

The Danish National Research Foundation's



RESEARCH ACTIVITIES AT

THE DANISH NATIONAL RESEARCH FOUNDATION'S
CENTRE FOR TEXTILE RESEARCH (CTR)

2010

INTRODUCTION

2010 marked the end of CTR1 and the beginning of CTR2 continuing the successful research of the first five years and embarking on new projects with new goals.

CTR hosted in April 2010 hosted the *KOSMOS. Jewellery, Adornment and Textiles in the Aegean Bronze Age. 13th international Aegean conference* as well as two other international workshops. Nosch was appointed Chevalier dans l'Ordre des Palmes académiques from La République Française, Ministère de l'éducation nationale in December 2010.

In 2010 the scientific core of CTR consisted of the two CTR1 research programs: *Tools and Textiles, Texts and Contexts (TTTC)*, which focused on textiles of the Mediterranean Bronze Age, and *Textile and Costume from Bronze and Iron Age in Danish Collections (DTC)*, which investigated Danish textiles and animal skins in an European context. In 2010 the two new research programs *Textile Economies in the Mediterranean Area (TEMA)* and *Textile Crafts and Cultures (TECC)* were launched.

The primary staff of CTR in 2010 consisted of one director (Nosch), two researchers (Mannering, Andersson Strand), four PhD scholars (Zagal-Mach, Ringgaard, Lyngbye Pedersen and Frei), and scholars employed/or affiliated for 1-12 months at CTR (Cherine Munkholt and Henriette Koefoed as editors; Peder Flemestad and Vibe Maria Martens as research assistants; Karin Margarita Frei as post doc.; Ida Demant as researcher; Joanne Cutler as visiting PhD scholar; Ingeborg Philipsen as coordinator; Mette Bruun as coordinator; Irene Skals as conservator; René Gummer as journalist; Marianne Bloch Hansen as student) and several guestscholars who worked with us for several month periods (Susanne Lervad, Term Plus, Copenhagen; Michael Langkjær, University of Copenhagen; Johan Zimsen, researcher, Copenhagen; Judith Cameron, Australia's National University; Joanne Cutler, UCL). In addition, a group of approx. 80 collaborators from 23 European countries plus the USA, Canada, Israel, Syria, Jordan and Russia contributed to CTR research. CTR greatly benefited from exchange and collaboration with the two CTR visiting professors: In first part of the year the geochemist Douglas Price, University Wisconsin-Madison, in second part of the year the palaeoanthropologist Pia Bennike, Panum. CTR also engaged in a collaboration with Sabine Karg, National Museum of Denmark, and collaborated on the international research project FLAX sponsored by the Danish Research Agency for Culture and Communication.

Other important research activities of the centre were the final edition of several books, conference proceedings as well as monographs and papers. CTR scholars have given a total of 47 lectures at international conferences in 11 countries in 2010. All CTR activities are communicated through our web site: www.hum.ku.dk/ctr.



The Danish National Research Foundation's

**CENTRE
FOR
TEXTILE RESEARCH**

HIGHLIGHTS 2010



In April 2010 CTR hosted the international Conference **KOSMOS. Jewellery, Adornment and Textiles in the Aegean Bronze Age** in cooperation with professor Robert Lafineur, Université de Liège. The Conference was part of the CTR research programme *Tools and Textiles – Texts and Contexts* and due to live streaming it had more than 1500 visitors. See <http://ctr.hum.ku.dk/conferences/archive/kosmos/>

In 2010 CTR published the book: Michel, C. & Nosch, M. L.: *Textile Terminologies in the Ancient Near East and Mediterranean from the third to the first millennia BC*. Ancient Textiles Series Vol 8. Oxbow Books, Oxford.



The international research project **Fashioning the Early Modern. Creativity and Innovation in Europe. 1500-1800** was launched in July 2010. Research partners are Queen Mary, University of London; Victoria & Albert Museum, UK; Centre for Fashion Studies, University of Stockholm; University of Helsinki. See: <http://www.fashioningtheearlymodern.ac.uk/>

The 2nd International **FLAX** workshop was held 29-30 June 2010 at Sonnerupgaard and Land of Legends, Lejre. The workshop results will be published in a special edition of *Vegetation History and Archaeology*.

CTR published in 2010 a technical comment on flax in *Science Magazine*: C. Bergfjord, S. Karg, A. Rast-Eicher, M.-L. Nosch, U. Mannering, R. G. Allaby, B. M. Murphy, M.-L. Nosch, B. Holst, "Comment on '30,000-Year-Old Wild Flax Fibers'", *Science* vol. 328, 25 June 2010, 1634.

See: <http://www.sciencemag.org>



As part of the project **Dress-ID** a workshop was held 23-25 August focusing on experimental textile archaeology in Land of

Legends, Lejre. The workshop gave practical instructions into different aspects of textile production based on knowledge from the Roman World and from Roman Iron Age Scandinavia.

CTR organized the seminar **Textile Production in the Ancient Near East Neolithic-Bronze Age-Iron Age** in April 2010 as part of the the 7th International Congress on the Archaeology of the Ancient Near East at British Museum, London. The 17 presentations given by specialists in the field attracted many listeners.

The research programme **TEMA** (Textile Economies in the Mediterranean Area) was launched in August 2010. Focus is on textile production in the Mediterranean area in the first millennium BC.



In 2010 CTR launched the **Margrethe Hald Prisen**. Two traveling grants of 8.000 and 15.000 DKK will be awarded to extraordinary master theses on textile research in June 2011.

CTR RESEARCH IN 2010

TOOLS AND TEXTILES – TEXTS AND CONTEXTS. INVESTIGATIONS OF TEXTILE PRODUCTION IN THE BRONZE AGE EASTERN MEDITERRANEAN (TTTC) (2005-2010)

STAFF

Marie-Louise Nosch (January-July), Eva Andersson Strand (full time), Vibe Martens (August-December), Irene Skals (March-April), Ida Demant (April-August), Joanne Cutler (January-April), Henriette Koefoed (April-December).

VISITING SCHOLARS

Richard Firth (January).

In 2010 the TTTC research program has been working on completing *Tools, Textiles and Contexts* manuscript. The focus has been to combine and compare the information from the technical tool reports (produced for all sites) with the information on the contexts descriptions and analyses and interpret this data. A further important focus in TTTC 2010 has been on editing/finishing texts on e.g. research history, textile technology, experimental testing, textiles in the Mediterranean and the conclusions on the recordings in the database. The results of the research were presented at several workshops and conferences and often alongside the other collaborators. Additionally, researchers are visiting CTR to learn the new methods that we have developed. The outcome of the TTTC research program has resulted in monographs, articles in academic international journals, papers in anthologies, articles in conference proceedings, web-published research reports, unpublished research reports, and finally, several articles have been submitted that are currently in press. Several papers also are written in collaboration with international partners within the TTTC research program.

The most important “highlight” during 2010:

Michel, C. & Nosch, M.-L. *Textile Terminologies in the Ancient Near East and Mediterranean from the third to the first millennia BC*. Ancient Textiles Series Vol. 8. Oxbow books. This publication will have a groundbreaking impact on the research field and contains 22 articles written by international scholars and experts on various languages and scripts.

KOSMOS. *Jewellery, Adornment and Textiles in the Aegean Bronze Age. 13th international Aegean conference*. Organised by Marie-Louise Nosch and Robert Laffineur and will be published in: M. L. Nosch & R. Laffineur (eds) *KOSMOS. Jewellery, Adornment and Textiles in the Aegean Bronze Age. 13th international Aegean conference held at Copenhagen, April 2010/ 13eme rencontre égéenne, Copenhagen, avril 2010*. *Aegaeum* 33 (2011). For more information see below.

The 7th International Congress on the Archaeology of the Ancient Near East took place at the British Museum in April 2010. Andersson Strand and Nosch hosted a one day session *Textile Production in the Ancient Near East: Neolithic-Bronze Age – Iron Age* with 17 presentations given by specialists in this research field. The session attracted many listeners and the discussion was constructive and interesting. The papers will be published in Koefoed, H., Nosch, M.-L. & Andersson Strand, E: *Textile Production and Consumption in the Ancient Near East. Archaeology, Epigraphy, Iconography*. Ancient Textiles Series, Oxbow in 2012. For more information see below.

MILESTONES FOR 2010

Arrange *Textile Production in Ancient Near East Neolithic-Bronze Age – Iron Age*, ICAANE 7, London (12-16.04) ca 70 participants.

Submit manuscript for the volume *Tools, Textiles and Contexts*.

Arrange the 13th *Aegaeum Conference on Textiles, Dress and Adornment* hosted by CTR in April 2010, and assist in the publication of the contributions in two volumes, to appear in 2011.

STATUS 2010

Completed

80 % completed

Completed

TEXTILES AND COSTUMES FROM BRONZE AND EARLY IRON AGE IN DANISH COLLECTIONS (DTC) (2005-2010)

STAFF

Ulla Mannering (full time January-July); Irene Skals (200 hours, NM funding); Anne-Lisbeth Schmidt (200 hours, NM funding); Marianne Bloch Hansen (100 hours); Karin Margarita Frei (full time January -June); Ida Demant (February-April); Lise Ræder Knudsen (March).

In 2010, the DTC research program was working on completing the *Designed for Life and Death* manuscript on textile and costume in Iron Age bogs. Further time was spent editing others research contributions and writing the Danish contribution to the book *Textiles in Context*, which has been renamed *Textiles and Textile Production in Europe until AD 500*. Early Iron Age skin and textile materials were further investigated and photographed in 2010. Ida Demant worked on the publication of the textiles from Vorbasse.

The excavation of a grave find from Hammerum in Herning with unprecedented good preservation conditions for textiles was finished. Ulla Mannering worked as consultant during the excavation and the decisions on which specialist analyses to perform. Karin Margarita Frei, performed the strontium isotopic tracing analyses of the textiles. Ulla Mannering will be in charge of the final publication of the grave and the textiles. This work will start in 2011 and continue in 2012.

In 2010 the achievements were:

- Publication of specific results and methodological approaches in specialised journals (14C, dye, strontium isotopes, DNA, Huldremose Woman and Hammerum Woman). See list of publications.
- Collaboration with the Ancient DNA Group, now the Danish National Research Foundation's Centre for GeoGenetics, University of Copenhagen. The collaboration resulted in an MA thesis at the SAXO-Institute, University of Copenhagen and a joint article.
- Collaboration with Professor Bodil Holst, Head of the Nanophysics Group, Department of Physics and Technology, University of Bergen and Bridget Murphy, Christian-Albrechts-Universität zu Kiel, Institut für Experimentelle und Angewandte Physik developing new methods for differentiating between flax and nettle fibres from an archaeological context. In January beam time at the *European Synchrotron Radiation Facility* in Grenoble made it possible to examine 16 archaeological textile samples provided by DTC/TTTC. The results are currently being analyzed and will be published jointly with CTR.

MILESTONES 2010

STATUS 2010

Editing and submission of <i>Designed for Life and Death</i>	80% completed.
Editing and submission of <i>Textiles in Contexts</i>	95% completed. Introduction and maps are to be completed.
Editing and submission of <i>Textiles for War</i>	Manuscript sent to the publisher. Awaiting publication

PHD SCHOLARS AND THEIR RESEARCH

The CTR PhD scholars are now all finishing their PhDs, with exciting new perspectives and results. They have been very active at international conferences and some have even arranged their own international seminars.

Maj Ringgaard defended her Ph.D project *Degradation Phenomena in 18th-century Textiles Excavated in Copenhagen* in May 2010. Her Ph.D. was part of the project *Textiles and Conservation, with a Focus on Textiles from the Collections in the Danish National Museum* co-financed by CTR and the National Museum of Denmark.

Karin Margarita Frei defended successfully her Ph.D. (*Isotope*) - *Geochemical Studies of Textiles and Tools: Tracing their Sources* in August 2010 which was financed by the SAXO Institute, University of Copenhagen (2007-2010). She also presented her work at prominent conferences such as The International Symposium of Archaeometry at the University of South Florida, USA; at the European Association of Archaeologists EAA 16th, in The Hague, September 2010 in The Netherlands; at The Fourth International Symposium on Biomolecular Archaeology ISB4, Natural History Museum of Denmark, University of Copenhagen, September 2010, Denmark; at The Purpureae Vestes IV, Universidad de Valencia, November 2010, Spain and finally as invited guest scholar at the two following events; International Workshop, (European Science Foundation ESF) University College London, May 2010, UK and at The Research Seminar, "Forsker seminar", November 2010, at Lund University, Dept. of Antiquity, Sweden. Besides Frei published her findings in highly ranked journals, and organised and taught a *Strontium Isotope Analysis Prep Course* in June 2010 which was attended by Ph.D. students from all over the world and was praised by all participants. Furthermore, Frei was awarded with 10.000 DKK from the Elizabeth Munksgaard Foundation, for a research visit at the University of Madison (Wisconsin). Finally Frei will be awarded (April 15th 2011) the International GMPCA PhD award, which is given to the best PhD thesis written in either English or French every second year, relating to original work in archaeometry, in any of the different fields contributing to archaeology (1000 Euros, follow the award as well as the commitment to several international publications in peer review journals such as ArchaeoPress).

Birgit Lyngbye Pedersen is investigating the Ph.D. Project *Design as a Competitive Parameter in the Development of the Danish Fashion Industry* from 2006-2011. The project is co-financed by CTR, the Centre for Business History at the Copenhagen Business School, Centre for Design Research, the School of Design at Kolding, and the private foundation Fonden Frigges Legat. Lyngbye Pedersen has presented her research at the 5th EBHA Summer School in Umbria, organised by the Association for Business History, and the EBHA conference in Glasgow. She also presented her research at seminars at the School of Design Kolding and University of Copenhagen.

Ulla Isabel Zagal-Mach is investigating the Ph.D. project *Sails on the Horizon - a Craft Oriented Study of the Integration of Textile Sails in South Scandinavia Production and Use 500-800 AD* from 2006-2011 co-

financed by CTR and Lund University. Her Ph.D. research project is called. She gave papers at Millersville University, Pennsylvania U.S.A. in 2010. She has also taught a graduate course “Archaeological Theory” at the Department of Archaeology, Saxo-Institute, University of Copenhagen.

NEW RESEARCH PROGRAMS OF CTR2

TEXTILE ECONOMIES IN THE MEDITERRANEAN AREA (TEMA) (2010-2015)

STAFF

Marie-Louise Nosch (August-December), Peder Flemestad (August-December), Egzona Haxha (August-December).

The research program TEMA, i.e. “Textile Economies, in the Mediterranean Area”, was initiated in August 2010 and the months to December were spent in groundwork, both consolidating the program and generating further research. TEMA consists in a reassessment of textile production in the Mediterranean, predominantly focused on the important and vast Greek source material in the 1st millennium BC. Ranging from tools to texts, statuary, and textiles, the TEMA program proposes an entirely new international and interdisciplinary endeavour within the Humanities firmly based in CTR research.

In September M.-L. Nosch attended the ESF exploratory workshop on *Palace Economies in the 2nd Millennium BC*, and subsequently gave a paper in Paris at the *13th International Mycenological Conference*, entitled “The Textile Logograms in Linear B Tablets and in Aegean Archaeology”. A comprehensive treatment of textile logograms in Linear A and B. The paper will be published in the conference proceedings, scheduled for 2012. Furthermore the standing committee elected her to the post as *Sécrétaire Générale* of the *Comité International d'Études Mycéniennes*, and chose of Copenhagen as the venue for the next quintennial Mycenological conference in 2015. Flemestad has mapped the existing multitude of literature pertaining to ancient textile economies and gathered a wealth of written sources, that continues to grow, related to ancient Greek textile economy, effectively laying the ground for further research. He also gave a paper under DressID at the conference ” in Valencia in November entitled ”Theophrastos of Eresos on Dye Plants”; the paper consists in an appraisal of the status of dye plants in the botanical inquiries of this Greek philosopher and discusses the role potentially played by textile-related issues in his school in 4th/3rd century Athens. The paper will be published in the conference proceedings, scheduled for 2012.

Negotiations and plans were successfully carried out with the administration and scholars at the National Museum of Denmark for a PhD project in collaboration with the Department of Classical and Near Eastern Antiquities and the National Museum of Denmark. The project, entitled ”Textile tools and fibulae in archaic Greek sanctuaries with emphasis on the dedications in the Athena sanctuary at Lindos, Rhodes”, will investigate the role played by textiles and garments in ancient Greek cult, drawing among others on previously unpublished material in the Archaeological Museum in Istanbul. Indeed, the National Museum of Denmark holds half of the excavated material from the famous Lindos excavations conducted by the renowned Danish archaeologist Chr. Blinkenberg. The PhD project will be co-funded by the CTR and the National Museum of Denmark and will start in June 2011. This future PhD project unites the research of the CTR and the National Museum of Denmark and forms a fundamental part of the TEMA program.

Further plans and projected collaborations for 2011 include stays by Prof. Mary Harlow from the University of Birmingham (to conclude her forthcoming book for Cambridge University Press: *Clothing in the Ancient World*), and Berit Hildebrandt from the University of Hannover. Nordea Foundation has generously accorded us an apartment for three months free of charge for CTR Visiting Professors. F. Carraro from the University of Sorbonne will also join CTR in agreement with the CNRS. A research stay is furthermore planned for Christian Skelton from the University of Los Angeles through the DNRF and

the National Academy of Sciences, USA. A last notable achievement is the agreement with Dr. J. Zurbach from the École Normale Supérieure, Paris, to hold a joint seminar in June 2011 where on textile production and ancient agriculture.

TEXTILE CRAFTS AND CULTURES (TECC) (2010-2015)

STAFF

Ulla Mannering (full time August-December), Irene Skals (100 hours, NM funding); Anne-Lisbeth Schmidt (100 hours, NM funding); Marianne Bloch Hansen (100 hours). In 2011 Eva Andersson Strand (half time 2011-2015) and Karin Margarita Frei (full time in 2011 and 2012) will join the program.

In August 2010, the TECC research program was launched at the National Museum of Denmark. This program contains several different projects which will be launched individually during the next five years. The first project to start is the Bronze Age part of the **SCANDINAVIAN PREHISTORIC COSTUME** project. For this projects three application were made; KUAS' Rådighedssum 2011 for *Dye, Strontium and Stable Isotope analysis of the Bronze Age Textiles* and for *Analysis of the Roman Iron Age Lønne Hede Textiles*, and Elisabeth Munksgaard Fonden for *Creation of six Textile Samples to be used for Thermic Tests*.

In 2010 the achievements were:

- Preparing and submitting three applications. All applications were successful.
- Creating the necessary platform at the National Museum of Denmark for the future analyse performed within the program
- Defining new research topics and establishing new research collaborations
- Making research collaboration agreements with other existing research programs i.e. EU-funded HERA CinBA project by Prof. Lise Bender Jørgensen, NTNU, Trondheim, Norway
- Starting Bronze Age textile catalogue and database
- Collaboration with the Danish National Research Foundation's Centre for GeoGenetics, University of Copenhagen about a joint PhD scholarship.

MILESTONES 2011

Results from dye and strontium isotopic analyses

Publication of an article about the first results and interpretations of Danish Bronze Age textiles and costumes

OTHER CTR RESEARCH PROJECTS

CLOTHING AND IDENTITY IN THE ROMAN WORLD - DRESSID. EU FUNDED COLLABORATION ON TEXTILES RESEARCH

CTR is engaged in this international research program under the Education, Audiovisual and Culture Executive Agency, Directorate-General for Education and Culture of the European Commission. The project runs over 5 years, 2007-2013. Large parts of CTR research and results are integrated into the *DressID* project. CTR is one of the six European partners, and is heading three study groups:

- Elements of dress (spokesperson Mannering and Stauffer)

- Experimental textile archaeology (spokesperson Andersson Strand and Demant)
- Production and Trade (spokespersons Gleba & Pasztokai-Szeöke)

In June 2010, the 5th General Meeting of the project was held in Sheffield, United Kingdom 27th – 29th May 2010. Nosch, Andersson, Gleba, Mannering participated and presented their study groups' results, while Tereza Stolcova and Ida Demant presented papers.

In August 2010 CTR and the study group on Experimental textile archaeology arranged a 3-day workshop in Lejre, Denmark. In November 2010, Flemestad and Demant presented papers at the conference *Purpureae Vestes IV* in Valencia, Spain organized by DressID.

FASHIONING THE EARLY MODERN. EU FUNDED COLLABORATION ON FASHION RESEARCH

Funded by the Humanities in the European Research Area (HERA), this project was launched in June 2010. Partners are Queen Mary, University of London, UK; Victoria & Albert Museum, UK; University of Helsinki, Finland; Stockholm University, Sweden. Danish collaborators are the National Museum of Denmark, Design Museum Denmark, Danish School of Design and The Royal Theatre.

The project demonstrates how a study of creativity and innovation as an economic and cultural force in the past can help our understanding of the same issues today. In doing so the project creates a new interdisciplinary European community of academics, museum curators and fashion and design professionals who will work together to consider creativity, innovation and fashion in all its aspects from 1500-1800, its display in museum settings and its relevance to contemporary policy, legal practices and to the designers and manufacturers of today's fashionable goods. Over the next three years there will be workshops and conferences, information will feed into exhibitions and museum displays, web-trails and web-discussions will be produced as well as a series of books, essays and articles. Divided into five themes the project will explore fashion networks, new technologies, patents and protection, the designer and the merchant: names, reputations and the language of innovation, print-culture and fashion products, social groups and the circulation of fashion, and from Denmark Maj Ringgaard is working on a post doc. project on *Creative traditions: knitting in Europe, 1500-1800* (2011-2012).

INTERNATIONAL CONFERENCES AND SEMINARS IN 2010

Workshop at the 7th ICAANE: Textile Production in the Ancient Near East: Neolithic Age – Bronze Age – Iron Age, 16th April 2010, UCL, London

The workshop addressed the Bronze Age textile production which developed from household production to standardised, industrialised, centralised production. The development of dye industries, colour extraction and the intensive use of colour symbolism in dress demonstrate that shepherds were using selective breeding in order to obtain a variety of wool colours and qualities. During this same period, the palace economies lead to an intensification and standardisation of textile production, as testified in the extensive records on production management, tools, glyptic, frescoes and relief iconography. The workshop thus analysed and discussed the parameters of the technology and the development of this intensive, industry-like production of textiles, its impact on society, and how textile tools and technology developed in this period. In the quasi-absence of the textiles themselves, it is necessary to investigate other remains of textile production, such as depictions, archaeological contexts and textile tools.

The workshop combined several approaches: textile tool studies, experimental testing, iconographical studies, and context studies. The aim was first and foremost to raise awareness of the existence of textiles in these early periods. The workshop discussed backgrounds for the introduction of textiles in the Ancient Near East and sought for the spread and strategies for tools, fibres and techniques, and the evolution of textile tools in various regions. This raised the question of how textile technologies have influenced the development of other, later technologies. The overall outcome of the workshop aimed at answering how textile production influenced the early societies.

The 13th Aegean conference KOSMOS scheduled to take place at University of Copenhagen, April 19th-23rd 2010

The themes of Kosmos conference were jewellery, costumes, aesthetics, body adornment, colours, dyes and pigments, textile production, luxury and exotics, gender and femininity/masculinity, as well as their social, religious, ideological, economic, technological, administrative and philological connections *in the Aegean Bronze Age*. When the conference was due to open on the 21st April, less than 10 of the 135 registered international participants had been able to reach Copenhagen due to the Icelandic volcanic ash affecting air traffic. However the conference organizers Marie-Louise Nosch (CTR, Denmark) and Robert Laffineur (University of Liège, Belgium) received help from ITMEDIA (University of Copenhagen) to run a highly successful online conference instead of the original planned conference. With the formal permission of the authors, their conference papers were read aloud by a team of volunteers comprising the few visiting participants and CTR staff and student helpers. In other cases, the participants sent a recorded narration of their papers which was then broadcasted. To ensure maximum participation worldwide, the time of the online conference was shifted from morning to afternoon and evening (Copenhagen time) on the first day. An audience from 28 countries worldwide actively participated through the online conference chat room. The stranded authors too were able to discuss their papers, answer questions and even provide links to other material in response to questions. An estimated 1700 persons from around the world, both researchers and students made use of the live streaming and online chat possibilities to listen and participate in the live and lively discussions. Although most participants would surely have missed the physical proximity of their colleagues, the virtual conference enabled a great many who could not have been able to afford the time or financial expense to travel to Copenhagen to participate. Only time will tell how many students it inspired to research into the fields covered by KOSMOS. The proceedings of the conference will be published in *Aegaeum. Annales d'archéologie égéenne de l'Université de Liège*. For further information and a day by day account of the process of turning a planned traditional conference into an unanticipated worldwide online event see [www.ctr.hum.ku.dk/conference and seminars](http://www.ctr.hum.ku.dk/conference%20and%20seminars).

Second international FLAX seminar at Sonnerupgaard and the Land of Legends, 29th - 30th June 2010.

The seminar *Flax – a natural resource for food and Textiles for 8000 years* was organised by Sabine Karg, National Museum of Denmark, in collaboration with CTR. It formed a cross-disciplinary investigation on the evolution and cultural history of flax and linen. The conference addressed the issues: archaeobotanical records of flax weeds and dye plants, archaeological records of flax offerings, agricultural aspects of flax cultivation, environmental impact of flax production and the social aspects of flax and linen production.

Experimental Archaeology: Textile production workshop, the Land of Legends, 23rd-25th August 2010.

The workshop gave practical introductions into different aspects of textile production based on knowledge from the Roman World and from Roman Iron Age Scandinavia. Four subjects were introduced: Dyeing with plant material (woad, madder and tancy); Fibre preparation: sorting and combing of wool and hackling and scotching of flax, spinning with a drop spindle; Weaving on an upright loom: warping with tablets, heddling and weaving. The making of loom weights and drop spindles of clay (from mixing the clay, adding temper and forming the weights after original finds). The workshop was launched as part of the DressID organised by Ida Demant (Land of Ledgens) and Eva Andersson Strand (CTR).

EDITING AND PUBLISHING

Other important research activities of the centre consisted in 2010 of editing and publishing (see list of publications). CTR has a publishing and distribution agreement with Oxbow Books, Oxford. The international scientific journal *Ancient Textiles Newsletter (ATN)* is edited and published at CTR, but independently of its centre of excellence structure.

In 2010, CTR staff and collaborators published 9 papers in journals, 14 papers in conference proceedings, 8 book chapters, 9 other types of publications and 4 books. The total publication productivity 2005-2010 is thus:

Total number of publications: 219	2005-2010	Peer reviewed	Non-peer reviewed
Number of journal articles	42	33	10
Number of conference series	56	48	8
Number of monographs	16	16	0
Number of book chapters	44	38	6
Research reports on web site	31	31	0
Others	30	30	0

CTR STRUCTURE AND STAFF

No major changes in the centre structure occurred in 2010. The SAXO institute continues to take care of administrative tasks, freeing up the director Nosch. This arrangement functions very well.

CONCLUSION

The launch of CTR2 was celebrated at the National Museum of Denmark in November 2010. Marie-Louise Nosch presented the plan for CTR2 2010-2015 and Director Thomas Sinkjær from The Danish National Research Foundation held a speech to the invited guests explaining the mission of the Foundation. In the evening a cocktail party with more than 150 participants was held at the National Museum of Denmark to celebrate the beginning of the next five successful years.

CTR's major milestones and achievements for 2010 were:

- A successful start for CTR2 and solid embedment into both University of Copenhagen and the National Museum of Denmark.
- Building up a second CTR unit in the National Museum by Ulla Mannering.
- Further international funding for CTR research.
- A one publication in *Science* resulting from a international and interdisciplinary collaboration at CTR.
- 2 PhD theses defended successfully.

Ved underskriften bekræftes det, at beretning og regnskab med tilhørende noter og oversigter indeholder alle relevante oplysninger, som vedrører årets primære aktiviteter i Danmarks Grundforskningsfonds Center for Tekstilforskning

March 2011

Marie-Louise B. Nosch, Director

