## University of Nebraska - Lincoln DigitalCommons@University of Nebraska - Lincoln

Textile Society of America Symposium Proceedings

Textile Society of America

1994

## Ancient Near Eastern Fibers and the Reshaping of European Clothing

Elizabeth J. W. Barber Occidental College, barber@oxy.edu

Follow this and additional works at: https://digitalcommons.unl.edu/tsaconf

Part of the Art and Materials Conservation Commons, Art Practice Commons, Fashion Design Commons, Fiber, Textile, and Weaving Arts Commons, Fine Arts Commons, and the Museum Studies Commons

Barber, Elizabeth J. W., "Ancient Near Eastern Fibers and the Reshaping of European Clothing" (1994). *Textile Society of America Symposium Proceedings*. 1023.

https://digitalcommons.unl.edu/tsaconf/1023

This Article is brought to you for free and open access by the Textile Society of America at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Textile Society of America Symposium Proceedings by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

ANCIENT NEAR EASTERN FIBERS AND THE RESHAPING OF EUROPEAN CLOTHING

ELIZABETH J.W. BARBER Linguistics and Archaeology, Occidental College, Los Angeles, CA 90041

In April of 1994, an amazing story hit the news-stands. A group of naturally mummified corpses dated to 2000 BC and later had been found in Chinese Turkestan. Not only were their Caucasian features and blondish hair well preserved by the dry heat of the Xinjiang desert, but also their clothes--brightly colored plaids and twills among them (Hadingham 1994). We know from later linguistic records that a group of Indo-European speakers we call the Tocharians had made their way to Xinjiang and the Tarim Basin in early times. We also know that the Indo-Europeans began to spread across Eurasia from somewhere in the Caucasus region during the mid to late third millennium BC. Thus I was delighted to learn eventually that the plaids and twills were of wool, for I had been tracking the origins of twill weave for many years and had concluded that it began with the advent of wool from Mesopotamia into the Caucasus and southeast Europe in the 3rd or late 4th millennium BC (Barber 1990). If these were indeed the Tocharians, then this theory must be right on target.

It is well documented by now that the arrival of a useful new fiber will radically alter the textile technology of a culture. So we see it in early China, with the addition of silk to the older tradition of spinning and weaving hemp (Becker 1987, 81 et passim), and so we see it in early Europe, with the addition of wool to the earlier knowledge of working flax. In Europe, morover, the addition of wool altered the culture's views not just of how to produce cloth, but also of how cloth could be used.

The earliest actually preserved textiles that we have from both Europe and the Near East have all proved to be of plant bast, usually flax. The evidence begins around 7000 BC with a newly discovered fragment from Çayönü Tepesi, in Turkey (Wilford 1993) and continues with much larger finds from Nahal Hemar in Israel, about 6500 BC, and Çatal Hüyük in Turkey, around 6000 BC (see Barber 1991 for fuller descriptions of all early data not otherwise referenced). All of these sites, it should be noted, antedate somewhat the invention of pottery and even more so the start of metal-working. In fact, they are so early that people were only just learning to domesticate plants and animals, and it is questionable whether the flax of which these cloths were woven was domestic or simply collected from wild stands. If not domesticated in 6000 BC, it certainly was soon after.

Lots of surprises have accompanied our unraveling of the story of domestication. Contrary to popular belief, food

was not first. Dogs had come first--man's oldest as well as best friend---joining the human pack perhaps even as far back as 10,000 BC. Sheep were next, but various details show they were domesticated for their meat, not for wool, since they didn't have any wool to speak of yet. The wild progenitor of the domestic sheep, which still lives in parts of the Middle East, has a coat much like that of a The outer coat is of thick kemp, so brittle under torsion that it shatters if you try to twist it into thread, while the undercoat of "proto-wool" is so short and fine that it, too, is unspinnable. Several lines of evidence show that truly woolly sheep finally emerged from the mutating domestic gene pool about 4000 BC or a bit before, in the foothills around Mesopotamia.

By 5500 BC, the powerful notion of domestication had spread from the Near East deep into southeastern Europe, where we see local Neolithic farmers planting wheat, flax, and legumes, and herding a primitive breed of sheep. By 5500 we also see cottage after cottage, in the Tisza Valley of Hungary, equipped with sets of clay loomweights. after, the anthropomorphic vases and clay figurines begin to appear clad in geometric figures of a sort suitable to weaving. When we finally get glimpses of actual Neolithic European cloth, about 3000 BC, the technology has spread far to the west. Along with masses of spindles, loomweights, and hanks of worked and unworked flax, the muddy lake beds of Switzerland have disgorged fine linens embellished with fancily woven edges, beading, supplemental weft stripes, and brocaded geometric patterns. They are not a fluke: smaller shreds of equally elaborate material have turned up in communal Neolithic tombs in central Germany, where cloth had apparently been hung in curtains from the rafters. We get the impression that by 3000 BC the simple villagers of many parts of southeast and central Europe had become highly skilled in the production of patterned linens, using supplemental wefts on a plain-weave ground.

Then the woolly sheep began to arrive from the Near Back at Ground Zero--in Mesopotamia and Syria--the emergence of wool was already changing the local technology. Wool had new properties: it was ten to twenty times stretchier than flax, so it behaved very differently under tension; it came in various natural colors, the white variety of which was easy to dye; and its shortness and fuzzy crimp made it very different to spin, compared to long, smooth flax. Weavers apparently discovered that they could get a wonderfully dense cloth, and at the same time reduce wear on the more fragile woolen warp, by spacing the warp widely and beating in a fine weft. This technique of weft-faced cloth plus the easy availability of permanently colored thread eventually led to tapestry weaving, which in the late third millennium BC developed into the favorite pattern-making technique of Syria and presently of

Mesopotamia and Egypt.

Weft-facing may have seemed obvious to Near Easterners, who used a horizontal ground loom with the warp firmly stretched between two fixed bars. But the Europeans were using the vertical warp-weighted loom, in which the warp hangs from a beam and the bottom end is weighted in bunches by free-swinging weights of clay or stone. To them the convenient way of getting a dense fabric while saving wear on the warp was to pair or "twin" the warp threads in successive combinations: "twill" weave. And of course it has the wonderful advantage of mechanizing the otherwise lengthy process of patterning the cloth. We know that twill binding had been used for millennia in mats, but apparently it was the peculiarities of wool that finally forced its crossover into the making of cloth. We see this new binding system not only in the occasional scraps of textile that come down to us, but also in a significant change in the loom. Instead of the 10 to 20 large warpweights that characterize Neolithic looms, we find that after about 3000 BC loomweights in the Balkans and western Anatolia begin to occur in sets of 50 to 100 rather small weights that fall in not two but multiple rows. reflect the multiple sheds needed for twill weaving.

Other differences between the two areas surfaced also. The Near Easterners lived in a hot, dusty climate: the ideal clothing would be something cool, something wash-and-A body-wrap of linen--with its smooth, coolly absorbent, dirt-shedding fibers--was ideal. The Egyptians took up this happy combination and never looked any further, wearing linen as kilts and jumpers for the duration of their civilization and stowing it in vast quantities for the world beyond. In equally hot Mesopotamia, strange to say, the Sumerians show themselves wearing woolly sheep-skins as a preferred garment, although this may have been chiefly an archaic religious garb. are at the mercy of the fact that all their representations of themselves were connected with religious rites.) also knew linen as an important commodity, but their word for it--gada--may be a loan word from a still more ancient population of Mesopotamia, as was their word for "weaver," ishbar (Landsberger 1944). That is, they seem to have entered Mesopotamia from the eastern mountains in the mid fourth millennium in complete ignorance of woven cloth, linen or otherwise. The Semites living to the west, however, who began to take over control of Mesopotamia in the mid-3rd millennium, were probably long-time experts in the art of linen-making. For it is from the Semites that everyone soon borrowed the word for linen tunics: from Akkadian kitinnu-, Hebrew kutonneth, etc. These terms will come back to haunt us.

The Europeans, for their part, lived in a climate that could get hot in summer but was guite cold in winter. has to believe that they had long been in the habit, like the Sumerians, of bundling a fur rug around themselves in cold weather, but our earliest evidence for European clothing is quite different. It comes to us from over 20,000 years ago, on carved Palaeolithic Venus figures, a few of whom wear a thin band around the torso, while two wear a more complex garment, the string skirt (fig. 1). These clothes are clearly so skimpy that they cannot have served as protection from the elements, and therefore they can only have been intended as some social signal about the The string skirt in particular seems to have marked her ability and/or willingness to bear children--that is, her marital status. This fringed "marriage girdle" can be traced down through the Neolithic, Bronze, and Iron Ages in several parts of Europe, and all the way up into this century in grown women's folk costumes in isolated areas of the Balkans and Russia (Barber 1994, 54-69). It is never allowed to pre-puberty girls.

Now, consider the problems of a culture in which clothing is primarily a status marker. If you have only bast fibers like flax to work with, which come in only one or two pale colors and are very difficult to dye, you must depend largely on the form of the garment to encode social signals that will be recognizable at any distance. we find it in early Europe. What ornamentations there are appear to be mostly for such magico-religious purposes as promoting fertility and divine protection (which don't have to be seen to be effective). The forms of the garments, on the other hand, are few, decisive, and social: for men a sash of virility, and for women the marital string skirt and eventually a solider wrap-around skirt as well (or instead).

But when wool and its possibilities of strong color arrive, everything changes. Now one can swathe the body in as many visible social signals as one wishes by encoding them into varicolored clothing of a wide variety of designs.

Unfortunately there is a hitch: this otherwise wonderful wool is irritatingly scratchy to the skin. Somewhere in the early-to-mid-3rd millennium, not long after wool had arrived on sheepback from the Near East, a group of East Europeans solved their problem by borrowing another clothing idea from the same source: the linen tunic. next to the body as a foundation garment, it keeps the skin comfortable not only by serving as a buffer between skin and wool, but also by absorbing sweat into a garment far more easily cleaned than wool. We know for certain that these people got the tunic from the Semites of Syria and/or Mesopotamia because they took the word along with it, as so often happens with cultural borrowing. From Semitic kitinnu- and kutonneth came Greek khiton and Latin \*ktunica, which was simplified to tunica, whence English The garment seems first to have come into the Caucasian area, where it may have acquired a tube-like form

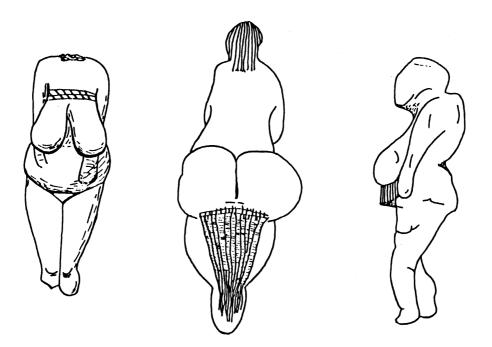


Fig. 1: Palaeolithic "Venus figures" wearing clothing: left, from Kostenki, southern Russia (after Efimenko 1958, fig. 140 and pl. XIV); center, from Lespugue, France (Musée de l'Homme, Paris); right, from Gagarino, southern Russia (after Tarasov 1965, fig. 14). Ca. 23,000-20,000 BC.

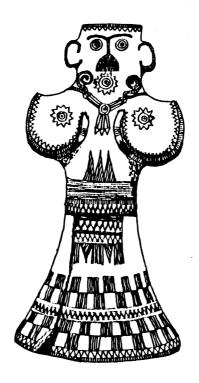


Fig. 2: Late Bronze Age cult figure of woman wearing squared skirt and deeply fringed apron over full-sleeved chemise. From Kličevac, on Serbian shore of the Danube; late 2nd millennium BC. (After Hoernes 1898, pl. 4).

with simple tube sleeves, just as we find it still today in many European folk costumes. From there the expanding Indo-Europeans seem to have brought it word and all into central and southern Europe in the 2nd millennium BC. it still had sleeves among the early Myceneaean Greeks is shown by the gold foil around the wrists of the royal occupants of the Mycenaean Shaft Graves: the gold is too flimsy not to have been backed by cloth, the fine dust from which was found all over the bodies. But the heat of the Mediterranean climate soon banished sleeves, and the classical tunic of Greece and Rome reverted to a simple draped and pinned linen that required no sewing. that the Greco-Roman form of draping is quite different from the Near Eastern wrap; see Barber 1994, 133-34)

With the soft white tunic in place, regardless of its precise form, woolen clothes could proliferate as overgarments. And so they did. Already in the mid-3rd millennium, a Caucasian chieftain was laid to rest wearing a long white tunic decorated with red and purple thread, over which he wore a black and yellow plaid woolen garment of unknown cut, and a fur wrap. He presages the long line of development leading to our modern Western dress: soft white shirts, blouses, undershirts, and slips topped by colored skirts, dresses, and--that useful invention of the horseriders of 1000 BC--trousers, all of which were traditionally woven of wool until colored cottons and silks began to replace wool for luxury or coolness. Note that we dress our beds the same way we dress ourselves, putting next to our skin the soft white vegetable-fiber sheets (that we call linens while making them now out of cotton!), and over that the colored woolen blankets.

Many forms of over-garment developed, of course--some of them quite early and with lengthy histories. For example, towards the end of the 2nd millennium BC along the lower Danube we see statuettes of women wearing what appear to be scoop-necked jumpers with aprons. Nearby, in Bulgaria and parts of Serbia, the local folk costumes today are so closely similar that some even have the same decoration in the same places (Barber 1994, 141-42 and fig. 5.5). simple apron, too, spawned back-aprons, skirts, and eventually shoulder-strap jumpers like the Russian sarafan, as I have shown elsewhere (Barber 1975).

Out of this prolific European tradition I wish to pursue here one line of dress in particular: the history of the "marriage girdle." As we said, it first turns up on Palaeolithic Venus figures from southern Europe--from France and from Russia. Next we see it on Neolithic figurines from the Balkans and Ukraine, the area between the two Palaeolithic figures, which is also the area of the earliest European farmers. During the Bronze Age, while continuing in the Balkans, it also spread along with textile technology into Denmark, where we are lucky enough to have found a complete string skirt of wool plus remnants

of several others and representations of girls wearing them. The complete skirt was found on the body of a young woman in an oak coffin and is newly dated by tree-ring chronology to about 1370 BC.

Homer, composing his poems about 800 BC, in the early Iron Age, talks of "girdles with a hundred tassels" owned by goddesses such as Hera and Aphrodite and used by Hera to seduce Zeus in a rather comical scene of the Iliad (Book 14: see Barber 1991, 257-58). Clearly the divine string skirt has much the same associations we have noted for the human one: to indicate the readiness of the woman for procreation.

We then lose sight of string skirts until fairly recent times, when 19th and 20th century ethnographers begin to record their presence in the remoter areas of southeast Surely it is significant that, with the omission of western Europe (that is, France and Denmark), the zone in which these folk costumes occur is almost identical in extent to the archaeological zone in which we have evidence for them, reaching from just west of the Urals through the Balkans to Greece (Barber 1994, 55 map-fig. 2.4).

But there is an interesting hole in the recent folkdistribution. The easternmost group of string skirts that I have found occurs among the Mordvin and Chuvash tribes, whose young women put them on over their white tunic or chemise at betrothal and wore them into old age. Similar customs surround the use of string skirts and deeply fringed aprons from southern Romania westward, through Serbia, Bosnia, Albania, and a few parts of Greece. some areas the woman is required to remove it or alter it if she proves barren.) But the Russians and Ukrainians in between these two areas did not wear string skirts. Instead, when their young women became of marriageable age, they added over their chemise a panjova, a solid cloth with a squared pattern, usually donned as a back-apron, and wore this garment into old age (Barber, i.p.). In other words, the custom is identical but the form of the garment is different.

I first noticed this peculiar situation from mapping my data concerning the relatively recent folk costumes. The configuration also looked rather familiar. If the map had been a dialect map showing the usage of vocabulary, I would have said that the two string-skirt zones at either end were remnants of an old use, and the central area with squared back-aprons was the result of an innovation -- a variation in form that had begun somewhere in the middle of the zone of women's marital girdles and spread like a puddle of spilled ink, blotting out the old custom as far as it permeated.

So I went back to the archaeological record to see if this were in fact the case and if I could spot when and where the square-patterned panjova began.

To my amazement, there it was--in some of the same

excavations from which I had been culling examples of early string skirts. (I just hadn't seen it because I wasn't looking for it.) The most striking specimen is a large clay cult statue from a site along the Danube River near Belgrade (fig. 2). The lady, or perhaps goddess, wears an outfit that is almost a dead ringer for the Ukrainian national costume: a decorated, full-sleeved covering of arms and upper body, with a square-patterned skirt below and at the very bottom the same zigzag pattern as is traditionally found at the bottom of a Ukrainian chemise. Over this she wears a short apron--much smaller than the modern one, but ending in a long stringy fringe! So this Bronze Age lady is wearing both a string skirt and a squared one! Nearby sites from the Late Neolithic, such as Vinča, also gave evidence. Of the numerous female figurines, some wore only body paint, others string skirts or aprons, and still others solid skirts with a squared pattern. (No tunics yet.) The association with fertility and childbearing is there too: all of these Late Neolithic female figurines have had their heads knocked off, and anthropologists have found worldwide that primitive agricultural communities regularly make female figurines which they ritually "kill" before burying them in the fields or grain supplies so as to jump-start the critical cycle of rebirth each spring from apparent death (Littleton 1981).

Whereas the "modern" string skirts may be of either wool or bast fiber, the squared panjova is apparently exclusively of wool. In fact, it was often produced by the girl as a test of her weaving. Our archaeological records are scanty at best, but it seems to be no accident that the squared skirt first appears at the time and place that woolly sheep were first brought into Europe. correlation leaves us with the following scenario.

Late Neolithic contacts with the Near East provided a new multi-hued fiber that would have made the weaving of squares and checks a simple, interesting, and elegant thing to do for the first time. These square-patterned skirts were immediately appropriated by the women who wove them, apparently becoming part of their ritual gear. Next the Near Easterners handed over the idea of the bast-fiber tunic or chemise to wear under the new woolen clothes; and now, wearing the fancy woolen social signals on a daily basis became reasonable. (In fact, I sometimes think that the panjova was a clever way to hide the stains of menstrual blood that would eventually accrue on the back of a nice white chemise.) The string skirt and squared panjova seem to have separated geographically, then, as independent and sufficient markers of the woman's marital status. And this state of dress maintained its continuity for some 6000 years, right up into our century.

## REFERENCES:

- Barber, Elizabeth J.W.
  - "The Proto-Indo-European Notion of Cloth and Clothing," Journal of Indo-European Studies 3 (1975) 294-320
  - Review of J. Becker, PATTERN AND LOOM (1987); in Archeomaterials 4 (1990) 210-12
  - 1991 Prehistoric Textiles: The Development of Cloth in the Neolithic and Bronze Ages. Princeton: Princeton University Press
  - Women's Work--The First 20,000 Years. 1994 New York: W.W. Norton
  - "On the Antiquity of East European Bridal Clothing," Dress (in press)

Becker, John

- 1987 Pattern and Loom. Copenhagen: Rhodos International Efimenko, P.P.
- 1958 Kostenki I. Moscow: Akademija Nauk

Hadingham, Evan

"The Mummies of Xinjiang, Discover 15.4 (April 1994)

Hoernes, M.

1898 Urgeschichte der bildenden Kunst in Europa. Vienna: Holzhausen.

Landsberger, Benno

1944 "The Beginnings of Civilization in Mesopotamia"; in B. Landsberger, Three Essays on the Sumerians (M. d. Ellis trans.; Los Angeles: Undena, 1974) 8-12.

Littleton, C. Scott

1981 "Buried Goddesses," PHP International 12.6 (June 1981) 18-29

Tarasov, L.M.

- "Paleoliticheskaja stojanka Gagarino," Materialy i 1965 issledovanija po arkheologii SSSR 131 (1965) 111-40. Wilford, John Noble
  - "Site in Turkey Yields Oldest Cloth Ever Found," New 1993 York Times (July 13, 1993) B5, B8