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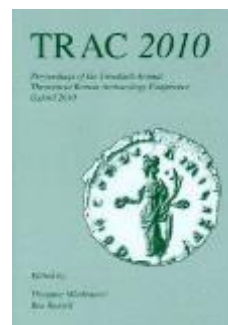
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Cloth and Clothing from Cemeteries in Noricum

Karina Grömer and Eva Hölbling-Steigberger

Introduction

Burial sites are the main source for preserved cloth fragments in Noricum. At the same time, burial sites are important for understanding the late Roman population in both the rural and military environment in the hinterland and along the Danubian *limes* in Noricum. In the last 15 years new evidence has come to light in excavations undertaken by the National Department of Monuments in three large cemeteries along the Danubian *limes* in Lower Austria. The area of the Traisen River valley in Lower Austria lay under the influence of civil and military administration connecting the municipal centre of *Aelium Cetium* (modern St. Pölten) and the forts *Favianis* (Mautern) and *Augustiana* (Traismauer) on the *limes*, between which focal points trade and troops frequently moved. Just 25 km to the east lies *Comagenis* (Tulln), another auxiliary fort on the Danube, surrounded by its *vicus* and cemeteries. Three cemeteries from this highly populated area in northern Noricum are the basis of our research and offer a good insight into the variety of different groups within the population buried there.

In recent years the scientific discussion of the processes of interpreting clothing and appearance through the remains in graves in Central Europe has increased, especially regarding the problems and limits of defining ethnicity using this material (e.g. Brather 2004; Von Rummel 2007). The main focus always lies on jewellery and the metal parts of costume in the graves, as they are usually the only remains left for archaeological research. Our research has two aims: first, to provide a collection of data for basic research on Roman textiles in Austria. Secondly, to provide a means by which to develop a new method for analysing the material itself, the direct legacy of the people and their attire and costume worn at their burial. This offers a valuable addition to the analysis of written sources and well-known depictions. In a further step, it should be possible with this approach to develop new theories that can be combined with the traditional analyses of non-organic remains in graves.

Analysing archaeological textiles – sources and methodology

To identify Late Roman weave types in Austria (third-fifth century A.D.) within the framework of the DressID Project (Grömer und Kern 2008) archaeological textiles from modern Austrian territory were analysed (Table 1). Thanks to collaboration with the Cultural Heritage Department (Bundesdenkmalamt) of Austria, and with different museums and excavators, even unpublished material could be included in the project, sometimes “fresh” from the excavations. Library-based research offered just a few published Roman textiles from Austria and they were added to this database. Until March 2010 the research work encompassed about 128 textile finds from the third to fifth centuries A.D., constituting an important part of the basic research of late Roman textiles from Central Europe. While most of the textile finds had a funerary context, there is one textile fragment from a settlement context: a well in Enns-*Lauriacum* (Plochbergergründe) contained a 1–1.4 mm-thick S-plied asbestos thread used as a lamp wick (Hundt 1976). Another textile from Lauriacum was kept in the basilica at Lorch in Enns as

wrapping for the relics of Saint Florian, who died as martyr on the 4th May 304 (Ubl 1997: 223, Cat.No. IV/S-1).

Table 1: Late Roman Textile finds from Austria (Stmk=Styria; OÖ=Upper Austria; NÖ=Lower Austria) (© K. Grömer, DressID Project, December 2009).

| Site | Location | Date | Context | Graves with textiles | Sample size | Characterization | Bibliography |
|-------------------------|-------------------------|------------|---------|----------------------|-------------|--|--|
| Frauenberg bei Leibnitz | Seggauberg (Stmk) | 4th/5th c. | grave | 8 | 12 | Linen and woolen tabby s/s and z/z, basket weave 2:1, pattern: structure stripes with threads z, z/z | Grollegger 2002 |
| Freundorf | Freundorf (NÖ) | 5th/6th c. | grave | 1 | 1 | Tabby | Textile analysis: Grömer |
| Furth bei Göttweig | Furth bei Göttweig (NÖ) | 4th c. | grave | 1 | 2 | Tabby z/z | Textile analysis: Grömer |
| Hollenburg | Krems (NÖ) | 5th c. | grave | 1 | 1 | Tabby, impression in mortar | Textile analysis: Grömer |
| Lauriacum | Enns (OÖ) | 4th c. | well | - | 1 | Asbestos: thread as lamp wick | Hundt 1976 |
| Linz-Altstadt | Linz (OÖ) | 4th/5th c. | grave | 1 | 1 | Zig zag twill | Ruprechtsberger 1999, 35 |
| Lorch | Enns (OÖ) | 4th/5th c. | relic | - | 1 | Flax tabby with blue stripes | Ubl 1997, 223, Cat.No. IV/S-1, Fig. p. 224 |
| Mannersdorf | Mannersdorf (NÖ) | 4th c. | grave | 1 | 2 | Tabby s/s | Textile analysis: Grömer |
| Mautern-Burggarteng | Mautern (NÖ) | 5th c. | grave | 55 | 67 | Tabby s/s and s/z, flax and wool, repp | Textile analysis: Grömer |
| Mautern-Melkerstrasse | Mautern (NÖ) | 5th c. | grave | 1 | 2 | Linen tabby s/s, woolen repp | Grömer and Mehofer 2006 |
| Mitterhof | Wildendürnbach (NÖ) | 5th c. | grave | 2 | 3 | Twill 2:2 z/z, tabby s/s | Textile analysis: Grömer |
| Pottenbrunn | Pottenbrunn (NÖ) | 4th c. | grave | 3 | 4 | Basket weave 2:1, tabby | Grömer in Hölbling 2008 |
| Saladorf | Würmla (NÖ) | 3th/4th c. | grave | 4 | 4 | Tabby z/z, repp s/s | Textile analysis: Grömer |
| Tulln | Tulln (NÖ) | 4th/5th c. | grave | 7 | 10 | Tabby s/z and z/z, twill 2:2 | Textile analysis: Grömer |
| Unterradlberg | Unterradlberg (NÖ) | 4th/5th c. | grave | 1 | 1 | Tabby | Textile analysis: Grömer |
| Zwentendorf | Zwentendorf (NÖ) | 3th/4th c. | grave | 4 | 12 | Tabby z/z, some s/z, basket weave 2:2, basket weave 2:1 and twill 2:2, z-yarns | Textile analysis: Grömer |

The textiles from graves are usually conserved as pseudomorphs – corrosion products on metal grave finds (e.g. Nowak-Böck 2010) – especially on bronze and iron artefacts such as jewellery and weapons. Usually such impressions are very small, but they still offer knowledge about cloth qualities and raw material. The analysis of these impressions followed the general regulations of textile archaeology and examined fibre, thread diameter, thread count, the analysis of the weaves, etc. (Emery 1966; Banck-Burgess 1999).

In addition to mineralised grave textiles, imprints of textiles in gypsum also survive, e.g. from a sarcophagus of a child from Wels and a stone chamber grave from Hollenburg (unpublished, Textile Database of the DressID Project, part of the Natural History Museum Vienna).

The methods used for the interpretation of the finds are multi-faceted. Context analysis of the archaeological evidence, and noting the position of the textile within the grave, are vital, along with the technical analysis of the textile. A textile found attached to a belt buckle, a bracelet, a fibula or earring, worn by the buried person as in his or her lifetime, can be interpreted as part of a garment.

The method of micro-stratigraphy developed by Inga Hägg (Hägg 1989: 431–439) has been used for the context analysis of mineralised textiles on metal objects. It examines the different layers attached to the object. The positions of each textile layer in combination with the object and the buried body can give a hint as to its former use. A belt buckle from Mautern-Melkerstrasse (Grömer and Mehofer 2006) from the fifth century A.D. may serve as an example: the belt clasp was situated in the grave on the pelvis of the skeleton. Next to the body a dense rep (a thick ribbed or corded weave) could be identified. Between the rep and the belt was a fine linen tabby (a fabric of plain weave), which was even found on the front side in three layers.

Additionally, we know of different functions for woven fabrics in burials apart from clothing. The textiles from the gypsum imprints from Hollenburg and Wels, for example, are pieces of a shroud or a facing of the sarcophagus rather than parts of garments. We also know of “technical” textiles, such on a knife from Mautern-Burggartengasse (grave 83, unpublished, Database of the DressID Project). On the iron knife blade the wooden scabbard was preserved together with its leather covering and textile filling. Textile covers and castings of different artefacts in graves are well known from the Iron Age up until the Early Medieval period in Central Europe. Swords especially were usually carefully wrapped in textiles and then offered to the buried person (for Iron Age see Banck-Burgess 1999).

Case studies: cloth textiles in graves from the province of Noricum

In this paper we will focus on some case studies of Late Roman graves in the province of Noricum, and how we locate textile finds in them. The surviving textile fragments are very small and represent only tiny parts of the original whole. How do we fit them? Can the fragments be allocated to certain parts of garments? And if so, which ones? The function of the object on which the pseudomorphs were found may, of course, give some hints.

1. Favianis – Mautern, Lower Austria

The first cemetery is connected directly to the *Favianis* fort, where an auxiliary garrison was stationed up until the Late Roman period. A *vicus* existed to the west and south of the fort and

three cemeteries are known so far. Both the eastern and the southern cemeteries were excavated in the first half of the twentieth century (Pollak 1993), but no textiles were reported among the finds at these sites.

Some textiles were preserved, however, in a small cemetery of 24 graves in the *vicus* (Mautern-Melkerstrasse), which dates from the fifth century A.D. onwards (Pieler 2004; Pieler and Obenaus 2005; Grömer and Mehofer 2006: 61–63). The textile from a belt clasp from grave 23 was mentioned above. It is a fine tabby of a belted garment attached directly to the clasp, both on the inner and outer side. This could be a tunic, gathered by the belt with rich folds (3 layers are visible) covering evenly the front side of the clasp. In addition, the microstratigraphy showed part of a cloth worn under the belted tunic: it was a rep, a denser, sturdier fabric. Did it belong to trousers or to an undertunic? Pictorial evidence and written sources prove that both are possibilities. For instance, both a tunic and trousers are visible on the famous ivory diptych of Stilichio dated to the end of the fourth century A.D. (Croom 2002: fig. 8, 39 and 40–41 for a discussion of undertunics).

The larger cemetery in this area, on which our research concentrates, is at Mautern-Burggartengasse and was excavated from 1999 to 2003 (Wewerka 2000; Grömer 2001; Pieler 2002; Pieler *et al.* 2003; Wewerka 2004; current research by author). It consists of 420 inhumations alongside a road to the east of the Roman fort. The majority of the graves were simple earthen pits with few traces of wooden coffins and only a few dry-walled stone chambers. Most of the bodies are arranged in the supine position, which is usual for this time period, and most of the graves are oriented west to east. The position of the arms is irregular; usually both arms were crossed above the pelvis or placed to the side.

The cemetery was used from the third century A.D. onwards, the earlier graves flanking the modern road from the south, the later ones following at an angle to the earlier ones. The chronological end of the cemetery is not easily determined, since no grave goods were found in the majority of the burials. The pottery deposited as grave goods dates to the first half, and possibly also the second half, of the fifth century A.D. Some graves were equipped with pottery of the early Middle Ages (Wewerka 2004: 419–421; Schmitsberger 2005), so the cemetery was clearly in use for a longer period of time, possibly with a gap of yet unknown duration. *Favianis* was the diocesan town of Saint Severin, whose *Vita* by Eugippus is an important source on Late Roman Christian life in Noricum. In the past, scholars tried to link his life with the archaeological evidence and especially with the graveyards, since unequipped burials are believed to be those of the early Christians. This matter cannot be resolved on this fact alone and will continue to be of importance for future research. In addition, graves without deposits are often believed to be those of people of lower rank, but in this cemetery they are not only simple earthen pits but expensive stone chambers as well. Also, some individuals seem to have been well nourished (Wewerka 2004: 419). So the idea that the humble graves are those of the Christians is not so easily corroborated, even though the *Vita* clearly states that the people of Noricum were living under stressed economical circumstances (Eugippus, *Vita Sancti Severini* XVII–XVIII).

Of the 169 burials with grave goods, 70 are female and 48 male, while 58 are unidentified to date. If pottery was deposited, mostly cups were used. Glass containers were only found in seven graves – all of them lying in the earlier parts of the cemetery.

The characteristic inventory consisted of a cup, sometimes knives, and in only nine cases a coin. Attire and equipment were situated at the usual places in cemeteries of that period, jewellery, belt-sets and fibulae according to the costume being worn, while containers were placed near the head or the feet. Sets of jewellery exist in various combinations, necklaces of

glass beads and multiple bracelets dominate. In 19 graves the dead were equipped with ornamented bone combs of various styles.

Recently anthropological work was started at the Natural History Museum of Vienna and already shows promising results. Although there are only a few examples of crossbow fibulae and only two not very elaborate belt sets, it seems that at least a part of the cemetery was used by the garrison of the late Roman fort. To date, about 20 identified inhumations have been identified which show clearly the signs of serious injuries and perhaps indicate that the deceased was a soldier (anthropological analysis was carried on by Dr. M. Teschler-Nicola, at the Natural History Museum, Vienna).

From the site at Mautern-Burggartengasse (textile analysis: Karina Grömer) we have about 67 textiles from 55 graves. Most of them are found in combination with attire or jewellery. Such textile finds are usually situated on belt clasps or on bracelets, and in some cases on earrings or finger rings (Fig. 1).

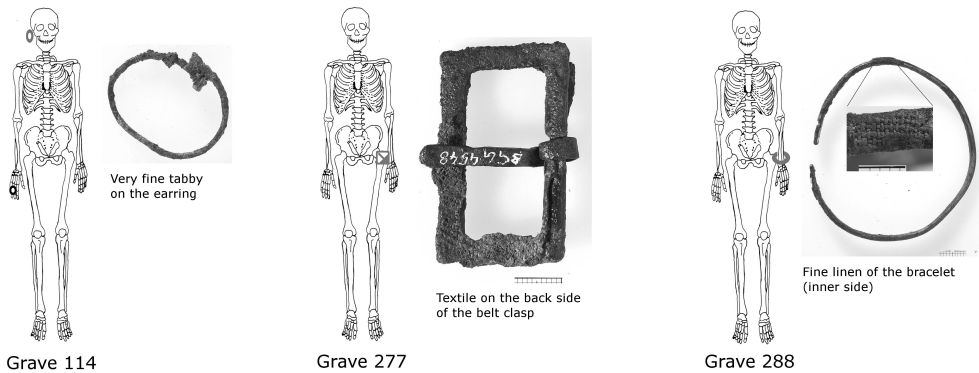


Figure 1: Mautern-Burggartengasse: Examples of textile finds on bracelets, belts and earrings (© K. Grömer).

For example, there is a belt clasp with a textile imprint from grave 277. On the back, directly next to the skeleton, there was a dense rep weave with yarn 0.4 mm thick. Between this rep and the belt a finer tabby of 0.2 mm yarn was found. Fragments of this fabric could be identified on the front side of the belt clasp as well. This find is comparable with the one from Mautern-Melkerstrasse grave 23.

Textiles found as pseudomorphs on earrings are usually very fine and open (“net-like”) weaves with 0.1–0.2 mm yarn, such as that found in grave No. 114. This fabric, located in area of the head, was probably a veil, covering the face of the buried woman.

In Mautern-Burggartengasse there were many textile finds on bracelets in women’s graves. In grave 288, for example, on the inner side of the bracelet, a fine linen tabby was found and analysed. The fabric was made with 0.2 mm z-yarn and had a thread count of 16–22 threads per cm, which is very fine. Textiles on bracelets, especially on the inner side, could be the parts of a “sleeved garment”, where the bracelet was worn over the narrow sleeve, possibly a *tunica manicata*. From the Mautern evidence (grave 288), this sleeved garment was of fine quality linen. From one of the better-preserved fragments from this cemetery we know that this tunic was sometimes of natural white colour.

2. Pottenbrunn, Lower Austria

The rural cemetery of Pottenbrunn was partially excavated alongside an old road about 6 km northeast of the *municipium Aelium Cetium*/St. Pölten (Hölbling 2010; Hölbling, *forthcoming*). It had two phases: the first phase, from the end of the second to the third century A.D., is characterised by cremations, inside encircled funerary gardens and crowned with small mounds; in the second phase, from the second half of the fourth to the beginning of the fifth century A.D., inhumation burials took place. Finds from the first half of the fourth century A.D. are missing thus far. Only the graves from the second half of the fourth century A.D. onwards were useable for our research. These inhumations are spread out between the mounds and the cremations, in two groups that lie on the eastern edge of the cemetery. The 51 late graves containing 59 individuals are mostly simple earthen pits, but half of the burials contained wooden coffins as well. Their main orientation, the position of the arms and the size of the pits is similar to that observed at Mautern. The anthropological gender determination shows twice as many males as females. Most of the individuals buried here seem to have died between the ages of 40 and 60.

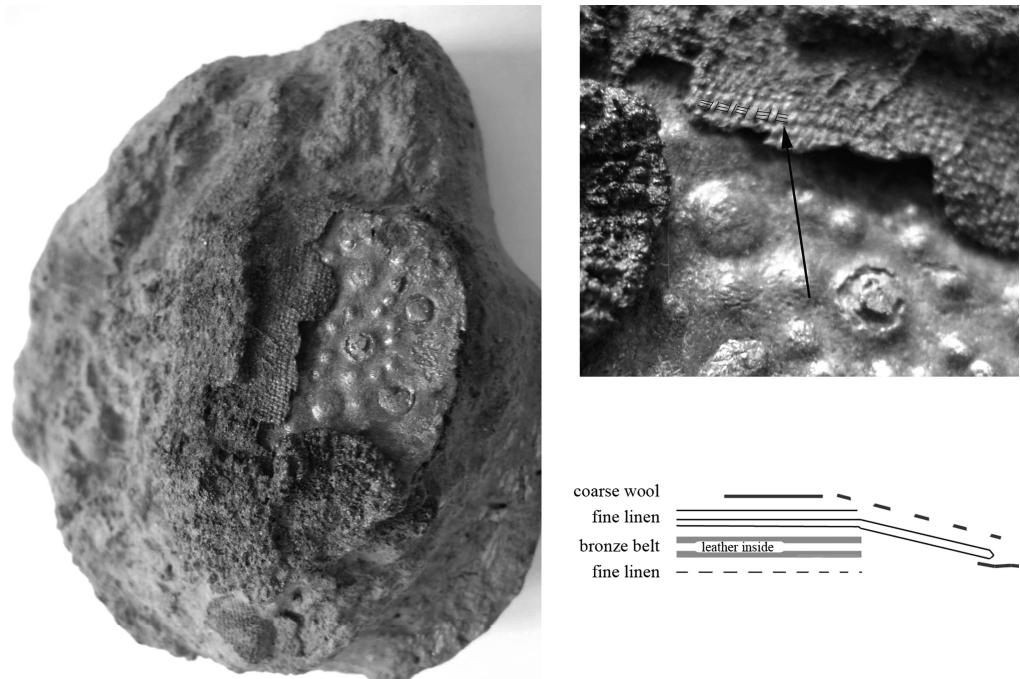


Figure 2: Pottenbrunn: textile layers on a belt buckle (© K. Grömer).

Only in four cases was pottery deposited, but 28 glass containers were found, suggesting they were used instead of ceramic ones. Male burials are restricted to a single container and a coin, the attire is standardised and gender-specific, consisting mainly of fibulae – both crossbow and ring- and belt-sets. Graves of women were better equipped and their grave goods were also more diverse. Glass containers were usually used, often deposited in sets consisting

of a cup, a bottle and perfume flasks. In addition there are coins in about half of the burials. Sets of jewellery exist in various combinations, a situation similar to that at Mautern. Children's graves are almost always without grave goods, though in rare cases pottery and coins were found.

Belt clasps are of special interest for the reconstruction of clothing. One was found at Mautern, as mentioned above. A find from Pottenbrunn (textile analysis: Karina Grömer), comes from grave 192 that belonged to an adult male. On this example layers of two different textile types could be identified (Fig. 2). There was a finer linen tabby closest to the buckle on the front and back; on top of that a thicker woolen tabby could be identified, with a surface looking slightly felted. Perhaps this textile was a warm mantle. The depiction of Stilichio represents those items exactly: a mantle held by a crossbow fibula and a belted tunic, under that leg covers or trousers. The various textiles on belt clasps in male graves may represent different garments. Textile pseudomorphs found directly on the back of the clasps (next to the body of the buried person) belong to a garment which was belted. In an ancient Roman context this would be a tunic; for a "Germanic" population situated in the Danube Area it might be named a "*Kittel*". Such garments are known from contemporary bog finds, such as that at Thorsberg (Schlabow 1976) on the German-Danish border.

3. Frauenberg, Styria

The next cemetery for discussion is located in southern Noricum on the Frauenberg near *Flavia Solva/Leibnitz* in Styria and provides a good comparison to the cemeteries presented above. *Flavia Solva*, an important city in Noricum Mediterraneum, was abandoned in the Late Roman period and the settlement on the Frauenberg was used as a retreat for the remaining population. Only one of two contemporary cemeteries has been excavated here, and this lies in the immediate vicinity of the settlement. It was used from the second half of the fourth to the mid fifth century A.D. and 472 inhumation burials were found in it (Steinklauber 2002).

The gender-specific grave goods and attire are similar to those from the other cemeteries: women are better equipped than men or children. The unspecific grave goods consist of pottery, glass, knives, shoes (remaining as nails), leather bags and coins. Certain parts of attire point to certain non-Roman influences in the burials, like certain types of belt clasps, fibulae (e.g. type G3 with a thick round bow with rectangular belt plate, spiral-crossbow or simple spiral brooches and cicada-shaped fibulae), earrings with polyedric pendants, and maybe the shoes. Very few indications of injuries are found in the skeletal material, though in one grave (F229) an iron lance-tip and 37 bolts alongside a bone-handled knife, a Kreisaugen ornamented belt clasp and plates were found, which seem to identify the individual as a non-Roman soldier (Steinklauber 2002: 184–187).

In nine graves mineralised textiles were detected on parts of the jewellery (textile analysis: Grollegger 2002). Comparable to Mautern-Burggartengasse, linen tabbies were found on bracelets in women's graves – both on the inner and outer side. A very impressive organic structure was found on a bracelet from the grave of a young woman, no. F310, consisting of two to three layers of two different linen tabbies along with fragments of leather. One weave had a remarkable fineness with 0.2 mm threads and a thread count of about 20 threads per cm. Above this was a somewhat coarser tabby with 0.3 mm z-yarn and 16–18 threads per cm.

The textiles on the inner side of the bracelet can be interpreted as a *tunica manicata*. The layers of cloth found on the outer side of a bracelet we could possibly deduce as parts of the

wider sleeve of a tunic, gathered and folded around the bracelet. Another possible interpretation of these textile layers is to identify them as parts of a mantle or *palla* (Cleland *et al.* 2007: 136; compare Olson 2008: 33–36), wrapped around the arm. This interpretation supposes that the buried person might wear the same type of clothes and in the same style as people depicted on contemporary images. We do not know exactly if this was the case.

From Frauenberg we know of some graves of men, women and children with fibulae on the right shoulder of the skeleton. In some cases textiles survived on the needles or inner sides of the fibulae. The older man in grave F275 had a fibula with a coarse plaid attached on it (0.6–0.8 mm yarn, thread count of 8–12). On the fibula of the woman in grave F353 two different weaves were found (Fig. 3). Around the needle of the crossbow fibula a coarse woollen twill was detected and on the outside of the fibula a dense fine linen tabby with 0.2 mm yarn. The small children in the graves F336 and F337, aged 3–5 and 7–8 years, had fibulae on their right shoulders, like adults. The textiles on the fibulae could be identified as very fine tabbies (0.1 mm z-yarn; 12–14 threads per cm), presumably made of vegetable fibre (flax?).

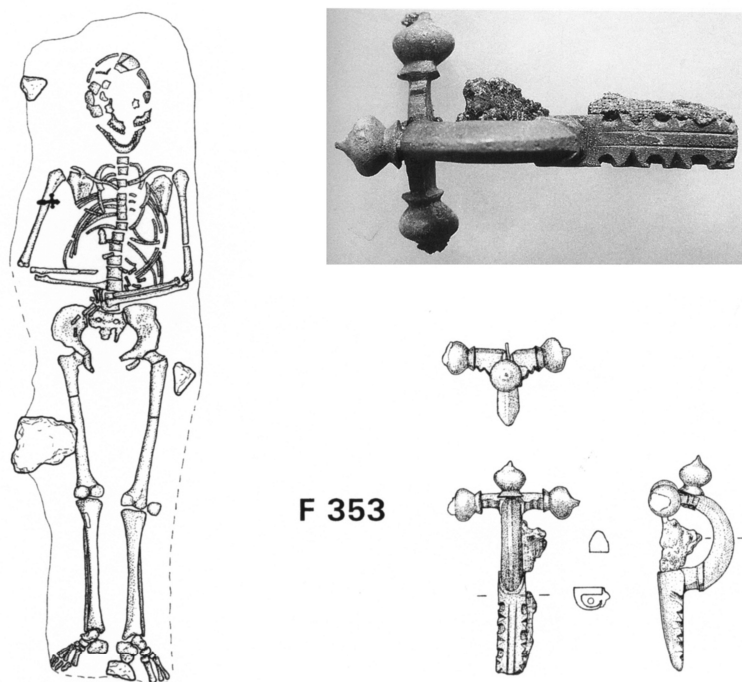


Figure 3: Frauenberg near Leibnitz, woman's grave No 353: Fibula with textile layers (after Steinklauber 2002, Fig. 99).

Textiles on fibulae in general may belong to any type of mantle (a *pallium*, a *paludamentum* or a *sagum*) which was pinned up on the shoulder (Cleland *et al.* 2007: “*sagum*”, p. 164; “*pallium*”, *paludamentum*”, p. 137). In the archaeological record we only have the small part of the mantle which was gathered up by the fibula. From Frauenberg we have also identified different cloth types from fibulae in graves of women, men and children.

On the one hand, a course cloth was found on the fibula of the man in grave F275. The woman in grave F353, on the other hand, had a mantle of finer woollen twill held by a fibula; the fine linen textile on the front side of the fibula can be interpreted as the pseudomorph of a veil. The small children in grave F336 and 337, meanwhile, were wearing light, fine linen mantles fixed with fibulae on their right shoulders.

Context studies – social identity

Theories about the meaning of dress have been discussed in various ways (e.g. Rothe 2009: 1–10; Mentges 2010; Von Rummel 2007). A main aspect of clothing is that it represents and ornaments the person wearing it. Climate, craftsmanship, tradition and social status thus relate to varying style. Clothing was also used as a means of communication, as it can signify age, gender, social and legal status or group membership (including religious affiliation). Clothing and adornment were used to form identity both at group and individual levels.

Do the textiles from Late Roman cemeteries in Noricum tell us something about social identity? Although this is still work in progress, it is possible to outline a basic approach to this issue.

1. Interpretation of simple standardised cloth types

It is remarkable that from Noricum we know only very simple weave types – tabby, for example, and sometimes basket weave. Twill is very rare. The textiles look somehow uniform and standardised, mainly with thread diameters of about 0.2–0.5 mm, single yarn, and thread counts between 10–18 threads per cm. If we compare that with finds from the Iron Age or Early Medieval period in the same area (for examples see Grömer 2010), we get a completely different picture. In the Iron Age as well as the early Medieval period we find many more fancy weaves such as herringbone twill or diamond twill, a side to spin pattern, colours, stripes, checks, pattern with floating threads, tablet weave and so on. There is also a wider variation of cloth quality, thread counts and yarn types. Textiles from the first millennium B.C. are known from the salt mine at Hallstatt (Grömer 2005), but there are similar finds in Iron Age graves as well.

In contrast, our sample of more than 120 Late Roman textiles in Austria offers only simple cloth types. What is the reason for the mostly “uniform” textile qualities in the third to fifth centuries A.D. in Noricum? Is it simply a lack of data? We are able to offer three models to interpret this evidence.

First, it may have been a matter of craftsmanship, and of the organisation of textile production. The high quality and great variety of the Hallstatt textiles suggest the work of specialists alongside household production. Roman-period textile production was highly organised and there are suggestions of mass production (Bender Jørgensen 1992: 126). We find standardised textiles, which were of high quality, but easy to produce in large quantities (simple tabby, simple patterns, stripes, no spin pattern). Only one newly excavated piece from Austria is a richer type of textile: in Carnuntum a sarcophagus was found with golden threads and perhaps silk fibres on the upper body (Rauchenwald 2009: fig. 8–9). This is an important indication of Roman impact in the Danubian area, illustrating the new Roman fashion and trade routes.

A second possibility for our evidence of simple, uniform textiles in the graves could be deduced by the context of the finds. Perhaps special kinds of simpler clothes were made specifically for the graves, as burial gowns or shrouds. It is also likely that these “grave-garments” were different from those worn in everyday life. If this is so, we should exercise caution regarding our interpretations of the elements of dress types.

Third, there is an economic explanation for the simple Roman cloth types in Noricum. We have written sources from the fifth century A.D. from Mautern (*Favianis*), where Saint Severin lived and died in 488 A.D. His biographer Eugippius wrote that Severin organised clothes donations for the defeated and starving population in Noricum Ripense (Eugippius, *Vita Sancti Severini* XVII–XVIII). The simple cloth types in the graves could belong to garments worn in everyday life by the local people, which reflect the strained economic situation of Late Roman Noricum, although it is noteworthy that the only textiles extant are those from graves which include metal parts of the attire. This means we are unlikely to be dealing with the lowest social classes of society.

2. Interpretation due to gender and age

Although the analysis of Roman period textiles is still ongoing, the data of this basic research shows some first remarkable trends: the textiles on the bracelets of women and girls are usually fine linen tabby. That means we can single out fine linen *tunica manicata*-type garments. Attached to the belt-parts are various textiles, and these seem to show that male garments do not differ greatly from the female ones in terms of weave structures. The first overview indicates textiles in male burials being somewhat coarser but this has to be proven by statistics later on in our research.

The case study of fibulae from Frauenberg is of special interest in this context: there are different qualities of mantles found in the graves of women, men and children. The male mantles have a coarse textile, while the woman had a mantle of finer woollen twill, and both of the children were found with fragments of a light, fine linen mantle with a fibula on the right shoulder. So, is this difference of cloth types to be explained by theories about gender and age? For Roman children it is usually said, based on written sources, iconography and non-organic attire, that they were dressed like “small adults” (Croom 2002: 119). At Frauenberg the children had the same types of attire as the adults (held by fibulae), but they were made out of different fabrics. Maybe there are climatic reasons for this difference, for example the children could have been buried during summer with light linen mantles, and the adults in winter, wearing warm woollen plaids. A means to verify that theory could be pollen analysis, which so far has not been included in our research.

Conclusions

The Late Roman cemeteries in the Danubian region share one common aspect: their small finds are comparable on more than just a local level and share great similarities with those from the neighbouring provinces of Pannonia and Raetia (on Straubing: Moosbauer 2005; on Halbtorn: Doneus 2006). This links those cemeteries even in more remote places, like Frauenberg, or the rural ones from the hinterland, like Pottenbrunn, to the ones directly on the *limes* and the international trade routes accompanying it. Although the grave goods may vary in the different cemeteries, some main features are traceable: bracelets, usually more than one, were often

used; containers were also very important, even if the material differs (Hölbling 2008: 257–265). Interesting in this context is the remarkable amount of glassware in the rural cemetery of Pottenbrunn (28 examples: Hölbling 2008: 258–259), while the cemeteries of *vici* and military personnel show less – sometimes almost none, like at Mautern-Burggartengasse (7 examples: Wewerka 2004: 418), where pottery prevails. The important crossbow fibulae and the belt sets, consisting in the fourth century A.D. of a belt clasp and propeller-shaped plates (and later on of chip-carved belt-parts), are found and used in civilian as well as in military contexts along the Rhine and the Danube rivers, but cannot be the only evidence for military personnel interred in the cemeteries. In all cemeteries non-Roman influence is clearly traceable in the remains of attire and jewellery and in handmade pottery. Only the dating of the cemetery shows the change in burial customs from inhumations in full dress to less equipped and possibly only shrouded inhumations in the later periods (as in Mautern) after the early fifth century A.D.

This limited amount of research already shows promising results. Since the newly excavated cemeteries have not been widely published, the importance of future comparative studies must be stressed. What an examination of the evidence from these cemeteries can add to our knowledge of the people inhabiting the *limes* region and its hinterland during the Late Roman period has yet to be fully explored.

In analysing the means of textile preservation and the various kinds of cloth, a conclusion could be drawn regarding which parts of clothing were preserved, which style was used for burial and whether it is possible to come to a general statement about social structures in the area. The textiles likely had different functions in the graves, such as covers, castings, “technical” textiles or shrouds. Most of the textile finds can be identified as pseudomorphs, fragments of clothes attached to bracelets, fibulae, belt buckles and earrings. Some of the items give us hints about the elements of dress worn by the deceased: tunics, veils and mantles. Their analysis offers additional information about the materials used – flax or wool – and about the cloth qualities.

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