

Monographs of the Archaeological Society of Finland 3

FOCUS ON ARCHAEOLOGICAL TEXTILES
Multidisciplinary Approaches



Edited by
Sanna Lipkin and Krista Vajanto

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MONOGRAPHS OF THE ARCHAEOLOGICAL SOCIETY OF FINLAND 3

PUBLISHED BY THE ARCHAEOLOGICAL SOCIETY OF FINLAND

SERIES

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*MONOGRAPHS OF THE ARCHAEOLOGICAL SOCIETY OF FINLAND IS AN INTERNATIONAL
PEER-REVIEWED ONLINE OPEN ACCESS SERIES.*

WWW.SARKS.FI/MASF

ISBN 978-952-67594-8-7 (PDF)

ISSN-L 1799-8611

ISSN 1799-8611 (ONLINE)

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LAYOUT: SANNA LIPKIN

FRONT COVER AND MAPS: KRISTA VAJANTO

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Preface

The aim of this publication is to bring in new points of view and methodologies in the research of archaeological textiles. This book focuses on textiles: it tries to understand their materials and structures, their making technologies and their purpose in their historical and archaeological framework. The information on textile technologies can be achieved through the examination of textiles and tools as well as through replicas and experimentation. The understanding of technologies, the value of textiles and their meaning for their users gives an opportunity to interpret archaeological material in its cultural and social contexts.

A number of the articles were presented in the conference of European Association of Archaeologists (EAA) held in Helsinki, August 2012.¹ There our session, *Focus on Archaeological Textiles – From Finds to Facts on Fabric*, gathered together different textile experts. The session turned out to be a success as it received many paper and poster proposals and ultimately became one of the biggest sessions in the conference with thirteen papers. Five of these papers (Chirstiansen *et al.*, Lempiäinen, Meo, Rammo and Vajanto on the Finnish shipwrecks) are included in this book. Other sessions in the conference also included numerous presentations on archaeological textiles.² One paper was presented in the session titled *Death and Burial in Post-Medieval Europe*³ (Lipkin and Kuokkanen). The session *Material chains and networks in space: production sequences, processes, chaînes opératoires and object biographies in Bronze and Iron Ages workshops*⁴ contained Quercia's and Foxhall's paper concerning their project 'Weaving relationships' within the larger program 'Tracing Networks: Craft traditions in the ancient Mediterranean and beyond' funded by the Leverhulme Trust.⁵ In addition, the two concluding articles of this volume (Karttila and Vajanto on textile standards) were included because they help to fulfil the aims of this publication and complement its themes.

The geographical focus of this book is in northern Europe and Mediterranean area. Central Europe is missing, which is partially due to the lack of papers offered for publication, but also because of the personal interests and contacts of the editors. However, recent publications on central European textiles and archaeological materials from the area are widely available. These include overviews on

1 Session was organised by Sanna Lipkin (University of Oulu), Krista Vajanto (University of Helsinki) and Carol Christiansen (Shetland Museum and Archives).

2 For example in session *Creativity in the Bronze Age*, a number of textile archaeological papers were presented. The session was organised by Hera-funded project 'Creativity and Craft production in the Middle and Late Bronze Age Europe', CinBA.

3 Session was organised by Sarah Tarlow (University of Leicester) and Jenny Nyberg (Stockholm University).

4 Session was organised by Barbara Armbruster (CNRS – Centre National de la Recherche Scientifique), Alexis Gorgues (Université de Bordeaux) and Katharina Rebay-Salisbury (University of Leicester).

5 The conference paper handled Lucania in southern Italy and in this publication they concentrate on weaving tools found in Sicily.

singular sites, such as *Textiles from Hallstatt (Textilien aus Hallstatt): Weaving Culture in Bronze Age and Iron Age Salt Mines*, edited by Karina Grömer, Anton Kern, Hans Reschreiter and Helga Rosel-Mautendorfer from 2013. A generous and ambitious publication *Textiles and textile productions in Europe: from prehistory to AD 400* from 2011 brings together a huge amount of information on the subject from multiple European countries. In its preface the editors Margarita Gleba and Ulla Man-nering encourage other textile archaeologists to produce similar contributions. Our publication at hand aims at geographical synthesis by bringing together two articles from southern Italy and Sicily as well as by collecting articles from the border regions of Europe (Estonia, Finland and Shetland), regions that are generally less published at the international level.

Each of the articles in this publication has a different starting point indicating the broad spectrum of possibilities in archaeological textile research. Multidisciplinary research is favoured nowadays and archaeological research is complemented in the articles with different viewpoints from conservation studies, history, natural sciences, experimental archaeology, and computer science.

Plenty of textile research is carried out by conservators. Karttila's article on the medieval Saint Birgitta's cap found in the Turku Cathedral is an example of such research. The cap consists of multiple layers of textiles, and their detailed analysis reveals new aspects of the making of the relics, which was a business in the Middle Ages. Lempiäinen's research handles also Medieval southwestern Finland.⁶ It concentrates on the terminology of clothes in wills. It proves that sources, such as wills, can make a great contribution to the research of historical textiles.

Lipkin's and Kuokkanen's article concentrates on slightly later, the 17th-century and early 18th-century materials from the northern Finnish town of Oulu. The article includes an analysis of textiles and other artefacts found in one male burial, and the writers also use the historical sources that give an insight into the social status of the deceased. This man from Oulu and the famous Gunnister Man found from a bog in Shetland (Christiansen, Hammarlund and Ciszuk) lived at the same time. Both men died in the geographical margins of Europe, which were actually places of cultural interaction. However, the diversity of the clothes of these men is clearly visible. Christiansen, Hammarlund and Ciszuk concentrate on creating archaeological reconstructions of garments. The textiles of the Gunnister Man burial were reconstructed as authentic as possible by testing different materials and creating similar wear as was visible in the preserving clothes. The writers conclude that the visual analysis of fibres and textures is crucial and even more revealing than the fibre diameter analysis. As the articles of this book demonstrate, experimental archaeology needs to be seen as a fundamental part of the study of past textiles. Otherwise, it is highly impossible to understand different historical techniques.

Vajanto's first article also develops experimental methods by examining hand spun and machine spun threads through modern textile standards. The focus is on how well the textiles bear the strain depending on the type of spinning and dyeing method as well as the permanence of dye stuffs in contact with sweat. The choices of fibre, thread and dyeing methods had an important role in the production of textiles.

It has become obvious through modern archaeological textile research that the past humans chose their materials purposefully and were highly aware of their properties. Meo used a method developed at the Centre for Textile Research (CTR) to reconstruct the types of textile woven at *Herakleia* (southern Italy) in the 3rd–2nd century BC, in which loom weights are measured in order to hypothesise the quality of woven cloth. His research verifies that the Ionic Arc and in particular Taranto, *Herakleia*'s motherland, were significant wool producing centres. In their article Quercia and Foxhall also concentrate on the loom weights. The research of weaving practices in Sicily from the Iron Age to the Hellenistic period (3rd century BC) is part of a wider program ('Tracing Networks: Craft traditions in the ancient Mediterranean and beyond') combining archaeology, archaeometry and computer science. The analysis of the loom weight data give information on the use of loom weights, the socio-

⁶ The territory of modern Finland was a part of Sweden until 1809 and the counties followed the legislation of the Swedish Crown. In 1809 Finland became an autonomous Duchy of Finland in Russia.

cultural relationships between women and families as well as contacts between the Greeks and the indigenous communities inhabiting the island.

The skill of textile-making needs to be considered as something that was taught from one generation to another. For this reason, continuity and traditions are characteristic for textile technologies. Most profoundly this is seen in the fact that the basic techniques remained the same throughout the history, from the Neolithic until the Industrial Revolution and they are used in household production even today. Tradition and continuation in contrast to change and transition are the starting points in Rammo's article on Estonian plant-fibre textiles. Variation in textiles suggests cultural differences and the change in technology may result from new cultural contacts, and the introduction of new tools, such as the looms in Rammo's material. Cultural contacts between different parts of the Gulf of Finland are also visible in the cargoes of Finnish shipwrecks in Vajanto's article. Some of the rare textiles found from the 13th–18th-century wrecks were examined in order to study the fibres and dyes used for a selection of preserved textiles of various origin and purpose.

Most articles discuss historical times, although in some northern European articles the oldest finds are from the transition between the Iron Age and the Middle Ages. However, it needs to be taken into account that the definition of historical varies from region to region. Although the prehistoric period in the Mediterranean area ends in the Archaic period (c. 580–480 BC) in the northernmost Europe prehistory lasted until the 12th–13th centuries AD.⁷

The articles in this publication reflect the diversity of archaeological textile research. Even the tiniest piece of textile can raise many questions concerning its manufacture, origin, purpose and place in society, culture and history. Textile production can be approached by studying the textiles themselves, the tools used in production as well as through ethnographical and historical sources. These are also important in the reconstruction of the social context of the textiles. Textile research at its best is collaboration between specialists: archaeologists, conservators, historians and natural scientists. The expertise in all these fields is present in this book.

The articles offer new and vital information on the interpretation of archaeological textiles. We hope that this publication is also going to be useful for fellow archaeologists outside our specialist field.

Oulu and Espoo, March 2014

Sanna Lipkin and Krista Vajanto

⁷ In eastern Finland the prehistoric era is considered to be finished in the beginning of the 14th century.

Authors

Dr Carol Christiansen is working as a Curator of Textiles at the Shetland Museum and Archives, UK. She divides her time between research on the collection and archaeological and historical textiles in Scotland. Her particular research interests centre on the use of landrace wools in the archaeological record.

PhL Martin Ciszuk is lecturer at the Swedish School of Textiles, University of Borås. He is educated in hand weaving and tailoring, specialising in historical textiles and garments. In his PhD research he is studying silk manufacturing from a historical perspective, complemented by his practical background. His PhL dissertation was called *Silk-weaving in Sweden during the 19th century. Textiles and texts – An evaluation of the source material*.

Professor Lin Foxhall is Professor of Greek Archaeology and History at the University of Leicester, UK. She initiated the project 'Weaving relationships: loom weights and cross-cultural networks in the ancient Mediterranean.' The project focuses on analysing the loom weights across the Mediterranean from the Late Bronze Age to the 3rd century BC, investigating the exchange of shapes, decorations, craft knowledge and personal/group behaviours within the larger social and economic interactions.

Lena Hammarlund was educated in hand-weaving at the Swedish School of Textiles, University of Borås. Since 1995 she has participated in Swedish and European research projects with archaeological textiles, covering wide temporal and geographical areas, from the Bronze Age to the early Modern Period, from Roman Egypt to northern Europe. She works from a handicraft-based perspective in order to investigate how textiles were made and their appearance and properties. This is achieved through projects spanning from practical work in spinning and weaving experiments to full-scale reconstruction. The perspective is holistic, incorporating the full production chain, from fibres to finished cloth.

MA Mira Karttila is an independent researcher and textile conservator from Finland. She has also an MA degree in history. She is interested in material culture and meanings and values connected to artefacts in different cultures and eras. Archaeological textiles and textile related materials are her main interests. After graduating in 2012 she worked for a while in a private textile conservation studio and at the National Board of Antiquities, Finland. She did her internships at the National Museum of Denmark and in *ABACA Conservation* in Paris.

MA Tiina Kuokkanen is an archaeologist from the University of Oulu, Finland. In her PhD project she is studying the early modern clothing from a gender archaeological perspective. Her study will discuss how the social structure of Oulu became visible in the local material culture in the 17th and 18th centuries. The archaeological material derives from different kinds of urban contexts and comprises small personal clothing-related items such as buttons, buckles and pins. The probate inventories from the 18th-century Oulu provide additional source material. At the moment she is also writing her second Master's dissertation to the discipline of history on clothing in the 18th-century Oulu. The focus of her second dissertation is on textiles.

BA Piia Lempiäinen is a graduate student at the University of Helsinki, Finland. She has a major in Finnish and Nordic history. Lempiäinen is currently finishing her Master's degree and writing her dissertation on dress history in the 18th-century Helsinki. Her research interests are in the medieval (12th–16th century AD) and the early modern (16th–18th century AD) clothing and fashion in the Nordic countries.

PhD Sanna Lipkin is an archaeologist at the University of Oulu, Finland. Her PhD thesis was written on the subject of *Textile-making in central Tyrrhenian Italy from the final Bronze Age to the Republican period*. She has worked in collaboration with the Special Superintendency for the Archaeological Heritage of Rome and the University of Oulu at the excavations of Crustumerium, near Rome. She has specialised in the attire of protohistoric Latins and Etruscans. In addition, she has wide experience in field work at the early modern sites in northern Finland with a special emphasis on textiles.

PhD Francesco Meo is an archaeologist and cultural manager at the University of Salento, Italy. His research activity aims mainly to the study of ancient southern Italian sites from the Iron Age until the Roman conquest. Particularly he has been focusing on the Greek towns of the Ionic Arc and the indigenous world of southern Puglia. The deep experience gained at several archaeological excavations has directed Meo's research towards the household production and its dynamics. Meo's interest in these themes has allowed him to be involved in different research projects launched by national and international authorities and present his results in numerous conferences.

PhD Alessandro Quercia is an archaeological officer in the Superintendency of Archaeological Heritage of Piemonte and Museum of Egyptian Antiquities (NW Italy). His MA and PhD studies focused on the Punic painted and coarse wares from the sanctuary of Tas-Silġ, Malta. He has studied and analysed classical pottery and material culture from different sites in the Mediterranean. Quercia is participating in an archaeological project concerning the indigenous sanctuary of Santa Maria d'Agnano in Italy. From 2010 until the end of 2013, he joined the School of Archaeology and Ancient History (University of Leicester) as Postdoctoral Fellow in the Tracing Networks subproject "*Weaving relationships: loom weights and cross-cultural networks in the ancient Mediterranean*".

MA Riina Rammo is an archaeologist and currently a PhD student at the University of Tartu, Estonia. She is specialised in archaeological textiles and textile tools. More closely, Rammo's PhD project concentrates on textile production, trade and consumption in the medieval towns of modern Estonia. Her research is within the history of costume and metal dress accessories.

MA Krista Vajanto is an archaeologist from the University of Helsinki, Finland. She is finishing her PhD thesis on the Finnish archaeological textiles and their dyes. Vajanto's main interest is in the Late Iron Age material (c. 1000 AD), but also the early modern finds have recently become more important in her research. Vajanto is interested in the wool of the Finnish native sheep and plant dyes. In addition, she has done experimental archaeology on textile crafts, more specifically in plant dyeing, *nålbinding* and weaving with a warp weighted loom.

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