

SUDAN & NUBIA

The Sudan Archaeological Research Society



Volume 27

2023

Statement concerning Sudan

1

The Kirwan Memorial Lecture

Alloying copper, arsenic and tin – the first crucible evidence from Kerma

Frederik W. Rademakers, Georges Verly, Kylie Cortebecq, Patrick Degryse, Charles Bonnet, and Séverine Marchi

2

Reports

A desert Middle Nubian amethyst mining camp at Wadi el-Hudi

Meredith Brand and Kate Liszka

24

Archaeological survey in the Melhab basin (Agig district), Red Sea region of Sudan: report on the 2023 field season

Amanuel Beyin, Ammar Awad M. Abdalla, Fakhri H. Abdallah Hassan, and Musaab Khair

48

A fortified site to defend the Kerma basin before the Egyptian conquest

Matthieu Honegger and Jérôme Dubosson

75

New work on landscapes of the Northern Dongola Reach

Christopher Sevara, Tim Kinnaird, Ahmed El-Ameen Ahmed El-Hassan (Sokhari) and Sam Turner

86

Kerma settlement Site P5, Northern Dongola Reach: report on the 2023 season

Steve Mills, Stephen Porter, Paul T. Nicholson, Loretta Kilroe and David Buchs

107

The Meroitic townsite of Kedurma 2023: new findings from the excavations of the cemetery

Mohamed Bashir and Claude Rilly

131

Archaeological vegetation mounds in the el-Matas area at the el-Ga'ab depression, Northern Sudan – new discoveries

Mohammed Nasreldein, Yahia Fadl Tahir and Ikram Madani Ahmed

148

Excavations in the Berber cemetery, the 2022 season and new chance discoveries in the Berber Region

Mahmoud Suliman Bashir

159

Preliminary report on the excavation of Building 1000 at Naga

Karla Kroeper and Christian Perzlmeier

172

The Isis Temple at Wad Ben Naga (WBN 300)

Pavel Onderka

188

Early Neolithic gouges from north-western Butana: new light on contacts between the Nile and its hinterlands

Ladislav Varadzin, Katarína Kapustka and Lenka Varadzinová

207

Studies

Following the footprints of a jackal from Meroe to London. The origin of British Museum EA68502

Michael H. Zach

214

Replicating prehistoric Sudan: Anthony Arkell's object casts

Anna Garnett

219

Chronology, correspondence analysis, and Lower Nubia in the 3rd century BC: a reassessment of the Meroitic cemetery at Faras Henry Cosmo Bishop-Wright	230
Giraffes at Faras – the exchange of goods and ideas across Kush Loretta Kilroe	247
Darfur focus	
Darfur. Threats and dangers to archaeological sites and possible ways to protect them Ibrahim Musa Mohamed Hamdon	257
We are all for Nyala (KAMAN), South Darfur. A note concerning a local initiative to preserve cultural heritage Ashraf Abdalla	263
The Centre for Darfuri Heritage at Nyala University: a driver for cultural development Gafar A. F. Ibrahim	265
Book reviews	287
Obituaries	291
Biographies	297
Miscellanies	302



Front cover. Block 1000.0049 from Naga (photograph courtesy Karla Kroper).

Above. Pottery jar with decoration of sorghum heads from BMC 60, Berber (photograph courtesy Mahmoud Suliman Bashir).

Sudan & Nubia is a peer-reviewed journal. The opinions expressed within the journal are those of the authors and do not reflect the opinions or views of the Sudan Archaeological Research Society or its editors.

Darfur. Threats and dangers to archaeological sites and possible ways to protect them

Ibrahim Musa Mohamed Hamdon

Introduction

Armed disputes are considered to be among the most hazardous threats to archaeological sites of every date and in all regions. This situation inspired the United Nations to make laws and conventions addressing this issue, and to initiate seminars and conferences enlightening people about such dangers to world heritage. Doubtless, archaeological remains in the Arab world currently are among the most affected by such disputes. The American invasion of Iraq in 2003 was followed by troubles in Syria, Yemen, and Sudan; and culminated in the political unrest in Libya and Egypt. These events coupled with the recent Russian invasion of Ukraine makes the threats to cultural heritage resulting from disputes related to wars an international phenomenon. These conflicts are the products of socio-political unrest in specific areas, and as such current threats to archaeological sites, museums and other types of tangible and intangible heritage should be regarded as a product of contemporary social unrest, and solutions must be sought to protect heritage and mitigate any potential damage. Darfur, situated in western Sudan, is not an exception to this; consequently, any solution enacted there will potentially help in solving or addressing threats in other areas. The paper will consider three issues: types of sites in Darfur, threats to heritage, and possible solutions for protection, followed by a general conclusion.

For much of the 20th century, Darfur remained a relatively secure and peaceful area that contributed greatly to the development of the Sudanese economy. However at the end of the 20th century, the region was swept by socio-economic upheavals that threatened archaeological sites in many areas. These started with waves of droughts in the 1970s and 1980s, which devastated the Sahel belt, resulting in many social and economic changes in the area. The situation was aggravated by the Libyan-Chadic war (1978-1987), which made Darfur its battlefield. This resulted in the acquisition of arms by many groups and factions. Gangs of armed robbers roamed the region causing unrest, disturbing peaceful citizens, and endangering archaeological sites. From the start of the 21st century, these problems were augmented by armed rebels in Darfur acting against the government in Khartoum. Their activities created social unrest and major threats to archaeological sites in the area. The endangerment of sites and human life also increased significantly with the rise of indiscriminate illegal mining for gold. However, the current conflict, which began on 15th April 2023, is now the most serious factor affecting people and heritage across the regions, with such threats taking on new dimensions. It is a conflict between two political factions, the Sudan Armed Forces and the Rapid Support Forces – a paramilitary force – both of whom originally formed part of the same Sudanese national government. Both use advanced weapons and are able to attract followers from other parties, including various ethnic groups. Thus, this recent conflict has almost become a war between communities, affecting all aspects of Sudanese society. It has also contributed to the destruction of many archaeological sites, while threatening many others. This article will highlight the heritage in Darfur and consider sites under threat, as well as possibilities for their protection.

Types of archaeological sites in the area

Assessment of the types of sites¹ endangered by disputes and threats can allow us to determine both their nature and the severity of their risk, as well as the most effective means of protection. For the purposes of this discussion, sites may be separated into six basic categories:

¹ See also, Arkell 1951; Mohamed Al Toum 2020.

1. **Monuments:** These include structures standing above ground level, of differing sizes and containing a variety of types of artefacts, for example, palaces and religious buildings. Towns, villages, and large industrial areas may also be included. These sites are usually found on mountaintops and in places difficult to access. This site type is a favorite of rebels and robbers, seeking positions to hide from shelling and aerial bombardment. They can also be used for storing ammunition and imprisoning captives. The site of Ain Farah is the best example of this type (Arkell 1936, 78-89; 1945, 185-220). It was from here that Idriss Déby formed an insurgent group that conquered Chad in 1990. He installed himself as Chad's president and acted in this role for more than thirty years. Later, Darfur rebels occupied Ain Farah. They have been there for more than two decades and are still there today.
2. **Sites in wadi valleys and caves:** This type of site is found in naturally hidden areas such as caves and valleys, which often contain rock drawings and sometimes wells. They are used for defense against air shelling in common with Type 1 sites, and are also used as hiding places against invading troops. The best examples for this type can be found at Jabal Mao in the Tgabou mountains (Ibrahim Musa Mohamed 1986; Tobert 1983). The main threat to these sites comes from indiscriminate shelling and from the activities of the occupiers themselves.
3. **Open air sites:** These consist of small sites found in open places. Most are prehistoric, represented by heaps of small stone objects and potsherds. They are found in the desert, as well as open places near towns, plains, and dry wadi beds. They are particularly vulnerable to ordinary human activities, particularly those sites found in open areas such as plains. Plains are often occupied by refugee camps seeking protection near large modern settlements. Sites around Al Fasher are the best example of this type (Abbas S. Mohammed Ali 1982, 169; Ibrahim Musa Mohamed 1986, 87). Such sites are greatly affected by the movement of refugees within their camps as this causes the destruction of many small artefacts and ancient activity patterns.
4. **Heritage buildings and collections:** collections housing archaeological material include Antiquities Service offices and museums. These largely official government installations are found in towns or cities. The most famous are the Sultan Ali Dinar Museum in Al Fasher and the Nyala Museum. They house valuable objects of different periods and are well-guarded; however, they sometimes fall victim to armed robberies, looting, and more recently, shelling as has been happening during the current conflict.
5. **Privately owned collections:** These may include valuable objects such as jewellery, treasured household utensils, photographs, and weapons, which are in the care and ownership of private individuals. These collections are threatened by theft and by the haphazard movements of people in troubled times.
6. **Border and frontier sites:** These are found near the international borders between states. Examples are Hufrat al Nahas and Kafia Gangi in southern Darfur, the boundary of which is adjacent to that of the Republic of South Sudan. These sites are at risk of disputes between adjacent states and/or by the encroachment of the members of one state into the other. This can also happen in cases of emergency, which may cause an influx of refugees from one country into another, as is the situation presently along the Sudan-Chad border. This may further cause armed disputes between two or more states.

The sources of danger to sites in Darfur

Archaeological sites in Darfur face many threats, which of course also hinders research in the area. Each site has specific risks that are currently causing issues or that may impact the site in the future, including:

1. Urban development: Many sites are destroyed because of the expansion of modern urban activities in towns and cities, including the construction of new buildings and other installations. These affect sites through the digging up of archaeological remains, and by displacing, destroying or damaging surface and sub-surface artefacts and environmental remains. More than one type of site, belonging to more than one cultural phase, may be destroyed or damaged.
2. Disputes and wars: As mentioned above, war has destroyed many sites especially those of type 1, which fall prey to shelling and can be used as hiding places. Because they are under an ongoing threat, it is not possible to visit or survey them.
3. Random illegal mining: Indiscriminate illegal and artisanal mining is one of the most serious causes of site destruction in many regions. It destroys the remains of heritage as well as stratigraphic contexts and is also the cause of social disruption with clashes among miners and between their ethnic groups. Most artefacts are thrown away if they are not of precious metals, and this is a particular risk for organic or environmental material. This type of threat destroys sites of all types and periods in all areas.
4. Radical ideas: Some individuals have extreme ideas towards archaeological remains of all kinds and believe that such remains should be destroyed or mutilated in one way or another. For example, some archaeological sites and objects in the Al Fasher area have been vandalised in the past; however, most have since been restored and repaired.
5. Refugee movements: The construction of new settlements to accommodate refugees has contributed significantly to the destruction of many sites. The movement of refugees within their camps, as well as the quarrying of stones and mud for the construction of shelters has destroyed many prehistoric sites in the Al Fasher and Kutum areas. Road building to and from camps linking them with nearby towns has accompanied the construction of these refugee camps and has also caused a lot of site damage.
6. Neglecting environmental threats: Many sites have been partly or wholly destroyed due to neglect of environmental threats and processes by those responsible for the protection of said sites. Some are overgrown with tree roots while others have been destroyed by watercourses with many artefacts swept away by torrents of water. These kinds of threat are found at all types of sites in Darfur. Sometimes combatants exacerbate these threats by refusing others the right to enter areas under occupation.
7. The weakening and dissolution of local administration: the dissolution of the Native Administration authorities by the regime of the late President Jaafar Nimeiry (1969-1985) weakened governmental powers across the region, especially in rural areas, and deprived traditional sites of protection by ethnic tribal leaders.
8. The absence of effective government control: the complete lack of government control currently in Darfur stands as the most outstanding obstacle for site protection. This is because the war is now all-encompassing, affecting all aspects of society, destroying sites and at the same time depriving people from getting any information about the situation across the region.
9. Unwillingness to relinquish relics: in some parts of the region, people are unwilling to hand over archaeological or objects of cultural heritage to authorities to be kept in safe areas or to be exhibited in museums. This causes many valuable archaeological objects to remain unknown and leaves them vulnerable to theft and destruction.

These threats stand as major obstacles obstructing any project aiming to protect sites or promote archaeological research across Darfur, and consequently, they must be revealed and removed, or at least, their effects lessened.

Possible solutions

The protection of archaeological remains is an important aspect of preserving a country's heritage. To this end, both government bodies and the community need to conduct joint efforts to preserve this material. Despite some government progress towards this (Mohamed Al Toum 2020), more effort is needed to protect sites, develop research and remove obstacles to this aim. This could be achieved by the following:

Firstly, it is essential to solve the socio-economic problems that cause tension between factions, and between rebels and the government. Such aggression, often leading to violence and war, is the most serious issue facing the region, causing much damage to human life, sites and archaeological objects. Unless it is solved in a radical manner, sites will always be under threat. Any agreement between the government and rebels should include a clause related to site protection, restoration and research possibilities in their territory. These agreements should also include terms concerning the future of the sites occupied by armed rebels when they are evacuated. They should be fenced and put under strong guard, as for example seen in the Abuja agreement under the last Darfur Peace Agreement in 2006. This would also protect them against illegal mining, both close to and above archaeological remains.

International issues facing sites need to be dealt with by protecting international border sites through mutual agreement between the concerned states, something that is crucial for solving border disputes. Peaceful solutions should be sought out by all and when that is not possible arbitration is better than confrontation. Using international laws to support this is particularly important, since international laws are binding for all parties concerned. Furthermore, more collaboration is needed between the Sudanese Government and other Arab governments in conducting research in the field and protecting archaeological monuments, with a particular emphasis on regional areas. The Qatar-Sudan Archaeological Project was a good example of such fruitful collaboration, which in future would ideally be oriented towards regional heritage issues. It succeeded in protecting and restoring many sites in the Nile region north of Khartoum, and some have already been opened to tourism. Collaboration with international organizations and bodies concerned with archaeological issues is not a new idea. Such activities go back to the 1960s, when the International Campaign to Save the Monuments of Nubia by UNESCO salvaged multiple monuments threatened by the raising of the Aswan High Dam. Such schemes could be extended to different regions of the Sudan where sites continue to be endangered by current human and environmental activities. Sudan has already signed The 1970 Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property, an international treaty intended to protect archaeological remains, and so this would follow in the spirit of this model, including collaboration with Interpol or any official body concerned with recapturing stolen archaeological objects. It would also be helpful to seek ways and means to reclaim objects taken from the area before the promulgation of the Antiquities Service Laws, and their exhibition in foreign museums or private collections.

A further large issue is how to effectively protect sites from radical ideologies, which seek to mutilate them and destroy their content. This should be done in two ways: by combating such ideas by promoting alternative ideas explaining and supporting archaeology, and by enacting laws to prevent people from harming sites and their contents. Such laws would also support the protection of sites from destructive natural elements such as torrents, sands, winds, and erosion causing rock-falls in sites in mountainous areas, as well as from destructive animals and plants.

Other smaller scale solutions involve the modernisation of systems for protecting antiquities,

something of great importance in any establishment concerned with archaeological remains at all levels. Museums and Antiquities Service buildings should be equipped with modern electronic safeguarding systems, especially those with early warning facilities. Some important areas should be under constant guard day and night. The walls and doors of such buildings should be refurbished to withstand attack.

Furthermore, the establishment of a database of archaeological sites as regards their position, current condition, environs including the type of inhabitants in the vicinity, roads and transport leading to them and the potential for using them for tourism would be of great use moving forward. This type of statistical information will help authorities take the right steps for the development of sites and for incorporating them within more general schemes for regional and national development. It will also be of much help to both local and international investors wishing to commence profitable financial projects in the area. Other digital projects would include the compilation of older written material concerning the archaeology of Darfur and its deposit in one place for consultation; including material in *Sudan Notes and Records* and hand-written material by Condominium officials stored in UK centres including SOAS and Durham. Such research could be very helpful to compile a new archaeological site maps and to update old ones.

Community efforts

Communities can positively contribute to the protection of sites and their preservation in areas like Darfur. This is because people in the area consider archaeological remains as their cultural heritage that should be protected and safeguarded under all circumstances. This has been personally experienced by the writer when he met ordinary people involved in previous crises in Darfur; they would ask him for the history of their ancestors and their contributions in building the civilization there. This is also reflected in rebel attitudes to archaeological sites, as written in peace agreements. Rebels insist that funds should be available for site protection, conservation, and for conducting archaeological research, suggesting this heritage is valued across social groups. So, it is important to consult community members in matters concerning site protection, and their consent should be sought before any major step is taken in this regard.

The development of small committees to discuss archaeological sites and museums with local groups would be helpful and mean the community could contribute towards protecting archaeological remains from destruction, as well as help raise funds for site conservation and protection. Such committees could also help with organising museum activities and attracting interested parties. The dissemination of the importance of archaeological sites among locals is crucially important for the protection and preservation of these sites. Local people are close to sites, and they are capable of protecting them if they understand the human factors behind respecting heritage and those who left such remains. Archaeologists and those concerned with cultural heritage should work hard to convince people about the importance of sites and the national role they play within societies. As such, the formation of local archaeological societies is a key way to combat threats. Local people know the region, its peoples' mentality, and are keenly aware of the natural and human threats to sites. Such groups are in the best position to talk to people in the area and spread awareness of the importance of protecting sites. They can also monitor sites effectively and report their condition.

Towards this aim, community museums should be opened to the public, not only with rooms for special exhibitions, but also for other social occasions such as the celebration of national events, in order to make them a centre of local heritage. Supporting cultural heritage centres also helps to collect objects and documents held privately by individual owners. The Darfur Cultural Heritage Museum, for example, has worked hard for years to spread awareness of the importance of protecting archaeological sites among community members, and has also collected multiple artefacts. The centre is a key area as it exhibits

objects, showing people the beauty and originality of their cultural heritage. Such centres should be financially supported and encouraged.

Developing a good relationship between museums and the local community is vital for developing awareness of national heritage in remote areas such as Darfur. This gives people the opportunity to enjoy viewing masterpieces of their cultural heritage, while they are well organised and conserved in safe places. They will be able to learn about the history of the objects from labels or museum guides. Furthermore, museums can give members of the local a chance to contribute to museum development and to play a part in their administration and policies to attract more visitors. The best example of such efforts is the Sheikan Museum in Kordofan, which has many volunteers who work hard to help the Museum implement its policies.

In any national project, training represents the cornerstone of success and this is equally true of heritage protection. Training will initiate new avenues among the youth and the population at large and provide expertise among youngsters to protect sites in different ways. This educational aspect is vitally important, particularly in building a generation aware of the importance of their cultural heritage and capable of protecting it. Consequently, popularization of archaeology at all educational levels is urgently needed among Darfur societies to spread as much awareness as possible among the whole community. This could be achieved by offering archaeological courses at both pre- and university levels. Giving public lectures to interested community members will certainly enhance the educational process.

Conclusions

Categorisation of archaeological sites reveals Darfur's richness in different types of heritage, but also highlights the severe threats this faces. Some sites have already been destroyed partially or completely; others are in imminent danger, while others are currently preserved but need further protection. These are spread across geographical localities and belong to multiple historic eras, and their importance as both cultural heritage and as a major element in developing tourism in the area is clear. This article has discussed the current dangers facing sites, particularly during the current crisis, and the possible ways of protecting them. While the problem is socio-political, if governments and communities collaborated Darfur's heritage could be effectively protected, using both regional, governmental and international efforts.

References

- Arkell, A. 1936. 'Ain Farah Darfur Antiquities', *Sudan Notes and Records* 19(2), 79-89.
- Arkell, A. 1945. 'Uri. The town of Darfur of Uri in Northern Darfur', *Sudan Notes and Records* 27(2), 185-22.
- Arkell, A. 1951. *The History of Darfur 1200-1700AD*. Khartoum.
- Ibrahim Musa Mohamed 1986. *The Archaeology of Central Darfur in the first Millennium AD*. Oxford.
- Ibrahim Musa Mohamed. forthcoming. *Contemporary Archaeology and Society*. Khartoum.
- Abbas S. Mohamed Ali 1982. *The Neolithic Period in the Sudan c.6000-2500BC*. Oxford.
- Tobert, N. 1983. *Fire as a fuel: Blacksmiths and Potters of Darfur*. London.
- Mohamed Al Toum 2020. *Recent Archaeological Surveys in Darfur*. Unpublished.