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Clothes make the man : early medieval textiles from the Netherlands

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Title: Clothes make the man : early medieval textiles from the Netherlands

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5. The textiles from the early medieval cemeteries in the region of Nijmegen, The Netherlands

A comparative study of the cemeteries of Lent-Lentseveld and Wijchen

The cemeteries of Wijchen and Lent-Lentseveld were put together into one case study because they are geographically very close together. Wijchen was excavated in the '90s and only recently published. Lent-Lentseveld on the other hand was recently excavated and this cemetery provides a detailed dataset of well preserved textiles from a short period of time. Moreover, the skeletal remains from this cemetery are well preserved creating the opportunity to analyse the differences in burial textiles between men, women and children. Although all these conditions were radically different in the case of Wijchen, the amount of textiles from Wijchen and the overlap in the period in which these cemeteries were in use, enables a comparison between both sites from this region.

The textiles from Wijchen were published in a catalogue before (see below), but a reanalysis and re-dating of the graves provided more information about the use of the textiles in the burials which is why these finds have been included in this case study once more.

The catalogue of Wijchen was published before in: Brandenburg, C.R., 2010: *Textielresten*, in S.Heeren & T. Hazenberg (red.), *Voorname dames, stoere soldaten en eenvoudige lieden. Begravingen en nederzettingssporen uit het Neolithicum, de laat-Romeinse tijd en Middeleeuwen te Wijchen-Centrum*, Leiden, 121-128.

5.1 INTRODUCTION

In the region around the city of Nijmegen several early medieval cemeteries have been excavated. The graves in these cemeteries often include fragments of (mineralized) textiles. In this study the textiles of two cemeteries will be discussed: Lent-Lentseveld, excavated in 2011 and 2013 and Wijchen, excavated in 1991-1996.

The textiles from Lent-Lentseveld were analysed recently, directly following excavation. The textiles from Wijchen have been partly analysed previously in 2009 resulting in a preliminary publication and catalogue.²⁴⁴ However, since this publication several adjustments are in need: objects that were hitherto not analysed were found in the storage resulting in more textiles, the dates of the graves have been revised and more time could be spent in the spatial analysis of the textiles in the graves.

5.2 THE CEMETERIES OF LENT-LENTSEVELD AND WIJCHEN

The cemetery of Lent-Lentseveld was found during large-scale building activities on the northern bank of the river Waal. The site consists of 50 inhumation graves and 20 cremation graves. The oldest burials in the cemetery are from the period 475-500 AD but may even be older (>425 AD). The cemetery stayed in use until the end of the sixth century. Several clusters of burials can be distinguished: a group of burials in the north of the cemetery is probably the oldest phase and the graves in the centre and southern part of the cemetery are younger. Due to the fact that post-excavation restoration and interpretation has not yet been fully completed, more precise dates of the graves are not available. Grave dates have to be based on the objects found in the graves and can result in dating margins of several decades. A number of graves could not be dated very accurately and are therefore assigned to the lifespan of the entire cemetery (475-600). In this cemetery and period no signs of Christianisation are visible in the archaeological record.

The inhumation graves of Lent-Lentseveld were well preserved. No natural disturbances or intentional reopening of the graves have occurred resulting in intact burials where the skeletal remains and the grave objects were still in their original position. These graves were documented in great detail using the most advanced excavation methods, which creates the opportunity of making 3D-reconstructions of the position of every object in the graves. The human remains were of high quality as well which may enable a reconstruction of the population, such as sex, age and family relations.²⁴⁵ A considerable amount of young children has been buried in this cemetery. Out of the 50 inhumation graves 17 individuals were children not older than six years old. The 33 adults can be divided into 12 men, 14 women and 7 individuals of whom the sex/gender could not be ascertained.

The cemetery of Wijchen has been in use for a longer period, starting around 350 AD and ending in the second half of the seventh century. Many of these graves are contemporary to Lent-Lentseveld making this site suitable for a regional comparison. The cemetery of Wijchen is considerably larger: it consisted of nearly 350 graves of which 309 were inhumation graves. Soil conditions were not as favourable as in Lent: the skeletal remains have sparsely survived. Intentional reopening of the graves has been observed in only 15 graves, but since a number of graves overlap there may have been some displacement of objects within the older (and partly) disturbed graves.

5.3 RESEARCH QUESTIONS AND AIMS

Lent-Lentseveld is a unique cemetery in the region of Nijmegen, with its rich demographic information, short but distinct chronology and spatial distribution. It is therefore very suitable for an attempt to assess the way the families, groups or individuals within this specific population were treated upon burial. For example the large amount of children within the cemetery give ample chance to ascertain how children in general or specific young individuals were treated

244. Brandenburg 2010b.

245. DNA-analysis has not been conducted yet.

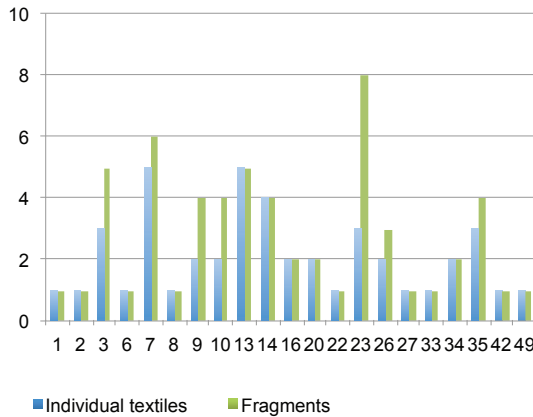


Fig. 5.1 Lent-Lentseveld: the number of individual textiles (dark grey) and number of fragments (light grey) per grave (grave number is listed on the horizontal axis).

in the burial ritual, and this can easily be compared to the way the adults were buried. This analysis will likely shed light on the different relations within this part of Merovingian society.

This chapter therefore attempts to assess the character, quality and uses of textiles and clothing in the burials in the cemetery of Lent-Lentseveld in order to determine the role these materials played in the burial ritual and to discern differences within the buried population.²⁴⁶ The finds of Wijchen are dealt with in the same way to compare and value the textiles of Lent in its region. This will also enhance the overview of the fabrics in use in this area of the Netherlands and provide a substantial dataset that can be used in an analysis of the use of textiles in a larger spatial context. The following research questions will be discussed:

1. What are the character, quality and development over time of the textiles found at Lent-Lentseveld and Wijchen?
2. How were the textiles used in the burials?
3. Are there differences in textiles or the use of the textiles between individuals or groups within the cemeteries?
4. Are there similarities or differences between the two cemeteries regarding the character or use of textiles?

5.4 DATASET

The textile remains from the cemeteries of Lent-Lentseveld and Wijchen were preserved in the corrosion on the metal objects in the graves. The textiles that were not in contact with metal decayed in the years after the burial. Because of this the remaining fragments are often very small, measuring between 0.5 x 0.5 and 5 x 6 cm.

The cemetery of Lent-Lentseveld has yielded 58 fragments of textile, which were found in 21 graves. Most of these graves contained one or two different fabrics; six graves provided more (fig. 5.1). 42% of the graves therefore have yielded textiles, which may be considered a rich find complex compared to other Dutch cemeteries excavated and analysed so far. In some cases there were several fragments of the same fabric present within one grave. These identical fabrics have been grouped together resulting in a total of 44 individual textiles. Wijchen yielded 87 individual fabrics (117 fragments) from 45 graves (fig. 5.2).²⁴⁷ This means that in only 14% of the 309 graves textiles have survived. Only eight out of those 45 graves contained more than two textiles.

The preservation of the fabrics from Lent is in general higher than those of Wijchen, but this is mainly because most of the iron objects from Wijchen have deteriorated badly during the last 20 years after they

246. Halsall 1995, 245-248; Effros 2002b, 69-91; Effros 2003, 124-128; Cohen 1985 shows how symbols have different meanings for different groups and can change over time, enabling people to (re)create the boundaries of their social group, p. 16 and 50. For a more detailed discussion on the role and use of textiles and clothing in the burial ritual see also Brandenburg 2012, 128-129.

247. In the textile catalogue published in Brandenburg 2010b only 95 fragments of textile were listed. Since this publication "new" fragments have been documented.

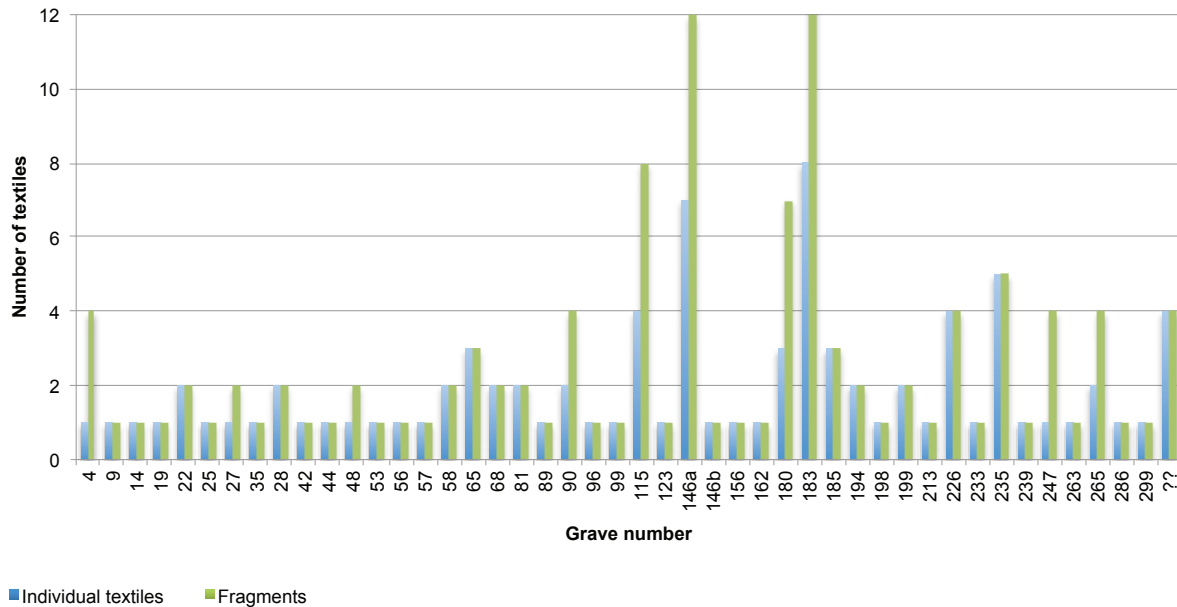


Fig. 5.2 Wijchen: the number of individual textiles (blue) and number of fragments (green) per grave (grave number is listed on the horizontal axis).

were excavated, resulting in crumbling objects, indeterminate fragments of textiles and damaged fibres. Due to these poor conditions it was often not possible to determine the fabric, thread thickness, spin or fibre type of the textiles from this cemetery. There were many indeterminate fragments among the textiles from Lent-Lentseveld as well, but these are mostly single threads preserved in the springs of brooches. Due to their small size it was not possible to ascertain the weave of these fabrics (hence the label 'indeterminate') but the thread thickness and spin was often visible giving information on the original quality of the fabrics to which these brooches were attached. Similar textile remains are completely lacking in the cemetery of Wijchen because most brooches were selected for display after the excavation and have undergone restoration, which included the removal of all organic remains. The fibres from Lent-Lentseveld were well preserved resulting in successful fibre analysis. This was not possible in the Wijchen-complex. Here the fibres were damaged and analysis proved successful in a smaller number of objects.

Due to the excellent state of preservation and the advanced methods of excavation all textiles of Lent-Lentseveld can be assigned to men, women and children of different age groups. The textiles from Wijchen have been assigned to gender, which was based on the presumed gender associations of the objects present in the graves (fig. 5.3). This leaves room for discussion for one should not overlook the possibility that some women may have been buried with weapons or men with female objects.²⁴⁸

Some of the textiles from Lent (9 fragments) are dated very narrowly, resulting in a subdivision of the dataset in small groups of overlapping sub phases, while most can not be dated more specific than 450-600 AD. The number of textiles that can be ascribed to these sub phases is too small to be used in analyses. Therefore the textiles from Lent will be dealt with as one single phase. The textiles from Wijchen have originally been divided into four main phases, which were further divided into sub phases (table 5.1).²⁴⁹ In order to enable a comparison with

248. Pohl 2004, 31-32; Price 2002, 149-153; Knol e.a. 1996, 302; Brandenburg 2012a, 128-129.

249. Heeren & Hazenberg 2010, 157.

the cemetery of Lent the textiles from phase 2, 3 and 4a will be grouped together and dealt with separately from the textiles of the period before (phase 1) and after (phase 4b). Only 24 out of the 87 textiles from the cemetery of Wijchen are from these periods 2, 3 and 4a and are consequently contemporary to Lent. Another 14 could not be dated more specifically than the period 530- 640 or later and some of these may be contemporary to Lent as well (fig. 5.4).

5.5 RESULTS

5.5.1 The types of textiles from the cemeteries of Lent-Lentseveld and Wijchen.

During the early Middle Ages, several types of weaves were in use. In the cemetery of Lent-Lentseveld fabrics woven in tabby, 2/2 plain twill, 2/2 broken diamond twill and 2/1 twill were observed. In the cemetery of Wijchen 2/1 twills have not been found. Some textiles were decayed to such an extent that identification of weave was not possible. Nevertheless it is clear that the textiles from both cemeteries show limited variation in fabric types. In Wijchen a border or selvedge was documented on a tabby z/z found in woman's grave 81 from the period 570-610.²⁵⁰ This border consisted of a bundle of four warp threads. The weft thread passed over these four threads and was immediately woven back into the fabric. There is no evidence for hems or tablet woven borders in the graves

5.5.1.1 *Tabby weaves*

In Lent-Lentseveld only five fabrics were woven in tabby. They were found in two men's graves and three graves of children of 4-6 years old. All these tabbies were woven out of z-spun yarns in one system and s-spun yarns in the other system and they vary greatly in number of threads/cm. Most tabbies were rather balanced with approximately the same number of threads in both thread systems. Two of the tabbies were made out of wool. The other three examples were too damaged to allow fibre identification.

250. Find number 06.106.TX2

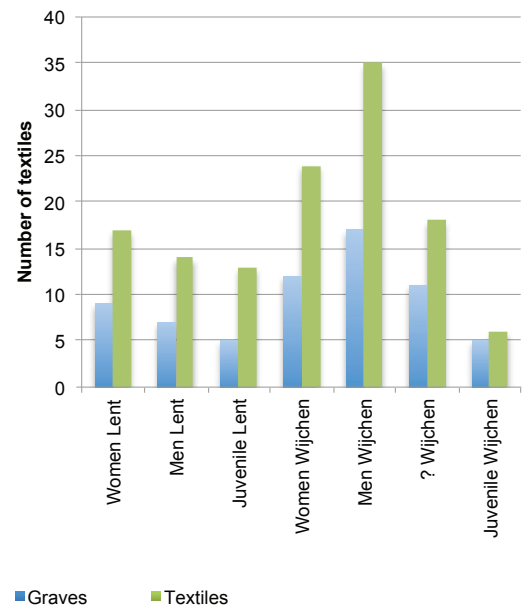


Fig. 5.3 The number of textiles (green) found in burials (blue) of women, men and juveniles from the cemeteries of Lent- Lentseveld and Wijchen.

In Wijchen the majority of the textiles were woven in tabby (35x). Here as well the fabric occurs in graves of men, women and juveniles. 29 of the tabbies were woven out of z-spun yarns in both warp and weft. In only four examples the fabrics were woven out of z-spun yarns in warp and s-spun yarns in weft. One was woven in a spin-pattern.²⁵¹ This is created using both z- and s-twisted threads in one or both systems. The different direction of the twist of the yarns bestows a very subtle but clear striped or check pattern to the fabric. In the fabric from Wijchen the spin-pattern is only ascertained in one system but the pattern could not be distinguished because of the very limited size of the surviving fragment (0.3x0.5mm). It was a fine and smooth fabric woven out of thin threads (0.2-0.3mm). Most tabbies however were woven much coarser than this spin-patterned fabric. Fibre identification was possible in a limited number of fabrics. Most of the tabbies have been made out of wool; only one example of plant fibre could be identified (in a z/z tabby).

251. Find number 10.110.TX3.

1	300 (?) – 450 (?)	1a cremation graves 340-370 AD 1b inhumation graves +/- 400 AD
2	450 (?) - 530	
3	530 – 570	3a: 530-555 3b: 555-570
4	570 – 640	4a: 570-610 4b: 610-640

Table 5.1 The chronology of the cemetery of Wijchen according to Heeren & Hazenberg 2010.²⁵²

5.5.1.2 Twills

In most cases where the fabric was evidently woven in 2/2 twill, it was not possible to ascertain whether it was a 2/2 plain twill or a variety of this weave, such as diamond twill. Only where the fragments were large enough to cover part of a reversal in the pattern, the difference between the types of twill could be discerned (3 times). Consequently, most of the smaller fragments (< 0,5 cm) are assigned to the group of 2/2 plain twill, making this group considerably overrepresented. 2/1 twill is a weave in which the weft thread passes over two and under one warp threads.

In Lent-Lentseveld the majority of textiles were 2/2 twills. Twelve fragments were woven in a variety of this weave: one of these was a plain twill and two were diamond twills.²⁵³ The diamond twills occur in two different graves from the sixth century: one of them is a man's grave and the other is of unknown sex. The other twills have predominantly been found in graves of women and only in smaller quantities in graves of men and children. There is great variation in the spin of the threads of these fabrics. Six

fragments were woven out of z-spun warp threads and s-spun weft threads. Four fragments were made out of z-spun threads in both systems and one had s-spun threads in both systems. One 2/2 twill was woven in spin-pattern using z- and s-spun threads in both warp and weft.²⁵⁴ Due to the small size of this fragment the pattern repeat could not be discerned. Most twills were made out of wool. Plant fibres have not been observed among the twills.

2/1 twill occurs only once in a woman's grave in the cemetery of Lent-Lentseveld.²⁵⁵ This grave belongs to the earliest phase of the cemetery (425-525). In some cases it was not possible to ascertain the type of twill, either because the weave was very decayed or because the fabric was contorted.

In the cemetery of Wijchen 30 textiles were woven in 2/2 twill. Two of these were evidently plain twills; another six fabrics were woven in diamond twill z/s. Just as in Lent-Lentseveld there is variation in the spin of the threads in these fabrics: 20 fragments were woven in z/s; eight fragments in z/z and two were woven in spin pattern with z- and s-spun threads in one system and z-spun threads in the other system. Wool is the predominant fibre in this type of fabric in Wijchen. Only one possible example of plant fibres was observed in a 2/2 twill z/z but due to bad preservation this identification is not certain.²⁵⁶

252. Heeren & Hazenberg (2010) maintain a conclusion of the cemetery around 640 AD. The grave assemblages however give room for a longer life span of the cemetery. Many objects may have been in use after 640 AD (pers. comment F. Theuws). Therefore the dates of the graves containing textiles have been reviewed with kind assistance of prof. dr. F. Theuws, Leiden University.

253. Find number 529.TX1 may also be a 2/2 chevron twill but due to the small size of the fragment the exact pattern was not visible.

254. Find number 273.TX1

255. Find number 255.TX1.

256. Find number 10.109d.TX1

The diamond twills have all been found in graves of men. The other twills were predominantly present in graves of men and sparsely in those of women and one possible juvenile.

In order to compare the distribution of the textiles from Lent-Lentseveld and Wijchen the fabrics from Wijchen have been grouped together in a period before Lent-Lentseveld was in use (350-450), a group contemporary to Lent-Lentseveld (450-610) and after (610- >640). Another group could not be dated narrowly resulting in a group of textiles from the sixth/seventh century or unknown date (fig. 5.5). The earliest period from Wijchen shows most variation and an even distribution of textile types. Note however that these textiles have been found in only 3 graves (all of these men) so this distribution should not be given much significance. The textiles from Wijchen 450-610 are considered contemporary to those of Lent-Lentseveld and here it is remarkable that the predominant textile type in Lent is tabby and in Wijchen it is 2/2 twill. However, when we take into account the large amount of indeterminable fabrics in the cemetery of Lent-Lentseveld it is obvious that this distribution is not altogether reliable either. In the seventh century the cemetery of Wijchen continued to be used and here we see that 2/2 twills and tabbies become equally popular.

5.5.2 Textile quality

5.5.2.1 *Quality of textiles based on thread count*

When we analyse the textiles from Lent-Lentseveld solely on the basis of thread count there are small differences between the different fabrics (fig. 5.6). The majority of the textiles is medium fine to fine (10-20 threads/cm), a small number is coarser and only one fragment is very fine (30x30 threads/cm). This is a 2/2 twill z/z from a woman's grave that could not be dated more narrowly than 450-600.²⁵⁷ The twills from this cemetery are on average finer than the tabbies.

257. Find number 763.TX1.

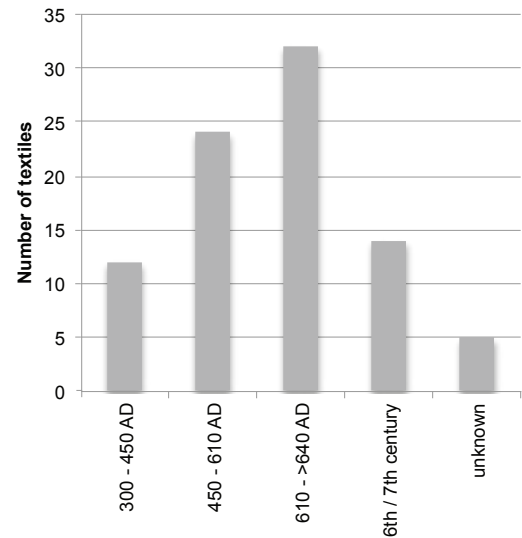


Fig. 5.4 The textiles from Wijchen, grouped by phase. In order to enable a comparison with the cemetery of Lent the textiles have been grouped together in three big phases: before 450, 450-610 (according to the lifespan of the cemetery of Lent) and 610 - 640 (or later). A group of textiles could not be dated more accurately than the sixth / seventh century.

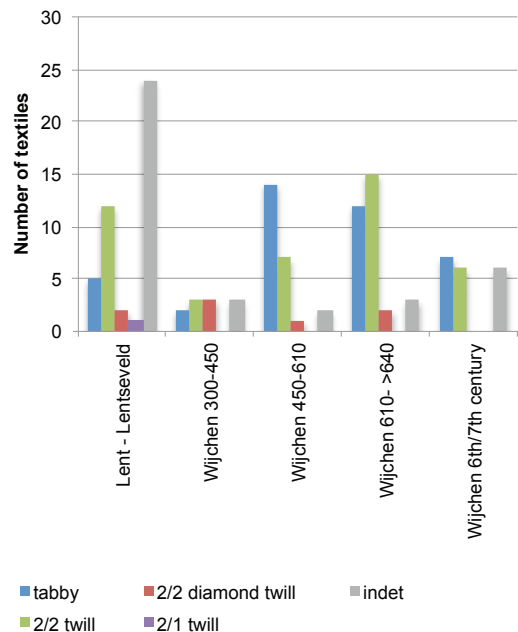


Fig. 5.5 Distribution of the fabrics in Lent-Lentseveld and Wijchen in the period before Lent-Lentseveld was in use (350-450), contemporary to Lent-Lentseveld (450-610), after (610- >640) and unknown (sixth/seventh century).

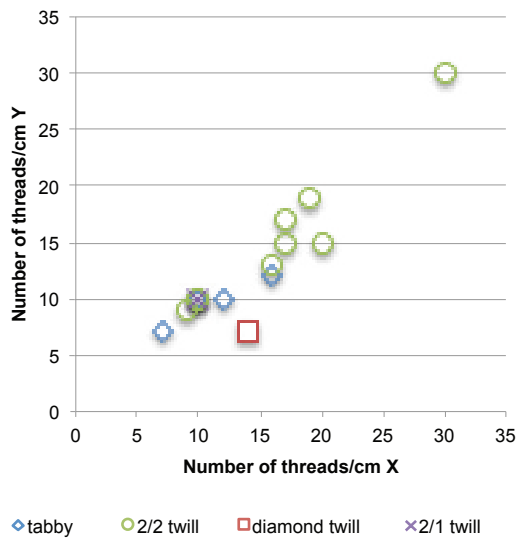


Fig. 5.6 The quality of the textiles from Lent-Lentseveld measured in threads/cm.

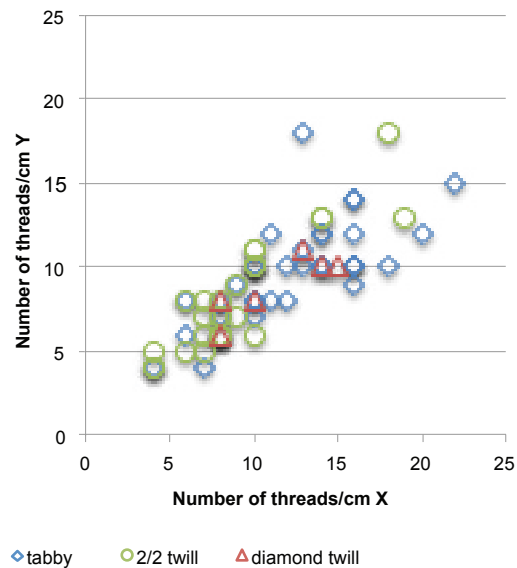


Fig. 5.7 The quality of the textiles from Wijchen measured in threads/cm.

The textiles from Wijchen show a different pattern and are in general coarser than those from Lent-Lentseveld (fig. 5.7). Here there are significantly more fabrics with a thread count below 10 threads/cm than in Lent-Lentseveld. Moreover, the tabbies in Wijchen are finer than the twills, which is the opposite situation compared to Lent-Lentseveld. There are no differences in thread count of the textiles from Wijchen in the period before, during and after the cemetery of Lent-Lentseveld was in use (fig. 5.8).

5.5.2.2 *Quality of textiles based on texture*

In the case of Lent-Lentseveld the fabrics are generally balanced: most yarns have been spun regularly and the threads are evenly spaced in both warp and weft. In other words there are no fabrics where thread thickness or spacing between the threads cause a special effect on the texture of the cloth. This cannot be ascertained of the indeterminate fragments found in the springs of brooches, but here the thread thickness varies from fine (with threads thinner than 0.4 mm) to coarser (0.5-1mm) making it logical to assume that these fabrics vary in quality as well.

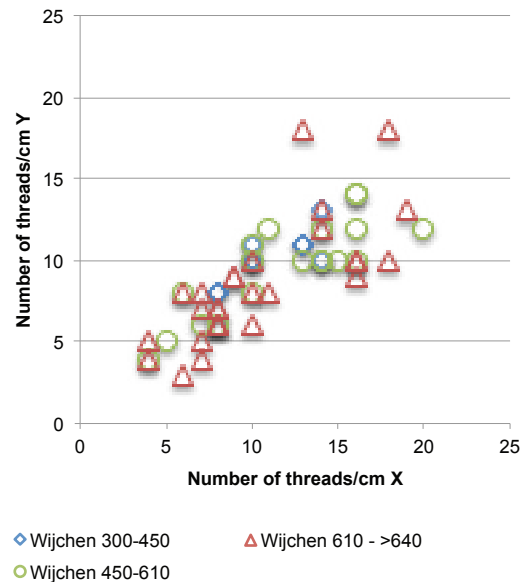


Fig. 5.8 The thread count of the textiles from Wijchen in the period before Lent-Lentseveld was in use (350-450), contemporary to Lent-Lentseveld (450-610), after (610- >640).

In Wijchen the threads have general been spun and woven regularly as well but here we see several fabrics that have a rather open structure.²⁵⁸ These textiles were made out of thin threads (0.2mm) and were woven in a low thread count. This results in delicate and open fabrics that may have been used for different purposes than the usual dense fabrics.

Apart from tabby, plain twill and diamond twills no special weaves such as tablet weave, or patterns such as *rippenköper* have been observed in Lent and Wijchen. Although diamond twill creates a visual effect, this fabric is a very common weave in this period in the Netherlands and is known in both coarse and fine qualities.²⁵⁹ The fact that it only occurs a few times among the cemeteries around Nijmegen is no indication for its rarity. Due to the small size of the remaining textiles in cemeteries this weave is often hard to discern from plain 2/2 twill so many more examples may be present in this cemetery that cannot be identified as such.

The only other examples of woven patterns that change the texture of fabrics are the spin-patterns observed in a tabby and two twills from Wijchen and a twill from Lent-Lentseveld. Two of the spin-patterned fabrics were excavated in the same grave (grave 180, a woman's grave from the period 610->640).

5.5.3 The use of the textiles in the burial

The textiles that have been preserved in the corrosion of the metal objects in the graves are generally considered to be the remains of the clothes in which the dead were buried and of other grave textiles such as shrouds, mattress covers etc. These textiles are a very small representation of the original amount present in the graves. Consequently, it would be optimistic to assume that it is possible to fully reconstruct the use of textiles in the graves and

the shape and fit of the actual garments on the basis of the small surviving fragments. Nonetheless, the dataset allows some conclusions regarding the use of the fabrics because the position of the textiles on the metal objects and the position of the objects on the body are often known. Using this information we can attempt to reconstruct which types of fabrics were used on specific areas of the body and which types of textiles were worn over or under each other. In the following section three areas of the body will be elaborated: the waist, where textiles have been associated with belt parts such as buckles, belt plates etc. (by far the largest amount of textiles), the lower body where pieces of textile have been attached to strap ends and lastly the upper body where textiles associated with brooches will be discussed. Here small sidesteps to the waist/hip area are made as well since some of the brooches were positioned on that part of the body. After this overview an attempt will be made to reconstruct the attire of two individuals excavated in the cemetery of Wijchen: the man from grave 183 and the woman buried in grave 235. These graves were the only graves in which the amount and quality of the textiles enables us to make such a reconstruction on the level of the individual. For this reconstruction the position of the metal dress accessories on the body and the stratigraphy of the textiles on these objects have been used to reconstruct which fabric types were worn on specific body parts and in relation to each other.

5.5.3.1 *Textiles associated with the belt*

There are several groups of objects associated with textiles. Belt parts such as buckles, buckle plates and belt plates are by far the largest group. When preserved on the back of a belt part one can assume that the fabric originally was worn under the belt. Textiles are often present on the front side of the belts as well. These fabrics can be interpreted as the remains of a garment worn over the belt such as a cloak or an outer tunic, but this may not always be the case. It is also possible that the garment was worn beneath but partly folded over the belt.

258. Find numbers 01.155.TX1, 04.076.TX1, 05.072.TX1, 07.019.TX1, 13.017.TX1 & 20.032.TX2.

259. Brandenburg 2010a, 60, table 8, in early medieval settlements in the north of the Netherlands only 6% of all fabrics are woven in tabby with 50% of diamond twills and another 35% of other types of 2/2 twills.

Lastly: fabrics found on the front side of buckles and other belt parts do not necessarily represent a garment. These can also be the remains of shrouds (when present on the front of the body) or mattress covers or coffin lining (when present on the back of the body). Knives and other utensils hanging from the belt show remains of textiles as well. It is often difficult to determine the function of these textiles. When more than one layer of textile is present, these could be different garments (or a garment and a shroud), but the object could also be lying in the folds of one single garment. Lastly, this type of object may also have been encased in a pouch (hanging from the belt).

Lent-Lentseveld

In the cemetery of Lent-Lentseveld four buckles and one belt plate with textile remains were found. In all cases the textiles were adhered to the front of the object. The objects were found in graves of three men, one woman and a child. Without exception the fabrics were densely woven 2/2 twills (one was a diamond twill). The fabrics were of medium fine quality with thread counts ranging between 10x10 and 17x17 threads/cm and thread diameters of 0.3-1mm.

Associated with belts are also seven knives, a fire steel and a pair of shears, which showed remains of textiles. Four of these objects were found in graves of children. The others were excavated in the graves of three men and one woman. The textiles were either tabbies z/s or 2/2 twills z/s of varying quality ranging from coarse in the graves of the children (7x7 threads/cm) to fine in the adult graves (20x15 threads/cm). Worth mentioning is the firesteel found in grave 14, the burial of a four-year-old child. This object was found together with a small buckle and the fabric (a coarse tabby z/s of 10x10 threads/cm) covered both objects. The small buckle was probably part of a pouch hanging from the belt and since the same fabric covered both fire steel and buckle we can assume that the pouch was made of this coarse tabby. In the same grave another buckle was present which

was covered by a piece of fine woollen diamond or chevron twill (16x13 threads/cm). This fabric may have been part of the garment worn over (or - as explained above - under) the belt.

Wijchen

In the cemetery of Wijchen a large amount of buckles has been documented with textile fragments attached. This gives ample opportunity to investigate fabrics of the garments worn under and over the belt. Among a total of 22 belt buckles eight had textiles on the front or edge of the buckle, the other 14 buckles were evidently worn over the textile. Three of these buckles had two layers of different textile adhered to the back giving insight in the different layers of garments worn under the belt. Starting with the fabrics found under the belt there seems to be some variation in both fabric type (equal amounts of tabbies and twills) and quality. Most fabrics were made out of wool and of varying quality. Six fabrics were fine with thread counts ranging between 14-16 threads/cm. Eight textiles were however coarser, with 10 threads/cm or less. The fabrics found on the front of the buckles were mostly twills and all were coarser than 10 threads/cm.

In grave 81 (a woman's grave from 570-610 AD) two fabrics were found under the belt. These were part of two garments, both made out of woollen tabbies z/z. The first layer was a dense and fine fabric made out of 0.2mm thin threads (16-17x12 threads/cm). The selvedge described earlier was documented in this fragment. Over this garment another tabby was worn which was a much more open weave, made out of the same thin threads but fewer threads/cm (14x10 threads/cm). This fabric covered the entire back of the buckle and was partly folded over the front as well. Grave 180 is a similar situation with two fabrics on the back of the same buckle. The lower garment here is made of a fine, smooth and regular but slightly loose spin-patterned woollen twill, made out of thin threads (219x13 threads/cm). Over this garment another garment was worn which was coarser than the first garment. It was made out of thicker threads but due to the bad state of preservation identification

of fibre and weave was not possible. In grave 235 a buckle was found with two layers of tabby attached to the back. The garment directly below the buckle was a coarse tabby z/z (10x8 threads/cm), worn over another finer woollen and open tabby z/z (16x10 threads/cm).

Another group of interesting objects are the ones associated with or hanging from the belt. Wijchen has yielded 20 of these objects consisting of several knives, belt rings, chains and other tools such as a toilet set and a purse ring. The textile types attached to these objects are tabbies and twills in equal amounts and in varying qualities ranging from very coarse (4x4 threads/cm) to fine (20x12 threads/cm). On some of the objects several pieces of textile were present. One of the knives (from grave 183) had six different fabrics attached and this object will be discussed in more detail below.

A ring belonging to a sword belt from grave 38 (a man's grave) was originally lying in between two different garments. One of these was made out of a coarse 2/2 twill of 8x6 threads/cm, on the other side was a somewhat finer twill made out of 10x10 threads/cm. In grave 199 (possible juvenile?) a chain was found with two layers of textile attached. Directly against the chain is a fine and open tabby (12x8 threads/cm), which is covered by (or lying on) a much coarser fabric of 8x8 threads/cm. The function of these textiles is not clear due to the fact that we do not know whether the chain was lying on top of the fabrics or was covered by them.

5.5.3.2 *Textiles associated with the lower body*

Strap ends and the textiles attached to these objects give information about the garments that were worn between the belt and the knee, since the strap end was hanging down from the belt. There are two examples of strap ends found in Wijchen, both of them from the period 570-610 AD. In none of them the gender of the deceased could be established. No strap ends with textile remains were present in Lent-Lentseveld.

On the back of the strap end from grave 25, 3 or 4 layers of folded textile woven in 2/2 twill were present. It was a fine fabric made out of thin threads. Unfortunately the fabric was very badly preserved, therefore thread count and fibre identification was not possible. The other strap end from grave 286 was lying on a much coarser fabric made out of 2/2 twill of 7x6 threads/cm. In the first example it is clear that the strap end was lying on the folds of an undergarment or tunic that reached below the hip. This garment was evidently made out of a fine fabric. The interpretation of the other textile is not so straightforward. Since only one layer of textile is present it is not clear whether we are looking at an undergarment/tunic or perhaps a hose or trousers.

5.5.3.3 *Textiles associated with brooches*

In Lent nine textiles were found that were attached to the back (or spring) of brooches. These have been found in six graves, all of them women's graves. We can distinguish brooches that were positioned in the area of the chest and those that were found just below the pelvis. The general idea is that brooches in the area of the hip were used to fasten or close an open outer garment or cloak, whereas brooches in the area of the chest may have had the same function or were used to close the head aperture of a garment or fasten a veil or shawl onto another garment. The finds described below will illustrate that it is difficult to make generalized assumptions such as these.

The woman in grave 20 was dressed in the so-called *Vierfibeltracht*, which is characterised by the occurrence of four brooches in a more or less vertical line on the body.²⁶⁰ The upper two were a pair of small round brooches, whereas the lower two were a set of larger bow brooches. The *Vierfibeltracht* is generally ascribed to the fifth and early sixth century, which would fit into the chronology of Lent since the burial is dated in the period 475-600. On one of the disc brooches several s-twisted threads were found of rather large diameter (0.75 mm), indicating that it was attached to a rather coarse fabric.

260. Strauß 1992, Siegmund 1998.

One of the bow brooches that were found between the legs directly under the area of the pelvis had several z-twisted threads of a much smaller diameter (0.2 mm) attached, indicating a delicate or thin fabric. The first we can gather from these finds is that the two sets of brooches were not used to fasten the same garment. If used as described in the model of the *Vierfibeltracht* the gown or undergarment to which the disc brooches were attached was made out of a coarse fabric while the cloak worn over the gown was made out of a much finer fabric. This seems contradictory with the aforesaid character of the fabrics worn over the belt, that were all made out of thicker threads than those found adhered to this bow brooch.

The textiles from grave 16 give a similar picture. Here a pair of bow brooches was found under the hands of the buried woman, directly under the area of the pelvis. The brooches were positioned above each other. In the spring of one of the brooches several z-twisted threads and a piece of leather were documented, whereas in the spring of the other brooch several s-twisted threads were present. Both types of threads were thinly spun (0.2-0.3 mm) and may have belonged to the same fabric that, judging from the thin threads, must have been rather fine and not really befitting an outer garment or cloak such as found covering the different belt parts in this cemetery. The occurrence of leather on one of the brooches may imply that the garment to which the brooch was fastened had a leather edge or that a leather strap was attached by the brooch onto the fabric.

In grave 34 a pair of bow brooches was found. One of these brooches was positioned besides the body while the other was positioned between the legs, just under the area of the pelvis. On the spring of this last brooch several 0.5 mm thick z-twisted threads were present. Another brooch in the shape of an animal was found in the area of the neck. This brooch was attached to a fine and densely woven 2/2 twill z/s and was made out of 0.3-0.75 mm thick threads.

The pair of bow brooches in grave 35 was found on the pelvis of the buried woman. On the spring of the lower brooch a few fibres were found, but no fibre or fabric identification was possible.

The S-shaped brooch from woman's grave 2 was attached to a fabric made out of 0.2mm thin threads. This brooch was found in the area of the neck. In grave 42 a pair of s-shaped brooches was found in the area of the upper chest. On the spring of one of these brooches a few fibres were documented but fibre or fabric identification was not possible.

In Wijchen several brooches were found with textile remains attached. These brooches have been found in four graves and one was a stray find.

Woman's grave 65 (570-610) yielded one disc brooch on the centre of the chest area, with textile remains on the back and front. The brooch was attached to three layers (or folds) of a rather coarse woollen tabby. Because of the folds the thread count could not be ascertained (10x? threads/cm). On the front side of the brooch was a fragile and open tabby made out of thin threads (0.2 mm). Due to the presence of a thick layer of paraloid on top of the brooch the thread count could not be discerned properly (approximately 15 threads/cm).

Woman's grave 156 (610-640) yielded a single disc brooch, which was found in the area of the chest. The brooch was attached to a rather coarse twill which was badly preserved and consequently could not be analysed properly.

Woman's grave 226 (530-555) yielded a single bow brooch, which was found in the area of the hip. This brooch was attached to several folds of a fine and dense woollen tabby (14x16 threads/cm) woven out of thin and regularly spun threads. This fabric was worn over a garment made out of a more open woollen tabby (13x10 threads/cm).

Woman's grave 235 yielded a pair of bow brooches more or less above each other in the area of the hip. The lower brooch was attached to a tabby (14x12 threads/cm, 0.3-0.5 mm thick threads), which in turn covered a garment made out of a coarser tabby (6x8 threads/cm, ca. 1 mm thick threads). The brooch was used to fasten the outer garment but was probably not attached to the garment underneath.

The textiles described above allow some general remarks on the way brooches were used in the sixth century women's graves in Wijchen. In the area of the pelvis the brooch was fastened to a garment made out of densely woven woollen tabby. Since no borders have been documented it is not possible to confirm that this outer garment was a cloak or open outer garment, which was held together either under the chin or in the area of the hip. Underneath this garment was an undergarment or gown, generally made out of a coarser or more open tabby than the outer garment. In the area of the upper chest the brooches were attached to a coarser fabric. This could just be a reflection of differences within the cemetery, but could also point to a different function of the garments. Were the coarse fabrics perhaps shawls that covered the shoulders and were held together by a single brooch on the chest? Or was the single brooch used to close the head aperture of a gown? In grave 65 the brooch under the chin was covered by a fragile and open tabby, which may have been used as a veil.

The quality of the fabrics attached by the brooches is not the same as observed on the front of the belt parts. In Wijchen the textiles on the front of the belt were all coarser than 10 threads/cm while those attached to the brooches were finer than 10 threads/cm. In Lent the textiles on the front of the buckles were finer than in Wijchen, but the fabrics attached to the brooches were woven out of thinner threads and therefore must have been of a different character (or quality) than those present on the front of the buckles. The question arises whether these two types of fabrics represent different garments.

5.5.3.4 *Textiles associated with weapons*

Weapons were either positioned on the body or placed separately in the grave. Textiles found adhered to these weapons may either be remains of clothing, a shroud or pieces of cloth in which the weapons were wrapped.

Lent

Two swords and a seax from Lent-Lentseveld yielded pieces of textile. One of the swords contained fragments of the same fabric on both sides: a tabby of 10x10 threads/cm. This could mean that the sword was lying in the folds of an outer garment but the weapon may also have been wrapped in a separate piece of fabric before or during the burial. A twill of equal quality was attached to one side of the seax. The textile on the other sword was damaged and could not be analysed. One of these fabrics was made out of wool. Fibre analysis was not possible for the other two textiles.

Wijchen

The textiles adhered to the weapons from the cemetery of Wijchen do not differ from those of Lent-Lentseveld. Here two lance heads, an arrowhead, an axe and a seax were found, all covered on one side with a rather coarse fabric. Lastly grave 299 yielded a hacking blade, which was covered on one side with two layers of the same fabric. These fabrics were generally 2/2 twills, only one example of tabby was found associated with the weapons from Wijchen, and most of these were made out of wool using thick threads of 0.75 mm or more. Again, the tabby is the exception: here thin (0.3 mm) threads were used in one system and thicker threads (0.75 mm) in the other system resulting in a rather fine weave of 14x10 threads/cm. A shield grip was found associated with a woollen diamond twill.

A preliminary conclusion is that the textiles associated with weapons are in general rather coarse fabrics. It is not possible to determine the function of these textiles: were the weapons wrapped in these textiles or were they merely covered with a shroud? It even remains possible that these textiles belonged

to the outer garments of the deceased but this seems less likely when we compare them to the ones found on the front of the buckles. The fabrics associated with buckles may represent these outer garments and these are generally finer than the fabrics found on the weapons.

5.5.3.5 *Reconstructing men's dress in the period 300-350; Wijchen grave 183*

In grave 183 several objects were found with one or more fragments of textile attached. Most informative here is a knife²⁶¹ in a leather sheath on which probably six different textiles were visible (fig. 1.2). This illustrates the fact that in most graves only a very limited part of the original textiles have survived and it should encourage us to be careful in our attempts to reconstruct the way people were dressed upon burial, solely on the basis of small numbers of surviving textiles.

The knife was sheathed in a scabbard of which the outer layer consisted of leather, which covered a layer of textile. The textile used in the scabbard was a fine woollen diamond twill z/z (12-14x10-12 threads/cm). The scabbard was lying on two layers of textile. From this we can conclude that the man was wearing an undergarment made of a woollen diamond twill z/s (14x10 threads/cm), covered by another garment made out of a coarser tabby (8x8 threads/cm). On top of the knife and scabbard were another two or maybe even three textiles. Directly on top of the scabbard was a tabby z/z made out of thin threads (13x11 threads/cm). On another part of the scabbard a large piece of damaged textile was present but here only thin z-twisted threads were discernible so it is not certain whether this is the same fabric as the tabby. Both pieces of fabric were covered by another textile made out of very thick threads (1mm). This textile was very damaged as well so weave and fibre could not be identified.

Also present in the grave was a buckle of a sword belt and a large piece (2 layers) of non-mineralized textile that was not attached to the buckle but was

exactly the same size as the back of this object. Therefore it is assumed that this fabric was originally on the back of the buckle. It is a regularly woven 2/2 plain twill woven out of woollen threads (13-15x12-15 threads/cm). There is no resemblance to the fabrics found below the knife so it must be assumed that this fabric was either part of the belt or another garment worn under the belt.

Lastly there were an axe and three lance heads in the grave that were all covered with or lying on the same fabric: a coarse woollen 2/2 twill (6-10x7-8 threads/cm). This textile was either a cloth lying on the bottom of the coffin or a shroud covering all the objects in the grave. The thread thickness of this textile resembles the topmost textile on the knife, but it is not certain that these textiles are the same. Summing up: even in this grave - with so many surviving textiles - it is not possible to reconstruct the way the deceased was dressed. However we do get a good picture of the stratigraphy of textiles on the body: two or three under garments and one or two outer garments (or one outer garment and a coarsely woven shroud covering the body and the weapons in the grave).

5.5.3.6 *Reconstructing women's dress in the period 450-555; Wijchen grave 235*

Grave 235 yielded a pair of brooches with two types of textile attached (fig. 5.9). Also present in the grave were a buckle with two types of textile and a ring with one layer of textile. Together these objects enable us to partly reconstruct the garments of the 15-25-year-old woman buried here.

In the grave a buckle was found with two layers of tabby attached to the back. The garment directly below the buckle was a coarse tabby z/z (10x8 threads/cm, 0.75mm thick threads), worn over another but finer and somewhat open woollen tabby z/z (16x10 threads/cm, 0.2mm thick threads). The grave also yielded a pair of bow brooches more or less above each other in the area of the hip. The lower brooch was attached to a tabby (14x12 threads/cm, 0.3-0.5mm thick threads), which in turn covered a garment made out of a coarser tabby (6x8 threads/cm, ca. 1mm thick threads). This last tabby

261. Find number 13.017.

is probably the same as the fabric lying directly under the buckle. The brooch was used to fasten the outer garment but was probably not attached to the garment underneath. Lastly a bronze ring was found together with several beads and small layer of textile on one side. This fabric was very stretched and only a few threads/cm remained. The thread thickness of this fabric is similar to the fabric fastened by the bow brooch but it is impossible to tell whether it is the same fabric.

We can conclude that the young woman buried in grave 235 was dressed in an undergarment made out of a fine woollen tabby, covered by another woollen dress or garment made out of a coarser tabby. This dress or garment was fastened at the hip with a belt. Lastly the woman wore an open garment or cloak made out of a fine tabby, which was closed at the hip by two bow brooches.

5.5.4 Textiles associated with men, women and children

Figure 5.3 shows the amounts of textiles that can be associated with men, women and children in the cemeteries of Lent-Lentseveld and Wijchen. As stated before: the textiles from Lent-Lentseveld have positively been associated as such based on the skeletal remains in the graves. In Wijchen this has been based on the gender-association of the objects in the graves. Although the amount of textiles is not very high, there are some preliminary conclusions regarding the use of textile types and textile quality among men and women. The textiles from children's graves are unfortunately too limited a number to make any assumptions regarding the use of fabrics in the burials.

Figure 5.10 shows the distribution of the textile types among the women, men and children in Lent-Lentseveld. The tabby weave does not occur often in this cemetery, which is remarkable to start with because in other cemeteries, including Wijchen, the tabby weave is one of the most numerous fabric types. This fabric is completely lacking in women's graves and only occurs in graves of men and children. Women in Lent-Lentseveld seem to have been buried solely in twills. Note however the large amount of

indeterminate fragments of textiles in women's burials that may have influenced this distribution pattern. In men's graves there is a more or less equal distribution of twills and tabbies.

When we look at figure 5.11 it becomes obvious that the use of textiles in Wijchen in the period 450-600 AD is different. Here women are buried mostly in tabbies, men in twills with small amounts of tabbies. In the period prior to 450 AD and after 640 AD however, much more variation is observed in graves of both men and women.

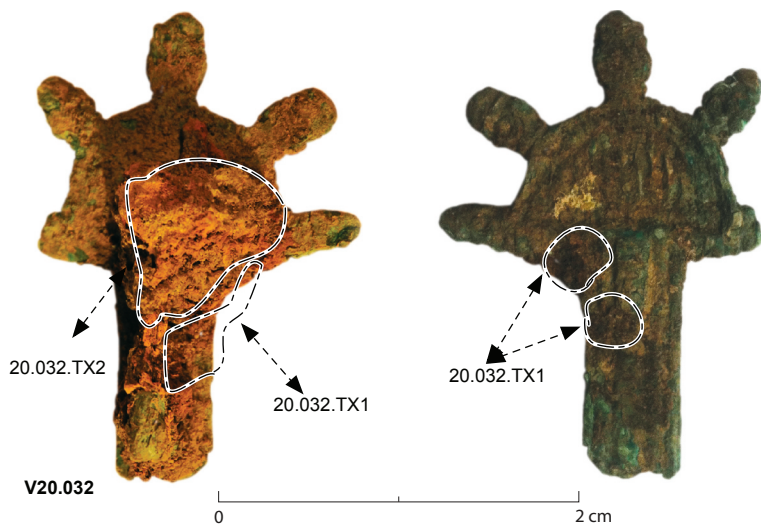
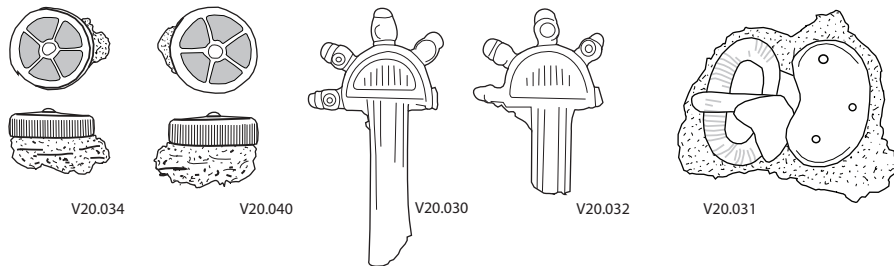
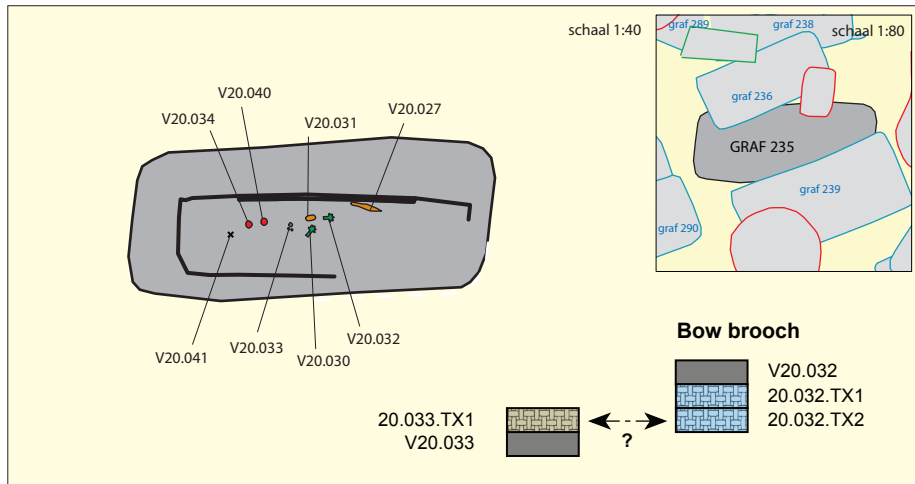
There are also differences between men and women regarding the quality of textiles. As is shown in figure 5.12 the textiles in women's graves from Lent-Lentseveld are finer than those in graves of men and children. This trend is – although less pronounced – also visible in the cemetery of Wijchen (fig. 5.13). This difference can be partly explained by the fact that men's graves contain weapons and these objects were wrapped in or covered by coarse fabrics. Particularly women's graves 23 and 35 from Lent-Lentseveld stand out by their higher quality textiles. The other graves from both cemeteries however show a mixture of fine and coarse textiles making it impossible to discern groups of graves within the cemeteries based on textile quality.

5.6 DISCUSSION

This chapter set out to answer several questions regarding the character, quality and use of the textiles from Lent-Lentseveld and Wijchen. These questions will be covered in the following paragraph.

The textiles found in Lent-Lentseveld and Wijchen are a rather uniform body of textiles with only a few basic fabric types and no special or fine weaves. In this respect they are comparable to other rural cemeteries excavated in the southern part of the Netherlands such as Bergeijk and Posterholt.²⁶²

262. The textiles of these cemeteries have been published in Brandenburgh 2012a & 2013.



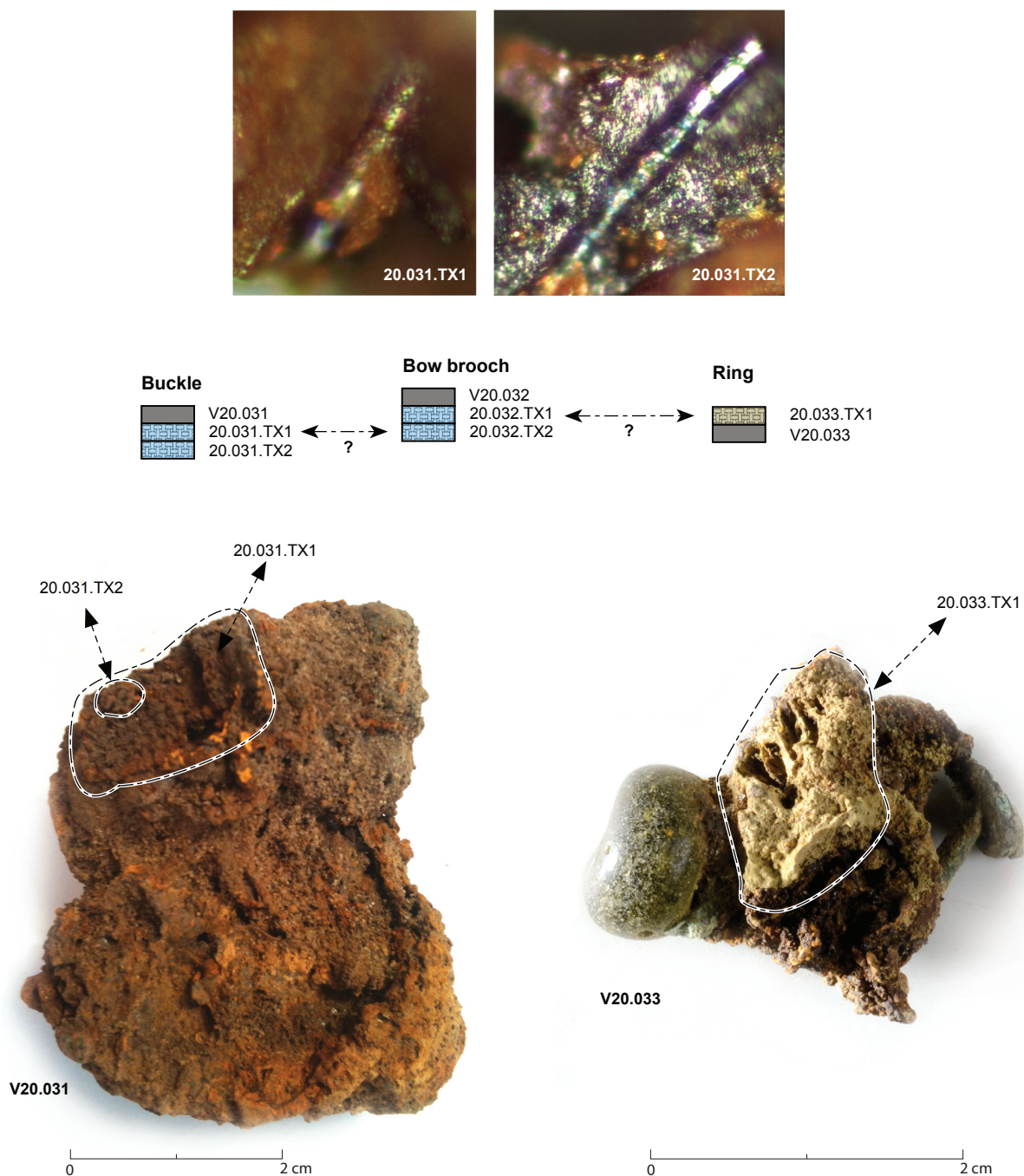


Fig. 5.9 The textiles that were attached to the various objects in woman's grave 235 in Wijchen.

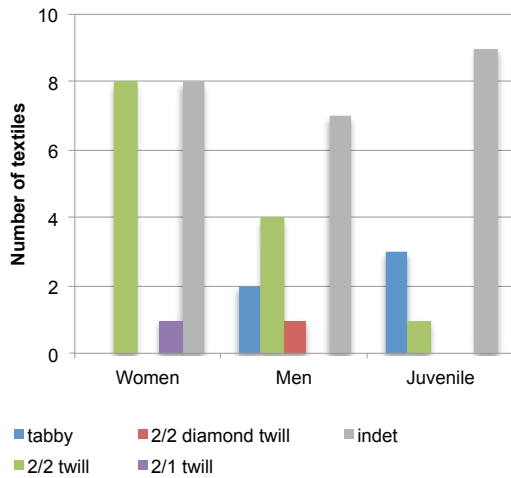


Fig. 5.10 Distribution of the fabric types among graves of women, men and children in Lent-Lentseveld.

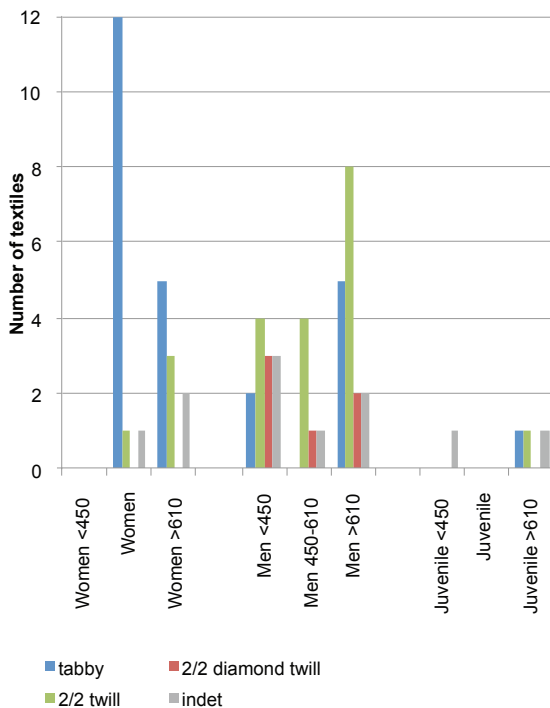


Fig. 5.11 Distribution of the fabric types among women, men and children in Wijchen. The period 450-610 is contemporary to the textiles from Lent-Lentseveld in figure 5.10. Textiles from graves where the gender could not be discerned have been left out of this graph.

The textiles from Lent-Lentseveld and Wijchen show little variation in fabric types and textile quality. There are however differences between the sites and within the sites. In Lent-Lentseveld the most popular textile type is 2/2 twill whereas Wijchen shows equal numbers of twills and tabbies. Noteworthy here are the differences between men and women in both cemeteries: in Lent the women were buried in twills and in Wijchen the women seem to have had a preference for tabbies. Men in both cemeteries were generally buried in twills with small quantities of tabbies. Women generally wore clothes made out of finer fabrics than men. This difference can partly be explained by the fact that the weapons in men's graves were covered by or wrapped in coarse textiles. The local variation between men and women that can be observed needs further elaboration. Looking solely at the fabrics, both cemeteries seem to have a rather homogeneous population. There are no graves or groups of graves that contain textiles of exceptional quality. Only women's graves 23 and 35 from Lent-Lentseveld stand out by their higher quality. The other graves from both cemeteries however show a mixture of fine and coarser textiles. In general the fabrics from Lent-Lentseveld are finer than those from Wijchen. The majority of the textiles from Lent-Lentseveld is medium fine to fine (10-20 threads/cm), a small number is coarser and only one fragment is very fine (30x30 threads/cm). In Wijchen there are significantly more fabrics with a thread count below 10 threads/cm than in Lent-Lentseveld.

Many textiles were adhered to dress accessories enabling us to create a generalised picture of the way people were dressed upon burial. In many cases there is evidence for an under garment over which another garment (tunic or dress?) was worn. The undergarment is generally a fine fabric and can be either densely woven or slightly open. The garment worn above is coarser, made out of thicker threads and is generally a more open fabric. There is not enough information to ascertain the length of these garments. Only two strap ends were found with textiles attached indicating that these types of fabric were present in the area below the hip. Over the belt both men and women probably wore another garment made out of a medium fine and densely woven fabric. In the case of the women's graves

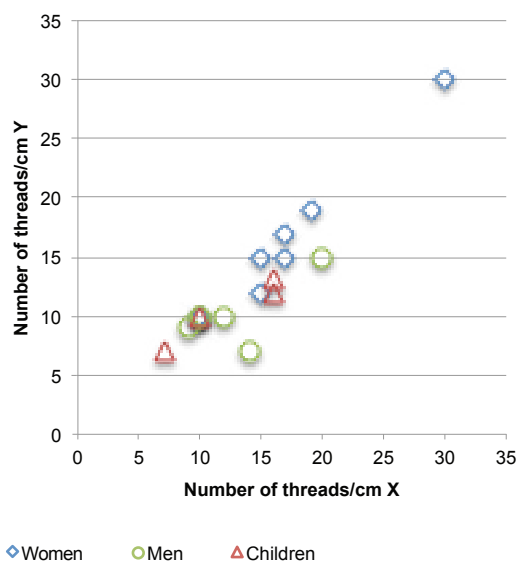


Fig. 5.12 Quality of the textiles associated with women, men and children in the cemetery of Lent-Lentseveld.

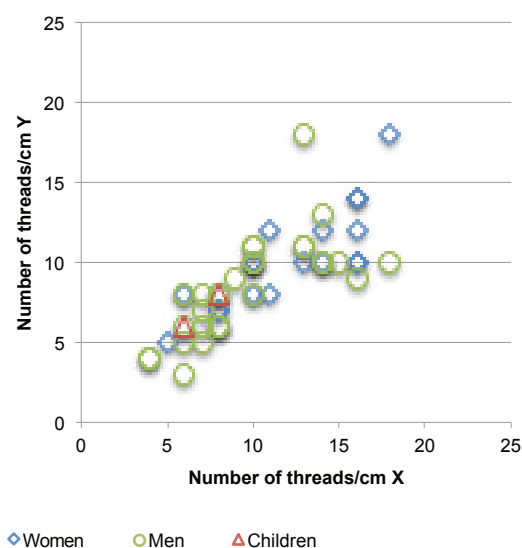


Fig. 5.13 Quality of the textiles associated with women, men and children in the cemetery of Wijchen.

this garment was open and fastened at the front with one or more brooches, either under the chin or at the hip. There is no evidence for hems or tablet woven borders in the graves so we do not know how the edges of the garments were reinforced. Utensils and knives were hanging from the belt or – according to several objects from Wijchen – may have been stored in a pouch made out of coarse fabric. In one grave there may be evidence for the presence of a veil or shawl hanging over the shoulders and covering the brooch that fastened the outermost garment. This fabric was a fragile and open tabby woven out of thin threads.

There is no information to be gathered regarding the cut and finish of the different garments, nor do we know anything about the way the lower body was dressed. No garter buckles were found, nor can textile remains be located in this area of the body.

Although there is no conclusive evidence yet, there may have been shrouds present in the graves. The textiles associated with weapons are in general rather coarse fabrics. It is not possible to determine the function of these textiles: were the weapons wrapped in these textiles or were they merely covered with a shroud? Since this type of very coarse fabric is also present covering all the other textiles in men's grave 183 in Wijchen it may be possible that the entire content of the grave was covered with a shroud.

Much research is still needed to complement the results presented above. Dye analysis may provide valuable information about the appearance of the textiles in the graves. Moreover, having analysed the variability in the use of fabrics is only the beginning of understanding what these differences mean. In this respect the results presented above are merely stepping stones towards a better understanding of Merovingian burial practice that need further elaboration.

