

Jebel Moya: Initial re-investigation into the archaeology of south-central Sudan

Introduction

SLIDE The Jebel Moya massif lies in the southern part of the Gezira Plain between the Blue and White Niles, about 250 kilometres south south-east of Khartoum. The massif has a perimeter of around 11 kilometres. Sir Henry Wellcome, the founder of the Wellcome Trust, was informed about a potential archaeological site in a valley to the north-east which he surveyed and began initial excavations in January 1911.

SLIDE The excavations encompassed four seasons until 1914. Around a fifth of the estimated 10.4 hectares were excavated. The majority of the materials, including the skeletal data and excavation records, were shipped to the UK. These materials have not been adequately re-examined until now. The nature of the site, epitomising a pastoral complex, provides a unique opportunity to evaluate the evidence for social orders as reflected in the largest burial assemblage in Sudan. None of the studies to date have considered the social aspects of the individual burial assemblages and the distribution of the graves in terms of how the spatial and temporal distributions reflect and inform social organisation at the site.

Previous investigations

SLIDE The excavations were not resumed after being interrupted by the First World War. Subsequent to Sir Henry Wellcome's death in 1937, the Wellcome Trust appointed Frank Addison to author the final archaeological report which was published in 1949. Mukherjee, Rao and Trevor wrote the second volume on the physical anthropological remains which was published in 1955.

Addison initially dated Jebel Moya from 1000 – 400 BC, which corresponded much of the then known Napatan period of Upper Nubia, on the presence of Napatan amulets, beads, faience and metal objects within select graves and on his reconstruction of the rate of deposition. He modified his dating in a 1956 publication to 500 BC – 400 AD on the basis of Meroitic objects also being present in some of the graves.

SLIDE Subsequent to Addison's publications, Rudolf Gerharz revisited the issue of chronology in his doctoral dissertation and subsequent 1994 published monograph. Gerharz claims it is the horizontal spatial distribution of graves only which provides a more reliable chronology. Gerharz hypothesised three phases: Phase I, 5th millennium BC, is characterised by dotted wavy-line pottery, identified by Isabella Caneva in a selective study of British Museum pottery. Phase II is dated between 3000 and 800 BC, and is regarded as the classical Jebel Moya culture. Phase III is bracketed between 800 - 100 BC, has most of the graves allocated to it and is said have the first appearance of imported items.

Mukherjee's report demonstrated that all age groups and sexes were represented with no evident pattern of disposal or depositional bias. However, Addison's hypothesis of the population of Jebel Moya being biologically diverse was not upheld. Neither did it find any support in a 2007 study by Joel Irish of the dental characteristics which instead reinforce the conclusions reached by Mukherjee of population heterogeneity from Phase 2 onwards.

State of the evidence

SLIDE It is against this backdrop that I began revisiting the expedition's records for the first time since Addison. I have constructed a new and more complete Registrar of Graves, cross-correlating the records with Addison's site report over the last two years. This new Registrar has been combined with the grave distribution map to produce a GIS dataset for undertaking spatial analysis of the graves and grave goods.

SLIDE To provide a couple of examples of the value of constructing a new Registrar of Graves. Essentially there are 2883 graves and pits recorded, both excavated and unexcavated, a number which tallies with Frank Addison's. There is a discrepancy of 1 in the number of excavated graves and pits – 2792 as opposed to 2791 – due to a grave having been recorded twice by the excavators. There is a larger difference in the number of recorded human burials: 3137 for Addison and 3160 for me. Interestingly, only 2 of the human burials were dismembered.

SLIDE Of the burials, 217 were prone, 1697 supine, 346 on their left and 420 on their right side. There were 36 crouched burials. The highest proportion of elongated burials is from those who were buried supine, followed closely by prone.

SLIDE In addition, 1470 of the burials have some form of grave goods. Gerharz's claim of around 50% of the graves not containing any accompanying items is broadly accurate. Gerharz further claims that almost all the items he classes as imported were confined to the eastern half of the cemetery, a claim which I'll be investigating in the coming months. The point though, illustrated by the map shown, is that grave goods, no matter how poor or lavish, are in fact distributed across the whole of the excavated area.

SLIDE The bodies were also buried in numerous cardinal directions: 222 to the north, 733 to the north-west, 308 to the north-east, 104 to the south, 294 to the south-east, 442 to the south-west, 226 to the east and 499 to the west. The majority of the burials were thus facing either in the direction of somewhat north or west. What is unknown at this stage is how the cardinal directions breakdown between burials assigned to different time periods.

Pottery

Kevin MacDonald and I visited the British Museum on the 13th June this year. We'll be returning again in late July for further analysis. Three assemblages have been distinguished to date.

SLIDE Assemblage 1 is Mesolithic or very early Neolithic. There are stamped comb, pivoted comb and one possible impressed cord-wrapped roulette. The temper of this Dotted Wavy Line pottery is bone with strong mica content. There is no burnishing.

SLIDE Assemblage 2: Thick everted rims with stylus-impressed chevrons on the lip very similar to that found by Randi Haaland in Level 2 at Rabak, dated by 1 radiocarbon sample to approximately 3200 BC. After the chevrons on the lip, there is stamped comb, stylus or wad of cord decorations and then a plain band beneath it. The temper is coarse sand paste with less mica. Burnishing is rare.

SLIDE Assemblage 3: It is different from the first two assemblages in all respects. It is mainly burnished. There are both simple and classic everted rims. The decor is stamped stylus and comb, cross-hatch incisions, with pendant triangles sometimes in-filled with fine stamping with comb or cord-wrapped element and some cord-wrapped roulettes (impressed, not rolled). There is mica in the paste but no or very little bone.

Dating the remains

SLIDE There has been one failed attempt at AMS dating of human skeletal remains. Myself, Kevin MacDonald and scholars from the Duckworth Laboratory and Queens University attempted to date 11 samples which were mostly patellas. All 11 samples failed the preliminary nitrogen tests. It was also not possible to extract tooth roots, which are cemented into the maxillas and mandibles, or the brittle molars.

Subsequently, however, enough funding has been secured to date 3 pottery samples using luminescence. These three samples are most likely to come from the British Museum collection: the relevant curatorial department has agreed in principle and we are waiting for the decision of the separate Conservation department. The samples will be dated at the Oxford dating laboratory.

In the meantime, there is a chance that the first pre-1st millennium BC burial has been identified. Grave 1290 is situated in square O.4, P.5 in the south-west corner of the excavated area. It comes from Stratum C, for those of you who are interested in Addison's original stratigraphic designations.

SLIDE The chevron-patterned and unburnished shard was under the left hand of the adult male who lay supine, was elongated and was orientated to the west in an oval grave. The shard is the same as those from the British Museum's second assemblage mentioned earlier and has distinct similarities to sherds found in Layer 2 from Rabak. Due to concerns over the reliability of the 1 radiocarbon date from this Rabak layer, this type of pottery will be amongst the samples dated by luminescence.

The third assemblage from the British Museum will also be re-examined at the end of July and thereafter. Very brief statements have been made in the past that some pottery bears resemblance to Butana, Kerma and C-Group ware, claims which were challenged by Frank Winchell at least with regards to the Butana Group. Suffice to say that there is a lot of confusion surrounding the post-Rabak and pre-Napata pottery which direct dating and further re-examination will go a long way towards clarifying.

Further thoughts

SLIDE Jebel Moya provides a unique opportunity to study the changes in demography, cultural complexity and social differentiation through understanding the inhabitants' cultural identity and their location in time and space. The massif is in the middle of a large plain and therefore is a standout feature in the landscape. Its choice as a burial location could have been because it helped define the peoples' relationship with the landscape which was the source of wealth, power and survival. In other words, there was a relationship between lands for habitation, grazing and cultivation and the graves.

There are regularities which link a society and how it disposes of its dead, interweaving a complex web of socio-economic and ideological variables. At the same time, there are no set rules concerning

the degree of mortuary differentiation within any given society. The community at Jebel Moya has previously been hypothesised to have permitted a wide range of variation. Indeed, the spatial dimensions and organisation of mortuary systems can be a sensitive indicator of social variability, including providing information on social variables other than status.

It is early days yet in being able to develop a suitable chronological framework for Jebel Moya. What there is so far can be summarised as a small amount of Dotted Wavy Line pottery, distinctive Neolithic sherds and one possible associated burial, with the remainder of the pottery types probably from the late 2nd and 1st millennium BC together with the majority of the graves.

With the framework established, it will become possible to undertake detailed analysis of the information collected in the new Registrar of Graves to determine what evidence there may be from the burials for social differentiation and hereditary systems. This involves examining, amongst others,

- (1) Pottery. Organisation of production for social complexity and identity in different settings, with the pottery associated with burials being a subset
- (2) Grave goods. Types, position, proximity

In other words, what I am paying attention to is the spatiality of death practice. It remains possible that Jebel Moya was an aggregation site for lineage segmented purely pastoral societies, as hypothesised by Gerharz for his Phase II. However, I have been unable to find examples of African nomadic societies with long-term fixed burial grounds. Comprehensive surveys have not yet been undertaken in the immediate surrounding plain; there may be evidence of contemporary settlement remains or of mixed economies, such as the cultivation of wild sorghum. In other words, the habitation remains and non-burial lithics and pottery in the valley may have been indicative of periodic occupation by semi-sedentary communities for specific rites and burials of select individuals.

In summary, my current view is that early on, from the 3rd millennium BC onwards, funerary rites periodically altered the landscape within the basin, transforming the temporarily-inhabited settlements into places of collective memory through a denial of contradictions – concealment or misrepresentation of social relations amongst the living with few or no grave goods.

This process evolved further in the late second and throughout the first millennium BC, with trade links, either direct or through intermediaries, established with subsequent Napatan and Meroitic societies to the north. The concept of the individual dead was slowly transformed in favour of the community, with both collective and individual memory. Accompanying this transformation may have been the evolution of a greater distinction between burial and non-burial areas, reflected in increased wealth deposition in certain graves and perhaps more of an emphasis on selected community individuals in death. Identification of sectional interests might be possible.

Funerary rites, with a naturalisation of the present where social constructs are represented as a part of the natural order, were re-experienced by the event of death drawing upon a symbolic reservoir of ideological premises underpinning the mortuary practices. The disposal of the dead is a form of ritual communication that is integral to the social construction of reality and to the reproduction of

the social form. There are transformational rules with what is essentially a conceptual transformation of living society being expressed in material form during the cultural formation processes. The cemetery at Jebel Moya is a snapshot of particular moment during this process, with various elements of mortuary practices operating in different ways. The denial of contradiction, for examples, seems to imply a lack of material differentiation. What is abundantly clear is that the location of the valley for burial marking a re-use of material culture in ritual activities brings together ideological and cosmological activities, providing a reference point in the landscape intermittently over a period of a few thousand years, and is fertile ground for investigating the degree to which social orders are represented in the burials.

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