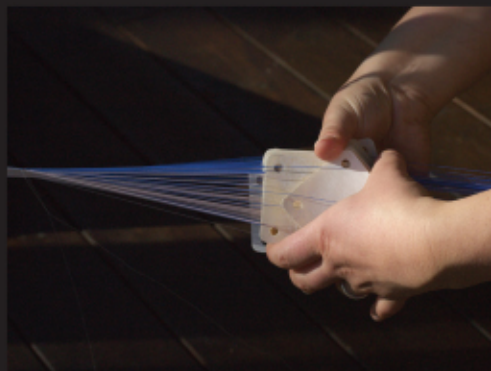


# Ancient Textiles Modern Science



edited by

**Heather Hopkins**

# Ancient Textiles, Modern Science

Re-creating Techniques through Experiment



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## Re-creating Techniques through Experiment

Proceedings of the First and Second European Textile Forum  
2009 and 2010

*edited by*

Heather Hopkins

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*Front cover: Top left: Tablet weaving in progress. Photo: Katrin Kania*

*Top right: Dyeing wool with madder. Photo: Heather Hopkins*

*Bottom left: Mordanting wool with alum. Photo: Heather Hopkins*

*Bottom right: Reconstruction of lime bast shoes. Photo: Anne Reichert*

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## Contributors

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**Katrin Kania** has studied medieval archaeology, specialising in textiles and historical tailoring techniques. She is using experimental archaeology to reconstruct historical textile crafts processes. Her PhD thesis about medieval garments and tailoring techniques was published in 2010. Today, she is working as a freelancer teaching, demonstrating and making museum replicas.

**Sarah Goslee** is a scientist who turns her analytical skills to the study of historic textiles. Her fascination with tablet weaving has led to extensive research into the diversity of structures that can be created with simple equipment. She founded and maintains [stringpage.com](http://stringpage.com), a widely-used resource for textile technique and history.

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**Heather Hopkins** uses new approaches to solve historic problems. Her work focuses on the size and scale of the dyeing industry of Pompeii. Since graduating with a BSc in archaeology and a PhD in engineering she continues to research, present and publish widely, broadening the approach while making new subjects accessible.

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The Textile Forum would not have been possible without the generous help and support of many persons from museums, open-air museums, as well as friends and family of the two organisers – and of course the enthusiasm of the participants of the past years.

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# Introduction

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The number of people involved in ancient technology is growing by the day. Some of them are archaeologists, others are teachers, students, artists or crafts people to name just a few. Ancient technology attracts many kinds of people because it bridges between our hands and the hands of our ancestors – and with that we have one of the most direct links with the past we can imagine.

At the yearly EXAR conference on experimental archaeology, many people meet and many ideas cross the table. It was in October 2008, that the idea was first mentioned of organising a get-together for anybody interested in textiles using a hands-on and archaeological approach. True, there are conferences like the famous NESAT textile conference but why not use a workshop or forum approach?

In HOME Eindhoven, now Eindhoven Museum, an archaeological open-air museum founded in 1982, it has been done: we brought a number of people together who all were interested and experienced in a specific craft – for one week they immersed in doing practical work during the day and listening to more formal presentations in the evening. For the museum, it was a unique experience showing the public something you do not see every day. For the participants, it was better than a conference where usually there is too little time to sit together and discuss technicalities and approaches in more detail.

Using the HOME Eindhoven workshops as inspiration, Kania and Ringenberg have developed an approach which fits very well with the textile people they have in mind. They combine the archaeological view with experience in textile working; and through this diverse network got a group together large enough to start a ‘buzz’ on Day One of the first Forum in Eindhoven. I was happy to have been of some small assistance and to see the ball roll on.

The second Forum built on the first, and thanks to the contacts and perseverance of the two leading colleagues, that too was a success. The Archeoparc at Val Senales, not far from where Ötzi was found, proved to be a very well chosen follow-up location after HOME Eindhoven.

The international character is one of the strengths of the Textile Forum. Often we find one or two colleagues nearby, but in this relatively small world of textile crafts and archaeology, one needs to be able to rely on far friends – and the Forum is the perfect place to sit down and work together. The strength is in its simplicity of combining networking, research and a textile market into one single happening.

Another strength is that the forum is catering for a variety of people, bringing together specialisms which otherwise would never be so close to one another. Archaeology is not only science, and textile is not only craft. This cross-fertilisation has led to many interesting new leads, most of them not explored yet to the full.

The Textile Forum's first two years have been very productive and brought people together in a very pleasant way. The results of the two Forums – these proceedings – witness of both a serious and fruitful approach to textile craft and archaeology as well as of a series of collegial friendships which would not have existed otherwise.

The Textile Forum is not an official association, foundation, platform or similar. That is both a strength and a weakness. With the publication of these present proceedings, an important step is made to make the Textile Forum and its results better known to other textile enthusiasts.

Roeland Paardekooper MA PhD  
EXARC Director  
The Netherlands

# A Conference from the Craftsperson's Perspective: introduction to the European Textile Forum

*Sabine Ringenberg and Katrin Kania*

As far as conferences go, the European Textile Forum is a quite unusual one. Concentrating on the aspects of craftpersonship and crafting, it caters to the very special and individual needs of those persons working with historical textile techniques. This includes an uncommon schedule of papers in the evening and the daylight hours reserved for archaeological experiments, workshops or simply exchange between the participants and hands-on discussion on and about their current textile projects.

With a full week running time, the Textile Forum is long enough for a larger experiment like the Spinning Experiment undertaken in 2009, and long enough for the participants to learn from each other and establish a good contact for further networking. This paper explains the reasons behind the Forum – and the possibilities of such a unique conference concept.

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While textile in historical times was undoubtedly the most important means to show off wealth and taste, witnessed by pictures, texts, inventories and surviving textile works, the occupation with textile crafts in modern times has gained a somewhat demeaning reputation. Textile works are often seen as an undemanding pastime for frustrated housewives and the like. This view of textile crafts as something low in both status and material worth is further advanced by today's very cheap mass-produced textiles and clothing – but also by a phenomenon regarding historical techniques, where badly made products using wrong materials and much simplified historical techniques can be found. At 'medieval markets' and similar fairs, textile wares manufactured with historical techniques, such as tablet-woven bands, are quite frequently offered for little more than the cost of their materials, showing how little value is placed today on the time and knowledge necessary for their manufacture.

In direct opposition to this modern view of ancient textile crafts stand the fine, exacting textile objects from medieval times that still survive today. For making objects

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like these, three things are needed: a very high level of skill, expensive materials, and massive amounts of time. Due to this, most of the techniques demand a very well organised division of labour, mostly among many specialists of one social or economical group. To produce a single simple textile from a basic material such as wool or flax takes many steps of work, starting with sourcing the suitable raw fibre materials and ending with finishing tasks such as fulling and shearing or smoothing.

This multitude of steps until a final, finished object is achieved is something that textile work has in common with other crafts like pottery work or blacksmithing. However, there is a distinct difference in how these crafts are perceived today: while nobody would talk about smelting steel as any basic blacksmith's ordinary task to provide the workshop with the iron or steel needed, the preparation of fibres (both wool and flax), the production of spun yarns and weaving these yarns into cloth are often only seen as an aside to a normal woman's housework. For textile crafts, yarns are the basis for other work just as smelted steel is the basis for metalwork. And just like in other crafts, a division of labour for the different steps in manufacture is highly probable, at least for a professional or semi-professional workshop.

Division of labour may not be traceable in every instance, but a quick survey of surviving textiles shows that they could not have been all 'home-made' by non-professionals. On the contrary, textile production of high-quality items was an important factor of medieval economics (Cipolla 1993). Weaver's workshops as well as embroidery workshops in nuns' convents and monasteries are well-known from archaeological evidence and records (e.g. Windler and Rast-Eicher 1999/2000; Hamburger *et al.* 2007; Staniland 1991). A division of labour and specialisation is always connected to infrastructure: the specialists have to be supplied with tools, materials and also the necessities of daily life such as food and fuel. Textile work is time-consuming – many modern attempts at recreating historical textiles show this. Even if we have no way to reconstruct exactly the time needed in historical context by the appropriate professionals, the immensely fine work must have taken an appropriate amount of time – time that was not available for the worker to grow crops or tend to animals. The professionals in textile production must therefore have received enough wages for their work to sustain themselves. But not all trade and infrastructure regarding textiles will be possibly traceable from our time. Though spinning and weaving for the basic needs of a household or farm were probably common and basic knowledge – this does not imply that every household did all of its own textile work, or that every person was similarly skilled and enthusiastic regarding these tasks. The concept of being completely self-sustaining as an ideal situation is a rather modern one and not a reality we can expect to find in our history: even for the lower quality textiles produced as 'utility textiles' such as rough fabrics to cover, transport or package other goods in a home or farmstead, an informal barter of homemade textiles against other homemade goods or services can be easily imagined, as part of social and economical interaction to mutual benefit within a small community.