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THE ROPE CAVE AT MERSA GAWASIS: A PRELIMINARY REPORT

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Introduction

In the mid 1970s, Abdel Moneim Sayed discovered the remains of a Middle Kingdom harbour, known in ancient Egypt as *S3ww*, in Mersa Gawasis, about 22 km south of modern Safaga at the Red Sea coast. It proved to be an important site, not in the least because texts mention expeditions to Bia-Punt. In 2001, the University of Naples "L'Orientale," the Italian Institute for Africa and the Orient in Rome, in collaboration with the University of Boston, co-directed by Rodolfo Fattovich and Kathryn Bard, started the systematic investigation of the site in order to understand the organisation of seafaring in pharaonic Egypt.²

The site includes remains of a settlement, an industrial area and various manmade caves. Finds vary from ships timber and anchors to package material such as wooden boxes. One of the most remarkable finds, however, is the large number of rope coils, which are stored in a cave: the so-called 'Rope Cave' (Cave 5). Here we present some preliminary notes on this extraordinary discovery, which is dated to the Middle Kingdom. Interpretation of the

¹ Saved 1977, 1979a, b, 1980, 1983.

²Bard and Fattovich 2001, 2003, 2004, 2005; Fattovich and Bard 2006, 2007.

excavated contexts of these ropes strongly suggests that cordage found at the site was used in maritime activities and as ship equipment.

CAVE 5

According to the excavation report³ Cave 5 is 19 m long and has an almost rectangular plan, having a width of 3.75-4.10 m. The ceiling is slightly vaulted with a central groove of 60 cm wide and is 1.6 m height in the middle and 1.5 meter high at the sides. The Cave is entered through a collapsed wall between Cave 2 and the Rope Cave, as eolian sands cover the original entrance.

Cave 5 is the so-called 'Rope Cave', because of the large number of coils of rope. The majority of the coils are deposited at the back of the cave. In the top layer, 16 more or less complete coils have been identified along with two big piles of rope, possibly consisting of three or more coils. Some ropes are not deposited as coils, but seems to have been brought in as a bunch of rope or coils with a different shape.

There is, at least partially, a second layer, which probably extends in half a circle from the collapsed wall between this cave and Cave 2. This second layer contains at least 10 coils. Towards the front the number of coils decrease rapidly and two smaller coils are the only ones on top of the windblown sand that now obscures the original entrance to the cave.

As Ward⁴ states, the condition of the ropes, due to the long and slow desiccation in the constant environment, looks like freeze-dried in appearance, but the cellular integrity lacks, which greatly reduced the stability (which is supported by the thick layer of scattered fibres surrounding the coils; moreover, many coils have fallen apart and only a few are more or less complete). This also proved to seriously hinder the identification of the material. A first analysis⁵ however, confirms the conclusion based on macroscopic analysis that the ropes are not made of papyrus or halfa grass. Future research will have to establish the material. The tiny holes in the ropes seems due to insect activity, but it has yet to be determined by what kind of animal.

The ropes are coiled longitudinally and wound in the middle as to allow easy storage for future use. The diameters of the ropes vary from about 24

³ Fattovich and Bard 2006.

⁴Zazzaro 2007: 194, note 8.

⁵ We thank A.J. Clapham and R. Gerisch for their preliminary identification.

mm to as much as nearly 40 mm for the ply. The estimated length of the most complete coil seems to be 30 m. Based on a detailed study of the cordage from Berenike, the ancient Egyptians rather inserted a third yarn and/or increased the diameters to acquire stronger ropes, rather than cabling, as is custom usually done nowadays. The composition is sZ_3^6 , which is an oftenused composition. A detailed analysis of the diameters and the Cord Index of Ply is in progress.

OTHER CORDAGE FINDS

Various small pieces of cordage of different appearance as the coiled ropes have been recovered. Two objects are of special interest; a bag, found in Cave 2, is made of sZ_2 strings and, according to Zazzaro, shaped in a tapering rectangle, measuring 60x45 cm, with two loops at the top. Linen strings hold the horizontal strings, possibly made of halfa grass, together. Bags like these are well known. Moreover, they are depicted in various tomb reliefs. The second interesting cordage objects are grommets, which are much comparable to the much later ones from Berenike.

Future research

The work at Mersa Gawasis will continue in the 2007-2008 season and includes the identification of the material, the identification of the insect activity as well as the analyses of the research done in the 2006-2008 season (among which the measuring of diameters and the calculation of the Cord Indices). Focus of the work will be on the completion of the description and the establishment of the weight of a coil, the knowledge of which helps to interpret the use of the ropes. Moreover, the possibility of recovering one or more coils will be investigated.

⁶ Terminology is after Veldmeijer 2005a. Note that this differs from the way the cordage is described in the excavation reports (Bard and Fattovich 2005; Zazzaro and Ward 2006).

⁷Zazzaro 2007: 195.

⁸ Veldmeijer 1999: 265-266. Here the grommet is interpreted as pot/head stand but Veldmeijer (2005b: 66-67, Fig. 1; 75) explains that the object might have had a more specific function for seafaring.

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