

Sources and Ideas for Reconstructing a 15th Century Male Suit of Clothes

Arenwald von Hagenburg (Pears, A.N.)

AoA, GoA, OL.

Shire of Aros, Kingdom of Drachenwald

Ovre Slottsgatan 18C

753 12 Uppsala, SWEDEN

Ph: +46 18 471 6202, FAX: +46 18 55 02 25

Email: arnoldp@docs.uu.se

Abstract

There are, so far as the author is aware, no complete suit of 15th century clothes preserved in the European archaeological record. Consequently any reconstruction of dress from this period must necessarily involve some informed guesswork. It is the intention of this article to gather useful resources for others who would like to have an informed foundation for their future guesswork, and also to illustrate the utility of the conclusions reached through the practical expedient of constructing a sample suit of clothes.

Consequently, this article gathers and discusses relevant evidence upon which to base the construction of a male costume of approximately 1560. A full set of clothes is considered, and the arguments for cut and construction of the suit of clothes is drawn from primary source materials, secondary sources (in the form of art works)¹ and tertiary discussions of costume by costume historians.

Discussing individual items of clothing in isolation is difficult since the foundation provided by one piece of clothing can be vital to the construction of the layers that lie over it. Consequently this article investigates the issues associated with constructing a complete suit of clothes. Basing the structure of this article on the major subdivisions of clothing proposed in the introduction a section is devoted to the evidence that can be used to deduce the form of each of the following constituent pieces of a full suit of clothes. Namely, *underclothes*, *doublet and hose*, and *robe*.

¹Types of art vary in value in reconstructing costume[4]. This article classifies sources in the following manner. Primary sources are considered to be extant examples of clothing that are reliably dated to within 20 years of the putative date for the clothes to be constructed. Art which depicts clothing, for example paintings, sculpture, and reliefs are considered to be secondary evidence, together with written accounts describing clothing which were written within 20 years of the clothing being reconstructed. Tertiary sources include books on historical costume, and patterns that are reconstructed by textile researchers. Value has been assigned to evidence in the order given above. It should be noted that the majority of the evidence for costume construction in the period mentioned is secondary in nature, and so this article relies heavily on details in paintings and sculpture of the period to substantiate the theories of construction put forward.

Having presented a synthesis of views and evidence in each area hypothetical patterns and reconstructions of each of the items of clothing discussed. In doing so limitations in the evidence are explored and discussed in the context of developing a workable and wearable reconstruction.

The article concludes that there are wide variations in the cut and construction of clothing within the period of time chosen for the study. Much of the evidence used is drawn from Italian art and this has a significant impact on the final style. While common elements of costume can be seen in the artistic record, there is also much diversity even within a single region. Such variations and dispersal of regional fashions over Europe need to be taken into consideration when constructing costumes from this period.

1 Introduction

Re-constructing clothing is a complex undertaking and one that takes up a good deal of time and effort. In this article we assemble and discuss evidence associated with an attempt to reconstruct a suit of male clothes from the mid fifteenth century.

Comment on the the structure of a suit of clothes and the layers involved quoting from both Birbirani[1] and Piponnier[4] in regards to;

- Cloth and the colours that are available.
- Textures and layers of clothing in a suit.
- General indications of the structure and art that can be useful in supporting different views.

Use of cloths in differing colour mixtures are common in clothing depicted in art during the period upon which this article is centred. Contrasting colour choices are common, especially among younger men who appear to be depicted in the height of fashion². The view of Piponnier can also

²This is supported by Pipponier who remarks on the choices of colours available, "Perhaps the most important of the finishes that gave wollen cloth its final appearance was the dyeing. Kermes was extremely expensive and produced a huge range of colours including 'sanguine' or blood red; it was the the favourite but was reserved for

Colour	Hose	Doublet	Over Tunic/Robe
Grey	6	1	2
Red/Rose	18	4	26
Black	9	9	11
White		1	1
Blue	3	5	3
Yellow		3	1
Brown			1
Green	1	1	2
Brocade			8

Figure 1: Clothing colour distribution in 15th century art works

be supported to some degree through the artistic records. country scenes show peasant workers in worn clothing³ and even these people are shown wearing coloured hose, even if stripped to the shirt working in the fields.

In stark contrast to the distribution of fibres preponderant in modern textiles, not to mention the ubiquity of modern fibres such as Rayons and other polymers, fifteenth century cloths are principally composed of wool (of varying qualities⁴). Other common fibres included linen and silk, sometimes combined with precious metals to produce the rich brocades often termed "cloth of gold", as well as multicoloured cut velvet brocades that combine low relief decoration and colour changes to great effect.

A brief survey of the colours of the male costumes depicted in reproductions of european paintings[2, 3, 4] and frescoes is summarised in table 1. Reference to art is not conclusive, since the colours available to the artist were limited and there are inherent value attributions associated with special colours such as blue. By concentrating our attention on portrait scenes and group portraits where a high degree of attention of realism in the depiction of clothing is evident and by discounting colours worn by major mythical and religious subjects it can be hoped that the impact of artistic choices on the data presented here has been minimised.

Colour also contributed to the value of cloth enhancing the value derived from the basic fibre used. Dark colours appear often in formal portraits where people are assumed to be wearing their best clothes; and are widely

the luxury end of the market, which spread as far as the eastern and southern shores of the Mediterranean. Woad cost less because it was extracted from a plant that could be grown in a number of regions. Woad dyed cloth blue or, if combined with other colourings, green; it was convenient to use because it needed no mordant and could be used either for whole fleeces or for ready spun wool. According to the concentration in which it was used it could give very deep blues or a much paler shade. Although the richest, darkest colours were still only within the grasp of a minority, this development made coloured fabrics available to an ever-increasing number of people from less exalted social classes. Blue garments were already quite common among city dwellers in the thirteenth century and were beginning to spread to the countryside by the fourteenth; even quite humble peasants would possess a coloured gown, though its colour might be faded by age and use, or by the mediocre quality of the dye used on inexpensive woollen cloth." [4, See pp.16 and 17]

³See country scenes in Cardini and Clegg.

⁴See Piponnier[4] pages 15–26 for a discussion of fibres and colouring methods

accepted to have been associated with cost, as deep saturated colours were expensive and difficult to achieve with the dyeing techniques available⁵.

2 Underwear

Clothing in the High Middle Ages relied on several layers to achieve the correct "fashionable profile". The subsidiary aim of much clothing was also to display the wealth and power of the wearer, creating a situation where the purely functional nature of clothing is subsumed in costly display. Evidence of this lies in the huge expanses of rich cloth consumed by hanging sleeves and deep pleated over-tunics, for which there is no functional necessity.

The discussion presented here works its way from the inner to outer layers, since a major thesis of this work is that the final stylistic effect of the suit depends upon all the underlying components. Full shirts of a fine fabrics bulk out doublets at the breast and give fullness to jacket arms. The doublet that lies over the shirt quite likely also padded at the front or stiffened with quilted interlining.

Hose provide a durable and rich leg covering that shows off the well shaped leg, and contributes to the fashionable elongation of the body seen in female dress and accentuated by tall head-dresses. This fashion was not limited to art and clothing extending as it did into architecture and sculpture.

The basic body shape produced by the combination of underclothing and the tight doublet (or pourpoint) provided in turn a foundation for the overtunic; a deeply pleated full garment, gathered at the waist and often displaying bag or hanging sleeves. These rich over garments appear to have been an accepted means to display wealth, enhancing the social image of the wearer.

2.1 Breech clouts

2.1.1 Material

Material used for underclothes is uniformly white in colour, or a very pale colour. This would be consistent with varying qualities of linen cloth. Some draperies are fine light gauze like cloth, but the most common type of shorts appear to be quite strongly built, and constructed from a dense weave linen cloth.

The best examples of such clothing in detail are pictures of the martyrdom of Christ, and St Sebastian; where in both cases the subject of the painting is generally depicted semi-nude⁶.

⁵Piponnier also comments on the types of colour considered most luxurious, identifying "...saturation by the dyes improved, producing the deep shades so popular in the late Middle Ages: dark greens and blues, violet and especially black." [4, See last sentence at the bottom of page 17]

⁶Refer to Cardini[2, pages 92 and 93] Antonello da Messina, San Sebastiano (1475-76), Gemäldgalerie, Dresden and Crocifissione, Musée des Beaux Arts, Antwerp. which both show a tight fitting form of shorts with a centre seam and fastened at the waist by a threaded tie that passes through a tubular waist seam. Another similar article is shown in Bartolomeo Vivarini, Trittico di San Martino (San Giovanni Battista, San Martino e il povero e San Sebastiano)

2.1.2 Form and Function

The function of the breech clout was probably principally one of hygiene as well as cultural aesthetics. The practical advantage being that one's outer clothes are protected from soiling to a large extent. This is important where over clothes are made of materials such as silk brocades that are typically relatively hard to clean.

In contrast a simple undergarment of linen that can be easily washed and bleached in the sun provides a convenient basis for ensuring comfort and cleanliness while reducing the wear and tear on the expensive fabrics often used in outer clothing.

Crotch coverings in artistic works range from breech clouts which are composed of folded lengths of cloth to quite sophisticated tight fitting trousers (shorts)⁷.

2.1.3 Cut and Construction

Since my research has not revealed any extant underclothes used to cover the genitalia comments on the cut and construction are informed speculation based on evidence in art works of the period. In some pictures substantial detail is given, and this lends some weight to the idea that the painter is depicting a real item of clothing.

Draperies are often depicted in paintings that deal with mythical occurrences or Biblical events. The relationship of these items to social realities is difficult to determine, since the inclusion of fantastic clothing and details in such paintings is well known⁸.

2.2 Shirts

2.2.1 Material

The material used in shirts is likely similar to that already mentioned for breech clouts. All available evidence points to linen cloth of varying level of quality for nobility with perhaps some silk. Lower classes were probably restricted to hemp cloth⁹. The extant shirts from the mediaeval period include the Shirt of St. Louis (Paris), Sture Shirts (Uppsala, Sweden). As far as I am aware all extant examples are made from either linen or silk which is consistent with the presumption of ownership by people of an elevated station in life.

2.2.2 Form and Function

Shirts were an indispensable item of dress, and are always present even when very poor people are depicted. Shirts

in the central panel depicting St Martin dividing his cloak with the beggar², See page 106].

⁷Support for this view lies in many paintings of the period. However, paintings of Biblical subjects may not be representative of actual practical clothing, since these works often include fantasy elements. A counter example to the thesis that folded cloth was an artistic convention is to be found in a miniature of Jean Fouquet, Martyrdom of Santa Appolonias², see page 107].

⁸For an introduction to this area see Pipponier^[4] chapter 1, which gives an overview of some key issues that should be borne in mind when interpreting High Mediaeval and Renaissance art.

⁹See Birbari page 32 and Pipponier page 31 first paragraph in relation to threads, and page 43.

were obviously washed regularly and hung up to dry on poles¹⁰.

Fullness and construction details appear to vary¹¹ however the basic function and shirt form remains constant throughout the 15th and even into the 16th century.

It appears from examination of surviving examples and the associated pictorial record in the art of the period that shirts were very simple in form, consisting of essentially three rectangles of material one forming the body and one each for the arms. To allow additional fullness at the armhole a square gusset was often inserted¹².

2.2.3 Cut and Construction

Birbari concludes from artistic evidence as well as extant items that shirts in Italy can be divided into roughly two major categories; narrow shirts reaching to the low to mid thigh and with a slit up to around waist height at the sides and wider or fuller shirts that had no side slit and probably reached no lower than the mid-thigh¹³.

Collars for shirts on the other hand appear to vary widely. It seems that a wide range of styles existed almost concurrently. I have not attempted an analysis of styles on the basis of geography or time period, however such a study might reveal interesting data.

Despite variations it is clear that a shirt of some type was indispensable, with richer people using finer and more light weight fabrics in general and often having a fuller cut shirt than their poorer counterparts. A wide choice of neck openings are possible, the most common alternatives being a large opening that is gathered into the tighter neck of the doublet, and some type of gathering into a collar band¹⁴.

¹⁰As is evident from the washing hanging to dry in the background of Carpaccio, Miracle of the True Cross, Academia Venice reproductions of which are found in Birbari as Figures 14 A and B, as well as Figure 15

¹¹A discussion of Italian shirts of the period is given in Birbari pages xxx to yyy. Art works that provide significant insights for Italian fashions are presented there in Figures 12, 13, 16, 17, 19, 21, and 23.

¹²For a discussion in Birbari see page . Pictures that appear to show such a construction include Piero della Francesca, Carrying of the Sacred Wood, San Francческа, Arezzo, Milano where we see full shirts descending to mid thigh with a side slit up to the waist. These shirts have open neck holes and no collar. Another valuable picture is Signorelli, Figures in a Landscape, Toledo Museum of Art, Ohio, USA. Where a male figure is shown in the action of removing his shirt. The proportions of the figure allow an accurate estimate of the circumference of the lower edge of the shirt to be obtained. In contrast to the shirts in Piero della Francesca's work no side slit is visible. Since the dates of these works are very similar it could be proposed that multiple styles of shirt existed concurrently. It is also possible that stylistic differences are class related however this assertion is harder to sustain. Side slits were present in France by the mid fifteenth century, such shirts (with deep V-necks) are clearly shown in an illumination by Colin de Amiens in Pietro de Crescenzi, *Livre des Profits champêtres*, Musée Condé Chantilly, MS 340(603),f. 207

¹³The full discussion can be found on pages 30 to 36. Pipponier^[4] also supports this general conclusion page 66, commenting "Shirts, which were invisible until the mid-fifteenth century, varied only in the quality of the fabric used, usually fine linen." in her discussion on masculine garment shapes.

¹⁴Sometimes this band is elongated to allow the ends to be tied together to close the shirt. See for example Piero di Cosimo, Guil-

3 Doublet and Hose

In almost all pictures showing males in public, the clothing worn consists of at least doublet and hose over the under-clothing discussed in the previous section. The exception to this is depictions of peasants working in the fields of workmen loading ships or bearing heavy loads. In these situations it is likely that a doublet and hose would have been both too warm and too restrictive to movement.

3.1 Doublet

3.1.1 Material

Cloths used to make doublets seems to have been relatively fine heavy cloth if the drape and folds depicted in paintings and frescoes are accurate. The type, colour, texture, patterns, vary significantly though the summary table in the introduction to this article provides an indication on colours. Types of cloth clearly include silk velvets and rich wools, with some very rich examples in brocades.

Linings are not easy to discover since most doublets are shown closed up as they are being worn. Some have trimming in fur around the neck and wrists, however, the use of fur is generally confined to the over tunic. Where pictures do show us the interior of a doublet it appears that some were not fully lined¹⁵

Padding, and stiffening, is apparent in some illustrations, and the inclusion of wool and felt to achieve the fashionable outline is likely.

3.1.2 Form and Function

One argument for the increasingly tight fitting doublet was increasingly close fitting armour. The space and shape of the armour breastplates of the period is very like that of the doublets. In some cases it is clear from accounts and also paintings and sculpture that the doublets were worn under armour to provide padding and mounting points to which elements of the armour could be laced and strapped.

The points hanging on the sleeves are a clear reference to the military function of the doublet. They are positioned to provide a lacing point for the attachment of the arm protection which reached from the wrist to the mid upper arm and was laced into place on the doublet sleeve to prevent it riding down and pressing onto the wrist and hand of the wearer.

Interestingly several pictures showing these laces have no military connotation¹⁶. There seems to be some confusion about the function of these laces as a result, however it seems likely that the the military association of these laces became fashionable in itself, and thus they formed

iano da San Gallo (portrait), Rijksmuseum, Amsterdam (Birbari Fig. 22), and

¹⁵One painting that supports this view is Rogier van de Weyden, Salome, where a supporting figure is shown with his doublet hanging at his waist and colour differentiations in the interior and the depiction of stitching lines clearly show padding and facings rather than a full lining.

¹⁶See Birbari figures 18,33,35,36,94 where in figure 35/36 and 94 the context is purely social.

a part of fashionable dress as well as having a practical purpose and origin.

3.1.3 Cut and Construction

Patterns pieces, and reasoning about the shapes that are required. Some extant clothing, the suit/doublet of Charles the Bold is one such, though the attribution is not sure.

Birbari notes that stress on the doublets must have been considerable as a consequence of the tight fit and the strain of pulling up the hose to get a tight fit. In some cases this caused the centre back seam of the doublet to split open¹⁷.

3.2 Hose

3.2.1 Material

Plain coloured cloth seems to always be used, and a cloth type that has some stretch on the bias to give a good fit must have been vital. Wool seems the most likely choice for material since it has good stretch characteristics when bias cut. Fine scarlet cloth seems to have been a popular choice (given the preponderance of red hose in period art) and this was a fine woolen cloth that would have combined warmth with comfort.

Silk, particularly knitted silk and socks of various materials are also know to have been used. Several clerical stockings in knitted silk survive however the process was very costly and certainly beyond the reach of the ordinary person. It seems likely therefore that most hose were made from woolen cloth of various levels of quality.

3.2.2 Form and Function

Not all were well fitting, and the angle of the folds in the examples that are ill fitting can be interpreted to indicate that the cloth was bias cut. Footed hose are to be seen in a range of settings, but the majority of hose appear to have been worn with shoes or low ankle boots.

3.2.3 Cut and Construction

Patterns contain examples from single leg hose to a complete set of "trousers" with attached codpiece in the period under consideration.

Patterns for the pieces can be deduced from several pictures that clearly show the seams that are used. The uniformity of the pictorial evidence in for each style indicates that the methods of construction were very uniform both temporally and geographically. Example reconstructions of hose patterns based on depictions in art of the period are presented in Turska[5]. The accuracy and foundations for this reconstruction are not easy to guess however since the book is written in Polish.

¹⁷This is shown clearly in [1, Fig. 35/36]. Interestingly the Rogier van der Weyden, Salome painting which shows the interior of such a doublet indicates that the front was strengthened and padded/quilted to achieve the desired pidgeon breasted shape; but the back with its center seam under such evident stress clearly consists of a single layer of cloth.

Strengthening at the top of the hose is evident, and facings or linings can be seen, particularly in images of St Sebastian where he is generally depicted partially stripped of clothing and crucified. Images of St Roch showing his plague spot are also a good source of pictorial evidence for the facings and lacing points in the upper section of the hose since he loosens his hose and turns down the top in order to show the location of his plague spot on his upper right leg.

Pictures showing any type of labour or activity that involves bending forward suggest that the lacing of the hose prevented people from moving freely. Most working people are shown with laces undone at the back allowing them to bend forward. The strain on both the hose and doublet also appear to have been considerable as previously noted, perhaps explaining the need for reinforcement of the top of the hose with linings or facings of linen.

Footed hose are clearly depicted in some illustrations and it has been assumed that a sole is sewn onto the base of these hose to protect the sole of the foot, and to reduce wear on the cloth under the foot. Where shoes or boots are worn we cannot be certain that hose were constructed with a foot, though the hose excavated in the Boksten Man find are footed and obviously designed for outdoor use where shoes would have been worn.

4 Tunics

This section deals with overgarments that appear to be most common in depictions of formal events in upper classes of the social structure.

Early in the 15th century one hardly ever sees more of foundation clothing than the collar of the doublet, and the small amount of shirt and hose that projects beyond the compass of the enveloping houppeland.

In the period addressed by this article the houppeland has evolved in shape, become shorter; varying between buttock and ankle length, but no longer trailing on the ground. Art works often depict fashionable youths wearing very short risqué tunics juxtaposed with their more conservative elders wearing longer formal gowns.

Nonetheless all lengths of tunics as well as more formal ceremonial robes reaching to the ground, remain common in artistic depictions.

4.1 Material

While noting that the primary focus of discussion here is more specific, the materials used in construction of robes are common to all the types of robes we have discussed. Cloth used to make the majority of robes appears to be wool, velvets and brocades; with the very high end being the metallic brocaded cloths termed "cloth of gold".

Invariably overtunics of this type are trimmed with fur, and in many cases appear to be fully lined with fur. Decoration with embroidery can be seen in many examples¹⁸.

¹⁸See Cardini, Clegg and Birbari for numerous illustrations which support this claim both from portraits and court scenes.

4.2 Form and Function

While the function of overtunics of this type is functional, in that they are warm and easy to vest and de-vest, it also appears from the rich cloths and furs used, and the large quantity of cloth required to achieve the deep folds and draping; that such tunics also served to display the wealth and power of the wearer.

The tunic relies on the body shape produced by the doublet to assist the tunic to sit in even pleats and also to give the rounded pidgeon breast shape that was fashionable at the time. Consequently, while we often see people depicted wearing only a doublet and hose, wearing an overtunic without a doublet is almost never shown¹⁹.

4.3 Cut and Construction

Due to the fact that this report is on a work in progress details of cut and construction of tunics remain a focus of further work.

5 The Reconstruction

5.1 Materials

I have chosen a fine cotton cloth for the shirt and breeches. This is a cheaper modern substitute for the fine quality linen that would have been used in the period. I consider it sufficiently close in texture and weight to give a good approximation.

Hose are made from wool, with facings of cotton replacing the linen that would most likely have been used. The doublet is made from a cotton brocade which is both heavy and durable. Silk or velvet might have been preferable, but for a prototype I felt that the additional expense was not warranted.

The overtunic is made from a brocade that simulates cloth of gold in modern lower cost fibres. The weight and stiffness are less than that of the period parallel, however this cannot be helped.

In terms of colour, I chose high contrast colour combinations from among those colours that were fairly well represented in art works. Perhaps red hose would be more typical but blue, green and black are also fairly regularly shown in paintings and frescoes.

5.2 Patterns and Construction

The patterns for the underclothing are my own attempts to achieve a loog consistent with the selected art works discussed earlier. For the shorts I have attempted to reproduce the tight short legged effect shown in the San Se-

¹⁹The exception to this is when the overtunic is worn as a type of surcoat over armour. In this case the armour serves to define the body shape, and gives an identical profile since armour style was influenced by clothing, and the tunic is worn directly over the armour. This appears to have been common practice since many battle scenes show a majority of the participants clad in armour and overtunics. Whether this was due to heraldic conventions or merely a matter of panoply on the field remains the subject of speculation.

bastiano and Crocifissione of Antonello di Messina[2, See pp.92,93]

The shirt is based on a general pattern derived from the works discussed earlier. I have chosen a looser shirt with no side slits, and a collar with bands that can be tied to achieve a closure.

Hose and doublet patterns are adapted from those presented in Turksa, with adjustments to the skirts and the sleeve pattern to achieve a tighter fit in the lower arm, and more bulk or puffing in the upper. This reconstruction can be supported by reference to Italian paintings which appear to show sleeves made in this manner²⁰. In the case of the hose, the crotch line has been deepened, but there is little other change.

Fabric for the construction of the over tunic has been selected, and some preliminary research on structure and materials has been presented. However, construction has not yet begun.

6 Conclusion

This article attempts to present a useful collection of material upon which an informed reconstruction of a suit of 15th century clothes can be attempted.

Accessories, of which there were many, swords, daggers, purses hats, badges, jewels, and rings, to name but a few have been well outside the scope of this particular work and provide a rich focus for future investigations.

The evidence presented here also attempts through its description of a "work in progress" to illustrate some of the steps involved in an informed reconstruction of historical clothing, and to present some observations along the way.

The resulting suit of clothes looks very similar to those worn in portraits of the period, and in some way this is the only yardstick by which successful reconstruction can be measured.

The reconstruction demonstrates the significance of the combination of layers of clothing in achieving the correct shape and draping effects seen in portraits. In particular the use of stiffening in the front of the doublet appears to be essential in achieving a solid pidgeon breasted profile. However, it should be noted that this shape is also supported by the crumpled layers of shirt cloth worn underneath.

Construction of the overtunic and testing of hypotheses on the setting in and control of pleats using stiched bands attached to the interior of the tunic remain for further work.

References

- [1] Elizabeth Birbirani. *Dress in Italian Painting 1460 – 1500*. John Murray, 1975. A slightly dated book which analyses the costume details from a fairly wide range of Italian painting in the specified period and attempts to draw conclusions about the common construction of dress in the period. It is an attempt at classification of styles of construction.

- [2] Franco Cardini. *Europa 1492: Den gamla världen för femhundra år sedan/Europe 1492: Picture of a continent five hundred years ago/Europa 1492: Ritratto di un continente cinquecento anni fa*. Anaya Editoriale s.r.l./Fenice 2000 s.r.l. Milano, 1992. General purpose large format "coffee table book". Professor Cardini is a Mediaeval historian holding positions in Bari and Florence. The book has limited academic value in my view, however it provides a wide collection of art, particularly high quality reproductions of paintings and details from these paintings that are useful when investigating costume details and trends.
- [3] Elizabeth Clegg (Translator). *La Pitturra Italiana/Italian Painting*. 1998. Very high quality photographs of Italian paintings from the 14th to the 20th century.
- [4] Fran coise Piponnier and Perrine Mane. *Se vêtir du Moyen Age / Dress in the Middle Ages*. Société Nouvelle Adam Biro/Yale University, 1995/1997. Costume Mediaeval 500–1500, Good introduction to the value necessary to understand the contribution of art and other secondary sources when attempting to understand the structure and construction of clothing. General discussion covers the period noted above.
- [5] Krystyna Turska. *Ubiór dworski w Polsce w dobie pierwszych Jagiellonów*. Zakład Narodowy, Poland, 1987. Polish treatise on the costume and art in the Polish mediaeval period, together with archaeological finds, including shoes, and what appear from the pictures to be elements of an extant 15th century suit of clothes consisting of doublet and hose. Patterns of the doublet and hose are provided, and appear to be workable.

AUTHOR

Arenwald von Hagenburg is a native of the Principality of Lothac where he lived the first fifteen years of his SCA existence. He has been a keen crafts and arts participant in the SCA from his beginnings in the dreaded McCarrum Choir, and was a major participant in the Madrigal Massacre of Abbey Church around AS XXII. Early biographers trace the first intimations of his candidature for the Laurel Order to his invention of the Combine Harwurtzler, a sophisticated cross between a choral instrument and an automatic threshing machine. Following this triumph honours were heaped upon him by the Crown of the West, including the prestigious titles of Fellow of the Order of the Laurel (OL) and more recently Ancient Guild Master of Fence (GoA) for his services to the Arte of Rapier. Rumour currently places him somewhere in Europe! Travelers are being warned to be wary of passing musicians.

Dr Arnold Pears took his BSc(Hons) in 1986 and PhD in 1994, both at La Trobe University in Australia. He was a Lecturer at La Trobe University from 1991 to 1999 (being promoted to Senior Lecturer in 1998), he currently occupies an Associate Professorship at Uppsala University in Sweden. He has published widely in the areas of Parallel Computer Architecture and Network design, Parallel Algorithms, Simulation, and Computer Science Education.

²⁰See Cossa, triumph of Venus in[1, pp Fig. 52] or [2].