



Textile

The Journal of Cloth and Culture

ISSN: 1475-9756 (Print) 1751-8350 (Online) Journal homepage: <https://www.tandfonline.com/loi/rftx20>

Visions of Dress: Recreating Bronze Age Clothing from the Danubian Region

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To cite this article: Karina Grömer, Helga Rösel-Mautendorfer & Lise Bender Jørgensen (2013) Visions of Dress: Recreating Bronze Age Clothing from the Danubian Region, *Textile*, 11:3, 218-241, DOI: [10.2752/175183513x1379321037403](https://doi.org/10.2752/175183513x1379321037403)

To link to this article: <https://doi.org/10.2752/175183513x1379321037403>



Published online: 01 May 2015.



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Visions of Dress: Recreating Bronze Age Clothing from the Danubian Region



Abstract

This article highlights and discusses the challenges of recreating the clothing of a wealthy Bronze Age woman from Winklarn in Austria. She was buried with jewelry and dress fittings that appear almost theatrical, such as a wide belt of bronze, extremely long pins, and a collar consisting of fourteen spiked bronze pendants. A series of different sources underpin suggestions of what her dress might have looked like: placement patterns of jewelry in Bronze Age graves from Central Europe; Bronze Age iconography; textures of Bronze Age textiles, including a group of completely preserved garments from Denmark; and tailoring principles. Each of these sources has its own rules and pitfalls. Do the remnants of clothing we find in the graves represent garments worn in daily life, or garbs for burial? To what degree do stylized human images in Bronze Age art depict the shapes and decoration of “real” clothing? How can we use complete outfits of clothing found in oak-log coffin graves in Denmark, far away from Central Europe? A series of experiments has been carried out in order to investigate how the lady of Winklarn may have been dressed. The appearance of the resulting outfits is discussed, focusing on perception, visual appearance, and the interplay between clothing, dress accessories, textures, decoration, colors, and glittering bronzes.

Keywords: Bronze Age, prehistoric dress, experimental archaeology, appearance

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Textile, Volume 11, Issue 3, pp. 218–241
DOI: 10.2752/175183513X1379321037403
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Printed in the United Kingdom.

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Introduction and Research Questions

Conspicuous jewelry is a major feature of the European Bronze Age, catching the eye in museums as well as in books. Bronze Age people liked to adorn themselves with long pins, massive bracelets, elaborate collars, and spiked belt buckles in bronze or sometimes gold. An abundance of spectacular metal artifacts have survived, recovered through archaeological excavations of graves, hoards, and settlements. Organic materials such as textiles and leather objects are rarely preserved, as they disintegrate rapidly when buried in the earth. As dress consists of clothing as well as accessories such as jewelry, this means that perceptions of Bronze Age dress based on assemblages of dress accessories of metals are at best partial.

Fortunately, we are not without sources. In southern Scandinavia, favorable conditions of preservation have resulted in seven complete outfits of Bronze Age clothing that can be studied in the exhibition of National Museum of Denmark (Broholm and Hald 1940). In the Lower Danube area and Transylvania, figurines of clothed humans offer iconographical evidence (Kováč 1977: 58–9; Müller-Karpe 1980: Tables 326–27).

To this we may add a large number of textile fragments that inform us of textile textures, and add volume to our data on how textiles and clothing were constructed (Bender Jørgensen 1992; Grömer 2006, 2010). They also fill in spatial and temporal lacunae. Together, these sources allow us to discuss how Bronze Age clothing appeared, and how—and perhaps why—individual objects such as textiles, various types of jewelry, and other accessories were combined and turned into compositions. In a recent study, Fossøy and Bergerbrant (2013) have shown corded skirts from Bronze Age Denmark to be an arena where individual craftspeople could display their personal taste and skill. In this article, the jewelry from an archaeological find from Winklarn in Austria is the starting point for a discussion of Bronze Age dress from Central Europe, how it might be reconstructed, and how jewelry and textiles may have been used to emphasize certain parts of the body, enhancing or constricting movement and interaction with other people.

First, a few words on the Bronze Age (Demakopoulou et al. 1999; Kristiansen and Larsson 2005; Urban 2000; Vandkilde 2007). In Central Europe it is divided into three phases: Early Bronze Age

(2300/2200–1600 BCE); Middle Bronze Age (1600–1250 BCE), and Late Bronze Age (1250–800 BCE). The finds discussed in this article belong to the Middle Bronze Age. It is a period characterized by multiple inhumations under huge barrows (tumuli), and is often called the tumulus culture (Vandkilde 2007: 130). It allows us to observe where on the body the jewelry was placed. Unfortunately, conditions of preservation do not favor the survival of textiles.

The Bronze Age has been called the first Golden Age of Europe (Demakopoulou et al. 1999; Kristiansen and Larsson 2005). Trade across Europe flourished: Baltic amber has been found in the Aegean; glass beads made in Britain have turned up in Scandinavian graves (Vandkilde 2007: 127; Kristiansen and Larsson 2005: 58). Contacts and networks ensuring safe passage are essential for long-distance trade; as little evidence of fortifications such as hill forts are known from this time, we may, perhaps, assume that it was a peaceful period. The material culture reflects prosperity, and display obviously played an important role in social strategies for men as well as for women (Vandkilde 2007: 137–8). Jewelry and pottery is highly decorated; this also applies to weapons: richly adorned axes, battleaxes, and swords are thought to have been status symbols of a warrior elite. Middle Bronze Age society was hierarchical. The archaeological record shows that people buried with rich grave goods differ physically from those found in poorly equipped graves. Rich people were taller, indicating

better nutrition during childhood and little or no hard physical work while growing up. Body size and body shape reflect social position in many societies (e.g. Sofaer 2006: 79–85, 105–113). At the Austrian site of Franzhausen, the average height of males from richly equipped graves was 5 feet 7 inches (170 centimeters), that of poor males 5 feet 5 inches (165 centimeters). Women were about 4 inches (10 centimeters) smaller (Teschler-Nicola 1994: 173).

Perception, Dress, and Appearance

In recent years the concept of dress has been the focus of scholarly debates among anthropologists, archaeologists, art historians, and historians (Barnes and Eicher 1992; Calefato 2004; König 1999; Petrascheck-Heim 1988; Reich 2005; Roach-Higgins et al. 1995; Sørensen 1997, 2010). This is not limited to the arts and social sciences. Important research has been carried out in psychology (Kiener 1956; Lurie 1981), sociology (Sommer 2010), semiotics, and behavioral sciences (Schleidt 1994; Mentges 2005). It is now accepted that dress is an important form of nonverbal communication that includes far more than clothing and informs on the individual's gendered identity and social relationships. It also signals expectations of behavior.

In a study of perception of prehistoric images, Peter S. Wells (2008) draws on recent advances by neuroscientists and cognitive psychologists on how the brain processes visual images. Experiments have shown that attention focuses on particular

aspects of a person who is observed. The subject's eyes are the main point of focus, followed by the mouth, the top of the head and overall outline of the face, quickly followed by the edges, the perimeter of the body. Something similar applies to the observation of objects: the eyes scan the surface, looking for edges and points that attract attention (Wells 2008: 30–31). More time and attention is given to complex objects with highly decorated surfaces (Wells 2008: 34). This means that surfaces, edges, texture, decoration, glitter, and color are particularly important in perception. Lighting too is something that modern people easily forget, accustomed as we are to artificial light in the form of electricity. In the Bronze Age, lighting was supplied by the sun, or from an open fire in the form of hearths, torches, or oil lamps (Wells 2008). In a case study, Wells (2008: 68–69) shows how this is reflected in an Iron Age burial: the head, upper torso, wrists, and feet are decorated with glittering gold objects, framing the important parts of the body. All these aspects are highly relevant to our investigation into Bronze Age dress.

Further useful analytical tools for the study of Bronze Age dress and appearance have been established by Marie Louise Stig Sørensen (1997, 2010). She distinguishes between *cloth*, i.e., the textile itself, *clothing* that is the piece of clothing constructed from cloth, and *costume* that covers the combination of clothing, ornaments, and dress fittings. Another distinction is made

between items permanently attached to the human body such as certain types of neck or arm rings; those that are a permanent part of pieces of clothing, e.g., by being sewn onto cloth; and removable items such as pins or girdles (Sørensen 1997: 95–102). She also finds it important to differentiate between the dress of the living body and burial dress, i.e., treatment of the dead body (Sørensen 2010: 55).

Cloth culture is a concept minted by Susanna Harris (2012) and differs from clothing culture in that the focus is on cloth. According to Harris, all societies use cloth-type materials, i.e., flexible, thin sheets of skin, various types of plant fibers, bark,

textiles etc. that can be wrapped, folded, shaped, and used for clothing and other purposes. Materials are specific to each culture, and thus contribute to express identity. For the Bronze Age, Harris distinguishes between cloth cultures of Scandinavia, Central Europe, the Aegean, and Pharaonic Egypt.

The Winklarn Assemblage

The jewelry of a grave find from Winklarn in Austria is the starting point for our discussion (Heger 1903) (Figure 1). It belonged to a wealthy Middle Bronze Age woman. Found in the nineteenth century, no documentation of the skeleton is available, but descriptions of where the metal items were placed

Figure 1
Winklarn, grave 12. Photo © NHM
Vienna.



on the body exist and make it possible to get a good idea of how she was fitted out when laid to rest. A modern excavated grave from another Austrian site, Pitten, serves as comparison (Neugebauer 1994: 152–7) (Figure 2).

The Winklarn jewelry consists of four bronze spirals that were found around the head of the deceased. They presumably were part of her hairstyle. On her shoulders, two huge pins were found. They measure $14\frac{3}{4}$ inches (37.5 centimeters) and $13\frac{3}{4}$ inches (35 centimeters). A collar of fourteen circular, spiked bronze

pendants (*Stachelscheiben*) and spirals was placed around her neck. Each pendant has spikes $1\frac{1}{2}$ inches (4 centimeters) long. Arms and hands were adorned with at least six spiral finger rings and four bracelets (two on each arm). The most conspicuous item is a wide bronze girdle. It was 46 inches (117 centimeters) long and as the girdle was found around her waist, we may assume that it reflects her girth. The belt is $3\frac{1}{2}$ in (9 centimeters) wide and ends in two spirals that served to close it.

The girdle indicates that this was a large lady who proudly

emphasized her massive girth with conspicuous, glittering bronze. We may conclude that body size was a significant symbol of wealth, and that perceptions of female beauty and body ideals in the Bronze Age differed significantly from ours.

The lady of the Pitten grave was laid to rest with a similar assemblage: spirals around the head, large pins, and a collar of bronze spirals and spiked pendants; she had no belt, but her collar hung low and framed her torso in much the same way (see Figure 2). In both cases the jewelry emphasizes the head, the upper



Figure 2

Pitten, grave 2. Photo © Niederösterreichisches Landesmuseum.

body, and the waist. In neither case, however, have remains of textiles or other organic material been recovered. Textile textures and colors would have played important roles in the ladies' appearance, as would the cut, shape, and further decoration of garments and dress fittings.

Further Sources and Methodology

How can we get closer to an idea of the dress and appearance of the lady from Winklarn? In addition to the concepts and analytical principles outlined above, placement patterns, analysis of iconographic evidence, textile analysis, and principles of tailoring are useful tools.

Placement Patterns

Ulrike Wels-Weyrauch (1978, 1991, 1994) has charted and systematized the placement of dress accessories in female graves from Bronze Age Central Europe. Her work has made it possible to analyze which parts of female dress were highlighted by shining bronze jewelry, colored beads, shells, or other forms of nonperishable decoration. Sørensen (1997: 100) has used it to distinguish between chest and waist costumes. The Winklarn and Pitten outfits clearly primarily belong to the former category.

Iconography

Bronze Age images of human beings are very scarce indeed in Central Europe. As such images are common both from the preceding and following periods (e.g., Grömer 2010: Figures 152 and 182), the absence is conspicuous and

suggests a cultural taboo.

Depictions are, however, available in other parts of Europe. Figurines and rock art from Scandinavia also depict humans, as do figurines, paintings, and various forms of figurative art from the Aegean and Anatolia. Kristian Kristiansen and Thomas Larsson argue that they reflect similar ideas and designs (see for example Kristiansen and Larsson 2005: 143–44, 149, 188, 223, 230, 261, 268–75, 284–94, 308–19). Human images are also available from Transylvania and the Lower Danube area (Figure 3). The latter are the most relevant here. They mainly take the form of clay figurines, primarily depicting females in long, flaring gowns with elaborate decoration (Kováč 1977: 58–9; Müller-Karpe 1980: Tables 326–327; Grömer 2010: 333). Like human beings, the figurines are three-dimensional, and offer an excellent basis for comparison with placement patterns of dress accessories.

Textile Analysis

The remains of around 1,000 Bronze Age textiles have been recorded by scholars of archaeological textiles. They derive from almost 600 different sites in various parts of Europe. Two areas are particularly rich: southern Scandinavia and northern Germany, where even a number of complete garments and costumes have been preserved (Broholm and Hald 1940; Bender Jørgensen 1986; Ehlers 1998; Mannering et al. 2010); and Austria, where the salt mines of Hallstatt and the copper mines of Mitterberg and Radfeld are the main sources (Grömer 2006; 2010). To this may be added

Figure 3

Clay figurines from the Carpathian Basin and Lower Danube.

(a) Klicevac, (b) Dupljaja, (c) Dubovac, (d) Hungary (a–c after Müller-Karpe 1980, d after Kovács 1977).



a sprinkle of fragmented textiles from most parts of Europe (Bender Jørgensen 1992; Grömer 2006), and one large, technically complete textile recovered from a burial at Pustopolje in Bosnia-Herzegovina (Benac 1990; Bender Jørgensen, Grömer and Marić Baković forthcoming). Although the majority of these textiles are just fragments, the data obtained by analyzing them allow us to understand how they were made and which raw materials, fabrics, qualities, colors, and forms of decoration were used, and thus get an idea of what they looked like.

Bronze Age fabrics in Central Europe are generally quite simple. Most are woven in tabby weave

with some variation, i.e., repp for starting borders. Patterns and decorative elements appear already in the Early Bronze Age, in some cases obviously based on Neolithic traditions (Barber 1991: 133–44; Rast-Eicher 2005: 124–29). A striped, olive green and dark brown fabric has been recovered from Franzhausen in Austria (Figure 4). Technical analysis shows that wool yarns are relatively thick. Linens are rare in the Middle Bronze Age. They are generally finer than wool fabrics, and their yarns usually plied. In the Middle Bronze Age, very light, open, veil-like textiles appear, as well as twill weaves and further evidence of dyeing. This opened

exciting new possibilities for Bronze Age textile designers.

The textiles from Hallstatt, Mitterberg (see Figure 4) and Radfeld in Austria are contemporary with the ladies of Winklarn and Pitten, and belong to the same geographical area. They are, however, basically fragments, and offer limited evidence of clothing; but they do give us an idea of the cloth culture of the region in the Bronze Age—the textile surfaces, textures, colors, and patterns that were in use. They also offer valuable information on edges, and of cutting and sewing techniques, i.e., how textiles were shaped by tailoring (Rösel-Mautendorfer 2010).



Figure 4

Textile qualities 2200–1200 BCE.

(a) Franzhausen, (b–c) Mitterberg, (d–l) Hallstatt. Photos © BDA, NHM Vienna.

Principles of Tailoring

A tailor uses a series of sewing, shaping, and modeling techniques to create a three-dimensional object out of a plain fabric. Basically the choice is between using shaping and sewing techniques to do this, or to drape a plain piece of fabric around the body and use dress fittings such as pins, buttons, fibulae, belts, sashes, or laces to keep it in place. Both techniques were used in the Bronze Age. Pins and fibulae appear frequently in graves; they

are evidence of draped and modeled clothing. Textiles from the salt mines of Hallstatt display seams and hems and demonstrate that sewing and shaping techniques (Figure 5) also were used to create clothing.

The properties of materials play an important role in how garments are made and set limits. Some fabrics are stiff and dense, well suited to hard wear and outer clothing; such fabrics can be cut without fraying but do not allow a soft drape or fine pleats. Others are

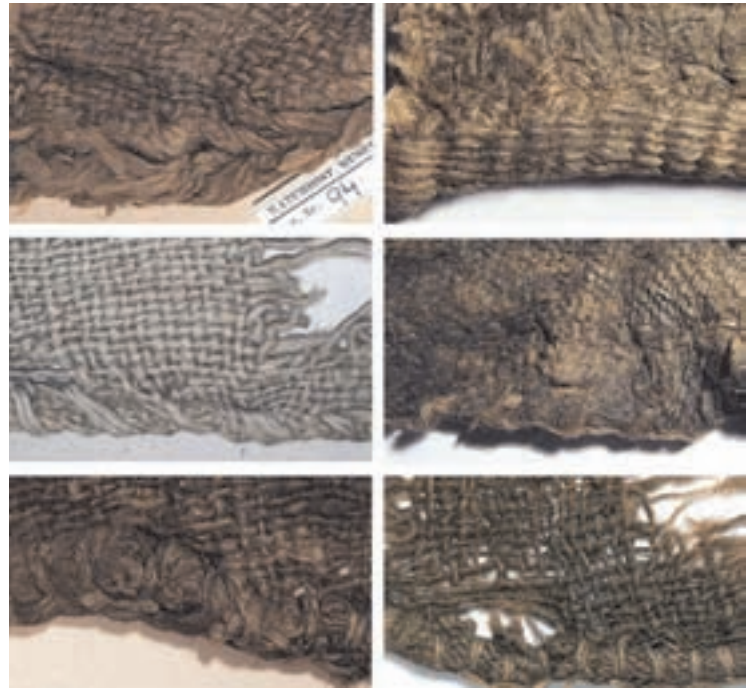


Figure 5
Seams and hems from Hallstatt.
Photo © NHM Vienna.

light and loosely woven, excellently suited to soft, pleated dresses or shawls, but fray easily. Without hemming, the edge will frazzle.

Challenges of Reconstruction

Why do we attempt to reconstruct things that we do not have? Ever since the beginnings of archaeology, reconstructions of clothed people from various parts of prehistory have been a common way of dissemination, for example in the wall charts that were staple teaching materials from the late nineteenth century and up to the time of television.

The richness of Bronze Age graves in Central Europe and lack of well-preserved garments have inspired archaeologists to create reconstructions of Bronze Age clothing in the form of drawings (Feustel 1958: Figure 97;

Neugebauer 1994: Cover and Figure 41; Wels-Weyrauch 1994: Figure 55). Those pictures, produced by scientists in cooperation with illustrators, have been disseminated through scientific publications as well as popular literature, and can be found in schoolbooks and museums. Recent research has shown that they subconsciously reproduce contemporary perceptions such as gender roles and body ideals, and they convey that archaeologists *know* how prehistoric people looked. Therefore it is important to make it clear how and why reconstructions are constructed.

Our knowledge about Middle Bronze Age dress is multifaceted, but there are problems and challenges when combining the different sources. Each of the

sources has its own rules. Does what we find in the graves represent the remnants of clothing worn in daily life, or was there another treatment of the dead body? Ancient images have their own rules, too. In the Bronze Age they are often stylized and do not offer “real” images of clothing, nor exact shapes and decoration. That was not the purpose of the figurines. How should we deal with this?

In the following, a series of attempts to reconstruct the costume of the lady from Winklarn will be presented (Figures 6 and 7), along with the empirical basis, alternatives, and choices made during the work. The starting point consists of the jewelry and dress fittings in the grave, and their placement. To this, evidence from the complete garments from

Figure 6
Ensemble of Winklarn and variants
of dress reconstruction. Photos:
H. Momen; graphics: K. Grömer.



Winklarn, grave 12



Variant 1: „Nordic type“



Variant 2: „Carpathian type“



Variant 3: „Peplos type“

Scandinavia, cloth qualities from Central Europe, and anthropomorphic clay figurines from Eastern Europe have been added and tried out. None of the

recreated outfits can be considered as the “truth.” They represent different body contours, were made from different types of cloth, and consist of different garments of



Variant 4: „Pustopolje“

Figure 7

Variants of dress reconstruction.
Photos: H. Momen; graphics:
K. Grömer.



Variant 5: „free association“

different shapes and silhouettes. The number of individual items of clothing also varies. The names of each variant refer to where the inspiration comes from. In each

case, the jewelry from the Winklarn grave—pins on the shoulders, bronze belt around the waist—are used in a functional way. Bracelets, hair spirals, and collar with *tutuli*

are perceived as decorative features. For all versions, a general decision of costume length was taken. No form of headwear or footwear was used. Whenever

possible, single elements were made as exact reproductions of archaeological finds. The jewelry from Winklarn was made by Stefan Jaroschinski, Noricum Replikate, Germany; tailored garments by Helga Rösel-Mautendorfer and Sabine Kastlunger.

Variant 1: “Nordic Type”

The magnificent, well-preserved, complete costumes from Scandinavia have induced scientists to reconstruct Central European clothing in the same way, adding local jewelry and other metal accessories (compare Neugebauer 1994). Variant 1 (Figure 6) is based on the cut and

shape of the completely preserved blouse found in Borum Eshøj grave C in Denmark, and the wrap or long skirt from the same grave (Figure 8; Broholm and Hald 1940: 64–71). The woven girdle of the Danish find is replaced by the bronze belt from Winklarn. We also decided to add a short, oval mantle in order to find a feasible use for the long pins. This has no foundation in the Scandinavian material, as neither paired bronze pins nor mantles have been found in any of the three female graves with complete garments; pins are quite rare in Scandinavia and not a common element of female dress. Mantles of oval shape are common



Figure 8

Garments from (a) Borum Eshøj grave C and (b) Muldbjerg (after Boye 1896, Taf. IV and XI).

in male burials such as at Muldbjerg.

To make the blouse, a rectangular piece of fabric measuring about $47 \times 23\frac{1}{2}$ inches (120×60 centimeters) was folded into thirds, parallel to the longer side. The fabric was then cut on both sides to about up to a quarter of the total length along the edge of the pleat. Both flaps were then folded to the middle and sewn together to form the back of the blouse. The upper third was then folded over and sewn on to the back part. Then the neckline was cut into the middle of the edge created by the new pleat. Gussets were placed under the side pieces to allow better maneuverability.

Although the Danish original is wool, we choose a linen fabric for the blouse in order to observe the drape and handle of this material.

For the skirt, we choose a medium-weight woolen fabric. It was sewn together and loosely pleated. The skirt was held together by a string below the bronze belt.

The cloak was cut a bit smaller than the original in order to adjust it to a woman. Made of thicker wool, it was pinned to the blouse with pins up to $13\frac{3}{4}$ inches (35 centimeters) long placed at the shoulders. Different shades of naturally pigmented wool were chosen for the three items of clothing.

Comments: The resulting outfit or costume appears quite functional, but is based on originals found far away from the Danube region. Jewelry, dress accessories, and textile textures of the two regions differ considerably, and despite contacts between Scandinavia and Central Europe in the Middle Bronze Age, the garments of the Winklarn lady probably looked different from those of the woman from Borum Eshøj.

Perception and Appearance: In the Nordic Type version of the Winklarn dress, the focus is on the costume's chest. In Figure 9, the collar is placed above the mantle; the latter is pushed to the back,



Figure 9

Reconstruction Variant 1, detail.
Photo: H. Momen, NHM Vienna.

allowing the lady to show off the front of her bronze belt. The back of the belt is, however, hidden by the mantle, reducing its glittering effect. The color variation lends a pleasing variation to the overall appearance and creates a distinction between the upper and lower part of the body.

Variant 2: “Carpathian Type”

The silhouette of clay figurines from the Lower Danube and Carpathian area (see Figure 3) generally displays a tight top and

wide, flaring skirt. Feet and footwear are not visible. It may be interpreted as a combination of blouse and skirt, or an A-line dress. Delicate decoration in the form of triangles or checkerboard checks adorn most of the figurines. Similar patterning has been found in textile fragments from Pfäffikon-Irgenhausen in Switzerland (Figure 10), dated 1685–1493 cal. BCE (Vogt 1937; Rast-Eicher 2005: 121). This textile was embroidered with blue, red, purple, and yellow dyed threads (Rast-Eicher and

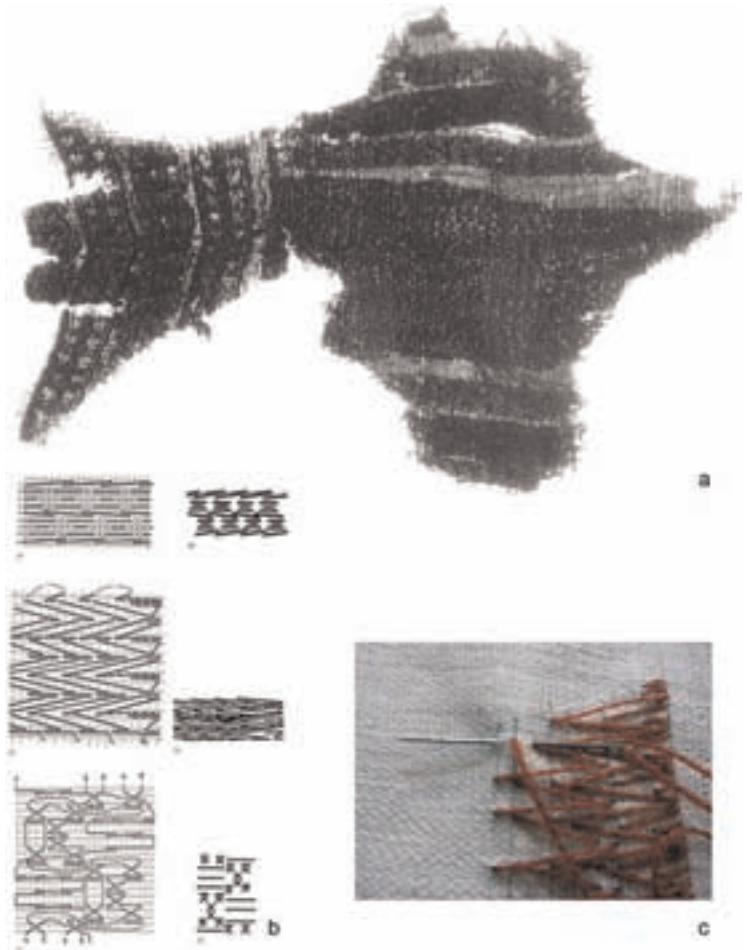


Figure 10
Embroidery on the textile from Irgenhausen and reconstruction of the sewing (after Vogt 1937 and photo: S. Kastlunger).

Reinhard 1998: 288). The Carpathian Type reconstruction of the Winklarn dress is based on a clay figurine from Klicevac and the decoration of the Pfäffikon-Irgenhausen textile.

For this reconstruction we choose old, handwoven linen fabrics of good quality, like on the Irgenhausen find; red and blue dyed wool threads were selected for the embroidery. The garment hadn't to be too wide but have a smooth drape, so that all details of the embroidery could be seen well. In order to meet these demands we cut the fabric in the shape of a flared tunic, sewn together at the shoulders and sides. The resulting A-line dress is constructed as a cut-to-shape garment, sewn to form a three-dimensional object. Clothing of this type is known from Mediterranean area and the Near East. To apply the pins found in the

Winklarn grave, we pinned the woolen cloak made for version 1 to the dress.

The bronze belt was used to accentuate the waist rather than to hold the clothing in place.

Comments: The reconstruction is based on the assumption that the decoration on the clay figurines renders textile patterns and applied decoration like embroidery. The mantle is entirely fictional, as it does not fit the silhouette of the figurines. It is simply added to use the pins. Necklaces and collars are frequently depicted on the figurines (compare Grömer 2010: Figure 169).

Perception and Appearance: In the Carpathian Type version of the Winklarn dress, the eyes are drawn to the upper part of the body, but the lower hem of the skirt is also emphasized by the embroidery that offers an intricately designed and

colorful decoration (see Figure 6). The mantle lends substance to the lady's body shape but also obscures her back and particularly the back of the bronze belt. The stance of the model draws attention to the bronze arm rings and the lady's wrists. If her arms were relaxed, these would be obscured by the mantle.

Variant 3: "Peplos Type"

The peplos is a typical garment of classical antiquity (Pekridou-Gorecki 1989: Figure 53). It is known in several variations. The Doric peplos is a tubular garment, folded over and pinned on the shoulder. A girdle or sash was used to create rich cloth folds.

A tubular item of clothing found in the bog of Huldremose, Denmark (Figure 11), has been interpreted as a peplos (Hald 1950: 474; 1980: 358–65). It is dated to the Iron Age,

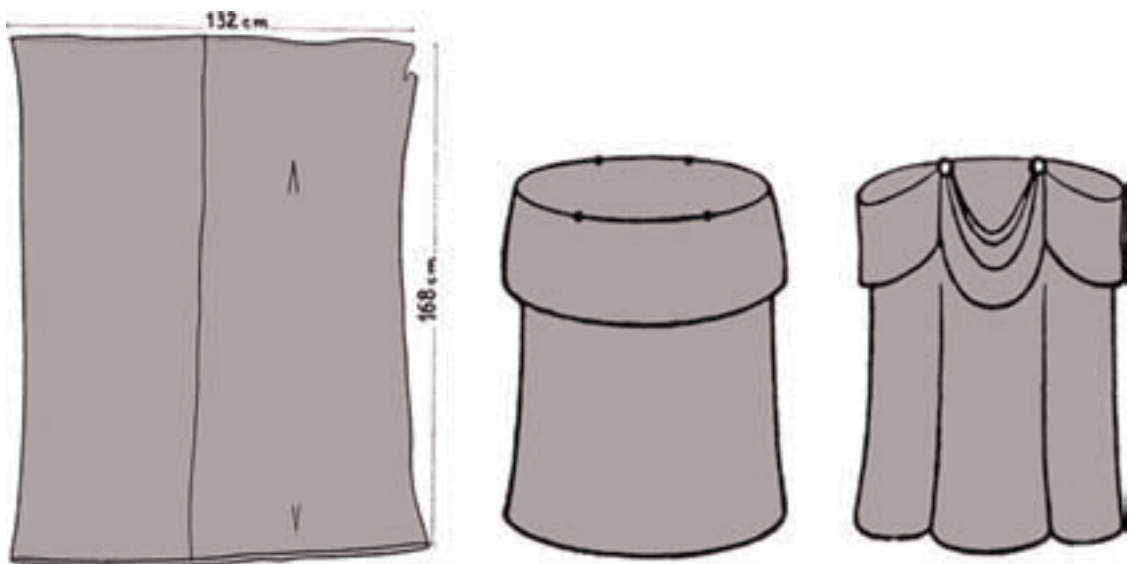


Figure 11
Tube dress from Huldremose and its drape (after van der Sanden 1998).

210–30 cal. BCE (Mannering et al. 2010: 266). The Huldremose garment has been used in most of Europe as model for reconstructions of Iron Age garments, as dress fittings (fibulae on both shoulders and remnants of belts) are frequently found in female graves (compare Grömer 2010: 357–62).

Inga Hägg (1996: 143) has pointed out that in Central Europe, garments pinned on the shoulders by two pins or fibulae go back to second millennium BCE in Central Europe, i.e., the Early and Middle Bronze Ages. She argues that this type of dress fitting—and the tube-shaped peplos—reached Greece from Central Europe with the Doric

migration of 1200–1000 BCE. Hägg's theory forms the base for our third variant of the Winklarn dress. A tubular piece of clothing the size of the Huldremose garment was made, pinned at the shoulders, and belted with the Winklarn items (Figure 12).

The fabric chosen was a medium-weight reddish-brown wool. The piece was 6 feet 6 inches (2 meters) wide and 5 feet (1.5 meters) long. It was sewn together as a tube with an overcast stitch.

Comments: The Peplos Type variant of the Winklarn dress seems very functional. It is, however, important to point out that no tubular garments so far



Figure 12

Reconstruction Variant 3, detail.
Photo: H. Momen, NHM Vienna.

have been found in Central Europe. Neither does it fit with the drape of the dresses depicted on the clay figurines.

Perception and Appearance: In the Peplos Type version of the Winklarn dress, simple functionality and a plain textile tube were combined to form a costume. It is sleek and shapes the body. The accent lies clearly on the pin, collar, and belt. This variant

has no mantle, so the marvelous belt is visible from the front and the back, emphasizing the waist as well as the chest.

Variant 4: “Pustopolje”

A large textile found in a grave from Postopolje, Bosnia-Herzegovina (Figure 13), is the only major textile find from Bronze Age Europe apart from the complete garments from Denmark. It was used as shroud in

a male grave dated to the fifteenth century BCE. It is a plain tabby with repp borders and measures 10 × 5½ feet (3 × 1.70 meters) (Benac 1990, Bender Jørgensen, Grömer, and Marić Baković forthcoming). The textile is best described as a blanket, but may have been used as a draped garment. It does not show any evidence of tailoring. Draped garments were a common feature



Figure 13

Grave from Postopolje (after Benac 1990, Figure 6).

of Bronze Age clothing in Egypt and the Near East (Vogelsang-Eastwood 1993), and are indeed still used in many parts of the world (e.g., the sari in India).

We wanted to create a dress without sewing, just using methods of draping. The pins and belt were to hold the dress in place. For the reconstruction, we chose a piece of lightweight woolen cloth of the same size as the Pustopolje textile. The edges were hemmed with blanket stitches sewn with a red thread. The fabric was dyed blue. Dyeing is known from Middle Bronze Age textiles from Hallstatt (Hofmann-de Keijzer 2010: Figures 74 and 80).

The rectangular piece of fabric was folded symmetrically from the front of the model to her back, so that the fabric covered her body up to the chest. In the back, the fabric was draped crosswise and the edges of the fabric were brought forward to the front. The edges were pinned together with the front part of the dress at the shoulders. In order to make the pleats in the back drape in an elegant way, it was necessary for the fabric to have a soft drape (Figure 14).

Comments: Geographically, the Pustopolje blanket is nearer to Winklarn than the Danish finds. Draped and pinned, it serves as a very comfortable and wearable



Figure 14

Reconstruction Variant 4, detail.
Photo: H. Momen, NHM Vienna.

outfit. The Pustopolje burial was, however, that of a man, and we have no evidence for similar items in female contexts. It is of interest that one large piece of cloth can form a complete costume, draped around the body and held in place by the pins and belt. The same piece of fabric can be draped in several different ways. In Figure 7 the fabric's border hangs down the back in a way that corresponds with a contemporary clay figurine from Hungary (see Figure 3D, back) (Kovács 1977).

Perception and Appearance: Like in the third variant, the belt is visible both from the front and the back, emphasizing the model's waist as well as the collar and pins do her chest. The deep blue color enhances the contrast between the textile background and the golden glitter of the bronze adornments and dress fittings.

Variant 5: "Free Association"

For this reconstruction, we combined a rectangular piece of fabric from Variant 4, Pustopolje, and the oval cloak of Variant 1 to create a new ensemble. For this we simply wrapped the rectangular fabric around the body. The fabric was held in place by twisting the upper edge around and pinning it on the cloak in the area of the chest, so that the cloak works like a halter. After that the belt was put on top of both garments. The ensemble looks like a dress with open sleeves (Figure 15).

Comments: This variant is simply to be considered as our space for creativity. Two items, the Pustopolje blanket and an oval mantle based on the male outfits of the Danish oak log coffins, were used to experiment with different possibilities for creating a dress, only constricted by the rule that the pins and belt must have a functional role.

Perception and Appearance: In this case, it is conspicuous that the belt that usually is hidden behind the mantle is here fully exposed. The belt turns the mantle into a different garment, suggesting sleeved outerwear. Here, the belt clearly accentuates the waist.

Results: Perceptions of Appearance

Following Peter S. Well's ideas (2008) it is interesting how the different versions of the Winklarn costume influence perception of the model's head/face, upper torso, body contours, feet, and wrists. According to Wells (2008: 67–69), the face is the most important part of the body for the communication of information as well as emotion. The region around the face is therefore the ideal place for objects that are intended to attract visual attention. Looking at someone's face allows one to see ornaments on the chest at the



Figure 15
Reconstruction Variant 5, detail.
Photo: H. Momen, NHM Vienna.

same time. The collar with the spiked pendants and the large pins from Winklarn can thus be understood in relation to the importance of the face. In addition, the exceptional broad belt also draws attention to the waist, as do the four bracelets situated at about the same height as the belt.

The bronze objects are now greenish following several thousand years of being buried in the ground. When new, their visual appearance was golden and glittering. Exactly how they appeared to the observer would, however, to a great extent have depended on the lighting (Wells 2008: 46–47). Objects are lit not only directly, by sources such as the sun and fire, but also indirectly, by ambient light reflected by surfaces. In the Bronze Age, brightly colored objects, especially shiny jewelry of bronze or gold, would have been restricted to elite contexts. This makes such objects and associated clothing markers of identity (compare Sommer 2010; Sørensen 1997).

Three of the five versions included a mantle (nos. 1, 2, and 5). The effect of the mantle is that the body is completely covered from the shoulders and appears shapeless. The glittering belt is almost hidden: only a small part around the opening is visible.

Variant 1 has the highest number of items, presenting the observer with different shapes and edges. Following Wells's argument (2008: 34), the more complex the surface of an object appears, the more time and attention the brain devotes to examining it and figuring out what it is. Variant 2

offers the highest visual complexity, not only by the glitter and the three-dimensionality of the upper torso and waist. Here the eye is guided to the lower edge as well, to the colorful embroidered pattern just above the garment's hem. In contrast to this, Variants 3 and 4 are minimal, sharp, and restrained, free of any self-conscious quirk. This minimalistic style keeps the eye focused on the bronze objects. The grand silhouette, delicate drapery, and folds serve as a background feature. Wells (2008: 64–69) states that usually no metal items are found between the waist and footwear, arguing that nothing notable was attracting the attention of observers to this part of the body. As demonstrated by Variant 2, a brightly decorated textile surface placed at the lower hem of the skirt creates a complex, colored texture that clearly catches the eye. Following the ideas of Susanna Harris (2012), the heavy, thick, warm, and long skirt and mantle of the Nordic Type forms a striking contrast to the bright, light, embroidered linen dress of Central Europe.

The accessories of the Winklarn grave were all removable, and cannot be considered as permanently attached to the body. There is no doubt that this type of jewelry was used by living women, as they often display signs of use-wear (compare Wiegel 1994: 165).

Wearing such a costume must have taken practice, as the jewelry was heavy and not especially ergonomic. It must, however, have appeared very impressive due to the sheer amount of bronze—an

expensive and luxurious material in those days. It was not only an identity marker displaying the high social status of the wearer. It also demonstrates an awareness of how to compose an impressive outfit, using the effect of glittering, composite surfaces in nonverbal communication (Kiener 1956; Lurie 1981). The spiked pendants clearly tell the observer to keep his distance from the lady of Winklarn.

As archaeologists, we have to point out that we still do not know how the lady from Winklarn was dressed. The five variants are educated guesses rather than solutions. Bronze Age clothing cannot be reconstructed just from the placement patterns of dress accessories in graves. It is, however, interesting to see how the different cloth and clothing cultures influenced the general appearance.

Acknowledgments

The reconstruction of the Winklarn garments were carried out as part of the HERA-funded CinBA project “Creativity and Craft Production in Middle and Late Bronze Age Europe” (home page: www.cinba.net). Special thanks are due to Stefan Jaroschinski, Noricum Replikate (Prutting in Germany), who made the jewelry and to Sabine Kastlunger (Vienna), who embroidered the linen dress in Variant 2. We would also like to thank Sandra Fellner, who posed as a model, and Hischam Momen, who took the fashion photographs. We are also grateful for comments from our colleagues in the CinBa project, especially project leader Joanna Sofaer (University Southampton).

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