Textile Crafts and History

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The main focus of my research is Roman dress. When we imagine the Roman past one of the image most conjured up is a statue of man in a toga. Roman authors (always men) wrote about the clothing that exposes the social codes associated with certain garments but reveals little about textile production or relative economic value of either the textiles or the finished garment. If they do talk about cost, it is mostly to complain about women desiring expensive and exotic fabrics such as silk. Alongside this rather partial literature, a huge volume of surviving images in a variety of media show clothed individuals allowing us to stock the Roman wardrobe with a number of different garments. However, it is often hard to match the literature with the images and to align the idealising and stereotyping that they embody to the lived reality of producing and wearing the ancient wardrobe.

Roman dress was essentially very simple: a tunic (or layers of tunics) of very basic rectangular or T-shape, covered with a mantle which could be of varying size and rectangular (the pallium) or elliptical (the toga). The large terminology of Roman clothing suggests that all other garments were a variation on this basic theme. There are lots of words for cloaks, for instance, but the shaping was essentially straight or curved edged and fits into the basic model.

Tunics were sewn on the side seams and made to fit with belts and tucks, and the mantle was wrapped around the body; clothing was not cut to shape but made in single pieces on the loom.

My research takes the quintessential Roman garment, the toga, and asks some more basic questions of it?

These answers come partly from texts – we know the toga was made of wool and that the Romans prized certain wool as fine and white. Texts also imply that a Roman could judge the quality of another man’s toga by its colour and wool type.

I have made a series of calculations based on the toga size as suggested by H.R. Goette extrapolated from his comprehensive study of togate statues. It may be slightly on the large side but it would, when wrapped round the body, create the effect as in the picture here.

![Fig. 1. Togate Statue from Archaeological Museum, Madrid.](image)

This is a very large piece of cloth measuring approx. 4.20m x 4.80m. To produce it requires the space to set up the loom, time to spin a quantity of fine quality yarn and enough skill to set up the warp, weave a curved edge – and of course the time to weave it.

I have calculated, based on experimental work done at the Centre for Textile Research, that such a toga would require about 40km of yarn – which, depending on the skill of the spinner, could take up to 900 hours to spin and then up to nearly 200 hours of weaving for a single spinner/weaver. As it needs a loom at least 5m wide it is unlikely that a single weaver would be involved (100 hours x 2 weavers). So, all in all, if this is the work of a single Roman matron, production would take about 1000-1200 hours – at 10 hour days that’s 120 days if you do nothing else all day. And these calculations do not include the shearing of the sheep or the preparation of the wool prior to spinning.
This type of thinking about ancient textiles raised all sorts of other issues both about the toga itself and how often it might be worn, how precious a garment it might be if it took so much time to make etc. – but even more importantly – how many sheep might it take to make a single toga?

Well, one answer would be – it depends on the size of the toga and the fineness of the weave.

However, the problem raises far more fundamental issues about resources and use of them in antiquity. Textile production, despite it absolute importance to the lives of people at all levels of society, has never featured as one of the ‘big themes’ of ancient history.

Those of us who study textile production in the past tend to stick to our disciplines: archaeology, history, iconography, philology (terminology) – some of us study the texts, some look at images, others look at the textile remains and tools – we rarely get time to discuss areas of common interest or overlap – even more rarely do we get to talk to anthropologists or craftspeople – who we know are essential to our understanding of what we are seeing/reading/finding – but when we do get the chance, as here in Amman this week, the results tend to be rather explosive – traditional assumptions come tumbling down, new ideas develop.

I want to talk for a few minutes about the history of textiles and how we need to make it one of the big themes of historical thinking – to sit alongside the stories of big men, big wars and political narratives. In the last few decades the environment landscape and climate have all come to the fore in both modern and historical thinking, but still the place of textile production – even in histories of the landscape – gets short shrift.

There are perhaps two basic reasons why textile production is often omitted from large scale studies of the past: one, is that textiles are often perceived simply as clothing (or furnishing) and thus closely connected with the body/individual; the other is that textile production is often traditionally associated with women and the domestic realm. This may be due to an erroneously perceived gender divide in the method of production. Textiles are traditionally assigned to the realm of women, who are also linked more closely to ideas of the body and bodily adornment, and were mostly not deemed worthy of study by 20th century bourgeois male scholarship, who considered the very idea of dress and ornament subjects that academic minds should not waste time on. It was social anthropologists who noted the importance of adornment in creating identity. It has required a cross-disciplinary nudge to make historians of early periods sit up and take notice.

Despite its marginality in the ‘big themes,’ textile production, from raw material to finished item, has had a significant impact on society from its earliest history. The production of textiles of quite complex weaves preceded the production of pottery and metals. Thus people spun and wove for many thousands of years before they started to develop and use other technologies, and we must assume that textile technology strongly influenced the emergence of many other later innovations. Weaving, and language and processes of weaving, lie behind the language and terminology of early mathematics, of music and of ways of describing the cosmos. The continuing centrality of textiles to daily life is an essential characteristic of the claim to establish their study as one of the ‘big themes’.

For over 10,000 years textiles have been used to cover the human body and remain relevant to everyone, every day. However, it is significant that in the last three or four generations the majority of people have become alienated from the craft elements of production, and this is particularly so for textiles. Few Europeans now know how to weave or even understand the principles of weaving, and even fewer of those who do are academic scholars.
In the last hundred years in the West, textile crafts have moved from being a fundamental industry to being perceived as a female handicraft and leisure activity: a part of the cultural economy but not highly valued in the wider monetary economy. Very occasionally now hand weaving has become part of haut couture fashion, bringing it to notice as a high end product, but still little thought is given by consumers to modes of production.

This attitude probably also partly explains why the field is generally neglected in academia.

In other areas of the world the reverse is happening: textile production in both its traditional and industrialised forms is being seen and exploited as a means of creating an economic base for communities, and sustainable production and corporate social responsibility are becoming themes which shape the new textile consumer literacy (see UNESCO’s Intangible Cultural Heritage initiative: cf. [http://www.unesco.org/culture/ich/doc/src/20435-EN.pdf](http://www.unesco.org/culture/ich/doc/src/20435-EN.pdf) (accessed 5.7.2013). See Tyabji 2008 for some projects in India; Layla Tyabji’s paper in this collection).

Elizabeth Barber’s *Prehistoric Textiles* (1991) and *Women’s Work – the First 20,000 Years* (1994) recognised the concept of the fibre revolution and considered how the very early production of fibres into spun thread influenced gender roles, the division of space in villages and the emergence of craft and task specialisations. We now need to recognise how this revolution was amplified throughout history as increasingly complex societies required more and more textiles. In the Greek world sanctuaries, for instance, became huge producers and consumers of textiles; the levy of a fleet demanded long term thinking in terms of the production of sailcloth, and the Roman army was a mass consumer of textiles.

Textiles and clothing in the past did not just come out of the hands of busy textile workers. They were grown in fields and retted in ponds that fast became poisonous, or produced from the fleeces of hundreds of thousands of sheep grazing off land and pasture. These resources competed with edible crops, fundamentally depleting the soil and modifying the landscape. If the land had not been put to pasture, grazing and transhumance, the ancient landscape would have looked very different; and if textiles had not developed as a major productive element in ancient societies, the cultural landscape would also have looked different.

The fibre revolution created growth in the production of raw materials, particularly in the area of the Mediterranean triad as flax and sheep can flourish on land that cannot support other crops.

The question then is how do we access this type of information? In Greece ethnographic studies of the 19th and early 20th century villages and agricultural practices are often drawn on in order to elucidate early, ‘primitive’, subsistence or simple economies. Such research has the potential to provide clues for how ancient communities dealt with the procurement of necessary goods. It is clear from classical literature that understanding of textile production, particularly of spinning and weaving was very much part of the common body of knowledge of the general population of antiquity, who were either actively engaged in or close observers of these activities. Textiles were everywhere – not just on the body or making up the furnishings of a room, covering pack horses, acting as sacks, bags, baskets – and in some parts of the world, as homes.

The inter-textual and metaphorical use of the techniques and terms of textile production are evident in ancient mathematics, philosophy, drama, poetry and other forms of literature, suggesting that the production of textiles in antiquity was fundamental and transcended all areas of life, from the practical to the symbolic: the Fates spin the thread of life, Helen and Penelope act as meta-literary weavers in the Homeric poems, the cosmos is thought of as a woven fabric, plots and songs are woven: textile terminology is endemic once one starts to recognise it.
All these examples demonstrate that textile craft was not invisible in the past, but has slowly become so over time. This is partly due to industrialisation which removed textile work from the craftsperson to the factory, removing the element of individual skill. This close association between methods of production and finished article is something modern society has lost sight of when it comes to clothing and textiles. One of the drawbacks of the loss of craft knowledge is that as modern authors we lack an understanding of technical knowledge and often miss an essential part of the information.

One way to solve these issues is to look where traditional techniques are still in play – we are not suggesting that direct analogies are good methodology but we can learn much about the stories behind the textiles – we might learn that men and women are sometimes associated with different types of looms, for instance; that local sheep are not the preferred raw material and that high quality goods use imported wool – these are all questions which need answers and looking at the practice of traditional craft should speak to our imaginations as historians - techniques might enlighten our understanding of the implicit assumptions in the writings of ancient societies and techniques might give us insight into what we find in the archaeological record.

The discipline of experimental archaeology has made an equally significant contribution to research in this area. It is now possible through many tests and experience to gain deeper understanding of how textiles were made and to answer such questions as: how long might it take to make a garment; what level of skill was required; what quality of raw material used; and what resources and techniques were required. Furthermore, archaeologists working together with experienced craftspeople have produced reproductions which have given new insights into how textiles were made and how they might have been used. This allows us to ask how long a garment could last, how often it needed mending and where the wear is first visible. Such experiments and close observation of surviving textiles have also helped in the avoidance of embarrassing anachronisms and mistranslations in philological studies. For instance the modern common misuse of the term embroidery to designate decorated textiles; or the misuse of the term carding for the 3rd and 2nd millennia BC textiles when fibres were actually cleaned and processed by combing instead.

It is far harder to answer this type of question with literary material as ancient male authors tend to assume an understanding of textile techniques omitting any clear explanations. Pliny for instance, expends a lot of time on the description of murex-dyeing techniques which seem to reveal that he had good informants but did not know the whole secret of colourfast quality dyes. On the other hand dye recipe books on papyri tantalise in their detail and suggest a good knowledge of the chemistry behind dyeing – even if we cannot identify all the ingredients.

Understanding how a garment is made and from what type of material is key to understanding the manner in which it might be worn and how it might be experienced on the body. The properties of any given textile will influence what can be made from it, and how it might be made. Wool can be heavily felted for waterproofing, or it can be light and loosely woven in many colours – as a textile it is extremely versatile. Silk might be valued for its sheen, its colour and in antiquity for its rarity and exoticism. Ancient clothing is often talked about in terms of ‘drapery’ and it is the relationship of the type of textile and its properties combined with the techniques of its construction that create drape.

Interdisciplinarity is essential, working and learning from craftspeople, archaeologists, anthropologists, economists, artists – and endless other ‘-ists’ must become central to further research – as proved, so effectively by our gathering in Amman.
Acknowledgments

Parts of this paper are taken from joint work with Prof. Marie Louise Nosch (Danish National Research Foundation’s Centre for Textile Research, Copenhagen), and I thank her and all my colleagues at CTR from whom I learn so much. Also to Eva Andersson Strand and the one night in 2013, at her home in Sweden when we conceived this workshop. – and what an adventure it has become! I would also like to thank the Werner Gren Foundation for granting the funding that made all this possible.

Bibliography


See also the research project The Textile Revolution: [http://www.topoi.org/group/a-4/](http://www.topoi.org/group/a-4/)