

Textile Fragments Found Together with a Late Roman Helmet

Archaeological Aspects

On June 17, 1910 in Deurne (N. Brabant, the Netherlands), the peat-cutter G. Smolenaars found a gilded silver helmet together with textile fragments and other objects. The helmet was cleaned and polished to be exhibited to the public in the living-room of G. Smolenaars' house. Unfortunately, during the cleaning process the iron inner cap, which was covered with leather, was removed.

In 1914, the Museum of Antiquity, Leiden (R.M.O.) bought the helmet together with the other objects. Restoration of the helmet was necessary, especially because the inner cap had been removed. The outer helmet is constructed of decorated gilded silver plates. At the right side this decoration is interrupted by the inscription "STABLESIA VI", which is the name of an equestrian unit of the Roman army (4-5th century A.D.). Helmet fragments of the same type were found at San Giorgio di Novara (N. Italy) and Burgh (Norfolk, England).

Objects excavated together with the helmet include:

- 38 bronze coins dated 315-319 AD.
- 1 bronze fibula
- 3 leather shoes
- 1 spur
- parts of a dagger sheath
- 2 horse bells
- leather and textile fragments.

References

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Technological Information

The textile fragments found at Deurne belong to two different textiles. Most fragments of textile no. 1 were found in 1910, those of textile no. 2 in 1914 (Leene 1973, p. 80-83).

Textile No.1

These coarse fragments apparently belong to a band or belt. The width between the selvages of the

fragments is 24 cm, 13-15 cm and 6 cm respectively. The association between the different fragments is lost, and this is unfortunate for reconstructing the textile.

The spaced warp has thin warp ends of strong Z-spun woollen threads (8/cm). The weft of Z-spun woollen threads (double threads per pick) covers the warp (16-18/cm). Two different weave structures are used: weft faced extended 2/2 tabby and weft faced 2/2 twill, which irregularly alternate (Fig. 1).

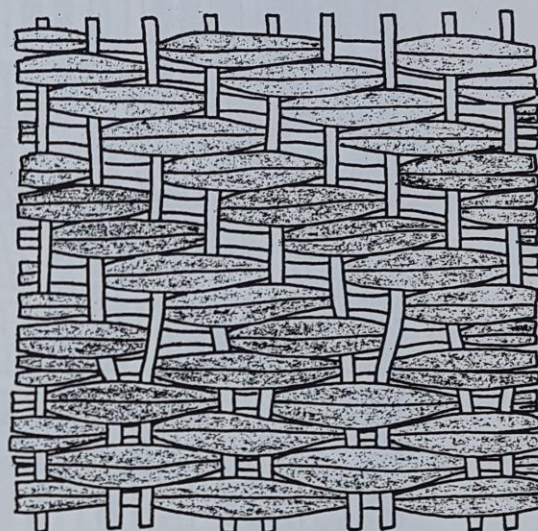


Fig.1 Textile number 1.

Textile No.2

These fragments are part of a textile which can be described as a mantle. In some of the fragments part of a decoration can be seen. The pattern itself was probably of a different colour, but burial in peat has altered the colour of the woollen threads. Although only small fragments have survived (all together 0.5 m²) we can see that a geometrical pattern was woven in.

This type of cloth described as *Palmyran twills and diamonds twills* is recorded from Palmyra (Pfister, 1934, 1937, 1940), Doura-Europos (Pfister & Bellinger, 1945), Mons Claudianus (Bender Jørgensen, 1991), Abu Sha'ar (Red Sea coast, Egypt. Bender Jørgensen, 1992) and from Berenike (Red Sea province, Egypt. Wild & Wild, 1995)

Textile no. 36 found at Doura-Europos may give the best idea of what the textile of Deurne looked like (Pfister & Bellinger, 1945 p. 15, Fig. 4). The textile has spaced warp ends (10/cm) of strong Z-spun woollen threads. These warp ends are totally covered by the Z-spun woollen weft (44-52 picks/cm).

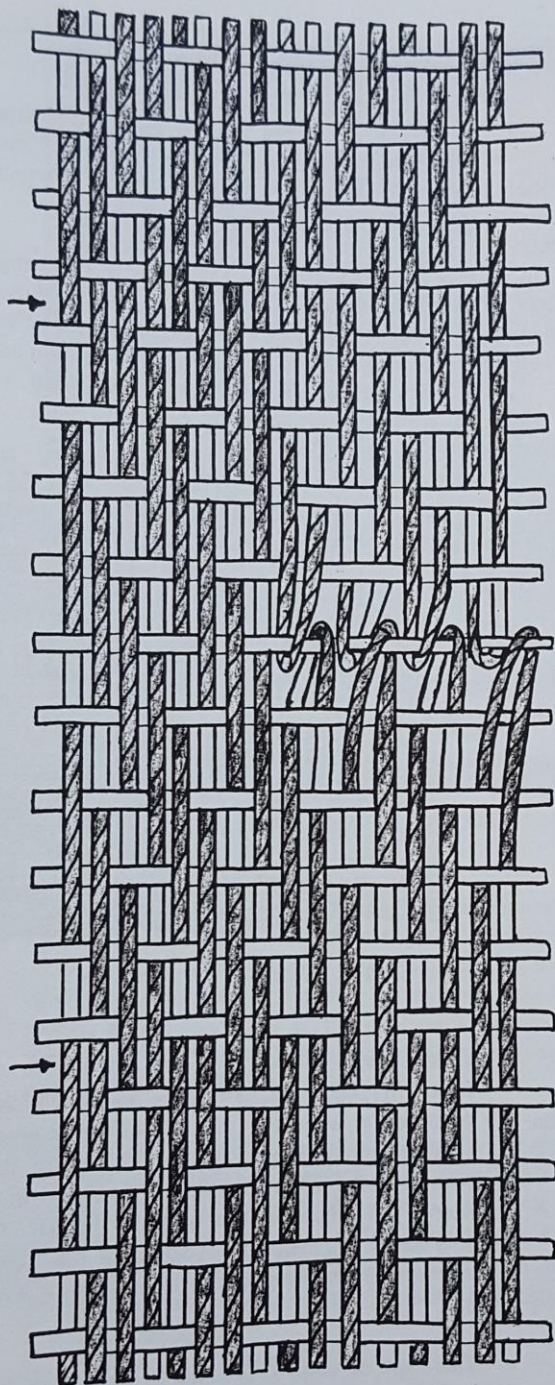


Fig.2 Textile number 2.

The structure of the main fabric is a weft faced chevron 2/2 twill; the direction of the twill changes every 10 warp ends. To incorporate the pattern a single dovetailed tapestry weave is used and the structure of the main fabric continues into the pattern (Fig. 2). It is only because of the dovetailed technique used that a pattern could be detected. The weft threads of the main fabric and the pattern, now of the same colour, have been sent to the Central Research Laboratory, Amsterdam, for analysis.

A reliable analysis of all reported textile fragments of this type is needed to be able to make a thorough study of the weaving equipment used. The textiles from Deurne are important because of the location of the finds (the Netherlands, N. Europe), the owner of the garments (a staff officer of a Roman equestrian unit) and the dating to the 4th century A.D. by means of the coins.

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