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Displaying the Nabta Playa Monuments in the Nubian Museum, Aswan, Egypt

Introduction

Nabta Playa, in the South Western Desert of Egypt (Fig. 1), is not only one of the major Neolithic settlement regions of the Sahara, but also the largest Neolithic ceremonial center of the entire African continent, spreading over a surface area of about 10 sq. km., and stretching in time from about 8,500 to 3,500 years BCE. It contains a large amount of sacred installations (Fig. 2) represented by two great fields of offering tumuli situated on the Sacred Mountain, or Gebel El Muqaddas in the north of the area (Figs 3, 4), and in the Valley of the Sacrifices (Fig. 5) located nearly two kilometers to the south of the gebel; a possible solar calendar on a small hillock at the mouth of the same Valley of the Sacrifices (Figs 6, 7); four fields of megalithic stelae counting several hundreds of shaped sandstone blocks farther to the south and southeast (Fig. 8); and at least two alignments of stelae (Figs 9, 10) directed towards the polar region in the northern celestial hemisphere, and Sirius and/or Orion (?); as well as an impressive burial tumulus overlooking the clusters of stelae from the west (Fig. 11).

Researching sacred installations in the Nabta Playa Basin

After the early three field seasons at Nabta Playa (1974, 1975 and 1977), the Combined Prehistoric Expedition transferred its work first to the prehistoric sites located in Kharga Oasis (1976), and following the 1977 season briefly to Kubbania, on the Nile, just north of Assuan (1978), then to the Kiseiba Scarp (1979-1980), and again to

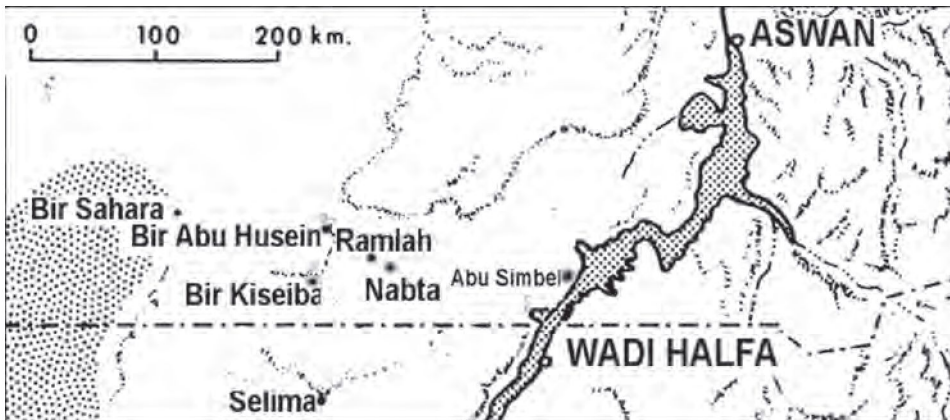


Fig. 1. Location of Nabta Playa

Wadi Kubnaniya (1980-1984). Subsequent field seasons were spent at Bir Sahara and Bir Tarfawi (1985-1988), and at Bir Safsaf and Wadi Arid (1984-1985) (Wendorf and Schild 1980; Wendorf *et al.* 1984; 1987; 1989; 1993). In 1990, the Combined Prehistoric Expedition reactivated its interest in the Nabta Playa Area and conducted very intensive excavations and mapping in the Nabta Playa basin during the 1990-1994, and 1996-2009 field seasons (Wendorf *et al.* 2001). Naturally, the megaliths and sandstone block quarrying were the main focus of study during the years 1990 to 1997 and 2001 to 2009 (Bobrowski *et al.*, 2012; McKim Malville *et al.* 1998; 2008; Schild and Wendorf 2004; 2012; Wendorf and Królik 2001; Wendorf and McKim Malville, 2001), but the other excavations at surrounding sites near Gebel Ramlah (Kobusiewicz *et al.* 2010) and Bergat El Shab cemented their importance in place and time.

Non Archaeological Interest in Nabta Playa

In 2002, a physicist, Dr. Thomas G. Brophy, following the publication of Volume I of the Prehistory of Nabta Playa (Wendorf *et al.* 2001), began secretive investigations of Nabta Playa megalithic monuments. Shortly afterwards he was followed by Mr. Robert Bouval, a writer and author of several well-read books on ancient Egypt in which he has advocated the interaction of Pharaonic Egypt with extraterrestrial creatures.

In 2002, Dr. Brophy published *The Origin Map. Discovery of Prehistoric, Megalithic, Astrophysical Map and Sculpture of the Universe*. It is a book discussing association of certain Nabta Playa megaliths, particularly the possible calendar circle and the slightly shaped rock underneath the cluster of fallen stelae termed a *Complex Structure A* by Wendorf and Królik (2001, 505). In the book, Dr. Brophy

(2002) has argued that the possible Solar Calendar was in fact a star viewing diagram constructed at about 16,500 years ago, which represents a map of the stars of Orion. The sandstone *mushroom*-like rock underneath the *Complex Structure A*, however, depicts a detailed map of our galaxy carved around 17,500 BCE

The book triggered a great interest in the remote desert area of Nabta Playa in the *New Age* religion followers as well as those interested in extraterrestrial phenomena. Soon numerous illegal “tourists” began visiting Nabta Playa megaliths in the archaeological off seasons. In the years 2004-2007 the “tourist” started to build new megaliths and reconstruct the old ones using original stones or bringing them from the neighboring prehistoric installations. One of the “fully reconstructed monuments” was the Solar Calendar. The Supreme Council of Antiquities of Egypt could not offer a constant surveillance of the remote Nabta Playa Basin Area (compare Schild and Wendorf 2012) and its protection. It became obvious that some of the most endangered elements had to be moved to places where they could be viewed and protected.



Fig. 2. Map of major sacred installation of Nabta Playa (not to scale). Drawing by Marek Puzzkarski

Selecting the Monuments in the Field

In the 2008 season two groups of monuments, both endangered or ruined by the tourists had been selected for the transfer to the Museum. The first of those was the possible calendar. Before the transfer the already “reconstructed” by the “tourists’ calendar was mapped in details (Fig. 7) and all the elements



Fig. 3. Gebel El Muqaddas. The person in the middle stands at the foot of a deflated tumulus in lag position. Southeastern tip of the gebel. Photograph by R. Schild



Fig. 4. Gebel El Muqattas, Site E-06-4. Excavating a small tumulus. Looking northwest. Photograph by R. Schild



Fig. 5. Valley of the Sacrifices. A reconstructed Late Neolithic tumulus (Site E-91-1n). Looking northwest. Photograph by R. Schild



Fig. 6. Valley of the Sacrifices, a possible solar calendar (Site E-92-9) in 2004. Looking northeast. Photograph by H. Tallah Abdelebaset Ahmad



Fig. 7. Valley of the Sacrifices, Site E-92-9. Reconstructed by “tourists” solar calendar being mapped by Betsy Alexander in February 2008. Photograph by M. Jórdeczka



Fig. 8. Western Group of Stelae. Two clusters of collapsed and broken stelae. Photograph by R. Schild



Fig. 9. Alignment A, Megalith A-2. Tilted and collapsed and broken stelae, looking northeast.
Photograph by R. Schild



Fig. 10. Reconstruction of Megalith A-2. Painting by M. Puszkarski

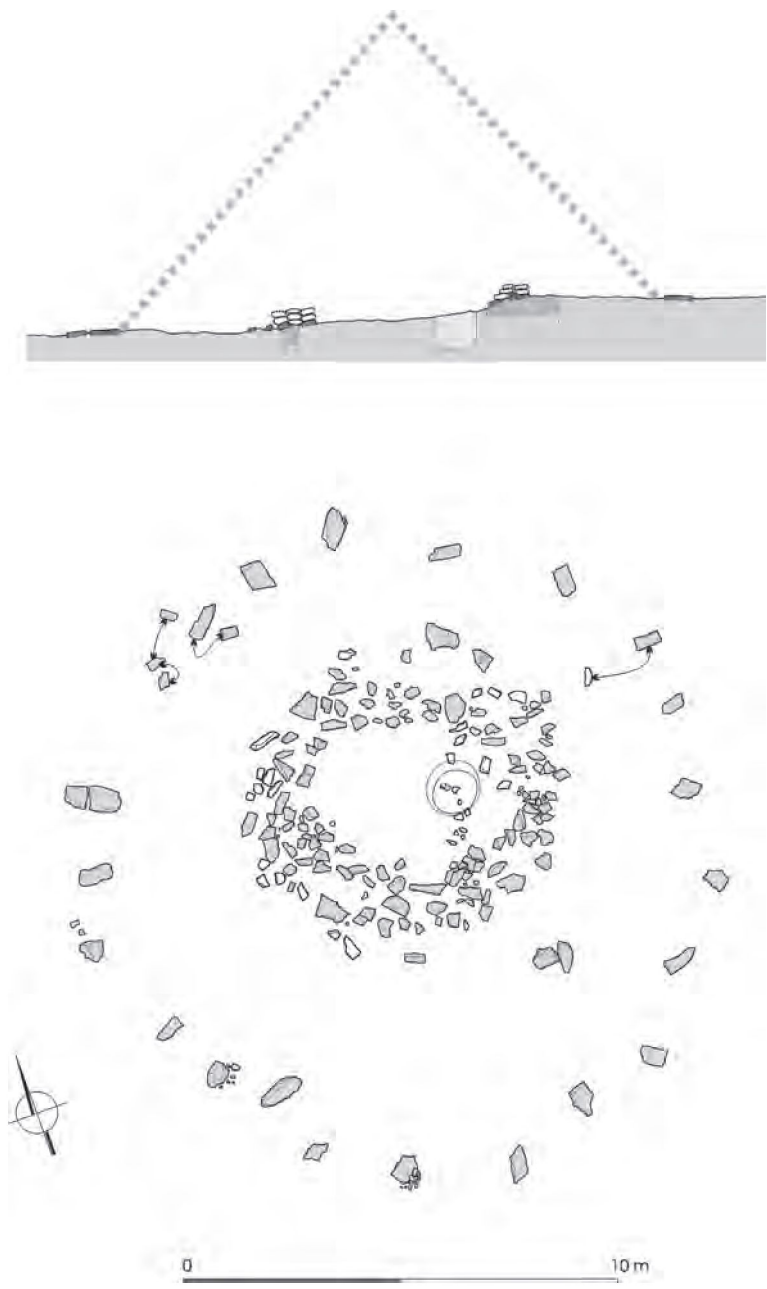


Fig. 11. Tumulus of Little Lord of Nabta Playa. Map and cross-section showing possible earthen superstructure. Drawing by M. Puzkarski



Fig. 12. Selected elements of the Solar Calendar awaiting packing. Photograph by R. Schild

compared with the sketch of the monument drawn in the 1992 field season (Aplegate and Zedeño 2001, Figs 14.1, 14.2). All the intrusive, later elements of the structure were left in the field and the original ones numbered, photographed and packed in wooden boxes for transportation (Fig. 12). In total there were 37 stones thought to be the original vertical components of the installation, many of which, particularly those used for the construction of tall sights (gates) have been worked by flaking their sides (e.g., Figs 13-15); others, usually elongated blocks, may often show non-weathered, fresh bases indicating that the specimens were inserted in the sand (compare Figs 16-18).

Seven samples of the stelae were selected from the Western and South Eastern Fields of Stelae. The exact position of each of them was recorded in detailed maps of the fields. As to the third installation of the group, a “cow sculpture” recovered from the pit under the collapsed stelae of Complex Structure A, it had been brought to the Nubian Museum in Aswan already in the late 1990s by the Supreme Council of Antiquities following the excavations of Structure A (Site E-96-1) in the 1996 season (Wendorf and Królik 2001).



Fig. 13. Chipped vertical component of a sight. Photograph by R. Schild



Fig. 14. Chipped vertical component of a sight. Photograph by R. Schild

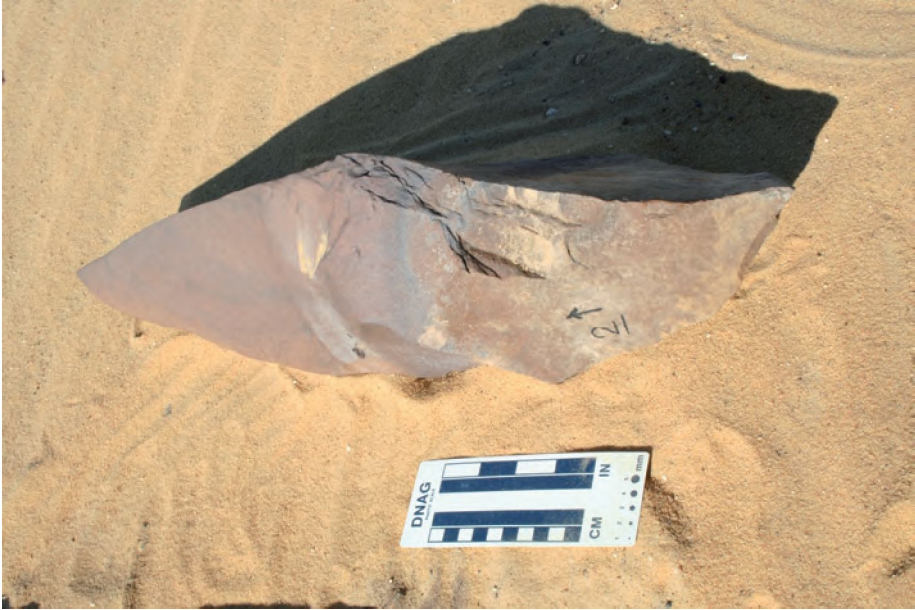


Fig. 15. Chipped vertical component of a sight. Photograph by R. Schild



Fig. 16. Vertical, blocky components of sights. Note fresh, non-weathered bases. Photograph by R. Schild



Fig. 17. Vertical, components of sights. Note a fresh base on specimen n. 10. Photograph by R. Schild



Fig. 18. Vertical components of sights. Note a fresh base on specimen n. 33 and weathered, truncated distal end. Photograph by R. Schild

Moving Selected Monuments to the Nubian Museum in Aswan

Following the permission of Dr. Zahi Hawass, the then Chairman of the Supreme Council of Antiquities, on February 10, 2008 the Combined Prehistoric Expedition, in the presence of an Extraordinary Committee headed by the late Undersecretary of State Mr. Atia Radwan (Fig. 19) as well as a police escort, successfully transferred selected monuments from the Neolithic Ceremonial Center of Nabta Playa to the Nubian Museum in Aswan (Fig. 20). The set contained seven sandstone stelae and thirty seven sandstone elements of the possible Late Neolithic solar calendar. Another element of the exhibit, a worked block of sandstone resembling a cow excavated from the pit dug underneath the Megalithic Structure A in the Western Field of Stelae was already in storage in the Nubian Museum.



Fig. 19. The late Undersecretary of State Attia Radwan sitting on a collapsed, broken stela (right) and Adel Kelany, Inspector of the Supreme Council of Antiquities at Nabta Playa during removal of selected antiquities in February 2008. Gebel Nabta in background. Photograph by M. Jórdeczka

Setting the Monuments in the Garden of the Nubian Museum

In March 2007, pending the permission of the Chairman of the Supreme Council of Antiquities to move certain endangered monuments of Nabta to the Nubian Museum director of the Museum Dr. Ossama Abdel Meguid selected a space for the monuments on the shelf of an ancient granite quarry in the front, western garden of the Museum (Fig. 21-23).

Probable Solar Calendar

The setting of the installations in the winter of 2009 began with the solar calendar. This complex appliance has been recognized as a probable ancient calendar indicating the summer solstice at the time of its use, or the beginning of the summer rainfall in the South Western Desert of Egypt. It was astronomically dated to



Fig. 20. Placing the stelae on a trailer. A box near the tarmac contains vertical components of the solar calendar. Photograph by M. Jórdeczka



Fig. 21. Nests carved in the granite prepared for the setting of calendar's sights. Photograph by M. Jórdeczka



Fig. 22. Sights and the ring ready to be set in the nests. Standing: (from left) police guard, Romuald Schild, Marek Puzzkarski, Michał Kobusiewicz and Heba Talah Abdelbaset Ahmad. Photograph by M. Jórdeczka



Fig. 23. Setting the sights in the concrete filling the nests. Photograph by M. Jórdeczka

about 4000 BC, basing on the assumption that the east of the north line of sights indeed points to the position of the rising sun at the time of summer solstice (McKim Malville *et al.* 1998).

The remnants of the solar calendar were discovered on a small, but prominent, sandy knoll at the mouth of the Valley of the Sacrifices. The calendar was originally reconstructed as made of a stone ring, measuring nearly 5 m in diameter, with two lines of sight within the circle, constructed using several pairs of upright, elongated sandstone blocks, or “gates.” The first line of sight points approximately to the north, while the second one may indicate the position of the rising sun at the summer solstice, marking the beginning of the rainy season in the desert. There are, however, other hypotheses concerning the use of the device linking it with Sirius. The exact age of the device is not known, although a radiocarbon date from a nearby hearth indicates an age of about 4,900 BCE, a date contrasting with that suggested by the paleoastronomy.

The direction of the calendar sights or gates was copied from that recorded in the field on which the first reconstruction of the device has been based (compare Applegate and Zedeño 2001, Fig. 14.3). The new analysis of the original field records and the mapping and inventory of stones taken in the early February of 2008 suggested that the number of observation gates might have been slightly different than that proposed in the reconstructions made in 1992 and 1997, published in 1998 (McKim Malville *et al.* 1998, Fig. 3b) and 2001 (Applegate and Zedeño 2001, Fig. 14.3). Therefore, a new reconstruction of the monument was recommended in 2009. It seems that the partially shaped blocks making the elements of the sights have been more numerous than suggested in the 1992 reconstruction. This has implied the presence of at least four pairs of gates (sights) in the center of the device instead of two gates suggested in the first reconstruction.

An important element of the installation is a proposed ring enclosing the sights. Its presence has been postulated on the basis of the scatter pattern of displaced slabs in the areas outside the sights, for no clear-cut outlines of a ring have been preserved in the archaeological record. Many of the slabs concentrated in the northwestern, or the highest section of the hillock outside the sights (gates) while several, dispersed flat stones rested on the northeastern and eastern slopes of the rise suggestive of an important downslope creep of the stones.

A relatively large number of flat sandstone slabs around the device, in its immediate neighborhood and at the foot of the hillock upon which the calendar was placed, makes the hypothesis of a ring plausible, but not incontestable (Fig. 24). Therefore, the installation assembled in the Museum Gardens is a



Fig. 24. Completed reconstruction of the possible solar calendar, looking north. Photograph by M. Jórdeczka

hypothetical proposal, perhaps the most likely under the circumstances, the strongest parts of which are the bearings of the sights. Details concerning the number of gates and the sheer existence of the ring seem to make the weakest parts of the hypothesis.

The Stelae

An installation of displaying seven specific stelae is made up of an assortment of the complete or nearly complete objects selected in February 2008 (Figs 25-29). The individual elements of the group have been collected from two major fields of stelae, the Western and the South East Field. The stelae have been set together to resemble the real individual clusters of stelae (compare Fig. 30), which today are without exception composed of collapsed and broken blocks. The stones face north, the circumpolar region of heaven where the stars never die and where there is no death at all. This is the region of Dāt, the goal of the deceased, the *Field of Offerings*, in which the departed will live as a successful spirit, according to Egyptian cosmology (compare Frankfort *et al.* 1961, 57). It is here that the spirits encounter their northern emergence into the world (Allen 2005, 10), and here that the king would become a circumpolar star (Spencer 1982, 140).



Fig. 25. Moving the largest stele towards its nest. Photograph by M. Jórdeczka



Fig. 26. Moving the largest stele towards its nest. Photograph by M. Jórdeczka



Fig. 27. Moving the largest stele towards its nest. Photograph by M. Jórdeczka



Fig. 28. Setting the largest stele in its nest. Photograph by M. Jórdeczka



Fig. 29. Setting the last stele in the nest. Photograph by M. Jórdeczka



Fig. 30. The stelae and the solar calendar, looking north; The Old Cataract Hotel in the background. Photograph by M. Jórdeczka



Fig. 31. The cow, looking west. Photograph by M. Jórdeczka

All the exhibited specimens show traces of working by knapping, some abraded by exposure to airborne sand. The work may be limited to certain parts of the blocks, i.e., edges and top (Stele 5 from Complex Structure A) or extend to the nearly entire perimeter of the slab (Stele 2 from Complex Structure B). Four displayed examples have rounded tops (Stelae 2-4, broken, 7).

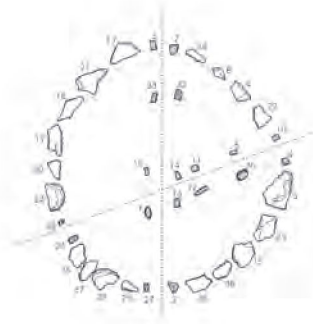
All the stelae are believed to date to the Final Neolithic of the Western Desert. A radiocarbon assay, on charcoal from a pit underneath Complex Structure E at Site E-96-1, Western Field of Stelae, gave a calibrated date of about 3400-3500 BCE (Wendorf and Królik 2001) while a series of radiocarbon measurements on charcoal from the hearths in the sandstone quarry supplying the blocks to stelae manufacturers indicate an activity in the 4500 – 3400 cal. years BCE age bracket.

The Cow

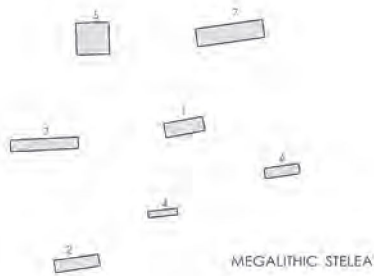
In February 2010 a crudely worked sandstone block, resembling very schematic outlines of a cow, was brought from the stores of the Nubian Museum and set in a nest carved in the granite next to the group of stelae (Fig. 31). It had been extracted from a pit under Complex Structure A of Site E-96-1 in the 1996 field

MAP OF NABTA PLAYA
NEOLITHIC SACRED INSTALLATIONS
AT THE NUBIAN MUSEUM

ASWAN 2009



CALENDAR



MEGALITHIC STELEA



COW



KEY:

- 1. 1.....39 inventory numbers
- 2. ——— direction of sights

Fig. 32. Map of the installations. Drawing by M. Puzkarski



Fig. 33. Putting the Western Desert sand around the installations

season and transferred to the Nubian Museum by the Supreme Council of Antiquities a few years later. The work has completed the display of the Nabta Playa Monuments in the Nubian Museum (Fig. 32).

The area in which the stelae and the calendar are placed has been covered by original yellow desert sand brought from the Western Desert to give an impression of the desert environment to the group (compare Fig. 33).

Closing Remarks

The sacred installations of Nabta Playa exposed in the outdoor area of the Nubian Museum are the first prehistoric architectural monuments ever exposed in an Egyptian museum.

Both, the possible calendar and the stelae, form an eye catching, impressive set of megalithic monuments that have not only a historical meaning, but make a profound artistic impression.

Acknowledgments

The removal and exhibition of the Sacred Installations from Nabta Playa in the Nubian Museum have been sponsored by the Combined Prehistoric Expedition Foundation and the Institute of Archaeology and Ethnology, Polish Academy of Sciences.

We wish to thank the Supreme Council of Antiquities, Dr. Zahi Hawass, then Chairman of the Council, the late Mr. Atia Radwan, Under Secretary of State for Upper Egypt Antiquities, Mr. Adel Kelany and Ms. Heba-Tallah Abdel Baset Ahmed Ibrahim, both of whom have been inspectors in Upper Egypt, for permitting us to move the antiquities to Aswan and erect the installations and for helping us throughout the project.

We wish to express our profound thanks to Dr. Ossama Abdel Meguid, Director of the Nubian Museum, Dr. Mohammed Rageh, Mr. Ahmed Abdelrahman and the staff of the Museum for their friendly support they gave us in the Museum and during mounting of the exhibition in the winter of 2008, 2009 and 2010.

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