



Anne Kwaspen

# An exceptional way to join two textiles: A textile fragment from Hisn al-Bab, Egypt

## Abstract

Since 2019, a research project has been ongoing on the many textile fragments that were excavated in Hisn al-Bab, near Aswan, Egypt (late sixth to early seventh century CE). Part of the study focuses on the determination of clothing fragments. Seams are an important feature for identifying garments. An investigation of these features revealed that one of Hisn al-Bab's textile fragments provides evidence for an unusual way of joining two woven textiles without using sewing techniques.

**Keywords:** textile, Egypt, Nubia, Hisn al-Bab, finishing border, seam

## Introduction

The site of Hisn al-Bab, a military installation on a rocky slope and plateau on the eastern bank of the Nile, is situated in southern Egypt at the south end of the first Nile cataract, 10 km south of Aswan. Its importance to the military is obvious because of its strategic location on the frontier between Egypt and Nubia. The archaeological site consists of two fortresses (Gascoigne and Rose 2012; Styhler-Aydın and Döring-Williams 2017). The earlier fort is probably of late Roman date, and the use of it came to a violent end during the seventh century CE. After a period of abandonment, a new fort was built in the ninth century, partly over the earlier structures. Over this time, Hisn al-Bab changed from an Egyptian frontier post to one recognised as being part of the Nubian state.

Excavations carried out by the Cairo branch of the Austrian Archaeological Institute since 2012 under the leadership of Dr Pamela Rose have focused on the Late Antique occupation of the earlier Roman fort (late sixth to early seventh century CE), at which time there was a significant Nubian presence at Hisn al-Bab. An abundance of textile fragments from six different areas within the fortress have been recovered. From the 2019 excavation season, Amandine Mérat began studying



Fig. 1: Textile 1192-004-0045AK/AM346, Hisn al-Bab, Storage magazine of the Ministry of Tourism and Antiquities, Aswan (Image: Anne Kwaspen)

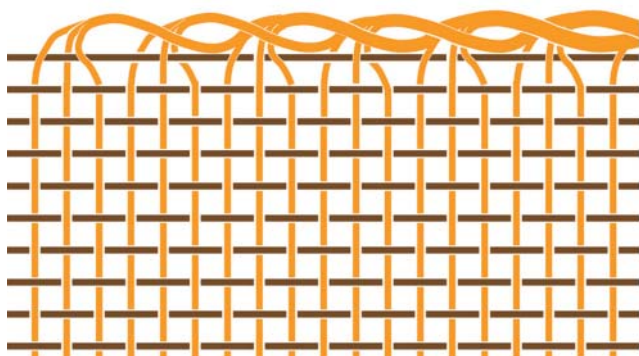


Fig. 2: Diagram of common finishing border of woven wool cloth (Image: Anne Kwaspén)

all the textile finds with the aim of studying the use and reuse of textiles at Hisn al-Bab, its industry, and possible trade and exchanges with Egypt and Nubia. The author also joined the team for one season in 2019 in preparation for a Marie Skłodowska Curie research project to study the impact of cultural cross-fertilisation between the diverse populations of Egypt in the Early Medieval period (seventh to tenth centuries CE) through a comparative study of the clothing worn in that period.

A search through the collection of textile fragments from Hisn al-Bab was conducted in order to identify clothing fragments. Specific elements that can indicate use as clothing are neck openings, sewn pleats, trimmings or woven corners that suggest the armpit point of a tunic. Unfortunately, none of these elements were found.

Another indicator of clothing can be the presence of seams. Some fragments were found with run and fell seams, one of the most common seaming methods in Egyptian clothing. In addition, two fragments were found with a less usual method of making a seam: two selvages placed side by side without overlapping, and oversewn together. However, one fragment, textile 1192-004-0045AK/AM346 deserves a special mention. It shows an unusual way of joining two woven textiles.

#### Textile 1192-004-0045AK/AM346

The wool fragment was found in Area 1 of the excavation site. This area is a room that was clearly used as a storage facility, which can be deduced from the many finds in this room (Rose et al. forthcoming). It is therefore safe to assume that the fragment probably does not come from clothing or was no longer used as clothing in its last function.

The overall measurement of the textile is 22 cm in the warp direction and 27 cm in weft direction (fig. 1). It consists of two woven textiles which are joined

together. The first woven textile measures 12.3 cm in the warp direction and 27 cm in the weft. The second woven fragment is smaller and measures 10.5 cm by 20.5 cm. Both are in S-spun naturally coloured brown wool. No fibre analyses were executed to identify the animal from which it came but it is very likely that it is camel hair. The spin angle of the S-spun warp threads is higher than the more loosely spun weft threads. This difference in the spin of warp and weft is a common feature in the woven textiles found at Hisn al-Bab. Both fabrics have similar thread count of 9 per cm for the warp and 10 to 13 per cm for the weft. Both have a weft faced tabby structure leaning towards a balanced weave.

Only one finished edge is preserved on each fragment. It is the edge with which the two pieces are joined together in an unusual way. However, in the context of comparing known finishing techniques for wool textiles, it should not be unexpected. A common way of finishing the warp ends in a wool weave in Late Antique Egypt was to work the threads into a twined cord running along the fabric (fig. 2). Usually, every three warp threads were bundled to be incorporated into the twined cord. This finishing technique was also used in the fragment under investigation here but it was used to connect two pieces rather than to finish one.

In both fabrics, the ends of the warp threads were bundled per three and then alternately intertwined with warp bundles of the other textile. The thread ends were only worked into a twined cord after the crossing, where the warp threads of the textile on

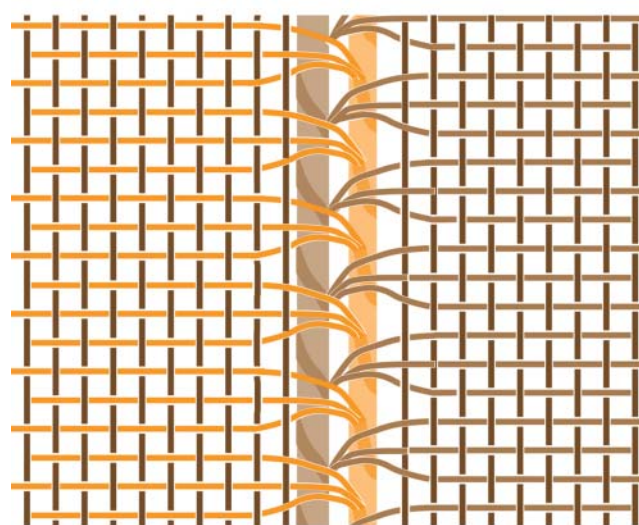


Fig. 3: Diagram showing how to join two woven wool cloths by intertwining the warp ends before creating two twined finishing cords (Image: Anne Kwaspén)



Fig. 4: Detail of textile 1192-004-0045AK/AM346: two twined cords (Image: Anne Kwaspen)



Fig. 5: Detail of the reverse side of textile 1192-004-0045AK/AM346 (Image: Anne Kwaspen)

one side are worked into the the twined cord of the opposite side and vice versa (fig. 3). In this way, the two fabrics are joined together without the need for sewing. This demonstrates an exceptional method of joining two textiles along the starting or finishing edges. Two twined cords lie next to each other on one side of the joined textiles (fig. 4). On the other side, the intertwining of the threads is visible (fig. 5).

It is a pity that the function of the original, complete textile cannot be determined. It would be interesting to know for which type of textile this method of joining was used. Since this is a unique find to date, it is not yet possible to determine whether this was typical for this region in Egypt or a finishing technique of Nubian origin.

### Bibliography

Gascoigne, A. L. and Rose, P. J. (2012) The forts of Hisn al-Bab and the first cataract frontier from the 5th to

12th centuries AD. In *The Sudan Archaeological Research Society Bulletin* 16, London, British Museum, 88–95.

Rose, P. J., Clapham, A., Pyke, G. and Lehmann, M. (forthcoming) A storage area from Hisn al-Bab, Aswan. Conference proceedings, *Continuities and Transitions: Approaches to Studying Food and Drink in Egypt and Sudan*. In Institut Français d'Archéologie Orientale, 21-23 March 2018.

Styhler-Aydın, G. and Döring-Williams, M. (2017) The fortification walls of Hisn al-Bab on the Southern border of Egypt: An analysis of structures and building techniques. In: J. W. P. Campbell, N. Baker, M. Driver, M. Heaton, Y. Pan, T. Rosoman M. Tutton and D. Yeomans (eds), *Building histories: The proceedings of the fourth annual construction history society conference*, Queens College Cambridge, 7-9 April 2017. Cambridge: Construction History Society, 43-54.

Author: [kwaspen.anne@hotmail.com](mailto:kwaspen.anne@hotmail.com)