serious repair. Certainly, early in the reign of Piankhy (ca. 747-716 BC), B 500 was heavily renewed internally, encased in a new outer wall (see **fig. 1**), and provided with a throne room (520), with a massive black granite throne dais (**figs. 21, 22**). Ramses II's unfinished hypostyle hall (502), which had been planned (probably) for 60 columns (**fig. 14**), was also finally completed by Piankhy with 42 columns, set in a new arrangement,

all inscribed for himself (figs. 18, 19), and the hall was roofed with timber, probably open to the sky along the axis (fig. 20).

Even before the pylon of B 502 was decorated, the king had begun construction of an even larger court (501), fronted by a still larger pylon (B 500-Phase VII) (fig. 23). This brought the temple's total length to 156 m (300 Egyptian royal cubits).

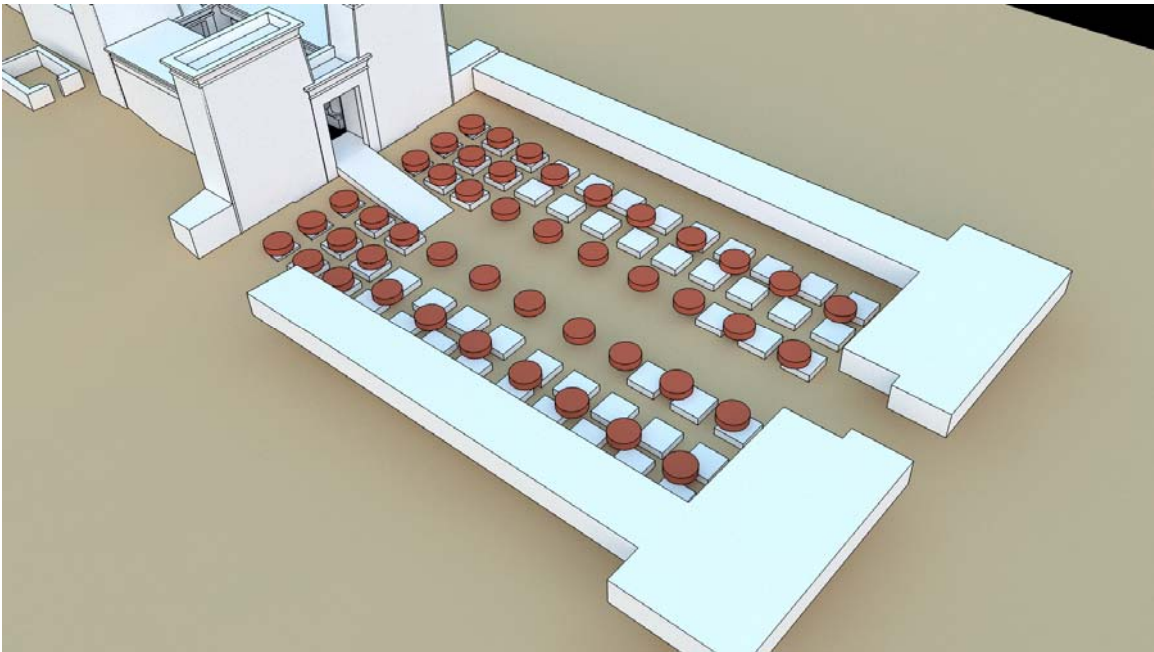


fig. 18. Court 502, showing the unfinished columns attributed to Ramses II (white) and, over them (red), the bases of the columns actually used by Piankhy in B 500-Phase VI.



fig. 19: Bases for the massive unfinished columns attributed to Ramses II underlying the smaller shallower column bases of Piankhy's columns. (Photo: T. Kendall)

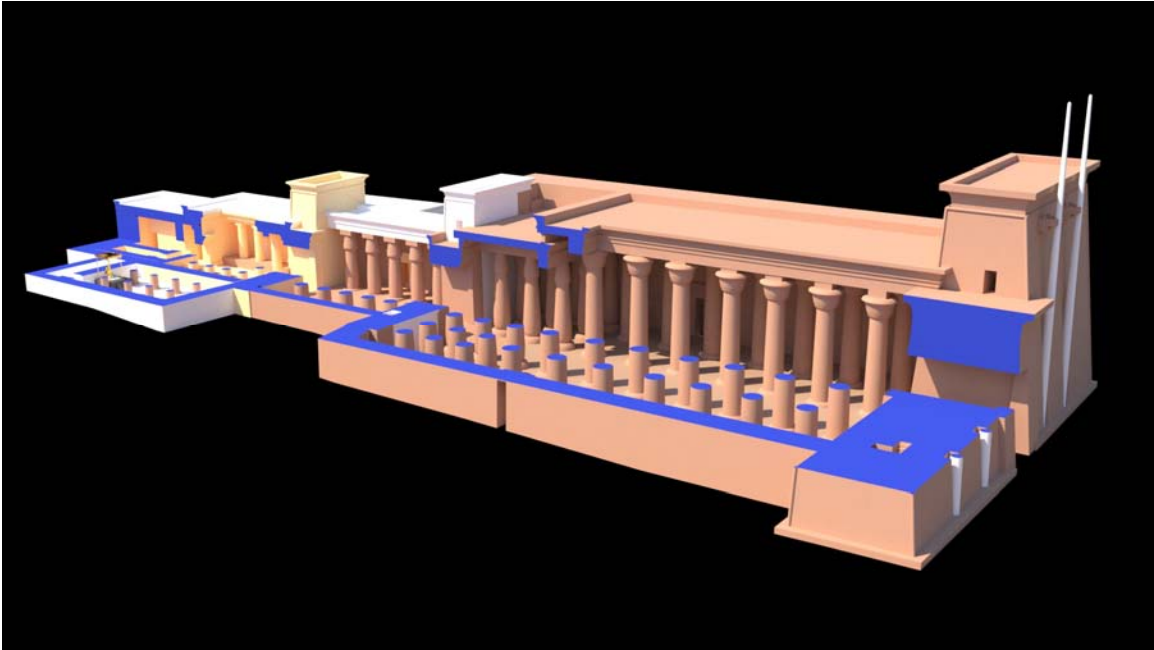


fig. fig. 20. *Cutaway view of B 500-Phase VI, showing Piankhy's completion of Ramses II's planned hypostyle hall 502. (Model by N. Reshetnikova and Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*



fig. 21. *B 520: Piankhy's new throne room, added to the northwestern corner of the temple. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*



fig. 22. *B 520: Interior view of the Piankhy throne room. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*

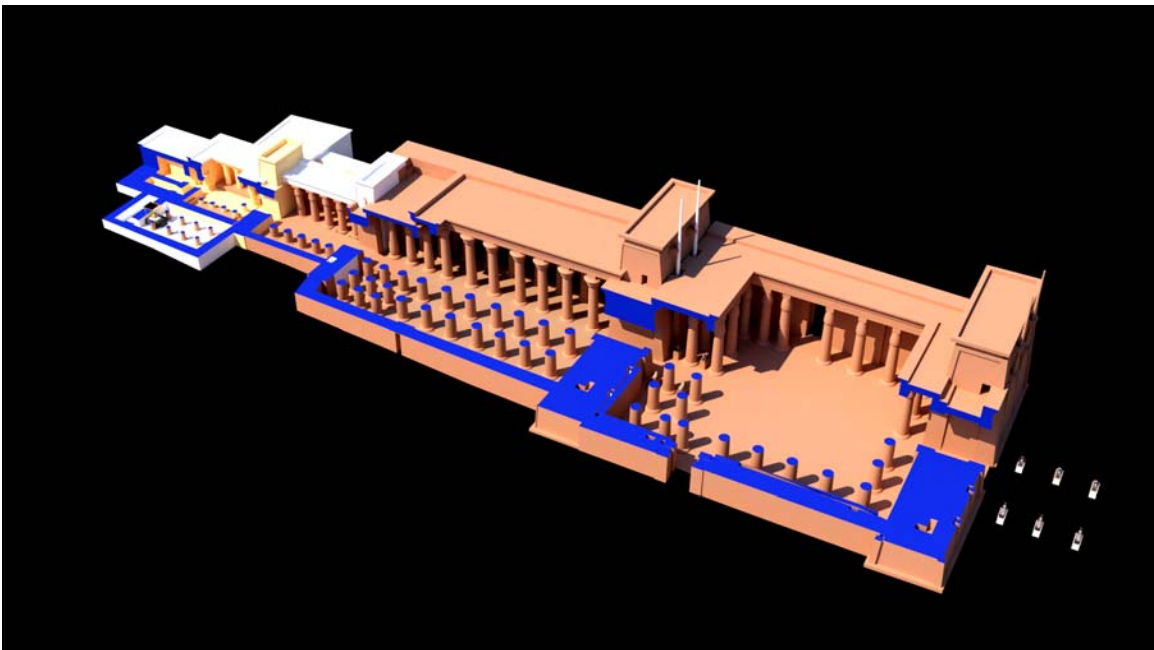


fig. 23. *Cutaway view of B 500-Phase VII. The Amun temple as it may have appeared at the end of Piankhy's reign, about 716 BC, with the new outer court 501. (Model by N. Reshetnikova and Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*



fig. 24. *A view inside Court 501 as it may have appeared at the end of Piankhy's reign. (Model by N. Reshetnikova and Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*

The main purpose of Piankhy's two great courts, it seems, was to provide wall space for the reliefs which would illustrate the events of his triumphant Egyptian campaign of Year 20 (ca. 727 BC), during which he conquered virtually all of Egypt and received oaths of allegiance from all of the co-reigning kinglets of Lower Egypt. These events were described on an enormous granite stele, set up in Court 501, which was recovered in 1862 and removed to the Cairo Museum. Today, sadly, most of these reliefs are in very poor condition or have disappeared altogether, but enough remains of the fragments to permit a description of the overall decorative program (See B 500: Piankhy reliefs). The king further adorned his new additions to the temple with select statuary of Amenhotep III, brought from that king's temple at Soleb, nearly 500 km downstream. Among these were the six ram statues placed on pedestals in front of the temple (See B 551 kiosk).

Piankhy's son and third successor, Taharqa, further embellished B 500 by contributing a magnificent stand for the god's sacred bark (see p. 75). This was originally installed in the center of room 506, but has recently been removed for its protection to the Jebel Barkal Museum. Taharqa's nephew Tanwetamani (ca. 664-653 BC) added a kiosk (or bark station) in the center of court 502, which has now almost completely disappeared. Texts, however, state that this structure was "overlaid in gold" and had "double doors (of cedar) overlaid in electrum."

B 500: The Great Amun Temple in Meroitic Times.

Piankhy's great temple was probably badly damaged in the attack of Psamtik II on Napata in 593 BC. Its statues were smashed and the temple's wooden roofs were probably torched (See B 500 Statue cache). The temple was restored later in the sixth century, and would surely have been restored and re-roofed several times after that.

The temple underwent major restoration for the last time during the joint reign of Natakamani and Amanitore (mid-first century AD) (**fig. 24**). This Meroitic royal couple refaced and re-carved the first and second pylons, and added their own reliefs to its interior and exterior walls. In Court 501 they re-plastered and repainted Piankhy's reliefs, attempting to bring them back to their former glory, while adding images of themselves and their son in procession with the gods on the temple's exterior walls. They also decorated both end walls of the first pylon with colossal standing images of Amun, facing forward. As a final touch, they erected a new kiosk or bark station in the center of 501. Another kiosk, B 551, was built in front of the temple's entrance, probably by their predecessor Queen Amanishakheto (see B 500 Kiosks).

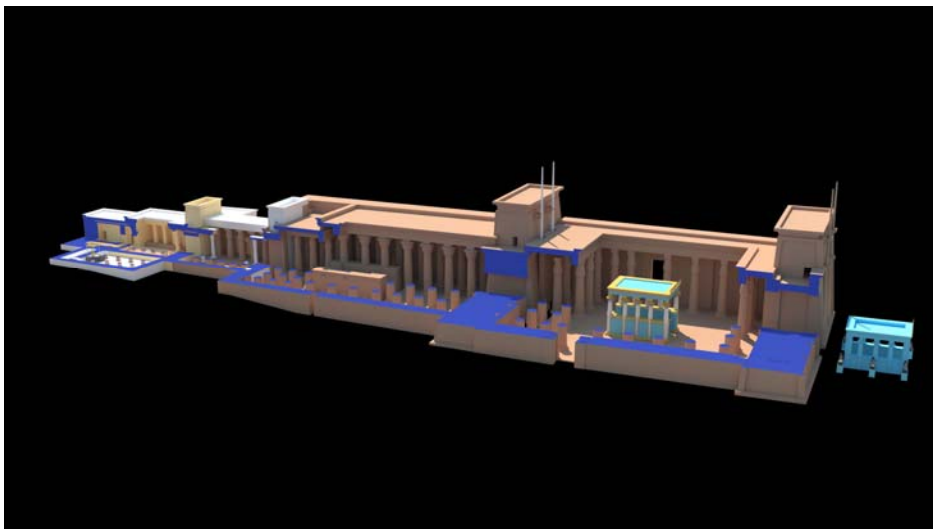


fig. 25. *B 500 in later Meroitic times, with the kiosk B 551 of Amanishakheto(?) in front of the temple, and the kiosk B 501 of Natakamani and Amanitore inside B 501. (Model by N. Reshetnikova and Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*

In Meroitic times B 500 remained an enduring symbol of the ancient glory of Kush and must have been a source of inspiration for all kings and ruling queens who journeyed there. The great edifice, the home of Amun of Napata, the ancient Nubian national god, was maintained as a place of royal coronations and visitations, and as a kind of treasury, where precious cultic implements, donated by long dead kings, as well as their crowns and scepters, were stored. The temple would have been an imperial museum, a source of enormous national pride, and a link with the past for future generations. As works of art, the Egyptian statues and reliefs of Piankhy must also have served as primary sources of inspiration for the sculptors of later Kushite times, during periods when external contacts were limited.

B 500: The Reliefs of Piankhy

The fine relief with which Piankhy covered the walls of his great temple has now either disappeared due to erosion or is now in very poor condition. Fortunately, large sections of it, which are now lost, were carefully recorded in drawings by travelers in the early and mid-19th century, and these drawings, when joined to other surviving fragments, recently exposed by excavation, can be used to present a fairly complete description of the king's decorative program. The temple map indicates the locations of the scenes described below (**fig. 1**).

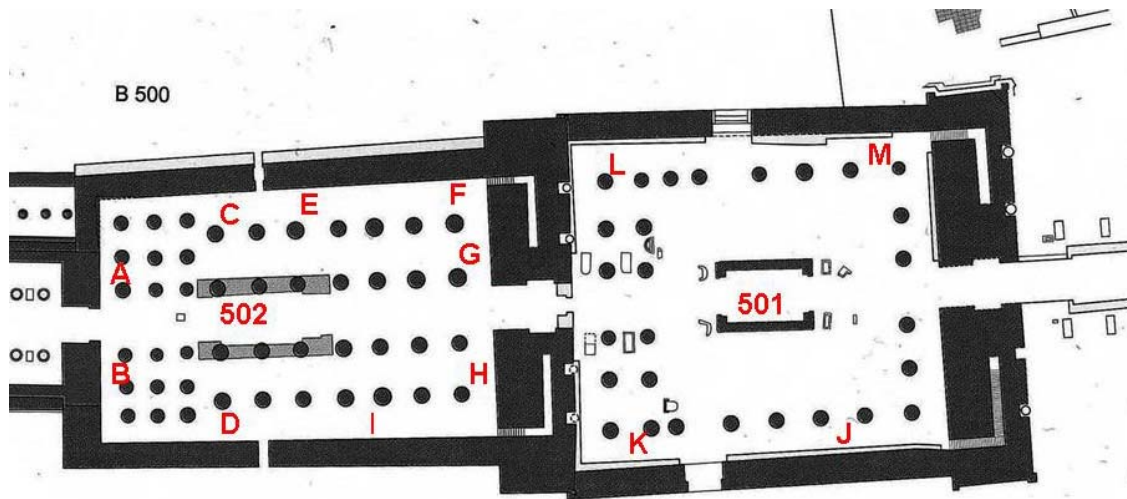


Fig. 1: *Key to Piankhy's relief program.*

Hypostyle Hall 502

Wall Sections:

A and B

The end walls of 502, flanking the doorway leading into 503, were originally carved with near mirror-image scenes of the king, standing, facing inward, toward an enthroned figure of Amun, facing outward, followed by a standing figure of Mut. The oppositional Amuns would probably have been ram-headed and human-headed, upstream and downstream, respectively.

C and D

Each of the side walls of 502 was bisected by a doorway. The wall sections to the rear of the doorways pictured the emergence of the bark of Amun leaving the temple. The NE wall (**C**) depicted the king and his chief queen (**fig. 2**), followed by a retinue of offering and standard bearers, all facing left, greeting the bark, proceeding right, which was carried on the shoulders of twenty-four priests, in two files of twelve. The opposite (SW) wall (**D**), now lost, once preserved lines of standard bearers and dancing women greeting the bark as it emerged from the temple (**fig. 2**).

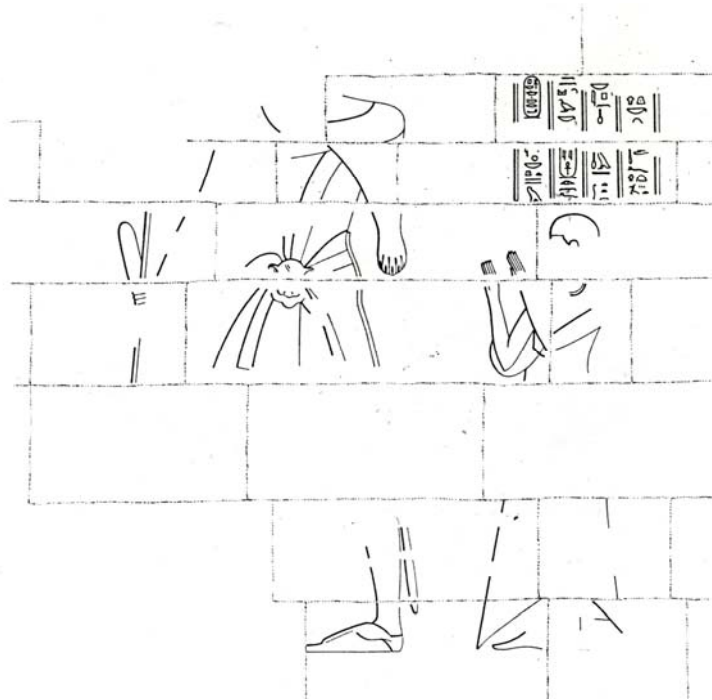


Fig. 2. Detail from wall C, showing the over-lifesize image of Piankhy, greeting the bark of Amun (approaching from left), accompanied by his "great royal wife" Peksater. The text above her head is now lost, but it was largely preserved in an early photo taken by J. H. Breasted of the University of Chicago in 1906. The text recorded the queen's words: "Oh Amun-Re, Lord of the Throne of the Two Lands (i.e. Jebel Barkal) in Napata, your son, King of Upper and Lower Egypt, Piankhy has made [for you] this beautiful monument, the most beautiful monument in Nubia, [so that you may establish him] upon your throne on [earth], his words having authority over mankind." (Drawing: T. Kendall, inked by Susan Osgood).

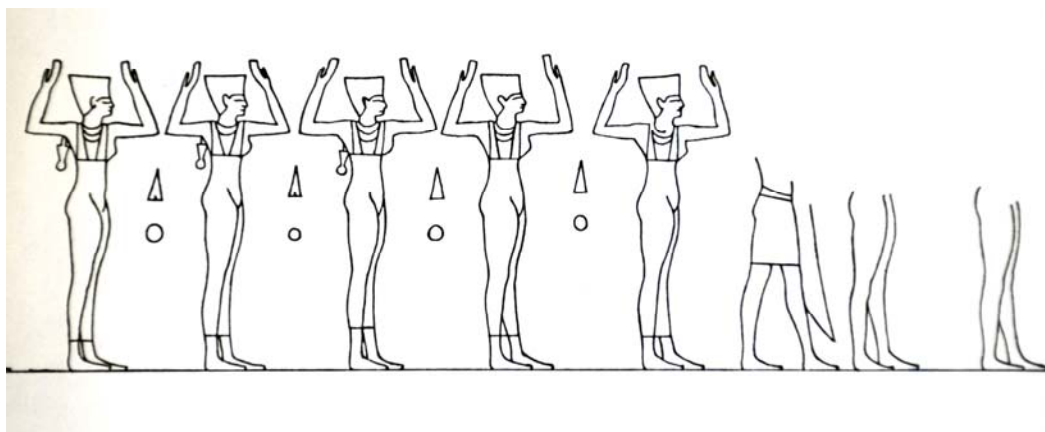


Fig. 3. Detail from wall D, depicting a row of dancing girls greeting the bark of Amun shown on the opposite wall. After a drawing by Alessandro Ricci, who visited Jebel Barkal in October 1821, now preserved in the British Museum.

E and F

The wall sections forward of the side doors in 502 are very poor condition. Despite the damage, however, enough remains to suggest that the pictorial narrative was composed in a clockwise direction, which moved from the NE side door (E > F), across the rear walls of the second pylon (G > H), to the SW side door (I). In other words, it moved from upstream ["south"] to downstream ["north"]) and depicted the early events in the king's Egyptian campaign, which were described on his Victory stele (ll. 1-9), which was set up in Court 501. Legs of two standing queens at E suggest that the king appeared here standing or seated with his women, facing right, receiving a messenger from Egypt, represented by the feet of a small figure facing left. This would have been the messenger who brought the news to the king in Napata of the grave threat to the Thebaid posed by the newly formed confederation of Lower Egyptian city-states under Tefnakht of Sais.

Piankhy's decision to mobilize his troops and to go himself to Egypt (stele ll. 9-26), his arrival at Thebes and his celebration of local festivals (ll. 26-29) was probably the subject of the missing middle sections of the wall. The different registers, now lost, would probably have depicted the king's military preparations at Napata, his march downriver to Thebes, and the homage paid by him to Amun at Karnak. Section F, at far right, portrayed a striding groom leading a horse (**fig. 4**). The groom survives only as two sandaled feet, while the horse can be traced only in the faintest outlines.

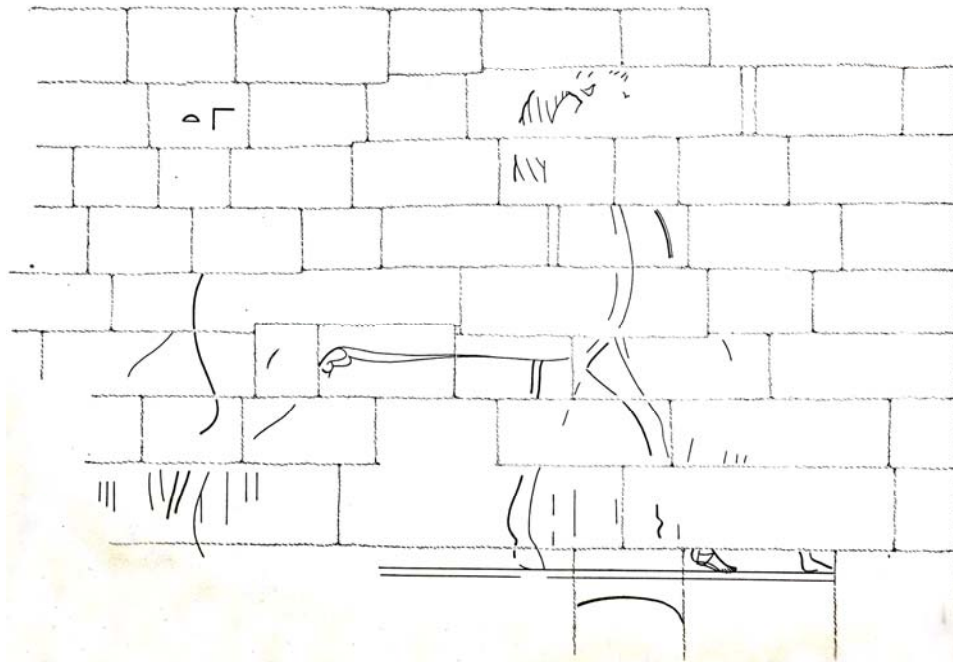


Fig. 4. A full-sized horse at F (fig. 1), being led to the right ("north" to Egypt) by a groom. The dotted line on the right is the intersection of the wall with the pylon. (Drawing: T. Kendall, inked by Susan Osgood)

G and H

The second pylon of B 500 is much ruined and eroded, but its rear wall surface was once fully carved and evidently pictured the continuation of the story told on the NE side wall (E > F). Today no part of the original pylon wall surface exists higher than 3.5 m, but in the early nineteenth century these walls still stood at least 10 m. high on each side, as revealed by drawings of the ruins made by several of the early European visitors to the site. At that time the original relief on the rear walls still survived almost to that same height, and these scenes were carefully drawn and recorded by several of them.

As we now know it, the rear side of the NE pylon tower (G) was divided into at least five registers. The upper two, now completely lost, depicted scenes of Kushite chariots moving right ("north") with Egyptian troops fleeing before them (**fig. 5**). Behind the wheel of the lower chariot was the figure of a kneeling enemy being slain by a larger Kushite warrior, and behind them was a pair of large feet, suspended in the air. These were surely the feet of a captive grasped by the hair and suspended by an even larger figure of the king, who would have stood over the door leading up into the pylon and filled the top two registers behind the chariots (**fig. 5**).

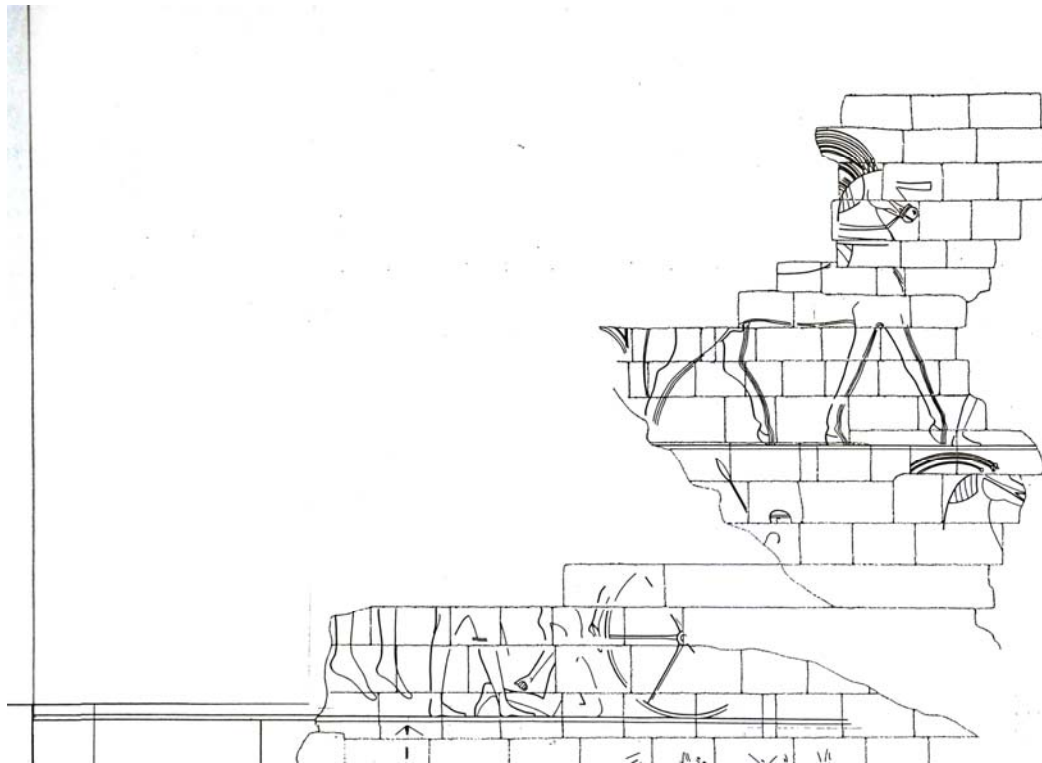


Fig. 5. Reliefs preserved on the upper wall (G) of the NE tower of the second pylon in the 19th century. (Drawing: T. Kendall)

Below the battle scene, there was a narrow third register containing a badly eroded view of the Nile. At the far left, faint traces of a ship appeared moving right on a watery surface toward a long ramp, with figures of men and horses disembarking (**fig. 6**). Based

on lines in the Victory Stele, we could guess that the river action culminated on the right side of the wall with the siege or surrender of Hermopolis (ll. 30-69). This was apparent by what was preserved in the two registers below.

Under the riverscape, large scale figures reappeared - again part of a row of horses led by grooms, proceeding to the right. Of these only a single horse on the left side of the wall is partly preserved, together with the feet, neck, and shoulders of its groom. The evidence for believing that the theme of the wall was the fall of Hermopolis is found on the fifth and lowest register.

Following his acceptance of the surrender and tribute of Nemlat, the Hermopolite king, Piankhy went to the temple of Thoth, and, as the text of the stele says (l. 59): "slew oxen, calves, and geese for his father Thoth, the Lord of Hermopolis, and for the Eight Gods, who were in the House of the Eight Gods." These sacrifices appear to be illustrated below the horses, for here are traces of nine tiny trussed oxen - one for each god - prepared and bound for slaughter, each beside a table supporting two conical round-bottomed pots, a small bouquet of flowers, and two vertical palm fronds (**fig. 6**).

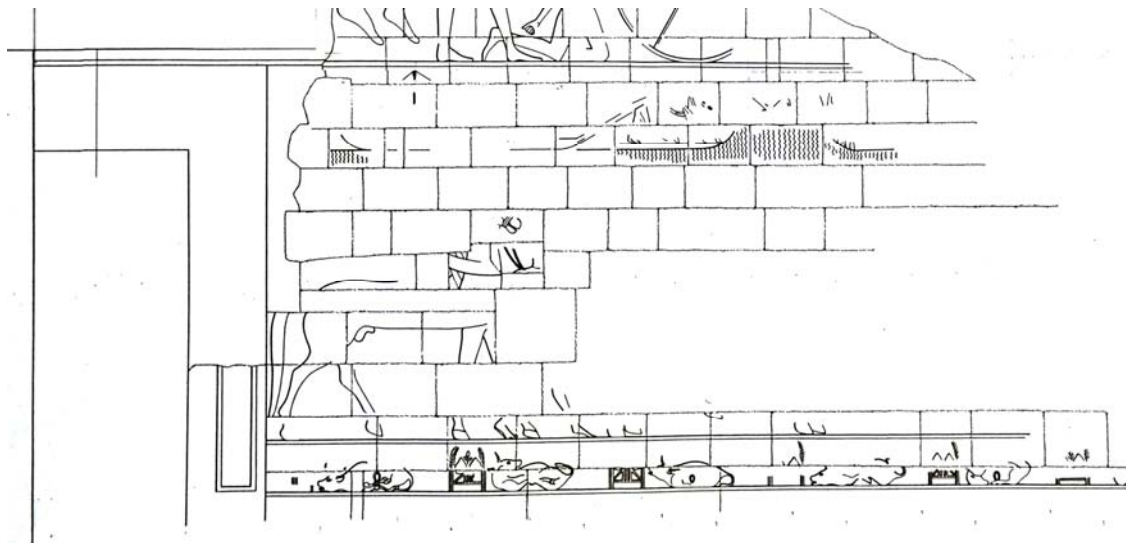


Fig. 6. *Reliefs preserved on the lower wall (G) of the NE tower of the second pylon, as recorded by the Mission in 1986-87. At left is the doorway to the stairway inside the pylon. (Drawing: T. Kendall)*

If these oxen represent the sacrifices made to the gods of Hermopolis, the horses above must represent those presented to Piankhy by Nemlat. Although many of the details of Nemlat's surrender are lost in the sixteen line break in the stele at this point, it can be presumed that the procession of horses above the sacrifices were led by the figures of Nemlat, carrying a sistrum (l. 58), and his wife, both of whom appear together on the Victory Stele leading a horse before Piankhy. On the destroyed right half of the register there would seem to be just enough room for one more pair of horses and the two royal persons leading it, who would have stood as tall as the horses.

On the opposite (SW) wall of the pylon (H), fragments of two registers of relief also survived in the 19th century which no longer exist today (**fig. 7**). These were about 3 m above the floor level in 502, at the same level as the chariot scenes on the other side (**fig. 5**). These, too, depicted scenes of battle. The upper register pictured three Kushite foot soldiers moving left, each overpowering a smaller Egyptian opponent wearing a peculiar tall knobbed helmet, reminiscent of the White Crown. Two are stabbing their fleeing foes with spears, while the third stands over his slain enemy and shoots an arrow at another, who flees on horseback over the carcass of a dead horse. A palm tree in the background gives the scene a realistic touch.

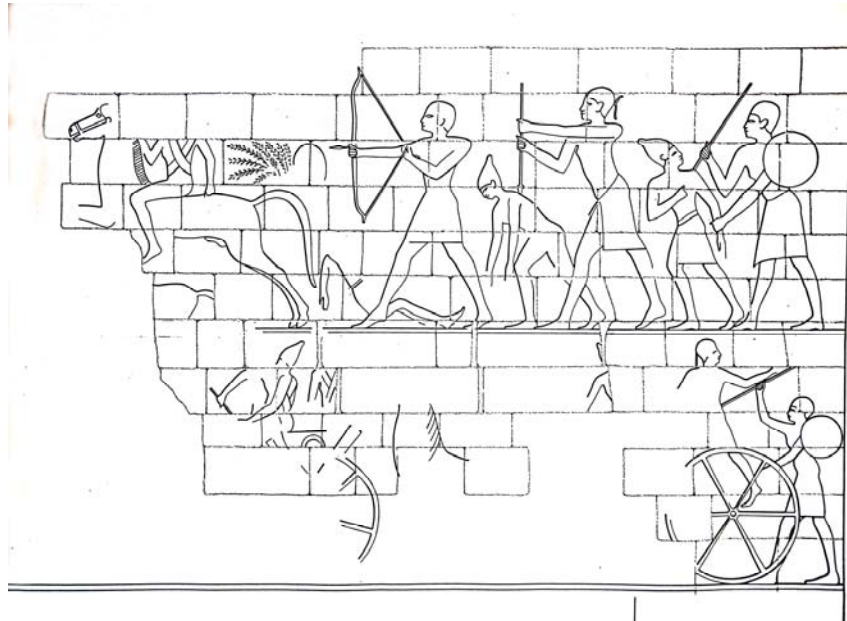


Fig. 7. *Battle scene on the upper section of rear wall of the SW tower of the second pylon (=fig. 1, H), as it was preserved in the early 19th century.*

In the lower register, a Kushite infantryman, carrying a round shield over his shoulder, like his comrade above, spears an Egyptian charioteer. The latter stands on the platform of his chariot fending off his foe, while his fellow charioteer urges his horses forward to escape the field of battle. One of the animals appears to be stumbling or dying. At the left, two Egyptians stand close together in a chariot, of which only a part of the wheel is preserved.

I

No trace has survived of the original surface of the SW wall, forward of the side door, but it may be supposed that this section (I) featured scenes culminating with the siege and capture of Memphis.

Court 501
Wall Sections:
J

The reliefs of the outer court (501) complete the picture of the Egyptian campaign. On the long SW (=downstream, "north") wall (J) they illustrate the final episode: the submission of the Lower Egyptian rulers before Piankhy (**fig. 8**). Here the Kushite conqueror appeared – unfortunately preserved only from the knees down – receiving the tribute of four (of the nine) Egyptian rulers, “on their bellies” (as the text says) and “smelling the earth” before him in a bow of total submission, just as they are depicted in miniature at the top of his Victory Stele. Behind the bowing kings are four pairs of horses, each representing the animals that each ruler was said to have brought to Piankhy as part of his tribute.

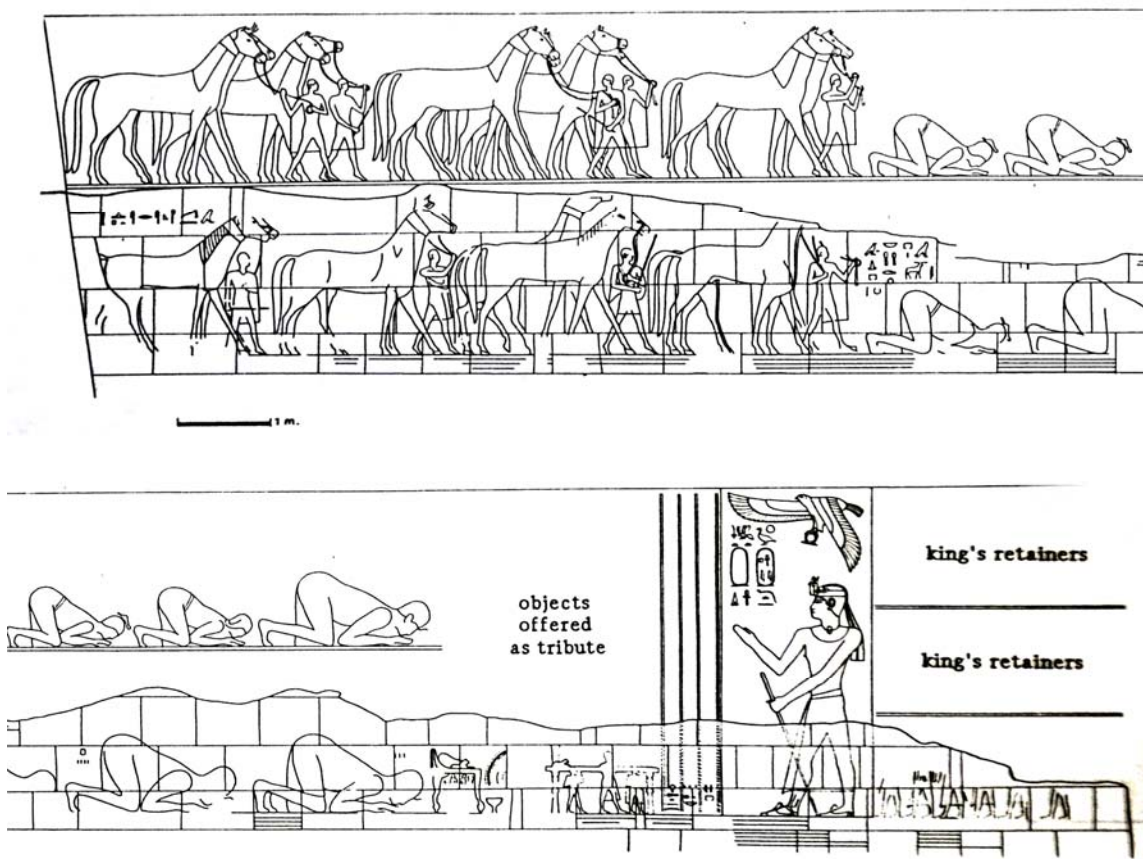


Fig. 8. The left and right halves of the forward section of the SW wall of 501 (J). The drawing shows the preserved line of masonry with the surviving reliefs below it, while the upper half shows the supposed composition of the destroyed upper part of the wall. (Drawing: T. Kendall)

In front of the bowing kings appear objects from their tribute: a cushioned throne with armrests in the form of recumbent lions and lattice-work between lion legs in the form of

tiny bound enemy prisoners. Other objects are a footed offering vessel, piled with palm fronds. Three men are also shown carrying forward a fancy four-post couch or bed, also with a small recumbent lion and carved legs.

Piankhy, appears at the right side of the scene, facing left, to receive the homage and gifts from the conquered. His figure was carved in raised relief within a panel sunk 2 cm deeper than the plane of the remainder of the wall, where the figures are all carved in sunk relief. He wears a long, sub-knee length skirt with a hem pointed in front and a pair of elaborate sandals. He also carries a long staff or walking stick. Six smaller attendants stand behind him on the wall, one of whom carried a large feathered fan (as revealed by a large loose fragment found in the debris nearby).

K

To the left of the previous scene, there is a doorway, which is now just a wide gap in a line of tumbled stones. To the right of this gap, no trace of carved surface survives for the first 6.3 m. At that point, however, there is a single large foot, indicating the reappearance of the king, standing, facing right. Before him is a row of ten tall offering stands bearing loaves of bread, followed by more vessels, and a badly damaged figure of a large seated god, facing the king. This is undoubtedly Amun of Karnak at Thebes. Between him and the corner of the wall stands a goddess, doubtless Mut, bent slightly at the waist, facing left, holding a compound amuletic staff, signifying long life to the king.

L

On the northeast (=upstream, "south") wall the relief depicted events that took place after the king's return to Napata: namely, the construction and dedication of the Jebel Barkal temples. The wall is divided into five panels, each representing a specific ritual activity. From left to right, they are:

Panel I: The king, wearing a cap crown (now lost but preserved and visible only in one of Breasted's photos), faces left, accompanied by his heir (?) (who stands in front of him) and his *ka* (his "divine double," who stands behind him). He holds a staff toward a group of five shrines, shown schematically, which rise from a common rectangular foundation. This foundation is inscribed with two names, which appear within twin vertical rectangular frames. One seems to say *Dju-Waab Neferu* ("Beauties of Jebel Barkal). The scene appears to show Piankhy dedicating five temples at Jebel Barkal (**fig. 9**).

Panel II: The king (facing left) runs a ritual race before a goddess, facing right, who stands before a shrine. The king is accompanied by a smaller running human figure (his heir, his *ka*?) as well as by a running bull calf (perhaps symbolizing also his "ka" [since the Egyptian word for "bull" is also "ka"]). Texts in front of the goddess read "Coming and bringing; coming and bringing."

Panel III: The king holds a very large hoe, apparently initiating the construction of the temples at Jebel Barkal.

Panel IV: Two figures stand on either side of the king's *serekh*, which is inscribed "[Strong bull arising] in Thebes."

Panel V: The king faces left, standing behind an *iwn-mutef* priest.

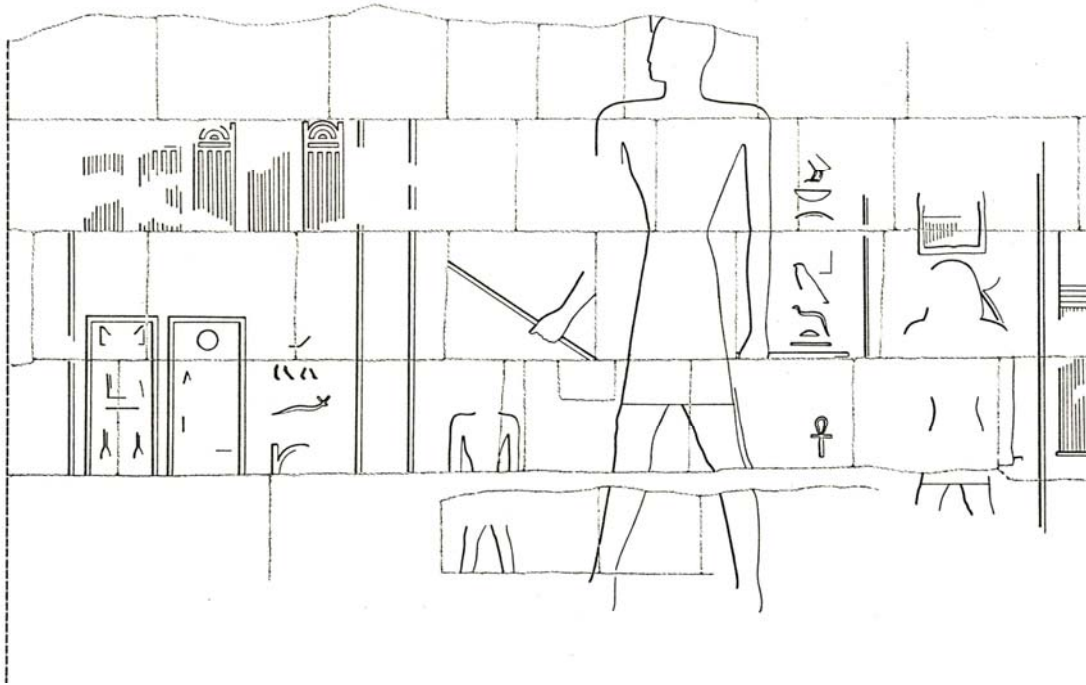


Fig. 9. Detail from wall section L, showing Piankhy, accompanied by his heir and his "ka", dedicating five temples at Jebel Barkal, which seem to be named "The Beauties of Jebel Barkal." (Drawing by T. Kendall, inked by Susan Osgood)

M

This section of the wall depicted Piankhy's celebration of his Heb-Sed or 30-year jubilee festival. From right to left, the scenes are:

Panel I: the king, followed by his *ka*, being led forward by Horus (**fig. 10**);

Panel II: the king seated in an enthronement pavilion receiving offerings (**fig. 11**);

Panel III: the king led forward by Montu and Thoth (?), with an *iwn-mutef* priest and a panel with the king's Horus name: "[Strong Bull arising in Na]pata";

Panel IV: the king instructed by Seth and shooting arrows to the four directions to claim his kingdom. The remainder of the wall is lost.

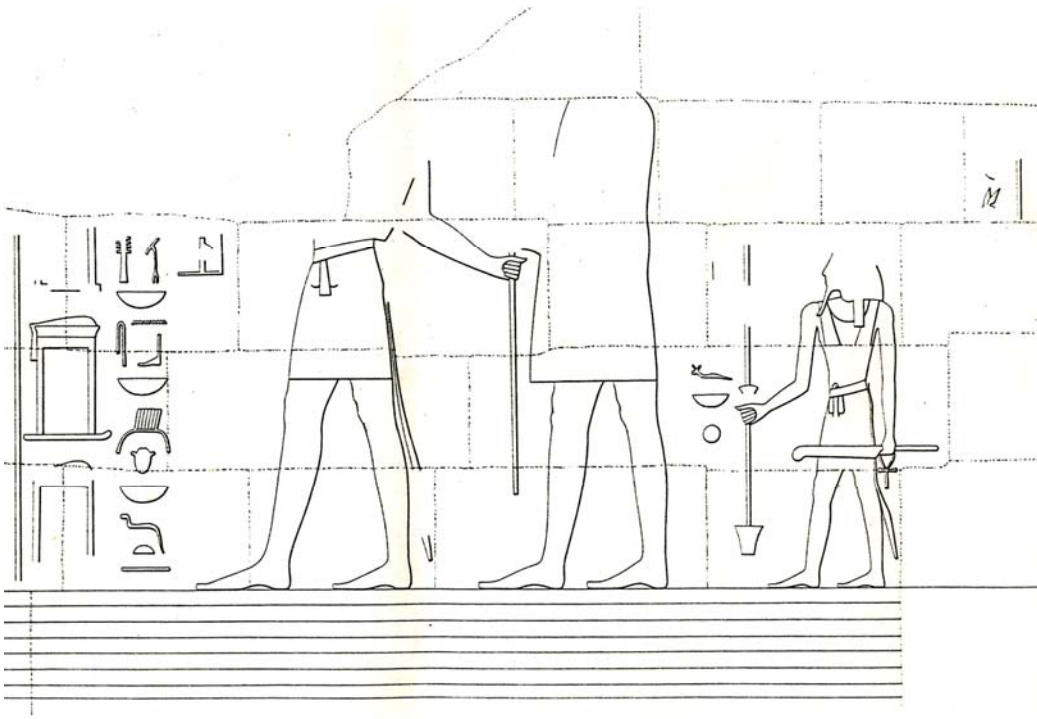


Fig. 10. Scenes from Piankhy's Heb-Sed (wall section M, from right to left). The king, followed by his "ka", led forward by Horus, as the text says: [given] "all stability and dominion, all health, and all joy forever." (Drawing by T. Kendall, inked by Sudan Osgood)

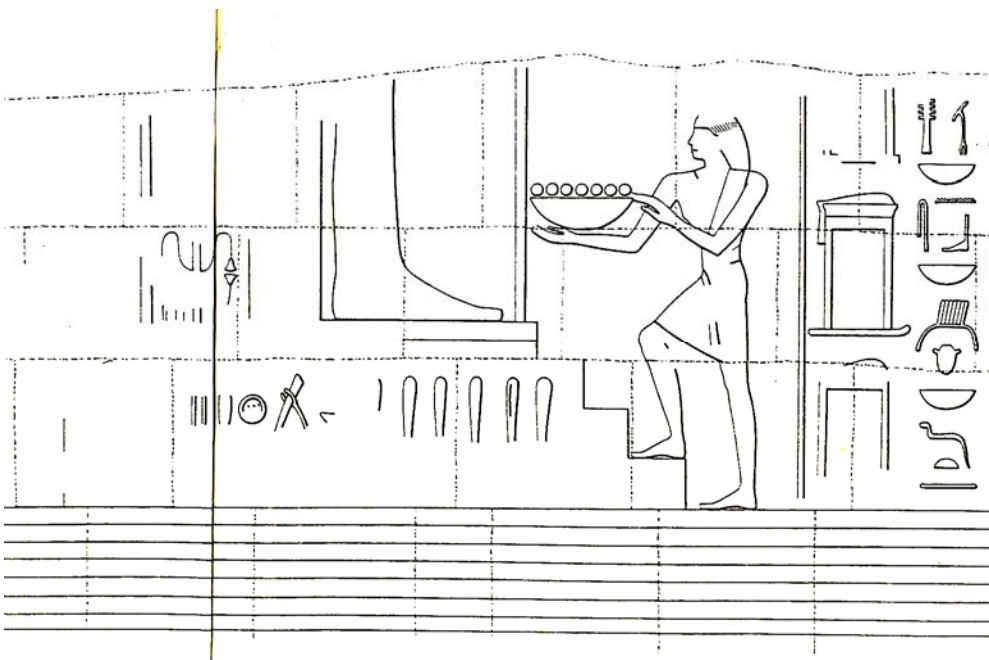


Fig. 11. The king seated on a throne, under a baldachin, being brought a basket of offerings by a servant (M). The throne is reminiscent of those in B 500, room 520, and in B 600 (q.v.) (Drawing by T. Kendall, inked by Susan Osgood)

Facade of Second Pylon

The second pylon of B 500 was completed by Piankhy, perhaps rebuilt on a foundation of an earlier unfinished pylon of Ramses II. Piankhy raised four flagmasts in niches against its façade and flanked its approach with four ram sphinxes brought from the temple of Amenhotep III at Soleb. Even before he had carved the reliefs on its front face, however, the king had planned the new, larger court 501. This is clear by the fact that his reliefs on the pylon façade fit within the side walls of 501, which were built directly against the sides of the pylon face.

Each pylon bore four flagmasts, two on each side of the doorway. Their niches divided each side into three vertical relief panels. The panels beside the doorway each bore a colossal standing guardian figure facing inward, of which today only the feet are preserved, 1.3 m in length. (The right figure had blue-painted skin). These were probably Atum (on the left [west] side) and Shu (on the right [east] side). The end panels each bore an image of a colossal striding king, facing inward, wielding a mace or sword in one hand and grasping a single large enemy figure by the hair with the other. The ground line of these panels was supported by a row of bound and fettered enemy name ovals, facing inward, like the king. Because in the middle panels the enemy name ovals face outward, it is evident that colossal images of the god Amun must have stood on them, facing the king, who would have been offering his victims to the god. Today both figures of Amun are completely lost.

Of the enemy name ovals, only those in the center panel on the center left (SW) side can be reconstructed. Those on the far left are almost totally obliterated, and those in the far right panels, being late Meroitic restoration, bear no names at all. Fragmentary though the names are in center panel, one can see that their traces reveal an identical sequence to several enemy names appearing on the inner pylon at Sanam. With this parallel they can be reconstructed, thus, from left to right: *Fnhw* (i.e. Syrians), *T3w nbw* ("All Lands"), *S3sw* (i.e. Peoples of the Northeastern Desert), *T3 Mhw* ("Lower Egypt"), and *Pdwt Swt* ("Neighboring Bow-people") - altogether, fairly good accounting of Piankhy's real and perceived potential enemies.

B 500: The flag masts

Each of the two forward courts of B 500 was fronted by a pylon, estimated to be 18-20 m high. These pylons were rebuilt for the last time by the Meroitic royal couple Natakamani and Amanitore in the early first century AD. The front wall of each pylon had four deep vertical recesses, which were emplacements for wooden flag masts that would have stood perhaps up to 24 m high. Each mast was held in place against the pylon face by massive wooden clamps which projected from two levels of windows (**fig. 1**). At their summits the masts flew long banners or streamers, which were thought to reveal the presence of the deity by their movement in the wind, signaling the breath of the god. Egyptian texts tell us that the lower extremities of the masts were fitted with bronze and that their points were plated in electrum.

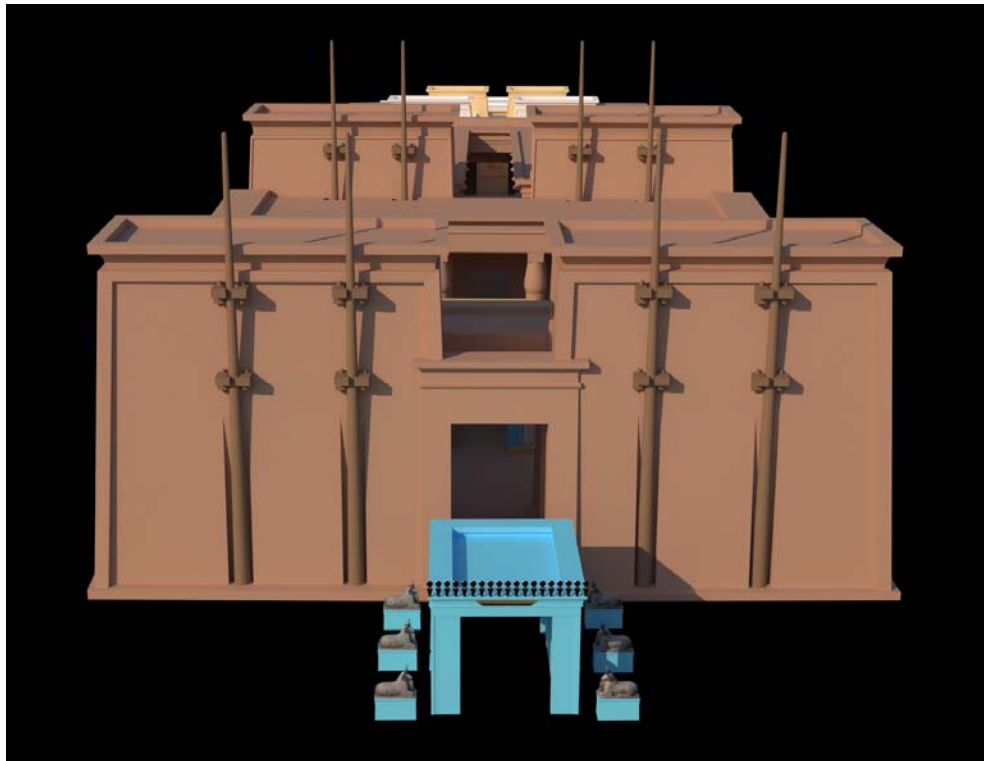


fig. 1. *The Meroitic facade of B 500, showing the flag masts and kiosk B 551 fronting the entrance. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*

The flag masts in B 500 would have been made from the trunks of huge Cilician pine trees, cut in the mountains of Lebanon, shorn of their branches, shipped to Egypt, and floated 2000 km upriver to Jebel Barkal. That such complex, labor-intensive operations could be successfully completed proves that the Meroitic kingdom in the first century AD had friendly and cooperative relations with Roman Egypt.

Recent excavations of the flag niches in B 500 have revealed that each mast had a massive stone as a foundation and was capped at the bottom with a circular disk of heavy

bronze, which was nailed to the wood (**fig. 2**). These disks, which still survive *in situ* in some of the niches, despite the loss of their wooden masts, were made from multiple overlapping plates of metal, fastened together with bronze nails along the straight edges. The larger nails survived only as traces of iron rust. These disks had evidently been intended to prevent rot, to inhibit wood-boring insects, and to prevent the bases from cracking when the masts were raised. Their diameters, from .90 - 1.20 m, indicate the thicknesses of the masts.



fig. 2. *Bronze disk, made of overlapping plates of metal, originally nailed to the bottom of a flag mast. The photograph shows the disk, as found, in 1987, still in place in the second flag mast recess (from the left) of the second pylon of B 500. Meroitic renovation. (Photo: T. Kendall).*

Most surprising was the discovery that before the bronze disks were nailed to the masts, and before the masts were raised, small bronze plaques cut in the shape of bound enemy prisoners were ritually nailed to the wooden bottoms (**fig. 3**). Each figure was inscribed in Meroitic script with the name of the particular enemy tribe it represented, and each was pierced through the chest or head with a bronze nail (**figs. 4**). This ritual was obviously intended to kill the depicted enemies by sympathetic-magic.



fig. 3. *Bronze plaque in the form of a bound enemy prisoner, shown, as found, in 1987 on top of the bronze disk (cf. fig. 3). The figure had clearly been nailed to the bottom of the mast before the disk had been affixed to it. (Photo: T. Kendall).*



fig. 4. *Bronze figure, once nailed to the bottom of a flag mast. From the third mast recess (from left) of the second pylon of B 500. Found in 1920 by G. A. Reisner. MFA 24.1791 (Courtesy Museum of Fine Arts, Boston).*

When the flag masts were finally raised to vertical by ropes hauled over the roof or through the windows of the pylon, their enormous weight would have rested on the enemy figures, as if to crush them eternally under the god's standards. The Egyptian hieroglyph of the flagpole, in fact, had the meaning "god."

The association of the flag with God has come down to the present, for in the modern Sudan, flags are still put over sheikhs' tombs to mark them as holy places (**fig. 6**).



fig. 5: *Flags over a modern tomb of a Sudanese holy man. (Photo: T. Kendall)*

B 500: The Statue cache

In 1916 George A. Reisner discovered, in two separate caches, ten complete or nearly complete hard stone statues, representing, sometimes in multiple image, Taharqa and four of his five successors to the early sixth century BC: Tanwetamani, Senkamanisken, Anlamani, and Aspelta. (The only king not represented in the group was his presumed son and second successor Atlanersa, for whose statue, see B 700). Seven of the statues were life size or nearly life size; three others were of colossal scale; and one represented a contemporary queen (**figs. 4-7**).

The find was full of ironies. One was that Reisner discovered the first cache completely by accident, in an otherwise vacant area immediately beside the pylon of B 500 (**figs. 1, 2**). This was an area being probed by him as a prospective dump site. Here he expected, indeed hoped, to find nothing at all. Six weeks later, he found the second cache just as unexpectedly, in and around a room of the neighboring Amun Temple B 800, 120 m west of the first cache (**fig. 3**). The surprise was the discovery that many of the fragments found here joined those from the first cache.



fig. 1. *The statue pit at Jebel Barkal, 20 m northeast of the NE end of the first pylon of B 500, as found by Reisner in 1916. (Courtesy of the Museum of Fine Arts, Boston)*



fig. 2. *Detail of fig. 1. (Courtesy of the Museum of Fine Arts,*



fig. 3. *The second cache of statue fragments found by Reisner in one of the side rooms of B 800. (Courtesy of the Museum of Fine Arts, Boston)*

Because the fragments of the second cache were found mixed with a thick layer of ash, charcoal, and burned wood and appeared to have been dumped carelessly in their burial place with rubble from a conflagration, Reisner speculated that the statues had been

deliberately broken in a violent episode that that had also included a fire. Since the generally larger, heavier fragments of the first cache lay immediately outside the and to the right (northeast) of the entrance to B 500, he speculated that all the statues had originally been set up inside the great temple, that they had been toppled and broken in place, and that the temple (i.e. its massive wooden roof) had then been burned. He concluded that, as an initial step toward restoring the temple after the disaster, the workers had removed the broken statues and burned debris from the damaged temple and buried the fragments in the two widely separated caches before commencing the building's restoration.

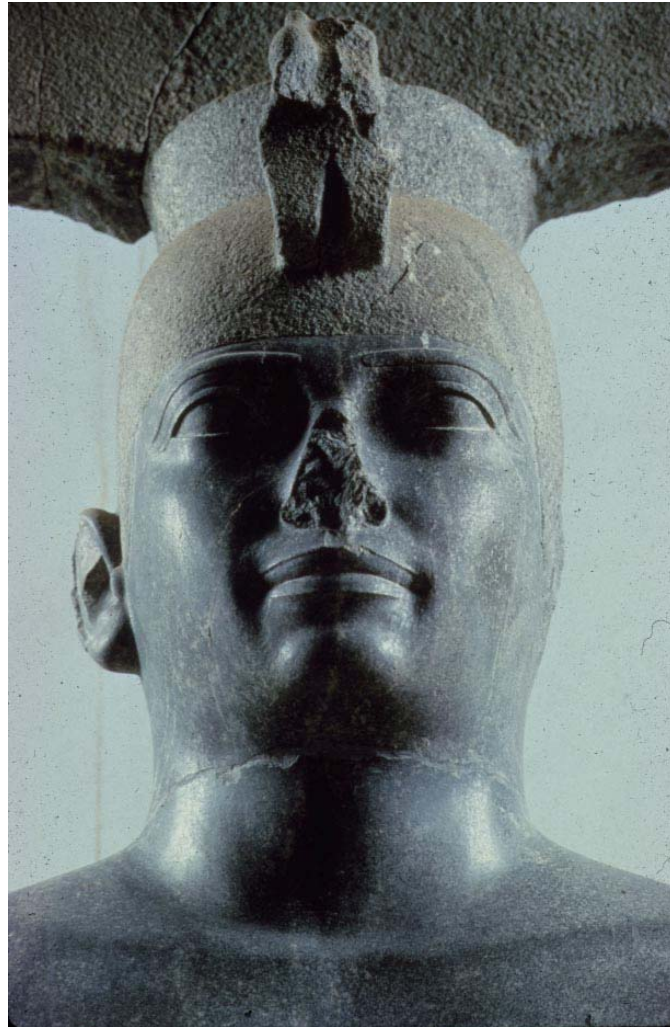


fig. 4. *The largest statue in the cache, at 4.18m, represented Taharqa, wearing the crown of the god Shu (for explanation, see B 200-300). Sudan National Museum, Khartoum.(Photo by Enrico Ferorelli).*



figs. 5, 6. *The large statues of Anlamani and Aspelta from the cache, as restored in the Museum of Fine Arts, Boston. Each, like Taharqa, wears the crown of Shu (see fig. 2). The former is about 4 m in height; the latter is 3.32 m high. (MFA 23.732 and 23.730. Courtesy of the Museum of Fine Arts, Boston.)*

The statues exhibit similar patterns of breakage. When found, most were split at the base, the legs, and in the middle, and all the heads were broken off. Five of the statues are still headless. Of those whose heads were recovered, only that of the small Senkamanisken statue in Boston shows no other damage to the face. The statue of Taharqa is missing its nose and one ear. The head of the large statue of Anlamani lacks its nose and chin, while the face of Aspelta was also found noseless. (The nose was later recovered in debris

between B 500 and 800). The tall feathered crowns of each of the colossal statues associated each of the kings with Shu, the first born son of Amun as Creator god (for explanation, see B 200 and 300); the feathered crests had all been split from their heads. Five of the statues lack their right hands or exhibit damage to their lower right arms and hands. Although there are no obvious indications of hammer blows to the stone, the damage is clearly not natural and suggests a concerted attempt at mutilation. The work appears to be that of an enemy determined to "kill" the spirit of the statues and to render them - and the individuals they represented - powerless to avenge their destruction.

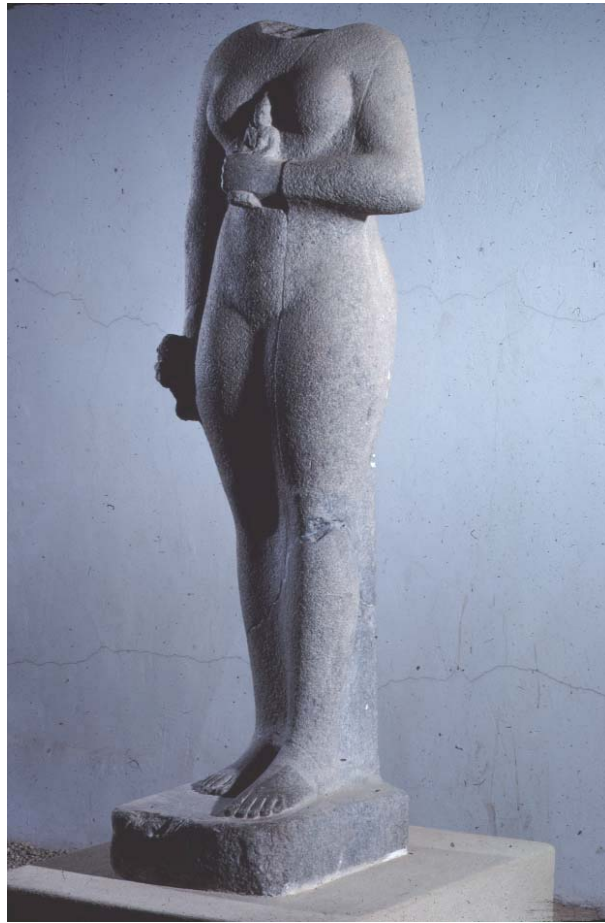


fig. 7. *Statue of Queen Amanimalel(?), from the Barkal cache. Courtesy of Sudan National Museum, Khartoum. (Photo by Enrico Ferorelli).*

Reisner realized that the destruction of B 500 - and of the statues - must have occurred during or soon after the reign of Aspelta (ca. 600-580 BC), the last king in the statue series. Although he attributed the destruction to a hypothetical dynastic quarrel in the mid-sixth century BC, recent examination of destruction patterns at both Jebel Barkal and at Sanam Abu Dom, across the river, suggest that each of these sites suffered violent destruction and fire damage contemporaneously, sometime early in reign of Aspelta (For this king's burned palace, see also B 1200). Because it would be most unlikely that the royal and sacred buildings of Jebel Barkal, as well as the statues of kings spanning over half a century - especially that of Taharqa - would be deliberately destroyed by a rival

dynastic faction, the vandals must have been outsiders. Since the reign of Aspelta coincided chronologically with the well-known attack on Kush in 593 BC by the new Egyptian king Psamtik II of Dynasty 26, we are drawn to the conclusion that the vandals were his troops, many of whom were Greek and Carian mercenaries. His objectives are not hard to imagine. He would surely have wished to put an end forever to Kushite claims to his throne - the throne of Egypt - and to destroy the oracle of the god that kept encouraging those claims.

In 2003 a second cache of broken statues was found by the Swiss archaeologist Charles Bonnet at the site of Dukki Gel (ancient Pnubs), near Kerma. This cache included the very same kings represented at Jebel Barkal - Taharqa, Tanwetamani, Senkamanisken, Anlamani, and Aspelta - but these were carved at much smaller scale. These statues, too, had been deliberately broken, after which their pieces had been carefully gathered up and buried in a pit, also near the local temple (**fig. 8**). Today the Dukki Gel statues, all restored, are exhibited as a group in the Kerma Museum, while the Jebel Barkal statues are divided among the Sudan National Museum, the Jebel Barkal Museum, and the art museums of Boston, Toledo and Richmond in the United States.



fig. 8. The cache of statues from Dukki Gel, found in 2003. C. Bonnet and D. Valbelle, *The Nubian Pharaohs: Black Kings of the Nile*. Cairo, 2005. p. 76.

Refs:

D. Dunham, *The Barkal Temples*. Boston, 1970, pp. 17-25, pls. I, II, VII-XXII.

T. Kendall. "Fragments Lost and Found: Two Kushite Objects Augmented." In P.D. Manuelian, Ed, *Studies in Honor of William Kelly Simpson*, vol. 2. Boston, 1996. pp. 468-476.

B 500 Kiosks: B 501 and B 551

In Egypt, the temples of the greatest gods always housed portable, gilded boat-shaped shrines or "barks," each of which enclosed in its "cabin" a statue of its respective god. Each bark was also fitted with a pair of carrying poles so that on ritual days, processional files of priests could bear it from one temple to another so that its divine occupant could visit other gods - or, in the case of Amun, his alternate aspects (**fig. 1**).

Each bark was kept in a special chamber within its temple. At Jebel Barkal during the New Kingdom, the bark of Amun of Napata in B 500 was probably kept inside the small side chapel B 504c. In Taharqa's time it resided in the middle of room 506, resting upon a beautifully carved granite stand, which is now in the Jebel Barkal Museum (**fig. 2**).

Since the bark was a ritual substitute for the boat in which the god was thought to traverse the heavens, the top surface of the bark stand symbolized heaven, and on Taharqa's bark stand it is the hieroglyph "heaven" adorned with stars that is being supported by the repeating figures of the king himself (**fig. 2**).

In B 500 a fragmentary relief inside court 502 (northeast wall) shows the bark of Amun as it was in Piankhy's reign, probably at actual size. It appears to have been about 6 m in length and was carried on its poles by 24 priests, in two files of 12, six to each end. Because the bark was richly adorned with gold and small statues of royal figures, and because it housed a hidden image of the god, it was heavy enough so that carrying it must have been laborious. Along the bark route, thus, periodic rest stations known as "kiosks" were built, in which the priestly bearers could set down the bark down on secondary stands, rest for an interval during its "voyage", and perform rituals.

Several kiosks have been found at Jebel Barkal, four in B 500 alone. Traces of one in the lowest level of court 502 suggest that it was built in the late Eighteenth Dynasty in the roadway out in front of B 500-Phase II or III. Seven hundred years later, the Kushite king Tanwetamani (ca. 664-653 BC) built another one on the same spot but on a floor level 70 cm higher. Unfortunately, this structure has barely survived to the present. Much better preserved are two Meroitic kiosks: one in the middle of court 501, and the other (B 551) in front of the entrance to the temple. A fifth kiosk (B 560) was built to accompany the temple B 561 (q.v.).



fig. 1.

fig. 1. The bark of Amun as represented on the walls of Hatshepsut's Red Chapel at Karnak. Typically the Amun barks had ram head figureheads on their prows and sterns, small figures of kings, standards, and goddesses were also mounted on their decks, and a hidden image of the god was contained within its closed "cabin."



fig. 2. Taharqa's granite stand for the bark of Amun in B 500, with quadruple images of himself on each side, holding up the sky on which the bark symbolically rested. This object is now protected inside the Jebel Barkal Museum. (Photo: T. Kendall).

Kiosk B 501

In the mid-first century AD, a kiosk was built in the middle of court 501; its dimensions were approximately 7.85 x 10.82m (**fig. 3**). Today only its screen walls still stand, but it originally had ten-columns, which rose from them. There can be little doubt that the builders of this structure were the Meroitic royal couple Natakamani and Amanitore, who must be the king and queen pictured together in its fragmentary interior reliefs. Traces of light blue, yellow and red pigment reveal that the structure was brilliantly, gaudily painted. Its great width also indicates that it must have had a roof made from cedar beams imported from Lebanon (**fig. 4**).

In relief on the inside of the northeast wall, the king and queen, followed by a standing winged goddess, appear walking to the left, toward four gods (**fig. 5**). Although damaged, it is clear that these were Amun, Mut and Khonsu, seated on thrones, followed by a standing goddess. Although the deities are preserved only from their waists down (or less), it is evident that they were thought to reside *inside* Jebel Barkal, for in front of Amun's figure is a sloping line in raised relief, which represents the mountain's cliff line (a scene paralleled by the complete scene of this type in B 300: q.v., fig. 2). On the much damaged opposite wall the royal couple and the same winged goddess appear, facing left, standing before the bark of Amun, which is shown resting on a stand.



fig. 3: *View of the remains of kiosk B 501, as excavated in Dec. 2013. (Photo: Bryan Whitney)*



fig. 4: A tentative restoration view of kiosk B 501; all the colors below the tops of the screen walls are actually attested. The shape of the column capitals is suggested by the survival of a large section of a single example.. (Model: N. Reshetnikova and Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)



fig. 5: Fragmentary relief on the inside of the NE wall of kiosk B 501. At right the king and queen, in front of an image of a goddess with splayed wings, face left, toward three seated gods (Amun, Mut, and Khonsu of Jebel Barkal) and a standing goddess, who were shown inside Jebel Barkal, as indicated by the raised relief cliff line of the mountain which appears just in front of the legs of the first seated god (Amun). (Photo: Bryan Whitney)

Kiosk B 551

The kiosk B 551 was built immediately in front of the entrance of B 500, between the six ram statues of Amenhotep III (which had been brought from Soleb and re-erected there by Piankhy) (**fig. 6a, b**). The unnamed builder of B 551, judging by her unusual corpulence, was almost certainly the ruling queen Amanishakheto, who is represented twice on its inside walls. Approximately 7.20 x 9.60 m in area, this structure differed from the preceding by having square corners front and back, with three columns per side rising from the screen walls.



fig. 6a. Kiosk B 551 as excavated, March 2014. (Photo: Bryan Whitney)



Fig. 6b. Kiosk B 551 as excavated, March 2014. (Photo: Bryan Whitney)

Unlike kiosk B 501, which was multi-colored, B 551 seems to have been painted predominantly (if not entirely) light blue (figs. 7, 8), a color which was found on all its surviving architectural components and which was added to all the ram pedestals, doubtless at the same time.



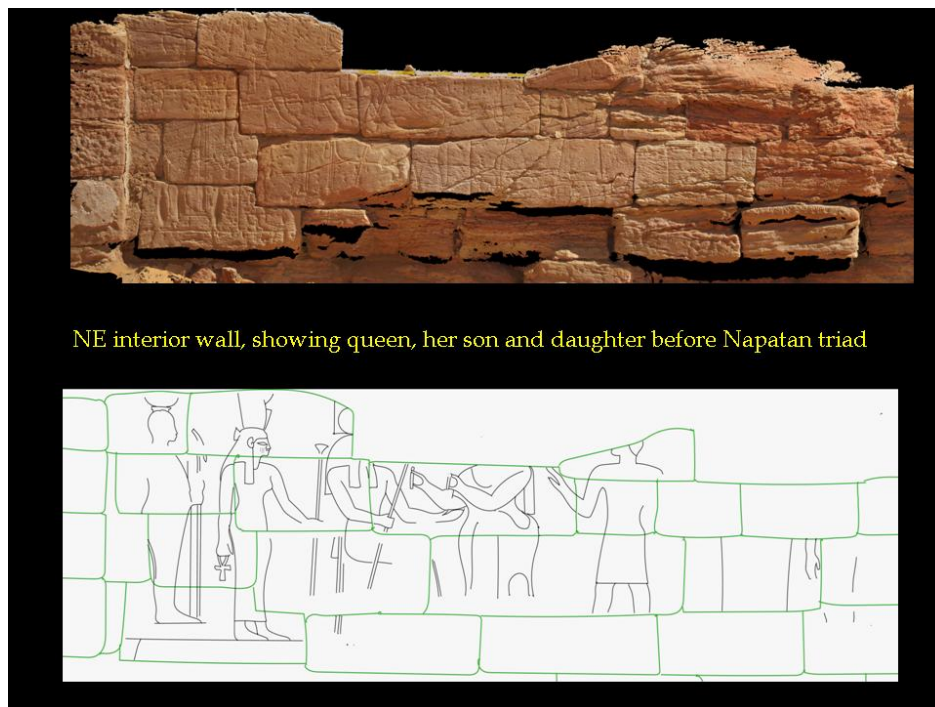
fig. 7. Kiosk B 551 as tentatively restored. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)



Fig. 8. The kiosk B 551, looking east to the temple B 561 with its kiosk B 560 (q.v.) (Models by Geoff Kornfeld and N. Reshetnikova © 2015 NCAM Mission and Learning Sites, Inc.)

Both inside walls of B 551 depict a queen of great obesity, followed by a normally proportioned male and another female, nearly as large as the queen. The last two figures would seem to be the great lady's son and daughter. On each wall the royal family is shown approaching the gods Amun (seated), Mut and Khonsu (both standing).

On the downstream wall the gods can be recognized as Amun, Mut and Khonsu of Thebes in Egypt, for here Amun was represented human-headed, and Mut appears as any Egyptian goddess. On the upstream wall, however, the gods can be recognized as those of Napata, for here Amun was represented ram-headed, as he was routinely in Nubia. His consort Mut, who stands behind him, was identical to the Egyptian Mut, except in one remarkable detail: she bears three vertical incised lines on her cheek, which are unmistakable as Sudanese tribal scars (**figs. 9-10**).



NE interior wall, showing queen, her son and daughter before Napatan triad

fig. 9. Each inside wall of Kiosk B 551 was fully carved in relief, but today only the rear ends of the side walls preserve legible elements of their figures. On the northeast (upstream) wall, shown here, the great queen (headless) appears in high priest's garb in a leopard skin robe. She is followed by her son and daughter (here largely missing). They stand before the ram-headed Amun of Napata, who is followed by his consort Mut and his son, the moon god Khonsu. (Drawing: T. Kendall).



fig. 10. *Mut of Napata rendered with Sudanese facial scars, from the northeast interior wall of kiosk B 551. (Phot: T. Kendall).*



fig. 11. *Young girl with facial scars, photographed at Jebel Barkal in 1987. Photo by T. Kendall)*

B 561-B 560: The Mammisi Temple and Kiosk

In 2014-15 excavations in front of B 500 led to the discovery of a previously unsuspected avenue of small temples, of which B 561 and its associated kiosk B 560 have been the first to be cleared. This avenue probably led down to the center of the town of Napata and to an ancient Nile quay, while the small temples lay perpendicular to it.

Temple B 561 seems to have been built in the early first century BC (**fig. 1**). Although no royal names have been found associated with it, its surviving reliefs show a king and queen before various deities (**figs. 2, 3**). As suggested by its pylon towers, which appear to have fallen forward simultaneously, B 561 was probably destroyed by an earthquake. Radiocarbon dates suggest that this event occurred in the second or third century AD.



Fig. 1. *Temple B 561 as excavated, March 6, 2015. (Photo: Bryan Whitney).*



Fig. 2. Relief on the inside NW jamb of the sanctuary, showing a king approaching Khonsu. (Photo: T. Kendall).



Fig.3. Doorjamb fragment preserving the body of a queen, from the antechamber, B 561. The figure of the lady parallels those of the royal women pictured in Meroitic tomb chapels of the late second and early first centuries BC. (Photo: T. Kendall).

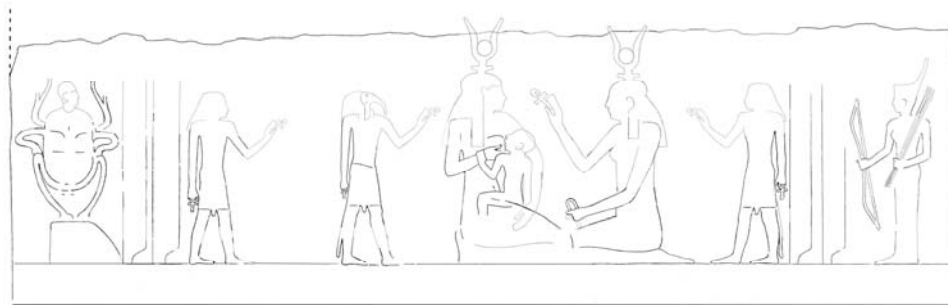
The temple, built largely of fired brick, was plastered and brightly painted, but little of its painted decoration has survived. Behind its pylon, it had three interior chambers. The first featured two columns, carved in high relief with water plants and inscribed with a repeating Meroitic hieroglyphic inscription (**fig. 4**). The second was an antechamber, with stone doorjambs preserving well-carved images of Thoth and Horus pouring jars of water toward those passing through the doorway, as if to purify them (**fig. 5**). The third chamber contained a central sanctuary with stone walls carved in relief. The focus of these reliefs was a scene of the goddess Isis suckling the child Horus in company with a second goddess (**fig. 6**). The surrounding walls feature a series of monstrous deities, many holding knives (**fig. 7**). Although these scenes are now in poor condition, their surviving details match precisely those in contemporary temples at Dendera, Edfu, and Philae in Egypt, which were all temples of the type known as "mammisi," leaving no doubt that B 561 was a Meroitic mammisi, the first yet discovered in Sudan.



Fig. 4. Columns with swamp plants and lines of Meroitic hieroglyphic text. B 561. (Photo: T. Kendall).

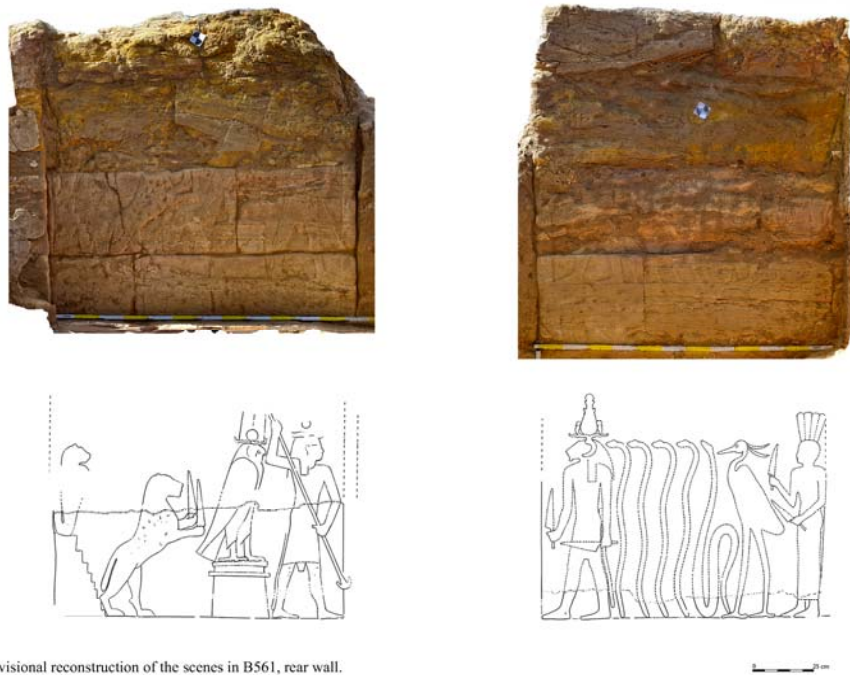


Fig. 5. *View to the sanctuary through the second gateway, with reliefs showing the gods Horus and Thoth making ablutions. B 561. (Photo: T. Kendall).*



Provisional reconstruction of the scene in B561, front wall.

Fig. 6. *Top: photo of rear wall of sanctuary, B 561, with reconstruction drawing based on Egyptian parallels, by Lyla Pinch-Brock.*



Provisional reconstruction of the scenes in B561, rear wall.

Fig. 7. *Reliefs from the rear (SW) walls of the B 561 sanctuary reconstructed from Egyptian parallels, by Lyla Pinch-Brock.*

Mammisi temples were built as symbolic nurseries for the child god Horus and simulated in stone the Delta marshes in which he was said to have been raised by his mother Isis. Within the marshes (and the temple), he was thought to be safely hidden from his wicked uncle Seth (personifying Chaos), who had slain his father Osiris in order to usurp the throne, which young Horus would later have to fight to regain. As the Egyptian mammisi temples served the rulers of Egypt, so B 561 would have served the later rulers of Kush. As each king would have considered himself Horus incarnate, such temples would have allowed him ritually to go back in time to the birth of his divine ancestor and to magically merge with him and his divine mother, whose role may have been played by his own mother.

B 560: The kiosk of the Mammisi

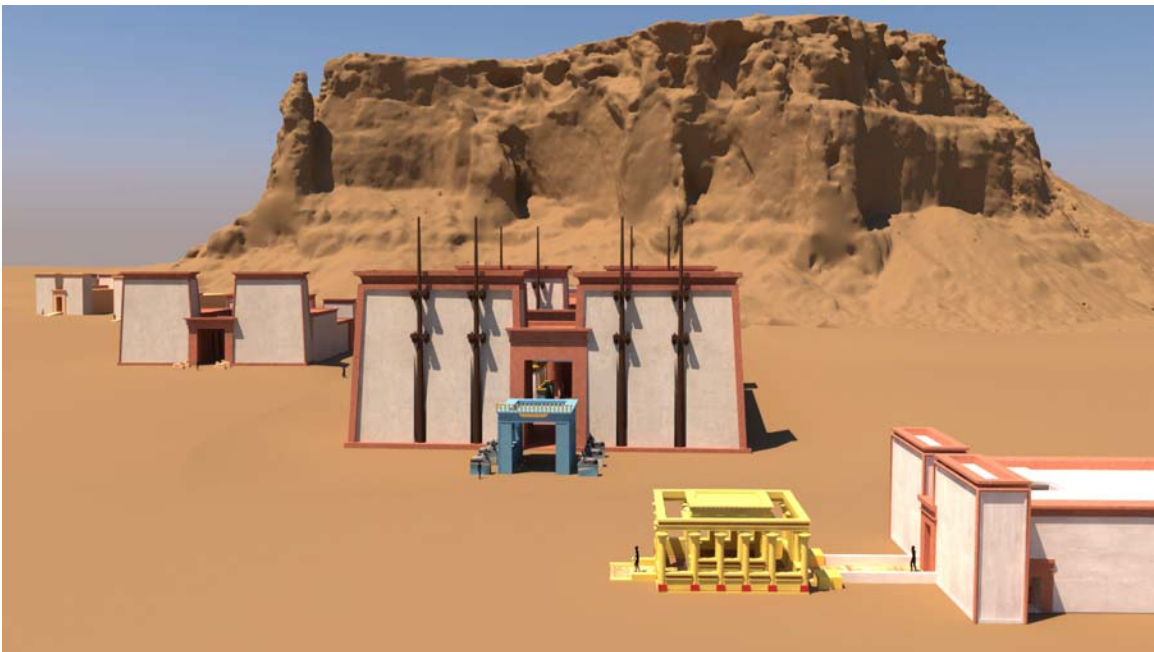
Sometime after B 561 was built, an elaborate kiosk, B 560, was added to its front as an entrance structure (**figs. 8, 9, 10**). Unlike the temple itself, which was constructed mainly of fired brick, the kiosk was built mainly of stone. In keeping with the theme of the "mammisi" - namely to simulate the marshes in which the child Horus was raised - the kiosk was designed with a double colonnade, in which the columns simulated papyrus and other marsh plants. If its exterior walls and columns were plastered and brightly painted blue, yellow, and red, the walls of its small inner chamber were carved with relief scenes showing the departure and return to a temple of a divine "bark," carried on shoulder poles by a double file of priests. On one wall, the carried bark appears accompanied by a pair of chariots and a military guard (**fig. 11**). Each chariot was drawn

by a team of three horses - a type of harness depicted eight centuries before in the Piankhy reliefs in B 500! - and was accompanied by soldiers, one of whom carries a spear and another, a throwing stick. The larger chariot was undoubtedly the king's, but the king's figure, sadly, has not survived. Fortunately, the name of the royal builder of the kiosk is partly preserved, written in a single line of very late Egyptian hieroglyphs on architraves from the central chamber ("-ka-r-m"). He was the Meroitic king Amanakhareqerema - probably dating to the late first or early second century AD (**fig. 9**).

B 560 and 561 both continued to be used into the second or third century AD, but both seem to have been felled simultaneously by an earthquake, after which, in late Meroitic times, the abandoned ruins were reoccupied by squatters, who used them as dwellings. Temples B 600 and 700 (q.v.) seem also to have been destroyed in the same earthquake, which sent enormous boulders crashing down upon them from the cliff above.



Fig. 8. *Kiosk B 560 after excavation, March 2014. (Photo: Bryan Whitney)*



Figs. 9, 10: *Temple B 561 with its kiosk B 560, in preliminary computer models (shown as it appeared in relation to the Great Amun Temple (B 500)). (Models by N. Reshetnikova and Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*



Fig. 11. *The king in his chariot, followed by a smaller second chariot, accompanies the divine bark of Amun(?). Interior relief (SE wall) from Kiosk B 560. (Photo: Bryan Whitney).*



Fig. 12. *Lintel from B 560 inscribed in late Egyptian hieroglyphs with the name assumed to be that of the Meroitic king Amanakhareqerema, thought to belong to the late first or early second century AD. (Photo: T. Kendall).*

B 600: The Enthronement Pavilion.

B 600 is the earliest known standing stone structure at Jebel Barkal (**fig. 1**). Its Kushite superstructure stands atop foundations which are securely dated to the reign of Thutmose IV by a foundation deposit containing name plaques of that king. Because B 600 was built up against the Jebel Barkal cliff, it was very vulnerable to rock falls, and it seems to have been seriously damaged at least twice: once, probably in the third century BC, after which it was restored, and again in the second century AD, after which it was left a ruin. After its first (known) destruction, it was rebuilt as a royal enthronement pavilion, but whether it had had that same function in the 18th Dynasty remains unclear. There is still no evidence that it had been dedicated to a particular deity - other than the king. About 630 BC B 600 was joined on its site by a new temple, B 700, which was built immediately beside it on the southwest, also against the cliff in an equally vulnerable position (**figs. 1, 2**).



fig. 1: Aerial view of present state of B 600 (foreground) beside Napatan temple B 700 (background..)



fig. 2: Reconstruction view of B 700 and 600 as they may have appeared in the third or second century BC. (Models by Nadejda Reshetnikova and Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)

B 600, which was 3 m higher than B 700, was mounted by a stairway, all traces of which have now disappeared. The stairway rose to an entrance portico (601), much of which has also collapsed. The central chamber (602) had four columns, and its inner chamber (603) features a low stepped podium built against the back wall (**fig. 3**).

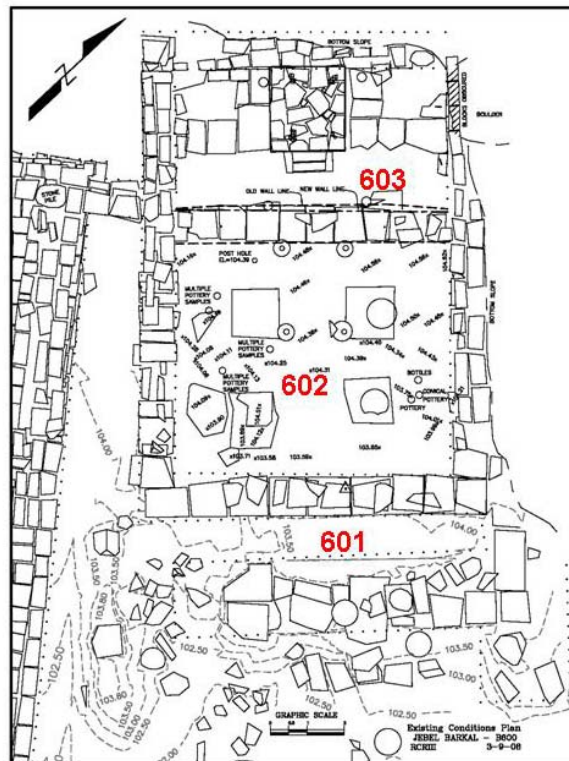


fig. 3. Plan of B 600. (Robert C. Rosa III)

The podium, clearly of Meroitic date, has four pairs of cut holes on its top surface, indicating that it once supported both a wooden(?) throne platform with square legs and a canopy or baldachin with round legs (**fig. 4**). A set of four larger round holes in the floor surrounding the podium indicate that the throne base and baldachin were surmounted by a still larger baldachin. Another series of four round holes in 602 revealed that the king's approach to the throne in the inner chamber had been canopied by a third baldachin (**figs. 5, 6**). The lack of any carved relief or inscriptions on the preserved walls and columns suggest that in Meroitic times B 600 may have been redecorated and re-inscribed in paint whenever a new king was installed in his office.



fig. 4. Photo showing present state of throne podium in room 603. (Photo: T. Kendall)

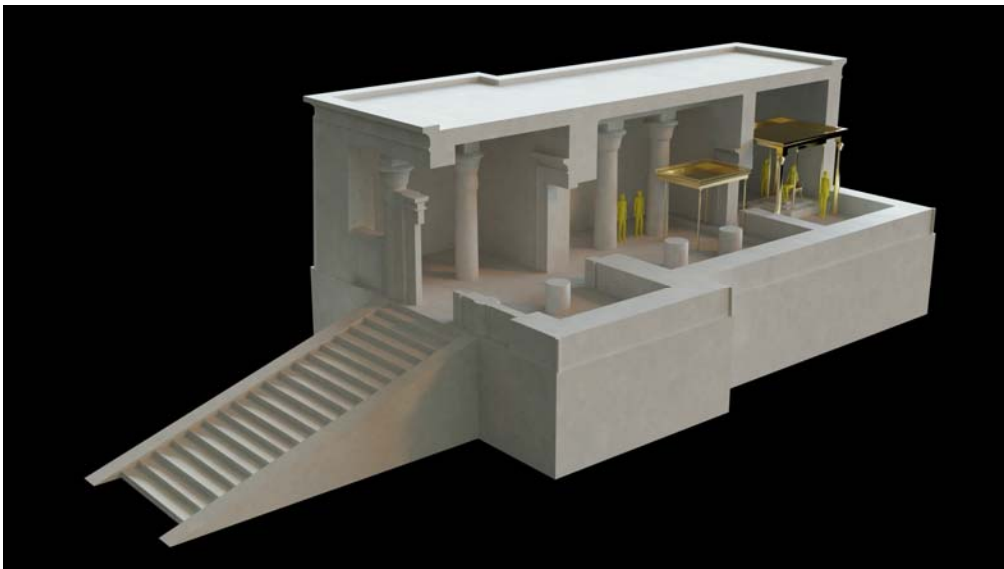


fig. 5. Reconstructed model of Meroitic B 600, showing throne and baldachins. (Model by N. Reshetnikova and Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc)



fig. 6. Detail of fig. 5, showing the throne podium with baldachins. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc)

B 600 in its Kushite state brings to mind the kind of royal pavilion that first appears in art on the Narmer macehead (**Fig. 7**). This is a stepped platform, sometimes of considerable height, on which the king appears, crowned and seated on his throne under a baldachin. In later illustrations, the height of the platform is reduced to give greater emphasis to the king's figure, and occasionally he is shown sitting beneath multiple baldachins. The combination of the stepped platform, throne and baldachin (or baldachins) was called a "tchentchat" in Egyptian, and such pavilions appear repeatedly in scenes of enthronement, especially those picturing the *Heb-Sed* or royal jubilee (See also B 500: The Reliefs of Piankhy, fig. 11)



fig. 7. Heb-Sed scene with Narmer seated in a "tchentchat" from the king's votive mace head, Hierakonpolis, ca. 3100 BC (after G. Robins, *The Art of Ancient Egypt*, London, 1997, p. 35, fig. 28)

Ref: Timothy Kendall and Pawel Wolf "B 600: "A Temple of Thutmose IV at Jebel Barkal," in V. Rondot, F' Alpi and F. Villeneuve, eds. *La pioche et la plume: Autour du Soudan, du Liban et de la Jordanie. Hommages archéologiques à Patrice Lenoble.* Paris, 2011, pp. 237-259.

B 700: The Temple of Osiris-Dedwen.

B 700 was built by the successive Napatan kings Atlanersa and Senkamanisken during the period from about 650-630 BC. Its function is somewhat mysterious, for while it appears to have been dedicated to Amun (like B 500 and B 800), its sanctuary contained a very long inscription to Osiris, god of the Underworld, whose name here is coupled with that of Dedwen, a Nubian god associated with deceased kings. In the ruins were also found fragments of a false door inscribed for Osiris, which gives the sanctuary of this temple something of the appearance of a tomb chapel. Furthermore, in the small sanctuary annex (704), added in early Meroitic times, small bronze figures of Osiris were found buried under the floor. (Note that the walls of 704 are also made from the reused slabs of the Osiris inscription, originally installed in 703).



fig. 1. *B 700 (left) with B 600 (right) as restored. For a photo showing the two in their present state see above B 600, fig. 1. (Model by N. Reshetnikova and Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*

B 700 was built against the Jebel Barkal cliff directly beside the old temple B 600, which had been sponsored by Thutmose IV. The proximity of these two buildings suggests that the function of B 700 was closely tied to that of B 600. As Reisner discovered during his excavations of the two in 1916, both had been severely damaged by a cliff collapse, probably in the early third century BC. After this event both were restored. Later, perhaps in the second century AD, the two temples were again damaged by falling rocks -

this time, so badly that they were left in ruins. This last destruction was probably the result of the same earthquake that shattered B 560 and 561 (q.v.). Further degradation of B 600 and 700 resumed in the 19th and early 20th centuries, when their ruins were used as a quarry by the local people, who methodically knocked down most of their remaining standing walls and carried away their stones for reuse (**fig. 2, 3**).



fig. 2. *View from the sanctuary of B 700 (room 703), showing the temple as it exists today.*

As suggested above, B 600 (q.v.) was a royal enthronement pavilion, in which the king, probably following his coronation, mounted a stairway in order to take his seat on the canopied throne inside. The evidence from B 700, on the other hand, suggests that it was the place where each new king, following the death of his predecessor, went first in order to be confirmed in his new role by Amun and giving the office of kingship renewed life.

B 700 had four chambers: a roofed, columned portico in front of its pylon (701), a columned court, which was open over the center aisle (702), and a roofed sanctuary (703), to which was added a small chapel (704) at the rear, as part of the temple's restoration in early Meroitic times (**fig. 3**). The temple's founder was Atlanersa, who seems to have died prematurely but ruled long enough to complete its construction and the relief decoration in its two interior rooms (702, 703). It was completed by his successor Senkamanisken, who inscribed the columns in 702, added relief to the pylon, and donated a small obelisk (found in 702; now in the MFA Boston).

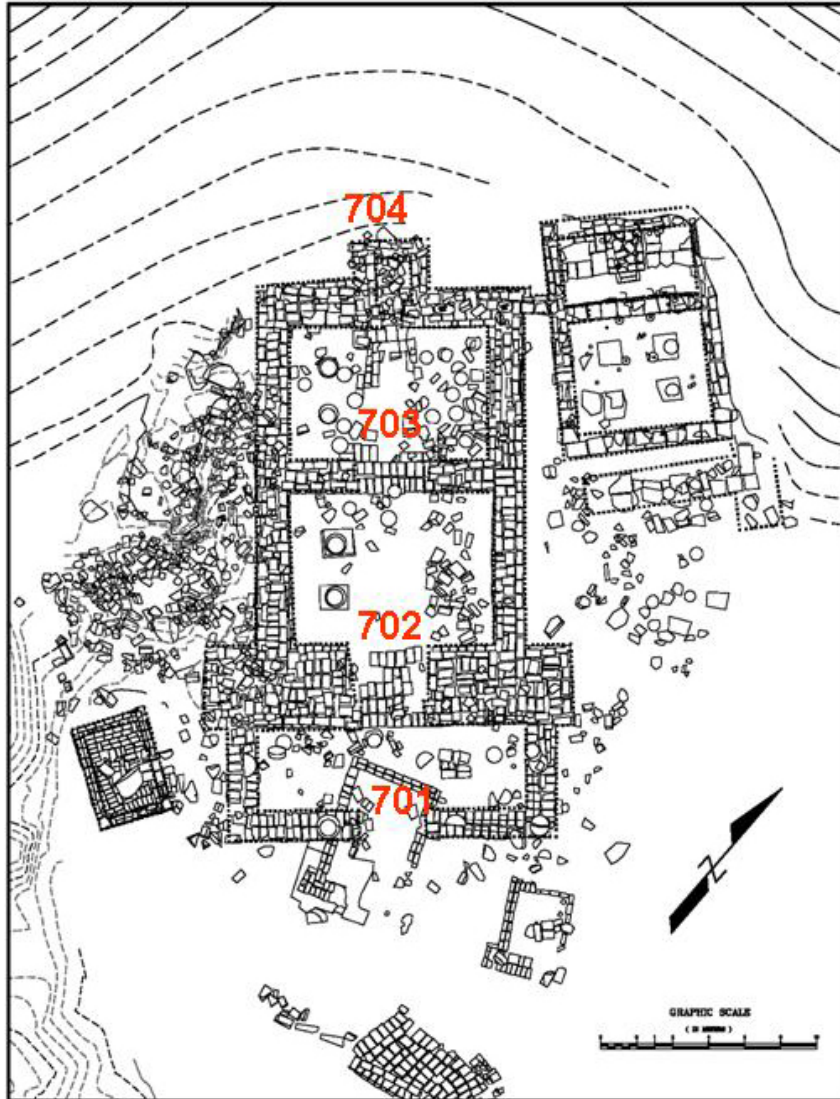


fig. 3. Plan of B 700, with rooms numbered, showing B 600 is at right rear, with the small 18th Dynasty talatat chapels arrayed in front, from left to right: B 700-sub 2, B 700-sub 1, and B 700-sub 3. The tumbled blocks on the west side of B 700 are the remains of its walls, which were pulled down in the 19th century by stone quarriers. (Survey map: Robert C. Rosa III).

If most of the temple's relief decoration has been lost to stone quarriers, the relief on the NE pylon tower was still well-enough preserved in 1821 to inspire two early European travelers to sketch it (**figs. 3, 4**).

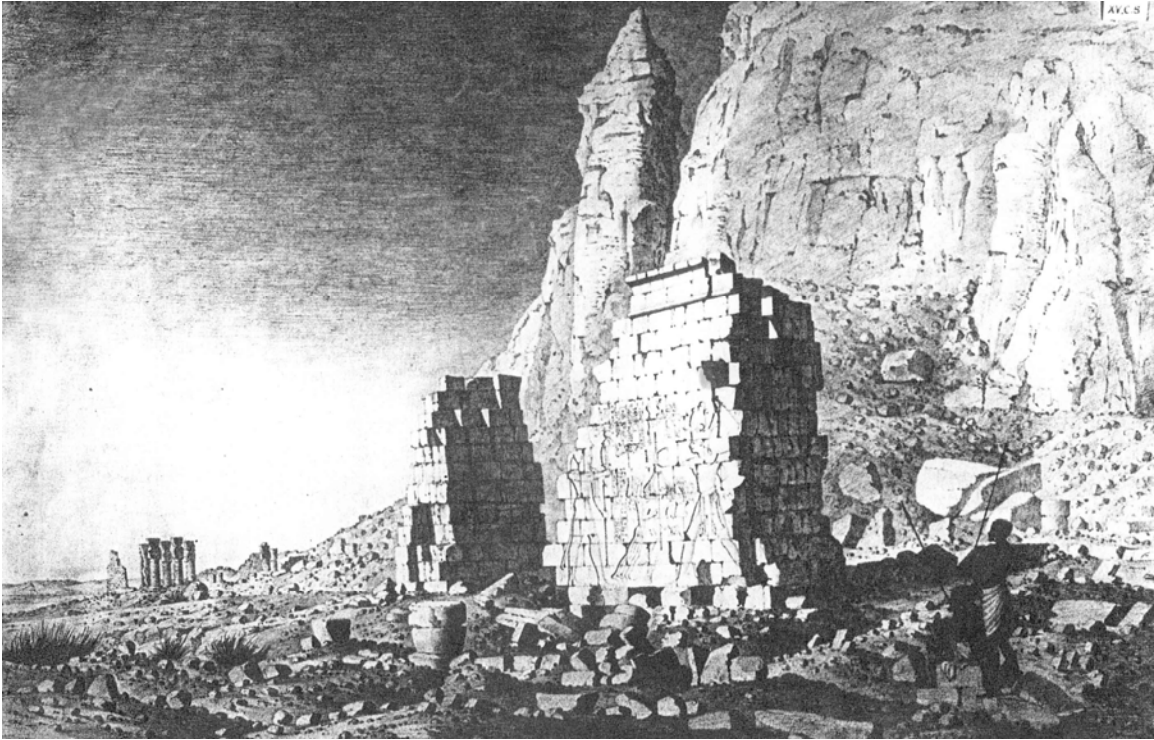
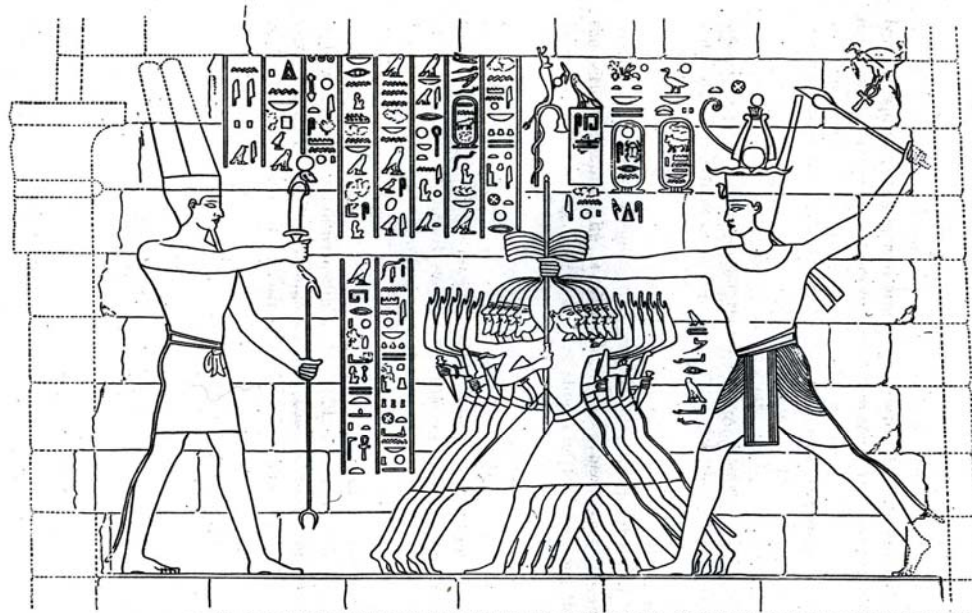


fig. 4. *View of B 700 as it looked in 1821, from a drawing by L. M. A. Linant de Bellefonds, made by camera lucida, now in the British Museum. The northeast pylon tower, then still standing, was carved with the scene in fig. 4.*

In 1821, F. Cailliaud recorded the pylon relief in particular detail (**fig. 4**). It depicted King Senkamaniskén holding a cluster of ten enemy captives by the hair and executing them before a human-headed Amun "of Karnak." Here the god repeats his famous decree of authority for the new king, which also appears on the sandstone stele of Piankhy (found in B 500; now in the Sudan National Museum):

"I said of you (while you were still) in your mother's womb that you were to be ruler of Kemet ("Black Land"=probably Egypt and Kush). I knew you in the semen, while you were in the egg, that you were to be lord. I made you receive the Great Crown, which Re (the Sun god) caused to appear on the first good occasion. (Inasmuch as) a father makes his son excellent, it is I who decreed (the kingship) to you. (So) who shall share it with you? For I am the Lord of Heaven. As I give to Re, (so) he gives to his children, from gods to men. It is I who gives you the royal charter.... No other (can) decree (who is to be) king. It is I who grants kingship to whomever I will."



THE NUBIAN KING SENKA-AMEN-SEKEN SLAUGHTERING REPRESENTATIVES OF TEN REBEL NATIONS IN THE PRESENCE OF AMEN-RĀ, THE LORD OF THE THRONES OF THE WORLD.

[From Cailliaud, *Voyage*, Plate LXI.

fig. 5. The pylon relief of B 700, as sketched by F. Cailliaud in 1821.

This text, in which the god stresses his role as kingmaker, strongly suggests that the temple played a paramount role in the king's coronation. What exactly that role was is suggested by other clues.



fig. 6. View of room 703 in 1916 with the Atlanersa bark stand in place, from Reisner's photographic archive. Courtesy of the Museum of Fine Arts, Boston.

In 1916, after removing the tons of rubble and fallen stones from the cliff that filled the sanctuary, Reisner found a great granite "altar" in place, beautifully carved on all sides with images of King Atlanersa holding up the heavens and inscribed with texts revealing that it was made to support the portable "bark" of Amun of Napata from B 500 (**figs. 5, 6**). This made it clear that Amun of Napata did not permanently reside in B 700 but was brought here from B 500 only on special occasions by the priests, who set the boat shrine, containing the god's image, temporarily on the stand, where it would have remained for the duration of the ritual for which it was required. After that it would have been carried back to B 500. But what was this ritual? Why was Amun of B 500 brought here? And why did the sanctuary have a funerary aspect?



fig. 7. *The Atlanersa bark stand, from 703. MFA 23.728. Courtesy of the Museum of Fine Arts, Boston.*

The bark of Amun from B 500 was considered to be a replica of the boat in which, in his role as Re ("Sun"), the god was believed to sail the heavens by day and the Underworld by night. In the Egyptian view, the Sun "died" at sunset, whereupon, according to the royal funerary text known as the *Amduat* ("What is in the Underworld"), he entered the world below (or world of Night) as a "ba" or "spirit seeking resurrection." The Egyptian word "ba," which duplicated the sound a goat makes, was also the word for a type of sheep with horizontal horns. This is probably why in the Underworld the Sun God, as "ba", was typically represented as a man with the head of a ram of this species, wearing a sun disk on his head (see **fig. 7**).



fig. 8. *The ram-headed Sun God on his "night bark" traveling through the Underworld after sunset. The great snake protecting him, called Mehen ("Coiler"), appeared suddenly on the boat at around midnight. (Berlin, Ägyptisches Museum, Papyrussammlung P 3005).*

As the god progressed on his boat through the hours of night, sometimes being towed by jackals, and sometimes fighting mythical enemies, his journey simulated a tortuous river voyage upstream - not unlike the Nile journey over the cataracts from Egypt into Upper Nubia, which the king (as living Sun-god-on-earth) made on his own journey of conquest. In other words, the king's journey into Nubia and the god's in heaven seemed to be reflections of each other.

At midnight, as pictured in the *Amduat*, the god on his boat was suddenly enshrouded by a great protective serpent (**fig. 7**). Simultaneously he was thought to have arrived at a mountain, which took the form of a similar serpent, under which sat enthroned a form of the god Osiris (or "Flesh of Osiris") (**fig. 8**). The coincidence of these two gods appearing together under identical snakes representing mountain profiles apparently indicated that they had come together and merged under the same mountain.

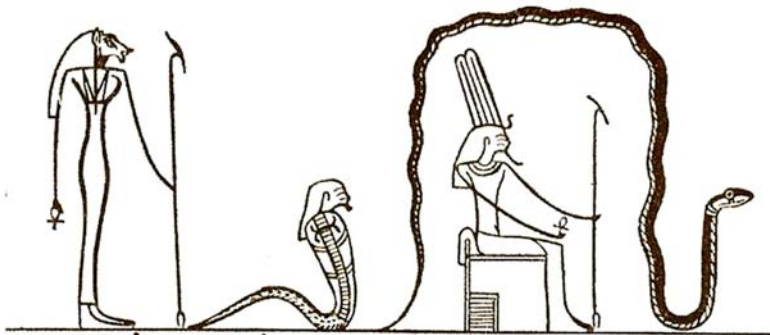


fig. 9. *The serpent mountain at the bottom of the Underworld, under which sits the god "Flesh of Osiris," with whom the sun god Re was thought to unite each night at midnight to gain rebirth as the new sun at dawn. (Vignette from the tomb of Amenhotep II, in A. Piankoff, *The Tomb of Ramesses VI, Texts*. New York, 1954. fig. 80, opp. p. 277).*

Within this serpent mound the Sun God merged momentarily with Osiris, an act which was believed to allow him to repeat life and to be reborn magically as a child sun at dawn. (In this context, "Flesh of Osiris" was understood to be the Sun God's mummy. Just as human beings, after death, were thought to be reborn each new day as "living ba's," by uniting with and resting within their mummies each night, so the Sun God was believed to be reborn every day in the same way.) Perhaps not coincidentally, this mountain of the Sun God's birth and rebirth in the Underworld was represented in same way as Jebel Barkal (**fig. 6**).



fig. 10. *Amun of Napata seated under a snake, symbolizing Jebel Barkal, as represented in the intaglio of a gold ring, from the "Ferlini Treasure." tomb of Queen Amanishakheto, Meroë (Beg. N. 6) (From C.R. Lepsius, Denkmäler aus Aegypten und Aethiopien, Abth. V, Berlin 1842-45: Bl. 42, no. 103). Just as Osiris' Mound in the Underworld was the place in which the sun god Re was thought to be rejuvenated each night by uniting with his deceased alter-ego, Jebel Barkal in remote Upper Nubia seems to have been the Mound where the king was thought to be able to merge with his divine parent, the primeval creator, to attain "rebirth" and revival.*

If the mythical Mound in the Underworld and Jebel Barkal were thought to be manifestations of each other, we can probably discern the function of B 700. When the bark of Amun of Napata was brought from B 500 into B 700, it would have signified that the Sun God had temporarily "died" - that is, passed into the Underworld as at sunset - and that he was seeking rebirth in union with Osiris, who was imagined to dwell within Jebel Barkal (behind the sanctuary of B 700). Since Amun and the king were considered physical aspects of each other, the transport of the bark from B 500 to B 700 must have signified that the old king - the old "Sun-God-on-earth" - had also died. Inside the temple, in other words, Amun-Re was transformed into Osiris-Dedwen. "Rebirth" for the god would have occurred when a new king was named and crowned. This event would then have allowed the god in his boat to be returned to B 500, to resume his identity as Amun, while the newly crowned king would probably have emerged from B 700 and mounted the stairs to take his throne inside B 600.

The general correctness of this theory is suggested by the colossal statue found fallen in front of the main entrance to B 700 (**fig. 7**). Now set up in Khartoum, it had once stood on the left (west) side of the door (**fig.8**). The statue represents the god Atum (dressed like a king wearing the Double Crown), who personified the Sun God at the moment of his sunset ("death") in the west. The statue would have conveyed the meaning that whoever passed through the temple entrance had "set," like the Sun, and had entered the Underworld, seeking revival and rebirth.



fig. 11. *Colossal statue found by Reisner fallen in front of the entrance to B 700, where it had been set up originally on the west side of the doorway. It was apparently toppled, and its head cut off, during the raid on Napata of Psamtik II in 593 BC. It was subsequently buried under a raised floor level. (Courtesy of the Museum of Fine Arts, Boston)*

fig. 12. *The same statue restored and erected in the Sudan National Museum, Khartoum. (Photo by Enrico Ferorelli).*

Although in B 700 there was no comparable statue found on the right (east) side of the doorway, there is at Tombos, some 200 km downstream, another statue, cut from the same stone and having virtually the same dimensions, which can be seen, lying on its side, in the granite quarry where its head had cracked just before it reached completion, which resulted in the statue's simply being left there. We can guess that this statue represented Atlanersa, that it was intended to be shipped to Jebel Barkal, and that it was carved to stand on the east side of the doorway of B 700. It appears to have been the symbolic counterpart of the other statue, for it would have represented the ruler as the

personification of Sunrise. In other words, when god and king emerged from the temple, both were imagined to have achieved new life, as at dawn.



fig. 13. A statue of the same stone and virtually the same dimensions as that in figs. 7, 8, lying in the Tombos granite quarries. This statue, too, was evidently intended to stand in front of the doorway of B 700. (Photo: T. Kendall)



Fig. 14. The portico B 700, reconstructed. In this view the temple appears from the same angle as it did in 1821, when drawn by Linant de Bellefonds (see fig. 3). (Model by N. Reshetnikova and Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc)

Ref. T. Kendall, "Reused Relief Blocks of Piankhy from B 900: Toward a Decipherment of the Osiris Cult at Jebel Barkal," in J. R. Anderson and D. A. Welsby, eds. *The Fourth Cataract and Beyond: Proceedings of the 12th International Conference for Nubian Studies*. Leuven: 2014. pp. 663-686.)

B 700-sub chapels: *Talatat* enclosures for the Aten cult.

Beside and in front of the portico of B 700, excavation has revealed the foundations of three very small, single-roomed chapels, all of which were built of *talatat* blocks (**fig. 1**). Two of them, designated "B 700-sub 1" and "B 700-sub 3" had small pylons. Both were built with grey and yellow *talatat* of the type seen in the earliest stone phase (I) of B 500, indicating that they were contemporary with that temple and should be attributed to Amenhotep IV/Akhenaten (**figs. 2, 3**). These tiny buildings are actually identical to a type of small roofless chapel, built by the dozens in long lines, pictured in Akhenaten's Karnak reliefs, in which each chapel is shown to contain a single table of offerings over which the king's new god, the Aten (i.e. Sun Disk), hovers, extending his life-giving rays, while the king visits them one by one (**fig. 4**). Such chapels were apparently standard features of the Aten sanctuaries built by the king at both East Karnak and at Amarna, his new capital in Middle Egypt. Judging by these examples, there must have been lines of such buildings at Jebel Barkal, of which these are the only known survivors. Their existence is clear evidence that the king established his Aten cult here at the southern limit of the empire (**fig. 5**).



fig. 1. Map of B 700 and B 600, showing the three small *talatat*-built chapels in a line in front of B 700. The center chapel (B 700-sub 1) and that on the right (B 700-sub 3) appear to be offering chapels to the Aten, built early in the reign of Amenhotep IV/Akhenaten. That on the left (B 700-sub 2) may be slightly later, either later in Akhenaten's reign or contemporary with B 500-Phase II; it seems to have been built to house a large natural stone. (Plan: R. C. Rosa III).



fig. 2. Photo of B 700-sub 1, as excavated in 2008. This small building had already been leveled to its foundation prior to the construction of B 700, but, on encountering this ancient structure, the Napatan builders left its old stones in place and carefully cut through them when laying the walls of the later temple's portico.

fig. 3. Photo of B 700-sub 3 as excavated in 2008. (Both photos: Pawel Wolf)

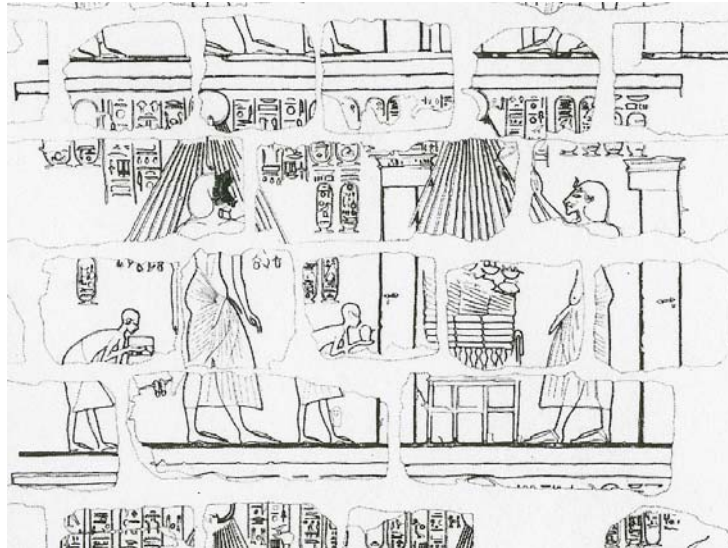


fig. 4. Akhenaten making offerings to the Aten in small roofless chapels with pylons, comparable to B 700-sub 1 and 3. From a series of reassembled talatat reliefs from Karnak, now in the Luxor Museum.



fig. 5. *The Aten chapels (B 700-sub 1 and 3) restored. (Models by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc.)*

The third *talatat* chapel, designated "B 700-sub 2," lies just southwest of the B 700 portico (**fig. 6**). While the other two were built of grey and yellow sandstone, this one was built of white sandstone *talatat* blocks, comparable to the stones used in B 500-Phase II, which suggests that it may be a little later in date (reign of Tutankhamun or Horemheb?). Whereas the two other structures show no indication of later use (as one would expect of monuments from Akhenaten's heresy), B 700-sub 2 was revived in the Napatan period, perhaps when B 700 was built, and a red sandstone superstructure was built over its white *talatat* floor (**fig. 11**). Unfortunately, almost all of this later phase was demolished when its blocks were carried away by stone scavengers – probably in the 19th century - leaving us almost totally ignorant of its ancient form and meaning.

B 700-sub 2 is curious because lying on the original *talatat* floor is an enormous natural boulder, looking as if it had been deliberately lifted up and set down upon the pavement. The boulder itself bears graffiti giving the names and titles of two Egyptian officials of Dynasty 18, but these texts (upside down) appear to have nothing to do with why the stone was set on this foundation. One can only suppose that, for some reason, the stone became an object of special veneration, and the structure was built to house it.

Inside B 700-sub 2, resting on the *talatat* floor, a remarkable collection of votive offerings was recovered. Among these was a hoard of over 600 natural stones of odd or suggestive shape or attractive color (**figs. 7, 8**). There were also objects of human manufacture such as a prehistoric ground stone macehead, several broken polished stone disks, and Egyptian objects seemingly contemporary with the *talatat* floor, notably several small earplugs, and, most surprising, a fragment of a large green stone disk

earplug of the Amarna Period (**fig.9**). This last object, with a concave groove around the rim, would have been held in the stretched ear lobe (**fig. 10**).



fig. 6. Photo of B 700-sub 2 as excavated in 2008, showing its white talatat foundation of late 18th Dynasty date, the large natural stone that was set on top of it, and the remaining red sandstone blocks of the Napatan period building that was erected over it. (Photo: Pawel Wolf).



fig. 7: Selection of votive sandstone concretions from B 700-sub 2.



fig. 8: Selection of wind-worn votive stones from B 700-sub 2.



fig. 9: Fragment of a large green stone disk earplug with green glass inlays, late Dyn 18; 6.7 cm diam, from B 700-sub 2.



fig. 10: *Wooden statuette of a young girl wearing large disk earplugs like that in fig. 9. Egyptian, late 18th Dynasty. British Museum (EA 32767)*



fig. 11. *The small chapel B 700-sub 2 (with B 700 in the background), as it may have appeared in the Napatan Period. (Model by Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc)*

Ref. T. Kendall. "Talatat architecture at Jebel Barkal," *Sudan & Nubia* 13, 2009. 2–16.

B 800: The Temple of Amun of Karnak at Napata.

B 800 lies parallel to and about 50 m southwest of B 500. It was an Amun temple that seems to have been built by the earliest known Napatan kings (ca. 800-750 BC) as a temporary substitute for B 500, while that temple was undergoing restoration. Unlike most of the other Barkal temples, B 800 had no New Kingdom antecedent, and it appears to have been built quickly of mud brick so that the cult of Amun of Napata could continue uninterrupted in temporary quarters, while B 500 became a construction site.

When Reisner excavated B 800 in 1916, he found that it presented two pre-Dynasty 25 construction phases. The earliest was a small building of irregular shape ("B 800 nucleus"), which included a stone-paved open court, four stone columns, a roofed antechamber, and an off-center tripartite sanctuary (**fig. 1a**). Its walls, he stated, "were of the cheapest available material, crude-brick, and... poorly built even for that material." He then speculated that its builder had been Kashta "or his immediate predecessor" (whom we now know bore the name of Alara).

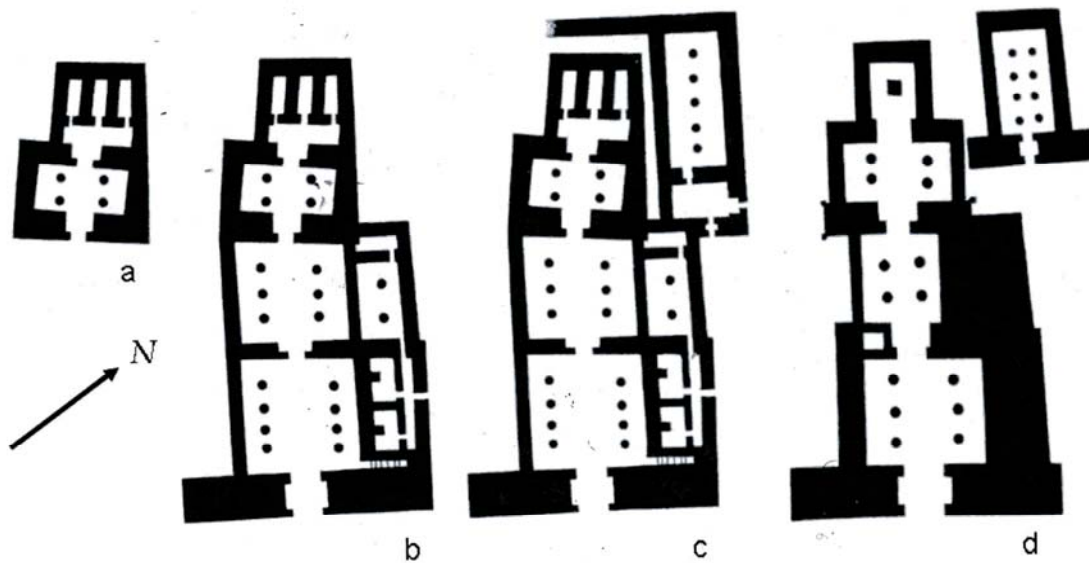


fig. 1. *The evolution of the complex B 800-900: a) "B 800 nucleus" (attributed to Alara); b) "B 800-first" (attributed to Kashta); c) "B 800-first" with "B 900-first" (dated to the late reign of Piankhy); and d) "B 800-second" (Anlamani) with "B 900-second" (Meroitic).*

Soon after completion of the nucleus, two outer courts and a pylon were added to it, as well as a series of side rooms, all constructed of mud brick (**fig. 1b**). This enlarged structure, "B 800-first" was striking for its lack of refinement: its columns were hand-cut and not perfectly round, and, flanking the entrance, there were at least four crude sandstone rams, which appear to be the earliest large-scale statues attempted by native

Kushite sculptors. (The best preserved example can now be seen at the entrance to the Jebel Barkal Museum. **fig. 2**)



fig. 2: *One of at least four ram statues erected at the entrance of Kashta's "B 800-first", ca. 760-750 BC. (Photo: Bryan Whitney).*

Sometime after the expulsion of the Kushites from Egypt in the later seventh century BC, B 800 was rebuilt in stone ("B 800-second") by Anlamani (**fig. 1d**), indicating that its role as a temporary residence for Amun of B 500 had changed, since the god's original temple had been fully operational since the reign of Piankhy. At this point, B 800 must have acquired a new permanent meaning, independent of B 500, since its old mud walls were now sheathed in red sandstone, and its tripartite sanctuary was dismantled and rebuilt as a single sanctuary containing a bark stand. It was, to be sure, a second Amun temple, given its ram statues, but dedicated to what form of the god? The answer surely lies in the local iconography of Amun.

In local monuments at Jebel Barkal the god is commonly represented in two forms, which seem to have symbolized different directions (**fig. 3**). The god's human-headed form nearly always appears on monuments or temple walls on the left or downstream (southwest) side, which indicated "north" and Egypt. The god's ram-headed form nearly always appears on the right or upstream (northeast) side, which indicated "south" and Nubia. The human-headed Amun was, of course, the Egyptian god of Thebes, Amun of Karnak, while the ram-headed Amun was the Nubian Amun of Napata, "who dwells within Jebel Barkal." Since the "southern" temple (B 500) housed Amun of Napata, we can be fairly certain, then, that B 800, the "northern" temple, housed the Amun of Karnak.

Since the Kushites had lost direct or easy access to Karnak in the latter seventh century BC, it appears that B 800 was rebuilt to be the ritual substitute of Karnak at Napata.



fig. 3. *The top of the Stele of the Meroitic king Tanyidamani, found at Jebel Barkal. The king is dressed as high priest and wears the crown of Shu (see B 200-300, B 500: statue cache). He is flanked by the two primary forms of Amun: the ram-headed Amun of Napata at right (on the "south"), and the human-headed Amun of Karnak at left (on the "north"). MFA 23.736. Courtesy of the Museum of Fine Arts, Boston.*

Ref. T. Kendall, "Reused Relief Blocks of Piankhy from B 900: Toward a Decipherment of the Osiris Cult at Jebel Barkal," in J. R. Anderson and D. A. Welsby, eds. *The Fourth Cataract and Beyond: Proceedings of the 12th International Conference for Nubian Studies*. Leuven: 2014. pp. 663-686.)

B 900: The "Lion Temple"

B 900 is a small temple attached to the northern corner of B 800. It had two phases: the first (B 900-I) dating to the later reign of Piankhy (ca. 747-716 BC) (**fig. 1**) and the second (B 900-II), dating to the Meroitic period, about seven centuries later (**fig. 2**). The latter building, a single-room temple with eight columns (2 x 4) fronted by a pylon, is identical in form and comparable in size to the so-called "lion temples" of Naqa and Musawwarat es-Sufra. It may thus have housed the Meroitic lion god Apedemak, who, it seems, was closely associated with Amun, and in Meroitic times was probably conceived as a resident of Jebel Barkal (**fig. 3**). (That Apedemak, too, may have been imagined as an aspect of the uraeiform pinnacle is suggested by the recent discovery of the Italian team within their concession of a stone uraeus with a lion head.) Unfortunately, this "lion temple" preserved no carved decoration of its own, but it did incorporate a large number of blocks reused from B 900-I, over whose foundations it rose.

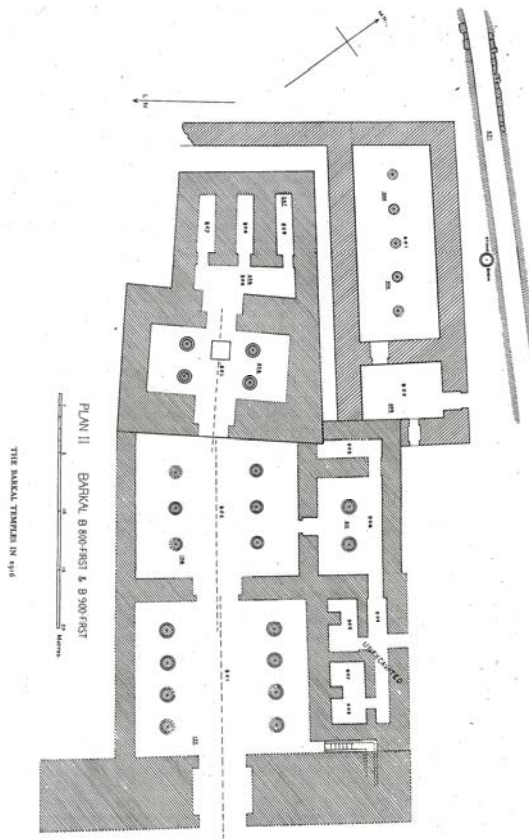


fig. 1: Plan of B 800 in the latter 8th century BC with B 900-Phase I on upper right (east) side. From G. A. Reisner, *Journal of Egyptian Archaeology* VI (1920), pl. XXXI.

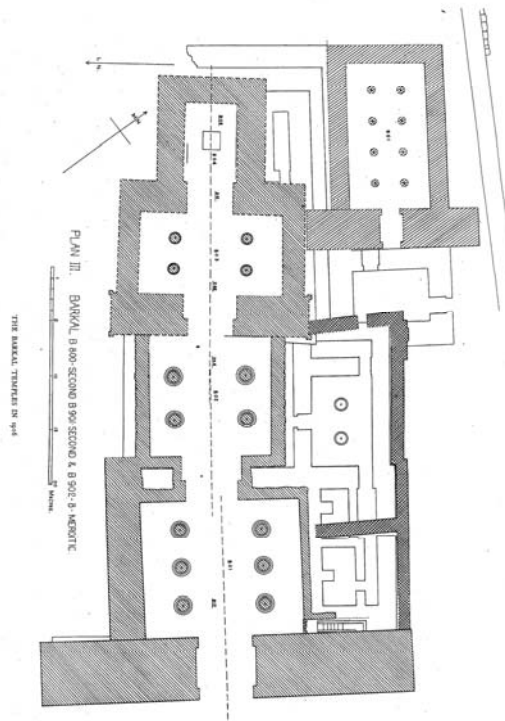


fig. 2: Plan of B 800 later in the Napatan period with B 900-Phase II on upper right (north) side. From G. A. Reisner, *Journal of Egyptian Archaeology* VI (1920), pl. XXXIV.



fig. 3: A vignette from one of the columns in the Lion Temple at Musawwarat es-Sufra, which may represent Apedemak in a shrine simulating Jebel Barkal together with an obelisk perhaps symbolizing the pinnacle. From F. Hintze, *Musawwarat Es Sufra*, Band I, 2 Der Löwentempel, *Tafelband*. Berlin 1971. Taf. 85.

B 900-Phase I was quite different from its later counterpart; it seems to have had an inner room bisected by only one row of five columns. Over forty carved blocks were recovered from it. Some were still embedded in the walls of B 900-Phase II; others were found scattered widely over the surrounding ground. These blocks, many of which were removed and taken into storage in the Jebel Barkal Museum, bear the earliest Kushite reliefs known. The recovery of multiple cartouches made it clear that the builder of this temple was Piankhy, that it had been constructed in the latter half of his reign, and that it was contemporary with B 500, court 501. It had been carved on the exterior with rows of large, slightly over lifesize figures of deities (Amun, Osiris, Isis and Horus [?]) and multiple images of the king, now all very fragmentary (**fig. 4**).



fig. 4: *Blocks from B 900-Phase I, dating from the later reign of Piankhy, showing part of a procession of deities including Osiris and Isis. (Photo: T. Kendall).*

(See T. Kendall, "Reused Relief Blocks of Piankhy from B 900: Toward a Decipherment of the Osiris Cult at Jebel Barkal," in J. R. Anderson and D. A. Welsby, eds. *The Fourth Cataract and Beyond: Proceedings of the 12th International Conference for Nubian Studies*. Leuven: 2014. pp. 663-686.)

B 1100: the "Great House" at Jebel Barkal.

Thirty meters to the right (north east) of the Mut Temple (B 300) lie traces of another temple, which seems to have been part of the same series of goddesses' temples as B 200 and 300 (q.v). It is designated "B 1100" (**fig. 1**). Sadly, little of this building now remains, for it had no rock-cut rooms, and, like the exterior masonry walls and pylons of B 200 and 300, it was almost entirely quarried away by stone scavengers in the 19th century. So little of B 1100 survives today that we cannot reconstruct its ground plan, but its remaining blocks reveal that it had three successive building phases: Egyptian (late 18th Dynasty), Napatan, and Meroitic.

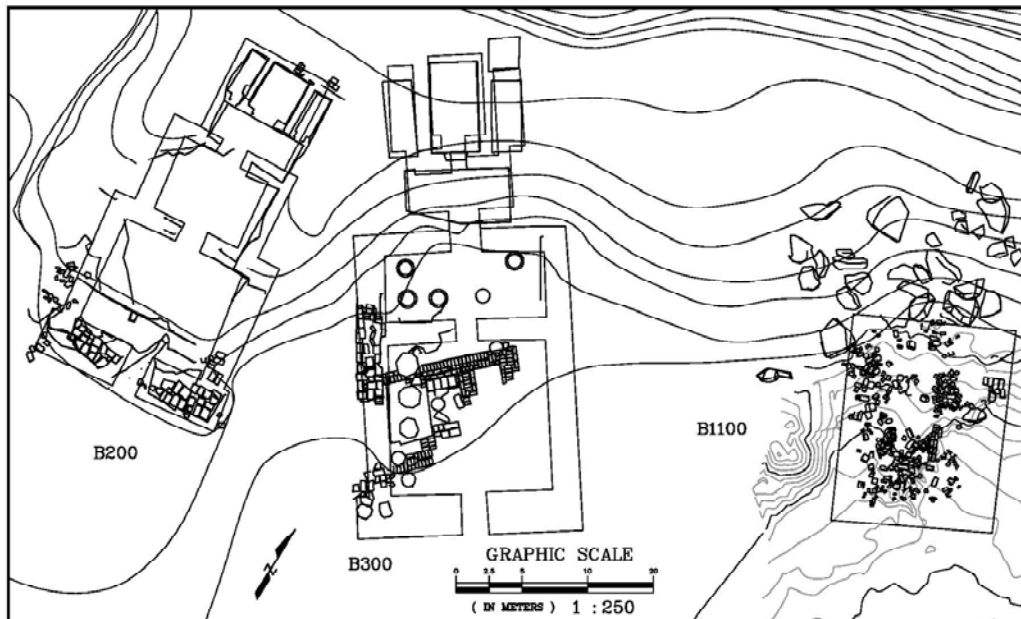


fig. 1: General plan of temples B 200 , B 300 (with B 300-sub) and B 1100 (Map: R. C. Rosa III).

The surviving Meroitic relief blocks of B 1100, discussed below, suggest that B 1100 was dedicated to the royal uraeus goddesses Nekhbet and Wadjet (known collectively as the "Eye of Horus"). The position of the temple, directly in front of the Jebel Barkal pinnacle, is most significant (**fig. 2**), for it is from this angle that the pinnacle actually presents the appearance of a royal uraeus, crowned with the White Crown (**fig. 3**). A bit farther west, as noted above (q.v. B 200 and 300), the pinnacle took the shape of a uraeus crowned with a sun orb ("Eye of Re"), which apparently dictated the locations of B 200 and 300, which housed the goddesses of the god's uraeus, known as the "Eye of Re."

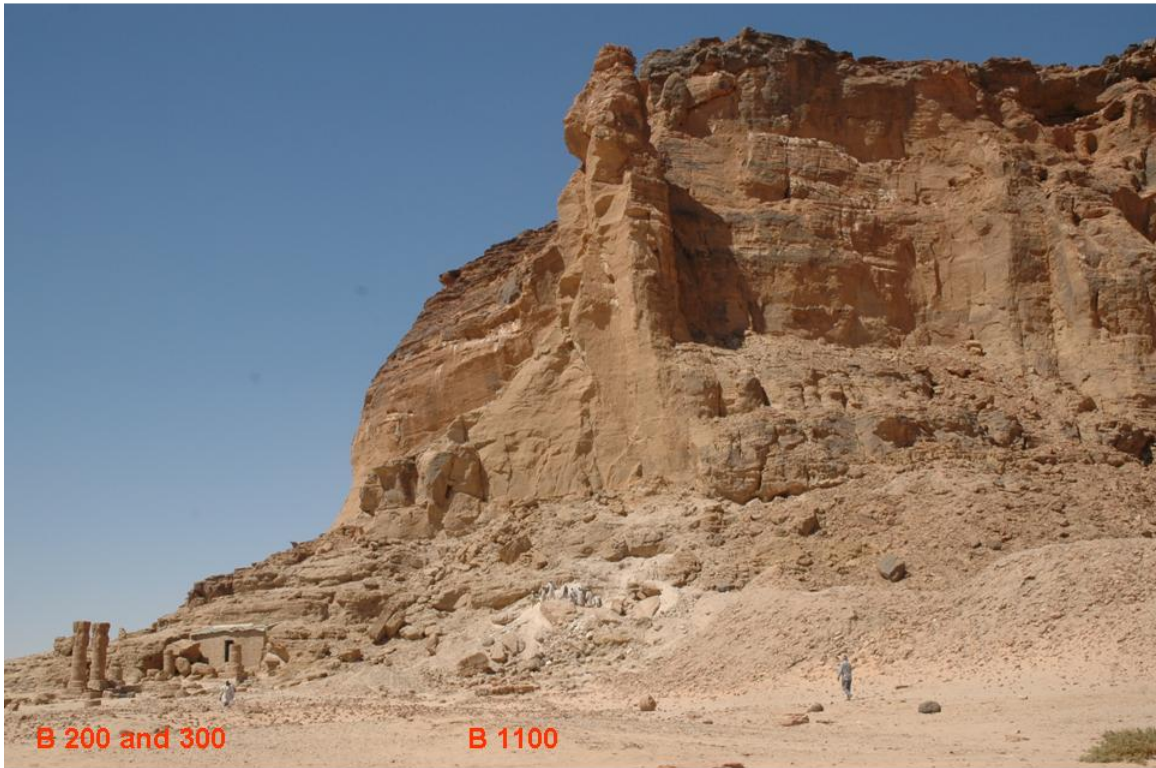


fig. 2: *Photo showing location of B 1100 in relation to both the pinnacle and B 200 and 300. (Photo: T. Kendall).*



fig. 3. *Bronze uraeus with White Crown, from a royal statue, revealing its likeness to the pinnacle as it appears in fig. 2. Courtesy of the Museum of Fine Arts, Boston.*

About thirty carved Meroitic blocks and fragments were recovered from the site, and these could be dated by their preserved cartouches to the joint reign of the Meroitic royal couple Natakamani and Amanitore (mid-first century AD) (**fig. 4**). These blocks had derived from a small vaulted chamber, whose inside surfaces were carved in raised relief with images of both royal uraeus goddesses represented as vultures (**figs. 5, 6**). On the arched ceiling, they flew overhead in a starry sky. On the sides, where the vault joined the walls, they stood on register lines, their wings splayed, alternately wearing the White and Red Crowns. These birds bracketed pairs of cartouches naming the royal couple and pairs of small squatting figures of Amun, who faced a fetish of a goddess wearing the Double Crown. These details strongly suggest that the temple was dedicated to the goddesses of the royal uraeus, Nekhbet and Wadjet, who also personified the goddess of the crowns, Weret-Hekau ("Great of Magic"). If this is correct, B 1100 was the temple known as the "Great House," which the king entered during his coronation to receive his crowns "from Weret-Hekau" herself (who was probably none other than his own mother, "magically" transformed into the goddess).

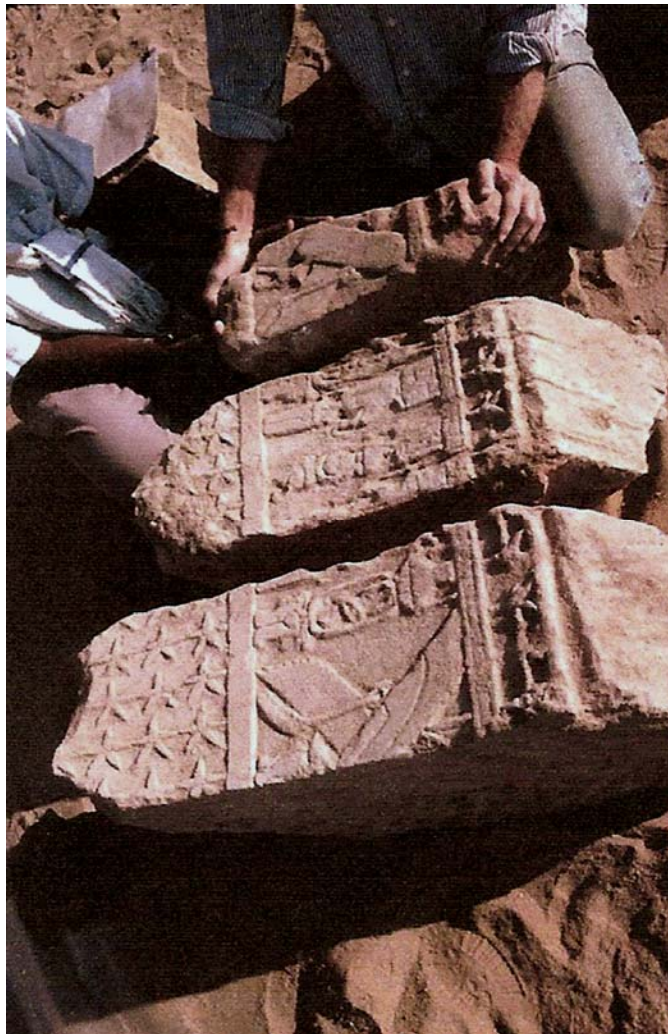


fig. 4: *Meroitic blocks from a small vaulted chamber, found in the ruins of B 1100. (Photo: Susanne Gänsicke).*



fig. 5: *Photomosaic showing the surviving Meroitic relief fragments of B 1100, composed in mirror image to suggest the overall wall and ceiling decoration of the small vaulted chamber inside the temple in the time of Natakamani and Amanitore.*



fig. 6. *Nekhbet (left) and Wadjet (right), represented as vultures, flanking a pair of cartouches bearing the throne names of Natakamani and Amanitore. The cartouches flank pairs of squatting figures of Amun, who face a fetish of a goddess, face frontal, wearing the double crown. (Photos: T. Kendall).*

Like B 300, just to the west of it, B 1100 occupied a cult place that had been used continuously for the same purpose since the 18th Dynasty. Beneath its Meroitic blocks, there were several reused Napatan relief blocks, suggesting a building phase that was probably contemporary with B 200 and 300. Below these were fragments of a foundation, made with the distinctive white sandstone *talatat* blocks of the late 18th Dynasty (see B 300-sub, B 500-Phase II and B 700-sub 2) (**fig. 7**). A red sandstone block, found nearby, conveniently preserved the cartouche of Horemheb (1323-1295 BC) (**fig. 8**), which seemed to confirm the date that would otherwise have been proposed for the foundation of B 1100 simply based on the type of *talatat* blocks used in its construction.



fig. 7. *The talatat foundations of B 1100-Phase I, showing that the temple had first been built in the late 18th Dynasty and paralleled B 300-sub.*



fig. 8. *Architrave bearing the throne name of Horemheb, found 10 m east of the B 1100 foundation.*

All the evidence from B 1100 indicates that it was the temple called *Per-Wer* ("Great House"), where the king received his crowns from the crown goddess Weret-Hekau. The siting of the temple directly in front of the pinnacle shows that the natural rock shaft had been recognized since the 18th Dynasty as an effigy of a royal uraeus (and hence, a statue of the goddess). Because of this the Egyptians had come to believe that Jebel Barkal was a pre-eminent ancient source of royal authority. The later Napatan and Meroitic kings perpetuated this tradition by continuing to rebuild B 1100, so that they, like the pharaohs of the New Kingdom before them, could come to Jebel Barkal to claim the same kingship, and to perform the same rituals within the same temples that the pharaohs had used many centuries before. The Meroitic reliefs even reveal that pinnacle was thought to embody *both* royal uraei, indicating that the Kushites believed that the kingship granted by Amun of Jebel Barkal gave them complete authority over "Upper and Lower Egypt" (whatever that was understood to mean in Meroitic times).



Fig. 9. *The Jebel Barkal temples as they may have looked in the Meroitic period, with B 1100 represented in purely hypothetical form as the third temple from the bottom. (Model by B. Whitney and Geoff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc)*

B 1200: The Napatan palace and Aspelta throne room.

The labyrinthine mud brick walls southwest of B 800 are the remains of the Napatan palace, designated "B 1200," at Jebel Barkal (**fig. 1**). Until now this sprawling ruin has been only partially excavated, but a recent geophysical examination suggests that it is about 70 m square. When Reisner first probed it in 1919, he found that it was not merely one building but a series of buildings, built one on top of the other, each with a slightly different plan. He thought he could discern four levels, but recent research suggests that there may have been as many as eight rebuilding phases - one about every 100-150 years. The first may have been Ramesside, given the discovery of blocks inscribed for Ramses II in one sounding. The next six or seven phases, beginning in the early eighth century BC, were Napatan, while the last was early Meroitic. In the inscription of Harsiotef (late fourth century BC) we are told that in his day "the king's house" had over sixty rooms, but was "falling down," and that he rebuilt it. B 1200 seems finally to have been abandoned as the site of the royal residence by the mid-first century BC. It was replaced by B 100, which was built just in front of B 1200's southeast corner (which is still unexcavated).



fig. 1: *Photo of the excavated walls of B 1200 (foreground) and those of B 100 (background), as exposed by G. A. Reisner by February 1919, as seen from the summit of Jebel Barkal. (Reisner photo A2757, Courtesy of the Museum of Fine Arts, Boston).*

About 85 cm below the level of the visible mud walls on the surface, Reisner found remains of an older building level with a different plan, with finely carved and painted stone columns and doorways bearing inscriptions naming the kings Senkamanisken, Anlamani and Aspelta (ca. mid-seventh to early sixth century BC). He also discovered that this level had been destroyed by fire and that its charred ruins had been evenly buried under a layer of earth 80 cm thick, which was laid in order to create an earth foundation for a new palace, built probably in the late sixth century BC.

In 2007 the NCAM Mission undertook extensive excavations of this buried and burned level (believed to be the fourth) and exposed a well-preserved throne room of Aspelta (**figs. 2, 3**). Its walls had been painted with murals (now reduced to tiny fallen fragments) and colored bands; its ceiling, too, had been plastered and painted, perhaps with repeating designs of *udjat* eyes, and supported by four columns.

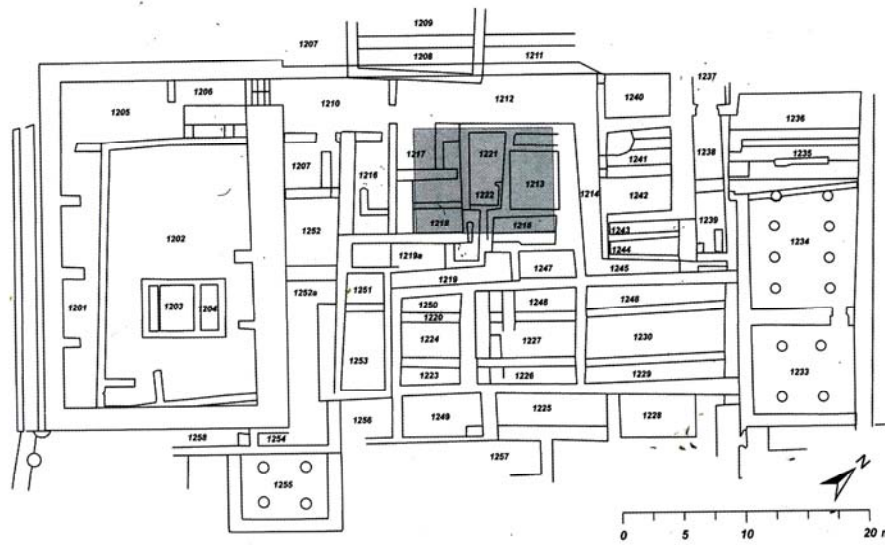


fig. 2: Plan of the northwestern half of B 1200, as excavated and drawn by Reisner, showing the location (shaded) of the throne room of Aspelta, excavated in 2007 (shown in fig. 3).



fig. 3: *Throne room of Aspetla after excavation in 2007, looking northeast (Photo: Pawel Wolf)*

The columns of this room were of unique papyrus bud form, having secondary capitals in the form of four addorsed projecting rams heads, crowned with sun disks (as tertiary capitals) (**figs. 4, 6**). The column shafts, also brightly painted, were carved in sunk relief with registers of "year goddesses," accompanied by hieroglyphic texts expressing their magical utterances (**fig. 5**). These sayings, designed to protect the king from harm, indicate that this room had served as the ritual setting for ceremonies connected with the advent of the New Year (which coincided with the rising of the Nile in mid-summer; see B 350). The spells were supposed to protect the king during the five dangerous epagomenal days preceding the start of the New Year (see B 200-300, fig. 3).



fig. 4: *Ram-head column capital: one of four from the Aspetla throne room. (Photo: T. Kendall.*



fig. 5: A well-preserved "year goddess" from one of the columns in the Aspelta throne room. Strangely, each goddess was crowned with a pair of sun disks.(Photo: T. Kendall).

The focus of the room was the NE end, where there were four sandstone sockets set into the floor in a rectangle. These had surely supported the four wooden columns of a baldachin or canopy under which the king sat on his throne (**fig. 6**). The king would have

faced the opposite end of the room where there was a formal large doorway, through which visitors and officials would have entered for audiences with him.

Unhappily for Aspelta, the protective words of the goddesses could not help him. His palace seems to have been deliberately set on fire and destroyed. The destroyers in this case were almost certainly the troops of the Egyptian king Psamtik II (595-589 BC), whose army invaded Kush in 593 BC, ravaging the Jebel Barkal sanctuary and leaving it a ruin.

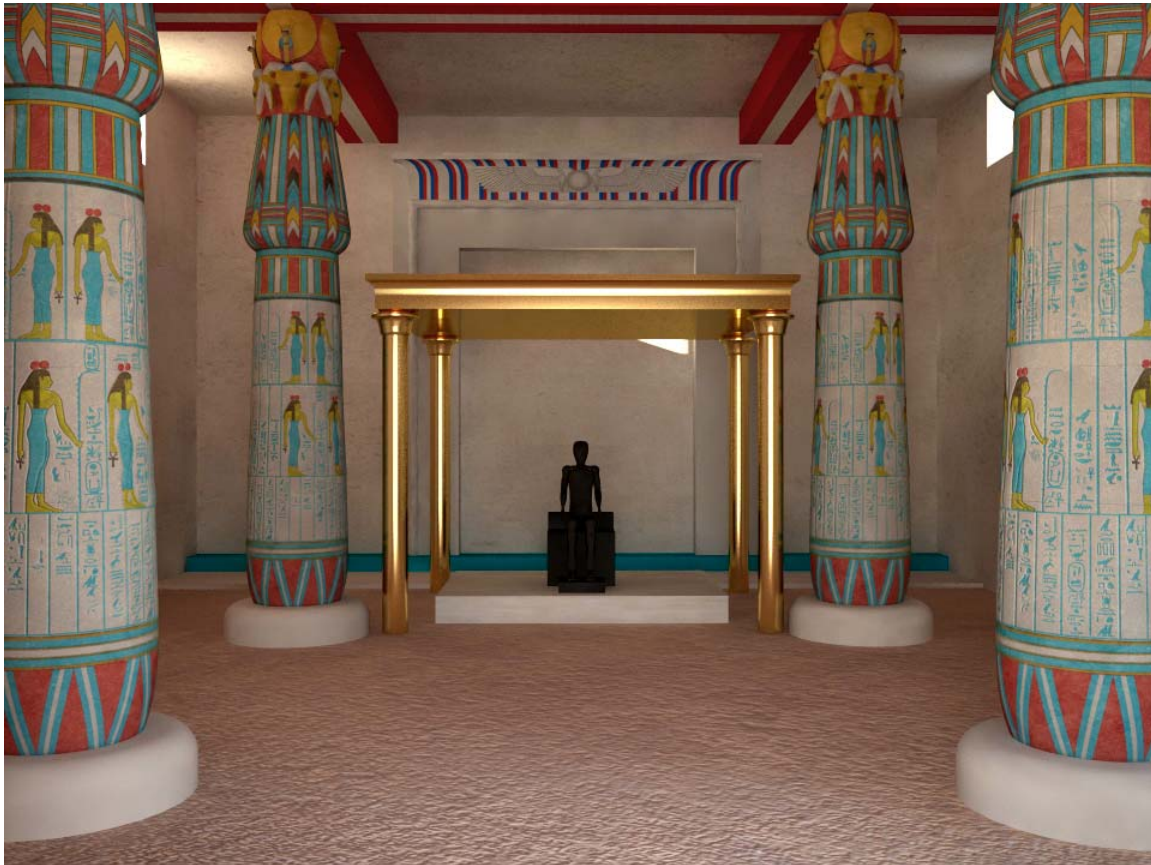


fig. 6: *Tentative reconstruction of the Aspelta throne room, with colors reproducing those actually preserved on the columns (Compare with fig. 3). (Model by Geff Kornfeld © 2015 NCAM Mission and Learning Sites, Inc)*

Ref.

Timothy Kendall, "The Napatan Palace at Gebel Barkal: A First Look at B 1200," in W.V. Davies, ed. *Egypt and Africa: Nubia from Prehistory to Islam* (London: British Museum, 1991), pp. 302-313.

Timothy Kendall and Pawel Wolf, "Excavations in the Palace of Aspelta at Jebel Barkal, March 2007," *Sudan & Nubia* 11. 82-88, pls. XXXV-XXXVIII.

B 1700: A Palace of the High Priest of Amun (?)

The structure B 1700, about 50 m northeast of B 500, was discovered by means of magnetometry in 2006 (fig. 1).



Fig. 1. Magnetic image generated in 2006 showing B 500 with previously unknown structures (which were then buried and not visible from the surface): at right (NE): B 1700; below: the mammisi temple and kiosk (B 560-561 q.v.) (on right side of avenue leading into B 500), and opposite it: a still unexcavated temple (B 570). (Geophysics: Meg Watters, T. Goldman, R. Wutzler, and Moh. Abdul Wahab).

B 1700 was first excavated in January and February 2015, when about half of it was cleared (fig. 2, 3). It has proven to be a palatial structure, about 16 m square - but so severely denuded that almost nothing of its superstructure survives. Today it exists only as a network of doorless mud brick foundation walls, packed with broken pottery and ashes. These walls originally supported stone columns and architectural elements, fragments of which still lie about in very worn remnants. The double walls of the square plan in the center

(10.8 x 10.4 m sq.) may have been intended to support a peristyle - either a central living room, if roofed over, or a private atrium, if left open. B 1700 is much too small to have been a royal residence, but, given its proximity and axial similarity to B 500, it may have been a priests' house - possibly the residence of the High Priest of Amun. Radiocarbon dates suggest it was in use between the first century BC and the first century AD.



fig. 2. *B 1700, under excavation, February, 2015, looking south. The first pylon of B 500 is visible in the distance. (Photo: T. Kendall).*



fig. 3. *B 1700, as excavated, March 2015, oriented to the cardinal directions (3D photoscan by Maksim Lebedev and Simone Nannucci).*

A Brief History of the NCAM Jebel Barkal Mission, with Staff Acknowledgements

In 1986, a small team from the Museum of Fine Arts (MFA), Boston, led by Timothy Kendall, began work at Jebel Barkal in the former concession area of G. A. Reisner. Under MFA sponsorship, and with support from the National Geographic Society and the Schiff Giorgini Foundation through Alan M. May, this team worked five seasons - 1986, 1987, 1989, 1996, and 1997. In 1999, with Kendall's departure from the MFA, the team merged, at the invitation of Dr. A. Roccati, with the Italian Mission. Then in 2003, at the request of Hassan Hussein Idriss, Director General of NCAM, Kendall's mission was designated an official NCAM Mission and given new US sponsorship by the African-American Studies Dept., Northeastern University, Boston, through grants from the Marilyn M. Simpson Foundation, Charles Frisch and Cynthia Walpole, the Archaeology4All Foundation through Victor Duer, and the J. A. and H. G. Woodruff Charitable Trust through James and Thomas Woodruff. El-Hassan Ahmed Mohamed, the team's Inspector since 1996, now became the Mission's Co-Director, and the Mission has continued working nearly each season to the present. In 2013 funding of the Mission was granted by the Qatar-Sudan Archaeological Project (QSAP), also known as the Nubian Archaeological Development Organization of Qatar-Sudan.

The Mission's field objectives have been: 1) To re-examine and fully record all of the temples and palaces excavated by Reisner and to prepare final publications of each, 2) to survey and map the entire temple area, as well as each structure, both topographically and block-by-block, 3) to survey the licensed area through magnetometry to identify sub-surface structures, 4) to collaborate with the Italian Mission in mapping the entire architectural complex, 5) to seek stratified archaeological evidence of pre-Egyptian and early Egyptian occupation of the site to determine when the mountain might first have acquired its cultic importance, 6) to explore the cliff face and to record all ancient evidence for human workmanship on the mountain itself, and 7) to examine the textual and iconographic record of Jebel Barkal to try to better understand the nature of its cult, its religious meaning, and its place in history.

Over the years, many people have joined us in the field to contribute their time, expertise and insights, and without their help, dedication and ingenuity, the work could never have achieved the level it has. We have been honored to work with these colleagues and thank them profoundly, both collectively and individually. (We list them below in chronological order, by season).

Cynthia Shartzer† (Project Manager) (1986, 1987, 1989, 1996, 1997, 1999, 2002)
Babiker Mohamed El-Amin (Inspector, Sudan Antiquities Service [now NCAM]) (1986, 1987, 1989)
Paul Duval† (Alpinist) (1987, 1989)
Nathalie Beaux (Egyptologist) (1987)
Lynn Holden (Egyptologist) (1987)
Susanne Gänsicke (Conservator) (1989, 1996, 1997, 2015)
David Goodman (Surveyor) (1989)
Enrico Ferorelli† (Photographer) (1989)
William Riseman† (Architect, Computer Modeler) (1989-1994)
Faiz Hassan Osman (Archaeological Assistant)(1997, 2000), (Project Mgr. 2005)
Alan M. May (Archaeological Assistant) (1997)

Margaret S. Watters (Geophysicist) (2000)
 Ahmed Moussa (General Assistant) (2000-2015)
 Hatim Osman Fadl, (Chief Excavator) (2000-2015)
 Shadia Abu Rabu Abdel Wahab (Inspector, NCAM) (2002)
 Pawel Wolf (Field Director) (2002, 2004, 2006, 2007, 2008, 2010)
 Ulrike Nowotnick (Archaeologist, Ceramologist) (2002, 2004, 2006, 2007)
 Annett Dittrich (Archaeological Assistant) (2002)
 Diana Nickel-Tzschach (Archaeological Assistant) (2002)
 Alexandros Tsakos (Archaeologist) (2004, 2005, 2005)
 Rehab Khidir al-Rashid (Inspector, NCAM) (2005)
 Max Farrar (Surveyor) (2005, 2005, 2007)
 Jeremy Pope (Egyptologist) (2005)
 Martin Pittertschatscher (Conservator) (2005)
 Silvia Zauner-Mayerhofer (Conservator, Archaeological Asst.) (2005, 2005, 2009, 2010, 2011, 2013, winter 2014)
 Nadejda Reshetnikova (Architect, computer modeler) (2006, winter 2014, fall 2014, 2015)
 Stanislav Vorstrikov (Archaeological Assistant) (2006)
 Thomas Goldmann (Geophysicist) (2006, 2007)
 Ronny Wutzler (Geophysicist) (2006, 2007)
 Mohamed Abdel Wahab (Geophysicist) (2006)
 Alexander Kendall (Archaeological Assistant) (2007)
 Jana Neumann (Archaeological Assistant) (2007)
 Judith Heymach (Archaeological Assistant) (2007)
 Lukas Goldmann (Archaeological Assistant) (2007)
 Manja Wetendorf-Lavall (Archaeological Assistant and Ceramicist) (2008)
 Heather Wilson (Archaeologist) (2008, 2009, 2010, 2011, 2013, winter 2014, fall 2014)
 Robert Rosa (Surveyor) (2008, 2009, 2013, winter 2014, fall 2014, 2015)
 Samreen Wolf (Assistant) (2010)
 Rosemarie Mispagel (Archaeological Assistant) (2010, 2011, 2013, 2014)
 Charles R. Morgan (Archaeological Assistant) (2010)
 Yasin Mohamed Said (surveyor) (2011)
 Sami Mohamed el-Amin (Inspector, NCAM) (2013, winter 2014, fall 2014, 2015)
 Geoff Kornfeld (Computer modeler) (2013-16)
 Donald Sanders (CEO, Learning Sites, Inc.) (2013-16)
 Bryan Whitney (Photographer) (2013, winter 2014, fall 2014, 2015)
 Dominic Perry (Egyptologist) (winter 2014)
 Joyce Haynes (Egyptologist, Archaeologist) (winter 2014, fall 2014, 2015)
 Rosa Frey (Archaeologist) (winter 2014)
 James Knudstad: (Architect, Archaeologist) (winter 2014)
 Dobiesława Baginska (Ceramologist) (winter 2014, fall 2014, 2015)
 Mohamed Osman Abdulla (Archaeologist, Computer specialist) (2015)
 Maksim Lebedev (Archaeologist) (2015)
 Simone Nannucci (Archaeologist) (2015)
 Lyla Pinch-Brock (Draughtsman) (2015)
 David Krathwohl (web designer) (2009, 2016)
 David Klotz (Egyptologist) (2014-2016)

We would also like to acknowledge the dedication of our many skilled workmen, too numerous to name here, some of whom have worked with us so many seasons over the past thirty years that they have contributed their sons and grandsons to the team.