Prehistory and Protohistory

Maria C. Shaw and Anne P. Chapin (with contributions by E.W. Barber, G. Bianco, B. Burke, E. C. Egan and S. Peterson Murray). *Woven Threads. Patterned textiles of the Aegean Bronze Age (Ancient Textile Series 22).* pp. 264, colour illustrations. 2015. Oxford: Oxbow Books. ISBN: 978-1-78570-058-3 £14.95.

Aegean studies and textile research welcome a new book with an original and highly specialized topic. Contrary to previous research that was orientated more to weaving technologies, this volume is devoted to textile design and connects fabric technologies with different expressions of the visual arts. The book focuses first and foremost on a detailed analysis of patterns and in this way it upgrades patterning from a simple decorative medium to an important key for understanding the applied thread technologies, the evolution of design and a series of craft transfers during the Late Bronze Age. Furthermore, it postulates a new research area supplying evidence for intercultural relations between people of the Aegean and the East Mediterranean.

Bronze Age studies have devoted several works on Minoan and Mycenaean costume and textile technology, which becomes better understandable through recent targeted studies[1] and accurate recreation attempts.[2] Textile patterns, on the contrary, had not been given proper attention, despite their great importance as pictorial evidence.[3] The reasons for this hesitation and omission is twofold. Due to the lack of actual patterned textiles from the Aegean, we cannot be entirely sure that the motifs seen on decorated surfaces are reflecting woven, painted or sculptured works, and even in cases of a close similarity to decorated fabrics, we cannot tell for certain if they represent actual textile products or if they are only inspired by them. However, textile patterns, which are repeated on different artistic or utilitarian media, in different periods, and places, can relate archaeological remains of different nature, upgrading textile design to an essential key to decipher past material cultures. This volume aims to give a holistic image of the Aegean textile art, and therefore contains papers by authors who present different approaches, such as fabric technologies, analysis of motifs, as well as research on the consumption of textile products in everyday life, and their impact on economy and society.

In the introductory chapter *Spinning Ariadne's Thread: Sources and Methodologies* (pp. 1-16), Anne Chapin gives a brief history of Aegean textile studies and explains the different approaches of the book and the classifications of available evidence. The sources are classified typologically, i.e. after physical evidence (tools and textual references to fabric technicians), then iconography, i.e. textile products (clothes, covers, walls, floor coverings) and the way they were displayed in elite households, villas, and palaces. This chapter also provides the necessary bibliographic material for the non-specialist. The first approach to the subject collects references to elaborate textiles mentioned in Greek mythology, showing the importance of luxury clothing in the ancient world. Then follow instances of Mycenaean artistic expressions, where, through the affordance of luxury patterned textiles, the local social elite distinguished themselves from barbarity. Through these examples, it is demonstrated that costume variation in iconography characterises specific ethnic groups, whereas there are no clear differences between the Aegean regions, so that we can talk about an Aegean costuming tradition. A survey of the pictorial and iconographic sources follows, encountering clothes and patterned fabrics on characteristic illustrations of Late Bronze Age life depicted on various artistic media: scenery in the glyptic and micro sculpture, such as seals, signet rings and figurines, but also the 'woven style' on pottery characterized by complex seamless and interlocking designs. From all these pattern-bearing media, more emphasis is devoted to frescoes, which, due to the large dimensions of the depictions and the artists' narrative intentions, allow for a more accurate examination of motifs and the use of decorated textiles in the built environment.

Chapin makes a very interesting approach to the process of motif analysis by comparing it with the translation of ancient text fragments (p. 11), when a constant attempt to understand the writer's intentions is made. Similarly, whenever analyzing fragmentary motifs and depictions, scholars try to trace the artist's intentions to describe their physical environment, to decorate and highlight certain artefacts or to use different artistic means to impress the viewer. Thus, the whole process of interpreting motifs belongs to an interpretative circle, where fragments create a canvas for understanding the whole meaning of the artwork. In this process it should also be borne in mind that

[1] Anderson Strand and Nosch 2015; Nosch and Laffineur 2012
[2] Jones 2015
[3] Barber 1991; Tzahili 1997

the depictions are not always realistic, but contain a series of conventions and that the final result has been shaped by the artist, but also by the sponsor and by the people to whom the artwork is addressed. Beyond her references to the Late Bronze Age artworks depicting decorated fabrics and to their importance, Chapin conducts a contextual analysis, which refers to the interior spaces where these were found in order to make a better assessment of their impact in their social background. Through the volume's introduction, the importance of using standardized terminology and glossaries is emphasised.

The second chapter *Bronze Age Aegean Cloth Production in the Bronze Age* (pp. 17-42) by B. Burke and A. P. Chapin is an investigation focused on the available archaeological evidence and offers an overview of the state of the art in Aegean Bronze Age textile technology. All known archaeological and linguistic evidence related to fabric production is collected here. There is an extensive reference to raw materials, tools and machinery and to the distribution and consumption of ready textile products in various Aegean regions. The importance of interdisciplinary research concerning textile technology is particularly emphasized, especially the need to combine information deriving from history, archaeology, and literature.

The authors refer to the archaeological textile remains in the prehistoric Aegean from the sites of Akrotiri, Chania, Mochlos, Kalyvia, Agia Triada, Phaistos, and Routsi and - since the relevant universal data are not very often discussed in Aegean archaeology – they discuss the earliest textile examples from the Upper Palaeolithic until the Neolithic in the Near East. They also enumerate raw materials available in the Aegean, such as linen, wool and sea silk,[4] the ways of their processing and the particular sites where these were found. A special reference is made to studies on Bronze Age textile tools and devices (spindle whorls, looms, loom weights and weaving tablets), their function and efficiency (pp. 29-34).

The authors finally collect the most important and relevant textual evidence from the palatial archives of the Late Bronze Age (pp. 34-38), which yield information about the textile products circulating in the palace, as well as information about the craftspeople, the organization of production and the distribution of textiles in the countryside. This chapter is an inclusive and helpful introduction to the deliberate study of luxury fabrics that follows in the next chapters. By using a combination of interacting archaeological, technological and textual data, it gives a complete picture of the operational chain from the raw materials to the use of the final products. Beyond the data on production and consumption of textile goods, it highlights the role of individuals, whether as craftsmen, work receivers, or as good consumers.

The agenda of the book proceeds into one of the central themes of textile iconography, the production and use of patterned textiles in costume, where luxurious fabrics are woven with elaborate colorful designs. Since clothing is closely linked to the identity and personality of the people who wear it, costume iconography is the most appropriate field to monitor the importance of fabrics for the expression of prestige, gender roles, and religious traditions. In her chapter *Patterned Textiles as Costume in Aegean Art* (pp. 43-103), Susanne Peterson Murray traces a clear difference between the luxurious fabrics of Minoan Crete and Mycenaean Greece. In Crete, fabrics are often woven with sophisticated colored designs covering the entire surface of the clothes, whereas in Mycenaean Greece they were more simple, with the colored patterns being limited to the edgings, while the rest of the fabric remained monochrome, an observation that signifies the considerable expenditures Cretans were spending in materials and time.

Murray opens her detailed and extensive survey by describing some representative garments of the Late Bronze Age seen on images of Minoan Crete, particularly from Pseira and Knossos, while she also refers to the impact this imagery must have had through its thematics and aesthetics, here by making comparisons with the decorated rooms at Phylakopi and Akrotiri (pp. 45-75). The presence of luxuriously dressed figures in these exceptional places creates a picture of the importance of these garments for the social position of the people who wore them. Thus, the presentation of the fabrics on the frescoes was accompanied by the statement of the social role of the depicted people. The collection of crocuses, for example, and the age of the luxuriously dressed figures in the wall-paintings of Akrotiri refer to the high social position of the girls, who were involved in textile production.

In the costume of the Mycenaean mainland discussed in the second part of this article (pp. 76-90) there is initially a great impact of Minoan costume seen in the tailoring of the dress and on the patterning, but this trend will soon be abandoned and the decorations will be limited to the edges of

[4] Sea silk is the raw material for making textiles from the Mediterranean marine mollusc Pina Nobilis, a wonderful sea product, which gives very fine filament, finer than silk.

the garments. And while the frescoes best represent the color variety, three-dimensional objects such as the Ivory triad from Mycenae, show better the texture details. Murray analyzes meticulously the costume elements from specific frescoes from Mycenae and compares them with the processions from Pylos, Tiryns and Thebes, tracing the points where the costume elements refer to worship. Particular reference is made to the symbolic meaning of the sacred knot, a piece of decorated fabric worn or offered to the goddesses carrying worship messages.

In the chapter *Palace and Household Textiles in the Aegean Bronze Age* (pp. 105-130), Maria Shaw and Anne Chapin discuss the position and role of luxury colored fabrics, not in their customary use as the basic element of garments, but as elements of interior decoration. Such textiles were found in the rooms of prominent people, which, as evidenced by the iconography, were decorated with luxurious wall, ceiling hanging or floor coverings. Their use in the interiors had, on the one hand, the purpose of demonstrating the economic strength and the social high status of their owners and on the other hand to display the spirit and the artistic quests of the local culture. In addition, the cases of decorating the interiors of sacred places with elaborate fabrics show the great importance of luxury in the sacred ceremonies of the Late Bronze Age. As examples of the religious use of luxury fabrics, some well-known frescoes from Akrotiri and Crete (Agia Triada and Galatas) have been chosen.

The authors of this chapter go one step further to a detailed interpretation of the textile iconography and connect woven patterns with special techniques. Apart from a comparison of textile-like patterns with actual textiles, an attempt is made to interpret their individual elements as the result of specific techniques, such as quilting, cording or the application of non-fibrous material, like the use of semi-precious stones and metallic elements. This expanded approach enlightens us about many more crafts and technologies than the manufacture of textiles. A significant approach of this chapter, that might be a useful guide for future textile studies, is that all the repetitive designs, whether seen on garments, on utilitarian objects or on interior furnishings, are considered to represent existing textile artifacts and they are not just inspired by patterned textiles. However, all cases are not always obvious or undisputable. Such a case is e.g. the decoration of the figure-eight-shaped shields with the woven motifs of Pylos, which the authors consider to be covered with cloth. Since a textile covering would be a rather inappropriate material for defensive weapons, these patterns could also be seen simply as a visual transfer of textile motifs to another material.

Special attention is given in this publication to the decorated floors of Mycenaean palaces. Emily Egan in her chapter *Textile and Stone Patterns in the Painted Floors of the Mycenaean Palaces* (pp. 131-147) makes a radical review of the interpretation of the decorative flooring of the Mycenaean era. Through the study of square patterns and their visual perception, floor paintings found in the palaces of Tiryns, Mycenae, and Pylos, are not considered to be imitations of cut stones, which is the most common interpretation, or patterned fabrics, but an imaginary hybrid expression of these two artistic fields and a typical example of a complex visual craft transfer. This interesting approach, regardless of whether it is fully accepted in the case of floors, releases us from linear interpretations and dilemmas to choose one interpretation and reject another. Furthermore, it shows the perpetual interaction of contemporary decorative arts, which by joining technological elements and longing for new ways of expression creates new time styles.

The chapter *Sailing the Shining Sea: Maritime Textiles of the Bronze Age* (pp. 149-181) by M.C. Shaw and A.P. Chapin approaches a topic that has not been abundantly discussed in Bronze Age textile studies, that is the textiles used on ships. The most direct sources on this topic are the archaeological shipwrecks that have yielded real finds, while indirect information comes from the written sources of Linear B, which can be compared with evidence from Egypt and the Near East. To this evidence indications from historical, philological and archaeological sources of later periods can be added. However, the most useful testimonies are the pictorial ones that demonstrate various artistic means of the Late Bronze Age, such as clay ship models, frescoes, seals and sealings depicting ships, and vase iconography. Through all these pictorial means, it becomes clear that special fabrics were designed for the needs of ship building. The wall painting of the naval battle of the fleet and the scene of the shipwreck from Akrotiri, for example, demonstrate different instances of the use of fabrics, ropes, decorative sails, and they often represent deck shelters, which are lightweight panels of wood, leather and fabric placed on the decks of the ships. Their function was to protect the passengers from the wind, without hindering the front view. In addition to the basic textiles, also strings, cords, ropes of various weights and materials are illustrated. The fresco of the fleet shows us in great detail the construction of the

ikria (stern screens, p. 155). Additionally, evidence from other areas shows that the ropes were made of different materials, such as palm trees and halfa grass in Europe and North Africa, and papyrus, flax, reed, and hemp in Egypt. These materials could also have been used in the Aegean since ships were visiting harbours and could have been supplied with native materials. Significant at this point is the archaeological evidence from Scandinavia's shipbuilding that shows us that the sails could have been made of wool, a case which could explain the cross-hatching of the Aegean Miniature Fresco. In such a case, sails would be reinforced with netting or rope. There is also evidence for coloured sails in ancient shipping, such as the sails of the Tutankhamen tomb which were dyed red and other examples from Egypt showing repetitive designs. The Aegean illustrations could also represent cloth with netted reticulated decorations.

Particular attention is paid to the fresco fragments from Mycenae, for which a new reconstruction as painted ikria is suggested instead of the old one, which interprets them as curtains (pp. 155-167). As an argument the authors use the full absence of curtains in contemporary iconography. The closest comparisons are the deck shelters of room 4 in the West House in Akrotiri. These representations offer a reasonable pictorial and spatial framework for the new interpretation, since this room, like the room in Mycenae, has been interpreted as a bedroom.

Between the years 1998 and 2010, Maria Shaw has published very detailed studies on the preparation of the wall painting. In this publication, Anne P. Chapin provides a review of this material in the chapter *String Lines, the Artists' Grid, and the Representation of Textiles in Fresco* (pp. 183-204) based on excerpts from Shaw. This elaboration of the older work here makes sense, since this topic is an ideal supplement on the conception of patterns discussed in other contributions of the volume. The article focuses on the pre-designing of frescoes representing patterned fabrics, namely drafting, guiding lines and auxiliary grids. Available evidence for this stage of construction are the traces of the tools that were embossed on the walls. With the proper engravings, artists marked the positions of the motifs within the composition and they were able to design true copies. Some lines were free, embossed by hand with a sharp object, while others were made with special design tools such as compasses or stretched yarns, on which the incision was made. The guiding lines that created the frame of the picture were pressed into the mortar with a string. Such elements are mainly known from Knossos. Threaded lines were used to design architectural parts and other straight-lined surfaces, whereas for the representation of curvilinear surfaces stencils, french curves, etching, and compasses were used. The auxiliary seamless squares were used by the artists to display the patterned fabrics, ensuring the correct repetition of the motifs.

Through Barber's article *Minoans, Mycenaean and Keftiu* (pp. 205-237), it becomes clear that textile recreations are crucial for understanding the weaving processes, for comparisons with textile products from other cultures and for realising the potential of textile art to offer valuable historical data. As a particular issue, the article deals with the presence of textile belts with Aegean decorative motifs in the Keftiu ships in Egypt of the 18th Dynasty. As comparing elements deck shelter representations are used, the fresco of the fleet and the decorated chamber roof of the Orchomenos tholos tomb. These pieces of pictorial evidence demonstrate that ceilings and walls of prominent houses were decorated with fabrics. Textual evidence comes from Euripides, who in the tragedy *Ion* refers to textile kiosks located in temples. It is also known that in Egyptian interiors, there were awnings on the roofs to protect people from the falling dust.

Subsequently, there follows a re-release of the chapters and texts of the fundamental work of Elisabeth W. Barber's *Prehistoric Textiles* refering to fabrics depicted on Egyptian frescoes which are considered to be Aegean. As in the case of Shaw's re-release chapter, this repetition works very well, since the volume's new content can directly be compared to this pioneer work on Aegean textile iconography. A synthesis of all known examples is given, where the Egyptian illustrations connect the Minoan and the Mycenaean textiles with archaeological data from Egypt, with special reference to some of the most popular Aegean motifs among the Egyptians, such as the spiral, the quadrangle and the checker with enclosed dots. This transcultural evidence also provides useful historical and chronological data. The Egyptians must have seen these multicoloured fabrics during the diplomatic missions of the 18th Dynasty, when the Aegeans brought them as gifts to the court of Thebes. From that time, wealthy Egyptians cherished Aegean fabrics, mainly as covers for canopies, until the period of the collapse of the Aegean palace societies.

In her closing chapter *Observations, Summaries, and Conclusions* (pp. 239-256), Anne P. Chapin summarises the results of all the chapters. What clearly comes out from all contributions, is the demonstration of the value of patterned fabrics as archaeological

evidence, their significance in artistic expression and their role in various fields of everyday life as well as in symbolic environments. In both the Minoan and the Mycenaean worlds, textiles played a crucial role in the economy. The clothes people wore were of many different kinds, and costume was a prominent medium of self-determination. As shown on the wall painting iconography, enemies are depicted naked or wearing hides giving a clear message: civilised and winners wear clothes, while those who do not wear any are lower citizens, losers or barbarians.

The construction of the elaborate clothing in Crete demanded an investment of considerable time and access to difficult-to-acquire materials, though willingly spent by the elite in order to posess the objects of desire. During the Minoan period, bright colours, intricate designs, jewellery, and headdress prevailed in the costume, and particular importance was given to personal adornment. A clear contradiction to the Minoan luxurious living is presented through the iconography of the Mycenaeans, who, even in the ranks of the priests and the military people, whose position would justify a distinct quality of attire, were dressed in simple garments.

The articles of the volume refer to archaeological data well-known to specialists and to many specialised readers, but the new perspective of textile production and consumption, gives the old finds a broader significance and offers a series of new interpretations. The non-specialised reader will enjoy this compilation of articles as well, since the language, the explanations and the narrative character of the texts allow for easy comprehension. An even easier use of the book would perhaps be facilitated by an index and glossary, as there are many different topics discussed and special terms are used. The bibliographical list compiled for all the articles at the end of the book refers to archaeological reports, special studies concerning the technology, art and interpretations of the patterned textiles.

To the great virtues of this publication, beyond its rich informative content, counts the excellent quality of the edition including many colour photographs presenting the pictorial evidence in much detail. The parts of the illustrated patterns, which are not well-discernible on fragmented or poorly preserved finds, have been designed in clear and lively reconstructions. The re-publishing of earlier published book chapters by M. Shaw and E. Barber helps to create a complete picture of the approaches that have been taken so far and to see the evolution of various surveys on patterning. The greatest asset of the book is that it collects all the necessary data required to see the patterned textiles, both in their technological, aesthetic, and social dimensions, as a necessary tool in the archaeological research that reveals unknown aspects of the Bronze Age's art and technology, history, and social life.

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Andersson Strand, E. and M.-L. Nosch (ed) 2015. *Tools, textiles, and Contexts. Investigating Textile Production in the Aegean and Eastern Mediterranaean Bronze Age* (Ancient Textiles Series 21). Oxford: Oxbow Books.

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Philippa M. Steele (ed.). *Understanding Relations Between Scripts. The Aegean Writing Systems.* pp. xv + 221, 87 b/w illustrations. 2017. Oxford & Philadelphia (PA): Oxbow Books. ISBN 978-1-78570-644-8 £36.00.

This book is based on the papers given at a conference in Cambridge, March 20-21, 2015, held in memory of Anna Morpurgo Davies, on various aspects of the prehistoric Aegean writing systems (Cretan Hieroglyphic, Linear A and Linear B) and their Cypriot relatives, including not only the