

Textiles of the Nile Valley.

Coptic v.02

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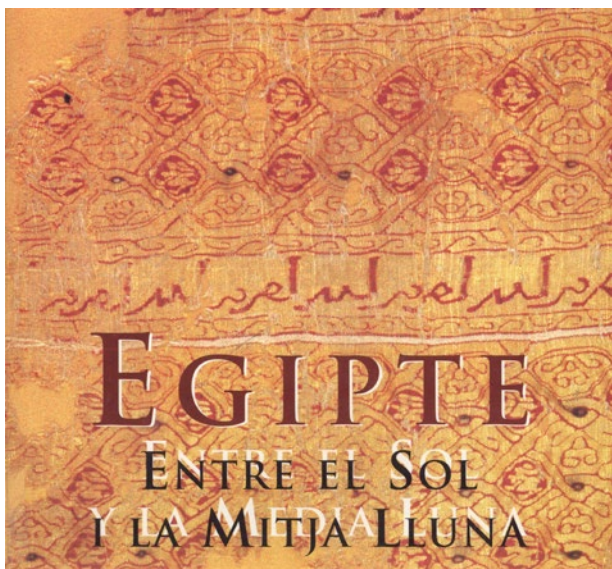
Photographs: Quico Ortega (CDMT)

¹ *Egipte, entre el Sol i la Mitja Lluna*. CDMT and Area of Editorial Services, Terrassa, 1999.

As time passes, our concepts and definitions of people and objects often change or take on new significance. When in 1999 the CDMT showcased its collection of Coptic textiles in the catalogue “Egipte entre el Sol i la Mitja Lluna” [Egypt, between the sun and the half-moon]¹, which accompanied the exhibition of the same name, the term “Coptic” was applied in a broad sense to the body of post-Pharaonic textile pieces discovered during excavations in Egypt.

Historically, the word “Coptic” was synonymous with “Egyptian”. The Greeks used the name for the inhabitants of present-day Egypt, which derived from the pharaonic name for the city of Memphis, “Het-ka-Ptah”, or “Sanctuary of the *ka* [soul] de Ptah”. Following the Muslim conquest of the region, the first syllable of the name was omitted in Arabic, ultimately giving up “Coptic”. This term was used by the conquerors to refer to the people of the Nile Valley, who in the year 641 were predominantly of Christian faith. The name therefore described both a geographical area and a specific population group.

Exhibition catalog: “Egipte entre el Sol i la Mitja Lluna”, CDMT, 1999.



These roots, however, have since lost their meaning. The “Coptic” textiles bear no relation to the modern Copts, a population with specific religious beliefs but no longer associated with a particular geographical area. In fact, many of the textiles have no link whatsoever to Christian iconography: the pieces that feature representations of classical mythology do not fall within the scope of this particular qualification of ‘Coptic’. It was important, then, to review the use of the term.

In light of the above considerations, it is now deemed preferable to describe the collection as consisting of textiles from the Nile Valley, or simply Egyptian textiles, which can then be further classified by period: Pharaonic, Greco-Roman, Byzantine or Islamic.

There have also been significant changes in the chronologies considered for this group of textiles.

2 Several works can be found in the CDMT library catalogue, at the following link: <http://goo.gl/WRsO6D>.

3 *Textilien des Mittelmeerraumes aus spätantiker bis frühislamischer Zeit*, Abegg-Stiftung Foundation, 2004.

4 Katoen Natie is a Belgian private company, founded in 1855, that originally sold and transported textile thread, primarily cotton, and now specialises in technologically advanced logistics services. Its owners have created at their head offices in Antwerp a space called “HeadquARTers” where they exhibit part of their art collection, which includes numerous textiles from Egypt and Central Asia.

5 *Methods of dating ancient textiles of the 1st millennium AD from Egypt and neighbouring countries*, Lannoo Publishers, 2007.

6 Full professor at the Universidad Complutense de Madrid.

7 Curator of the Museo de Artes Decorativas, Madrid.

8 “The collection of Coptic textiles in the Museo Nacional de Artes Decorativas, Madrid: the results of the dye analysis and 14C testing,” A: *Methods of dating ancient textiles of the 1st millenium AD from Egypt and neighbouring countries*. Lannoo, 2007.

9 Research and development projects funded by the Spanish Ministry of Economy and Competitiveness (formerly the Ministry of Science and Innovation): “Caracterización tecnológica y cronológica de

The literature on “Coptic” textiles is plentiful² but – with the exception of the most recent examples – examines them in terms of iconography, style, or the relationship between their decorative content and that of other objects (stuccos, coins, ceramics, etc.). Many of the excavations that uncovered these pieces were not adequately documented at the time and only the most attractive or best preserved items or fragments were conserved. As a result, many items lack context and cannot be correctly catalogued.

Over the last few years, teams of specialists in various disciplines have carried out collaborative studies of the textiles, analysing fibres, dyes and techniques, and selected pieces have been carbon-14 dated. Their work has made it possible to correct the chronologies of a great many of the pieces in the collection.

One of the first outcomes of the new analyses was the publication in 2004 of the catalogue of items in Abegg-Stiftung collection.³ Some of these items were carbon-14 dated, leading author Sabine Schrenk to question the geographical origins and timelines originally established for them. Her review included an interesting reflection on the importance of defining the context in which such pieces were produced and the purposes they might have served.

In 2005, the city of Antwerp hosted the first conference of the Textiles from the Nile Valley study group, sponsored by the Belgian company Katoen Natie.⁴ Organised around the theme “Methods of dating ancient textiles of the 1st millennium AD, from Egypt and neighbouring countries”, the conference brought together archaeologists, chemists, art historians, curators and Egyptologists from many countries and institutions to discuss the results of their research. Two years later the proceedings⁵ were published, and the conference is now a biennial event at which experts present fascinating papers on the latest advances in the field. Among the speakers at the first conference were Laura Rodríguez Peinado⁶ and Ana Cabrera Lafuente⁷, who presented their study of the dyes used in the pieces exhibited at the MAD.⁸ Later, the same experts embarked on two new research projects, to which the CDMT contributed as a collaborating museum.⁹ The venture led to the presentation of a joint paper at the study group’s second conference, “Late Roman and Byzantine textiles from Egypt: some examples of furnishing textiles from Spanish

las producciones textiles coptas: antecedentes de las manufacturas textiles altomedievales españolas” (HUM2005-04610) and “Caracterización de las producciones textiles de la

tardoantigüedad y Edad Media temprana: tejidos coptos, sasánidas, bizantinos e hispano-musulmanes en las colecciones públicas españolas” (HAR2008-04161).

CDMT n.r.2705, 5th-6th c.
[See detail.](#)



10 Published in: *Clothing the House. Furnishing textiles of the 1st millennium AD from Egypt and neighbouring countries*. Lannoo Publishers, 2009.

11 Though they were found in Egypt, we have not included them in this group – 5 fragments of mummy bandage (1st century AD), 4 painted linens (1st century AD), 8 silk cloths from Akhmim (7th-9th centuries AD), 1 textile fragment from Antinopolis (5th-7th centuries AD) – nor do we consider all of these pieces to date from the Fatimid period.

12 <http://goo.gl/tvvUhg>. Partners in the initiative include Katoen Natie (Antwerp), the Musée du Louvre (Paris), the Skulpturensammlung und Museum für Byzantinische Kuns (Berlin), the Abegg-Stiftung Foundation (Riggisberg) and the National Museum of Denmark (Copenhagen).

13 Tests were carried out at *Beta Analytic Inc.* in Florida. Accelerator mass spectrometry was chosen as it is the least aggressive technique, requiring only very small sample quantities for testing.

collections”.¹⁰ Two of the featured pieces were carbon-14 dated and dye analyses were conducted on a further five, all belonging to the CDMT collection.

Of the national collections in Spain that include Egyptian textiles from the Greco-Roman period to the Islamic era, the CDMT’s is the largest, holding 284 pieces¹¹ that date from the third to the eighth century. Each of these pieces is presented and described in the 1999 exhibition catalogue “Egypt, between the sun and the half-moon”. Thanks to new studies and ongoing work during the 17 years since its publication, we have been able to add new information and obtain more accurate data, as detailed in the rest of this article.

Carbon-14 dating consists in measuring the quantity of the radioactive isotope in a given organic material. Carbon-14 exists in the atmosphere and is assimilated cumulatively by all living organisms, whether through photosynthesis (plants) or ingestion (animals). When an organism, or part of that organism, dies, the assimilation stalls and the concentration of carbon-14 slowly begins to fall. Scientists have determined the rate at which this decrease occurs, so by measuring the quantity of carbon-14 conserved by an organism it is possible to establish a relatively precise estimate of the point at which the carbon loading was interrupted. Until recently the procedure was little-used for dating textiles, being both costly and damaging to the textile, as it required a comparatively large sample to ensure accurate results. In recent years, however, costs have fallen and far smaller test fragments are needed, making carbon-14 dating a more economically viable option and enabling large groups of related samples to be tested to acquire estimates of genuine significance. The results of those projects that have used the carbon-14 technique to date textiles – from before and after the first millennium – are now being pooled through a free, open-source database maintained by the University of Bonn.¹²

Two textiles from the CDMT were selected for carbon-14 dating by accelerator mass spectrometry (AMS)¹³. The first, catalogued under record number 2705, is a fragment of a rectangular linen *clavus* decorated in purple wool. The decoration comprises a small lion within a lobed circle, a figure to one side that has been highly distorted by the near-complete loss of the weft, and a kneeling or leaning figure on the opposite side whose left hand holds up an unknown object. The second figure appears to be female and wears a round, tower-like headdress that recalls representations of the goddess Rhea (Cybele, in Latin), mother, among others, of Zeus and Poseidon. The approximate period to which the piece had originally been dated was the turn of the sixth century AD, and this has been confirmed by carbon-14, which indicated with a likelihood of 95% the period 400–540 AD and, with lesser certainty of 68%, the period 420–530 AD.



14 The analyses were carried out at the *Larco Química y Arte S.L.* in Madrid.

15 A. Cabrera has also found hemp in some of the exhibits at the Museu Tèxtil i de la Indumentària de Barcelona, as noted in her doctoral thesis: *La industrial textil copta: la colecció de teixidos de la Antigüedad Tardía del Museu Tèxtil i d'Indumentària de Barcelona*, Universidad Complutense de Madrid, 2015, unpublished.

The second textile to undergo carbon-14 was item 3869, a heavily deteriorated piece decorated with a row of swimming *putti* holding offerings, each separated by aquatic plants and lotus flowers. The decoration is presented in a variety of colours against a red background, but the figures themselves are crude and simplistic in appearance, which guided the original dating of between the ninth and eleventh centuries. Carbon-14 dating, which matches the findings for similar pieces, situates the piece with a likelihood of 95% between the years 600 and 660 AD, and with a lower probability of 68% between 620 and 650 AD, making it at least two centuries older than originally thought.

Just as correctly identifying the structure and fibres of textiles helps to pinpoint their geographical origins and date of production, analysing the dyes that they contain can also provide important information. The dyes used in Al Andalus in the Middle Ages, for example, were not the same as those employed in Central Asia during the same period, and the use of cochineal indicates a clear *terminus ante quem* for dating purposes.

The items with record numbers 87, 207, 222, 245 and 304 were analysed using high-resolution liquid chromatography,¹⁴ which identified the typical dyes used in Egyptian textiles from the period: madder red (*Rubia tinctorum*) for the red shades, indigo (*Indigofera tinctoria*) for the blues, and indigo with weld (*Indigofera tinctoria* with *Reseda luteola*) for the greens. Fibre analysis, meanwhile, revealed both the linen and wool typical of pre-Islamic Egyptian textiles but also the use of hemp in certain parts of the decoration in one piece (rec. no. 207). Hemp is rarely described in the literature, but this is presumably because the laboratory tests that would identify it were not carried out, its appearance being near-identical to that of linen to the naked eye.¹⁵

CDMT n.r.87, 5th-6th c. [See detail.](#)



CDMT n.r.207, 5th-7th c.
[See detail.](#)





CDMT n.r.222, 5th-6th c.
[See details.](#)

CDMT n.r.245, 5th-6th c.
[See details.](#)





CDMT n.r. 304, 3rd-5th c.
[See detail.](#)

16 Textile restorer and researcher, respectively, attached to the art collection owned by Katoen Natie, Antwerp.

17 “Textiles, tools and techniques of the 1st millennium AD from Egypt and neighbouring countries”. Lannoo, 2015.

The CDMT is now part of the team in the project “Las manufacturas textiles andalusíes: caracterización y estudio interdisciplinario” (HAR2014-54918-P), which is scheduled to run for three years, will adopt the model of previous studies, using a multidisciplinary perspective to establish the links between a variety of Medieval textile pieces. Alongside this, the CDMT is also involved in the project “Medieval Textiles in Iberia and the Mediterranean”, funded by the Fondation Max van Berchem (Geneva) and the Pasold Research Fund (United Kingdom), which consists of a complementary epigraphic study of the textile corpus.

In 2012 and 2013, the CDMT also contribution to the project “Measurements and fitting of Egyptian children’s tunics of the 1st millenium AD”, led by Anne Kwaspen and Chris Verhecken-Lammens.¹⁶ The authors examined the patterns of 60 children’s tunics from 14 different collections and used the information to reconstruct how they would have been produced and worn. One of the pieces included in the study was the tunic owned by the CDMT, stored under record number 263. The results were presented at the 8th Textiles from the Nile Valley conference and published in the accompanying proceedings.¹⁷

Two other items, from the Tove Alm collection (rec. no. 7495 and 7509), are currently part of research being carried out by Maciej Szymaszek for the preparation of his doctoral thesis *Tracing the Provenance of Ancient Egyptian Textiles: Tove Alm’s Collection* at the University of Gothenburg. The thesis looks particularly at the evolution of human representations in Egyptian textiles and uses carbon-14 dating to situate the pieces chronologically.

In 1968, the Swedish antiquarian Tove Alm sold part of his collection of Egyptian textiles to what was then the Terrassa Provincial Textile Museum. The



CDMT n.r.263, 4th-6th c.





CDMT n.r. 7495, 6th-7th c.

18 We have not included in this group the first-century Egyptian textiles donated by the Monastery of Montserrat.

19 For more information on how the Egyptian textile collection was put together, see: CARBONELL, Sílvia. “La col·lecció de teixits coptes del Centre de Documentació i Museu Tèxtil de Terrassa.” In: *Quaderns del Museu Episcopal de Vic*. Vic, 2004.

20 Imatex link: <http://goo.gl/wYF8hP>.

present-day CDMT’s other Egyptian textiles¹⁸ come from the Biosca and Viñas collections¹⁹. Through the work of Sílvia Carbonell, it has been established that Ricard Viñas bought examples from various antiquarians and collectors around the world: from Jacques Kassapian in Paris, Gottfried Enster in Zurich, Albert Honnegger in Lyon, A. Indanyan and from Marçal Olivar and Emili Cabot in Barcelona. Thanks to information received from Laura Rodríguez, it has been possible to identify 36 items that came originally from the collection of Anastasio Páramo, from which they were transferred to the Ignasi Abadal collection and later the collection of Josep Biosca, who in 1946 founded the Biosca Textile Museum, the seed from which the CDMT grew.

The Egyptian textiles were the first collection at the CDMT to be photographed with a digital camera, in 1996, and were also the first exhibits to be made freely available in our on-line image library, **IMATEX**. At the time of its launch, IMATEX was a pioneering initiative at the national level, conceived as a novel solution to the longstanding problem of balancing conservation with dissemination.

This year all of the pieces have been re-photographed. The original images, obtained with our first digital camera, have been greatly improved upon, and we now have much sharper and more detailed views of each item in the collection, whose colourful designs – crude but intricately worked – make them so endearing.²⁰



CDMT n.r.7509, 6th-8th c.
[See detail.](#)

In February 2017 the CDMT will host the exhibition “Ancient Egypt and the Coptic Textiles of Montserrat,” curated by the Fundació Abadia de Montserrat, which showcases pieces from the Roca collection, and an exhibition of photographs taken at excavations in Oxyrhynchus, organised by the Catalan Society of Egyptology.

The study of historical textiles is currently attracting considerable interest. New research techniques, analyses and tests have made it possible to conduct a critical revision of the literature, as well opening up new channels of investigation into aspects hitherto unaddressed. In this new scenario, team work has a crucial role in facilitating the sharing of knowledge and resources, enabling experts to acquire a comprehensive understanding of the many aspects that the complex field of textile research presents. ●