

# ARCHAEOLOGICAL TEXTILES NEWSLETTER

ATN, 6, 1988.

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## EDITORIAL

Again we are fortunate in having a wide range of subjects covered in this, the sixth, edition of the *Archaeological Textiles Newsletter*. The subjects vary from textiles found during Japanese excavations in Iraq to the reconstruction of Anglo-Saxon embroideries. The editors are particular pleased in being able to include a contribution by the East German textile conservator Heidemarie Farke, and we hope that more information about current research in Eastern Europe will be included in forthcoming issues. Other items which have been included are some short notes about recent excavations in Egypt, namely, those by the Japanese at Akoris and an European excavation (English, French, Danish, Dutch team members) at the Roman site of Mons Claudianus. There is also brief notes about a recent exhibition about Palmyra held in Sweden, and some archaeological textiles now in the Hermitage Museum, Leningrad.

Several notes have also been received about recent or forthcoming conferences. It would appear from the report concerning the three day 'event' held in York that such meetings are becoming very popular. It is hoped that the meeting to be held in Manchester in September about *Levantine Textiles* will prove to be equally successful. Comments about these meetings, and any others which involve archaeological textiles, will be welcomed by the editors of the *Newsletter*. In particular it would be very interesting to have some information and comments about the meeting in Antibes, which has the title: *Tissage, Corderie et Vannerie*, which is due to take place in October of this year.

In addition to features such as Recent Theses we have also included a short poem about the plight of a weaver. If anyone has similar poems or short descriptions about the producers of textiles, etc., which they think may be of interest to other readers, could

they please send them to one of the editors, but please remember that poems with archaic words must be avoided or a translation should be provided! The poems, etc., need not be in English! French and German items will also be accepted!

There are so many entries in the Bibliography that there was no room for an Extended Bibliography. In their stead there are the contents lists from a number of conference papers and compilations which are relevant to the study of textiles. In the next issue of the *Newsletter* the *Extended Bibliography* should be resumed.

It has been suggested by several readers that it would be useful to have an idea of which subjects other members of the *Newsletter* are interested in, what they are currently working on and also what research facilities they can offer. Items for this new section should be about 100 words long and include some general information about the writer's current interests, past work, etc. The *Newsletter*, however, should not be used as a means of advertising for work, and no rates of pay, etc., can be included. In addition the *Newsletter* can take no responsibility for any work which may be privately contracted as a result of such notes.

Once again the time has come for subscriptions to be paid. The subscription remains the same: 15 Dutch Guilders or the equivalent in pounds sterling, per year (for two issues, including postage). Or better still could members please for two years at a time. Please remember that cheques other than those in guilders or pounds sterling cannot be accepted and we will have to send them back, as it costs us about \$3 to cash a \$4 cheque!!

Please remember that the deadline for the next issue of the *Newsletter* is October 1st, 1988.

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NOTES TO CONTRIBUTORS

The *Archaeological Textiles Newsletter* aims to provide a source of information for those who are studying textiles primarily as archaeological objects. Contributions to the *Newsletter* are welcome, and should be in accordance with this concept.

1. Contributions can be in English, German or French. If necessary, items in Russian will be accepted, but these will be translated into English.

2. Contributions may include short (!) references to recently published books, journals, articles and to forthcoming exhibitions, seminars, conferences, special courses, lectures etc., information concerning work in progress (see note 3), and any queries concerning the study of archaeological textiles.

3. Work in Progress: this is a general category which includes, for example, work on archaeological textiles from recent excavations or in museums. Items in this section should contain information (if available) about the following: where the textiles were found; the relevant dates; who excavated the site and when; the range of textiles found; who is responsible for the cataloguing of the textiles and where they are to be published. These notes should not exceed a maximum of five hundred words per item. Maps showing the position of the relevant sites would be greatly appreciated.

4. Line drawings will be considered, but photographs cannot be accepted at present.

5. The editors reserve the right to suggest alterations in the wording of items sent for publication.

6. The deadline for contributions is the 1st April and the 1st October, for the May and November editions respectively.

The views expressed by the various authors are not necessarily those held by the editors.

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LOGO

The logo is taken from the famous depiction on a Hallstatt urn, found at Odenburg/Soporn, Hungary. The original illustration shows three women who are spinning and weaving.

Colophon

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J. P. Wild.

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or money may be transferred to the following  
Dutch Giro Account: G. M. Vogelsang-  
Eastwood, 2567328, again using the contact  
address given above.

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The Irish Linen Weaver's Song

(quoted by R. Showell, in *The Journal for Weavers, Spinners and Dyers*, 144 (Autumn 1987), 18.

You will easy know a weaver  
When she comes into town,  
With her ol'tatty hair  
And her stockin's hanging down,  
And her apron tied before her,  
And her scissors in her hand,  
You will easy know a weaver,  
For she'll never get a man.

## EXHIBITIONS

## WHALING IN THE GOLDEN AGE, EXCAVATIONS ON SPITSBERGEN

(9th July to 9th October, 1988)

During the summer months of 1988 a large exhibition will be held in the Rijksmuseum, Amsterdam, in cooperation with the Arctic Centre of the State University of Groningen. Both historical and archaeological data will be presented at the exhibition. One major group of archaeological finds is formed by a large collection of 17th and 18th century textiles, including complete garments worn by the whalers.

In a series of campaigns spanning the years 1979 to 1981, the excavation team of the Arctic Centre, under the direction of Dr. L. Hacquebord, has investigated the material remains left by the 17th and 18th century whalers on Spitsbergen. Amongst the sites excavated was the Dutch whaling station of Smeerenburg on Amsterdam Island in northwest Spitsbergen, where, during the summer months of 1614 to 1660 A.D. the harpooned whales were processed.

A total of well over 600 different textiles were recovered from the domestic refuse in and behind the houses of Smeerenburg. These finds were predominantly made up of work clothes. The recognizable parts of the woollen clothing included a jacket, two pairs of breeches, a shirt, felt hats, a knitted cap and many fragments of knitted stockings.

A cemetery on Zeeuwse Uitkijk was also investigated, where, from about 1640 onwards many whalers found their last resting place. Fifty 17th and 18th century graves were opened for skeletal analysis and many of the graves contained clothed bodies. Some of the whalers had been buried in their woollen clothing, while the other bodies were probably buried in a shirt or a shroud made from perishable materials, such as linen. Only the better preserved woollen garments could be brought to the Netherlands. These include 33 knitted caps, 1 leather cap trimmed with fur, 7 jackets, 3 breeches, 5 pairs of stockings, a beautiful embroidered piece of cloth and a linen sack.

Many of these textiles and several replicas, which give a good impression of the practical clothing worn by whalers and sailors, can be seen in the Rijksmuseum.

In conjunction with the exhibition there is a catalogue with the same name. The catalogue contains articles by various authors on the subject of the Dutch whaling trade during the 17th and 18th centuries. There is a long article about the textile finds with many illustrations, a number of which are in colour. All the articles are in Dutch, but they have English summaries. Price: ca. Dfl. 40.

Sandra Vons-Comis,  
Rijksmuseum,  
Stadhouderskade 42,  
1071 ZD Amsterdam

The Rijksmuseum is open: Tuesday - Saturday:  
10-17 hours (closed on Monday)

Sunday: 13-17 hours

## CONFERENCES

## LEVANTINE TEXTILES

The Fourth Biennial Conference of the Early Textiles Study Group will be held at Ashburne Hall, The University of Manchester, from Friday 16th September to Sunday 18th September, 1988. The theme for the conference is "Levantine Textiles" and the invited speakers include:

A. Sheffer, Tel Aviv University, on:  
"Textiles from Masada (1st century A.D.)"

A. Baginski, Shenkur College of Textiles, Israel, on: "Textiles in the Mishna and Talmud".

R. Germer, University of Hamburg, on:  
"Evidence for Dyeing on Ancient Egyptian Textiles".

J. Allgrove-MacDowell, former Keeper of Textiles, Whitworth Art Gallery, University of Manchester, on: "Textiles from Middle Kingdom Kahun".

Other speakers to be announced.

On the Saturday afternoon there will be a visit to the Egyptian collection at the Manchester University Museum, where Dr. R. David has kindly agreed to show the Kahun and other Pharaonic textiles, both on display and in the reserve collection.

The cost of the conference, to include accommodation and full board, will be £40. Please state if vegetarian diets or other special needs are required. Cheques, payable to the "Early Textiles Study Group", should be sent to the Early Textiles Study Group, c/o R. Hall, Dept. of Egyptology, University College, Gower Street, London WC1E 6BT. Further information can be obtained from the same address.

R. Hall.

## TISSAGE, CORDERIE ET VANNERIE

Co-organisées par le Centre de Recherches Archéologiques du CNRS et le Musée Archéologique d'Antibes, les Rencontres Internationales d'Histoire et d'Archéologie d'Antibes ont un double objectif:

- rassembler autour d'un thème d'étude des archéologues et des historiens de toutes spécialités et qui se consacrent à des périodes et des espaces différents;
- favoriser des approches interdisciplinaires par la participation de chercheurs d'autres domaines scientifiques

Pour ces IX<sup>èmes</sup> Rencontres le thème est:

Tissage, Corderie et Vannerie

Un tel titre met davantage l'accent sur les activités que sur les objets qu'elles produisent (vêtements, cordes et paniers). L'analyse de ceux-ci n'en constituera pas moins un volet important de ces Journées, notamment lorsqu'il s'agira de documents uniquement révélés par leurs empreintes ou de documents qui ne se conservent que dans des conditions particulières. On abordera pour ces derniers les techniques nécessaires à leur conservation et à leur étude. Les matériaux retiendront aussi l'attention. On s'attachera à caractériser des techniques et à cerner les aspects sociaux de ces activités, de manière à faire apparaître évolutions, décalages et ruptures entre la Préhistoire et l'ère industrielle.

Ces Rencontres de dérouleront du 20 au 22 octobre 1988 au Palais des Congrès de Juan-les-Pins.

Droits d'inscription: 300 francs. Ces droits comprennent la fourniture du dossier des Rencontres et le volume des Actes ainsi que 25 tirages-à-part, par communication, pour les auteurs.

Le bulletin d'inscription doit être retourné accompagné du chèque correspondant - libellé au nom de l'A.P.D.C.A. - compte no. 6 186 32R, CCP Marseille.

Les bulletins accompagnés des droits d'inscription seront seuls pris en considération.

Secrétariat des Rencontres d'Antibes,  
C.N.R.S: Centre de Recherches Archéologiques  
250 rue Albert-Einstein  
Sophia Antipolis  
06565 VALBONNE Cedex  
France

IRAQ

The At-Tar Caves in Iraq  
(Map 1)

The At-Tar Caves are situated 110 km south-west of Baghdad, 30 km south-west of Kerbala and 80 km west of the ancient capital, Babylon. Here, between the lakes of Bahr al-Milh (Razaza Lake and Bahr an-Najaf), about 480 man-made caves were discovered on the face of a series of marl stone escarpments. These are divided into four groups: Hill A; Hill B; Hill C, and Hill D.

From 1971 to 1984, the party, Kokushikan University Expedition, under the leadership of Prof. H. Fujii, was engaged in the excavation of Hill A and C at the At-Tar Site.

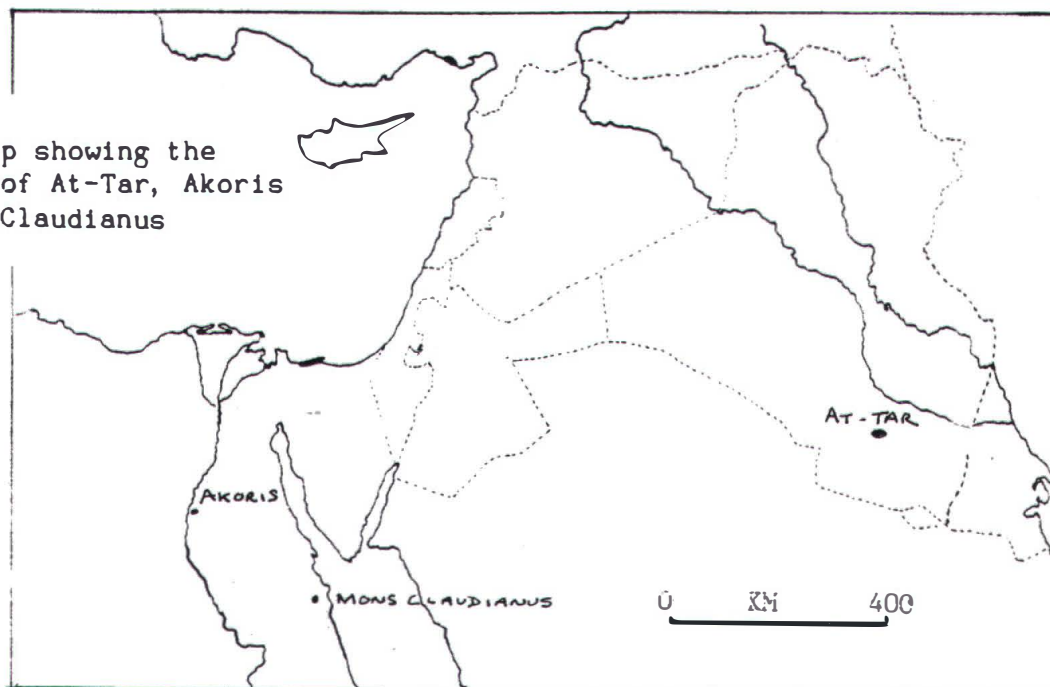
According to the radiocarbon dates of the textiles, leather and date seeds unearthed at the site, these caves were used at two different times for distinct purposes. The purpose of the original excavation at the site is still subject to debate, but it is certain that they were reused as burial chambers from the 3rd century B.C. to the 3rd century A.D.

In 1976 and 1980 two preliminary reports on the archaeological textiles discovered at the At-Tar Caves were published. Following these publications, we proceeded with the identification work, according to material, colour, design, structure, etc., of the fragments. The results of the identification work were published for the first time in 1986. The publication reported the new discoveries from the sixth excavation.

The following is an outline of the textiles.

Textiles in wool predominate in number. Textiles made of cotton, flax, or hemp were also found. Wool fibres, spun into threads, are sometimes as fine as 13 to 20 $\mu$  and rather long. Some threads have an apparent diameter

Map 1 Map showing the position of At-Tar, Akoris and Mons Claudianus



of less than 0.2 mm. The yarns can be classified into: single yarns, 2-ply yarns, 3-ply yarns, 4-ply yarns. Concerning the yarns used for making the colour gradation, the unspun wool, which has been dyed into two or more colours in advance, is then spun into the yarns of neutral shades with a proper colour gradation ('shaded bands'). Tabby variations (lousine), twill 2/1 and 2/2 were found. The crossing of warps is sometimes observed near or at the border line between ground and design portion in order to alter the structure. Four types of selvedge were woven into the fabrics from At-Tar: plain selvedge; reinforced selvedge by regular weft; reinforced selvedges by additional thread, and decorative selvedges by additional thread. Three types of finishing border were observed: fringes, closed cord, and hem stitch.

Other than the fabrics described above, we found pile textiles which have been categorised into five structures: Turkish knot; Persian knot; Coptic knot, the knot peculiar to At-Tar, etc. Some examples of double faced pile textiles were also found. Some pile textiles have border decorations in a stripe pattern near two edges.

The main designs of the fabrics from At-Tar are: H-shape patterns; Γ-shaped patterns; portraits; floral designs and wave patterns, all of which were woven using tapestry weave techniques.

The H or Γ-shaped patterns on a yellow ground are also found among the fabrics from other sites such as: Palmyra, Dura-Europos, The Cave of Letters, and certain tombs in Nubia. The frescoes depicting human figures clad in mantles at the synagogue in Dura-Europos have already been used to identify fragments bearing H or Γ-shape patterns.

Floral designs such as on the axis band are observed in textiles with a horizontal stripe. On either side of the floral design band, the wave pattern band is found and parallel to it is the shaded colour band. These three designs are always combined in a symmetrical arrangement. This composition of mirror symmetry [1] developing in two directions from the axis band has been confirmed in the examples uncovered at Palmyra, Dura-Europos, Noin-Ula and Kertch. These sites date back to the 1st-3rd century A.D.; 3rd century B.C. - 3rd century A.D.; 1st century B.C. to 1st century A.D., and 1st century B.C. to 1st century A.D. respectively.

Portraits are framed by a border decoration of wave pattern or continuous triangles. In composition and representation portraits from At-Tar are similar to those of mosaic pavements at Antioch, where the portraits are done in Graeco-Roman style. The features of the above mentioned fabrics from At-Tar suggest that aspects of Mesopotamian culture combined with those of Roman and Jewish culture, produced the textiles found at At-Tar.

Such being the case, the discovered textiles, to the best of our knowledge, can be dated to the Roman period. Further study will be necessary to ascertain the exact age of the fabrics.

The results of the study on the textiles from At-Tar (Cave 12, 16 Hill C) will be reported in English in a few years time.

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Japan.

[1] In this context the use of the term mirror symmetry is not meant to imply perfect symmetry.

ed. H. Fujii, *At-Tar I, Excavations in Iraq, 1911-1975*, Tokyo (1976; in English).

ed. H. Fujii, *Al-Rafidan, Journal of Western Asiatic Studies*, 1 (1980): A special edition on the studies of textiles and leather objects from At-Tar Caves, Iraq, Kokushikan University, Tokyo (in Japanese, with the data in English).

H. Fujii, Y. Takagi; K. Sakamoto, H. Okada and M. Ichihashi, "Textiles from At-Tar Caves, Iraq", *Al-Rafidan III-IV* (1985; in English).

K. Sakamoto, "Ancient pile textiles from the At-Tar Caves in Iraq", *Oriental Carpet and Textile Studies I* (1985).

H. Fujii and K. Sakamoto, "Archaeological Textiles, new discoveries from At-Tar Caves (Cave 12 Hill C) -- the sixth Excavation", *Al-Rafidan*, VII (1986; in Japanese and English).

## EGYPT

### Akoris, Egypt.

It would appear that the recent Japanese excavations at the Egyptian site of Akoris have resulted in the discovery of a number of Coptic period textiles. The expedition was conducted by the Heian Museum, Japan. It is hoped that further information about this excavation and the textiles will be included in a forthcoming issue of the *ATN*, but in the meantime, should anyone have other details about these finds I would be very interested in hearing from them. My thanks to K. Sakamoto for the above information.

G. M. Vogelsang-Eastwood

### Mons Claudianus, Egypt

(Map 1)

Recent British, French, Danish and Belgian excavations at the Red Sea Mountains quarry site of Mons Claudianus have uncovered a wealth of first, possibly second century A.D. textiles. These have all been found in the rubbish areas of the site.

A brief survey of some of the textiles has already been carried out by J. P. Wild, and they are regarded as being 'typically' Roman in appearance. So far only wool or flax textiles have been recorded. Many of the wool textiles include purple or dark blue bands. There is no indication, however, that any decorative tapestry examples, in the manner of the so-called 'Coptic' tapestries, have been found.

The textiles will be recorded and prepared for publication by G. M. Vogelsang-Eastwood and I. Blom, Leiden. As the excavations will take place over a number of years, it will be a while before a final report can be published. In the meantime, however, it is proposed that regular preliminary reports will be made available.

G. M. Vogelsang-Eastwood  
and I. Blom

#### GERMAN DEMOCRATIC REPUBLIC

Gewebereste an 2 Vogelfibeln, Völkerwanderungszeit Großengottern, Bezirk Erfurt, DDR.

Bei Bauarbeiten in Großengottern, Bezirk Erfurt, DDR, wurde 1984 ein völkerwanderungszeitliches Grab angeschnitten und aus dem Aushub 2 kleine Vogelfibeln, Silber mit Goldauflage, Nadelspirale, Nadelsehne und Spiralachse aus Eisen, geborgen. Die Fibeln waren mit Erde und Korrosionsprodukten, vor allem auf der Rückseite, fest verbacken. Nach umfangreichen Voruntersuchungen konnten Faserreste auf den Fibelrückseiten freigelegt werden. Es galt die Metallverbindungen auf und in den textilen Anhaftungen bei gleichzeitiger Reinigung, ohne den Erhalt derselben und der Silberfieln zu gefährden, zu entfernen. Dies gelang zum Teil recht gut unter differenzierter und vorsichtiger Anwendung eines Komplexons, 10%ige Chelaplex-III-Lösung.

Auf den Rückseiten beider Vogelfibeln konnten Gewebereste in mehreren Schichten, Stoffumbruch und Saum, Nähfäden im Vorstich und Fadenösen freipräpariert werden (fig. 1).

Bei allen verarbeiteten Textilfäden ist als Rohstoffmaterial Flachs identifiziert worden.

An einer Fibel war der Nadelschuh abgebrochen, so daß die Nadel nicht mehr in demselben hielt. Dieser Verschuß wurde "repariert", in dem man um den Fibelkopf, den Nadelhalter und die dort endende Nadelspitze mehrfach einen feinen, kräftigen Zwirn wickelte (fig. 2).

Bei beiden Fibeln steckte die Nadel jeweils in zwei Oesen, die an den umgeschlagenen Stoffkanten zweier Textilstücke angenäht waren. Die Oesen sind aus 3 Einzelfäden, mit festem Schlingstich umwunden, gebildet. Die Fibel hielt also zwei Teile der Bekleidung, ohne daß die Nadel den Stoff durchstach, zusammen (figs, 3,4). Die aufeinandergenähten Gewebe sind wahrscheinlich zwei Textilien zuzuordnen, obwohl vom gleichen Fadenmaterial ausgegangen worden ist.

Gewebe:	
Rohstoffmaterial	: Flachs
Bindung	: Leinwandbindung
Kette und Schuß	: Z-Draht-Garn, $\emptyset = 0,3 - 0,4$ mm
Gewebedichten	: 20 Kettfäden x 15 Schußfäden 18 Kettfäden x 15 Schußfäden 20 Kettfäden x 20 Schußfäden
Nähfäden	: 2 fädiger S-Draht-Zwirn, $\emptyset = 0,5$ mm, aus zwei Z-Draht-Garnen, $\emptyset = 0,3$ mm,
Flachs Oesen	: 2 fädiger S-Draht-Zwirn, $\emptyset = 0,8$ mm - 1 mm aus zwei Z-Draht-Garnen, $\emptyset = 0,3$ mm - 0,4 mm Flachs

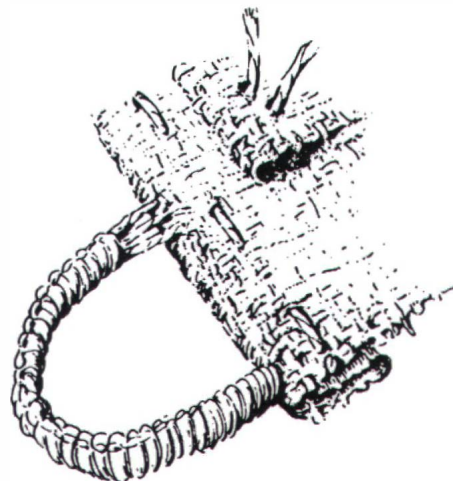


Fig. 1 Gewebereste, Stoffumbruch und Saum, Nähfäden, Fadenöse.

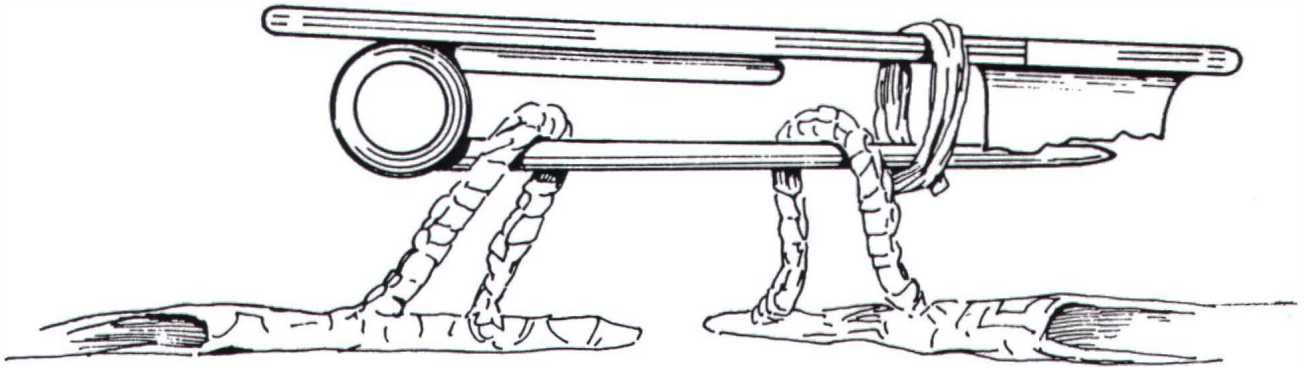
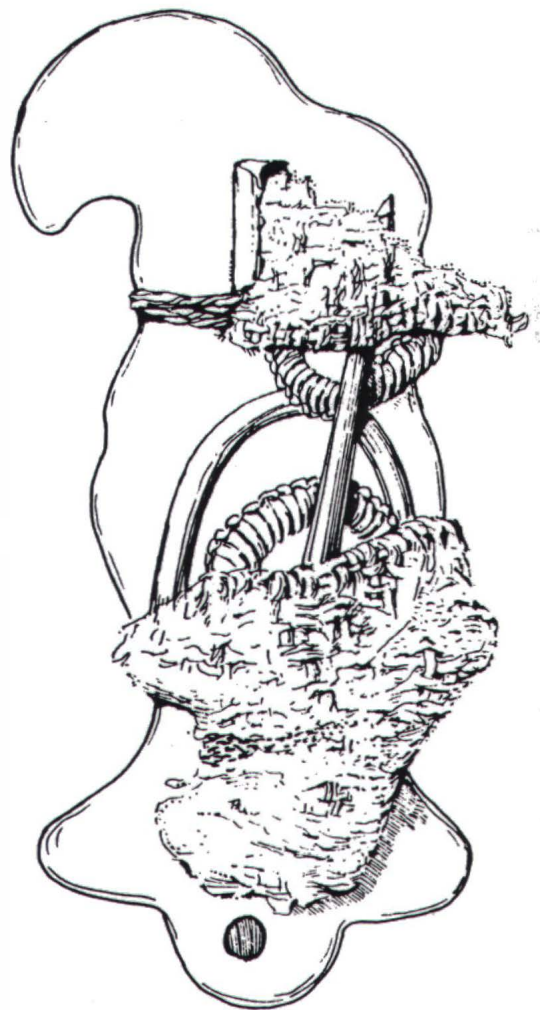


Fig. 2 "Reparierter" Fibelverschluss, Nadel führt durch Fadenösen zweier Bekleidungssteile

Fig. 3 Freipräparierte Gewebe- und Fadenreste auf einer Fibelrückseite



Reparaturfaden : 2 fädiger S-Draht-  
Zwirn,  $\varnothing = 1\text{mm}$ , aus  
zwei Z-Draht-  
Garnen,  $\varnothing = 0,4\text{mm}$  -  
 $0,5\text{mm}$ , Flachs.

Mit dem vorliegenden Befund ist ein Beleg für die Tragweise von Gewandspangen gegeben. Aus unserem Gebiet ist dies der erste Beweis von "konfektioniertem" Kleidungsverschluß. In wenigen Publikationen wurde schon erwähnt, daß Fibelnadeln durch Löcher oder Oesen zum Schließen von Gewandteilen oder Faltenraffung geführt werden. Leider sind mir keine differenzierteren Publikationen bekannt, und für jeden Hinweis diesbezüglich wäre ich sehr dankbar.

Heidemarie Farke,  
Restaurator,  
Museum für Ur- und Frühgeschichte Thüringens,  
Humboldtstraße 11,  
Weimar 5300,  
DDR.

0 10 mm

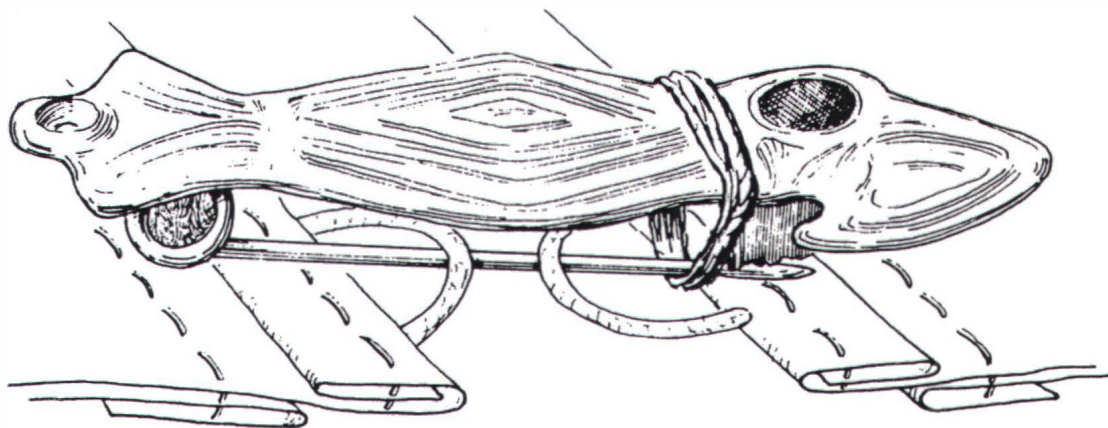


Fig. 4 Trageweise der "reparierten" Vogelfibel

#### Fibre Preservation in Two Carbonised Textiles from Soba

Two fragments of carbonised fabric from the medieval site of Soba, The Sudan have been examined with the Scanning Electron Microscope (SEM) to establish the extent of preservation of the fibre structure. A trial examination without gold coating using the back-scatter detector produced inadequate image quality, and gold coating was therefore considered essential.

Sample 1 (ref. B 25 67 2466 ), a plain tabby with highly twisted warp, 10 ends/cm, and a softer twisted weft with 4.5 picks/cm, was well preserved both at the macro fabric level, and at the fibre level where the characteristics of cotton were clearly visible in both thread systems.

Sample 2 (ref 27 98 2398 ), a fine Coptic knitted (crossed-loop knitting) fragment with 4.5 courses/cm and 2.5 wales/cm was also exceptionally well preserved. The plyed yarn structure (two ply) and the loop structure was obvious and at higher magnifications x750 - x1500 the fibre characteristics of cotton were again apparent in both singles yarns. A further increase in magnification of x400 - x1600 showed the internal structure of the fibres was still intact. It was possible to establish the degree of maturity of broken fibres, and also

prove that another fibre, most probably wool, was intimately blended with the cotton.

The extent of the fibre preservation in these two carbonised fragments is very encouraging. It is particularly significant that the internal structure of the fibre visible in the brittle fractures will enable confident fibre identification despite the erosion of the fine surface structure during oxidation.

This article reports the initial investigation of these fragments. Further work will reveal the proportions of the blend, and confirm the identity of the blend fibre. If necessary careful sample preparation would enable fibre diameter distributions to be measured with the SEM, as well as the accurate determination of macro fabric details such as yarn diameter, turns of twist/cm and the analysis of the extent of use and wear. It is not possible to be sure at this stage whether these two samples are typical of other carbonised textiles, and the author would be interested to hear from other researchers able to provide fragments for SEM analysis.

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### A Practical Reconstruction of 8th Century A.D. Embroidery Techniques

Readers are doubtless familiar with recent research concerning the early Medieval textiles at Maaseik, Belgium, forming, at the time of the research cited, a complex jigsaw of fragments [1]. Early last year the writer began a reconstruction, now complete, to analyse the practicalities of the embroidered work therein. Four strips were covered with gold thread, surface couched in designs of beasts, birds, foliates and interlace within a series of arcades. A six-coloured mosaic background of silk was worked in minute split stitch. Most of the gold had disappeared and the embroideries had warped badly. The most complete of the strips was chosen for reconstruction, approx. 63 cm x 10 cm on an even weave linen of 20.26 thread per cm.

A 1:1 line drawing had to be redrawn with the distortions of shrinkage and warping eliminated to prepare a pattern for transferring onto the fabric, which was then mounted on a simple tenter frame (fig. 5). Tension was an immediate problem, the heaviness of the gold and the density of the split stitching wholly altering the nature of the linen. Evidently, the order of working was paramount. Experiments have revealed that motifs should be worked outwards from a central core; component sections inwards toward their own centres. Equally important was the order of the colour application before the addition of the gold. It became clear that precise quantities of respective shades had been allowed for each motif and these were recorded. If certain rules were followed, perfect tension was achieved, motif sets (arcade, pier, spandrel) averaging 30 hours work. The technique was one of immense efficiency and economy. The 'cultural shock' of seeing an 8th century embroidery in its original state, combining such vibrance and richness of design and application outstripped all expectations.

The embroidery is available for loan/exhibition/study: enquiries to the writer, who is happy to undertake explanations/lectures [2].

Helen M. Stevens,  
The Mill House,  
Market Weston,  
Diss,  
Norfolk, IP22 2PE,  
England.

[1] M. Budny and D. Tweddle, "The early Medieval textiles at Maaseik, Belgium", *The Antiquaries Journal*, LXV, pt. II (1985), 353-389.

[2] Initial exhibition 7-24 June 1988, Bury St. Edmunds Art Gallery Suffolk. Other venues arranged.

### Textiles for the Archaeological Conservator

At the York Archaeological Trust on the three days from the 27th to 29th of April 1988 there were two one-day workshops and a one-day conference devoted to the subject of archaeological textiles. The event was held on behalf of the Archaeological Section of the United Kingdom Institute for conservation, and was organised by Sonia O'Conner (York Archaeological Trust), Penelope Walton (freelance Textile Consultant) and Dr Allan Hall (Environmental Archaeology Unit, University of York). Originally only one one-day workshop was envisaged, but demand was so great that this had to be repeated on the day after the conference and both the conference and workshops were fully booked well in advance.

The conference on the 28th had been organised by Sonia and was designed to bring together papers on a wide range of topics which all had a bearing on the conservator's approach to archaeological textiles. The programme was as follows.

"An Introduction to Textile Studies", Dr. J. P. Wild, University of Manchester.

"The Significance of Creases in Archaeological Textiles", H. Granger-Taylor, Institute of Archaeology (Roman Department), University of London.

"Missing Threads and Their Meaning (with particular reference to Medieval textiles)", F. Pritchard, Museum of London.

"Fibres and Fibre Damage in Archaeological Textiles", B. Cooke, Department of Textiles, UMIST.

"The Cleaning of Archaeological Textiles", L. Hillyer, Textile Conservation, Victoria and Albert Museum.

"Free-drying Archaeological Textiles: The Need for Basic Research", E. R. Peacock, Conservator, University of Trondheim Museum.

"A Mounting and Storage System for Archaeological Textiles", L. Morrison, Saffron Walden Museum.

"The Examination of a Set of Egyptian Mummy Fabrics from the XIIth and XXVIth Dynasties", M. Hann, Department of Textile Industries, University of Leeds and R. Janaway, School of Archaeological Sciences, University of Bradford.

"The Conservation and Analysis of Textiles from the Excavation of the Crypt at Christchurch Spitalfields", R. Janaway.

"The Conservation of Four Egyptian Tunics", V. Lochhead, North West Museum and Art Gallery Service.

"The Further Conservation of the Baynards Castle Textiles", L. Morrison, Saffron Walden Museum.

"The Conservation of Medieval and Later Shrouds from Burials in North West England", J. Glover, Senior Textile Conservation Officer, North West Museum and Art Gallery Service.



(right)  
Cutline showing suggested fields  
originally filled with gold,  
incomplete and badly distressed

(above)  
Design format. Arrows indicate  
final direction of working



'SET 7' IN STRIP OF ARCADED MOTIFS

'SET 7' IN STRIP OF ARCADED MOTIFS

(right)  
Re-drawn in correct alignment  
to include positions of mosaic  
infill.

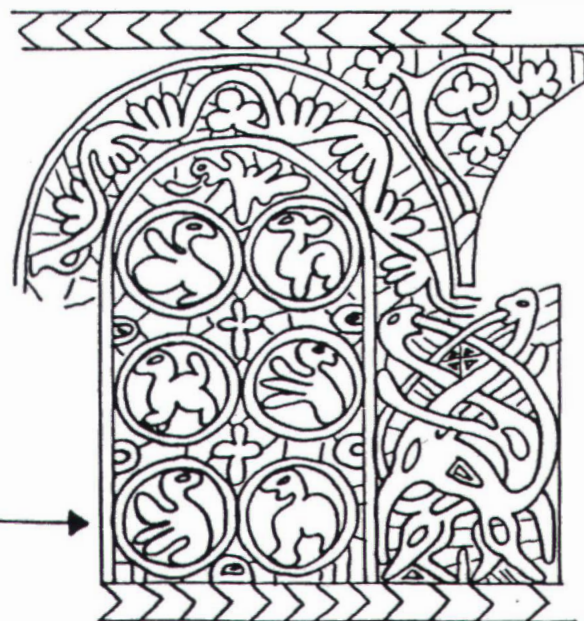


Fig. 5 Reconstruction of an 8th century embroidery

The practical workshops were designed to complement the conference. A total of 27 attended the workshops on the 27th and 29th April, in the YAT Conservation Laboratories. Penelope and Allan led practical sessions on spinning and weaving techniques, dyeplants and dyeing, plant and animal fibre identification and fleece types, and weave and dye identification. The handling and washing of archaeological textiles was also demonstrated and participants were encouraged to bring along their own material for examination.

It is hoped that the papers from the conference will be published by UKIC as part of its Occasional Papers series.

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York, YO1 2NA,  
England.

**Some Textiles in the Hermitage Museum, Leningrad.**

With the help of a Pasold Travel Grant I have recently been able to see various archaeological textiles now housed in the Hermitage Museum, Leningrad. During the visit I was able to see the textiles from the frozen tombs of Pazyryk, Siberia (5-4th centuries B.C.) which are currently on display, as well as silk textiles from the site of Motchevaya Balka (7-9th century A.D.). Only about 15 textiles from the latter group are on display, but the collection contains at least 200 items including complete garments. These are currently being catalogued and prepared for publication by Dr. A. Jeroussalimskaja.

The textiles I particularly wanted to see were found at the Crimean site of Kertch and date from about the first to fourth century A.D. These were excavated during the early 19th century and sent to Leningrad in the 1840's. These textiles have been described in various articles and books since the 1880's as being woven in a weft-faced compound tabby in wool (*taqueté*), and as such they are regarded as key examples in the history of this weave. A close examination of one of the textiles which has bands of H-shapes (the other was not available), however, has shown that it is not a *taqueté* form. A diagram of the weave has been given in figure 6. When re-examining the photographs of both textiles which were published in 1879 it would seem that they were woven in the same manner [1]. So far I have been unable to find any parallels to this weave, but it is possible that it represents a local weave form.

In addition to the Hermitage textiles it was also possible to see some early textiles (circa 1000 A.D.) from the site of Zalakhtovie, on the eastern shore of Lake Chudskoye which are believed to be Finnish in origin. These textiles have been published in two short articles (in English and Russian) by N. V. Khvoshchinskaya, The Archaeological Institute, Leningrad, but Mrs. Khvoshchinskaya would be more than willing to answer any questions about these pieces and would welcome comments [2].

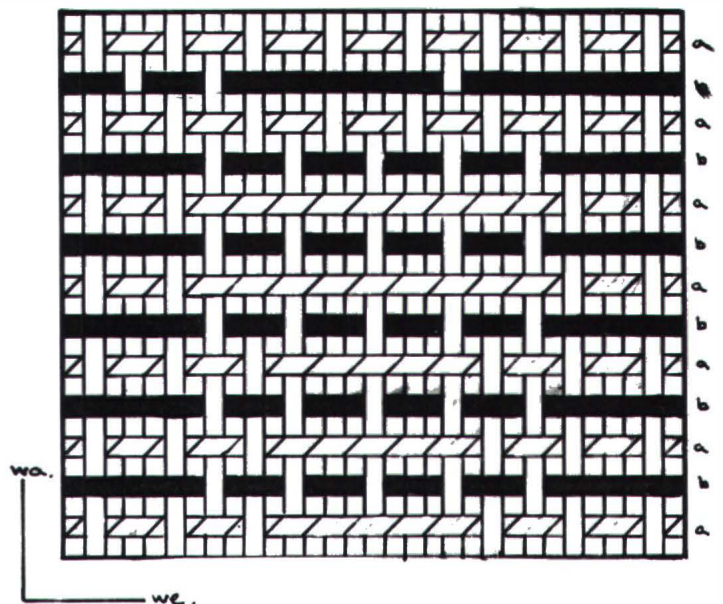
Finally, I should like to thank the Pasold Institute, London, for their generosity in providing me a travel grant; members of the Archaeological Institute, Leningrad and the Hermitage Museum, Leningrad for their great kindness and help in allowing me to see all the textiles I wished to inspect.

G. M. Vogelsang-Eastwood.

[1] L. Stephani, "Erklärung einiger Kunstwerke der Kaiserlichen Ermitage und anderer Sammlungen", *Compte-rendu de la Commission Impériale Archéologique pour les années 1878 et 1879*, St. Petersburg (1881), pls V. 5 and VI. 4.

[2] N. V. Khvoshchinskaya, "Dress of the Finnish population of the early second millenium A.D. in the western areas of the Novgorod land", *ISKOS*, 4 (1984), 174-178.  
N. V. Khvoshchinskaya, "Новые Данные О Мужской Одежде Населения Окраин Новгородской Земли" (New data on men's clothing of the Ukraine people of the Novgorod region), *Краткие Сообщения*, 179 (1984), 39-44.

Fig. 6 Weave diagram for a 2nd/3rd. century A.D. textile from Kertch, now in the Hermitage Museum.



Palmyra - Queen of the Desert

The Mediterranean Museum (Medelhavsmuseet) in Stockholm played host from 11th February to 8th May 1988 to a small but unusually important exhibition of Roman and Parthian art from Palmyra, the most famous of the great caravan cities of the Syrian desert. Aptly titled 'Palmyra: Queen of the Desert', it included not only examples of public and private sculpture, but on the initiative of Margaret Nockert of the Statens Historiska Museum, a selection of some of the most important Roman textiles (and two Chinese textiles) from the site, which have never been seen in Europe before.

Many of the pieces are very well known, not to say controversial, and were published in the 1930s and 1940s by Rudolf Pfister in three reports that were for their day outstanding. Now Margareta Nockert has not only conserved and mounted the textiles, but re-examined them technically and recorded the principal findings in the exhibition catalogue (*Palmyra: Ökens Drottning*, pp 77-105). In particular she has been able to identify a selvedge on a fine wool diamond twill and thus add fuel to the argument about the relationship between the diamond twills of Palmyra and superficially similar pieces from Birka and other northern Viking sites, which were displayed in the exhibition juxtaposed.

The exhibition proved, if that was necessary, that there can be no substitute for seeing textiles, however well published: the effect was breathtaking. The Chinese and Roman silks, for instance, were essential viewing. Some background to the Palmyra story was provided by a charming series of children's tunics from the neighbouring site of Halabiyeh-Zenobia, also exhibited was one of the characteristic Persian riding coats from Antinoë in Egypt. The catalogue *Palmyra: Öknens Drottning* is excellent value at Skr 40.

John Peter Wild

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RECENT THESIS

L. H. Abdel-Malek, *Joseph Textiles and Related Coptic Textiles*, Ph. D. thesis, Boston University, (1980).

"CONTRIBUTIONS TO THE HISTORY OF TEXTILES"

A new series about the history of textiles has recently been arranged under the auspices of Brill, Leiden. The range of books to be considered in this series includes any scholarly study which contributes to the history and development of textiles.

Anyone interested in contributing to this series should contact G. M. Vogelsang-Eastwood, Van Swietenstraat 45, 2334 EA Leiden, The Netherlands.

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Two books have recently been published and sent to the *Newsletter* which are relevant to the study of archaeological textiles, namely:

a I. Cock-Clausen, *Tekstilprøver fra danske arkiver og museer 1750-1975*, (Textile samples from the archives of Danish museums, 1750-1975) Borgens Forlag, Copenhagen (1987), ISBN 87-418-8188-5. Written in Danish, but with a very brief English summary. 563 pages with many photographs and illustrations, some in colour.

b J. Becker, *Pattern and Loom*, Rhodos, Copenhagen (1987), ISBN 87 7245 151 3 and 87 7245 8 (a supplement containing pattern drafts). 307 pages with many black and white and colour photographs and illustrations.

The first book, as the name suggests, contains a brief description and, in many cases, illustration of woven and printed textiles dating from 1750 to 1975. The catalogue entries contain the following information: origin, collection, date, type of object, material, method of production, approximate size, brief description of its appearance and condition, some general comments and finally, relevant literature.

The second book, also from Denmark, is a general survey of the history and development of looms suitable for producing complex, patterned textiles. It starts with textiles and looms in ancient China and finishes with modern experiments on drawlooms in Denmark. The book is particularly interesting for Becker's experiments in re-weaving patterned textiles found at various archaeological sites from throughout the Old World.

## BIBLIOGRAPHY

- L. Bender Jørgensen, "Metoder og kildekritik i tekstilforskningen. Et svar på et debatoplæg", *Tor*, 21 (1986/87), 263-281.
- L. Bender Jørgensen, "Jernalderfolkets klesdrakt", *Spor*, no. 2 (1987), 4-7.
- L. Bender Jørgensen, "A survey of North European textiles", *Studien zur Sachsenforschung*, 6 (1987), 99-122.
- H. Böhmer, "Purple obtained with natural dyes in Anatolian pile carpets and flatweaves", *Oriental Carpet and Textile Studies*, III, pt. 1 (1987), 127-133.
- J. Bourgeois, review of L. Bender Jørgensen, *Forhistoriske tekstiler i Skandinavien. Prehistoric Scandinavian Textiles*, in: *Helinivm*, XXVII (1987), 150-152.
- E. J. W. Bunting, *Sindhi Tombs and Textiles*, Albuquerque, (1980).
- E. Cockburn, "Cotton in Ancient Egypt: An unfinished story", ed. R. A. David, *Science in Egyptology*, Manchester (1986), 469-473.
- I. Cock-Clausen, *Tekstilprøver fra danske arkiver og museer 1750-1975*, Copenhagen (1987: not on archaeological textiles, but it is an invaluable, scholarly work on textile samples from Denmark which date from between 1750-1975, L. B. J.).
- P. Collingwood, *Textile and Weaving Structures: A Source Book for Makers and Designers*, B. T. Batsford Ltd., London (1987, price £14.95)
- E. Crowfoot, "The textiles", in: ed., V. I. Evison, *Dover: the Buckland Anglo-Saxon Cemetery*, London (1987), 190-195, 403.
- J. Dolejšová, "Funde von Textilresten in Komárno-Schiffswert", *Slovenská Archaeológia* XXXV-2 (1987), 385-390.
- N. Evans, *The East Anglian Linen Industry (Rural Industry and Local Economy 1500-1850)*, pub. by Gower for the Pasold Research Fund (Pasold Studies in Textile History, 5, 1985), Aldershot and Vermont.
- E. Fischer, J. Jaon, H. Shah, *Tempeltücher für die Muttergöttinnen in Indien*, Zurich (1982).
- E. E. Guðjónsson, "Nytjavefnaður og listræn textiliðja á Íslandi á miðöldum", *Hugur og Hónd*, (1987), 6-10 (the article is about early Icelandic textiles from archaeological and historical contexts).
- E. E. Guðjónsson, "A many-coloured web", *Atlantica*, (1987), 35-38 (*Atlantica* is the in-flight magazine for Icelandair).
- I. Hägg, "Textilhistoria, statistik och källkritik, 2", *Tor*, 21 (1986/87), 283-296.
- H.-J. Hundt, "Les textiles de la tombe de Hochdorf de Surprenants témoignages sur les anciennes techniques artisanales", *Trésors des Princes Celtes*, Paris (1987), 137-146.
- H.-J. Hundt, *Nachtrag zu den Textilresten aus dem fränkischen Knäabengrab unter dem Kölner Dom*, (1987), 237-242.
- A. Jeroussalimskaya, "Погребальный культ и некоторые верования Раннесредневековых племен Северного Кавказа (По материалам Могирника Мошевая Балка, VIII-IXBB)" (Le rituel funéraire et les cultes de Tribus), *Iranica Antiqua*, XVIII (1983), 179-197.
- H. Keiling, "Parum, Kreis Hagenow. Ein Langobardenfriedhof des 1. Jahrhunderts (Materialhefte zur Ur- und Frühgeschichte Mecklenburgs Bd. 1), Schwerin (1986). On page 20 there is a brief entry entitled, *Gewebereste*.
- N. V. Khvoshchinskaya, "Dress of the Finnish population of the early second millenium A.D. in the western areas of the Novgorod land", *ISKOS*, 4 (1984), 174-178.
- N. V. Khvoshchinskaya, "Новые Данные О Мужской Одежде Населения Окран Новгородской Земли" (New data on men's costume from the Ukraine during the Novgorod period), *Краткие Сообщения*, 179 (1984), 39-44.
- U. Körber-Grohne, "Les restes de plantes et d'animaux de la tombe princière d'Hochdorf", *Trésors des Princes Celtes*, Paris (1987), 147-154.
- U. Körber-Grohne, *Nutzpflanzen in Deutschland*, Stuttgart (1987: a good handbook on usable plants with chapters on, for example, flax by one of Europe's leading palaeobotanists, L. B. J.).
- H. Masurel, "Les tissus de l'Age du Fer", *Archéologia*, 189 (1984), 43-55.
- H. Masurel, "Esquisse de la personnalité du tisserand de l'Age du Fer", *Antiquités Nationales*, 18/19 (1987-87).
- H. Masurel, "Confrontation de vestiges textiles appartenant à l'Age du Fer et provenant d'Allemagne, d'Autriche, d'Italie et de France", *Bulletin de la Société Préhistorique Française*, 83, no. 10 (1986), 353-362.
- H. Masurel, "Le tisserand d'Apremont", *Archéologia*, 229 (1987), 28-30.
- H. Masurel, "Les vestiges textiles de la motte d'Apremont", in: *Trésors des Princes Celtes*, Paris (1987), 79-85.

B. C. Mohanty, *Applique Craft of Orissa*, Ahmedabad (1980).

B. C. Mohanty, *Patachitras of Orissa*, Ahmedabad (1980).

B. C. Mohanty and J. P. Mohanty, *Block Printing and Dyeing of Bagru Rajasthan*, Ahmedabad (1983).

F. M. Montgomery, *Textiles in America 1650-1870*, New York (1984).

L. Pollet, *Zelfkanten van de Islam: Textiel uit Tunesie, Noord-Jemen, Chinees Turkistan*, Antwerp (1988), exhibition catalogue.

K. Riboud, "Han dynasty specimens from Noin-Ula and Mawangdui in looped-warp weave", *Bull. CIETA*, 57-58 (1983), 16-49.

M. L. Ryder, "A note on the wool type in carpet yarns from Pazyryk", *Oriental Carpet and Textile Studies*, III, pt. 1 (1987), 20-21.

M. L. Ryder, "The measurement of wool fibres in yarns as an aid to defining carpet type", *Oriental Carpet and Textile Studies*, III, pt. 1 (1987), 134-152.

M. Spufford, *The Great Reclotting of Rural England (Petty Chapmen and their Wares in the 17th Century)*, Hambledon Press, London (1984).

C. Singh and D. Ahivasi, *Woollen Textiles and Costumes from Bharat Kala Bhavan*, Banaras Hindu University, (1981).

G. Thill, "Altrier", *Trésors des Princes Celtes*, Paris (1987), 251-254 (ref. to a fifth century B.C. textile from Altrier, no. 229, page 254).

J. Trilling, *The Medallion Style*, Washington (1985; ISBN 0-8240-6870-X).

I. Turnau, *Historia Europejskiego Włókiennictwa odzieżowego od XIII do XVIII w.* (The History of European Textiles for Dress Between the XIII and XVIII centuries), Warsaw (1987; English summary).

L. Varadarajan, *Traditional Textile Printing in Kutch Afrakh and Related Techniques*, Ahmedabad (1983).

G. M. Vogelsang-Eastwood, "A re-examination of the fibres from the Çatal Hüyük textiles", *Oriental Carpet and Textile Studies*, III (1988), 15-19.

S. Y. Vons-Comis, "Workmen's clothing or burial garments? Seventeenth and eighteenth century clothing remains from Spitsbergen", *Norsk Polarinstitut Rapportserie: Smeerenburg Seminar* (report on a symposium presenting results from research into 17th century whaling in Spitsbergen), Oslo, 38 (1987), 79-88.

S. Y. Vons-Comis, "Textielvondsten", in: eds., J. Hagedoorn and I. Wormgoor, *Domus Parva: Het Eerste Huis van de Moderne Devoten te Zwolle*, Zwolle (1987), 43-45.

P. Walton and G. M. Eastwood, *A Brief Guide to the Cataloguing of Archaeological Textiles*, York (1988; 3rd ed., £2.00, plus postage, copies are available from P. Walton, The Garden Flat, Bootham Terrace, York, England).

J. P. Wild, "Ein römischer Seidenstoff aus dem Wallis: Vallis Poenina an der antiken Seidenstrasse?" *Helvetica Archaeologica*, 70 (1987), 59-73.

A. Yusuf Ali, *A Monograph on Silk Fabrics Produced in the North Western Provinces and Oudh*, Allahabad (1900), reprinted by the Calico Museum of Textiles, Ahmedabad (1974).

---

Compilations of articles, reports, etc. which have been published in specific books and journals

ed. J. Geraint Jenkins, *The Wool Textile Industry in Great Britain*, London and Boston (1972).

J. P. Wild, "Prehistoric and Roman textiles", 3-18.

E. Kerridge, "Wool growing and wool textiles in medieval and early modern times", 19-33.

D. Seward, "The wool textile industry 1750-1960", 34-50.

M. L. Ryder, "The wools of Britain", 51-64.

J. A. Iredale, "Preparation of wools", 65-70.

R. T. D. Richards, "The development of the modern woollen-carding machine", 71-84.

H. Lemon, "The evolution of combing", 85-100.

H. Catling, "The evolution of spinning", 101-116.

C. O. Clark, "The dyeing of wool and woollen goods", 117-125.

P. Ellis, "The techniques of weaving", 125-156.

C. S. Whewell, "Milling and milling machinery", 157-169.

K. G. Ponting, "Cloth finishing", 170-184.

M. T. Wild, "The Yorkshire wool textile industry", 185-234.

K. G. Ponting, "The West of England cloth industry", 235-251.

J. E. Pilgrim, "The cloth industry in East Anglia", 252-268.

J. G. Martindale, "The rise and growth of the tweed industry in Scotland", 269-280.

J. Geraint Jenkins, "The Welsh woollen industry", 281-300.

---

eds., H. L. Needles and S. Haig Zeronian, *Historic Textile and Paper Materials, Conservation and Characterization, 188th Meeting of the American Chemical Society, Philadelphia, Pennsylvania, 1984*, Washington D.C. (1986).

M. A. Fikioris, "Charting the future: Conservation principles of Henry Francis du Pont", 3-18.

R. R. Bresee, V. Chandrashekar and B. W. Jones, "Age determination of textiles from single-fiber creep measurements", 19-40.

J. M. Cardamone and P. Brown, "Evaluation of degradation in museum textiles using property kinetics", 41-76.

S. H. Zeronian, K. W. Alger, M. S. Ellison and S. M. Al-Khayatt, "Studying the cause and type of fiber damage in textile materials by Scanning Electron Microscopy", 77-94.

R. R. Bresee and G. E. Goodyear, "Fractography of historic silk fibers", 95-110.

R. V. Kuruppillai, S. P. Hersh and P. A. Tucker, "Degradation of silk by heat and light", 111-130.

M. Skelton and L. Lee-Whitman, "A systematic method for differentiating between 18th century painted-printed Chinese and Western silks", 131-153.

H. Schweppe, "Identification of dyes in historic textile materials", 153-174.

C. Walker and H. L. Needles, "Analysis of natural dyes on wool substrates using reversephase high-performance liquid chromatography", 175-186.

I. Irving Ziderman, "3600 years of purple-shell dyeing: Characterization of Hyacinthine purple (*Tekhelet*)", 187-198.

H. L. Needles, V. Cassman and M. J. Collins, "Mordanted natural-dyed wool and silk fabrics: light and burial-induced changes in the color and tensile properties", 199-210.

M. Wentz, "Experimental studies on the effect of aqueous and nonaqueous treatments on historic textiles", 211-230.

I. R. Hardin and F. J. Duffield, "Characterization of metallic yarns in historic Persian textiles by microanalysis", 231-252.

L. R. Sibley and K. A. Jakes, "Characterization of selected prehistoric fabrics of Southeastern North America", 253-276.

K. A. Jakes and J. Hatton Howard III, "Replacement of protein and cellulosic fibers by copper minerals and the formation of textile pseudomorphs", 277-290.

R. L. Feller, S. B. Lee and J. Bogaard, "The kinetics of cellulose deterioration", 329-348.

H. D. Burgess, "Gel Permeation Chromatography: Use in estimating the effect of water washing on the long-term stability of cellulosic fibers", 349-362.

I. Block and H. Kyung Kim, "Accelerated ageing of cellulosic textiles at different temperatures: The effect of tetrahydridoborate reduction", 411-426.

---

Anon, *Tissu et Vêtement 5000 ans de Savoir-Faire*, 25th April - 30th November 1986, Musée Archéologique Départemental du Val-D'Oise (exhibition catalogue).

M. Sotton, "Les fibres textiles et leur transformation", 11-22.

J. Brochier, "Les débuts de l'industrie de la soie à Lyon", 23-24.

A. Ferdière, "Le filage", 25-26.

A. Ferdière, "Le tissage", 27-33.

H. Meyer, "Étude des armures de tissu de la protohistoire à l'époque mérovingienne", 33-37.

N. Moore, "Les tissus de laine au XIIIe siècle à Saint-Denis", 38-41.

A. Colombini, "Teintures attestées de l'antiquité au Moyen Âge", 42-45.

A. Rieger, "Coloration des textiles par les plantes", 46-49.

J. Sirat, "La couture et la broderie des origines au Moyen Âge", 50-52.

D. Guillot, "Production et diffusion des vêtements dans le monde antique", 53-58.

J-P. Suau, "Les 'signatures' des corps de métier du textile dans le vitrail gothique français", 59-70.

A. Bocquet, "Le textile et son artisanat au néolithique récent à Charavines (Isère)", 71-73.

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M-H. Rutschowskaya, "Les vêtements de la période copte", 81-90.

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C. Metzger, "Le costume romain", 99-101.

M. Martiniani-Reber, "Tissus et vêtements à Byzance", 102-104.

G. Fercocq du Leslay, "Le vêtement dans la protohistoire européenne", 105-110.

A. Ferdière, "Tissu et vêtements en Gaule", 110-113.

J. Sirat, "Le costume dans le haut moyen âge", 114-118.

F. Heber-Suffrin, "Le vêtement et ses accessoires dans les arts décoratifs du VIII<sup>e</sup> au XII<sup>e</sup> siècle", 119-129.

M. Depraetere-Dargery, "Évolution et signification sociale du costume du XIII<sup>e</sup> au XV<sup>e</sup> siècle", 130-141.

M-H. Rutschowskaya, "Le tissu dans l'Ameublement", 141-143.

J. Dubois, "Utilisation religieuse du tissu", 144-152.

J-P. Laporte, "Tissus médiévaux de Chelles et de Faremoutiers", 153-173.

H. Meyer, "Étude et restauration de tissus archéologiques", 174-178.

G-E. Roche, "Tissu et vêtement: choix de textes de l'antiquité à la fin du moyen âge", 179-190.

ed. H. E. Garland, Summary of talks given at the 5th meeting of *Dyes on Historical and Archaeological Textiles*, which took place in York (Edinburgh, 1987).

M. L. Ryder, "The natural pigmentation of animal textile fibres", 3-21.

G. W. Taylor, "Observations of the analysis of dyewood dyeings", 22-32.

F. Jones, "Some aspects of colour definition", 36-37.

P. Walton, "Dyes in early Scandinavian textiles", 38-43.

H. E. Garland, "The analysis of madder dyes", 44-53.

ed. B. Wittgren, Report from the Nordiskt Symposium om Textila Tekniker 1986, *Textila Tekniker I Nordisk Tradition*, Uppsala (1987).

M. Luutonen, "Mönsterstickning och mönstervirkning i Finland", 7-18.

K. Klement, "Traditionell stickning i Estland", 19-28.

N. Jensen, Striking på Færøerne", 29-37.

A. Kjellberg, "Strikking og bruk av strikkeplagg i Norge før 1700", 28-48.

G. Aarsland Rosander, "Mønstre - moter - markeder. Norsk strikkings image", 49-62.

L. Bender Jørgensen, "Nålebinding i dansk stenalder", 63-68.

L. Bender Jørgensen, "Et forskningsprosjekt om nordeuropæiske tekstiler før 1000 e. Kristus", 69-78.

L. Warburg, "Strik i de Københavnske Jordfund", 79-94.

E. Østergård, "Nordboernes tøj - dagligdragten i middelalderen", 95-104.

M. Erikson, "Stickat ur Röhsska konstslöjdmuseets samlingar", 105-110.

eds. G. Völger, K. von Welck, K. Hackstein, *Pracht und Geheimnis: Kleidung und Schmuck aus Palästina und Jordanien*, exhibition catalogue, Cologne (1987).

E. A. Knaug, "Berg und Tal, Stadt und Stamm - Grundzüge der Geschichte Palästinas in den letzten fünftausend Jahren", 26-35.

W. Hütteroth, "Der arabische Siedlungsraum in Palästina und Transjordanien in osmanischer Zeit", 36-45.

H. Wippert, "Textilproduktion und Kleidung im vorhellenistischen Palästina", 136-143.

R. Wenning, "Anmerkungen zu palästinensischen Textilien in hellenistischer, römischer und byzantinischer Zeit aus archäologischer Sicht", 144-149.



G. Winkelhane, "Textilgewerbe und Karawanenhandel Syriens im 19. und 20. Jahrhundert", 150-155.

G. Winkelhane, "Traditionelle Kleidung und europäische Durchdringung - Damaskus in spätosmanischer Zeit", 156-163.

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