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The “Venus” Figurines

Textiles, Basketry, Gender, and Status in the Upper Paleolithic¹

by O. Soffer, J. M. Adovasio, and
D. C. Hyland

Research on Gravettian textiles and basketry informs our understanding of Upper Paleolithic ideology and yields new insights on one component of Stone Age material culture—the “Venus” figurines. Detailed studies of a series of figurines indicate the presence of at least three types of dressed female depictions. These include several types of headgear, various body bandeaux, and at least one type of skirt. Using data from Europe, we argue that the garments portrayed were made of plant fibers and that their exquisite detailing reflects the important role played by textiles in Upper Paleolithic cultures. The iconography also associates these technologies with women as well as with power, prestige, and value.

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The Venus of Willendorf, then, within her culture and period, rather than within ours, was clearly richly and elaborately clothed in inference and meaning. She wore the fabric of her culture. She was, in fact, a referential library and a multivalent, multipurpose symbol.

ALEXANDER MARSHACK, “The Female Image”

Our images of Upper Paleolithic Europe are a curious lot, abounding with depictions of brave Ice-Age hunters preparing for the hunt, stalking and killing megafauna, or celebrating the kill. This is true for written and visual representations alike, which, by omitting from consideration the activities of not only older individuals but also women and children, present extremely limited and biased reconstructions of the past. These reconstructions

1. The work on this paper took some 18 months. Inspired by our research on the impressions of textiles, baskets, and nets on fragments of fired clay from Upper Paleolithic Moravia, we turned to the published literature on the “Venus” figurines to see if the various body adornments depicted on some of them could be understood better through the prism of perishable technologies of weaving and basket making. We discovered that other items of clothing were also depicted and hypothesized that they might reflect items of woven and plaited clothing. These initial findings were presented at the annual meeting of the Society for American Archaeology in March 1999 in Chicago and at the Zamyatnin Conference in St. Petersburg, Russia, in April 1999 and have recently been published in Russian and in English as “The Well-Dressed ‘Venus’: Women’s Wear ca. 27,000 B.P.” in *Archaeology, Ethnology, and Anthropology of Eurasia*, produced by the Institute of Archaeology, Siberian Branch, Russian Academy of Sciences. We went on to examine the original Venus figurines housed in museums in France, Austria, the Czech Republic, and Russia, and these studies confirmed our initial hypotheses about some of the specimens, revised our interpretations of others, significantly enlarged our sample (e.g., adding the figurines and figurine fragments from Kostenki I, Avdeevo, Lespugue, and the sites in Siberia), and provided the critical details presented here. Other critical revisions of the earlier paper involved embedding the archaeological evidence in the current anthropological discourse of gender and representation. We acknowledge our intellectual debt to M. D. Gvozdover, whose pioneering work on the subject will always inspire and enlighten us. We also thank Françoise Audouze, Marcia-Anne Dobres, Nancy Fisher, Alma Gotlieb, Joyce Marcus, and Alex Marshack for their insightful comments and suggestions, Randy White for the Cheyner reference, and Matti and John Bunzel for invaluable help with our research. Antl Walpurga was instrumental to our study of the Venus of Willendorf and Bohuslav Klíma, Jiří Svoboda, Lenka Jarašova, and Martin Oliva to our study of the Moravian materials. For our research in France we owe a debt of gratitude to Henry de Lumley, A. Langaney, and P. Mennecier at the Musée de l’Homme and Patrick Périn, Hélène Thiault, Dominick Kandel, Sylvie Grenet, and Marie-Sylvie Lagueze at the Musée des Antiquités Nationales. Artwork for this article was produced by Steve Holland. Jeff Illingworth assisted in the article’s production. Soffer acknowledges the financial support of her research on Upper Paleolithic adaptations in Central and Eastern Europe by the International Research and Exchange Board with funds provided by the U.S. State Department (Title VIII program), the U.S. National Academy of Sciences, the National Endowment for the Humanities, and the Research Board of the University of Illinois. The views expressed above and any errors or biases found within this document are solely the responsibility of the authors and in no way to be attributed to any of the above-mentioned funding agencies or organizations.

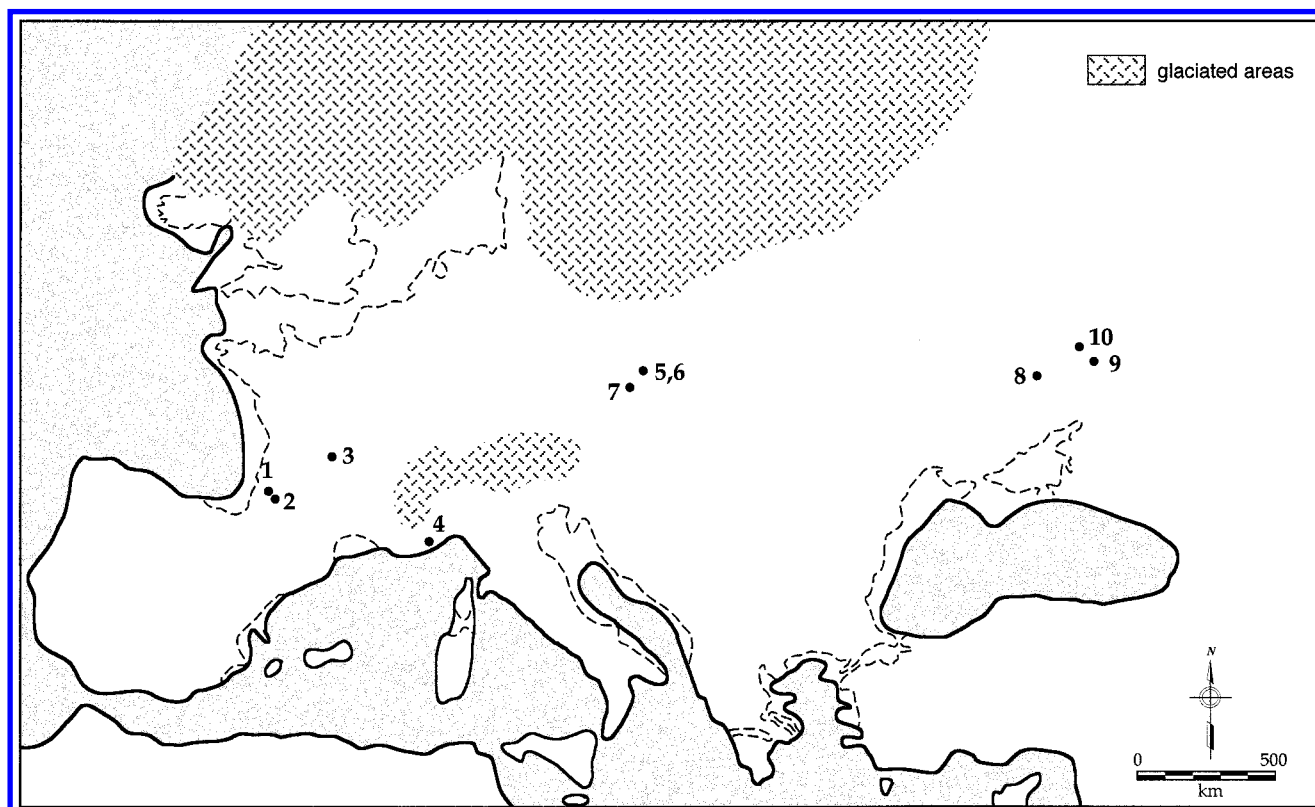


FIG. 1. Upper Paleolithic Europe, with location of sites discussed in text. 1, Brassempouy; 2, Lespugue; 3, Laussel; 4, Grimaldi Caves; 5, Dolní Věstonice; 6, Pavlov I; 7, Willendorf; 8, Avdeevo; 9, Kostenki I; 10, Gagarino.

of the imagined stereotypical activities of prime-age males leave us in the proverbial outer darkness as to what the Paleolithic “silent majority”—the mates, children, and parents of such brave prehistoric men—may have been doing with their lives in addition to admiring and assisting them.

We have elsewhere discussed some of the reasons for these biased reconstructions and pointed to the privileging of durable media—stone, ivory, antler, and bone—as sources of our information about the past (Adovasio et al. 1999, n.d.). Both ethnographic evidence and data recovered from the excavations of sites with equitable preservation tell us that the materials that survive, most notably stone, form a minuscule percentage of the inventories used by hunter-gatherers both in the recent and in the remote past. In early Holocene contexts where preservation is complete, there are 20 times as many fiber artifacts and, where present, even 4 times as many wood tools as lithic items (Soffer et al. 1998, with references). Other scholars have pointed to the effect of bias in the research interests of many of the male scholars who have dominated Pleistocene research from its inception (e.g., Gero 1995; Conkey 1991, 1997).

This paper begins to correct these slanted renderings of Upper Paleolithic lifeways by discussing the evidence for perishable technologies, specifically for the weaving

of textiles and the plaiting and coiling of baskets. We use the iconographic evidence for woven clothing often found on European “Venus” figurines to argue that these technologies were employed by Upper Paleolithic women, that they varied across Europe, and that they were sufficiently valued to be immortalized in fired clay, ivory, and stone.

Weaving and Basketry in the Upper Paleolithic

Ongoing collaborative research with Czech scholars on Gravettian inventories from such sites as Dolní Věstonice I and III and Pavlov I in Moravia (fig. 1) has documented the existence of highly diverse and sophisticated textile technologies that included the production of cordage and nets, the plaiting of baskets, and the twining and loom weaving of cloth (Adovasio, Soffer, and Klíma 1996; Adovasio, Hyland, and Soffer 1997; Adovasio et al. 1999, n.d.; Soffer et al. 1998). The evidence for these perishable inventories comes from 36 textile impressions found on small fragments of fired and unfired clay recovered from Dolní Věstonice I (Adovasio et al. n.d.), 1 from Dolní

Věstonice II (Adovasio, Hyland, and Soffer 1997), and 42 from Pavlov I (Adovasio et al. 1999).

The textiles and cordage specimens in question were clearly made of plant rather than animal fiber (Adovasio et al. 1999, n.d.; Soffer et al. 1998, with references). As table 1 indicates, the inventory includes single-ply, multiple-ply, and braided cordage, knotted netting, plaited wicker-style basketry, and a wide variety of non-heddleloom-woven textiles, including simple and diagonal twined pieces and plain woven and twilled objects. Some of these pieces even exhibit intentional structural decoration (Soffer et al. 1998).

Because the Moravian ceramic assemblage is highly fragmentary and the impressions especially small, we cannot specify with confidence the configuration or dimensions of items that were produced. We do know that both woven textiles and baskets are represented. As we have argued elsewhere (Adovasio, Soffer, and Klíma

1996; Adovasio, Hyland, and Soffer 1997; Adovasio et al. 1999; Soffer et al. 1998), it is highly likely that the plaited items represent baskets or mats, and the relatively wide range of textile gauges and weaves suggests mats, perhaps wall hangings, blankets, and bags, as well as a wide array of apparel forms including shawls, shirts, skirts, and sashes. The presence of sequentially spaced knots on some of the impressions suggests the production of netting, while our identification of seams conjoined by whipping stitches points to the sewing of textiles to produce more complex structures such as clothing and bags.

The variety of these inventories and the fineness of many of the final products clearly indicate that these are in no sense "primary essays in the craft." Rather, when coupled with the observed high level of standardized warp and weft processing, they suggest considerable antecedent development both for these items and for the fiber industry in general.

TABLE 1
Fiber Technology from Upper Paleolithic Moravia

Class and Type	Site		
	Pavlov I	Dolní Věstonice I	Dolní Věstonice II
Cordage			
Single, one-ply, Z-spun	1	—	—
Multiple, two-ply, S-spun, Z-twist	2	1	—
Multiple, two-ply, S-spun(?), Z-twist	—	1	—
Multiple, two-ply, Z-spun, S-twist	4	—	—
Multiple, two-ply, Z-spun(?), S-twist	—	3	—
Compound, two-ply, Z-spun, S-twist	1	—	—
Braided, three-strand	1	1	—
Z-twist	3	—	—
S-twist	8	6	—
Unknown	—	1	—
Knotted Netting			
Weaver's knotted	4	—	—
Textiles			
Twining			
Open simple, Z-twist weft	2	—	—
Close simple, Z-twist weft	2	1	—
Open simple, S-twist weft	3	3	—
Close diagonal, Z-twist weft	1	—	—
Open diagonal, Z-twist weft	4	—	—
Close diagonal, S-twist weft	2	—	—
Open diagonal, S-twist weft	3	1	—
Close simple, S-twist weft	—	1	—
Close simple, Z- and S-twist wefts	—	1	—
Open and close simple, Z- and S-twist wefts	—	1	—
Close simple, unknown-twist weft	2	—	—
Open unknown, Z-twist weft	2	—	—
Unknown simple, S-twist weft	1	—	—
Unknown	7	1	1
Plain weave (1/1 balance)	—	5	—
Basketry (plaiting)			
2\2 twill	—	4	—
Unknown	—	6	—

The materials discussed all come from Upper Paleolithic sites assigned to the Pavlov culture and date to between ca. 29,000 and 24,000 B.P. (uncalibrated). They represent the earliest evidence for cordage and textile production in the world and reflect technologies heretofore associated with the much later Mesolithic and Neolithic periods (Childe 1936). Although impressive in their number and sophistication, they are not the only cordage and cordage by-products reported from the Paleolithic. Cheynier (1967), for example, published, albeit in an anecdotal fashion, a textile impression from the Solutrean level at Badegoule in France. Our recent re-examination of the collections not only confirms his observation but indicates the presence of other plant-fiber-based impressions. Actual cordage has been reported from the somewhat younger sites of Lascaux, France (Leroi-Gourhan and Allain 1979), Ohalo II, Israel (Nadel et al. 1994), Kosoutsy, Moldova (Adovasio, Hyland, and Soffer 1997, Adovasio et al. 1999, with references), and Mezhirich, Ukraine (Adovasio, Hyland, and Soffer 1997; Adovasio et al. 1999, with references). These data strongly suggest that plant fiber-based textiles and basketry likely existed in a number of regions outside of Moravia, and our current studies of textile impressions in a variety of media from Upper Paleolithic sites in France, Germany, and Russia indicate this to be the case. The paucity of evidence for these perishable technologies in the Late Pleistocene compared with the abundance of evidence for technologies made of stone, ivory, antler, and bone is not surprising but rather to be expected because of preservational biases and deficient recovery techniques (Adovasio et al. 1999, n.d.).

Our evidence that people wove and/or plaited plant-fiber-based products by at least Gravettian times and the implication that these items were combined by sewing to produce more complex products raises a number of issues that can be subsumed under two broad research questions: (1) How were they produced and what were their functions? and (2) Who made and used them?

Although our research on the tools and implements which may have been used to produce textiles and fashion them into more complex structures is in its initial stages, we note that the appearance of Paleolithic textiles is penecontemporaneous with the appearance of implements associated with sewing, weaving, and net making. Specifically, eyed needles make their first appearance during the Gravettian period *sensu lato*, being reported in all parts of Europe from France (de Beaune 1993) to Sungir' in Russia (Bader 1998). Although some of these, such as the large needle from Předmostí, Czech Republic (Klíma 1990: fig. 28; Valoch 1982: fig. 4), may have been used in net making, its subsequent ivory equivalents, ubiquitous in later Upper Paleolithic sites, attest to extensive sewing and possibly embroidery. While these needles have been traditionally associated with the sewing of garments of leather and hide for the production of tailored clothing (Bader 1998, with references; Sterdeur-Yedid 1979), many of them are too small for this and likely reflect working with woven textiles and/or accessory stitching or embroidering rather than conjoining of

animal hides. Similarly, many Gravettian-age and later inventories contain implements previously identified as hunting weaponry or decorative or "art" objects which may have been associated with textile production—for example, the bone "spear head" from Předmostí (Klíma 1990; fig. 33; Valoch 1982; fig. 1), which may be a net spacer, the sitting anthropomorphs made of mammoth phalanges from Předmostí (Klíma 1990: figs. 23–24), and their equivalents from Avdevo in Russia (Gvozdover 1995: fig. 154), which perhaps served as loom weights. They also include the enigmatic "rondelles," including the cutout circular ivory objects from Sungir' (Bader 1978: fig. 114), the perforated mammoth-bone disks from Mezhirich (Pidoplichko 1976: fig. 74), which may have served as spindle whorls, and the engraved foot-shaped "pendant" made of fossil ivory found at Kniegrotte in Germany, which likely functioned as a grass comb (Feustel 1974: fig. 27).

We report here the results of our research on who made and used at least some of these products, using iconographic evidence as well as the more conjectural evidence from ethnohistory, modern ethnographies, and Upper Paleolithic funerary wear to do so.

Upper Paleolithic Female Imagery: Dressed Bodies

THE HUMAN BODY

No item of Upper Paleolithic material culture has received as much attention, from amateurs and professionals alike, as depictions of humans (Soffer 1987, Soffer and Conkey 1997). Particular attention has been paid to Paleolithic depictions of women, commonly termed "Venus" in the literature. This attention has, by and large, been directed to certain features common to many of them, namely, the emotionally charged primary and secondary sexual characteristics—vulvae, breasts, stomachs, and buttocks (Soffer 1987, 1989; Soffer and Conkey 1997). This selective focus on just a few features, presumed but never demonstrated to be the critical ones, has led to the well-known myriad of conflicting unitary explanations for the Venus figurines. These explanations are as numerous as commentators venturing an opinion and range from seeing the depictions as "fertility" symbols or "mother goddesses," paleoerotics, gynecological primers, and self-portraiture to suggestions that they were signifiers of widespread social ties (for discussion see, e.g., Delporte 1993, Dobres 1992, Duhard 1994, Marshack 1991, McDermott 1996). Other scholars have raised serious objections to such explanations, pointing to their selectivity, lack of attention to context, uncontrolled chronologies, and unjustified assumptions (e.g., Dobres 1992; Soffer 1987, 1989; Soffer and Conkey 1997).

GRAVETTIAN DIVERSITY

While Paleolithic depictions of females—which by now number well over 200 examples for the Gravettian period

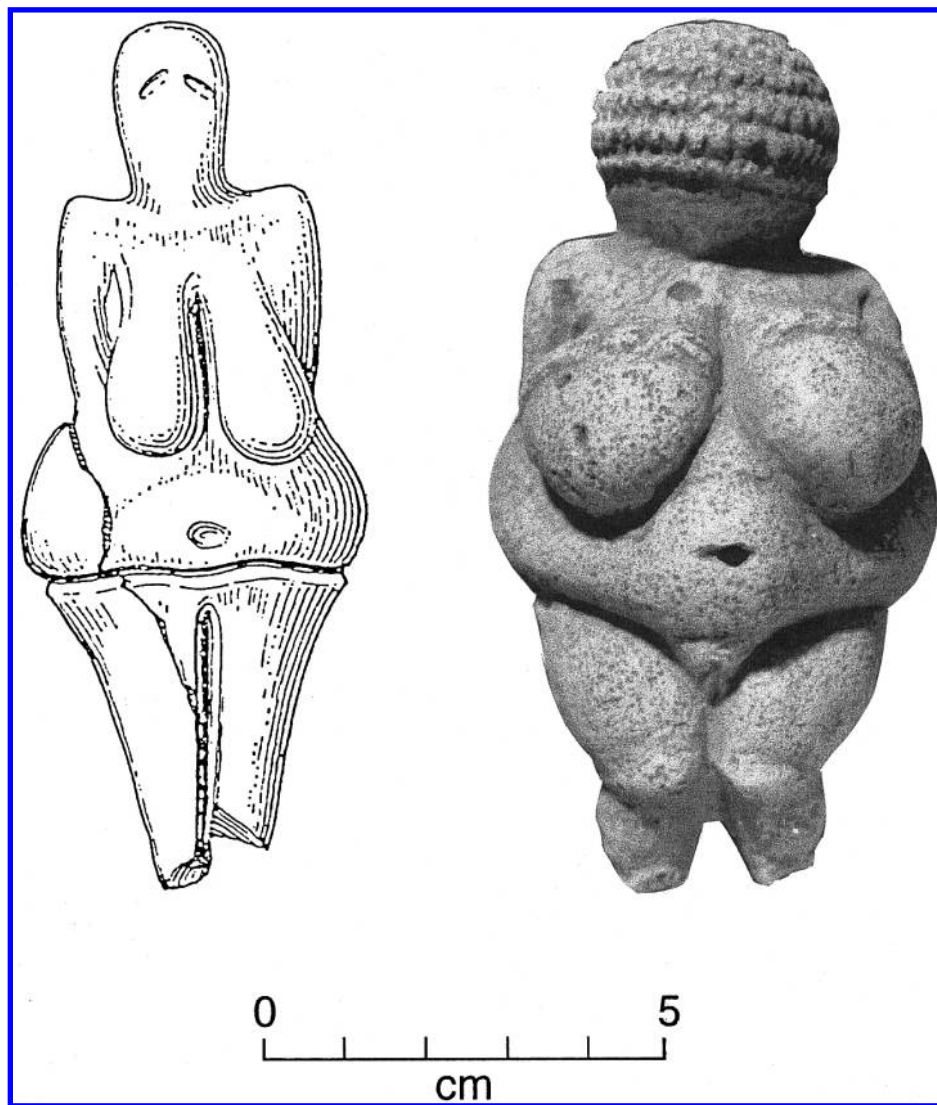


FIG. 2. *The Venus of Dolní Věstonice I* (left) and *the Venus of Willendorf* (right).

alone—are often unclad, there is a great deal of variability in the way in which the bodies are modeled. First, as Dobres (1992) points out, there is variability in the media used as well as in context. More important, the variability in the depiction of the female body is not random but fairly rigidly patterned regardless of media or context.

Focusing on over 100 figurines and figurine fragments from Gravettian-age sites in European Russia, Gvozdover (1989b) rigorously analyzed such features as body posture, anatomical emphasis, and surface decoration to identify at least four types of figurines in the assemblages recovered from the related and coeval Kostenki and Avdevo sites alone. This first truly archaeological study of this category of material culture concluded that (p. 89)

The massive numbers of figures at the site and their diversity of types gives reason to suppose that they

embodied a multiplicity of roles of the female image and that the different types of figurines had different functions in the Paleolithic pantheon. We believe that each type of figurine had its own symbolic meaning, conveyed by the pose and accentuation of the female body parts.

Focusing on the emphasis and spatial orientation of the anatomical features and extending her comparisons to female figurines found in Central and Western Europe during the broadly similar time slice some 27,000–20,000 years ago, Gvozdover noted accenting of thighs and hips in Western Europe, of breasts and bellies in Eastern Europe, and pointed out the intermediate position of the pieces recovered from Central Europe. Figure 2 shows that even these depictions are internally varied as well.

THE ELABORATED BODY

Upper Paleolithic female figurines, naked as well as partially clad, occur across Eurasia from the Atlantic Ocean to Lake Baikal (e.g., Abramova 1962, 1995; Delporte 1993; Gvozdover 1989b). Their distribution contrasts sharply with the scarcity of unambiguous depictions of Paleolithic males (e.g., Brno II, possibly Stadel, possibly the Avdevo male, fragments from Dolní Věstonice and Pavlov I, and the more ambiguous male from Brassempouy) and humans of unknown sex who are depicted either naked (in the case of unambiguous males) or lacking any marking.

Abramova (1960) and Gvozdover (1989b) were the first scholars to study the patterning of the decorations on the Venus bodies and to suggest that some of them might represent clothing. Our study continues this research,

focusing on the close reading of these decorations and demonstrating that they do indeed depict clothing. We do so because we agree with the observations made by Joyce (1993:256) in her study of figurines from ancient Mesoamerica:

The selection of features to be incorporated in human images is a means by which stereotypes of natural or essential human behavior may be promulgated. In order to approach the relationships between the inaccessible mental constructs of makers and users of these human images and the public representations to which we do have access, I assume that no detail is simply natural or accidental, the selection of attributes being part of a dialogic process of construction of human identities.

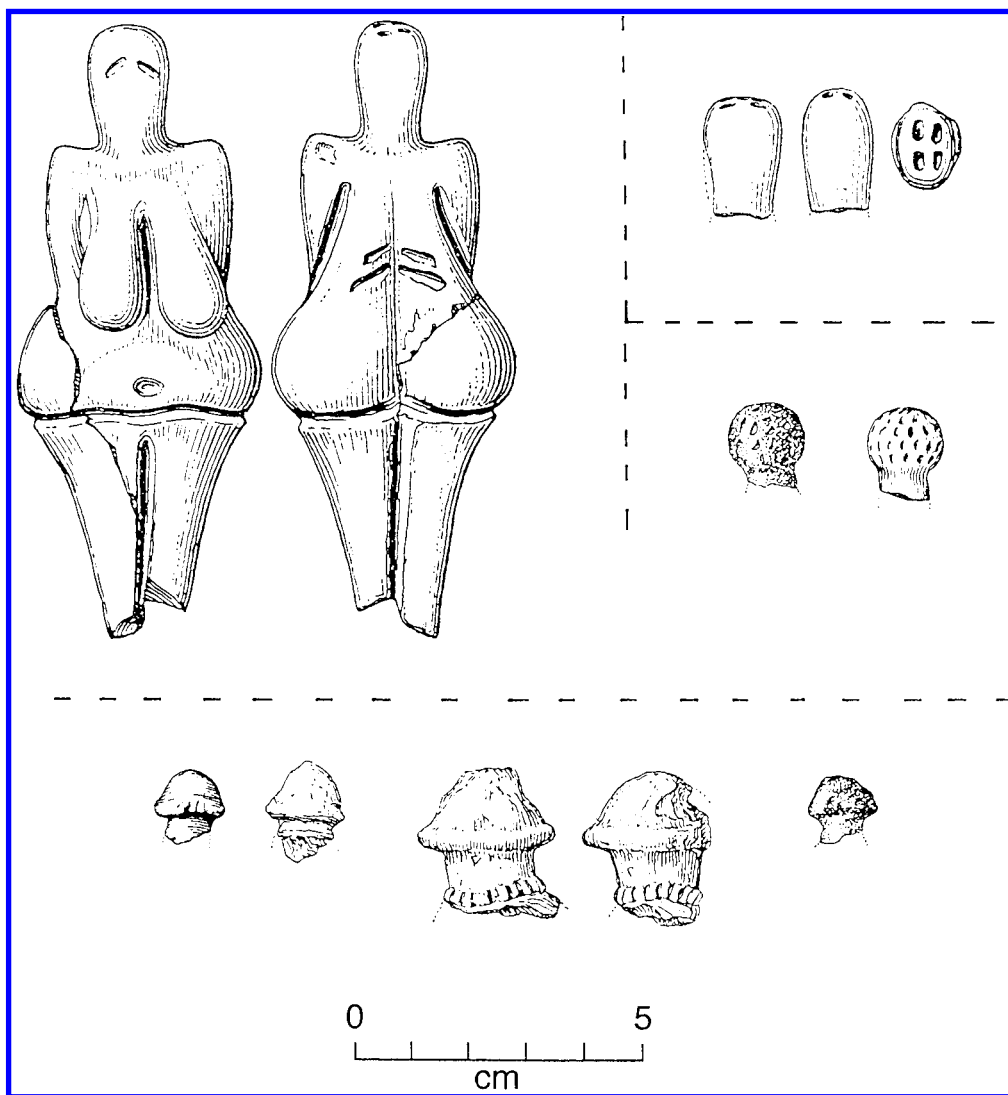


FIG. 3. A selection of the different types of female heads from Dolní Věstonice I and Pavlov I (after Klíma 1991: figs. 15, 17).

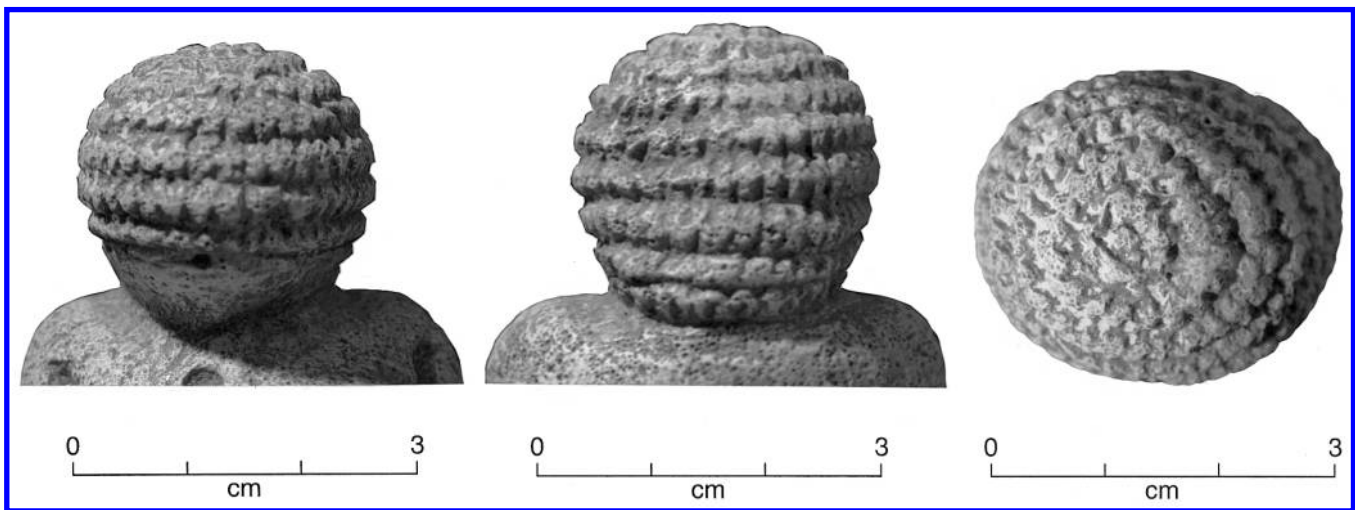


FIG. 4. Close-ups of the head of the Venus of Willendorf. Left, anterior; center, posterior; right, superior.

We focus on these features also because when the female images are depicted as decorated or clad, as much attention is paid to the detailing of the items of clothing as to the depiction of their primary and secondary sexual characteristics, something clearly in evidence on the well-known Venus of Willendorf and a myriad of other figurines and figurine fragments (see fig. 2). We argue that such attention and detailing offers us a rare, unambiguous entry into Upper Paleolithic ideologies and helps us to identify the roles that some females played in Late Pleistocene societies. This is so because, as Lesure (1997: 229) notes in his study of figurines from Chiapas, Mexico,

If figurines really were a medium for active construction of social identity, then the stereotypes represented in figurine assemblages can provide important clues about what was talked about and what was not, in conversations about social identity. . . . By looking at what was and was not represented, and how social categories were distinguished within figurine assemblages, it is possible to develop hypotheses about the subject matter of conversations about social differences.

Furthermore, we note that such detailing of clothing on the figurines reflects social differentiation in a medium both ideally suited for this purpose and universally used to this end—the human body. As Turner (1980:112) pointed out, “The surface of the body, as the common frontier of society, the social self, and the psycho-biological individual, becomes the symbolic stage upon which the drama of socialization is enacted, and bodily adornment . . . becomes the language through which it is expressed.” Thus, the presence of such detailing on the Venuses is not only not surprising but to have been expected.

While the few scholars, among them Okladnikov

(1941), Abramova (1960), de Beaune (1998), and Scheer (1995), who have commented on likely Paleolithic clothing have argued that it was surely made of such animal by-products as furs and hides, we argue here that the garments depicted on the European Venus figurines clearly and unambiguously reflect plant-based textiles and basketry and in so doing confirm the suggestions of this made by some of our predecessors on purely logico-deductive grounds (Barber 1991, 1994; Gvozdover 1989b; Marshack 1991).

The Dressed Venus

We next turn to a closer look at the garments found on the figurines dating to the Gravettian period, roughly between 27,000 and 20,000 years ago. We do so because female images produced during this period all across Europe are the most “realistic” or detailed Upper Paleolithic depictions we have. More recent images show a degree of stylization that renders identification difficult (Soffer 1997). Since the figurines from Central and Eastern Europe come from sites assigned by most scholars to a single Pavlov-Willendorf-Kostenki-Avdeev (PWKA) cultural entity (Soffer 1997, with references) and since, as Gvozdover (1989b) has noted, these images exhibit greater similarity to each other than to their equivalents from Western Europe, we compare the two groups.

CAPS AND SNOODS

Gvozdover (1989b) has noted that the presence or absence of detailing and decoration on the heads of the Eastern European figurines is highly variable, and this variability extends to Central Europe as well. Figure 3 illustrates just some of this variability, which, because of numerous examples found of each type, we argue is not random but patterned. Some of the heads from both

regions, such as the Dolní Věstonice I example, lack any realistic detailing at all. The second category consists of heads with variable realistic detailing of faces and hairdos (e.g., the ivory head from Dolní Věstonice I or the head of Kostenki I 83-1). Of more interest to this discussion are heads with clear depictions of headgear, which come from Dolní Věstonice I, Pavlov I, Kostenki I, Avdeev, and Gagarino and are made in a variety of media from marl to sandstone, fired clay, and ivory (fig. 4). Although some of these representations have been interpreted as stylized penis depictions (Klíma, personal communication, 1999), the presence of necklaces on them strongly suggests that they are images of the heads and necks of females.

The head of the Willendorf figurine offers the clearest evidence that what we see here is a depiction of headgear—a fiber-based woven cap or hat—rather than a hairdo, as posited by scholars from Sollas (1924 [1911]) onward, or a cap made of shells, as suggested by Abramova (1960). Our close examination of this specimen shows a spirally or radially hand-woven item which may be initiated by a knotted center in the manner of some kinds of coiled baskets (see Adovasio 1977: figs. 99a–b). The technique represented is a two-element structure in which an apparently flexible, horizontal foundation element or warp is vertically wrapped with stem stitches. The foundation element is clearly visible between the stitches, some of which are plain while others are countered (see Emery 1966: fig. 65). Work direction is right to left, and at least seven circuits encircle the head, with two extra half-circuits over the nape of the neck. The selvage, as depicted over the forehead, simply has the wrapping element encircling the final horizontal warp circuit. Several areas on the body of the cap appear to illustrate splices, where new material has been added. Suffice it to say that this complex construction cannot be produced with growing (that is, attached) human hair. A similar cap is depicted on the fragment of the head made of marl recovered from Avdeev (Gvozdozer 1995: fig. 110). This fragment also appears to have been spirally or radially produced.

The headgear represented on the Kostenki I marl figurine recovered in 1983 (fig. 5) belongs in this category as well. Although this cap is somewhat stylized, it is clear that the basic construction technique is similar to that on the Venus of Willendorf. The principal difference appears to be the greater number of circuits encompassing the Kostenki head. The cap depicted on the large head fragment from Kostenki I is also broadly similar, although the method of initiating the radial weaving appears to be different (fig. 6). The top of this head made of marl depicts a method of starting which may involve systematically superimposed weaving elements such as those which characterize certain types of twining centers and so-called plaited starts in coiled basketry (see Adovasio 1977: figs. 27, 31, 98). As in the Willendorf piece, this cap also shows extra half-circuits over the nape of the neck. Whatever the method of starting or finishing, considerable effort is expended on the caps themselves. Extreme detailing is typical across the broad area occu-

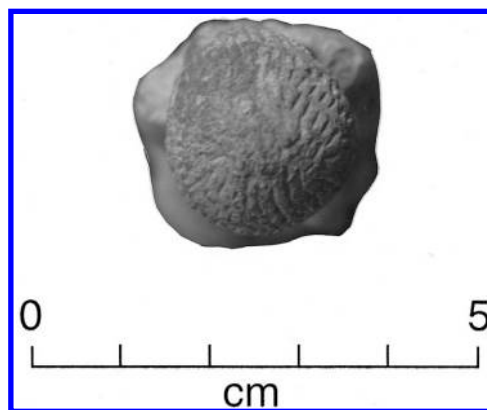


FIG. 5. Top view of the head of the Kostenki I marl figurine.

ried by groups assigned to the PWKA cultural entity and exhibits various degrees of realism and stylization.

The Western European specimens show different patterning. As in Central and Eastern Europe, some of the female heads are devoid of any detailing, for example, the “Venus with the Horn” from Laussel and numerous Grimaldi pieces (Delporte 1993, White 1986). Others, however, do depict head coverings, such as the Venus of Brassempouy (fig. 7), the “Negroid” head from Grimaldi (Delporte 1993: fig. 95), and the “Venus with the Grid-like Head” from Laussel (Delporte 1993: fig. 44). Unfortunately, the head from Brassempouy is not sufficiently detailed to reveal any attributes of the hypothesized head covering. Minimally, if the image is taken at face value, it would appear that some form of flexible, open, perhaps twined construction was fitted over the hair. Less likely but possible is the depiction of stylized knotted netting. A similar head covering may be represented on “La tête négroïde” from Grimaldi. As in the Brassempouy case, the rendering of the head covering is stylized and indistinct in details. The Laussel engraving is even more schematic, depicting a head in profile overlain with rectangular gridding. Rather than hats, we suggest that these depictions represent hairnets or netted snoods, a hypothesis also advanced by Moser (1997) for the Brassempouy figurine. Although far removed in time and context, similar netted headgear has been identified on a number of female bodies recovered from prehistoric interments in Danish bogs (Hald 1980).

Finally, when hats or caps are depicted on Upper Paleolithic figurines, facial details are absent. This, we suggest, points to the social (as opposed to individual) importance of the headgear in Paleolithic ideology.

BANDEAUX

Gvozdozer (1989b) has noted the presence of upper body decorations on a large number of the Kostenki and Avdeev figurines in the form of linear wedge-shaped notching with staggered spacing or checkwork and sug-

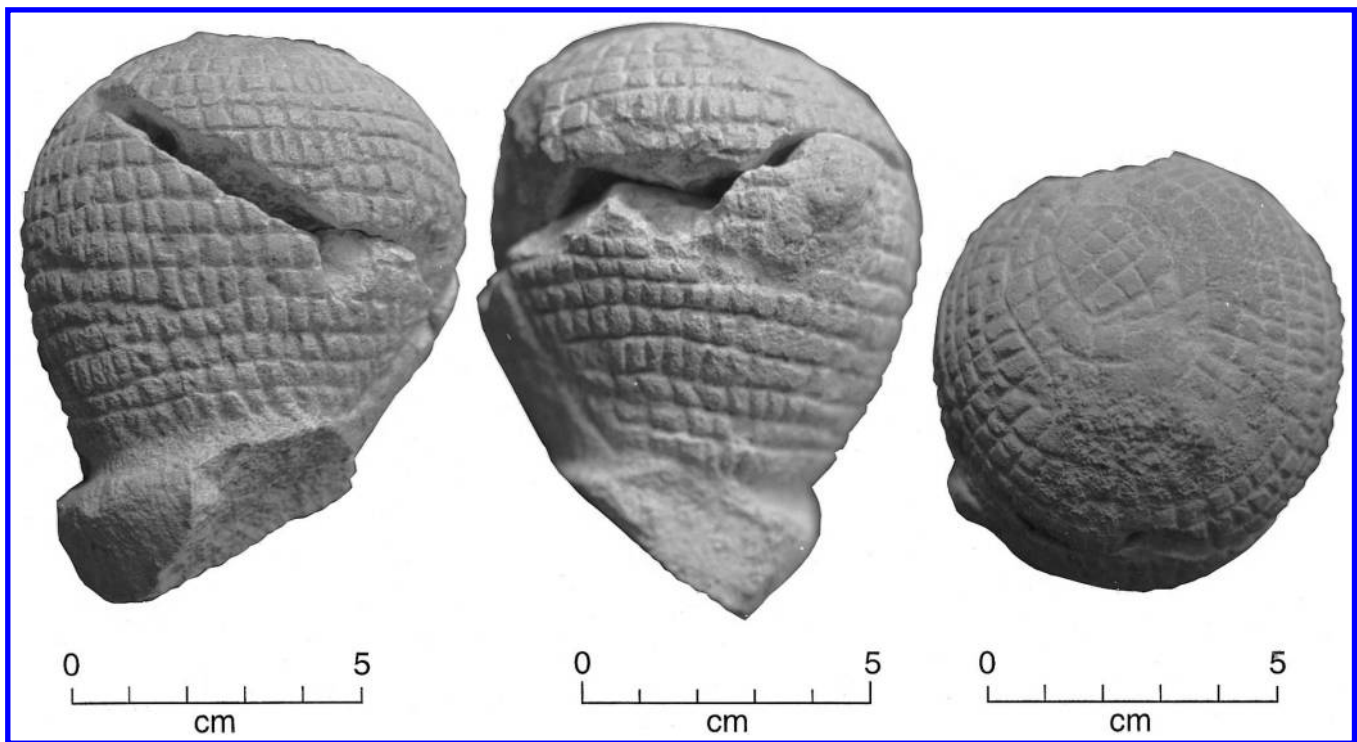


FIG. 6. Large head made of marl from Kostenki I. Left, right profile; center, left profile; right, superior view.

gested that they might be elements of clothing. The discovery of a number of new figurines and figurine fragments since her writing, especially at Kostenki I, permits us to expand on this hypothesis. The fine detailing on the Kostenki figurine reveals patterns on the straps and bandeau reminiscent of open twining with running-loop continuous weft selvages (fig. 8). Additionally, the artisan expended considerable energy on depicting the points at which the straps join the body of the bandeau, presumably via sewing. Whatever the weave of the straps, these engravings clearly depict woven fabrics.

Bandeaux, sometimes shown with straps and at other times abstracted into strapless banding on top of the figurines' breasts, are present on almost all Eastern European figurines wearing woven headgear (e.g., on figurine #6 from Avdeev [Gvozdover 1995:fig. 98] and on the Kostenki figurines [Abramova 1995:figs. 59, 60, 73, 74]). In the few cases where they are absent, as in the Willendorf case, they are replaced by hands folded on top of the breasts. These items of clothing are absent from the Western European figurines, and their absence confirms Gvozdover's (1989b) observation that while the semantic emphasis in Eastern European figurines was on stomachs and breasts, in Western Europe it was on hips and thighs.

BELTS

Belts, sometimes attached to string skirts, are worn on the waist or low on the hips. In Eastern Europe, these

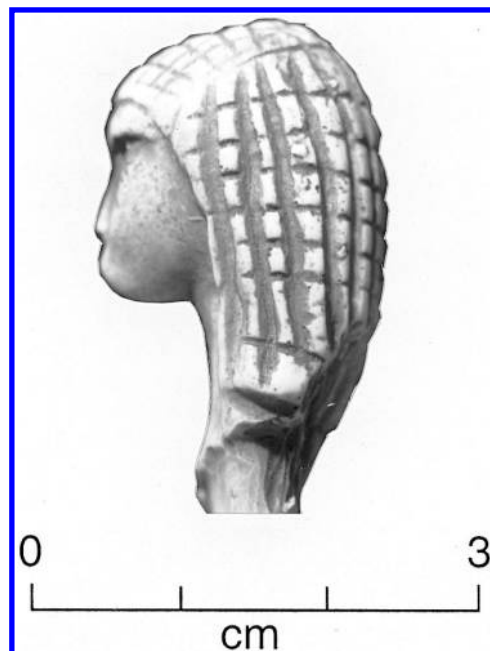


FIG. 7. *The Venus of Brassempouy.*

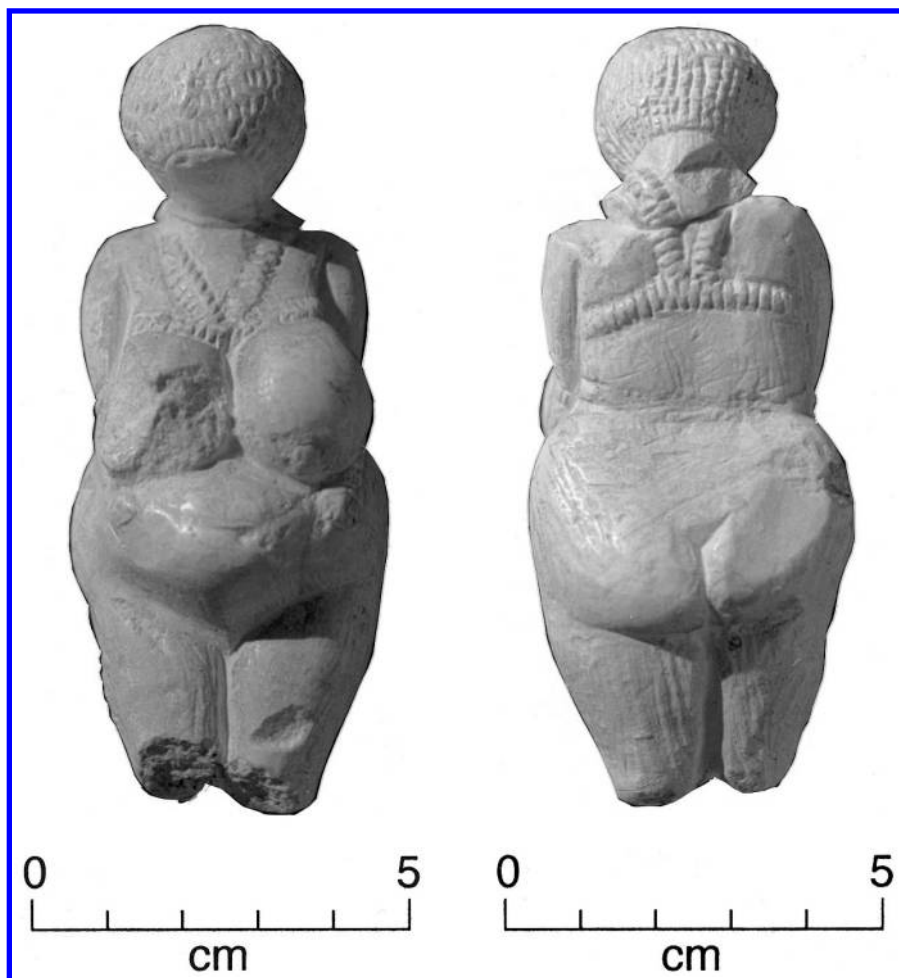


FIG. 8. *Venus figurine made of marl from Kostenki I.*

constructions are always shown worn on the waist, sometimes just on the back of the figurines and at other times on the front as well (e.g., the large marl fragment from Kostenki [fig. 9]). In Central and Western Europe, in contrast, belts are found low on the hip (e.g., the clay figurine fragments from Dolní Věstonice I and Pavlov I [Klíma 1991:fig. 15]). Some of them are quite realistic depictions of fiber-based constructions; others, as on the Venus from Dolní Věstonice I (see fig. 1), consist of highly abstracted horizontal lines girdling the body. The same low position of the belt can be observed on the Venus of Lespugue (fig. 10); here the belt is attached to a string skirt.

Our examination of the original Lespugue piece via unaided eye and low-power magnification reveals remarkable attention to detail. The Lespugue skirt is composed of 11 cords plied around a base cord which serves as the belt. The cords are secured to the belt by looping both ends of a single-ply construction over the belt and then twisting the ends together (i.e., replying) with a final Z twist. Several of the cords show as many as 30 and 40 separate incisions illustrating individual twists, and

great care has been taken to depict progressive changes in angle of twist. Near the top or waist end of the skirt, the angle of twist is tight, circa 40° or more. On the opposite end, the angle is much looser, circa 20° , clearly showing the cords unraveling or fraying at the hem. The overall configuration of the skirt is tapered not unlike a tail by employing a long central cord and immediately contiguous segments with progressively shorter cords toward the lateral margins of the skirt. Although no details of cord splicing are evident, our examination confirms Barber's (1991, 1994) observation that the garment depicted was clearly made of plant fiber.

JEWELRY

Bracelets and necklaces are found on a number of Central and Eastern European pieces but absent from Western Europe. These items are depicted more schematically than the headgear, bandeaux, and belts, and this makes it difficult to associate them with fiber-based products. When they are depicted on the figurines from the PWKA



FIG. 9. Large figurine fragment made of marl from Kostenki I.

sites, however, they are always found together with other items of textile clothing discussed above.

VARIABILITY CONTEXTUALIZED FROM WEST TO EAST

The above discussion points to clear differences between Western, Central, and Eastern Europe concerning what the well-dressed Venus wore (fig. 11). We acknowledge that the paucity of female images from Gravettian- or Perigordian-age Western Europe makes our reconstruction of Western Venus attire *very* tentative but suggest that the available data indicate that it minimally consisted of a netted snood and sometimes a belted string skirt worn low on the hip. String skirts are seen only on Western European figurines; the one purported example from Gagarino (Barber 1994:56) reflects the structure of the ivory (e.g., dentine) from which the figurine was made and not applied decoration. In Central and Eastern

Europe, in contrast, there is always a basket hat, often accompanied by a woven bandeau and belt and by necklaces and bracelets. In congruence with the differences in the area of emphasis between west and east noted before and the intermediate position of the Central European figurines between the two, in Central Europe, as in Western Europe, the belts are low on the hip while in the east they are at the waist.

We have noted that garments are found only on Upper Paleolithic female figurines; with the exception of the ambiguous belted figurine fragment from Brassempouy (Challot 1964:423), the rare male depictions and the undifferentiated anthropomorphs lack any such detailing. This patterning clearly associates garments with females



FIG. 10. *Venus of Lespugue*, posterior view.

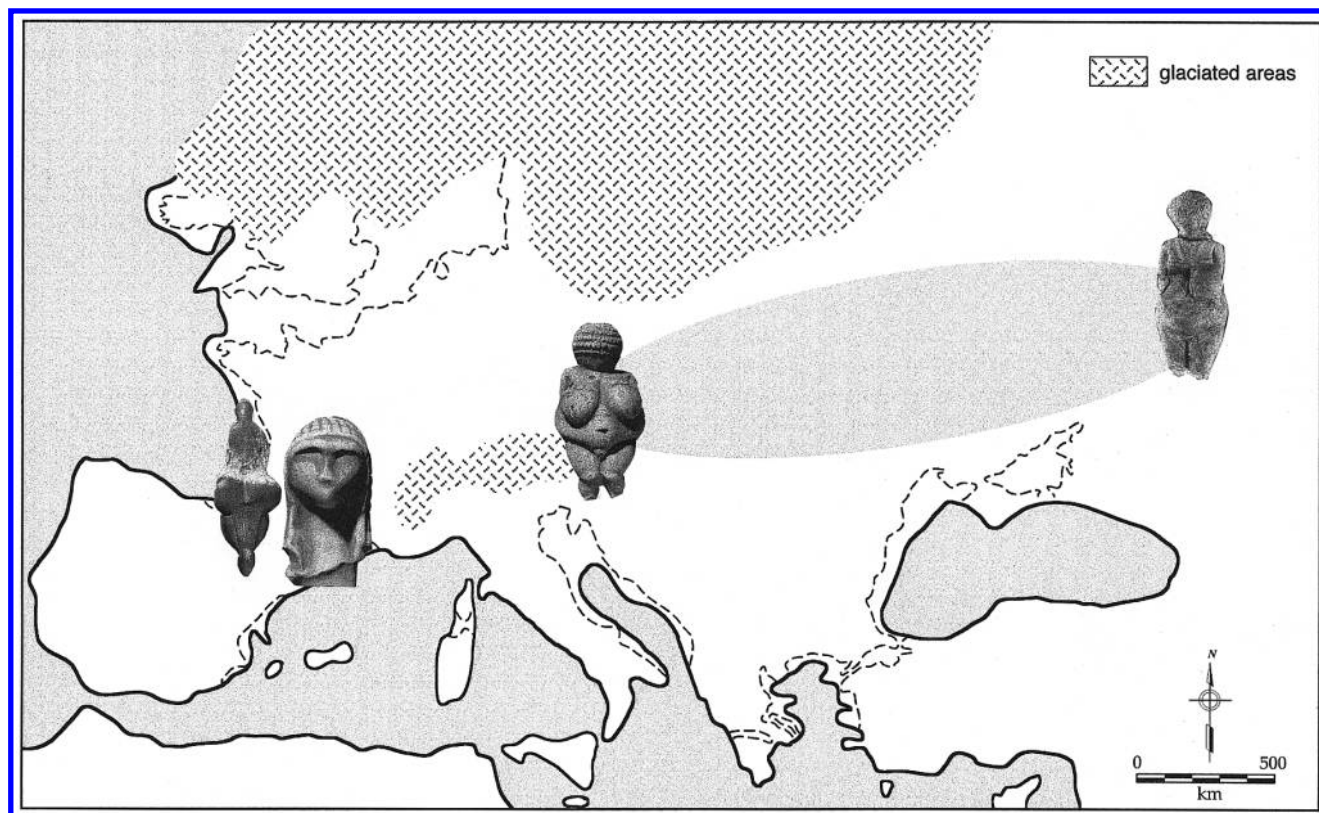


FIG. 11. Distribution of the different types of clad Venus figurines.

but only with some of them. Gvozdover (1989a) has shown that the decorations on female bodies occur in more abstracted form on a wide variety of implements recovered from Kostenki and Avdeev (fig. 12). This led her to identify these implements as synecdoches of the dressed female figurines. The same observations can be extended to inventories recovered from Dolní Věstonice I and Pavlov I (Klíma 1991). These two sets of data permit us to argue unambiguously, using terminology borrowed from Lesure (1997), that what was important and “talked about” some 29,000 to 20,000 years ago across Europe was woven and plaited clothing and headgear made of plant materials which were associated with one category of Upper Paleolithic women.

The Elaborated Female Body: Women’s Labor and Its Value

THE LIVING, THE DEAD, AND ICONOGRAPHY

Having documented Gravettian-age “Venus-wear,” we next briefly turn to the issue of whether these garments were a part of regular day wear, ritual wear, or some combination of the two. Although limitations of space prevent us from engaging in a full discussion of this issue, we can point to some regularities in the archaeo-

logical record that permit us to begin addressing it. While we will never be able to document Upper Paleolithic costumes in full detail, two sources exist for first approximations: (1) information from burials and (2) information from iconography.

We assume that the iconographic evidence, which depicts males unclad and only some females very partially clad, is not “photographic” evidence that little if any clothing was worn during the Upper Paleolithic in Europe. This assumption is warranted by ethnographic evidence that all hunter-gatherers inhabiting northern latitudes, if for no other reason than climate, are clothed. While it is true that the amount and kind of clothing worn varies depending on the season as well as the situation, the available data validate our assumption that Upper Paleolithic iconography is not to be taken at face value as a faithful reflection of clothing worn in daily life.

Evidence from Upper Paleolithic burials, although extraordinarily sparse, does show that both males and females were at least buried fully clad. For example, reconstructions of clothes worn by the deceased in the three most complete burials from Sungir’, dated to some 25,000 B.P., use the placement of beads and deformations in the bead strands to posit sewn hooded top garments, pants with attached footwear, capes, and caps or hats (O. Bader 1978, N. Bader 1998, Scheer 1995). The three in-

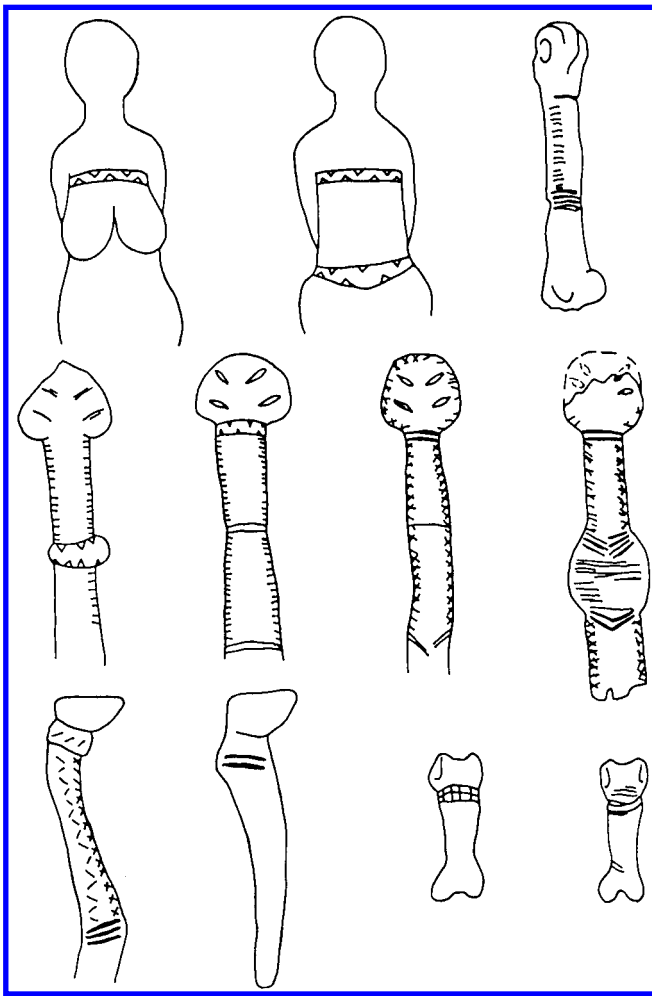


FIG. 12. *The location of decoration on the female figurines and other objects from Kostenki and Avdeevo (after Gvozdover 1989b: fig. 8).*

dividuals buried here, one an older male, the second an adolescent female, and the third a 7-to-9-year-old boy, also wore a plethora of bracelets, armbands, necklaces, and rings. Reconstructions of clothing worn by the deceased buried at the Gravettian sites in Italy also suggest the wearing of hats or caps and other body coverings (Mussi 1990). As noted previously, scholars have assumed that the clothing worn by the Upper Paleolithic deceased was made of hides or furs (Abramova 1960, de Beaune 1998, Scheer 1995). Lack of evidence prevents us from testing this assumption.

Iconography tells us that at least some of the clothing worn by some Upper Paleolithic individuals was made of plant-based textiles, that such clothing was associated, at least iconographically, with one category of Upper Paleolithic women, and that this association was important enough to be depicted in a variety of objects, from figurines to pins, awls, and decorated animal phalanges.

CONSTRUCTING FEMALE IDENTITIES

This association also affords us a clear glimpse of the gendering of society in Gravettian times. Since, as Gero and Conkey (1991), among others, have noted, gendering is a social construct used to group individuals into socially distinct categories, such evidence permits us to break down what has too often been treated as a unified entity—be it “the Gravettians” or “Upper Paleolithic groups” or, worse, “Ice-Age hunters”—and begin considering how individuals were aggregated into socially constituted groups that far back in time. It also permits us to address issues of agency, labor, and especially the value of that labor. In this exercise we are informed by the work of Costin (1996), who warns that gender differences in the past need to be demonstrated rather than assumed. She points out that the commonly used sources for doing so in archaeology are data derived from ethnographic analogy, texts, mortuary evidence, and figurative representations.

Marcus’s (1998) recent study of female figurines from Formative Oaxaca and Brumfiel’s (1996) analyses of Aztec figurines document that important information about gendering can also be obtained from specific spatial contexts. Upper Paleolithic female figurines and figurine fragments, however, as Gvozdover (1989b; see also Praslov 1993) has noted, do not appear to be restricted to specific depositional contexts. Some came from inside dwellings and others from cultural layers outside such features; some were found in pits, others not. The pieces recovered from Dolní Věstonice I and Pavlov I show no spatial patterning (Soffer 1997), and the contextual evidence from Brassempouy, Grimaldi, and Willendorf is equally uninformative (Delporte 1993). Thus, the nature of the available data seems to restrict us to just two sources of information, funerary evidence and iconography about social categorization—and, indeed, because the former is so sparse, to iconography alone.

Little attention has been paid to gender issues in the Paleolithic literature, and the work at hand is mostly theoretical rather than empirical. One exception is Conroy’s (1993) study of anthropomorphic depictions, which argues for gendering during the Upper Paleolithic, albeit in a different form from that of today. Pointing to the patterning in female and not male depictions, she concludes that women’s bodies had been transformed into cultural constructs while those of males had not. Gvozdover’s work (1989a, b), in turn, demonstrates that the gendered females were further subdivided on criteria which she argues are related not to age but to other cultural structuring principles. Our discussion adds to these observations by demonstrating the association of textiles and basketry used as clothing with one category of social females—their likely inventors and producers.

WOMEN’S WORK IN THE UPPER PALEOLITHIC

As we have noted above, the unambiguous assignment of particular technologies to any particular social grouping of individuals is a difficult endeavor in archaeology.

This is especially so as one moves farther back in time and can no longer convincingly use arguments of historical continuity. Separated as we are by some 27 millennia from the first documentation about who wove and made baskets in prehistoric Europe, the gendering of textile technologies must rely on parsimony, at best. Nonetheless, iconography and analogy with the ethnographic record clearly indicate that it was Paleolithic women who were most likely the weavers and basket makers in Gravettian times.

We have already presented iconographic evidence for this. Here we briefly refer to the ethnographic record, which documents the close association of women not only with plant harvesting and processing (Kehoe 1990, 1991; Murdock 1937; Murdock and Provost 1973; Owen 1996, 1999; Watson and Kennedy 1991) but also with the transformation of plant products into more complex structures through weaving and the processing of woody materials into basketry. This association is valid for all simpler societies where textiles and basketry are produced for domestic and communal needs and breaks down only when such perishable products enter the sphere of market exchange (Barber 1990, 1994; Hald 1980; King 1991; Schneider and Weiner 1989).

This is not to suggest that males play no role in perishable fiber-based technologies. Indeed, there is ample evidence that certain categories of items, such as woven footwear and some kinds of nets and ritual cloth, are often made by males. Rather, we suggest that these male-based productions are the exception; for textiles, in particular, male involvement is usually minimal.

We are well aware that, as Costin (1996) and Wobst (1978) before her have noted, reliance on ethnographic analogy is fraught with dangers of replicating contingent phenomena, especially the highly context-dependent social ones, as eternal. We suggest, however, that the evidence from the ethnological and ethnohistoric records warrants such an association.

VALUABLE WORK, VALUED LIVES

Our documentation of extensive textile production in prehistoric Europe and of the gendering of these technologies sheds new light not only on the labor of a heretofore unrecognized segment of Upper Paleolithic people, women, but also on the high value of this labor. The exquisite and labor-intensive detailing employed in the depiction of the woven garments worn by one group of Venuses clearly shows that weaving and basket-making skills and their products were valued enough to be transformed into transcendent cultural facts carved into stone, ivory, and bone. Simply put, we suggest that being depicted wearing such garments associated the wearer and, by extension, the maker of them with a marked position of prestige. While it is tempting to speculate about the criteria used for such categorizations in Upper Paleolithic Europe—for example, age-grades, marriageability, reproductive status, membership in sacred societies (for possible permutations see Marcus 1998)—the nature of the data at hand permits us only to suggest

that, however delimited, these status positions, at least during Gravettian times, were restricted to a particular category of social females.

We have already commented, here and elsewhere, on the narrow gauge of many of the weavings found imprinted on the Moravian ceramic fragments—the finest of which are comparable not only to Neolithic but even to Bronze and Iron Age products and, in fact, to thin cotton and linenwear worn today (Adovasio, Hyland, and Soffer 1997; Adovasio et al. 1999, n.d.; Soffer et al. 1998). Such fine weaving is a very labor-intensive activity, and its presence in the Upper Paleolithic archaeological record therefore probably reflects the intensification of female labor. The iconographic importance attributed to this labor suggests to us that at least some textile products by this time may have been what Clark (1986) has termed “symbols of excellence.”

Specifically, we raise the possibility that these highly perishable products of female labor may have served as “symbols of achievement” and been a part of prestige economies. We advance this hypothesis in the light of Clark’s (1986) discussion of prehistoric valuables, which notes that in simpler societies materials of symbolic value are often highly perishable—an observation amply confirmed by both the ethnographic and the archaeological record (e.g., Chilikat blankets on the Northwest Coast, atush among the Ainu, cloth in prehistoric Mesoamerica and Peru). Here we add yet another category of products, textiles and basketry, to the ivory and shell precious substances that Clark identified as socially valuable materials during the Upper Paleolithic. In contrast to his ivory and shell valuables, whose makers will likely remain forever unknown, in the case of Upper Paleolithic textiles and basketry we are dealing with gendered technologies that assign the production of valuables to women’s labor.

Conclusions

A variety of textile, basketry, and netting items were produced in Upper Paleolithic Europe by at least 27,000 B.P. They were likely used to meet both household and hunting needs and also served as clothing. The evidence for the making and wearing of varied and sophisticated woven products by Gravettian times shows that the Upper Paleolithic witnessed a quantum elaboration of “the string revolution” (Barber 1990, 1994) and suggests that Paleolithic women made and likely wore a great variety of cloth, including twined wear and non-heddle-loom-woven plain weaves.

Paleolithic imagery associates the wearing of clothing with a category of women whose attire included basket hats or caps, netted snoods, bandeaux, string skirts, and belts. These garments were clearly not day wear but more likely ritual wear, real or imagined, which served as a signifier of distinct social categories. They varied in a patterned manner from east to west.

Hunter-gatherer ethnography, ethnohistory, and Upper Paleolithic iconography associate the production of tex-

tiles and baskets with women and thus reveal not only female labor but one of the principles used to gender Late Pleistocene people. The association of textiles and basketry with just some of Venuses indicates that a variety of roles were available to social females in addition to gender-based ones and that these roles were likely associated with achievements through female labor and/or age or status.

Both the fineness of some of the weaves and iconographic depictions of this technology indicate that value was placed on these plant-based products. The iconographic recognition accorded to textiles and basketry suggests that these products may have been "symbols of excellence," serving as important signifiers in prestige economies and status demarcations. Furthermore, it seems clear that whoever carved the clad Venuses was intimately familiar with fiber technology. If the carvers were not the actual weavers or basket makers, they must have been extensively guided by the latter's knowledge and expertise.

Marshack's (1991:29) observation that "the Venus of Willendorf . . . was clearly richly and elaborately clothed in inference and meaning" is true not only in the allegorical sense but also literally. She and her sisters were indeed richly and elaborately clad in the woven and plaited finery of their time.

Comments

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In the past few years Soffer and her colleagues have been demonstrating the existence of weaving, plaiting, basketry, knitting, and the making of nets in Upper Paleolithic times, pointing to finds of the imprinting of various plant-fiber textile fabrics on fired-clay fragments from Moravian and other Upper Paleolithic sites. They have also identified pieces that may have been used as tools for the processing of plant-fiber products. This paper is an attempt to analyze data on Upper Paleolithic figurines and, for the first time, their decorative detailing with the objective of ascertaining the presence or absence of plant-fiber clothing.

The authors distinguish two types of headgear, one characteristic of Western Europe and the other of Central and Eastern Europe. They say that rather than abstract decoration the concentric or spiral strips with dentate ornamentation on the heads of some figurines depict hats or caps of very sophisticated basketry. Beyond this, they interpret the isolated horizontal strips with the same decoration on the breasts and/or waists or hips of the figurines as parts of "high-quality" plant-fiber textile garments. At the same time, they consider the bracelets with the same ornamentation too schematic for such an interpretation.

A further detail of Upper Paleolithic clothing is the string skirt that is pictured on the figurine from Lespugue. Visual examination permits the authors to suggest that the details of the strings and the method of fastening them to the belt are greatly emphasized in this depiction. Regrettably, they do not provide any evidence for this in the form of enlarged photographs or drawings of these strings and the places where they are joined, and therefore it is not clear that the marks are not simply traces of the tool(s) used to carve the ivory. The same can be said about the basketry caps or hats; we need not only photographs of the heads but large, detailed drawings of the headgear's construction and the patterns of the weaving. Besides, there are unfortunately some inaccuracies in the description of the figurines.

Soffer et al. have developed a very interesting and important theoretical approach, but the analysis of the data selected fails to achieve the level at which we can talk about "noble or noted weavers" and other high matters. Discussion of their paper will, however, contribute to the development of new approaches and research efforts.

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This valuable article presents an insightful analysis of Upper Paleolithic figurines using an extensive data base and discusses various controversial issues including the clothing, labor, and ideology of the time period. I agree with the authors that the iconography of Upper Paleolithic figurines is an extremely important source of information for the study of Paleolithic ideology. I also agree that the traditional and stereotypical view that Paleolithic garments were made primarily out of leather and hide should be seriously reconsidered. Over the past several decades, researchers have become increasingly aware that plant food was often more important than meat in many hunter-gatherer societies. Nevertheless, the relative importance of plants over animal products as raw materials is often overlooked. The argument presented by the authors will further stimulate recent discussions on the complexity of human-plant relationships in the prehistoric period. Since very few researchers have focused on the systematic use of plant resources before the Holocene, the contribution made by this article is particularly important.

There are, however, a few points that I feel might be further elaborated on by the authors. The first is their use of ethnographic analogy to suggest that women were weavers and basket makers. It is my understanding that a major principle underlying recent developments in gender and feminist archaeology is not to make general assumptions about the roles of women or men in past societies (e.g., Gero and Conkey 1991). In this regard, the authors' assumption that plant fiber and baskets were produced by women may lead to another stereotypical view of the role of women in prehistoric societies. Fur-

thermore, even if the makers of these products were indeed women, the makers of these garments were not necessarily their wearers: the garments may have been produced by some women to be worn by other women.

Second, even though I strongly agree with Joyce's (1993) statement that no detail of figurines and other human images is accidental, reconstruction of prehistoric clothing from iconographic characteristics is not always easy. For example, in the study of prehistoric Jōmon hunter-gatherers in Japan, which is my research specialty, scholars have suggested that not all the decorative characteristics of figurines represent the graphic depiction of the past people's clothing and physical appearance. According to Esaka (1990), Fujinuma (1997), and Izumi and Nishida (1999), most Jōmon researchers agree that many of the Middle to Final Jōmon (ca. 5000–2300 B.P.) clay figurine heads depict characteristics of the Jōmon people's hairdos. However, Fujinuma (1997: 135) also warns us that some of the head and body decorations of Late and Final Jōmon figurines are not graphic representations of hairdos or outfits but simply decorative motifs, since they closely resemble pottery decorations from the same period. Similarly, many researchers agree that some of the incised lines and dotted marks on Jōmon figurine faces may represent tattoos but not all of these markings are graphic representations. In this regard, systematic examination of the variability within each of the four categories of evidence (i.e., headgear, bandeaux, belts, and necklaces/bracelets) would be useful. Statistical analysis of the occurrence of these four characteristics on a given figurine might also strengthen the authors' argument that they represent a single category of Upper Paleolithic women.

Finally, although the authors' argument that fine weavings may have served as "symbols of achievement" is highly suggestive, evidence for fine weavings from the Upper Paleolithic period should perhaps be represented in a more detailed manner for a wide audience. In the field of Jōmon textile studies, Ozeki (1996) points to the difficulty in distinguishing non-heddle-loom-woven textiles from other kinds of weavings solely on the basis of textile impressions.

Future research on gender and ideology in the Upper Paleolithic should include not only iconographic studies of figurines but also other lines of evidence. For example, although the authors are pessimistic about the significance of spatial analyses of Upper Paleolithic figurines, I would argue that the systematic reexamination of the provenience of figurines at both the intra- and the intersite level may shed new light on the nature of these figurines. In the case of Jōmon archaeology, researchers have begun to identify the spatial contexts of clay figurines and observe changes in their spatial distribution through time that were not previously recognized (Ogasawara, personal communication). Iconographic analyses will prove to be most convincing when used in combination with other lines of evidence.

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The identification of plant-fiber-based textiles and basketry impressions on burnt clay in the Moravian Pavlovian (Adovasio, Hyland, and Soffer 1997, Adovasio et al. 1999) is undoubtedly a breakthrough in research on the Upper Palaeolithic. For the first time it has been shown that Central European and possibly also Eastern European Gravettian societies were acquainted with weaving and basketry in the period preceding the Last Glacial Maximum. Examining the tool kit and analysing the ornaments and clothing of Gravettian Venus figurines, the paper under discussion provides further arguments in support of the existence of weaving and basketry in Gravettian societies.

I would, however, be more cautious in extending the results of investigations of the Gravettian, notably in the steppe-tundra zone of Central and Eastern Europe, to other Upper Palaeolithic societies, particularly the Magdalenian and Epigravettian. Research on the significance of the cultural revolution during the Last Glacial Maximum has revealed essential differences between the pre-Pleniglacial Gravettian and the post-Pleniglacial Epigravettian and the Magdalenian. Dramatic changes took place in the whole of material culture, behaviour, and subsistence strategies, settlement patterns, and, consequently, social structure and symbolic culture (Kozłowski 1999).

The pre-Pleniglacial Gravettian was characterized by stability of settlement networks exceptional for the Upper Palaeolithic, which can be seen in large settlements, often with a well-organized layout of dwellings, for example, on the Russian Plain (Praslov 1993). The semi-settled way of life was made possible by the biomass resources of the steppe-tundra and the possibility of food storage in conditions of permafrost. In turn, the effect of the semisetled way of life was the emergence of the spheres of material culture and technology that would only become known at least 10,000 years later in the settled societies of the initial Neolithic—ceramics manufacture and the use of plant fiber in weaving and basketry. The intensification of plant gathering for consumption encouraged the use of wild plant fiber just as it did in the Pre-ceramic Neolithic of the Near East. Similarly, Gravettian Venus figurines exhibit more characteristics in common with the figurines of the initial Neolithic of the Near East than with the Late Magdalenian or Epigravettian "Venus" schematic representations (Kozłowski 1992). The best example of this analogy is the figurine of a pregnant woman from Kostenki 13 (Kozłowski 1992: fig. 40), which bears a strong resemblance to the figurine of a pregnant woman from Çatal Huyuk.

I do not think we are entitled to divest the Gravettian Venus figurines of their sexual connotations—to ignore the woman's role in reproduction and associate the figurines with the role of women as plant gatherers and

textile producers. Unquestionably, the sexual attributes of the Venus figurines dominate over the elements of clothing. It is highly significant that as female representations, both in the Pavlovian and in the Kostenkian, become more stylized, elements of clothing disappear and solely sexual attributes remain (Kozłowski 1992). If, as the authors claim, the description of woven garments received as much attention as the depiction of sexual characteristics, then we should find fully clothed figurines in the Gravettian such as are known in Siberia (the Mal'ta-Buret' culture). But it should be added that the Siberian figurines are very definitely clad in furs and/or skins. Perhaps this is the point of view of one of the "male scholars who have dominated Pleistocene research," but so far it seems to correspond better to the potentials for interpretation of the Palaeolithic record.

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Recognizing refined accomplishments in perishable fiber-based technologies millennia earlier than previously thought is a pioneering achievement of archaeological method. Combining the evidence of ethnography with that from Gravettian female figurines, a reasonable case is made that these technologies were created and used by women, that such skills and finely woven objects were highly valued, and that fiber artifacts served as markers of social status and identity. However, Soffer, Adovasio, and Hyland integrate only some of the iconographical attributes of these early figurines into their interpretive picture, and this selectivity obscures issues central to the study of their motivation and function. The paper also ignores current discussion about the nature of the variability characterizing early images and proceeds on assumptions altogether as selective as those found in prior "unitary explanations."

Although our authors acknowledge that most female images are "fully naked" and only some "very partially clad," their emphasis on "woven clothing," "Venus wear," and "dressed" figurines inevitably distracts attention from the fact that it is the uncovered and not the clothed body that is selected for representation in what they refer to as Pavlov-Willendorf-Kostenki-Avdevo (PWKA) "Venus" figurines and their Gravettian "equivalents from Western Europe." When the chronologically and geographically distant Lake Baikal sites are excluded, not a single figure suitably clothed for "northern latitudes" can be identified among the 200 cited examples. Though they make a plausible case for woven and sewn "shawls, shirts, skirts," and leather outer garments, we actually see only items such as bracelets, necklaces, caps, snoods, belts, bandeaux, and one string skirt that do not conceal the otherwise nude female body. Our authors assume that these fiber items were worn with the intention of being seen, which is entirely plausible, but their representation may also simply be incidental to the primary purpose for creating the figurines,

which may have been to portray the biological topography of the female body. Because ordinary "day wear" is conspicuously absent, the authors invoke "ritual wear" as the operative "signifier of distinct social categories," but ultimately their inference of a social role for figurines rests entirely on ethnographic analogy rather than archaeological or iconographical evidence. Given the weaknesses of ethnographic analogy and the lack of meaningful spatial patterning in depositional contexts, the attributes of the figurines themselves should always remain central to any interpretation of function. It is just as logical an ethnological possibility that these apparently realistic images of the uncovered female body played a didactic role akin to present-day obstetrical and gynecological textbooks and primers (McCoid and McDermott 1996, McDermott 1996). At least such an interpretation is consistent with the universal nudity of these images, whereas a discussion focusing only on their clothing is not. Perhaps the established term "body ornament" would be more descriptive.

Acknowledging only "variability" among Middle Upper Paleolithic or Gravettian images ignores evidence of significant stylistic regularities in the way the female body is represented. I have previously summarized the extensive evidence for a consistent set of anatomical omissions and proportional distortions supporting a clear central tendency of representational style and argued that regional variation typically occurs within a core of more geographically extensive regularities (McDermott 1996). This widely shared point of view is based on far more than mere fixation on "emotionally charged . . . sexual characteristics."

The absence of eastern bandeaux and the fact that string "skirts," worn low on the hips, are seen only on Western European "figurines" are presented as confirming both regional variability and Gvozdover's argument that thighs and hips are accentuated in Western Europe whereas breasts and bellies are stressed in Eastern Europe. In spite of the liberal use of the plural, only half of one string skirt (the singular example from Lespugue has no front) exists to support this claim. Furthermore, Gvozdover's conclusions on regional accentuation appear more complex, for she says (1989b:86), "In the Eastern European figurines, the breasts and abdomen were accentuated, . . . and in the Western European, the abdomen, buttocks, and to lesser degree the breasts and hips."

The authors infer the existence of considerable variability when they contrast the "bodywear" of female figurines with its absence in "unambiguous depictions of Paleolithic males," "humans of unknown sex," and "undifferentiated anthropomorphs." After examining the originals of most alleged males I remain unconvinced of their subject, and indeed every cited example has been challenged by others (McDermott 1996). There may be a half-dozen or so disputed males, but there are no unambiguous ones, and, indeed, a tradition of male image making has yet to be demonstrated for the Middle Upper Paleolithic. Similarly, claims for figures of indeterminate sex either ignore arguments that most are unfinished

female figurines interrupted at some recognizable stage in a structured fabrication process or else follow Pales and de Saint Pereuse (1976) and conflate early images with much later and radically different ones (Praslov 1985, McDermott 1996). In short, the literature about variability among these largely nude female images is more complex than described.

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Soffer et al., who have brought to the scientific scene a whole new range of perishable items, now further elaborate on this theme, turning to iconic representations and to the Gravettian figurines. Their conclusions are that textiles were represented on some statuettes, that weaving and basket making were part of the female sphere of activity, and that iconography associates them with prestige and power. In doing so, they suggest (1) that there is a sound statistical basis for their observations, (2) that the inspection of the statuettes allows positive identification of textiles and garments, and (3) that evidence exists of the exclusive association of women with such perishable technologies.

The statistical foundation of point 1 seems sound enough, as "well over 200 complete or nearly complete examples for the Gravettian period alone" are mentioned. From my own data base, however, a figure of 200 seems an exaggeration. Dismissing torsos, heads, and fragments, we are left with some 70 Gravettian figurines and bas-reliefs, evenly subdivided between Western Europe (Italy, France, and Germany) and Central/Eastern Europe, east of the Rhine-Adriatic divide. Female representations, identified by breasts, vulvas, expanded bi-trochanteric width, and protruding buttocks, are overwhelmingly predominant. Males, however, lacking such good anatomical markers, are more difficult to identify unless they are naked and details are depicted, including the penis (e.g., the specimen from the Brno II burial and fragment DV 11 of Dolní Věstonice in the Moravské Muzeum). Otherwise, we are left with clad and/or schematic representations which simply cannot be sexed (e.g., the "Chasseur" from Laussel, Avd-75 from Avdevo, and the ivory figurine of 1973 from Kostenki I, not to mention the earlier, Aurignacian therianthrope statuette from Stadel). The same holds true for isolated heads such as the "Negroid Head" of the Balzi Rossi and the ivory one from Dolní Věstonice (which I have examined and found to display a protuberance between mouth and nose that could well be a moustache). The mushroom-shaped head fragments from Dolní Věstonice discussed in the paper cannot be sexed with any certainty, either. Necklaces are not gender-specific; the Gravettian burials of Liguria includes males wearing necklaces made of interwoven fish vertebrae, deer canines, and marine shells (Mussi 1995a). While female representations recognizable as such are overwhelming in number, female/male com-

parisons cannot be made on any statistically significant basis.

Textiles are identified (point 2) on the basis of an analysis of the Willendorf I figurine, a cursory description of a number of Kostenki and Avdevo specimens, and a detailed examination of the Lespugue Venus, from which the existence of skirts is taken as demonstrated. As is well summarized by Delporte (1993), however, the evidence for this unique piece of clothing is hotly debated—not least because a skirt tied *below* the buttocks would be unrealistic. With Delporte, I prefer the elegant hypothesis of Coppens (1989), according to which, looking at the back of the statuette, one can easily detect the outlines of *two* women, playing-card-like: the "skirt" is in such an improbable location because it is the rendering of the long hair of the second figure. The Lespugue figurine would thus be another of the double beings known from Gravettian sites all over Europe (Coppens 1989, Mussi 1995a, Mussi, Cinq-Mars, and Bolduc n.d.). As far as the Willendorf I figurine is concerned, the original hypothesis by Abramova (1960) of a cap decorated with rows of shells cannot be lightly dismissed. There is positive evidence of caps covered with rows of marine shells, perforated teeth, and ivory pendants in the rather extensive funerary record of Italy (21 individuals found in 16 Gravettian burials [Mussi 1995a, n.d.]), most of them worn not by women but by men. In two instances (Grotta del Caviglione and Baoussou da Torre) and possibly in a third (Grotta delle Arene Candide 1) remains of animal skin and hair were also positively identified beneath the skeleton (Cardini 1942, Rivière 1887), while in later Palaeolithic burials (Grotta delle Arene Candide) bunches of squirrel caudal vertebrae suggestive of a fur are associated with infant remains (Cardini 1980). Dismissing this consistent evidence of skin and leather to make use of Soffer et al.'s hypothesis, shells and pendants should be considered as having been sewn on fabric, as in the much later site of Nahal Hemar in the Judean Desert (Bar-Yosef 1985). To further complicate the matter, however, my own examination of an accurate cast of the Willendorf I figurine provided by the Wien Naturhistorisches Museum suggests that the decorative pattern found on it is also incised on pendants and on a possibly phallic item from Brassempouy (Taborin 1995), just as chequered patterns are described both on pendants and on heads (Abramova 1991, Zampetti 1994). To sum up, the archaeological record cited in the paper does not unambiguously support either the use of woven fabric or its exclusive association with women.

Point 3 is the weakest, because, notwithstanding an explicit warning against the lures of the ethnographic record, its "redundancy" is finally taken as unequivocal proof of the exclusive association of women with textiles and basketry—thus leading to circular argumentation and a path that I am not willing to follow.

This paper opens important new perspectives in the interpretation of Gravettian iconography, as fabric and basketry can now be expected to have been represented, in some instances, at least, and, in my opinion, this possibility should be assessed in detail against other possible

interpretations in each case. Notwithstanding new discoveries, however, the evidence for patterns in clothing seems not much more extensive today than it was in 1985, when it was preliminarily discussed by Y. LeGrand. I also remain convinced that modern analogues uncritically projected onto the past cannot do more than reinforce current stereotypes, including those on gender roles. The fallacies of circular reasoning can be avoided only by using independent lines of evidence. Churchill et al. (n.d.), for example, studying Gravettian populations, highlight an asymmetry of female upper limbs well above that of more recent populations, suggesting that, just like their male counterparts, women were possibly regularly engaging in activities such as throwing. The near-universal sexual division of labour of modern hunter-gatherers may therefore not have fully emerged by the later Pleistocene. This would be in good agreement with the mounting evidence that the Gravettian figurines—be they female, male, or unsexed—subtly express a sophisticated set of beliefs which include beings alternatively appearing as single and double, male and female, human and non-human (Bolduc, Cinq-Mars, and Mussi 1996, Coppens 1989, Mussi 1995*b*, Mussi, Cinq-Mars, and Bolduc n.d.).

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The discovery of numerous textile imprints on fragments of fired and unfired clay from the sites of Dolní Věstonice I and II and Pavlov I was a milestone in Upper Paleolithic research (Adovasio, Soffer, and Klíma 1996, Soffer et al. 1998). This was the first concrete evidence of the use of plant fibers in crafts during the Gravettian. The diversity of the textile technologies represented and their fineness show how little we know of the development of perishable technologies in the past. The recognition that several of the female figurines of this time are wearing woven caps of plant fibers is just as spectacular. The detailed execution of the headgear and other articles of dress gives us valuable insights not only on prehistoric technologies but also on the possible roles of women in these crafts.

These finds clearly illustrate how important it is for us as archaeologists to analyze and question the assumptions which underlie our research. The myth of Upper Paleolithic hunters in skin clothing who lived almost exclusively from big game and dwelt in hide tents has so pervaded archaeological thinking that plant resources have been ignored in reconstructions of prehistoric subsistence, seasonal mobility, crafts, and tool use and archaeobotanical analyses deemed unnecessary (Owen 1994, 1996, n.d.a). The research on plant fibers and associated crafts that Soffer, Adovasio, and Hyland have been carrying out is revolutionizing our understanding of life during the Upper Paleolithic and the roles of prehistoric women.

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17 11 00

The discovery of textile impressions on clay fragments from Pavlov and Dolní Věstonice (Adovasio, Soffer, and Klíma 1996, Adovasio, Hyland, and Soffer 1997) is one of the most surprising discoveries of recent years. What is striking to both professionals and the broader public is that the new evidence contradicts our expectations about the Ice Age lifestyles as these are codified (or “fossilized”) in a number of popular artistic reconstructions. Today, after a few years of adaptation to this kind of evidence and in the light of our knowledge of other well-developed technologies of the Upper Paleolithic and analogies from recent hunter-gatherers and the Paleo-Indian evidence, it seems quite appropriate to reconstruct Upper Paleolithic hunter-gatherers as producers and users of a variety of textile, basketry, and cordage products. Additional studies of the impressions are in progress (Kovacic, Moravec, and Svoboda 2000).

It also appears that several other technologies traditionally associated with the Neolithic were already known during the Upper Paleolithic but, in a different social and economic context, used differently (or less “practically”): ceramics was used for figurines instead of pots and polished stone for decorative elements instead of axes. This lends credibility to the suggestions of Soffer et al. about the social meaning of Upper Paleolithic textiles, especially if we assume that hides and furs still played an essential role in clothing human beings.

Several related and supportive lines of the textile research are also being initiated on the bone industry, which could have been used in textile production (cf. Sterdeur-Yedid 1979, Kehoe 1990, Owen 1996), on possible evidence of clothing from burials (Bader 1978, Mussi 1990), and on the iconographic evidence—the depictions of anthropomorphs in Upper Paleolithic art. The present paper is an important step in this direction.

The essence of the Upper Paleolithic anthropomorphs, whether clothed or naked, is that they are centered on females. Certainly, female representations possess multiple meanings, and I agree that one should avoid selective focus and unitary explanations. However, I would see these figurines primarily as symbols in themselves, with the basic meanings derived from human anatomy. The various additive symbols, decorations, and/or depictions of clothing do not deny these primary (or substantive) meanings but, rather, expand and clarify them as adjectives.

Again, our efforts to read these adjective meanings should not be unitary. For example, several clay figurines from Pavlov, female or indeterminate, show simple strings around hips, legs, and necks with parallel diagonal incisions that even before the discoveries by Adovasio et al. suggested twisted cordage to some researchers (Klíma 1989, Marshack 1991; see my fig. 1), but I do not think that all the lines visible on the bodies are elements



FIG. 1. Human figurines of baked clay from Pavlov I with possible cordage belts.

of clothing. The Venus from Dolní Věstonice (figs. 2 and 3), another example from southern Moravia, shows a single, deep horizontal groove around the hips which is produced in the same manner as the vertical line separating the triangle of the legs. I would not see this groove as a belt. It divides the body into two parts, each with its own symbolic meaning (Svoboda 1997).

In contrast to the Siberian figurines, the females of Europe are naked or only partially clothed. The fact that the elements of clothing and headgear cover only limited and small parts of the bodies or heads suggests that the information provided by the European figurines is not about protection against cold. If their role is not just decorative, I would see this as a possible supportive argument for the social or ritual explanation of these items, as proposed by Soffer et al. Certainly no one forgets that clothing in general (including hide and fur clothing) was an essential part of human adaptation to the glacial climate.

What about the male world? Although it is entirely natural (and supported by ethnological analogies) to consider textiles female products, this does not mean that their use was limited to females or to a particular rank of social females. Adovasio, Hyland, and Soffer (1997) have suggested the wide use of these items, ranging from clothing (shirts, gloves, socks, all good for male hunters) to containers and mats (useful for everyone).

Soffer et al. have enriched our vision of the complexity of the Upper Paleolithic social system and how it documents the variability of microworlds based on gender, activity, and technology. Such complexity is certainly in

no way in contradiction to the image of the brave Ice Age hunters who were killing large mammals at the same time.

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This paper and the authors' previous work suggest that a "mature" textile and basketry technology already existed by early Upper Paleolithic times. This should not be surprising, given the cultural sophistication shown by the mobiliary and parietal art of the period, but it adds significantly to our appreciation of how close to us such apparently remote ancestors in fact are. The following remarks are offered in the spirit of recognizing the importance of the authors' contribution while suggesting some areas where the interpretation of the historical and social significance of their finds requires further research.

From the demonstration of their presence in the early Upper Paleolithic of Moravia Soffer et al. infer that fiber artifacts must have made up a majority of artifact inventories in Paleolithic times. This is based on the pattern revealed by early Holocene sites where perishable materials have been preserved. Although the inference is legitimate, the occurrence of significant improvements in the technology during the intervening 20,000 years cannot be excluded. That is, fiber items may indeed have become a lot more important in the Holocene, even

if the basic knowledge and applications had emerged a long time before. Moreover, the climate change at the end of the Pleistocene may have made available plant raw materials formerly absent from most of Europe during the last glacial period. In this regard, the paper lacks a paleoethnobotanical and paleoenvironmental discussion of the situation in Moravia 28,000 years ago. What plants are documented in the paleolandscape, by pollen or charcoal, that might have been used for textile and basket making?

At the same time, the variety and fineness of many of the final products entails considerable antecedent developments for these items and for the fiber industry in general as the authors contend only if a gradualist view of the historical process is assumed. Major innovations in the history of humankind (e.g., the appearance of art, the invention of writing) are demonstrably "sudden" and develop into full-fledged, widespread technologies over periods of time that, in evolutionary perspective, can only be described as very short. Although it makes sense to assume that fiber technologies developed fairly early on, it cannot be excluded that the refining needed to apply them to the manufacture (or the decoration) of items of clothing is only a late Paleolithic phenomenon.

The Paleolithic iconographic evidence for clothing reviewed by the authors identifies the following categories: headgear (fiber-based woven caps, hats, nets or netted snoods), bandeaux, belts, string skirts, and, possibly, bracelets and necklaces. Except for the headgear, these are items not of clothing but of decoration. The authors argue that the small size of most of the ivory needles known from Upper Paleolithic contexts suggests "working with woven textiles and/or accessory stitching or embroidering rather than conjoining of animal hides." The iconography and the tools both suggest, therefore, that plant materials were being used to decorate clothes made of other materials. Given the cold climate of the period and what we know about subcontemporary hunters of the Eurasian steppe-tundra, those clothes must have been made of animal skins, not of plant material.

The authors' reading of the Venus figurines leads them to suggest that the use of textiles in clothing is gendered, and they infer from this conclusion that the women who wore and made those objects held "marked positions of status." It is not clear to me, however, why this should be so. In fact, the argument on women as the inventors and makers of textiles would seem to lead to the conclusion that women in general, rather than a specific category of women, were held in high esteem in early Upper Paleolithic society. The authors believe that the plant-made items of clothing identified in the Venus figurines are ritual wear. By the same token, it seems equally possible, however, that they represent instead a gender-specific mode of ornamentation or of identification (as individuals or as members of a specific social group determined by age or marital status, for instance). Moreover, textiles may have been used for nonritual, nondescriptive, more mundane, utilitarian (and nongendered?) ways, for instance, for the manufacture of containers and other transport equipment necessary to sus-

tain the highly mobile lifestyle of the early Upper Paleolithic hunters of Moravia.

Reply

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We are gratified that so many scholars have elected to provide insightful comments on our article. Their observations appear to fall into three categories that are not necessarily mutually exclusive. Some commentators focus on evidentiary issues (Gvozdover, Zilhão), others emphasize interpretations, implications, or context (Habu, Kozłowski, McDermott, Svoboda), and several have both data questions and theoretical concerns (Habu, Mussi, Zilhão).

Questions about the evidence. Several commentators pose a series of relevant and quite understandable questions about the technology of the vestments depicted on the figurines. Before dealing with these concerns, we would call attention to a number of earlier publications, among them Adovasio et al. (1996, 1999, and n.d.) and Soffer et al. (1998), which provide detailed descriptions and illustrations, including schematics, of the technical processes underlying the material products which we believe are depicted on some of the Venus figurines. Examination of this corpus of data demonstrates that the weavers of Upper Paleolithic Moravia were not only manufacturing a variety of cordage types but, more important, also producing plaited basketry and twined and plain woven cloth which approach levels of technical sophistication heretofore associated exclusively with the Neolithic and later time periods (Barber 1991, 1994; Childe 1936). Unfortunately, much of this technology is evident only to those who have considerable experience with perishable material culture and have examined the original evidence firsthand. Regrettably, most Paleolithic archaeologists have not been trained to do so or have lacked access to the original specimens.

In this light, it is quite reasonable for Gvozdover, Mussi, and Habu to request additional data on some of our observations. Extensive firsthand examination of the original Venus of Lespugue illustrates conclusively that the cords that make up the body of the skirt loop over the foundation element in the manner described in our article. It is also abundantly clear that the cordage twist details, including the sequential change of angle of twist, are a deliberate attempt to depict the gradual untwisting of the cords and not a function of the tools used to produce the figurine—a conclusion also reached by Barber (1991, 1994) before us. Unfortunately, many of these details are masked in even the best of casts and require high-resolution photos of the original specimen for verification.

This lack of resolution in available casts also has a bearing on Mussi's questions about the Willendorf cap.

Fortunately, the relief on the head of Willendorf is sharper on the best casts than it is on the skirt of Lepugue. Close examination of good casts or the original clearly shows a radial construction which superficially resembles coiled basketry (fig. 4, *right*). The stitches which connect the spiral foundation may at first glance resemble molluscan shells, especially on poor casts, but are more parsimoniously explained as a variant of vertical stem stitches, as is illustrated by Emery (1966, fig. 65). This interpretation does not, of course, negate the fact that shells or vertebrate faunal materials may have been used as decorative embellishments by Upper Paleolithic people or that they occur in conjunction with hide or skin garments—these indeed have been the interpretations offered to explain the distribution of shell, ivory, and bone heads in burials at Italian Upper Paleolithic sites (Mussi 1995a) as well as at Sungir' (Bader 1978, White 1993). We are not, however, discussing Upper Paleolithic day wear or death wear. We are emphatically not asserting that plant-fiber garments were used instead of garments made of animal by-products; rather, we are suggesting that they were used in addition to them in response to seasonal or social parameters.

The interpretation of a cap on Willendorf also does not negate the fact that, according to many scholars, certain Jōmon figurines clearly depict hairdos. We are stating or reiterating, however, that in the cases cited in our article woven headgear is a more parsimonious explanation than simple decorative motifs or hair manipulations. Indeed, the “effect” noted on the Willendorf head (fig. 4) and on Avdevo fragment #13 (Gvozdover 1995: fig. 110) could not have been produced from growing hair because it requires a continuous radial foundation element. Similarly, the plaited effect on the Kostenki head (fig. 6, *right*) could not have been produced from growing hair.

Though not strictly a technological observation or question, Habu's comments on the difficulty of distinguishing non-heddle-loom-woven from heddle-loom-woven items from casts are well taken. In this regard, we can only reiterate that to date there is no direct evidence from the casts or the associated textile fabrication material-culture suite of heddle looms in the Upper Paleolithic.

Finally, we are quite concerned that Gvozdover finds some inaccuracies in our description of the figurines. Unfortunately, however, we cannot address this claim because of its lack of specificity.

Questions about interpretation. Both McDermott and Kozłowski defend the long-held view that the Gravettian Venus figurines are about primary and secondary sexual characteristics and resist seeing any variability in them beyond these features. Both argue for unitary explanations: McDermott sees the figurines as obstetrical-gynecological primers, and Kozłowski emphasizes their similarity to much later Neolithic images from Turkey and the Near East. Although we are glad to note that McDermott no longer insists on the “autogenous” origin of the figurines, we believe that his search for the one essential meaning and function of the figurines is a futile effort which, like its previous incarnations (e.g., seeing

them as fertility fetishes or “mother’ goddesses, as paleopornography, etc. [for discussions and evaluations of such interpretations see Conkey and Tringham 1995, McDermott 1996 with comments, Russell 1998, Soffer and Conkey 1997]), leads to dead-end arguments from authority. While such arguments may be the norm for art historians, we, together with many commentators on McDermott's hypothesis (1996; McCoid and McDermott 1996), find them less than satisfying. We do agree with McDermott, however, that women may have been the makers of some of the figurines. As we note in our article, this is possible because the fine production detailing depicted on the garments of the figurines implies thorough knowledge of the craft—suggesting that the carver was either the weaver or guided by one.

We suggest that the same problems of verification beyond arguments from authority plague all efforts at eliciting “meaning” from Upper Paleolithic imagery



FIG. 13. Stylized female figurine from Mezin (Photo © A. Marshack)

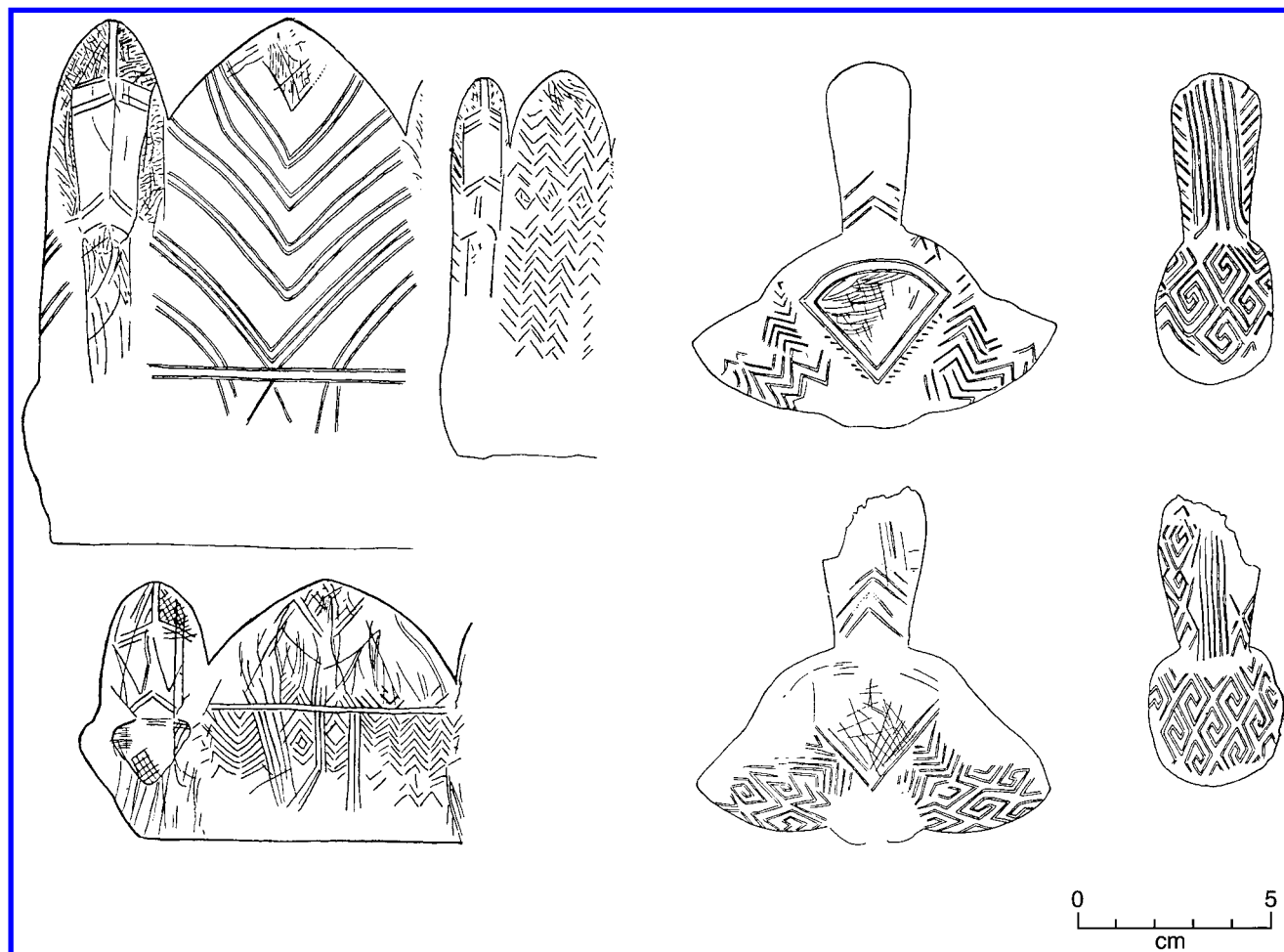


FIG. 14. *The design motifs on the Mezin figurines (after Soffer 1997: fig. 7).*

—including Coppens’s (1989) seeing Lespugue as depicting two women. (If this is the case, then one of them is thickly veiled by unravelling cordage.) While Mussi finds this dualism persuasive, for reasons discussed in Soffer and Conkey (1997) we prefer a more conservative approach of documenting unambiguous variability in some features on some of the figurines.

By pointing to purported similarities between Gravettian-age Venuses and Neolithic female figurines, Kozłowski conflates time and space and revives interpretations pioneered and championed by Gimbutas (1982, 1989, 1991). The problems with such interpretations have been extensively discussed in the literature and need not be elaborated here (e.g., Conkey and Tringham 1995, Tringham 1993). We also wish to challenge Kozłowski’s assertion that as Upper Paleolithic female imagery becomes more stylized through time, elements of clothing disappear and solely sexual attributes remain. The senior author has elsewhere discussed the changes in Upper Paleolithic female imagery through time (Soffer 1997). As the figurines from Mezin in Ukraine (figs. 13 and 14), dating to some 17,000 years ago, or engravings

from Magdalenian Gönnersdorf in Germany (Bosinski 1990:234) clearly show, stylization impacted both the sexual characteristics and the garments to the point where their unambiguous identification as such is highly problematic.

While Gimbutas (1982) chose to see the Mezin figurines as the prototype for her “Bird Goddess” of Old Europe and the Mediterranean, we are more intrigued by the similarities between the geometric designs on these Upper Paleolithic bodies and weaving patterns of East European Slavs (Kelly 1989, Lysenko and Komarowa 1992). Although we may be a bit uncomfortable with such a “longue durée,” we find the concordance of design elements and some of the items produced (e.g., belts, string skirts) more intriguing (see, e.g., discussion in Barber 1991 and 1994) than imaginary “eternal females” deified across time and space.

We are surprised that Kozłowski argues for major discordances in lifeways across Europe around the last glacial maximum some 20,000–18,000 years ago. Although some scholars have argued for such a radical transformation in Western Europe, the extension of such a divide



FIG. 15. *Figurines from the Siberian site of Mal'ta.* (Photo O. Soffer)

into Eastern Europe is totally unjustified. The East European record shows far more continuity in settlement complexity between some 25,000 and 12,000 years ago, rendering the imposition of West European models untenable (Soffer 1985, 1989*b*; Soffer and Gamble 1990).

A number of commentators mention the Siberian Upper Paleolithic figurines from Mal'ta and Buret'. While we agree with Kozłowski, McDermott, Mussi, and Svoboda that some of them are indeed shown clad, we are less certain than Kozłowski that the clothing depicted is made of furs and hides (fig. 15). This is certainly the interpretation offered for them by Okladnikov (1941) and one repeated in numerous secondary and tertiary sources. Our examination of the originals curated at the Hermitage Museum in St. Petersburg revealed a high degree of stylization which makes for great ambiguity in interpretation of just what they were wearing.

McDermott, Kozłowski, and Zilhão question the utility and function of the basket hats, bandeaux, and belts we have identified on some of the figurines. We reiterate that nowhere do we claim that this was necessarily clothing that offered protection against the elements, and we are somewhat surprised that they expect iconographic depictions to be snapshots of reality. At the same time, we would remind our readers of the pernicious influence of time-worn icons of Paleolithic life on

our scholarship. Specifically, by calling Paleolithic people "denizens of the Ice Age" and imagining them on frozen tundra landscapes, we ignore the fact that while the Upper Paleolithic clearly had 40,000 years of Januarys, it also had an equal number of Julys and Augusts. Images of ancestral "hairy men" who in time become "men in furs," as Moser (1998) has shown, have more to do with our own ways of imagining "the other" than with past realities. These "permafrosted icons" lead Zilhão to question the availability of any plant material suitable for fiber artifact manufacture during the late Pleistocene. This ignores not only the rich evidence from pollen profiles and macrobotanical remains recovered from Paleolithic sites from all over Europe (for a discussion of potential plant resources see, e.g., Owen 1996 and *n.d.b*), and concrete evidence for *Asclepias* sp. and *Urtica* sp. at the Moravian sites (Soffer et al. 1998, Adovasio et al. 1999, with references) but also the fact that many northern hunter-gatherers had complex perishable fiber-based technologies. Notable in this regard is the basketry technology of the Aleuts, which is widely recognized as the finest twining technology in all of Pacific coastal North America (Mason 1904, Shapsnikoff and Hudson 1971).

We reference here recent ethnographic and ethnohistoric data, but a number of our commentators (Habu, McDermott, Mussi) find problems with our use of cross-cultural ethnographic data to associate textile production with the labor of some Upper Paleolithic women. We acknowledge the problems inherent in assuming that gender-related activities observed by ethnographers are timeless, for this clearly naturalizes conventions that are social and therefore mutable. We note, however, that our association of some Upper Paleolithic women with textile products rests not only on this analogy but also on iconography—the subject of our article. We also remind our readers that there is a vast historic, protohistoric, and ethnohistoric literature supporting such an association (see, e.g., Barber 1991, 1994, with references, for Europe and the Mediterranean region). While the deep past may have been radically different from the past 10,000 years, we cannot dismiss multiple sources of data which question such imagined constructs.

We are somewhat surprised that the disparate data bases we use are dismissed just when we are beginning to find hard evidence for what some women did in the Upper Paleolithic. Such multiple lines of evidence, after all, are precisely the ones called for if we are to engender the past (Costin 1996, with references). Is our desire to diversify the image of "Ice-Age Hunters"—something we clearly need to do to begin grasping the richness of our Pleistocene heritage—just a prescriptive invocation? Or has the time come for us to concentrate on developing recovery and interpretive techniques to unearth this diversity and to begin identifying what some women actually did in the deep past? In this contribution, we clearly argue the latter.

Mussi and Habu suggest that a second look at the contextual information and statistical analyses of the whole assemblage are desirable. We respectfully disagree. First,

we simply have no contextual data other than the site names for the figurines recovered in Europe at the beginning of this century. The situation in Eastern Europe is, as we point out, much better, but, as Gvozdover (1989a, b) has noted, there are no specific contexts that have yielded the figurines. This stands in clear contrast to the Jōmon case. It may be, as one of us has argued elsewhere in regard to the production of ceramic animal and female figurines in Upper Paleolithic Moravia (Vandiver et al. 1989, 1990; Soffer et al. 1993), that their importance was in production and the social circumstances of use and not in their existence per se or long use life. Furthermore, we have to remember that the contextual circumstances of disposal may not reflect the circumstances of use. After all, it is only "heirlooms" which warrant attention through time, and we have no way of knowing that the Venuses were such.

Furthermore, it was our conscious decision not to subject these figurines and figurine fragments to statistical manipulation. This was because we believed that such collapsing of time and space not only was unjustified and essentializing but also would homogenize a diverse assemblage produced over thousands of years by heterogeneous people.

Whatever the agreement or disagreement with our interpretations of the functions and or uses of the woven items we discussed, we are delighted that most of the commentators view the discovery of Upper Paleolithic plant fiber technology as a significant increment to our understanding of these societies. Indeed, one of us (Adovasio) had frankly despaired that the role of perishable technology would ever be recognized. We are now confident that, at the very least, it is becoming apparent that Pleistocene societies all across the world did not live by stone alone.

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