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The fabric of kings (FAROS)

FAROS

Introduction

The FAROS project, entitled *The fabric of kings: funerary textile remains from Mycenae and the early Mycenaean textile production* and hosted at the University of the Peloponnese, Greece (Department of History, Archaeology and Cultural Resources Management), is a scientific initiative running from 2023 to 2025 that brings together several research and cultural institutions from Greece and abroad. The project's core focus lies in an exceptional case of elite textiles of the early Mycenaean period (17th–16th century BCE) providing insights into the textile culture and technology of the period. This report presents the research subject, objectives, methodology, preliminary findings, and future plans.

Over the past two decades, textile archaeology has gained momentum across Europe and the Mediterranean region. The study of textile remains has expanded, yielding detailed insights into the textile culture of various civilisations spanning prehistoric to modern times. Within Greece, scattered discoveries of ancient textile fragments date back to the late 19th century. However, intensified research in the early 2000s, driven by institutions like the Hellenic Centre for Research and Conservation of Archaeological Textiles (ARTEX) and the Textiles Conservation Lab of the Directorate of Conservation of Ancient and Modern Monuments, has led to the study of an array of ancient fabrics ranging from prehistoric to Roman times.

The period for which we know the most about textile production and technology is the Classical period, which offers a significant corpus of information. However, as we go back in time and the available sources decrease, our understanding of textile manufacture weakens and earlier periods such as the Mycenaean era remain less understood.

Research material, methodology and objectives

The FAROS project addresses this gap by focusing on the early Mycenaean period. By studying a corpus of previously unpublished textile remains alongside other available sources, FAROS aims to generate new knowledge that will lead to a better understanding of the textile culture of this early period in Greece. The Mycenaean, the earliest Greek civilisation (1600–1100 BCE), are famously associated with the Late Helladic period (LH) of the Greek Late Bronze Age, marked by a palatial culture. While substantial information exists regarding their phase of prosperity and decline (LH III), less is known about their initial emergence (LH I–II). The FAROS project focuses on previously unexplored material and introduces the Mycenaean through their textiles, thus generating new knowledge about early Mycenaean society and its textile industry. Most of the information about the Mycenaean textile production and technology actually derives from research on the palatial period (LH III) and is largely based on indirect sources, such as written documents (Killen 1984; Del Frio et al. 2010; Nosch 2020), textile tools (Nosch and Laffineur 2012; Vakirtzi et al. 2014; Siennicka et al. 2018), iconography (Nosch 2008; Smith 2012; Shaw and Chapin 2015) and archaeological remains (Kaza Papageorgiou and Kardamaki 2011, 201–208; Andersson Strand and Nosch 2015). Indeed, it is known that the Mycenaean palaces controlled a sophisticated textile industry that produced large quantities of various types of textiles, involved a great part of the population, and represented a significant economic sector.

The FAROS project adopts a holistic interdisciplinary approach, bringing together information from a variety of sources to gain a comprehensive understanding of early Mycenaean textile technology and its evolution through the Late Bronze Age.

The project's primary research focus is a substantial textile corpus from Mycenae, housed in the Prehistoric Collection of the National Archaeological Museum in Athens, Greece. It consists of funerary textiles discovered in inhumation graves, in the Grave Circles A (1600–1500 BCE, around seven fabrics) and B (1650–1550 BCE, around 15 fabrics). These Grave Circles were the resting place of the Mycenaean elite, which yielded numerous impressive burial goods (Karo 1930/1933; Mylonas 1973). Remarkably, only one of these fabrics has been previously studied and preliminarily published (Spantidaki and Moulhéat 2012, 192, figs 7.4–7.6), rendering the ongoing research within the FAROS project a unique endeavour in the field of Bronze Age textiles. The study of these textiles involves bibliographic research, archival investigation, macroscopic and microscopic examination, and scientific analyses such as High Performance Liquid Chromatography and radiocarbon 14 dating.

In addition to the textiles, the project studies textile tools from other early Mycenaean sites to understand the technology of the period, for example the types of looms used, as well as examining the types of fabrics that they could produce. A functional study of these tools will provide insight into the types of textiles that could be produced with them.

Furthermore, the iconographical sources of the palatial period will be examined, as well as relevant modern research, with the aim to identify and collect information about technical characteristics of the textiles and garments depicted.

Similarly, modern research on Mycenaean textile production using the Linear B archives (for instance, Del Frio et al. 2010) will be used to collect information about technical characteristics of the fabrics described (materials, colours, decoration).

Finally, the project aims to exploit the field of experimental archaeology to validate production and decoration techniques identified through the examination of the textile remains. To achieve this, the project will recreate textile tools from this period and produce woven samples of the analysed fabrics using reconstructed looms.

By combining all available sources on textile production and consumption in this early period, the FAROS project seeks to generate new technical data that will provide answers to larger technical and sociohistorical questions about the characteristics of the early Mycenaean textile culture. These questions include the characteristics of the early Mycenaean textile industry in terms of technical details of production (materials, fibre processing, production, and decoration techniques), as well as examining the characteristics of

elite textiles of the period. Furthermore, they explore the connections of the early to the later Mycenaean textile industry: is there a traceable evolution between the early and late Mycenaean textile technology or are there elements that disappear or change over time?

Preliminary results

The stereoscopic examination of the textiles from the Grave Circles of Mycenae so far indicates the presence of more than 15 different fabrics made both of plant and animal fibres. Plant fibres dominate, and it seems that flax is the most common material in this period, as it is generally the case in archaeological textiles in Greece (Spantidaki and Moulhéat 2012; Spantidaki 2016).

Preservation varies across textiles. Some have been mineralised due to contact with metal objects within the graves, leading to different degrees of mineralisation, while others retain their organic state. Notably, different areas of the same fragment may be preserved in different states, complicating the identification of various fabrics.

Several fragments exhibit meticulous fibre treatment, evident through the arrangement of well separated and parallel fibres, resulting in very clean and shiny threads (fig. 1). Most fabrics are woven and display the two main variants of the plain weave, namely balanced and weft-faced tabby. Some fragments also suggest mat-like structures (fig. 2). In addition, some fragments preserve traces of technical elements, such as simple or decorated edges.

Textile fragments of both Grave Circles preserve traces of decoration; red and purple colours have been



Fig. 1: Textile inventory number 8589, Grave Circle B, Tomb N. Stereoscopic image of the fabric displaying high quality threads (Image: Stella Spantidaki)



Fig. 2: Textile inventory number 551, Grave Circle A, Tomb IV. Stereoscopic image of mat-like structure (Image: Stella Spantidaki)

observed and preliminary analyses point towards the presence of hematite and seashell purple dye. These discoveries constitute the earliest evidence of colour decoration in Greece. An intriguing discovery within Grave Circle B is a textile fragment displaying evidence of tapestry decoration. Preliminary examinations suggest a heavily degraded, dark-coloured background fabric that was decorated with a thicker, light-coloured additional thread forming decorative patterns interconnected by the same thread floating in the background. The background fabric also displays areas of a bright purple colour, suggesting a combination of tapestry and purple decoration.



Fig. 3: Textile inventory number 9651, Grave Circle B, Tomb N. Stereoscopic view of a freestanding tapestry fragment with the background fabric displaying a bright purple colour (Image: Stella Spantidaki)

This high-quality fabric was surely executed by very skilled textile workers and attests to the high level of craftsmanship employed by spinners, weavers, and dyers in the early Mycenaean period (fig. 3).

Macroscopic examinations also suggest that several fragments were used to wrap weapons, such as daggers, arrowheads, and spearheads. A noteworthy case includes three bronze weapons enveloped in the same cloth. Additionally, some fragments were in proximity to luxury swords, decorated with gold embroidery with minute gold nails preserved within the fabrics (for gold embroidery, Kōnstantinidē-Syvrīdē et al. 2022).

The study indicates that most textile artefacts were the products of exceptionally skilled craftspeople and were likely considered luxury items during their time, mirroring the nature of other grave offerings.

Conclusion

Ultimately, the FAROS project is deeply committed to achieving both scientific and social impact. By disseminating progress and outcomes through lectures and academic publications, FAROS aims to emphasize the significance of ancient textiles in revealing insights about past societies, technologies, and social structures. This outreach effort aims to ignite interest in textile archaeology, attracting students and emerging researchers. This initiative is anticipated to pique the curiosity of the academic community and the broader public, potentially attracting additional funding for further, high-quality research. Beyond the realm of textile technology, FAROS seeks to foster broader appreciation for the Mycenaean civilisation, which will, in turn, contribute to promoting archaeology in Greece. To facilitate these objectives, the project envisions a digital archive that chronicles its journey and utilises short videos for YouTube, offering a dynamic glimpse into its progress. This approach aligns with the project's commitment to active communication, which includes maintaining an online presence, sharing milestones, showcasing scientific results, and conducting workshops. In weaving these elements together, FAROS endeavours to illuminate the tapestry of the early Mycenaean civilisation's history while engaging a diverse audience.

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