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LEARNING FROM CURVES: THE FEMALE FIGURE IN PALAEOLITHIC EUROPE

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Abstract. Other disciplines can sometimes bring more understanding to pre-Historic art studies by providing for different points of view. This paper attempts to re-examine the surviving representations of women from Palaeolithic Europe, using comparative examples from the more recent history of European art. There has been much discussion about them, and a popular, oft-repeated view is that the shape of these representations suggests that they were symbolic of fertility, pregnancy and procreation. However, art works from recent millennia show that a female shape seen to be connected with pregnancy and childbirth in one age may not necessarily be seen this way in another, and that artists frequently demonstrate their own individual styles and preferences for body shape when creating images of women. This paper proposes that the Palaeolithic female figures should be considered as part of the broader picture of the art of Europe. The possibility then emerges that their ‘meaning’ may often be something quite simple.

Introduction

The representation of the female form in the Palaeolithic art of Europe has been the subject of lively discussion for well over 100 years. Could there possibly be, one may ask, any new way of approaching such a well-worn topic?

The aim of this paper is to attempt to dispel some of the myths surrounding these images by looking at them in an unusual way, with the help of art history. The focus will be on the surprising strength of support that persists, in spite of the lack of archaeological evidence, for the idea that these art works were all meant to symbolise an obsession in the Ice Age with fertility, pregnancy and procreation (e.g. Dickson 1990: 101–3; Gimbutas 1991: 12; de la Croix et al. 1991: 36; Osborne 1997: 1100).

The literature still promotes this idea. One example typifying what the general public — and some archaeologists — read is an expensive coffee-table book with an impressive list of academic authors. Published by a respected university, it includes an article on the Venus figurines, which states categorically: ‘they all share the same standardized design: exaggeratedly swelling breasts and buttocks, and many of them appear to be pregnant ... The fertility symbolism is evident — the important thing was reproduction, fertility and pregnancy’ (Burenhult 1993: 103). Another example is a recent book on the trendy subject of goddesses. According to the author, ‘the typical Old Stone Age figurine of the Great Goddess is sculpted to emphasise fertility ... she often appears to be pregnant, with huge breasts full of milk’ (Graham 1997: 14).

Other texts contain similar information, including one by an archaeologist which seems to confirm that all these ideas are officially acceptable. The author writes:

A large percentage of the figurines display exaggerated

breasts, hips and buttocks and ... distended lower abdomens that suggest an advanced stage of pregnancy. Many scholars have assumed that these features characterize all Venus statuettes and have concluded that, as a class ... [they] were meant to celebrate and encourage female fertility, or to represent an ideal of female beauty that conceived of woman ‘primarily as a machine for giving birth and feeding efficiently’ (Dickson 1990: 101–3).

The illustration most frequently used is that of the ‘Venus of Willendorf’ (Fig. 1), a well-known over-plump figure described as ‘typical’ and ‘a personification of fecundity’ (Piper 1981: 12).

Such apparently authenticated statements unfortunately promote the belief that there is sound archaeological evidence for the information that all the female representations depict obese ladies displaying the physical characteristics of pregnancy and motherhood. Which is, of course, simply not true. Ordinary readers do not usually check what they read in books or question the evidence.

The figures

A considerable number of possible humanoid shapes in stone, ivory or clay have been discovered so far — 140 to 188 or more, depending on interpretation (Bednarik 1990: 133; Rice 1981: 402; Gvozdover 1989: 91). Most of them were probably made between 32 000 and perhaps 20 000 years ago (Bednarik 1989: 121; Bahn and Vertut 1988: 140). Of those that are indisputably human, many are of indeterminate sex and a few are male, though these tend to be disregarded. A number of them are certainly female. However, some are quite slim, some could be described as rather plump, and only a few are truly obese in the Western sense (see Haddingham 1980: 223–4; Abramova 1967: 68; Ucko 1968, for example). The female form is similarly repre-



Figure 1. 'Venus of Willendorf'.

sented on walls or as mobile art in engravings and bas-reliefs (Fig. 2), and one cannot separate the rock art in this collection from the images created in or on other materials.

The first female image to be found was a slim figurine (Fig. 3c). It was excavated in France in 1864 by the Marquis de Vibraye, who named it the 'Vénus Impudique' (the 'Shameless Venus') (Delporte 1979: 54–5). Venus subsequently became a popular, but unfortunate, name for female representations. The first one apparently did not cause much excitement, perhaps because art was considered to be simply a leisure activity at that time (Lartet and Christy 1864).

The fertility theory

So when, and why, did the concept of the fertility symbol emerge, and how valid is it? It seems to have originated in a paper presented in 1856 by a Swiss lawyer, Johann Bachofen, described as a mystic (Lowie 1937: 41, 51). Bachofen's theory, based on a Greek myth, was that a primitive Mother-Goddess representing fertility and fecundity had been the object of worship in the distant past (Hays 1958: 60–1; Lowie 1937: 40–3). Archaeologists took up this idea and used it as an explanation when they discovered figurines at both Neolithic and Palaeolithic sites around the turn of the century (Ucko 1968: 409–10). The rotund shapes of the Ice Age carvings from Brassempouy and Grimaldi (Figs 2a and 2b) probably gave scholars (practically all male at that stage) the idea that they matched the fecund goddess image; that the large abdomens denoted pregnancy, the large breasts promised a good supply of milk, and the general fleshiness suggested fecundity.

A single interpretation such as fertility suggests that nothing changed during the long Upper Palaeolithic period. Were our ancestors so fixed in their ideas that they did not alter their stylistic conventions or vary their conception of the meaning of the female shape over such a

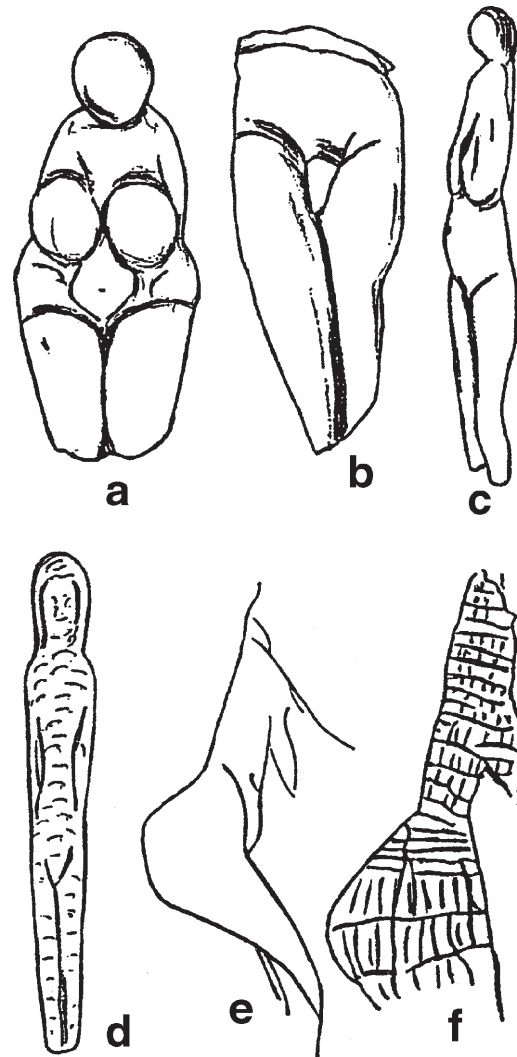


Figure 2. Figurines from (a) Grimaldi, (b) Brassempouy, (c) Avdevo, (d) Mal'ta, and engravings from (e) La Gare de Couze and (f) Gönnersdorf.

vast expanse of time and space? What about the 'sexless' figures, the male figures? Explanations for these have been almost non-existent. Could this be connected, perhaps, with the notion, also without archaeological backing, that Palaeolithic female images were representations of the imagined fecund pan-European Mother-Goddess who ruled over some kind of Ice Age social utopia? (See, for example, discussions in Bednarik 1996; Zarmati 1994; Meskell 1995.)

Other explanations

Over the last 100 years prehistorians have put forward many theories about the statuettes. A few writers (e.g. Collins and Onians 1978; Rice 1981; Bednarik 1990; Nelson 1990) have argued against the fertility thesis, and many practical explanations have been proposed, such as teaching devices (Meskell 1995: 82), initiation figures (Ucko 1968: 425), good luck charms (Hadingham 1980: 225), portraits (Delporte 1979: 276), puppets (Zamiatnine 184: 281), priestesses (Delporte 1979: 276, 290), witches

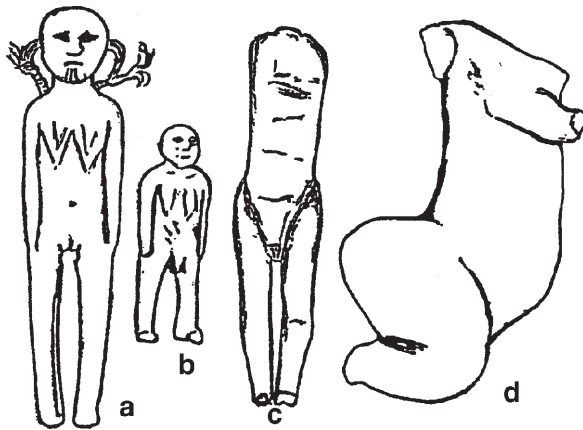


Figure 3. (a) Female and (b) male dolls from Bering Strait area, 1880; (c) 'Vénus Impudique' from Laugerie Basse; and (d) figurine from Sireuil.

(Ronen 1976: 57), or figures to scare away strangers (Von Koenigswald 1972: 402). Others envisage that the figures had a function in general society, fulfilling a role in communication and alliances and in primitive contracts (Gamble 1982: 103; Meskell 1995: 82). It has also been suggested that they may have been used by women to ward off difficulties in childbirth (Augusta 1960: 34), by men as a worry-stone, or by children as dolls (Von Koenigswald 1956: 187; Ucko 1968: 422. For ethnographic parallels, see Figs 3a and 3b, from Nelson 1971: 342–3).

Another favourite proposal — that the figurines and other female representations were early erotica (e.g. Guthrie 1984: 59; Kurtén 1986: 112) — has perhaps aroused more interest than other explanations, though the notion that the figures were made by men for men, to be 'touched, carried and fondled' (Guthrie 1984: 62–3) is not consistent with a comment by Jones (R. Jones, Australian National University, pers. comm.) that the original 'Venus of Willendorf' feels cold, hard and heavy. R. Bednarik (pers. comm.) has examined numerous of the figurines and agrees that this applies to many others, adding that some of the stone figures are of considerable weight (cf. Bednarik 1990). However, most theories still centre on the fertility aspect. And most fertility theories centre on the shape of the obese figures, ignoring the others.

We will never know what was on the minds of those early artists. But the history of the art of Western cultures shows that there have been many changes over time in the way that people, and in particular artists, have viewed, and portrayed, the human body, especially the female body. It is difficult to do this objectively. What is a normal female shape? What is obese? Our view comes from our own cultural and temporal perspective. Can we be sure that a large abdomen represented by a Palaeolithic artist meant pregnancy or constant childbirth — that the ample girth of some of the representations (e.g. Fig. 3d) was all to do with fecundity?

Early Western art

We do not know if art traditions developed in particular areas in Europe. Interestingly, the huge collection of

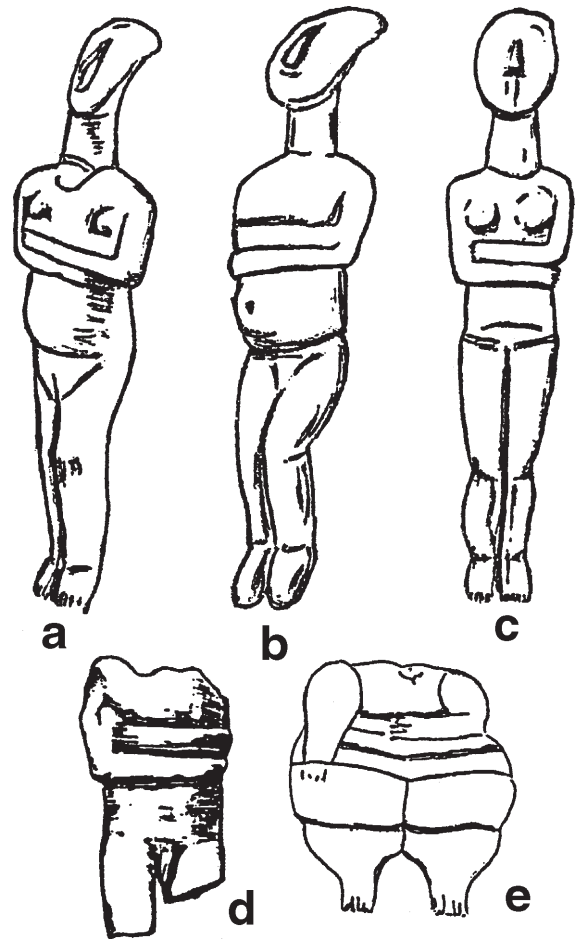


Figure 4. (a) Female figure, possibly pregnant, from the Greek Cycladic Islands; (b) male? figure, possibly pregnant, from the Cyclades; (c) female figure from the Cyclades; (d) male figure from the Cyclades; (e) figure from Hagar Qim, Malta.

rock carvings at Valcamonica, Italy, which was occupied from the end of the Palaeolithic, puts no emphasis on the female form, or on mother-goddesses. The carvings illustrate life over thousands of years, but the males seem to predominate (Anati 1960, 1987).

Many Neolithic figurines were excavated on Europe's fringes, including at Çatal Hüyük, Hacilar and the Greek Cycladic Islands. The evidence for goddess-worship at all these sites is inconclusive, unproved or non-existent, but scholars once again interpreted the female figurines in the mixed-sex collections as fecund deities (Ucko 1968: 409–10; Ehrenberg 1989: 72). The influence of preconceived ideas seems to have been very strong. Arthur Evans' elaborate picture of Minoan society with its emphasis on the Mother-Goddess was put seriously in question once it was realised that many of the artefacts, particularly statuettes, were clever modern fakes (Lapatin 2001: 33–6).

It is difficult to find many fertile-looking female figures in the stylised Cycladic collection. A few do have enlarged abdomens and at least one seems to be feminine because there are definite breasts (Fig. 4a). But a second figure (Fig. 4b) is curiously ambiguous. This figure bears a museum label (Museum of Cycladic and Ancient Greek

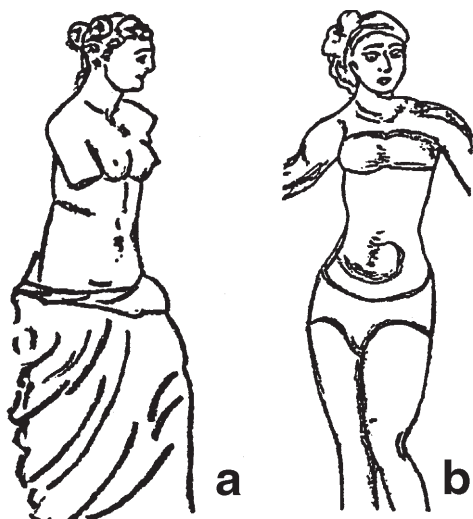


Figure 5. (a) *Venus de Milo*, c. 100 B.C., Louvre, Paris; (b) *female gymnast from mosaic*, Villa Armerina, Sicily, c. 400 B.C.

Art, Athens) describing it as ‘pregnant female figure’. But why? Its enlarged abdomen is accompanied by a manly chest represented, as on other definitely male figures (Fig. 4d), by a slight bulge above the folded arms and the suggestion of nipples. (All obviously female breasts seem to be shown as larger bumps higher up on the chest; see Fig. 4c.) Similarly, the squat fat carving from Hagar Qim, Malta, often described as a Mother-Goddess (Trump et al. 1993: 100), is more likely to be a male for the same reason (Fig. 4e). These examples again show the power of preconceived ideas: the ‘pregnant’ male could equally be a male with a medical disorder or a drink problem.

Stylised figures, small and large, were made in the Cyclades until the early Bronze Age (Ehrenberg 1989: 70–2). The later Greek artists who followed them seem to have preferred women more shapely to modern eyes, like the *Venus de Milo* (Fig. 5a), who gave her name to the Palaeolithic figurines (Delporte 1979: 54–5).

Venus’s waist is not small by modern standards and her abdomen is far from flat. Today some would describe her as slightly overweight, but she may well have been the Greek ideal. Roman women were less fleshy, though an interesting mosaic at the Villa Armerina, Sicily (Fig. 5b) depicts three young gymnasts with surprisingly prominent stomachs — surely they were not all pregnant? Nude women are rare in European art from the Dark and Middle Ages, but one French twelfth-century representation of Eve at Autun shows that the female body was still very much in the Greco-Roman tradition.

Changes in the female shape

Eve was a popular subject for artists, but an Eve of a most extraordinary shape appeared in the fifteenth century (Figs 6a and 6b): and all women through this century and beyond apparently looked like her. Eve’s body is described as ‘one long large stomach stretching from the collarbone to the crotch’ (Hollander 1988: 104). In this period there was a concentrated emphasis on the abdomen. Fifteenth-

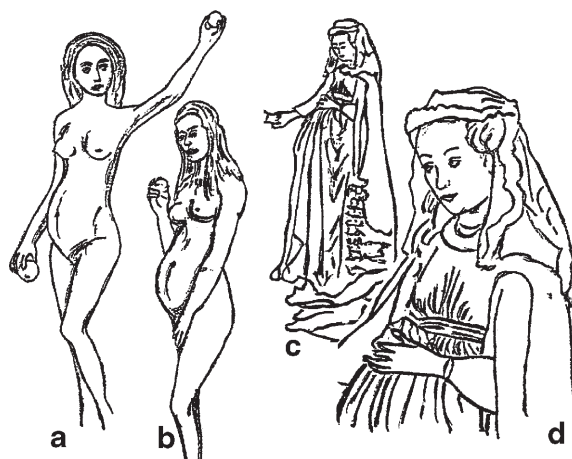


Figure 6. (a) *Figure of Eve from The sin of man*, van der Goes; (b) *figure of Eve from Ghent altarpiece*, Herbert and Jan van Eyck; (c and d) *details from Giovanni Arnolfini and his wife*, Jan van Eyck.

century fashionable ladies *tried* to look pregnant. They stood with a deliberately protruding stomach, emphasising it with extra folds and padding in their clothes, to produce the Gothic ideal shape (Clark 1987: 310; Scott 1980: 44–5; Boucher 1987: 191, 198).

In Jan van Eyck’s famous, but often misinterpreted (Scott 1980: 122), wedding portrait of Giovanni Arnolfini and his young bride (Figs 6c and 6d), the latter could not possibly have been pregnant: middle-class society in Bruges, where the artist and couple were living, would never have accepted it (Weale and Brockwell 1928: 15, 117; Hollander 1988: 99, 109–10; Murray 1989: 135).

To be convinced that Madame Arnolfini’s protruding stomach was a feature of chic fifteenth-century fashion and not a representation of pregnancy, one only has to look at other art works of the time. The van Eycks’ altarpiece, where the naked Eve holding the apple is portrayed, also shows a large crowd of martyred Virgins at the Adoration of the Lamb in similar stomach-enlarging dresses. And both the Virgin Mary and the (male) Archangel Gabriel in a van Eyck diptych illustrating the Biblical Annunciation have similar postures and pleats. In addition, the scene painted by the Limbourg Brothers depicting Eve with the serpent inside the Garden of Eden shows her, even before she tempted Adam, with a very round and protuberant stomach. One would not expect the virgin Eve, or the Virgin Mary, let alone the Archangel Gabriel, to appear to be in an advanced state of pregnancy. But clothing fashions for men and women were often similar at that time, in particular the wearing of the ‘houppelande’ dress, equally suitable for emphasised female stomachs and masculine pot-bellies (Scott 1980: 45–7; Nunn 1984: 23–4).

Artists painted pseudo-pregnant women even into the 1700s: for example, the *Nymphs bathing* by Fr. Girardon (1639–1715) are surprising with their large round abdomens. Interestingly, true mothers-to-be were shown with comparatively flat fronts. Artists used other devices to indicate the women’s condition — for instance, the barely-pregnant Virgin Mary and the very pregnant Saint Eliza-

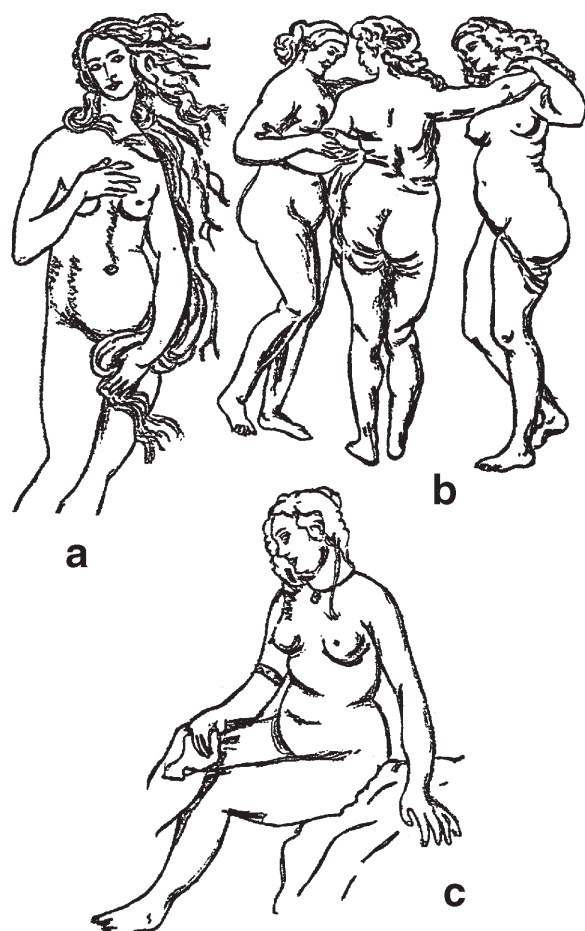


Figure 7. (a) Detail from *The birth of Venus*, Botticelli; (b) *Three Graces*, Rubens; (c) *Bathsheba*, Rembrandt.

beth on the occasion of the Biblical Visitation are often portrayed with a hand on each other's un-emphasised abdomen (Hollander 1988: 109).

Pear shapes and super-size abdomens generally fell out of favour once more and women began to look what might seem more natural today. Botticelli's *Birth of Venus* (Fig. 7a) and Raphael's *Three Graces* of the late fifteenth-early sixteenth century show these changes in the artists' perception of the female ideal. We can safely assume that Venus is not pregnant: Botticelli is illustrating the legend of her birth from the sea-foam (Vaizey 1979: 25). And it seems unlikely that all three of Raphael's young models were pregnant. A few years later Raphael demonstrates another change in his ideal — his models have now developed large thighs and plenty of flesh around the buttocks and the abdomen. His weighty pre-Temptation Eve is quite a different shape from the Eve of van Eyck and the Limbours of a century earlier.

Rubens' seventeenth-century nudes — for example, his *Three Graces* (Fig. 7b) — have been aptly described as 'pearly and plump' (Clark 1985: 139). A big female stomach and all-over fleshiness seems to have been desirable for many centuries. Rembrandt's women of the late 1600s and early 1700s displayed 'the huge bellies and general massiveness below the waist' which was much admired at the time (Hollander 1988: 108–9) (Fig. 7c).



Figure 8. Detail from *The Turkish bath*, Ingres.

The vanishing abdomen

Female abdomens were very noticeable in art well into the nineteenth century. This was the century when archaeology and the search for our origins became important, but with it came the prudery and moralistic attitudes which increased with the decades. Nineteenth-century middle-class society had a fear of the body in its obsession for respectability, and artists had to depict nudes in foreign or historical settings to allay criticism (Lucie-Smith 1981: 25; Clark 1985: 149–50). Ingres, for instance, painted a roomful of nude women with very rounded bodies, large breasts, and hefty thighs: he entitled it *The Turkish bath* (Fig. 8). Prudery developed and persisted into the early 1900s. Upright society viewed the bourgeois life of contemporary artists as immoral in Britain, subversive in France (Borzello 1982: cover, 169–70). They were still painting naked women with prominent stomachs, while conforming society ladies forced themselves into the uncomfortable restricting corsets necessary for their fashionable wasp waists, pushed-up bosoms, and protruding buttocks enhanced by a bustle (Ewing 1978: 60, 78, 80; Hollander 1988: 131), creating a shape somewhat reminiscent of the Gönnersdorf stylisations (Fig. 9).

Suddenly the abdomen vanished in polite society, and it remained concealed or minimised for decades. Purity and modesty were virtues of respectable womanhood in the late nineteenth and early twentieth centuries (Borzello 1982: 169), and the archaeologists, creatures of their own time (Shanks and Tilley 1987: 93), were conditioned to these social ideas. The naked corpulent figurines have been called ugly and unattractive and descriptions of them are often very unflattering (e.g. Burkitt 1934: 120–1; Haddingham 1979: 220–1). But scholars also found them fascinating, and may well have been very glad to grasp at the Mother-Goddess/fertility explanation — something belonging to the 'naked savage' and therefore well divorced from their own cultural milieu. Many twentieth-century artists began to explore different ways of seeing their subjects, and used their imagination to create female bodies in strange and unfamiliar forms.

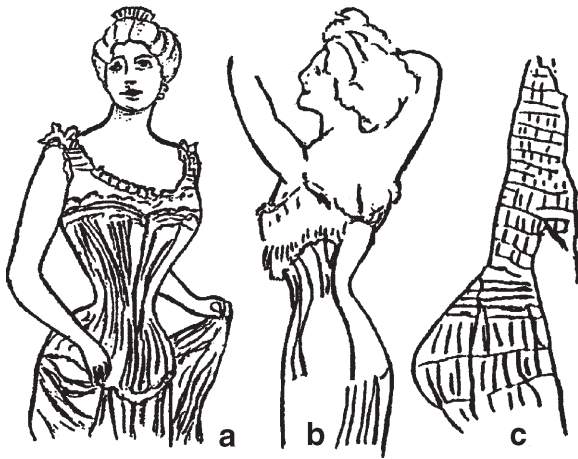


Figure 9. (a) Women's corset, 1900 (Ewing 1978: 107); (b) a late Victorian female shape compared with an engraving from (c) Gönnersdorf.

Results of the study

This diversion into art history provides some useful points worth remembering when studying the shapes of Palaeolithic women:

- 1) Large stomachs, big breasts, and a general 'massiveness below the waist' have not, as a rule, been intended to denote pregnancy or frequent childbearing in the history of Western art. The female abdomen has been represented as rounded, or even emphasised, since the ancient Greeks, and the idea that it should be flat came in again comparatively recently, just before the plump figurines began to emerge.
- 2) The female form can be altered in size and shape by simple postural changes to conform to new ideas, new fashions.
- 3) An artist's representation can show exaggerations or distortions in the natural lines of a model's body to suit current tastes. One example is Ingres' extra long-spined *Grande Odalisque*.

It is also evident from certain art works and knowledge about the artist that:

- 1) Artists often showed individual preferences for particu-

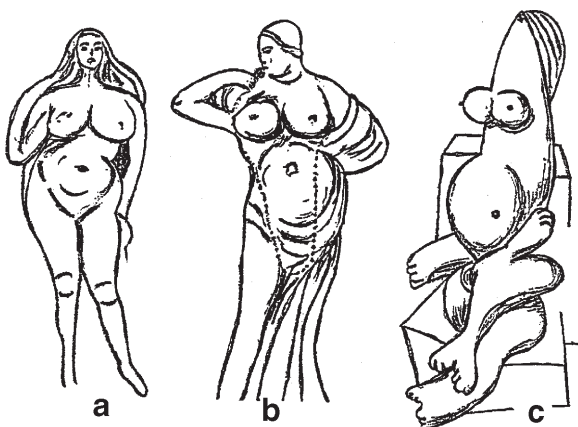


Figure 10. (a) Standing nude, Lachaise; (b) Eternal force (woman with beads), Lachaise; (c) Nude before a vanity, Picasso.

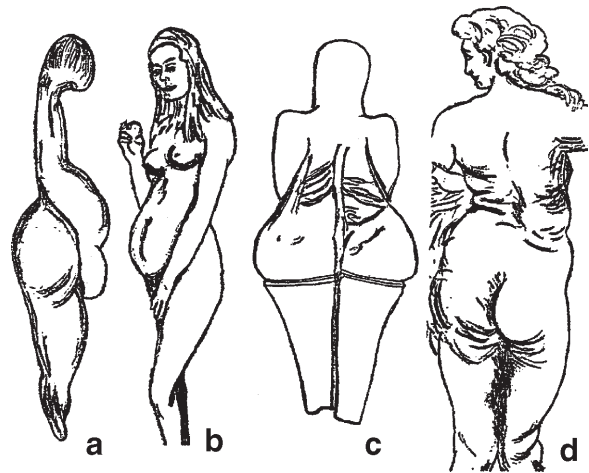


Figure 11. (a) 'Venus of Lespugue'; (b) Eve (see Fig. 6b); (c) 'Venus of Dolní Věstonice'; (d) Detail from *Three Graces*, Rubens.

lar female shapes. For instance, Gaston Lachaise was fascinated by his wife's short thick body, her large breasts, and her slim legs (Figs 10a and 10b). Like other artists, his works display his own predilections (Hobhouse 1988: 18, 183; Lucie-Smith 1981: 82).

- 2) Some female body shapes in art look so unnatural that they were probably largely imaginary (e.g. Fig. 10c).

So there could be many reasons for the shape of the Palaeolithic images which have nothing to do with fertility and fecundity — reasons which would include the slim and plump females and also the sexless and male figures too. The information currently available to readers of the literature is certainly far too selective when it mentions only the few truly obese shapes.

Some comparisons

Do *these* all exhibit the physical characteristics of pregnancy and childbearing? Let us look at them again and compare them with representations of ordinary and, as far as we know, non-pregnant women. First, the 'Venus of Lespugue' (Fig. 11a). She is somehow reminiscent of van Eyck's fifteenth-century *Eve* (Fig. 11b), or the Arnolfini bride (Figs 6c and 6d). Perhaps her posture, too, is simply unnatural and overemphasised. Next, the polished baked-clay Dolní Věstonice figurine (Fig. 11c), which has the same fleshy folds and large buttocks as one of Rubens' carefree young *Graces* (Fig. 11d), if one allows for some exaggeration. She does not appear to be pregnant either.

The Parabita figurine with her hands in front (Fig. 12b) looks no different from Philip Pearlstein's model in a relaxed pose (Fig. 12a), and the bas-relief of the 'Venus of Laussel' (Fig. 12d) could be the same person as Favory's twentieth-century studio model (Fig. 12c). It is doubtful whether both models would have been pregnant at the time of the sitting — the titles given by the artists to their finished work give no indication that they were.

Most of the Palaeolithic figures are represented in an upright standing position, but none of these is comparable with the truly pregnant woman depicted by Klimt (1903)

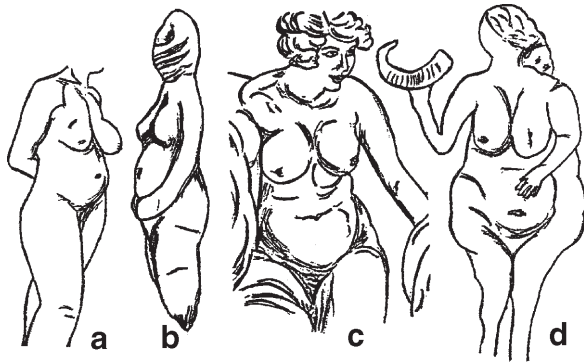


Figure 12. (a) Detail from *Two models, one seated*, Pearlstein; (b) *'Venus of Parabita'*; (c) *Bather*, Favory; (d) *'Venus of Laussel'*.

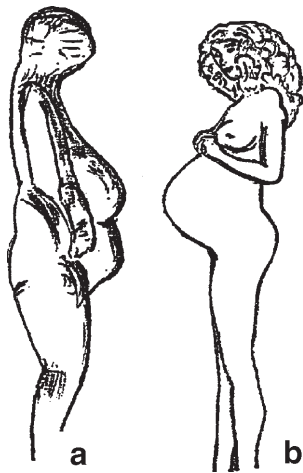


Figure 13. (a) *'Venus' figurine from Avdeevo*; (b) Hoffnung 1, Klimt.

(Fig. 13b). Possibly the Avdeevo 'Venus' (Fig. 13a) comes close, though she does not have the typical stance, quite noticeable in Klimt's portrait, of a woman soon to give birth. A rarer kneeling figure from Kostienki 13 (see illustration in Duhard 1990: 137) does appear to represent an imminent birth, but the posture of a similar carving from Sireuil (Fig. 3d), sometimes described as pregnant (e.g. Duhard 1991: 559), could be attained by many young girls doing stretching exercises.

We could find a number of comparisons for the 'Venus of Willendorf' (Figs 14a and 14d). Degas (Fig. 14b) and other artists have painted the same short-waisted body-shape; though perhaps Ms Willendorf looks most like a modern teenage member of *Weightwatchers* (Fig. 14c), somewhat too plump, but certainly not pregnant nor a mother.

Pregnant or not?

So where *are* the pregnant Palaeolithic women and those with many children? Why was there thought to be a relationship between the fat figures and pregnancy and childbirth? Jean-Pierre Duhard, a French gynaecologist, who considers himself to have 'a good knowledge of the female body', assumes that a large abdomen might indicate pregnancy and he sees 'a close relationship between preg-

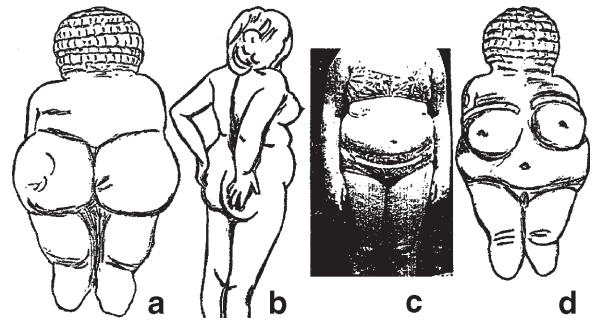
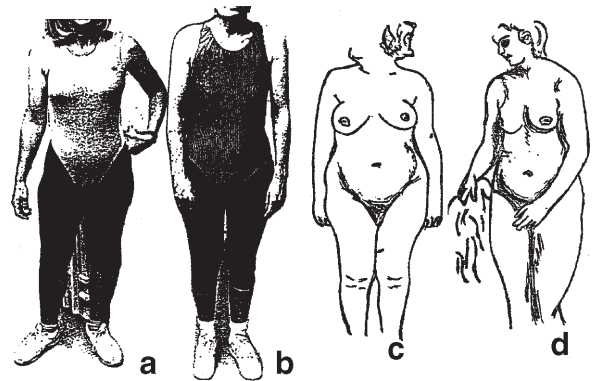


Figure 14. (a) *'Venus of Willendorf'*; (b) *Nude*, Degas; (c) young member of *Weightwatchers*; (d) *'Venus of Willendorf'*.



Figures 15. (a, b) *Two members of a large gymnasium*; (c) *gynaecological patient, after Duhard*; (d) *Bather*, Renoir.

nancy and adiposity' (Duhard 1991: 553). Another gynaecologist has pointed out, however, that obesity does not necessarily equate with fecundity — in fact, gross obesity can inhibit conception (Patten 1988: 173–4) and can cause birth defects (Corcoy 2004). In addition, mothers with large breasts often have difficulties with breast-feeding (spokesperson for La Leche League, Auckland 1992, pers. comm.). So the connections made between these physical features and fertility are distinctly dubious.

Duhard published drawings showing the different forms of fat deposits seen in some pregnant and multiparous women (Duhard 1991: 554). A personal survey in a large gymnasium established that they could all be seen in non-pregnant women and non-mothers too. And it was impossible to distinguish mothers from non-mothers by their shape. One 30 year-old mother of four had fewer bulges than a friend who had never given birth (Figs 15a and 15b). Some women successfully 'hide' a pregnancy if the foetus is small and lies in 'a tidy parcel' (H. Smith, MD, Auckland, 1961, pers. comm.), and some boast of a 'better figure' (i.e. fewer bulges and a flatter stomach) following childbirth (two mothers, R. May, Croydon and J. Taylor, Auckland, pers. comm.). Today a large stomach is seen as undesirable: 70%–80% of the women enrolling at the gymnasium do so to try, among other things, to decrease the size of their abdomens (J. Lynch-Blosse, senior instructor, Les Mills World of Fitness, Auckland, pers. comm.).

So it is impossible to generalise about the shape of a

human female, let alone interpret that shape from a small sculpture, given the enormous physical variation that exists today and probably always existed in Palaeolithic Europe. The figurines in particular show great variability over both time and space. But Duhard believes that they all represent pregnant or multiparous women (Duhard 1991: 553, 555–9), something not supported by the evidence from art history. His pregnant patient (Fig. 15c) (Duhard 1991: 555) looks little different from Renoir's *Bather* (Fig. 15d), who was modelled on a sculpture of Venus by the ancient Greek Praxiteles. The patient, and Praxiteles' model, have large thighs and rounded fleshy bodies, and one would not expect women of this size to have flat stomachs, even when not pregnant.

Conclusions

The results of this study suggest that much of the published information about the meaning and purpose of the figures from Ice Age Europe is misleading. Not only is it untrue that the collection consists mainly, or entirely, of representations of obese women, but it also seems unlikely that, overall, they were meant to be fertility symbols. Even the few figures that are obese rarely appear to be pregnant, and none is accompanied by an infant.

This study of the changes over time in the way in which people and, in particular, artists have viewed the female body — the perception of the ideal shape — has demonstrated that female body-shape in itself, without other indicators, is not enough to make judgements about a possible state of pregnancy or frequent motherhood. The obese figurines are, in fact, little different in their contours from non-pregnant women of a later age, including the clients of a modern gymnasium.

Some possible explanations for the figurines other than fertility symbols have already been mentioned. Even if female shapes were depicted for some symbolic purpose, it is quite likely that real models were used — these would be the women who were around, slim, plump and obese, in all shapes and sizes and, on rare occasions, pregnant. Men were represented too, and possibly older children: the 'Vénus Impudique' could well be a young girl.

So how can one explain why some of the women were so plump, when it can be argued that one would not find overweight women in mobile hunter-gatherer societies? One answer may be that Europeans of the Ice Age, in common with all semi-nomadic Arctic peoples (Watanabe 1973: 69), may have settled in one place for the three or four months of the coldest winter weather, as some of the evidence seems to suggest (e.g. Spiess 1979: 188; Soffer 1985: 416). A prudent group would have stored away an ample supply of rich fat meat in preparation for the season. Many women bemoan the ease, and speed, with which they can increase the size of their abdomens, hips, thighs, buttocks and breasts on a high-fat diet and inactivity. Enforced leisure would provide the opportunity for an artist to create female figures — for whatever purpose. Some of his (or her) models may simply have eaten too much and too well.

Appendix A: LIST OF ARTISTS AND THEIR WORKS CITED IN THE TEXT

- Botticelli, Sandro, 1480, detail from *The birth of Venus*, Uffizi, Florence (Fig. 7a).
- Degas, Edgar, c. 1900, *Nude*, Louvre, Paris (Fig. 14b).
- Ernst, Max, 1939, detail from *The robing of the bride*, Peggy Guggenheim Collection, Venice.
- van Eyck, Herbert and Jan, early 1400s, *Eve*, panel of altarpiece, Church of St Bavon, Ghent (Figs 6b and 11b).
- van Eyck, Herbert and Jan, early 1400s, detail from *The adoration of the lamb*, from altarpiece, Church of St Bavon, Ghent.
- van Eyck, Hubert or Jan, unknown date, diptych of *The Annunciation*, Thyssen Collection, Lugano.
- van Eyck, Jan, 1434, *Giovanni Arnolfini and his wife*, and detail, National Gallery, London (Figs 6c and 6d).
- Favory, André, 1925, *Bather*, Allan Franklin Gallery, New York (Fig. 12c).
- van der Goes, Hugo, c. 1467–8, detail from *The sin of man*, Kunsthistorisches Museum, Vienna (Fig. 6a).
- Girardon, Fr., c. 1700?, *Nymphs bathing*, Versailles.
- Ingres, Jean-Auguste-Dominique, 1814, *La Grande Odalisque*, Louvre, Paris.
- Ingres, Jean-Auguste-Dominique, 1862, detail from *The Turkish bath*, Louvre, Paris (Fig. 8).
- Klimt, Gustav, 1903, *Hoffnung I*, National Gallery, Ottawa (Fig. 13b).
- Lachaise, Gaston, 1921, *Standing nude*, Robert Schoelkopf Gallery, New York (Fig. 10a).
- Lachaise, Gaston, 1917, *Eternal force (woman with beads)*, Smith College of Art, Massachusetts (Fig. 10b).
- Limbourg Brothers, c. 1410, *Garden of Eden*, from Les Très Riches Heures, Musée Condé Paris.
- Pearlstein, Philip, 1966, detail from *Two models, one seated*, Vassar College Art Gallery, New York (Fig. 12a).
- Picasso, Pablo, 1936, *Nude before a vanity*, Musée Picasso, Paris (Fig. 10c).
- Raphael (Raphaelo Sanzio), c. 1500, *Three Graces*, Musée Condé, Paris.
- Raphael, c. 1509, *Adam and Eve*, Vatican.
- Rembrandt van Rijn, 1654, *Bathsheba*, Louvre, Paris (Fig. 7c).
- Renoir, Pierre, August 1870, *Bather*, Museum of Saõ Paulo.
- Renoir, Pierre, August 1905, *Bathing girl*, private collection, Pennsylvania (Fig. 15c).
- Rubens, Peter Paul, 1639, *Three Graces*, Prado, Madrid (Fig. 7b).

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