

Supernatural Pregnancies

Common Features and New Ideas concerning Upper Paleolithic Feminine Imagery

Duncan Caldwell



Note: "Supernatural Pregnancies" was published by the Barbier-Mueller Museums of Geneva and Barcelona in *Arts & Cultures* (2010) pages 52-75. Consequently, the present version, which is for private use only, may not be reproduced without the museum's and author's consent. The figures in this version also differ from those in the museum's publication.

Supernatural Pregnancies

Common Features and New Ideas concerning Upper Paleolithic Feminine Imagery

Duncan Caldwell



Cave "venus" with a horse's head and neck on the left, a vulva and mineral concretion above it that suggests pubic hair, and a finely incised horse visible here on the right "thigh". An almost life-size bas-relief of a bison was discovered by the author immediately to the right of this frieze. Ségognole 3, France.

Debate has raged over whether Paleolithic "venuses" even represent a coherent canon. So before trying to tease out intimations of underlying beliefs, one must prove that commonalities exist across huge spans of space and time.

I

When Randall White demonstrated with micrographs that the full-figure statuettes from Brassempouy (26,000 - 24,000 BP¹) were closer stylistically to ones from Kostienki I (ca. 26,000 - 29,000 cal BP²) – 3,070 km away - than to "venuses" from other French sites³, he showed that beliefs and artistic conventions could span continental distances during the Gravettian. Equally impressive ties across temporal spans can be demonstrated by comparing a 28,000 BP⁴ figurine from Weinberg, Germany with huge buttocks and flexed calves to the schematically similar 15,500 cal BP⁵ Enval venus, 15,000 cal BP⁶ Neuchâtel venus, 14,900 cal BP⁷ Courbet venus, 14,500 cal BP⁸ venus from Pekarna, and even the "Venus of Engen" and other Petersfels figurines from 14,900-13,550 cal BP⁹. The Petersfels and Neuchâtel figurines not only share the same crouch, but are drilled and made of jet – making them twins. Furthermore, five of these figures have neither heads nor feet, just like the Chauvet venus, three graces from Roc-aux-Sorciers, vulva and thighs in Segognole 3, and many other examples. Even the only figurine here which does have a head, the Courbet venus, has an anonymous one – just like numerous venuses whose bowed heads are devoid of faces. Put together, these and comparable pieces indicate that feminine iconography was passed down

with sufficient fidelity to suggest that its manifestations expressed a series of beliefs that remained essential to Ice Age hunter-gatherers.



Left: *The Weinberg or Mauern "venus" found about 50 cm from the rock face amid red ochre. Weinberg Caves, near Mauern. About 28,000 years old. Hard limestone. 72 mm. Archäologische Staatssammlung in Munich.*

Center: *The Courbet "venus". Penne, Tarn. About 14,900 years old. Fine-grained red quartzite. 25 mm. Musée Toulouse-Lautrec d'Albi.*

Right: *The Enval "venus". Also known as the Vic-le-Comte "venus". The Durif rock shelter, Vic-le-Comte, Puy-de-Dôme. About 15,500 years old. Quartzite. 31 mm. Musée Bargoin in Clermont-Ferrand.*

II

Many Paleolithic female images are also associated with a specific structure – as opposed to ones used domestically or linked to animal iconography. Such associations exist as far apart as

- Kostienki I and Avdeevo before 26,000 cal BP
- Gagarino around 26,000 cal BP¹⁰
- Roc-aux-Sorciers at 17,000 cal BP¹¹ and
- Gonnorsdorf at 14,400 cal BP¹².

At Kostienki I and Avdeevo the figurines were deposited in pits, at Gagarino they were in 10 equidistant niches around a semi-pit hut with a mammoth bone superstructure¹³, and at Gonnorsdorf steatopygous silhouettes were engraved into floor slabs of one of the huts – while others had themes concerning animals¹⁴.

The "Three Graces" at the Roc-aux-Sorciers, Angles-sur-Anglin. About 17,000 years old. Low relief on limestone.



The Roc-aux-Sorciers is typical of how Paleolithic feminine imagery is often associated with specific structures. Each of the 7 art panels on the cliff – including one with 3 mid-bodies of

women - has its own theme, hearth and holes for fastening tarps¹⁵. Like cave art, the reliefs, which were probably painted, would have come “alive” in firelight when each panel was lit in its specific enclosure.

The few female figurines such as the venuses of Tursac, Mauern and Lespugue which were found *in situ* in southern Europe were often discovered in the depths of similar shelters. All three of these, for example, were found next to or touching the wall of their rock shelters¹⁶. If there is any importance to the proximity of these figures with the overhanging earth, bands to the north, where there are few if any caves or cliffs, may have housed comparable statuettes in niches, pits or specific lodges to keep them in their dark or earthy element.



Left: A huge, 47 cm tall stone “venus” with her accessories in a pit at Kostienki 1-I. 26,000 - 29,000 years old. Statuette 87 is now at the Hermitage Museum, Saint Petersburg, Russia.

Center: The two interlocking “venuses” from the lion-and-wolverine-skull pit at Avdeevo. Mammoth ivory. 100 mm & 97 mm. Moscow Ethnographic Museum 77-1 & 77-2.

Right: The Chauvet “venus” with an inter-penetrating bison-headed anthropozoomorph, one of whose horns extends into a lion. Chauvet Cave, Vallon-Pont-d’Arc, Ardeche. Over 30,000 years old. Charcoal on limestone. Approx. 80 cm. H.

The deposition of “venuses” at the related sites of Avdeevo and Kostienki, with its link to Brassempouy, are good examples. Kostienki 1’s oval complex of semi-pit huts is arranged around a spine of ten hearths and is divided into 40 rows of squares. Vulvas made of soft marl were all found between the 13th and 27th rows – in other words in the oval’s center, between hearths 4 to 7 – while mammoth effigies were only found at one extremity (rows 7-18) and bear and feline sculptures were found at the other (rows 21-31). The three ivory venuses were found in pits at the same extremities as the big herbivores and predators¹⁷. The fact that some venus pits at the sites had small piles of burnt bone, which may have kept the figurines warm and lit, and roofs, made of stone or mammoth shoulder-blades, suggests that these holes were miniaturized pit-houses¹⁸. The way the holes were sometimes backfilled proves these houses were also ceremonial. In a hole at Kostienki which expanded downwards from 12 cm across at the surface to 35 cm below, a 47 cm. stone venus stood facing the central hearths amid three pieces of charred bone, a geometrically incised ivory diadem, and flint tools in a bed of fine silt. The hole was topped off with a mix of red ochre and silt¹⁹. Similarly, a pit at Avdeevo with a statuette at its center, two more interlocking venuses, a flint blade, and mammoth paraphernalia, was first filled with rosy sand. Then a lion skull was deposited in the

middle in greasy black soil. Finally, top soil mixed with wolverine skulls and jaws was placed above²⁰.

The carefully deposited ivory venuses at Kostienki's extremities and deliberately shattered marl female figurines and vulvas near the central hearths obviously represent two aspects of a belief system encompassing animal poles. A similar continuum may link figurines from southern habitation sites with related imagery in caves.

III

A structural analysis of imagery from the Avdeevo pit and Chauvet Cave leads to another commonality – the association with large armor-headed herbivores and occasional felines. Although the Chauvet venus is surrounded by animals, the most prominent is a bison whose black head appears directly above the darkened vulva, on - or in - its womb. The common pigmentation of the vulva and head, representing hairiness, distinguish the features from their surroundings, drawing them together. The “venus” is also knock-kneed, as if her knees were shown from the side, and shares her right leg with the bison. At first, it would appear to be the animal's forelimb, but the “bison” seems to have laid a thin arm atop it's thigh, turning the leg into the humanoid leg of a composite figure.

The fact that a conventionalized “venus” and her interpenetrating bison-headed consort are hidden on a pendulous formation in the cave's depths fits Leroi-Gourhan's idea that cave art was arranged in “mythograms”²¹. But the fusion is ambiguous, suggesting both a male/female bonding and transformation like the women changing into bison/mammoths on Pech-Merle's ceiling²².



Left: The Isturitz wand. Do the repetitions indicate movement and continuity? Isturitz Cave, Pyrénées-atlantiques. Engraved bone blade. 105 mm L. Musée des Antiquités Nationales, Saint-Germain-en-Laye.

Right: Pech-Merle Cave contains both a panel of red figures showing a mammoth and 7 figures transforming from women into quadrupeds, and 4 mammoth and 3 feminine silhouettes on all fours on the ceiling of the “Hall of Hieroglyphs”. Solutrean, 17,000-22,000 BP. Pech-Merle Cave.

The layered animal imagery surrounding the venuses in the much smaller “cave” at Avdeevo cries out for a similar analysis. Here, too, the female imagery must be reached after passing animals. Just beneath the surface lie the swarm of wolverines. Then, in the middle world lies the lion skull. Any intruder would have been forced to confront these animals' associations before proceeding to the trove of pregnant, mammoth ivory statuary. Similarly, at Chauvet, just as the “venus” shares a leg with the bison, one of its horns grows into the contour of a lion. Could the lion again be an outer emanation? Considering the evidence that large horned animals in France bore similar symbolic roles to tusked mammoths to the north, both the

Chauvet and Avdevo lions may be guarding a core mystery incorporating pregnancy and armor-headed herbivores.

Associations between “venuses” and such herbivores occur elsewhere as well. At Roc-aux-Sorciers, a fourth “venus” was associated with reliefs of bison, before the bison and venus were largely replaced with a frieze of ibex. At Tursac, a venus was aligned with long bovine or bison bones which were both the only ones that hadn’t been shattered and among the few which were not from reindeer²³. And at Isturitz, a partial wand shows 2 women on one side and 2 bison going the opposite way on the other. Harpoon-like marks on the intact woman and bison link them. If one borrows the thinking behind many Inuit sequences, these identical women and bison may represent movement, with a woman entering a bison state that circles back on the opposite side of the wand and vice-versa in perpetual transformation. If so, the woman is crawling through a tunnel represented by the wand itself – as she comes and goes from the animal world²⁴.

IV

Unhafted celts in New Guinea are sometimes dressed in skirts and viewed as feminine. Yet Westerners often assume such axes are phallic symbols of power. Paleolithic “venuses” may be equally ambiguous. The first prehistorians to notice that some of the venuses might be “hermaphroditic” were Lothar Zotz, Luce Passemard and Henri Breuil²⁵. They wondered, for example, whether a baton from Dolni Vestonice was simply a schematic woman’s body with breasts - or a phallus and scrotum? A similar baton from the Placard Cave has a vulva between leg stumps at the base, but if ones sees the blade-like trunk as a phallus, the stumps turn into testicles. A short list of statuettes incorporating such ambiguity includes ones from Weinberg Cave, Nab Head St. Bride’s²⁶, Savignago and Trasimène Lake²⁷, several figures from Mezin, and the phalliform venus of Milandes²⁸. Could such figures, which represent one tendency within the canon, represent a blending of male and female qualities in a graphic equivalent to the Tao?



Left: The Milandes phalliform “venus” similar to one from Trasimène Lake, Italy. Castelnaud-la-Chapelle, France. Nodule. 77 mm. Musée Nationale de la Préhistoire, Les Eyzies-de-Tayac, Dordogne

Center left: Phalliform “venus”. Mezin, Ukraine. Mammoth ivory. 145 mm.

Center right: Phalliform wand with a vulva at the base. Placard Cave, Charente, France. Reindeer antler. 153 mm L. Musée des Antiquités Nationales, Saint-Germain-en-Laye.

Right: Phalliform “venus” baton. Venus XIV. Dolni Vestonice, Czech Republic. Mammoth ivory. 85 mm. H. Moravske Museum, Brno.

V

Many aspects of Paleolithic figurines also suggest a fascination with geometric spacing and interlocking motifs. Objects deposited with northern figurines are often covered with meshed patterns. As we saw, the Gagarino venuses, which all seem pregnant, were found in 10 evenly distributed niches. At Mezin, the 15,000 BP figurines show the same schematization as ones to the southwest with cantilevering buttocks, but are covered in interlocking chevrons, zigzags and right-angle spirals with huge triangular vulvas²⁹. The Schematic venus of Predmosti (ca. 26,500 BP³⁰), and its nearly identical sister, which is about to be published by Francesco d'Errico, Martina Laznickova-Galetova and the author, are composed of triangular heads, oval breasts and bellies, and ladder arms - women defined by geometry. Similarly, the Avdeevo statuettes found head-to-foot and belly-to-back also interlock back-to-back

since they were separated like Siamese twins out of the same piece of ivory. The mammoth-bone cabins themselves are typified by ones at Mezirich (15,000 BP) – another site with female imagery - where each hut has its own pattern of mammoth bones around the base³¹.



Cabin composed of mammoth bones. Ca. 15,000 BP. Mezirich, Ukraine



Left: The “Schematic Venus”. Predmosti, Moravia. Mammoth tusk fragment 290 mm. Figure 108 mm H. Moravske Museum, Brno, Czech Republic. **Right:** First publication of the second “Schematic Venus”. Predmosti.. Mammoth bone. ca. 26,500 BP 17 cm. X 6.5 cm. Micro-wear analyses pending by Francesco d'Errico, Martina Laznickova-Galetova and the author.

Thousands of kilometers away, one of the Grimaldi figurines is janus-headed, the “Venus with the Goiter” has two fronts, and a second venus appears when the Lespugue venus is flipped upside-down. All these sculptures and groupings show how Paleolithic sculptors

melded interlocking readings and beings into the same imagery – all while respecting a conventionalized interplay of geometric forms.



The Lespugue "venus"; Rideau Cave, Haute-Garonne; Mammoth ivory covered in black pigment. 147 mm. H. Musée de l'Homme, dép. Anthropologie, No. 38-189



Left: The Playing Card "venus". Laussel, Dordogne. Low relief on limestone. Combined height of figures 20 cm. Block 45 x 31 cm. Musée d'Aquitaine de Bordeaux No. 51.34



Right: The "Savignago Venus". Another playing-card venus? Steatite or serpentinite. 225 mm H x 50 mm W x 65 mm D. The Pigorini Museum of Prehistory, Rome.

Two of the most image-warping Paleolithic images are the Laussel Player Card and Savignago venuses. The Savignago venus's pointed head seems almost as phallic as the trunk and head of the figurine from nearby Trasimène Lake. But a ridge up the "face" casts a shadow which suggests legs there too. If the "head" is seen as legs, then the former breasts become buttocks. If both the Lespugue and Savignago venuses are meshed figures – which reminds one of the head-to-toe Avdevo ladies - Laussel's Playing Card venus is probably another one, with a heavily incised, dominant figure fused with the lightly incised shoulders and head of a second being below. The image has been interpreted as a copulating couple, a

mystical body rising from that of a woman, a mid-wife helping a mother, and the first illustration of a baby appearing from the birth canal - the baby being the lightly incised end of the combined figure. One way or another, giving birth seems to be involved in the polysemic significance of the engraving's interlocking bodies.

The Gravettian use of netting and weaving³², may have inspired such meshed patterns in early art and architecture. Inuit seamstresses believed that clothes composed of hides drawn from different animals fused each species' qualities. Participating in the hunt with every stitch, a woman would take great pains to make perfect seams to avoid offending either the spirits she was hybridizing or her husband's targets. In the end, her husband could face and enter the animal world wearing a chimera imbued with animal powers³³. If this was also the case during the Paleolithic, such activities probably made women the sex that reconciled humans with their prey.

Like in tribal textiles, each stitch and motif would have taken on magical significance and influenced motifs elsewhere – including huts and the composition of figurines. But the same instruments, needles and awls, that are used to make textile motifs are also used to make ones a level deeper than clothes, on the skin they imitate. Like rock surfaces, skin, which may be cicatriced, painted or tattooed, is often viewed as a membrane between dimensions, so the sheer nudity of Paleolithic venuses, exposing so much of the interactive membrane, and the fact that many “venuses” bare traces of pigments or are even composed of meshed patterns is surely significant. Even unmarked, the exposure of so much skin must have promised passage between worlds.

Perhaps this explains why the venuses' torsos are always nude, with exposed breasts and genitals – although I suspect that the venuses were occasionally dressed, making them as deceptive today as the Parthenon without paint. All the same, manual wear shows that some of the figurines were handled naked. This nudity may be more in keeping with Ice Age conditions than one may think since Ice Age shelters were probably as insulated, fat-spattered, odoriferous and intimate as Inupiat winter houses, which grew so warm that the occupants remained bare or clad only in frilled briefs³⁴. Interestingly, the Lespugue venus seems to be wearing just such a frill beneath her buttocks – which seems to turn into hair when the figure is flipped upside-down.



St. Lawrence Eskimos stripped in the heat of a winter house. A single lamp could make the sleeping chambers of iaranga tents used by the Asiatic and St. Lawrence Island Eskimos, Koryak and Chukchi torrid.

VI

Many of the “venuses” are also plump. André Leroi-Gourhan thought such sculptures were composed of circles and ovals arranged according to abstract conventions³⁵. In his eyes, the Willendorf venus was a masterpiece of stylistic consistency and sculptural choices rather than of naturalistic representation. But art may seem truer than life precisely because it accentuates features. Thus the plumpness of Inuit “dolls” is both a convention and an ideal of beauty linked to the amplitude women may reach in prosperous times. Experiencing even one famine marks a person and game failures due to bad weather or over-hunting might have left Ice Age bands occasionally starving, making such symbols of prosperity highly attractive.

Another form of female amplitude and prosperity is pregnancy. References to pregnancy and childbirth may be as old as art. For example, some Cycladic statuettes have swollen bellies or post-partum wrinkles³⁶. Peter Ucko even wondered whether apparently expendable figurines found in Cretan trash heaps could be related to pregnancy – since they resemble tribal birth and fertility amulets³⁷. For example, Zuni women placed effigies of the babies they wished for in cradles. Similarly, Peule women receive animal leg bones which are named, dressed and fed, combining associations with the animal world, the dead who approve births, and fecundity. After giving birth, the bone becomes the child’s elder sibling³⁸ – showing how even a “doll” may be charged with shifting and blending roles.



Left: The yellow-steatite “venus”. Barma Grande, Grimaldi, Liguria, Italy. Yellow talc, possibly from vicinity of Luzenac, Ariège. 48 mm. Musée des Antiquités Nationales, Saint-Germain-en-Laye (M.A.N., no. 35 308).

Center left: The “Losange venus”. Grimaldi, Liguria, Italy. Green steatite. 61 mm. Musée des Antiquités Nationales, Saint-Germain-en-Laye (M.A.N., no. 49 281).

Center right: The “Polichinelle venus”. Grimaldi, Liguria, Italy. Green steatite. 81 mm. Musée des Antiquités Nationales, Saint-Germain-en-Laye (M.A.N., no. 49 282).

Right: The Monpazier “venus”. Monpazier, Dordogne. Complex rock with a limonite base. 55 mm. Musée des Antiquités Nationales (M.A.N., no. 83 303).

Ucko’s hunch that some Neolithic figurines might have been birthing amulets finds an echo in the 15 Grimaldi statuettes from around 20,000 years ago. A study by Randall White and Michael Bisson established that 9 were pregnant and 8 had dilated vulvas or an emerging baby’s head. Suspension holes, manual wear, and an emphasis on full pregnancy reminded them of figurine-pendants used to comfort Inuit women during childbirth³⁹. This analysis may have general bearing since many Paleolithic figurines such as the Monpazier “venus” with its dilated vulva show similar features.

Even so, fertility, in the literal sense of giving birth frequently, would hardly have been a Paleolithic woman's priority. Hunter-gatherer women typically suckle their children to the age of 3 – stopping menstruation by lactation-induced amenorrhea – because they usually can not afford to feed more than one child at a time. But there is an exception: in studying the !Kung, Nancy Howell found that such women could have more frequent births if meat and fat grew plentiful⁴⁰. So prolonged lactation, which engorges breasts, and abundant game were more important to Ice Age women than simply being baby machines. These associations may have given pregnancy a significance that far transcended childbirth.



Birthing amulet. Karluk I site, Kodiak Island, Alaska. Wood with inset human hair. 1500-1750 AD.

VII

In precarious Paleolithic bands, the amplitude of healthy women must have been as magnetic as the hearths they maintained. When a !Kung hunter in 1958 film, *The Hunters*, said that “A wife with breasts full of milk for a new baby made (me) want to kill a fat buck,”⁴¹ he may have been expressing a sentiment behind the venuses: a sentiment combining attraction for a woman when her sexual and maternal attributes were most engorged or “fat” and a desire to hunt a fat (possibly male) animal. The excitement this statement might elicit from a psychoanalyst suggests how compelling and elaborate the association of the woman's engorged body, birth, a baby and the hunt could become in societies sustained by them.

Add fire, and the mix becomes symbolically incendiary. At Roc-aux-Sorciers the three graces stood above their own hearth, at Avdeevo the statuettes had a miniature fire⁴², at Kostienki I marl vulvas and figurines were shattered near hearths⁴³, and at both Dolni Vestonice I and Pavlov I, ceramic figurines were both associated with the hearths where they were made and intentionally subjected to thermal shock⁴⁴. At Petrkovice a hematite figurine was found in an area plastered by red ochre and surrounded by hearths⁴⁵ while a gravid engraving of an anthropozoomorph with a silhouetted breast was found in a hearth at Étioilles⁴⁶. Finally, the Neuchâtel Venus was found in a charred hollow⁴⁷, the Tursac Venus was in contact with yet more ochre near hearths, and the Lady of Brassempouy was protected from a hearth above by a limestone slab⁴⁸.

The fireboards of the Reindeer Koryak show how the keeping of such hearths, pregnancy and control over animals may have been fused. The boards resemble feminine dolls with charms around their necks. They were “fed”, dressed and kept in shrines from which they would guard families and their hearths. But the female fireboard is also the male Master of the Reindeer Herd who keeps illness and wolves at bay. With the return of the reindeer from

their summer grounds, a fire was started by phallic drilling on the figurine and its embers were tossed towards the arriving herd to honor the birth of the primordial reindeer from fire⁴⁹.

Drawing on similar examples, Breuil and Bégouën concluded that the governing theme of Paleolithic art was fertility magic related to hunting⁵⁰. This has been dismissed because the cultures are separated by thousands of years and because Paleolithic art often focuses on animals which were not staples. But animals hardly have to be staples to be the focus of hunter-gatherer rituals. Furthermore, hunter-gatherers from the Kalahari to the Arctic have much in common, suggesting that their commonalities derive from economics. So, while remaining prudent, it may be worth examining a few customs which offer fresh perspectives.



Left: A Reindeer Koryak “Master of the Herd” fireboard with amulets. Maritime Koryak fireboards helped in the hunt for marine mammals. Both types of fireboards were periodically clothed and “fed”. Museum of Anthropology and Ethnography, Saint Petersburg, Russia. MAE 6750-16a

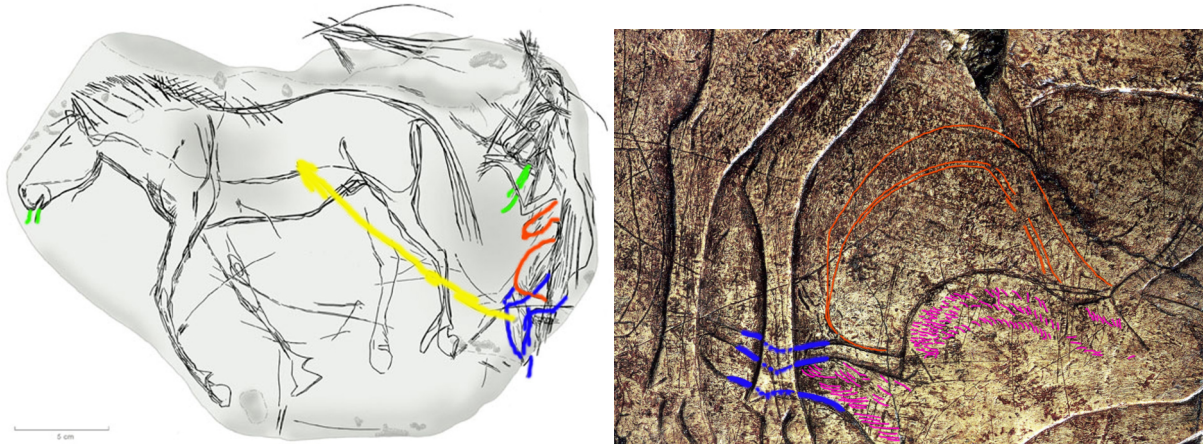
Right: Maritime Koryak women wearing grass masks like the grass blindfolds which they put on dead whales. AMNH neg. 1428, Jesup Expedition

When Bering Strait Eskimo and Nootka men went whaling, their wives had to fast and stay still in their husbands' sleeping places, since women embodied the whale and any movement they or the whale made would be transmitted to each other. Lying still, the whale-wife sought to draw the whale calmly to her husband. As soon as the hunters returned with their prey, the whale-wives broke their fasts and poured water into the dead whale's maw, as if it too had grown thirsty. The whale was hailed as a guest whose spirit would be reborn in the sea through the wives' intercession⁵¹.

The Paleolithic association of “venuses” with the bones and imagery of mammoths and bison – among the biggest of Paleolithic prey species - suggest that Paleolithic wives may have participated as much in the hunt at the imaginative level as their husbands. Like Nootka wives who first lie in their husbands' places to fuse male and female principles, and then dance after breaking both their own and the whale's fasts, Paleolithic women may have celebrated their husbands' successful “union” with prey as with an extension of the women's own selves.

Such female mediation, equating a naked woman, birth and coitus with her transcendence into and power over prey, may shed light on several works of Paleolithic art. The first is the gravid composite figure from Étioilles, who closely resembles an animal-headed personage with a silhouetted breast on a pebble from La Madeleine. Both the pregnant anthropozoomorph and

horse are “spitting” lines interpreted as sounds or blood. But if the horse is wounded, why is the animal-woman emitting the same lines? I am both reminded of an African woman trilling bird songs as she pushed during labor and Yanomanos snorting after ingesting hallucinogenic powder. Could the animal-woman be emitting cries during labor as she becomes her animal-double, still spitting in the throes of transformation? If women had taken a drug to help them through childbirth, the association with access to the supernatural – amid the cries of animals - would have been complete.



Left: A pregnant anthropozoomorph following a horse. Found in a hearth. Étiolles, Essonne. Incised limestone. 12,300 BP. Weight approx. 3 kilos. *Bulletin de la Société Préhistorique Française*, tome 98, n°1, jan.-mars, p.125-132.

Right: The “Femme au renne” (Reindeer’s Woman) from the Laugerie-Basse rock shelter. Note ballooning curves echoing the pregnancy below. Engraving on reindeer antler. 101 mm x 65 mm. *Musée des Antiquités Nationales, Saint-Germain-en-Laye (M.A.N., no. 47 001)*.

The Étiolles engraving also suggests a new reading for the oft-interpreted “femme au renne” (reindeer’s woman) from Laugerie-Basse⁵². Despite the assumption that the fragmentary animal is a deer, it could also be a bison. The key features for the new interpretation are easy to miss. First, the woman’s lower body has grown hairy. Secondly, the woman’s legs are not human, but are actually the legs of a large herbivore! Her visible forward-facing knees, which have fooled observers for over 150 years into thinking her legs were human, correspond to a reindeer’s or bison’s stifles – explaining why the “knees” are disconcertingly high on her legs. Below them, she also has backward “knees” hidden behind one of the animal’s fetlocks, yet evidenced both by light incisions across the animal’s legs and the changed angle of the “woman’s” “shins” from one side of the masking herbivore’s leg to the other. The so-called “woman” has hocks!

The third clue to have escaped observers’ attention for so long is two lightly incised ballooning curves, which echo the heavily engraved limit of a realistic pregnancy, suggesting supernaturally huge pregnancies or pulsations beyond the swelling belly. The woman’s birthing half seems to be transforming as she gives birth *towards* the animal above her (one is reminded of the bison head enwombed above the vulva at Chauvet). Also, the fact that she is supine with flexed legs reminds one of the minimalization or absence of faces, with their organs of directional sensing, and of feet, used to move in one direction, in so many Paleolithic feminine images. Are these simply signs of passivity or ways of expressing a trance-like ability to commune in all directions with invisible surroundings during pregnancy?⁵³

There may also be an association between the animal consort, the inner fetus who becomes an outer baby, and the beholder. At Ségognole 3 the chamber before the vulva gives one the impression of being both in front of and within a cave-sized feminine being. The cave is the

“venus” and, inside her, one discovers her animal attendants or manifestations – not just a horse on each thigh, but a largely natural form to the right that looks uncannily like a life-size reclining bison. At Chauvet the bison’s head above the vulva is similarly ambiguous, since it may be both in and on the womb.



Cave “venus” with one of two engraved horses highlighted. Ségognole 3, France.

Just as there is probably a continuum between the marl vulvas and ivory figurines hidden in pits at Kostienki I, there is probably a continuum between figurines at the back of rock shelters and similar imagery in the flame-lit bowels of the earth – especially when entire caves might have been female. At Ségognole, the “venus” seems to provide a path into a deeper world of germinative forms. Just as an Aivilik Eskimo sculptor asks his ivory “Who are you? Who hides here?”⁵⁴ as he seeks to release the spirit within by following its nature with his knife, the Paleolithic artist probably felt he or she was affirming spirits that lay just below the world’s skin.

Thousands of years later during the Neolithic, the Paleolithic belief that women could enter other worlds during pregnancy and become avatars of a spirit whose presence was manifest in earth and rock may have developed into the worship of goddesses of literal fertility, giving birth not only successfully, but often. But, for twenty thousand years, the most durable expression of religious belief known seems to have been largely inspired by women’s ability to enter dangerous transcendental states while generating life. Women – or “prey-mothers” as I call the figures in many of the Paleolithic works of art that we have examined – were apparently seen as having the maternal capacity to morph into, control and generate the largest and most symbolically important prey species – large herbivores, and most especially “armor-headed” bison and mammoths - while giving birth to true babies. This would have placed mothers at the crux of beliefs with huge implications in terms of economics, survival and social cohesion. In a world of transformative beings, one only had to let the spirits out of the rock or approach them through another membrane, a woman’s skin.

Post scriptum: In May 2009, almost a year after this manuscript was received, the discovery of a mammoth ivory “venus” from Hohle Fels Cave was announced⁵⁵. At 35,000 to 40,000 years old, it is the oldest female figurine from the Upper Paleolithic (leaving aside the Tan-Tan and Berekhat Ram figures, which are lightly incised manuports, and date, respectively, to the Middle and Lower Paleolithic). Despite the fact that it is several millennia older than other fully sculpted examples, the Hohle Fels “Venus” did not come unexpected: first, because it has a graphic equivalent in the painted Chauvet “Venus”, which is also Aurignacian, two,

because of an even older, eroded but probable figurine from the lowest level at Kostienki (ca. 45,000 BP), and, three, because it fits themes outlined above.

For example, the Hohle Fels figurine strengthens the essay's demonstration that statuettes of ample women were made before and after the period usually associated with them, the Gravettian. Two, the figurine's vulva is dilated like those of Paleolithic statuettes from Monpazier and the Grimaldi caves – which exhibit late pregnancy or even childbirth – suggesting a common theme. Three, it was associated with burnt bones – in other words fire. Four, the figure has tapered legs and no head, except for a suspension ring - minimizing or excluding the extremities like the majority of later examples.

Many commentators jumped to the conclusion that the piece was pornographic. "As one male colleague remarked (concerning the swollen vulva), nothing has changed in 40,000 years," quipped the finder, Nicholas Conard⁵⁶. Yet in the only case where one can be almost certain of the sexes and ages of the people who handled female figurines as they were being made – at Pavlovian sites where finger and palm prints were left on clay – the prints were made by women, adolescents or children⁵⁷ - not the typical clients for pornography. If anything, the phenomenon's increasing antiquity and longevity suggests that the figurines embodied a belief so crucial to survival that it must have bound men and women to each other – and to their principle means of subsistence: hunting.



The existence of a few Mesolithic feminine statuettes (eg. Nab Head St. Bride's in Wales) and similar schematization of Magdalenian and Pre-Cucuteni figurines suggest that beliefs surrounding sacralized images of advanced pregnancy and the feminine form did not disappear in western Eurasia with the Paleolithic, but kept evolving. Clay. Romania or Bulgaria, Lower Danube region. Pre-Cucuteni or Gradesnitza Culture. Vth-IVth Mill. BC. 198 mm H. Musée Barbier-Mueller Inv. 200-102.

Bibliography

Abramova (Zoia A.) 1995. *L'Art paléolithique d'Europe centrale et de Sibirie*. Jérôme Millon, Grenoble.

Adovasio (James M.), Soffer (Olga) and Klima (Bohuslav) 1996. "Paleolithic fiber technology: Data from Pavlov I, ca. 26,000 B.P." *Antiquity* 70: 526-534.

Barber (Elizabeth Wayland) 1994. *Women's Work – The First 20,000 Years: Women, Cloth, and Society in Early Times*. W.W. Norton and Co., New York.

Bégouën (Henri) 1924. "La magie aux temps préhistoriques" In *Extrait des Mémoires de l'Académie des Sciences, Inscriptions et Belles-Lettres de Toulouse*, 12. vol., t. 2, pp. 417-432.

Bégouën (Henri) 1929. "The magic origin of prehistoric art" In *Antiquity*, 7.

Bégouën (Henri) 1939. "Les bases magiques de l'art préhistoriques" In *Scientia*, 23, pp. 202-216

Bosinski (Gerhard) 1979. "The mammoth engravings of the Magdalenian Site Gönnersdorf (Rhineland, Germany)" In H.-G. Bandi (ed), *La contribution de la Zoologie et de l'Ethnologie à l'interprétation de l'art des peuples chasseurs préhistoriques*. Editions universitaires, Fribourg.

Bosinski (Gerhard), D'Errico (Francesco) and Schiller (Petra) 2001. *Die gravierten Frauendarstellungen von Gönnersdorf. Der Magdalénien-Fundplatz Gönnersdorf Vol. 8*. Franz Steiner Verlag, Stuttgart.

Breuil (Henri) 1952. *Quatre cents siècles d'art pariétal : les cavernes ornées de l'Age du Renne*. Centre d'études et de documentation Préhistoriques, Montignac.

Breuil (Henri) 1955. "Statuette bisexuée dans le Microlithique de Nab Head St Bride's, Pembrokeshire" *Congrès Préhistorique de France*, 14th Session in Strasbourg-Metz (1953), Paris. pp. 183-184

Caldwell (Duncan) 2009. "Palaeolithic whistles or figurines? A preliminary survey of prehistoric phalangeal figurines" in *Rock Art Research*, Vol. 26, No. 1 (May), pp. 65-82

Cauvin (Jacques) 1998. *Naissance des divinités, naissance de l'agriculture, La Révolution des symboles au Néolithique*. Flammarion, Paris.

Chaussonnet (Valérie) 1988. "Needles and animals: Women's magic" In Fitzhugh (William W.) and Crowell (Aron) (eds). *Crossroads of Continents, Cultures of Siberia and Alaska*. Smithsonian Institution Press, Washington, D.C. pp.209-226

Clottes (Jean) - editor. 2000. *La Grotte Chauvet, L'Art des origines*. Seuil, Paris.

Cohen (Claudine). 2003. *La femme des origines – Images de la femme dans la préhistoire occidentale*. Belin-Herscher, Paris

- Crowell (Aron) 1988. "Dwellings, settlements, and domestic life" In Fitzhugh (William W.) and Crowell (Aron) (eds). *Crossroads of Continents, Cultures of Siberia and Alaska*. Smithsonian Institution Press, Washington, D.C. pp. 194-208
- Delporte, Henri. 1979 & 1993. *L'Image de la femme dans l'art préhistorique*. Picard, Paris.
- Doumas (Christos) 1983. *L'Art des Cyclades dans la collection N.P. Goulandris*. Réunions des musées nationaux, Paris
- Duhard (Jean-Pierre) 1993. *Réalisme de l'image féminine au Paléolithique*. Éditions du CNRS, Paris.
- Efimenko (Piotr P.) 1931. *Signification de la femme à l'époque aurignacienne* in Russian. Izviestia. T. XI, Leningrad.
- Ehrenberg (Margaret) 1989. *Women in Prehistory*. British Museum Press, London.
- Getz-Gentle (Pat) 2006. *Ancient Art of the Cyclades*. Katonah Museum of Art. pp. 25, 29
- Gimbutas (Marija) 1991. *The Civilization of the Goddess*. San Francisco, Harper Collins.
- Goudet-Ducellier (Monique) and Porte (Colette) 1991. *Êves et Rêves ou regards sur les femmes préhistoriques*. Revised & re-issued in 2005 as *Êves et Rêves – La préhistoire au féminin*. Musée de Paléontologie Humaine de Terra Amata – Nice.
- Graziosi (Paolo) 1939. "Une nouvelle statuette préhistorique découverte en Italie" *Bulletin de la Société préhistorique française*, Vol. 36, pp. 158-162
- Gvozdover (Mariana). 1995. *Art of the Mammoth Hunters – The Finds of Avdeevo*. Oxbow Monograph 49, Oxford.
- Howell (Nancy). 1979. *Demography of the Dobe !Kung*. Academic Press, New York.
- Iakovleva (Ludmilla) 1995. "Les représentations féminines du Paléolithique Supérieur de Mézine (Ukraine)" in *L'Anthropologie*, Tome 99, No. 2/3: 273-285
- Iakovleva (Ludmilla) 1999. "L'art dans les habitats du Paléolithique Supérieur d'Europe orientale" in *L'Anthropologie*, Tome 103, No. 1: 93-120
- Iakovleva (Ludmilla) 2000. "The Gravettian art of Eastern Europe as exemplified in the figurative art of Kostienki I" in *Hunters of the Golden Age: the mid Upper Palaeolithic of Eurasia, 30,000-20,000 BP*. No. 31: 125-134
- Iakovleva (Ludmilla) and Pinçon (Geneviève) 1998. *La Frise sculptée du Roc-aux-Sorciers, Angles-sur-l'Anglin*. Éditions du C.T.H.S., Paris.
- James (E.O.). 1959. *The Cult of the Mother Goddess*. Thames & Hudson, London.
- Keeley (Lawrence H.) 1991. Ethnographic models for Late Glacial hunter-gatherers / Late Glacial ethnographic models. In *CBA Research Report 77: The Late Glacial in north-west Europe: Human adaptation and environmental change at the end of the Pleistocene*, Eds.

Barton (N.), Roberts (A. J.), and Roe (D.A.). Council for British Archaeology, The Alden Press Ltd, Oxford. pp. 179-190.

Kozłowski (Janusz K.) 1992. *L'Art de la préhistoire en Europe Orientale*. CNRS Editions, Paris.

Laming-Emperaire (Annette) 1962. *La Signification de l'art rupestre paléolithique*. Picard, Paris.

Lee (Richard) 1979. *The Kung! San – Men, Women and Work in a Foraging Society*. Cambridge University Press.

Leroi-Gourhan (André) 1965. *Le Geste et la Parole*, Vol. 2, *La Mémoire et les rythmes*, pp. 239-248

Leroi-Gourhan (André) 1965. *La Préhistoire de l'art occidental*. Mazenod, Paris.

Leroi-Gourhan (André) 1971. "Observations technologiques sur le rythme statuaire" *Echanges et communications (Mélanges offerts à C. Lévi-Strauss)*, Mouton, La Hague, pp. 658–676

Lorblanchet (Michel) 1995. *Les Grottes ornées de la Préhistoire: nouveaux regards*. Errance, Paris.

Malaurie (Jean) 2001. *L'Appel du nord*. Éditions de la Martinière, Paris. pp. 256-259

Morel (Philippe) and Müller (Werner) 1997. Un campement magdalénien au bord du lac de Neuchâtel, étude archéozoologique (secteur 1). *Archéologie neuchâteloise* 23, Hauterive-Champréveyres, 11, Musée cantonal d'archéologie.

Passepartout (Luce) 1938. *Les Statuettes Féminines Paléolithiques dites Vénus Stéatopyges*. Teissier, Nîmes

Pfeiffer (John E.) 1982. *The Creative Explosion*. Harper & Row, New York.

Piette (Edmond) 1895. "La station de Brassempouy et les statuettes humaines de la période glyptique" *L'Anthropologie* 6, pp. 129-151

Praslov (Nicolas D.) 1985. "L'art du Paléolithique supérieur à l'est de l'Europe" *L'Anthropologie*, 89, No. 2

Pringle (Heather) 1997. "Ice Age communities may be earliest known net hunters" in *Science* 277: 1203–1204.

Raux (Pascal) 2004. *Animisme et Arts Premiers – Historique et nouvelle lecture de l'art préhistorique*. Editions Thot, Fontaine, France.

Rousseau (Lucien) 1933. "Le Magdalénien dans la Vienne. Découverte et fouille d'un gisement du Magdalénien à Angles-sur-l'Anglin (Vienne)" in *Bulletin de la Société Préhistorique Française*, n° 30: 239-256.

- Rousselot (Jean-Loup), Fitzhugh (William W.) and Crowell (Aron) 1988. "Maritime economies of the North Pacific Rim" In Fitzhugh (William W.) & Crowell (Aron) (eds). *Crossroads of Continents, Cultures of Siberia and Alaska*. Smithsonian Institution Press, Washington, D.C. pp. 151-172.
- Saccasyn-della Santa (Elisabeth) 1947. *Les Figures Humaines du Paléolithique Supérieur Eurasiatique*. De Sikkel, Antwerp.
- Saint-Mathurin (Suzanne de) 1978. "Les Vénus pariétales et mobilères du Magdalénien d'Angles-sur-l'Anglin" in *Publications du Musée des Antiquités Nationales de Saint-Germain-en-Laye*, 10: 15-22.
- Serov (S. Ia.) 1988. "Guardians and Spirit Masters of Siberia" In Fitzhugh (William W.) & Crowell (Aron) (eds). *Crossroads of Continents, Cultures of Siberia and Alaska*. Smithsonian Institution Press, Washington, D.C. pp. 241-255
- Soffer (Olga), Vandiver (Pamela), Klima (Bohuslav) and Svoboda (Jiri) 1993. "The Pyrotechnology of Performance Art: Moravian Venuses and Wolverines." In H. Knecht, A.P. Tay, and R. White (eds) *Before Lascaux: The Complex Record of the Early Upper Paleolithic*, CRC Press, Boca Raton, Florida. pp. 259-276.
- Soffer (Olga), Adovasio (James M.) and Hyland (David C.) 1997. "Textiles and Cordage : a Preliminary Assessment". In Svoboda (Jiri) (ed) *Pavlov I 1957 Excavations*, Archeologicky Ustav AV CR. Brno, The Czech Republic. pp. 403-424
- Soffer (Olga), Adovasio (James M.) and Hyland (David C.) 2000. "The "Venus" Figurines: Textiles, Basketry, Gender and Status in the Upper Paleolithic" in *Current Anthropology*, No. 41: 511-537.
- Svoboda (Jiri), Lozek (Vojen), and Vlcek (Emanuel) 1996. *Hunters Between East and West*. Plenum Press, New York. pp. 162
- Taborin (Yvette), Christensen (Marianne), Olive (Monique), Pigeot (Nicolle), Fritz (Carole) and Tosello (Gilles) 2001. De l'art magdalénien figuratif à Etiolles (Essonne, Bassin Parisien). *Bulletin de la Société Préhistorique Française* 98(1): 125–132.
- Tarasov (L.M.) 1965. "Paleoliticheskaia Stojanka Gagarino" in *Materialy i Issledovanija po Arkheologii SSSR* 131: 132-38 Figs. 14-16
- Ucko (Peter J.) 1968. *Anthropomorphic Figurines of Predynastic Egypt and Neolithic Crete with Comparative Material from the Prehistoric Near-East and Mainland Greece*. Andrew Szmidla, London, Royal Anthropological Institute occasional paper. No. 24.
- White (Randall) 2002. « Une nouvelle statuette phallo-féminine paléolithique : « La Vénus des Milandes » (commune de Castelnaud-la-Chapelle, Dordogne) » in *Paléo* n°14 : 177-198
- White (Randall) 2003. *Prehistoric Art: the symbolic journey of humankind*. Harry N. Abrams, Inc., New York.

White (Randall) 2006. "The Women of Brassempouy: A Century of Research and Interpretation" in *Journal of Archaeological Method and Theory*, Vol. 13, No. 4 (Dec), pp. 251-304

White (Randall) and Bisson (Michael) 1998. "Imagerie féminine du Paléolithique : l'apport des nouvelles statuettes de Grimaldi" in *Gallia Préhistoire*, No. 40: 95-132.

Zamiatnine (Serguiei) 1934. *La Station aurignacienne de Gagarino et les nouvelles données qu'elle fournit sur les rites magiques des chasseurs quaternaires*. Les Éditions de l'État, Moscow-Leningrad.

Zoltz (Lothar) 1951. "Idoles paléolithiques de l'être androgyne" *Bulletin de la Société préhistorique française*, pp. 333-340

¹ Delporte thought the Brassempouy figurines came from a Middle Gravettian layer because they were found with "Noailles" burins. Claudine Cohen provides an unreferenced date that is 4,000 years older (ca. 28,000 BC) than Delporte's oldest date. If she is correct the continuum between Kostienki and Brassempouy not only covers a huge distance but at least 6,000 years.

² Calibrated to calendar years based on ¹⁴C dates (21,300 – 24,100 ¹⁴C BP) cited by Iakovleva (2000). Cohen cites ca. 22,100 - 22,700 BC. Calibration was approximated using Reimer Paula J *et al.* (2004). "INTCAL04 Terrestrial Radiocarbon Age Calibration, 0–26 Cal Kyr BP". *Radiocarbon* 46 (3): 1029–1058

³ White 2006, pp. 286-300

⁴ Delporte 1993 26,000 BC.

⁵ Delporte 1993 13,000 ¹⁴C BP Lab Lyon

⁶ Morel and Müller 1997. AMS measurements on charcoal and by palynological analyses to c. 13,000 ¹⁴C BP

⁷ ca. 13,000 ¹⁴C BP from Ladier (E.) 1987. La "Venus du Courbet". *Bulletin de la Société Préhistorique Française*. 84-1, pp 3-4 Magdalenian IV.

⁸ Svoboda *et al.* 1996. pg. 174. ca. 12,600 ¹⁴C BP

⁹ 11,750-13,000 BP, I assume ¹⁴C, in Delporte (1993). Donsmaps.com cites 14,000 BC.

¹⁰ 21,800 ± 300 ¹⁴C BP - Iakovleva (2000)

¹¹ Iakovleva and Pinçon 1998. S. de Saint-Mathurin called layer RSC, with its abundant mid-Magdalenian industry and hearths, the "layer of big fires" - dated to 14.160±80 ¹⁴C B.P. (GRN 1913) (Saint-Mathurin, 1988, p. 48). Delporte cites 14,200 BP while Cohen gives 17,000 BP, with neither stating whether dates are calibrated.

¹² Keeley: *Late Glacial ethnographic models*. Pg. 188 : "Gönnersdorf has yielded dates between 12,380 and 12,660 BP, placing it in the middle of the Bølling interstadial." The Bølling interstadial took place 13,000–12,000 ¹⁴C BP. From "Die gravierten Frauendarstellungen von Gönnersdorf" by Gerhard Bosinski, Francesco d'Errico, Petra Schiller; pg. 353: "The majority of female depictions of Gonnorsdorf type date to the beginning of the late Magdalenian ... although they also occur at the end of the Magdalenian and during the early and developed Azilian. ... The duration of this style of depiction is some 2,000 solar (calibrated) years, from 13,500-11,500 BC." Cohen gives 12,500 BP, Delporte 13,000-11,000 BP. Some of Cohen's dates are calibrated, some not. Delporte's always seem uncalibrated.

¹³ Abramova 1995, pp. 79; White 2003, pp. 141

-
- ¹⁴ Bosinski 1979; White 2003, pp. 105
- ¹⁵ Rousseau 1933 ; Iakovleva & Pinçon 1998; White 2003, pp. 103-105
- ¹⁶ Delporte 1979 & 1993, pp. 71 (Tursac), 133 (Weinberg, Mauern), 32 (Lespugue)
- ¹⁷ Iakovleva 2000 and 1999 (Map pp. 102); For a similar study see Abramova 1995, pp. 74-78
- ¹⁸ Praslov 1985, pp. 183; Kozłowski 1992, pp. 67; Abramova 1995, pp. 77-78 (Kostienki I)
- ¹⁹ Praslov 1985; White 2003, pp. 138
- ²⁰ Gvozdover (Mariana D.) 1983. "Novye nakhodki iz Avdeeva" *Voprosy Antropologii*, N 71, pp. 42-63 (in Russian); Abramova 1995, pp. 78 (in French)
- ²¹ Leroi-Gourhan 1965, pp. 239-248
- ²² Lorblanchet 1995, pp. 200; Delporte 1979 & 1993, pp. 84.
- ²³ Delporte 1979 & 1993, pp. 72. There are several cases of a well-sculpted animal that can be read both as a mammoth and bison. The best known is a Magdalenian spear-thrower from the Grotte de Canecaude (Aude) at the Laboratoire de Préhistoire de Carcassonne, but an unpublished Gravettian specimen was also found near Cambrai.
- ²⁴ Raux (Pascal) 2004
- ²⁵ Graziosi 1939 (citing oral opinions of Mme. Passemard and Breuil pp. 161); Zoltz 1951; Breuil 1955
- ²⁶ Breuil 1955 (lacks the microscopic analysis available for the Milandes "Venus")
- ²⁷ Graziosi 1939 (citing Breuil's opinion); Zoltz 1951
- ²⁸ White 2002
- ²⁹ Iakovleva 1995
- ³⁰ Svoboda et al. pg. 136
- ³¹ Iakovleva 1999, pp. 109-112.
- ³² Pringle 1997; Adovasio et al. 1996; Soffer et al. 1997, 2000
- ³³ Chaussonnet 1988, pp. 212-216
- ³⁴ Crowell 1988, pp. 203
- ³⁵ Leroi-Gourhan 1971; revisited by Delporte 1979 & 1993, pp. 262-273.
- ³⁶ Doumas 1983, pp. 99 (post-partum wrinkles), 146 (pregnancy); Getz-Gentle 2006, Pl. 8 & 9 (wrinkles), Pl. 15 (pregnancy)
- ³⁷ Ucko 1968
- ³⁸ Baldé personal communication 2008. Souleymane Baldé wrote several articles on fertility and birthing practices in the Sahel, including "Stérilité au Fouladou" (1986). *Le Journal du Jeune Practicien — decadaire d'informations therapeutiques et medico-professionnelles*, 10 Oct. Boulogne.
- ³⁹ White & Bisson 1998 pp. 124-127; White 2003, pp. 107
- ⁴⁰ Howell 1979
- ⁴¹ Marshall (John K.) 1958. *The Hunters*. Film, McGraw Hill.
- ⁴² Gvozdover 1983; Abramova 1995(See note 20)
- ⁴³ Iakovleva 2000
- ⁴⁴ Soffer et al. 1993, pp. 268-273; and 2000
- ⁴⁵ Klima (Bohuslav) 1957. "Übersicht über die jüngsten paläolithischen Forschungen in Mähren" *Quartär*, Vol. 9, Bonn
- ⁴⁶ Taborin et al. 2001; Caldwell 2009
- ⁴⁷ Morel and Müller 1997
- ⁴⁸ Piette 1895; White 2003, pp. 87
- ⁴⁹ Crowell 1988, pp. 204
- ⁵⁰ Bégouën 1924, 1929 & 1939; Breuil 1952
- ⁵¹ Rousselot et al. 1988, pp. 171; for related rites among the Maritime Koryak see Serov 1988, pp. 254-255
- ⁵² Caldwell 2009

⁵³ Raux (Pascal) 2004.

⁵⁴ Carpenter (Edmund) 1973. *Eskimo Realities*. Holt, Rinehart and Winston, New York. pp.

34

⁵⁵ Conard (Nicholas J.) 2009. "A female figurine from the basal Aurignacian deposits of Hohle Fels Cave in southwestern Germany" *Nature*, 2009; 459 (7244)

⁵⁶ Discovery News (May 13, 2009)

⁵⁷ Králík (Miroslav), Novotný (V.) and Oliva (M.) 2002. "Fingerprint on the Venus of Dolní Věstonice I" *Anthropologie* XL 2, pp. 107-113; Bougard (Estelle) 2009. "Les Ceramiques Gravettiennes de Moravie" *Séminaire international "Représentations préhistoriques" 26^e Session*. Responsable : Vialou (Denis), Musée de l'Homme, 30 Jan.; Also see Bougard (Estelle) 2007. "Uses of clay in the Upper Palaeolithic" *PhD Thesis, University of Liverpool School of Archaeology, Classics and Egyptology*.