Mats and baskets from Cemetery A at Naqlun in Fayum Oasis

Author(s): Anetta Łyżwa-Piber

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MATS AND BASKETS FROM CEMETERY A AT NAQLUN IN FAYUM OASIS

Anetta Łyżwa-Piber

Abstract: The article presents mats and baskets from the Christian cemetery (A) in Naqlun (Fayum Oasis), recorded in the 2004 season. The assemblage, dated provisionally to the 12th–13th century, is unique owing as much to its sheer size as to the exceptional state of preservation. Two-system basketry techniques, weaving with one and with two strands, have been distinguished among both the mats and baskets. Round mats and baskets were made with the sewn plaits technique. There is reason to think that the basketry assemblage in question reflects an aspect of Christian burial rites of the period.

Ke**ywords:** basketry, Christian cemetery, monastic site, Naqlun, Fayum Oasis

The mats and baskets discussed in this article originated from the medieval Christian cemetery (designated as A) in Naqlun[1] and have been dated provisionally to the 12th–13th century AD, that is to say, the late Fatimid–early Mamluk period. The assemblage is unique owing not only to the sheer number and variety of the preserved mats and baskets, but also to their satisfactory state of preservation.

The study was a challenge from the start, the primary aim being to develop a recording system that would correspond to the specificity of this material, which went repeatedly beyond the current standard introduced by Wilhelmina Z. Wendrich in her textbook studies of ancient and modern matting (Wendrich 1991; 1999). The mats were especially important as none of the archaeological excavations to date have produced an equally numerous and varied set. The result of this work is a typology of Naqlun mats (Łyżwa-Piber 2003; 2005). The present article describes hitherto unpublished material discovered at Naqlun in the 2004 season.

MATS

Mat manufacture is in a way hardly much different from textile weaving, hence weaving terminology proved to be an excellent complement for the vocabulary used for basketry. To facilitate the following presentation, it is thought best to review in

[1] I am grateful to Prof. Włodzimierz Godlewski, director of the PCMA excavations at Naqlun, for the opportunity to study this unique collection and for permission to publish the finds.

brief the terminology (based on exhaustive discussion in Wendrich 1991: 30–85; 1999: 153–174, 289–330).
Two-system basketry technique: applying an active and a passive system;
Active system: elements which create the coherence of a basketry technique (Wendrich 1991: 135);
Passive system: elements forming the body of a basketry structure, without having an actual part in creating the coherence of the technique (Wendrich 1991: 141);
Strand: general term for material used in basketry; plant member used for weaving basketry;
Member: component making up the active element;
Plane: kind of movement of the active system;
Direction: orientation of the system.

The rectangular mats from Naqlun were produced using the following two-system basketry techniques:
Weaving with one strand: two-system technique (similar to fabric weaving) with one active element (weft), consists of one strand (member) moving in one plane and woven in two directions — up and down — around the passive elements (warp) [***Fig. 1***, top].
Weaving with two strands: two-system technique (similar to fabric weaving) with one active element (weft), consists of two parallel strands (members) moving in one plane and woven in two directions — up and down — around the passive elements (warp) [***Fig. 1***, center].
Twining: two-system technique with one active element (weft), consists of two strands (members) moving in two planes, and plaited in two directions — S-direction and Z-direction — spirally around the passive elements (warp). In the Naqlun mats, the S- and Z-direction strands (members) alternate. The effect is a V-shaped braid. [***Fig. 1***, bottom]. While this technique has been recorded in the mat assemblage from Naqlun, it was not represented among the finds from the excavations in 2004.

The mats found at Naqlun were manufactured in all likelihood in a Fayum workshop. Palm string was used for the warp, while the weft was mainly *Juncus*

Fig. 1. Two-system basketry techniques used in Naqlun (All photos and drawings by the author)

(plant typical of wetlands). Only one mat (Nd.04.066, see below) appears to have been made of another plant, presumably grass.[2]

Mats manufactured with one of the first two techniques, either weaving with one strand or weaving with two strands, were commonly used to cover all kinds of Naqlun burials: bodies wrapped in shrouds as well as bodies placed on *jarîd* (midribs of date palm leaves) biers or in *jarîd* crates (called *qafas* in Arabic, see Wendrich 1999: 467) or wooden coffins.

MATS MADE WITH ONE-STRAND WEAVING TECHNIQUE

The one-strand weaving technique was used for plain weave mats.[3] The longer edges were finished with selvedges,[4] the short ones with borders made of alternately woven in warp ends reinforced with palm-rope weft. Mats of this type were never decorated.

Two mats of the assemblage discovered in 2004 represented this type: Nd.04.066, which measured 180 cm by 140 cm; number of warps per square decimeter: 3 (1 doubled); number of wefts per square decimeter: 12 [***Fig. 2***], and Nd.04.125, which was fragmentarily preserved, the fragment being 70 cm long and 80 cm wide; number of warps per square decimeter: 3; number of wefts per square decimeter: 12.

MATS MADE WITH TWO-STRAND WEAVING TECHNIQUE

Mats made with the two-strand weaving technique demonstrated a mixed panama weave: irregular[5] near the selvedges and long edges of the mat and regular[6] in the middle of the mat (except for decorated

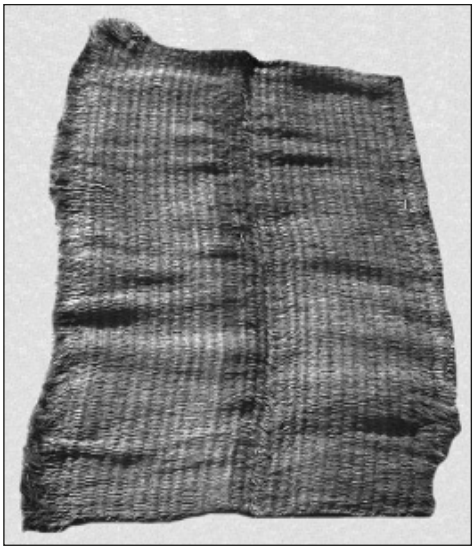

Fig. 2. Grass(?) mat Nd.04.066

[2] Archaeobotanical analyses have yet to be made in order to identify the plant material to species. This concerns mats and baskets.

[3] Plain weave in mats: the active element (weft) consists of one strand (member) or two strands interweaving with a passive element (warp) in 1 to 1 arrangement; this means that the weft weaves alternately — up and down — over and under a warp thread: 1 (over): 1 (under): 1 (over), etc., next, complementary one: 1 (under): 1 (over): 1 (under), etc.

[4] Selvedge: the simplest finish of the edges of a plaited form, resulting from changing the direction of a strand (member).

[5] Irregular panama weave in mats: the active element (weft) consists of two parallel strands (members) interwoven with the passive element (warp) in 1 to 2 arrangement. It means that the weft goes around one warp, then two, then one again, oriented in two directions — up and down: 1 (over): 2 (under): 1 (over), etc., then the next, complementary one: 1 (under): 2 (over): 1 (under), etc.

[6] Regular panama weave in mats: the active element (weft) consists of two parallel strands (members) interwoven with the passive element (warp) in 2 to 2 arrangement. It means that the weft goes around two warps in two directions — up and down: 2 (over): 2 (under): 2 (over), etc., then the next, complementary one: 2 (under): 2 (over): 2 (under), etc.

sections). The long and short edges were made analogously to the first technique and palm string was used as reinforcing weft in the short-edge borders. Mats of this type could be plain, decorated or doubled. Sixteen mats belonging to this type were discovered in 2004 in Naqlun.

Plain mats

Four of these were plain, that is to say, undecorated. In three cases (Nd.04.214, Nd.04.263, Nd.04.265) ranging in size from 96 cm (fragmentary) to 192 cm in length and from 76 cm (fragmentary) to 90 cm in width; number of warps per

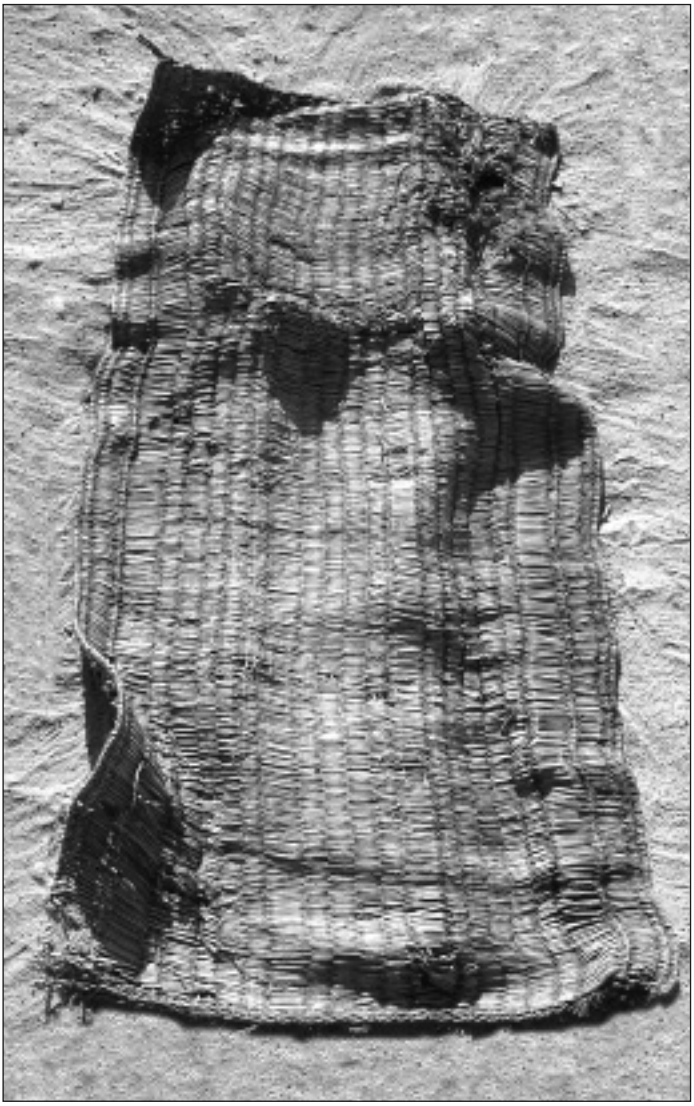

Fig. 3. Plain (undecorated) mat Nd.04.214

square decimeter: 6 (1 doubled); number of wefts per square decimeter: from 18 to 24 [*Fig. 3*]. Mat Nd.04.160, 180 cm long and 90 cm wide, had 7 (1 doubled) warps per square decimeter and 22 wefts per square decimeter.

Decorated mats

Three basic types of mat decoration have been distinguished: 1) ornamental bands, 2) rectangular decorative panels, and 3) geometric decoration woven into the mat fabric using a dyed plant shoot.

Ornamental bands could be woven in twill weave,[7] with variable arrangement of the weft interweaving with the warp from 1 to 3 forming a module composition. This type of decoration was found on one mat, Nd.04.010, measuring 175 cm in length (fragmentary), 100 cm in width; number of warps per square decimeter: 6 (1 doubled); number of wefts per square decimeter: 24. It had two mirror ornamental bands running down the length, 90 cm high and 16 cm wide [*Fig. 4*]. They could also be made in plain weave with a constant arrangement of warp to weft 1 to 1.

Rectangular decorative panels were also twill-woven like the ornamental bands and formed a composition of repeated units most often in pairs arranged on axis, usually across the mat in the form of a mirror reflection [*Fig. 5*].

Two of the mats found this season were decorated with rectangular decorative panels. A typical example is mat Nd.04.278, which was 190 cm long and 96 cm wide; number of warps per square decimeter: 6 (1 doubled); number of wefts per square decimeter: 20; the decoration consisted of ten rectangular panels in mirror reflection woven in across the mat. The panels formed five symmetrical pairs, the outer two pairs at both ends being 10 cm high and 16 cm wide, the central pair 20 cm high and 16 cm wide [*Fig. 7*].

The decoration of the other mat was less common. Mat Nd.04.157 was 180 cm long and 100 cm wide; number of warps per square decimeter: 6 (1 doubled); number of wefts per square decimeter: 22; the two rectangular panels measured 11 cm in height and 28 cm in width, and were woven in along one axis lengthwise and not crosswise on the mat [*Fig. 6*].

Geometric decoration woven into the mat fabric using a dyed plant shoot is the third type of ornament, represented by five mats in this year's assemblage from Naqlun.

In four cases, two parallel lines made of black-dyed plant shoots were woven in the middle on the long axis, nearer to the top, edging border. These were mats Nd.04.002, Nd.04.152, Nd.04.262, measuring 175–190 cm in length, 90 cm in width; number of warps per square decimeter: 6 (1 doubled or 2 doubled [mat Nd.04.002]); number of wefts per square decimeter: 16–22. The geometric ornamental units were 7–10 cm wide and 26–28 cm long [*Fig. 8*, photo and drawing at bottom right].

[7] Twill weave in mats: the active element (weft) consists of two parallel strands (members) interweaving with a passive element (warp) in a variable arrangement from one to three. This means that the weft goes around a varying number of warps, oriented in two directions — up and down — usually repetitive, mostly three per set:
1 (under): 2 (over): 2 (under): 2 (over): 3 (under);
2 (under): 2 (over): 2 (under): 2 (over): 2 (under);
3 (under): 2 (over): 2 (under): 2 (over): 1 (under);
2 (under): 2 (over): 2 (under): 2 (over): 2 (under),
and again from the beginning, etc..

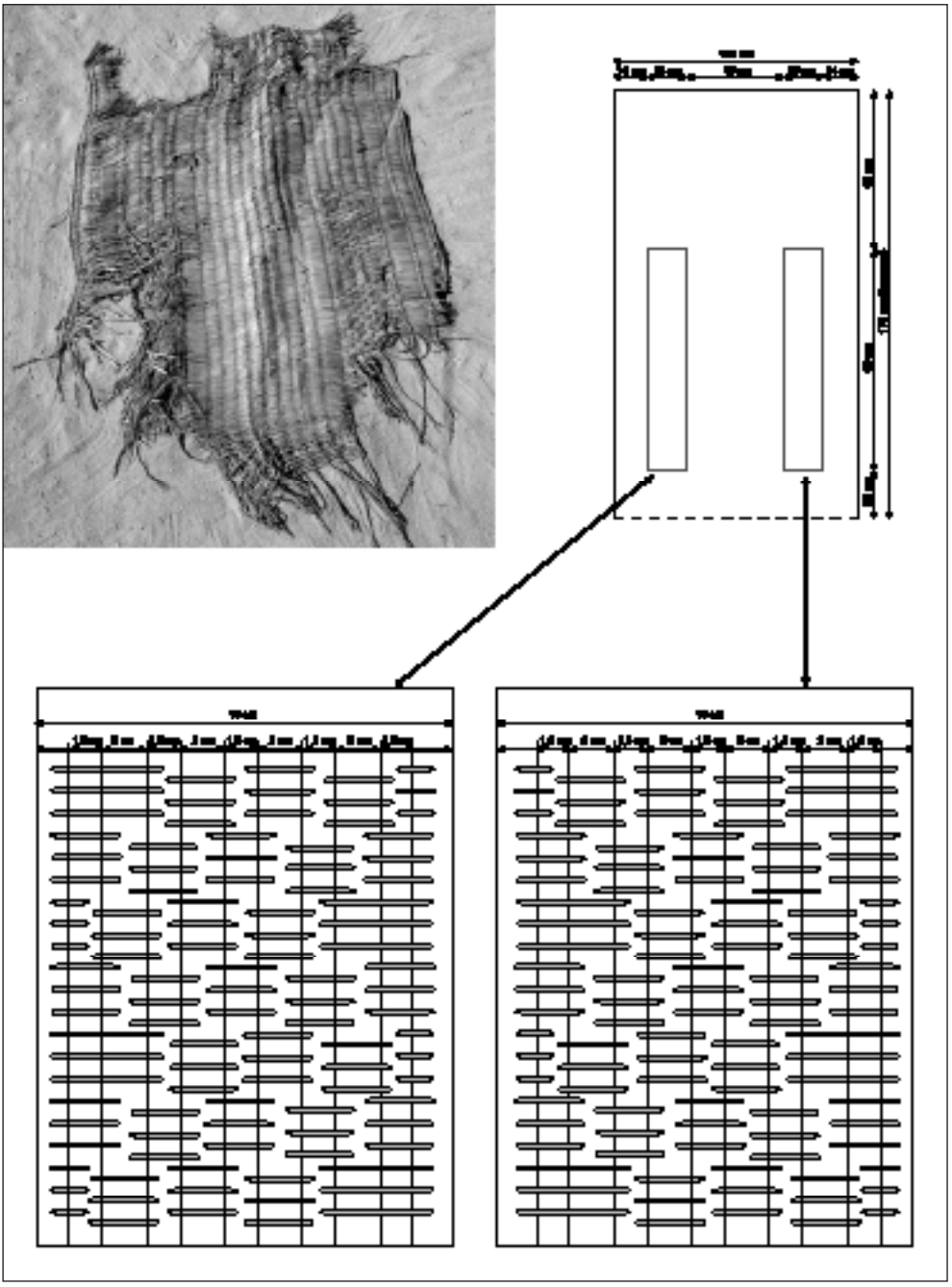

Fig. 4. Mat Nd.04.010: ornamental bands

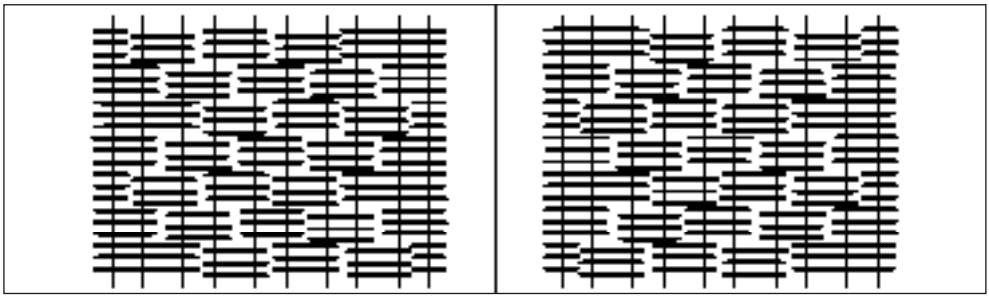

Fig. 5. Example of twill weave decorative rectangular panels in mirror reflection

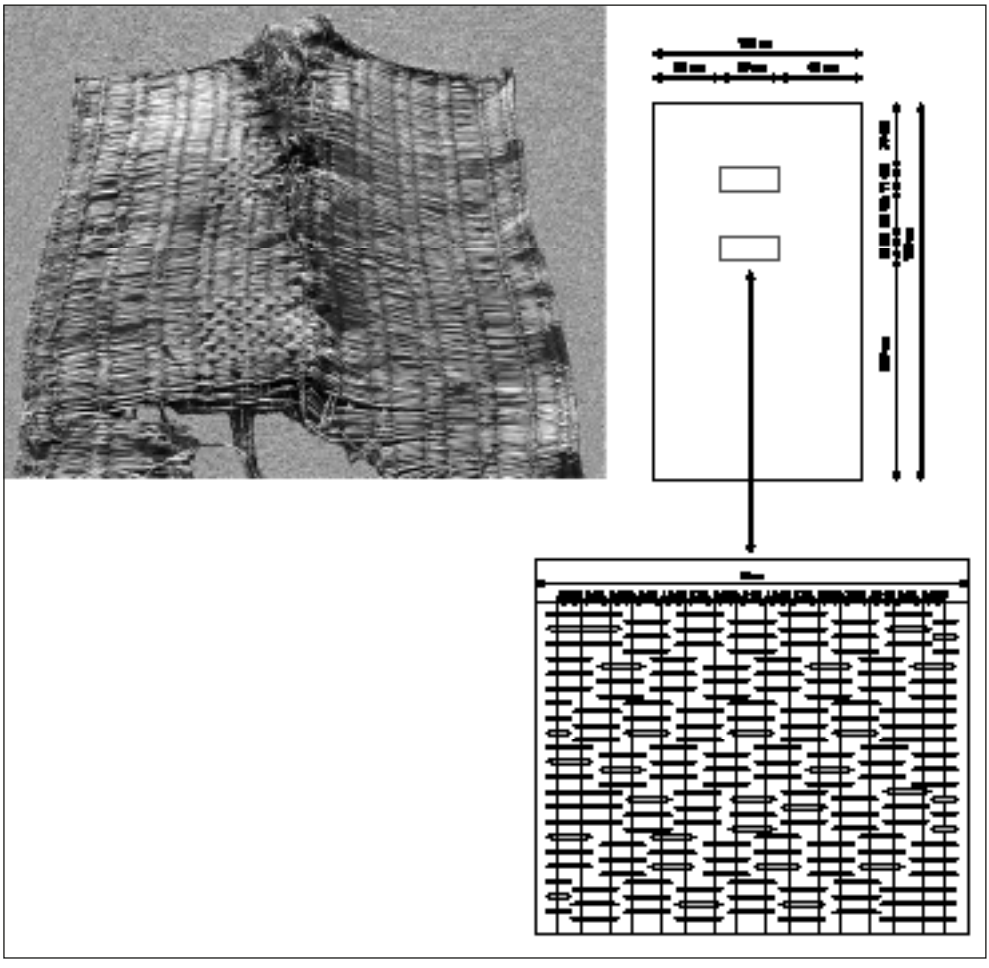

Fig. 6. Mat Nd.04.157: decoration consisting of two rectangular panels in line lengthwise

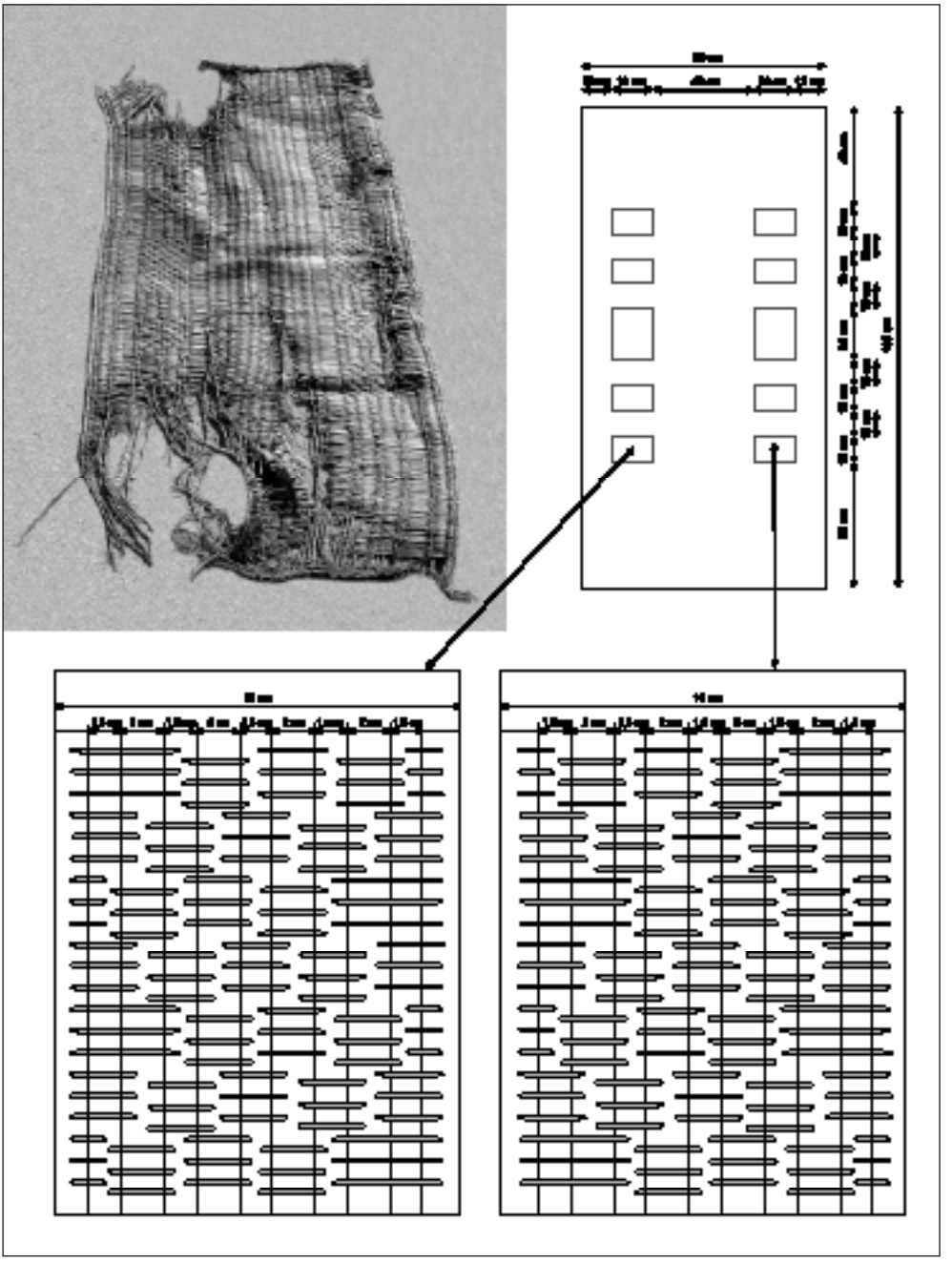

Fig. 7. Mat Nd.04.278: decoration consisting of a composition of ten rectangular panels

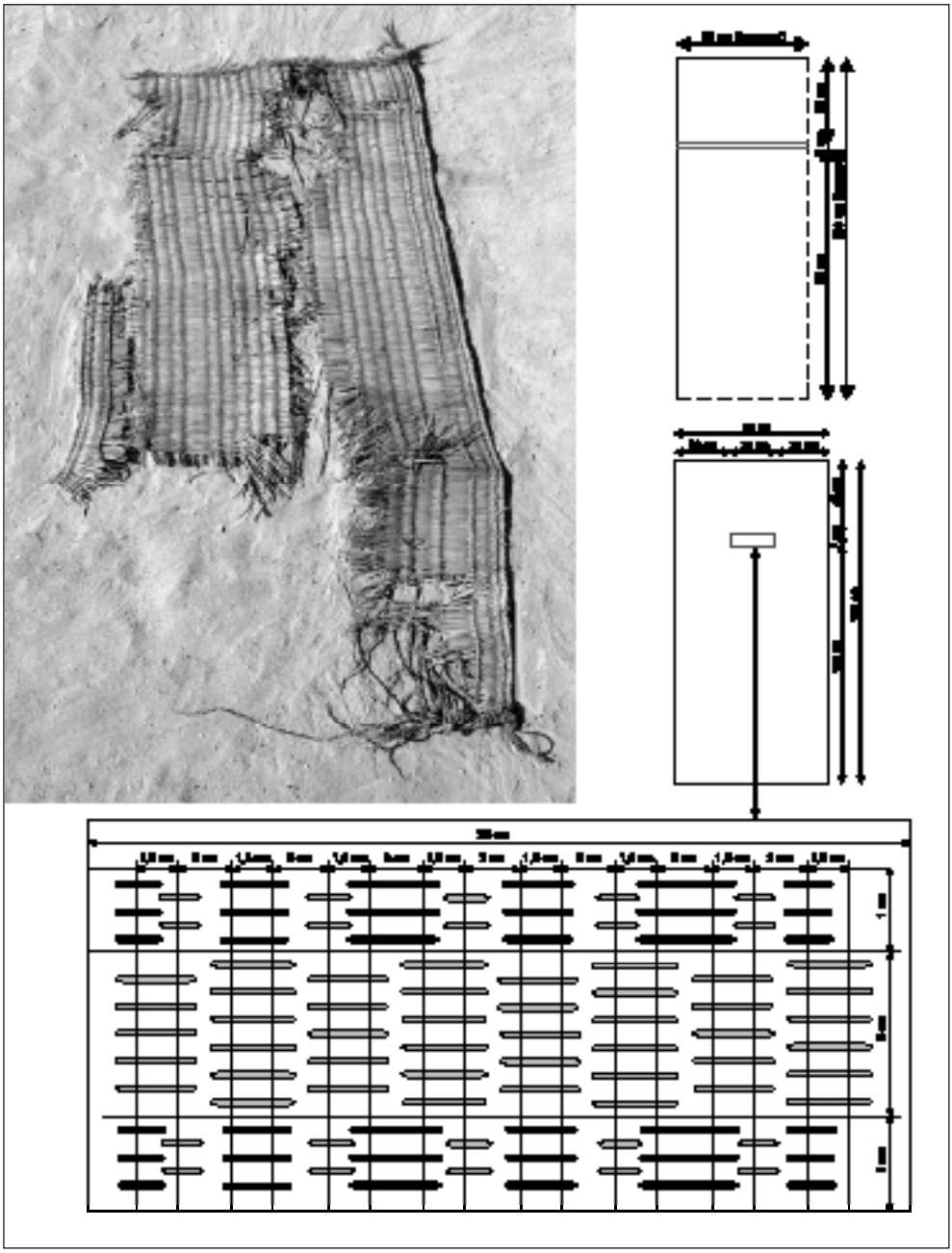

Fig. 8. Mats Nd.04.002: geometric parallel lines (drawing at top right) and Nd.04.023: geometric parallel lines extending the full preserved width of the mat (photo and drawing at bottom right)

In the fourth case, mat Nd.04.023, which was fragmentarily preserved, 130 cm long by 50 cm wide; number of warps per square decimeter: 7 (2 doubled); number of wefts per square decimeter: 22; the decoration consisted of two parallel lines made of a woven-in black-dyed plant shoot, extending from edge to edge. The lines formed a unit 2 cm wide and 50 cm long (equal to the preserved width of the mat) [*Fig. 8*, drawing at top right].

The last mat with this type of decoration, Nd.04.080, measured 192 cm in length, 104 cm in width; number of warps per square decimeter: 6 (1 doubled); number of wefts per square decimeter: 20. The black-dyed shoot was woven in as three parallel lines forming a geometric ornamental unit in the middle of the mat, near the top, edging border, 16.5 cm wide and 28 cm long.

Doubled mats

Three doubled mats: Nd.04.048, Nd.04.129, Nd.04.200, were 165–190 cm long, 100 (fragmentary)–150 cm wide; number of warps per square decimeter: 6 (1 doubled); number of wefts per square decimeter: 16–20. These mats featured a central band woven in plain weave running lengthwise on the mat, equal to its length and a constant 12 cm wide [*Fig. 9*].

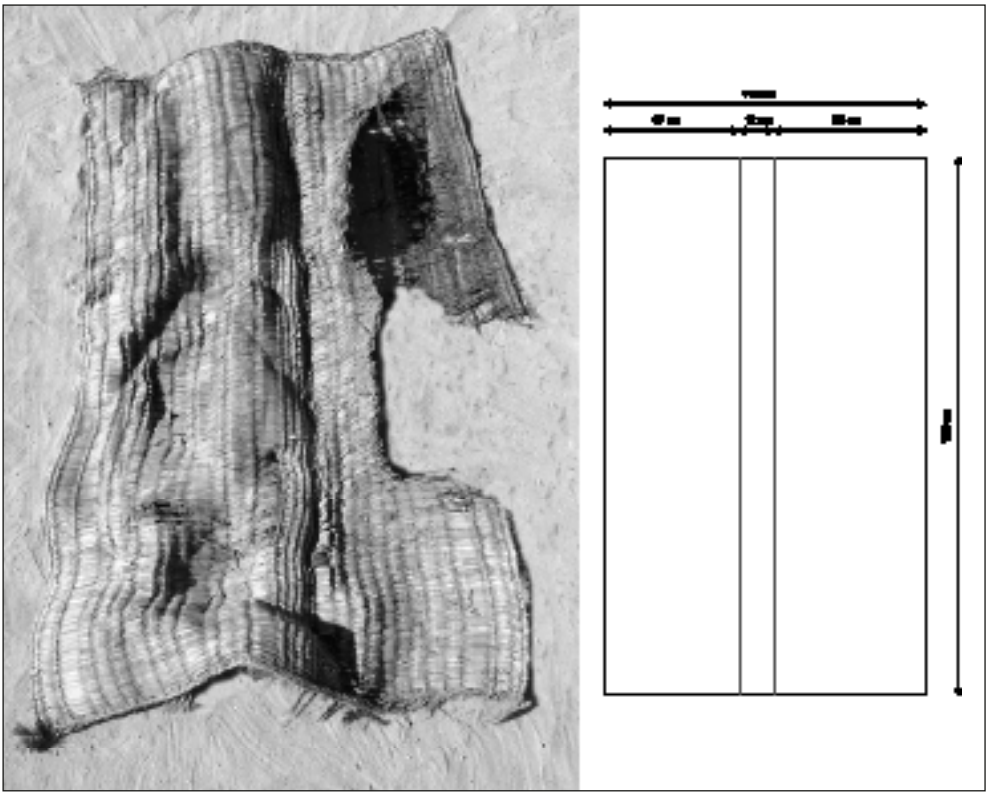

Fig. 9. Doubled mat Nd.04.048: central plain weave band

ROUND MATS

The round mats from Naqlun, like most of the discovered baskets, were made with the sewn plaits technique,[8] where the plaited strip is sewn with rope round and round in one plane in one direction.[9]

Three fragmentarily preserved round mats were found, all of them of large diameter. They were also most probably made in Fayum, using palm fiber for the rope and leaves for the plaited strips. The round mats were used in Naqlun to cover burials made in *jarîd* crates and on *jarîd* biers.

Two of these, Nd.04.099 and Nd.04.113 were 60 cm and 70 cm in diameter; the number of strands per decimeter was 9 and the number of interweaving elements (two strands [members] perpendicular to each other; looking like in a plait) per decimeter: 4.5; width of strand: 1.2–1.5 cm or 1.2–1.8 cm and width of interweaving elements: 3–4 cm. The edges were finished with selvedges. The first of these two was handleless, the second was furnished with four handles at the opposing ends

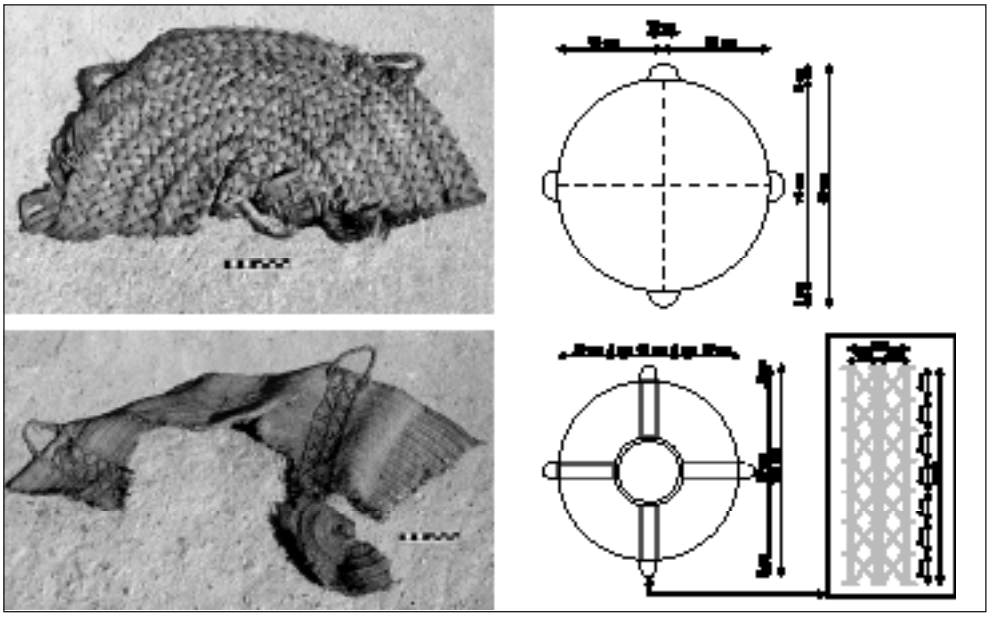

Fig. 10. Round mats Nd.04.113: four handles (top) and Nd.04.094: four handles and rope ornament

[8] Sewn plaits technique: two-system technique with one passive and one active system consisting of one strand (member) moving in one plane, orientated in one direction. The passive system consisting of a long plait (plaited strip) is sewn spirally with an active system – a sewing strand.

[9] Plaited strips technique: two-system technique with two active systems moving in one plane, which are orientated in two directions. If the edges of it are orientated perpendicular to each other, they could be used for making baskets and mats, but if they are parallel to each other, they cannot be pulled inside each other and are thus unsuitable for making basketry objects.

of crossing axes. The handles were made of three-ply (triple-twisted) rope with a diameter of 1.5 cm. The edges where the handles were sewn were reinforced with a simple running stitch same on both sides [*Fig. 10*, top].

The third mat, Nd.04.094, was very neatly made compared to the others and additionally decorated with a rope ornament [*Fig. 10*, bottom]. Its diameter was 90 cm, number of strands per decimeter: 28 and number of interweaving elements per decimeter: 14; width of strand: 0.5 cm, and width of interweaving elements: 1.5–2.0 cm. The edges are finished with selvedges reinforced with oblique hemming. There were four handles, on the axes made of three-ply (triple-twisted) rope with a diameter of 1.2 cm. A running stitch reinforced the places where the handles were attached. The rope ornament was made of a two ply (double twisted) string 0.4 cm in diameter, which formed a double column of diamonds inscribed into a rectangle 32 cm high and 8 cm wide. The ornament was stitched on the four axes, covering also the place where the handle was attached.

BASKETS

The baskets discovered in 2004 in Naqlun were also manufactured in the sewn plaits technique.

Like the mats, the baskets were made most probably in Fayum. The plaited strips used in their making were made of palm leaves and they were sewn together with palm-fiber rope. All nine of the baskets discovered this season were found on top of wooden coffins, at the head end.

Eight of the baskets (Nd.04.011, Nd.04.046.1, Nd.04.098, Nd.04.124, Nd.04.132, Nd.04.141, Nd.04.165, Nd.04.264, were large, usually of basin shape, mostly with two short handles, while the last basket, Nd.04.046.2, was flat, in the shape and size of a plate or pan. The large basin-shaped baskets had a rim diameter from 35 cm to 65 cm and bases, usually not markedly separate, 20 cm to 50 cm in diameter; in one case, Nd.04.124, the base was separate and attached with overhand stitch. The height of these baskets ranged from 18 cm to 40 cm; number of strands per decimeter: 9–21; the number of interweaving elements per decimeter: 4.5–10.5; width of strand: 0.5–1.5 cm; width of interweaving elements: 2.0–4.5 cm. The top edge was finished with a selvedge, the sole exception being basket Nd.04.264 where the edge was secured with an overhand stitch [*Fig. 11a*].

Three-ply (triple-twisted) rope was used for the handles, the diameter of this rope being 1.0–1.5 cm; a two-ply (double twisted) rope, 0.8 cm in diameter, appeared in only one example (Nd.04.011). The handles were attached 4–8 cm in on the inside and 7–12 cm on the outside. The sides where the handles were attached were reinforced with rope stitched with a running stitch. In basket Nd.04.011 the ropes for attaching the handles started from opposing sides and were tied with a double knot in the middle of the base [*Fig. 11b*].

Basket Nd.04.165 had a different, less common shape, flattened sides, oval base, and originally looked like a large basketry bag. This basket had a rim diameter of 60 cm and a base, not markedly separate, 45 cm across, and 40 cm high; number of

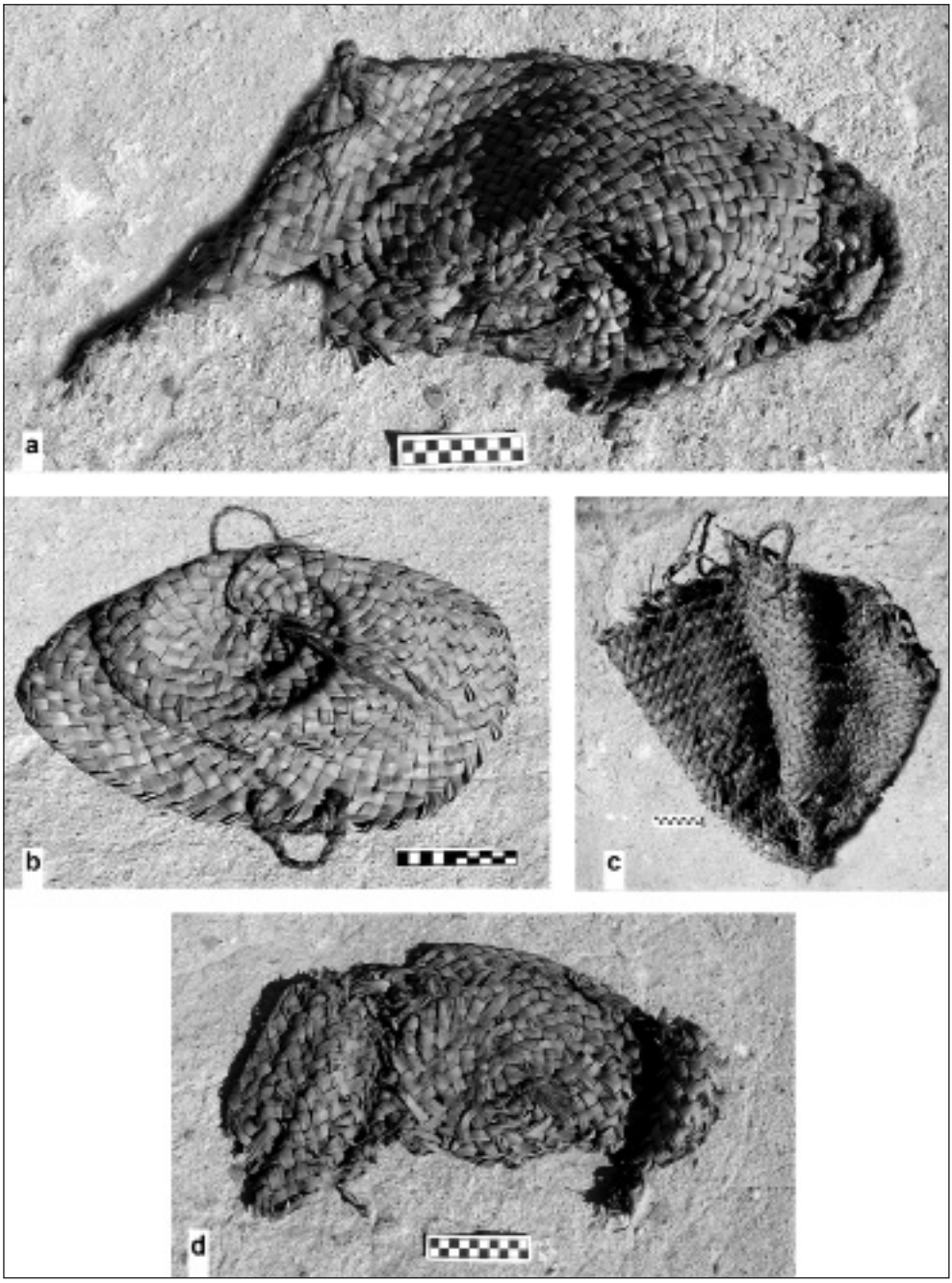

Fig. 11. Baskets: a – Nd.04.264; b – Nd.04.011; c – Nd.04.165; d – Nd.04.046.2

strands per decimeter: 9; number of interweaving elements per decimeter: 4.5; width of strand: 1.0–1.5 cm; width of interweaving elements: 3–4 cm. Edges were finished with a selvedge. Three-ply (triple-twisted) rope for the handles had a diameter of 1.2 cm. Running stitches reinforced the place on the side where the handles were attached and these handles were fastened 7 cm deep on the inside and 12 cm on the outside [***Fig. 11c***].

The flat, plate or pan-shaped basket Nd.04.046.2 had short sides and no handles. The rim diameter was 40 cm, the base, not markedly separate, 28 cm. This basket was 10 cm high; number of strands per decimeter: 9; number of interweaving elements per decimeter: 4.5; width of strand: 1.5 cm; width of interweaving elements: 3–4 cm. The edges were finished with a selvedge [***Fig. 11d***].

FINAL REMARKS

The basketry objects from cemetery A in Naqlun clearly constituted part of the medieval Christian burial rites in the 12th–13th century AD in Egypt. Their purpose was protection of the body at the time of the interment. Mats were especially useful in protecting less durable forms of burials made on *jerîd* biers and in *jerîd* crates, not to mention bodies, which were simply wrapped in burial shrouds. Baskets additionally covered the head of the deceased. Both new and used baskets were used; mats on the other hand appear to have been new. The large number of mats discovered at the cemetery seems to indicate the frequency of their use in domestic contexts of the period.

Evident effort was put in producing the mats used in burials; they are neatly made, differentiated and often richly decorated. It has been demonstrated that in most cases the decoration on the mats, especially if emphasized by a geometric ornament made with a woven-in black-dyed plant shoot, corresponded to the position of the head. The pattern on mats decorated with ornamental bands and rectangular decorative panels and the rhythm of the composition also usually indicated the top of the mat which also corresponded as a rule with the position of the head.

Until comparative material from non-sepulchral contexts is excavated, it remains an open issue whether such well-made mats with planned decoration, usually corresponding to the position of the deceased in the tomb, were manufactured specifically for burial purposes.

Anetta Łyżwa-Piber
e-mail: anetta_lyzwa@yahoo.com

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