The Hohle Fels Female Figurine:
Not Pornography but a Representation of
the Upper Paleolithic Double Goddess

In Honor of Marija Gimbutas

James B. Harrod

In 1975 I completed my Ph.D. at Syracuse and
my thesis was on the mythology of Britomartis
Diktynna of Crete, which I analyzed using
methods of Levi-Strauss and C. G. Jung. The
following year I wrote a complementary
manuscript on Aristaios, and then wrote a
manuscript reconstructing Mesolithic religion
based on Greek myths of the invention of the
bow and arrow, hunting and fishing nets,
plaiting of basketry and rope and domestication
of the dog, all of which are associated with
Artemis and Aristaios. In 1976 I read The Gods
and Goddess of Old Europe by Marija
Gimbutas and was amazed to read at the end of
it her discussion of survivals of the Neolithic
divinities in the ancient Greek mythologies of
Artemis, Britomartis and Aristaios. I was aware
of no one else in the world who was referencing
these mythic figures, and immediately wrote to
her about our mutual affinities and included my
Mesolithic paper. She responded
enthusiastically and the next year invited me to her
home in Topanga.

From that time she became one of my
dearest mentors and colleagues and most
enthusiastic supporter of my research. She
encouraged me to work on the Paleolithic as
that time period was in need of an
archaeomythological approach. We stayed in
regular contact over the years sharing our ideas
and writings. She was even the matchmaker for
me and my life-partner Patricia Reis, one of her
illustrators.

In 1987 at the Valcamonica Symposium
on Prehistoric and Primitive Art she offered up
her own keynote time for me to present my
proposed decipherment of the Upper Paleolithic
geometric signs and decoding of the Double
Goddess transformation symbolism. Such was
her generosity in promoting students and
colleagues. Later, I was privileged to review
her draft of The Language of the Goddess
and I assisted her in finding its publisher.

I honor her multidisciplinary brilliance,
her mastery of multiple languages, poetic and
artistic insight into prehistoric symbolism, vast
knowledge of archaeology, and numerous
excellent field excavations. I am profoundly
indebted to Marija in so many ways. Her
intellectual passion, open hearted love of life
and abundant graciousness is a spiritual
presence that is always with me.

Introduction

In the May 2009 issue of Nature Nicholas
Conard reported the discovery of a mammoth-
The Hohle Fels Female Figurine from Hohle Fels, Germany dated to the Aurignacian Upper Paleolithic 35,000 years ago. While it does appear remarkable for its early Aurignacian dating, 5,000 years earlier than the earliest dated similar figurines from the Gravettian, Conard’s speculation that the figurine is an “expression of fertility,” and Paul Mellars’ interpretation of it as “bordering on the pornographic” or “girls’ toys” appear to be contradicted by the incised markings on the figurine itself. Both Conard and Mellars fail to take into account extensive research on the decoding of geometric signs of the European Upper Palaeolithic and the subsequent amplification of these signs into a sophisticated iconography and script, also associated with figurines, during the European Neolithic and Mesolithic. Such research suggests that the markings on the figurine are ideograms, that they have a meaning, and that the figurine is a representation of the Upper Paleolithic Double Goddess.

Deciphering European Upper Paleolithic geometric signs

Drawing on the iconographic studies of Alexander Marshack and Andre Leroi-Gourhan on the Eurasian Upper Paleolithic, and Marija Gimbutas on the European Neolithic, I proposed a decoding and decipherment of a protolanguage of geometric signs of the Upper Paleolithic Magdalenian and earlier cultures of Europe, or UP(E). Applying structuralist semantic techniques of A-J. Greimas, it is possible to detect a topological complementary set of four basic sign-clusters (semantic fields) that constitute UP(E). This protolanguage appears to consist of ‘gesture-words’ or ‘motion-form verbs,’ which refer to elemental processes of nature, both the natural environment without and the psychic or spiritual realm within. Thematically the four basic UP(E) sign clusters in general may be translated as:

1. “Center inward”
2. “Contact interrupting spirit energies”
3. “Sprout, grow and branch”

Using various semiotic techniques it possible to differentiate the semantics for each of the sign types in each cluster. Figure 1 summarizes the markings that appear to be linguistic signs and their probable semantic connotations. In a second step in the decoding, it appears that syntactic pairings of UP(E) signs could have been used to generate formulae for ritual action and ritual transformations.

In a third step it is possible to show how combinations of UP(E) signs were apparently used to designate personifications (divinities, goddesses and gods) that preside over their respective ritual and natural transformation processes. In brief, focusing on the geometric protolanguage’s four basic sign-clusters, it is possible to generate six possible combinations or syntactic pairings—four signs taken two at a time—and each of these combinations appear to have been used to represent or express the meaning of six canonical European Upper Palaeolithic female (and six male) spiritual transformation processes. I have suggested naming these six transformations: the Self-Seedung Goddess; Mother/Mistress of Animals; Goddess of Self-Repose or Waterbird Goddess (comparable to later Aphrodite–Venus); Death/Rebirthing Goddess; Double Goddess of Death and Abundance; and Goddess of Vegetation or Tree of Life Goddess. If this

---

3 Conard 2009.
4 Mellars 2009.
11 Greimas 1966.
reconstruction of UP spirituality based on the geometric protolanguage is valid, it is a measure of the complexity and spiritual depth of Upper Paleolithic European cultures.

It is possible to apply this decipherment of UP(E) to generate readings for some of the graphic signs associated with animal and anthropomorphic images in European Upper Paleolithic art, and I have developed a detailed account of one of the six female spiritual transformation processes of the European Upper Paleolithic, the Double Goddess.¹³

Geometric signs that appear to be used to represent the Double Goddess transformation and proposed connotations for each sign are summarized in the following table (Figure 2).

¹³ Harrod 1997.
## Signs of the ‘Double Goddess’ Transformation

<table>
<thead>
<tr>
<th>Contact! Cleave!</th>
<th>Flow!</th>
</tr>
</thead>
<tbody>
<tr>
<td>hold together, bind, twin move back and forth, right/left side; one becomes two/two becomes one</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>bifurcate, split, cleave, double plentitude, wealth flay (wound, kill)</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>double, abundance, pair, power of two</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>crush (kill)</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>strike through, kill, I am a spirit being beyond death, stand</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>protrude, bulge, pregnant, surge, awe</td>
<td>![Symbol]</td>
</tr>
</tbody>
</table>

*Figure 2. Geometric signs associated with the European Upper Paleolithic Double Goddess spiritual transformation process and proposed general connotations for individual signs.*

### The Hohle Fels figurine

Viewed in the light of the iconographic studies noted above, including my proposed decipherment of the protolanguage of the geometric signs of the Upper Paleolithic Magdalenian culture of Europe—a literature completely ignored by Conard and Mellars—the markings on the Hohle Fels figurine appear to represent typical Upper Palaeolithic geometric signs, signs that are precisely those that one would expect to find on a figurine representing the Double Goddess. The figurine is 5.97 cm in height.
Conard conducted microscopic analysis of the lines on the figurine and observed that a sharp tool was intentionally used to incise them. In Figure 3, two photos of the figurine by Conard are annotated with arrows to indicate markings that appear to be geometric signs and other markings of significance.

The markings across the top of the breasts appear to consist of three parallel lines arcing from breast to breast. This would represent a typical tri-line ideogram, which I have translated as signifying ‘flow, flow in three spirit worlds’. Given its inscription across the breasts, I suggest we might read it metaphorically to represent the nurturing sustenance like breast milk that one may receive in each of the three (shamanic) realms of the upper, middle and lower world. The tri-line is curved in a way that suggests it may have been intended to depict a metaphorical combination of tri-line and arc ideograms. I have suggested that markings having an arc or spiral form could be translated as signifying: ‘spiral, revolve, circulate, whirl, curl, arc, parabolic movement; brisk, lively, exuberant’. If so, we might go a step further and decode the symbol as metaphorically connoting an exuberant liveliness, like a spiral dancing, that sustains one’s spirit in each of the three worlds.

Two groups of three short lines intentionally incised over left and right shoulder appear to be two more tri-lines, the artist using the redundancy to emphasize the importance of this ideogram and its meaning. On the figurine’s right upper arm are two short strokes, which may be called a bi-line. Drawing on Marija Gimbutas’ decoding for ‘power of two’ motif during the Neolithic, a similar connotation may be posited for the Upper Paleolithic: ‘bifurcate, double’. Below this bi-line sign are two parallel chevrons, which may be translated as ‘flow, flow through a channel or stream’. In other words, the figurine also represents a process of stream-like flow. There appear to be other bi-line markings on the figurine but these are not so clearly incised.

It is possible to read the two parallel chevrons as the artist’s attempt at actually combining two complementary signs into one, the two parallel lines bent into V-shapes, and if so, this suggests the artist has made a brilliant innovation, a metaphorical combination of bi-line and chevron meant to be read as a statement that the syntactic pairing of ‘bifurcate’ and ‘flow’ signs represents one goddess who is the Double Goddess.

**Her spiritual psychology**

The Double Goddess appears to represent the psychodynamic flow of energies down the uterine lineage from grandmother to mother to daughter and the sometimes conflicted, sometimes healing reconnection that allows the mysterious of that energy to flow. Such a female knowledge is typical of female initiation and healing rituals especially among horticultural peoples who have matrilineal or dual descent systems. It survives into ancient Greek religion in the myth of Demeter and Persephone.

Psychological insights of the writer Adrienne Rich and the Jungian analyst Marion Woodman seem to offer contemporary parallels for elaborating the Double Goddess transformation. Vicki Noble provides a comprehensive interpretation of Double Goddess themes with reference to prehistory and contemporary issues.

In *Of Women Born*, Adrienne Rich, with reflections on the myth of Demeter and Persephone, voices themes of the mother-daughter bond and the transformation process through which a woman, becoming biologically or spiritually pregnant, connects with the creative powers of the mother, the “courageous mother” within and finds, through “efficacious

---

14 For the derivation of this semantics from a phonemic-semantic reconstruction of the UP proto-language, see Harrod 2004.
reconciliation with the mother who bore her. Throughout Rich’s work the thematics of sacrifice and flow, pregnancy and nourishment, loss and reconnection are evident. Marion Woodman’s *Pregnant Virgin* helps illumine, in contemporary psychological terminology, the thematics of the Double Goddess transformation process as one of Death and Abundance. In this transformation, a woman moves from being the abandoned or rejected daughter, the ‘matchstick girl’ of folktales, perpetually hungry for a mother’s nourishing love, to finding, cherishing and abundantly nourishing the child (the daughter) within. The process moves through the inward suffering of self-devourment, self-hatred and depression. It moves through the body experienced as heavy, earthbound, rigid and immobilizing. By making contact with creative energies, discovering, and nourishing the pregnant daughter within, once rejected, now accepted, one lets those creative energies unfold as a stream unfolds, flowing with them. Just as the “efficacious tears” of the courageous mother restore the lost daughter, so tears of grief over the forlorn body cleanse and purify it and tears of compassion restore it to its empowerment.

The painter Meinrad Craighead reveals through her lifework interrelated motifs of spiritual pregnancy and riverine flow, which might be viewed as an expression of the ‘Double Goddess’ spiritual transformation process. With respect to the painting “Tree Mother” from *The Mother’s Songs: Images of God the Mother* she says:

> The Mother is a place, an abysmal space. A hole, the hollow is hallowed and hallowed, it heals. Here the holy dead are seeded in her dark matrix, take root and are re-membered.

With respect to the painting “Wisdom,” Craighead writes,

> When I reach through the hole at my center the gift eludes my grasp... The journey waxes full and then wanes dark, again and again. I stare into my hole focusing on a single point, waiting for her to dart wildly through my landscape.

This hole is like the channel of umbilical fluids feeding the fetus within and like the waters that flow through the uterine lineage down the female line. Commenting on “O Call of the Wild” (*The Litany of the Great River*), painted after her mother’s death, she says:

> My tree torso is deeply rent with a gaping hole. The pain in this wound is unbearable. I cry constantly for my mother. One night, or day, the picture comes for the last time and brings a healing magic. Something is alive within this painful wound.

Concerning the painting “Egg,” she says:

> I have never conceived but whether or not a woman does conceive, she carries the germinative ocean within her—and the essential eggs. We have a spirituality, full from within.

Water and spiral motifs occur commenting on the painting “Mother and Daughter”:

> The tree and the sea announce their identity simultaneously. The earth ends in the sea; the tree grows at its edge... I circle through the multiple concentric rings of the tree, shrinking and aging with each ring. At last the spiraling ends. I arrive at the small dark spot of origination. When I touch this innermost center I realize I am already there. I have been journeying to where I am.

---

18 Ibid.
20 Craighead 1986: 42.
21 Craighead 2003: 61.
23 Ibid.: 38.
24 Ibid.: 36.
Figure 3: Hohle Fels figurine, photo with microphotographs of incisions (N.J. Conard, Nature 459: 248-252, fig. 1 and 3), which I annotate (blue text, yellow arrows) to indicate probable geometric signs and other marking motifs.
As I have previously suggested, the Upper Paleolithic Double Goddess appears to have a semantics and thematics, in its variants and converses, something like:

‘Contact, cleave to irrupting spirit energies, conceive and flow!’ or ‘Be rent open, to spirit flooded, with life, the river flowing through this rending, streaming with life, darting alive!’ or ‘Weak, abandoned, corpse-like, stick-like, self-devouring, feed that which grows within you, yourself, pregnant, doubling, doubling again, manifold, abundant, and stream out overflowing!’

‘Ravished, raped, wandering, lost, through efficacious tears, grieving (in the land of the dead), reconnect, be reunited with the courageous mother, joined, twinned, in the uterine lineage through which flows the all-sustaining ancestral spirit energies, and filled with eggs be pregnant, alive with life!’ or ‘Split, watery, grieving, through your wound contact the spirit energies that expand within, touching and feeling that which doubles within, alive!’

Will not this spiritual psychology be part of the ‘meaning’ of the Hohle Fels figurine with its tri-line, bi-line and doubled chevron markings?

Gravettian parallels

One might object that I have over-interpreted the markings on the Hohle Fels figurine and that unlike European Neolithic figurines, which are not infrequently associated with ideograms, Upper Paleolithic figurines are rarely inscribed with geometric signs. While Upper Paleolithic female figurines are not often inscribed with geometric signs—at least those discovered so far—there are at least two Gravettian figurines so inscribed, one from Dolní Věstonice (Figure 4) and one from Laussel (Figure 5), and I suggest that they support my argument for decoding the marks on the Hohle Fels figurine.

The Dolní Věstonice figurine, Early Gravettian, 25-30,000 years ago, height 11.1 cm, has four clear incisions on its back. In terms of the stereotypical UP(E) geometric signs I suggest reading them as a metaphorical combination of two bi-lines, one on each side of the spine, and as two parallel chevrons with the angular strokes separated by the spine. If we may read them as such, then this inscription will be identical to the pair of parallel chevrons on the arm of the Hohle Fels figurine. The Dolní Věstonice figurine is notable for its face; the two slits for eyes as well as the down scrape from eyes to mouth. Some commentaries on the figurine observe that this abstracted face expresses some sort of otherworldliness or transcendence. I would add that the eyes also appear to depict the same broken chevron form as on the backside of the figure, a redundancy that points again to the ideogram representing the meaning of this figurine. In some microscopic illustrations of the face the scrape mark over the nose and mouth area almost appear alike a vertical ‘tri-line’ or tracks of tears, perhaps of grieving, which is a theme of the Double Goddess.

The relief carving of the so-called Venus of Laussel, Gravettian, 20-25,000 years ago, height 43 cm, has one fairly clear geometric marking on its right hip (left facing viewer), a Y sign. More vague in the photo are possibly two stroke marks (bi-line?) or maybe three marks (tri-line?), but it would require microscopic examination to determine if these additional marks are intentional. The Y mark appears to represent another typical geometric sign of the cluster of signs that I suggest are signs of ‘cleave, contact irrupting spirits, bifurcate’. More specifically, the Y seems to denote something like: ‘hold together, bind, twin, move back and forth, right/left side, one
becomes two/two becomes one’. In any event it is a sign that is appropriate for signifying the Double Goddess transformation. The Laussel site contains another relief figure, with two female figures merging, traditionally referred as the ‘Double Venus’.

**Significance of hand position**

The Hohle Fels figurine has forearms that have clearly carved hands under each breast. The degree of workmanship suggests that the depicted gesture may have special significance.

Gravettian female figures of the pregnant Double Goddess type appear to show several different styles of hand positions. Some show hands pointing downward toward the navel, such as the Laussel bas relief and Kostenki Limestone Venus; or at navel level touching the pregnant belly and/or at navel level pointing to navel, such as Kostenki #1 and less clearly #3; Avdeev #7 and less clearly #2; or have arms hanging at their side and may—or may not be, the sculpting is sometimes not clear—appear to be touching their bellies, such as Avdeev #6 and #10 and Gagarino #1. Still others have arms across the top of their breasts, such as Willendorf #1, Lespuque, and Aix.

At least for figurines discovered so far, the Hohle Fels figurine seems to be unique in having the hands clearly under the breasts and apparently over the left and right lower rib areas. In respect to this specific placement of hands several speculative interpretations are possible. First, perhaps the sculpture is arbitrarily made and the hand position is to be read as similar to the Gravettian sculptures in which they touch the pregnant belly as if sensing the life growing within.
Second—suggested by an Early Paleolithic stone sculpture collector—is that the hand positions are meant to depict a mother holding an infant at each breast, the breasts then are not so much exaggerated in size as each represents an infant’s head at the breast; the three dots on the figure’s right breast evoking an infant securely attached and turning its face to look away from the breast as if toward the viewer (Ursel Benekendorff, personal communication 2009).

Third, position of the hands on the Hohle Fels figurine may be intended to depict hand positions that are used in particular ecstatic trance ritual postures. While head and feet are not stressed in Double Goddess figures, arms and hands frequently are clearly delineated. The experimental research of Felicitas Goodman (1990a) and Belinda Gore (2001) has revealed that arm and hand position as well as overall posture is a critical element in trance postures. Varying position varies the content of a trance. Replicating figurations from hunter-gatherer and horticultural societies around the world, Goodman and Gore have discovered through experiential trancwork over thirty distinctive, stereotypical trance postures and have mapped out typical contents of trance experience and mythological parallels for them.

I reviewed Delporte (1979) and consulted with Goodman (personal communication 1994) on possible matches between Upper Paleolithic

Figure 5: Limestone bas-relief, painted with red ochre, Abri de Laussel, Marquay, France; Gravettian (photo Wikipedia Commons).
Double Goddess type figurines and experimentally identified postures. These included the Parabita figurine with clearly depicted hand positioning, right hand above the left, corresponding to the Chiltan Spirits posture; Kostenki #4 and perhaps #6 and Malta # 2, #5, #9, and #29, Bear posture; Kostenki #1 and #3, Avdeevo #2 and #7, Birthing posture and Malta #10, #11, #27 and Buret #1, Adena Pipe. Goodman and Gore categorize all these types of postures as having the function of ‘healing’. In addition, Malta #8 appears to match a posture for Trip to the Realm of the Spirits of the Dead.

Replications of the Venus of Galgenberg (Goodman 1990b) posture engenders the themes of journey to the upper world, mending the fabric of the cosmos and rebalancing it, via tree of life reconnect the three worlds, upper, middle and lower and reincarnation.

Belinda Gore observes that replication of the Lausseel Woman with Bison Horn posture, which she categorizes as an Initiation type posture, “gives an initiation into the Realm of the Dead and teaches about the creation of new forms”;26 trance experiences include motifs of “dissolving,” “nourishing an inner seed,” “life recreating itself through our bodies,” “dancing” and “renewal.”27 Felicitas Goodman describes the posture experience as: “reincarnation or reconnection of heaven, earth, and lower world” and “an initiation ritual into death and awakening to new life.”28 These themes are a good match for the thematics that I derive by reference to the geometric sign graphemes—‘bi-line’ of pregnancy and bifurcation, ‘chevron’ of intergenerational riverine flow, ‘arc’ of dancing aliveness and ‘tri-line’ of the three worlds of spirit—inscribed on the Hohle Fels figurine.

Finally, while the Hohle Fels figurine, with its unique positioning of hands under the breasts over the left and right lower rib areas, does not appear among experiential replications of trance postures conducted to date, its particular significance might be similar to that of its corresponding sympathetic nervous system plexus. If we focus on physiology and chakras, the Hohle Fels hands are placed over the respiratory diaphragm and celiac plexus, which includes smaller hepatic, splenic, gastric, pancreatic and suprarenal plexuses. This so-called ‘abdominal brain’ is highly affected by stress. During pregnancy this area is associated with nausea, esophageal reflux and other stomach, liver and spleen symptoms and may be causal in psychological affects during pregnancy, such as short periods of depression, loss of confidence, and fatigue. Pregnancy results in changes in lordosis of the lower thoracic and lumbar vertebrae with associated pain, and during labor, the celiac plexus transmits pain signals via sympathetic ganglia of vertebrae L1 to T10 as well as the sacrum. In osteopathy this area is referred to as the ‘thoracic-abdominal pivot’, which is key to breathing and movement. Opera singers may place their hands on the lower ribs to open the chest for more powerful expression of voice and song.

With respect to chakra theory this celiac plexus area corresponds to the ‘solar’ or ‘sun’ chakra (Sanskrit, surya), which may be associated with feelings of self-radiance, personal sense of empowerment, self-esteem and confidence, self-respect, dignity and safety; and slightly above, on the back ascending channel, the adrenal chakra, which may be associated with feelings of healing and belonging. In ch’i theory, this area of the body corresponds to Chung-Wan on the descending Functional Channel and Chi-Chung (T11), controller of the adrenals, on the ascending Governor Channel and The Middle Dantien. The hands-on healing technique Reiki may be useful during pregnancy to relieve morning sickness, pain, anxiety and improve sleep (Hartford Hospital study). Typically hands are placed on the solar plexus, sacrum, and third eye
chakra areas. In light of these somatic energy approaches, the Hohle Fels figurine’s hand positions may be intended to depict some sort of self-healing touch on the solar plexus to alleviate discomforting symptoms of pregnancy and restore psychological feelings of self-radiance, self-respect and empowerment. Perhaps not coincidentally these are again themes found in the Double Goddess transformation of which Hohle Fels figurine is a representation.

Clothing or scarifications?

The multiple horizontal lines on the Hohle Fels figurine’s abdomen may represent “clothing or a wrap”²⁹ or “skin clothing,”³⁰ but as there does not appear to be definite indication of textile fabric, such as weaving, net pattern, suspension from belt, etc. There are only simple parallel line incisions which I suggest more likely represent scarification markings.

Harald Haarmann³¹ shows depictions of figurines with ritual scarring from the African Luba, a matrilineal society. In this society ritual scarification of women’s bodies occurs throughout a woman’s lifetime beginning between age eight and eleven. The scars are first made around the navel, later on the chest and belly. Several types of figurines depict these scarifications.

Another type of Luba figurine is designated the ‘ancestor’ type (Figure 6). This type expresses the transmission of ancestral germinal power down through the female lineage. The ivory pendant ancestor figurines are in postures and have hand positions that may be compared to the Hohle Fels figurine and the meaning that a grapheme analysis has assigned to it.

---

²⁹ Conard 2009.
³⁰ Mellars 2009.
³¹ Haarmann 2009.
Conclusion

Considering its graphematic signs, hand positions, possible scarification marks and similarities to Gravettian and subsequent figurines of its type, the Hohle Fels figurine cannot be reduced to such simplistic notions as “fertility,” let alone “toys” or the misogynist interpretation “pornography.” In my view, the opinions of Mellars and Conard with respect to its function and meaning are not supported. Like the figurines of Dolní Věstonice, Laussel, Willendorf, Lespouque, Kostienki, Gagarino, Grimaldi and other Gravettian sites, the Hohle Fels female figurine may be categorized as an exemplary representation of the Double Goddess. A remarkable feature of the Hohle Fels figurine is its high degree of grapheme complexity at such an early date in the Aurignacian. In sum, the markings on the Hohle Fels figurine suggest it symbolized contact with the flow of germinative power and prerogative down through the female lineage and its user likely belonged to a matrilineal descent system in which the figurine played a role in female initiation and empowerment rituals.

References


---

**James B. Harrod** has an MA in Religion from Claremont Graduate Institute, and a Ph.D. in Religion from Syracuse University. He has conducted research via Harvard University field school in palaeoanthropology at Koobi Fora, Kenya, in the National Museums of Kenya, and has participated in palaeoart explorations in Australia, India, Israel and Europe. Dr. Harrod has an MA in Counseling Psychology from Pacifica Graduate Institute and has a private practice in depth psychotherapy in Portland, Maine. He is a Cuyamungue Institute certified practitioner of shamanic trance ritual postures, and is director of the Center for Research on the Origins of Art and Religion, which sponsors the website Originsnet.org