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# EXPRESSION

QUARTERLY E-JOURNAL OF ATELIER IN COOPERATION WITH UISPP-CISENP INTERNATIONAL SCIENTIFIC COMMISSION  
ON THE INTELLECTUAL AND SPIRITUAL EXPRESSIONS OF NON-LITERATE PEOPLES

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## MYTHS AND MEMORIES

## EDITORIAL NOTES

### MYTHS AND MEMORIES STORIES TOLD BY PICTURES

Are myths metaphors of memories?

Whatever the case, ever since the first appearance of *Homo sapiens*, men tried to immortalize myths, to make sure to remember them, to make sure that they were not getting lost. They produced and left behind monuments as testimony of memories, which are not always explicit. Will scholars, in 40.000 years time, be able to reconstruct myths and memories, if faced with the relics of the Hindi Khajurau, of a Tibetan Buddhist temple or of the Vatican's Cappella Sistina?

Myths are the collective memory that defines cultural identities. They are fundamental elements of the world cultural heritage, especially so if they are the expression of forgotten cultures. The identity of the human species is the union of all the human identities. An important task of research is decoding such traces of identity and making their content accessible to culture.

What myths and what memories are revealed in early monuments?

What are the stories behind a painted cave in Dordogne, megalithic monuments in Ireland, the Gobleky Tepe pre-ceramic ceremonial center in Anatolia, the Paleolithic shrine at Har Karkom in the Negev desert, or the immense concentrations of rock art in the Drakensberg, South Africa, Serra da Capivara, Brazil or Kimberley, Australia? What stories are hidden behind a standing stone erected by some human being of a forgotten culture, or behind a group of markings on the wall of a rock-shelter? These monuments preserve myths and memories

of cultures and ages around the world. Each monument, each rock picture, each standing stone, has its stories. By decoding them, history is being produced out of prehistory.

Awakening curiosity and asking questions are no less important than answering questions and solving problems. Reality and imagination are ingredients of our intellect. They complete each other. Reality without imagination and imagination without reality would be void of interest. What is captured by our senses awakens a double process, that of acquiring a sense of the reality and that of applying our imagination to search for a meaning to such sense. Often discerning what is real and what is imaginary is a subjective matter. Images and signs convey just a part of the reality they refer to. The rest of such reality has to be decoded.

I was looking at a splendid exhibition of early Chinese paintings: landscapes with small human beings and gigantic sea waves, dreamy, misty mountains, flowers and leaves having shapes and colors more real than real ones... but the smell of the paintings was not that of the depicted flowers. The paintings were communicating the connection between the theme depicted and the hand and mind of the artist. They express the sense of aesthetic and the metaphoric concepts of a culture that have to be decoded.

Senses are means of access to reality both for us and for prehistoric man. Such reality may be subjective and is formed, deformed or transformed by our senses. They select reality, they make us decide what is real and what is unreal, what to remember and what to forget, they co-ordinate our feelings of pleasant or unpleasant, beauty or ugliness, appealing or not appealing. The real and the imaginary may vary from person to person and both, real

and imaginary, can be accepted or refused. In the human mind there may be peculiar overlapping between knowing and believing. Even when our logic tells us what is real and what is not, we may decide to believe as real what we know is not real. But, in any case, real or not real is a judgment of our senses and our mental functions are related to our senses.

Was the mind of early man much different from ours?

Decorated caves, megalithic monuments, early shrines, sites of rock art, are the containers of myths and memories, the testimony of the immense variety of beliefs and habits, the source for an as yet unwritten history of mankind: the existential history of people's real and imaginary, myths and memories: the history of what has defined our present.

The selection of the real from the imaginary varies from person to person. It varies in different tribes and, no doubt, the same is true for early or forgotten societies. The variety of the monuments left behind by past cultures, the variety in style and subject matter of prehistoric and tribal art, are the mirror of the immense alternatives of the human mind. They are the medium to unveil past adventures of human myths and memories. What do they tell us? What do they tell you? Colleagues and friends are welcome to share the results of their experience, research, discoveries or ideas and submit their papers. Even small contributions may enrich our knowledge and whoever has something to say is invited to share such knowledge.

E.A.

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#### PRESENTATION OF PAPERS IN THE 2018 CONGRESS OF UISPP

The papers included in this issue may be presented in the above congress. Authors should confirm their intent to attend the Congress.

## EDITORIAL NOTE

EXPRESSION magazine is published by Atelier Research Center in cooperation with UISPP-CI-SENP, the "International Scientific Commission on the Intellectual and Spiritual Expressions of Non-literate Peoples" of the UISPP, Union Internationale des Sciences Préhistoriques et Protohistoriques.

The goal of EXPRESSION is to promote knowledge and ideas concerning the intellectual and spiritual expressions of non-literate societies. It is an open forum in conceptual anthropology, welcoming contributions. Colleagues having something to say will find space in this e-magazine, which is reaching people of culture and academic institutions in over 70 countries. Papers should have precise goals, conceived for this kind of audience, and possibly well illustrated. Letters on current topics and short notes are welcome and may be included in the section "Discussion Forum." Authors are fully responsible for their ideas and for the information and illustrations they submit.

Publication in EXPRESSION magazine does not imply that the publishers agree with the exposed ideas. Papers are submitted to reviewers for their evaluation, but controversial ideas, if they make sense, are not censured. New ideas and concepts may awaken debates and criticism. Time will be their judge.

#### Front page:

*Rock painting of Tanzania: the record of many ages is superposed on the same surface. The oldest figure in the center of the photo represents a large bird, probably an ostrich (Early Hunters). On top of it a female figure, natural size (Early Gatherers). Overlapping the two previous phases two human figures and an animal (Late Hunters). At the bottom of the photo, the painting an animal and a schematic human figure make the last phase of this rock (Pastoral phase). The surface has been painted in different periods putting figures on top of previous ones. (Base of the photo ca. 1,25m). Mjughada, Tanzania. (Anati, 1980).*

# DISCUSSION FORUM

The Discussion Forum invites readers to be active in debates of worldwide interest in conceptual anthropology.

## **THE FUNCTION OF ART: MEMORIZATION, COMMUNICATION, IDENTIFICATION AND WHAT ELSE?**

Charles Mountford, a pioneer in native Australian studies, about 80 years ago, observed an Aboriginal young man from Arnhem Land while he was painting the image of a kangaroo in a rock shelter. He asked him why he was making the painting and the reply was something like: "How can you catch a prey if you do not paint it first?" The artist's motivation was that of empathic magic: owning the image granted to own the prey. The same motivation was attributed by scholars like the Abbé Henri Breuil for the paintings of Altamira and other Paleolithic caves of Spain and France. But could such motivation concern all the artistic expressions of early man?

Some images, like those of the Wangina cloud-spirits in the Kimberley, (Australia), the Moai of Rapa Nui, (Easter Island), or the Ancestral Spirits of the Plain Natives of Arizona (North America), are unlikely to have been made for the same reason. What was their function? In places like Valcamonica, Italy, a number of prehistoric rock engravings were produced for didactic purpose; they were used for teaching myths and traditional memories to prepare young candidates for initiation rites. Some painted surfaces of hunting-gathering populations in Tanzania look like depictions of literary accounts, and many rock art sites

around the world appear to be receptacles of various motivations, to enhance the sanctity of the site, to have didactic functions, to represent cult images, myths, or to commemorate events. Prehistoric art appears to have had as many different purposes as those of more recent written literature, religious and not, historical or imaginary, aimed at memorization, communication, magic, commemoration, recording, affirmation of cultural or ethnic entity and more.

The definition of such functions may vary from site to site and from one cultural background to another. Much has been written on the topic of motivation for art creation and in an old book of mine I listed 12 major theories and hypotheses expressed by researchers in the last hundred years (Anati, 2003: *Aux Origines de l'Art*, Paris, Fayard).

Direct information from the field, by people having ideas about the sites they are studying, is useful for reaching an overview on an important question: What was the function of art for those that made it? Why did they produce art?

Colleagues and friends having pertinent ideas are cordially invited to express them.

Do you know why the art you are interested in was produced?

We look forward to hearing from you.

E.A.



## HOW TO CONCEIVE YOUR PAPER

Please consider that the magazine reaches readers from various disciplines of the human and social sciences in over 70 countries on five continents and should be of interest to all of them. The publishing language is English, using the American spelling. We recommend authors to present papers pleasant to read, avoiding dry scientific reports or inventories. We do not publish descriptive reports and try to avoid theoretical general disquisitions. Articles should have a specific topic understandable from the title. The articles should be conceived for the audience to whom they are addressed.

The recommended average size of each paper is 1,500 to 3,000 words. Illustrations are welcome: please calibrate the resolution to 300 dpi with a base of 14 cm, providing pertinent, explanatory captions, including source where relevant. All the material presented, texts and illustrations, should be free from copyright and any other obligation, and possibly not yet published elsewhere. Authors are fully responsible for the text and illustrations they submit.

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# FORTHCOMING **DEBATES**

Readers are proposing themes for debate. Some of them may be considered in future issues:

1. **DOMINANT THEMES** in prehistoric and tribal iconography: human, animal, objects, structures or signs?
2. **WOMEN**: their role in prehistoric and tribal art.
3. **ART AND ECONOMY**: relations between economic conditions and artistic creativity.
4. **SOCIAL STRUCTURE AS REVEALED BY PREHISTORIC AND TRIBAL ART**: how depictions reveal social relations and social organization.
5. **NEW HORIZONS OF RESEARCH**: the role of Conceptual Anthropology.
6. **DEFINING THE DOMINANT THEME** of prehistoric and tribal art assemblages. Defining the conceptual motivations in the diversity of thematic typology.
7. **DEFINING PERSONAL IDENTITIES OF ARTISTS** in prehistoric and tribal art. Can art reveal the identity of the artist?
8. **ART AS A SOURCE OF PSYCHOANALYSIS OF PREHISTORIC COMMUNITIES**: Is the choice of the themes to be represented and the associative system or syntax of the depictions revealing conceptual and social trends?
9. **BURIAL CUSTOMS AND PRACTICES** as expression of beliefs in afterlife. How did they imagine the world of the dead?
10. **IMAGES OF WARFARE AND FIGHTING IN PREHISTORIC AND TRIBAL ART: THEIR COMMEMORATING ROLE AND THEIR HISTORICAL VALUE.**
11. **SEAFARING DEPICTIONS: RECORDING MYTHS OR EVENTS?**
12. **REALITY AND IMAGINATION IN MYTHIC TRADITIONS.**
13. **REGIONAL PATTERNS IN ARTISTIC CREATIONS.**
14. **THE FUNCTION OF ART: MEMORIZATION, COMMUNICATION, IDENTIFICATION.**

*Proposals for papers and suggestions on these and other issues are welcome. The Discussion Forum invites readers to be active in debates of worldwide interest in Conceptual Anthropology.*

# CONTENTS

<b>Anati Emmanuel (Italy)</b> Forgotten Myths and Memories: the Art of Early Gatherers from Tanzania to a World Pattern.....	8
<b>Berriet Margalit (France)</b> Memories: Grounds for Myth.....	21
<b>Gassowski Jerzy (Poland)</b> Early Medieval Slavs in their Myths and Archaeology.....	28
<b>Kempe Stephan F.J., Al-Malabeh Ahmad (Germany, Jordan)</b> Cult Sites and Art.....	33
<b>Meaden Terence (UK)</b> Paired Megaliths with Sculpted Images facing Sunset at the Summer and Winter Solstices and the Implication of Paradisiacal Belief .....	42
<b>Sachin Tiwary (India)</b> Ethno Rock Art: Beliefs, Rituals and Experiences, the Study of Ferocious Depictions inside Khoh in Light of the Beliefs of Kaimur Inhabitants.....	48
<b>Sognnes Kalle (Norway)</b> Rock Art at Bardal in Trøndelag, Norway: Myths and Memories?.....	56
<b>Vahanyan Gregori (Armenia)</b> New Perspective on the Theory of the 'Main Myth' .....	64
<b>Wolnei Ferreira Guimarães Santiago (Brazil)</b> The Neanderthal Construction in Bruniquel Cave, France: the Origin of Myths through a Discussion of Anthropological Structuralism.....	71

# FORGOTTEN MYTHS AND MEMORIES: THE ART OF EARLY GATHERERS FROM TANZANIA TO A WORLD PATTERN

**Emmanuel Anati (Italy)**

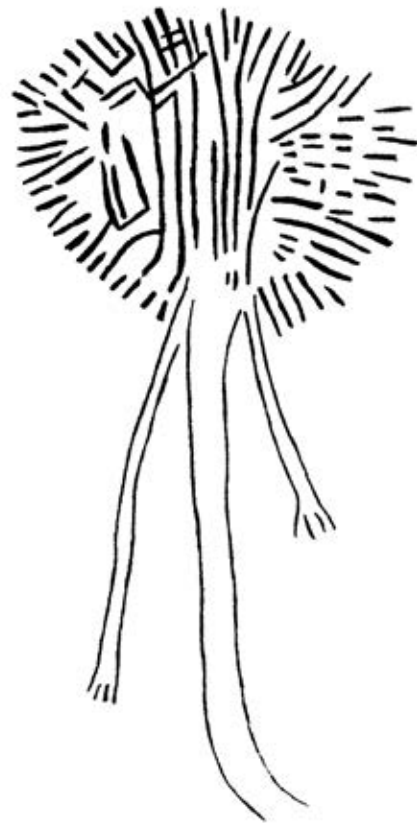
*Atelier Research Center for Conceptual Anthropology*

The definition of style in prehistoric art, as in all other periods of art history, is often neglected and is a fundamental element of analysis. Thanks to stylistic analysis, an unusual type of rock painting, made in a sort of surrealistic style, was identified in Tanzania. It was at first considered to be a late phase of the Early Hunter styles. Four major stylistic groups are currently recognized in the framework of world prehistoric art: Early Hunters (EH), Late Hunters (LH), Pastoralists (PA) and Farmers (FA). Large-sized images of big-game herbivores define a type of Early Hunter style: it is found in this region as elsewhere, and is attributed to hunters of big game who did not use the bow and arrow. The dominant figures are those of animals, mainly large herbivores that may have been their main source of food. Usually, this style has a simple syntactic structure of associations and sequences, and the figures depicted rarely describe scenes. On the other hand, Late Hunters, in various parts of the world, used the bow and arrow; the syntax of their art is primarily based on scenes, mostly of hunting. The dominant animal figures are elands and other middle size herbivores. The new style we describe here differs from both (Anati, 2015).

From the stratigraphic recording of rock paintings, the style detected belongs to the same general period as the Early Hunters but has different repertoires of images. During a UNESCO assignment in Tanzania, while analyzing the surfaces where this kind of figure appeared, it became clear that in fact they belong to a different style, which cannot be classified as Early Hunter or Late Hunter.

The paintings did not look like the usual art of Early Hunters at all: animal figures were depicted in a deformed way, in a style unlikely to reflect the hunter's realistic outlook and concern for animals, which can be found in other phases on the same rock surfaces. These paintings do not belong to the art of hunters. But the stratigraphic superimpositions indicated that they are likely to be earlier than the early phases of the Late Hunters, thus tentatively over 12,000 years old (Anati, 1986).

Another chronological hint is supplied by a different kind of superposition. Several of these paintings are covered by calcareous incrustations attributed to a humid period, likely to coincide with the phase of the maximal expansion of the central African lakes. These images were painted before that geological episode.



*Fig.1: Rock painting of an anthropomorphic tree of the Early Gatherers. Pahi, Tanzania.*



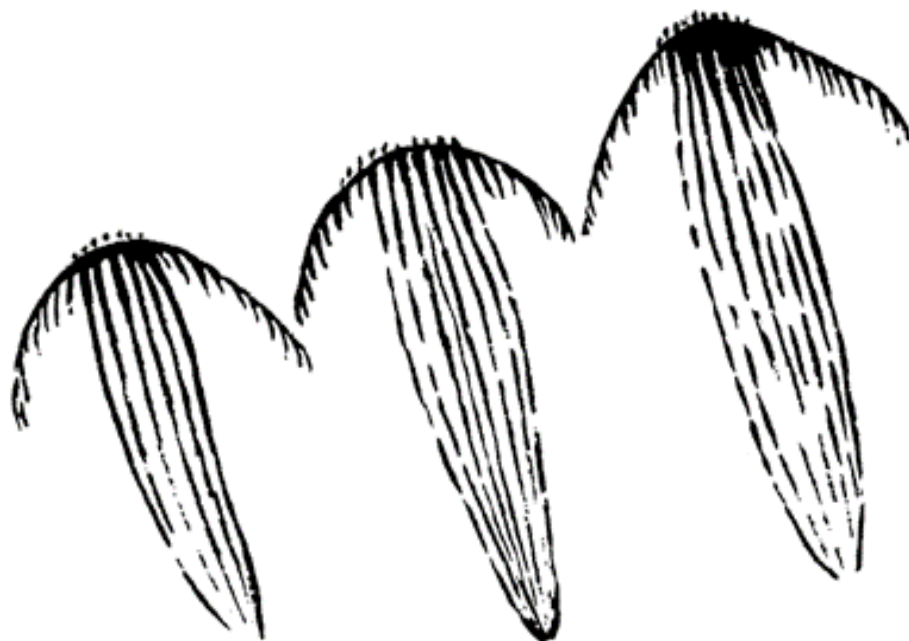


Fig.2: Rock painting of the Gatherers. It may represent plants, probably palms or big trunk shrub.

Chora, Kondoa, Tanzania.  
(M.Leakey, 1983, p.47)

Despite disagreement among scholars about the absolute dating of this episode, it is likely to have been either at the end of the Pleistocene or at the beginning of the Holocene (J.D. Clark and E.M. Van Zinderen Bakker Sr, 1962, 1964; J.A. Coetzee, 1967; D.A. Livingstone, 1969; M. Morrison, 1969).

This group of paintings, peculiar in both style and subject matter, is characterized by impressive groups of faceless anthropomorphic beings participating in performances or ritual activities. It includes a wide variety of scenes, some apparently mythological, and images likely to represent supernatural beings. There are no hunting scenes.

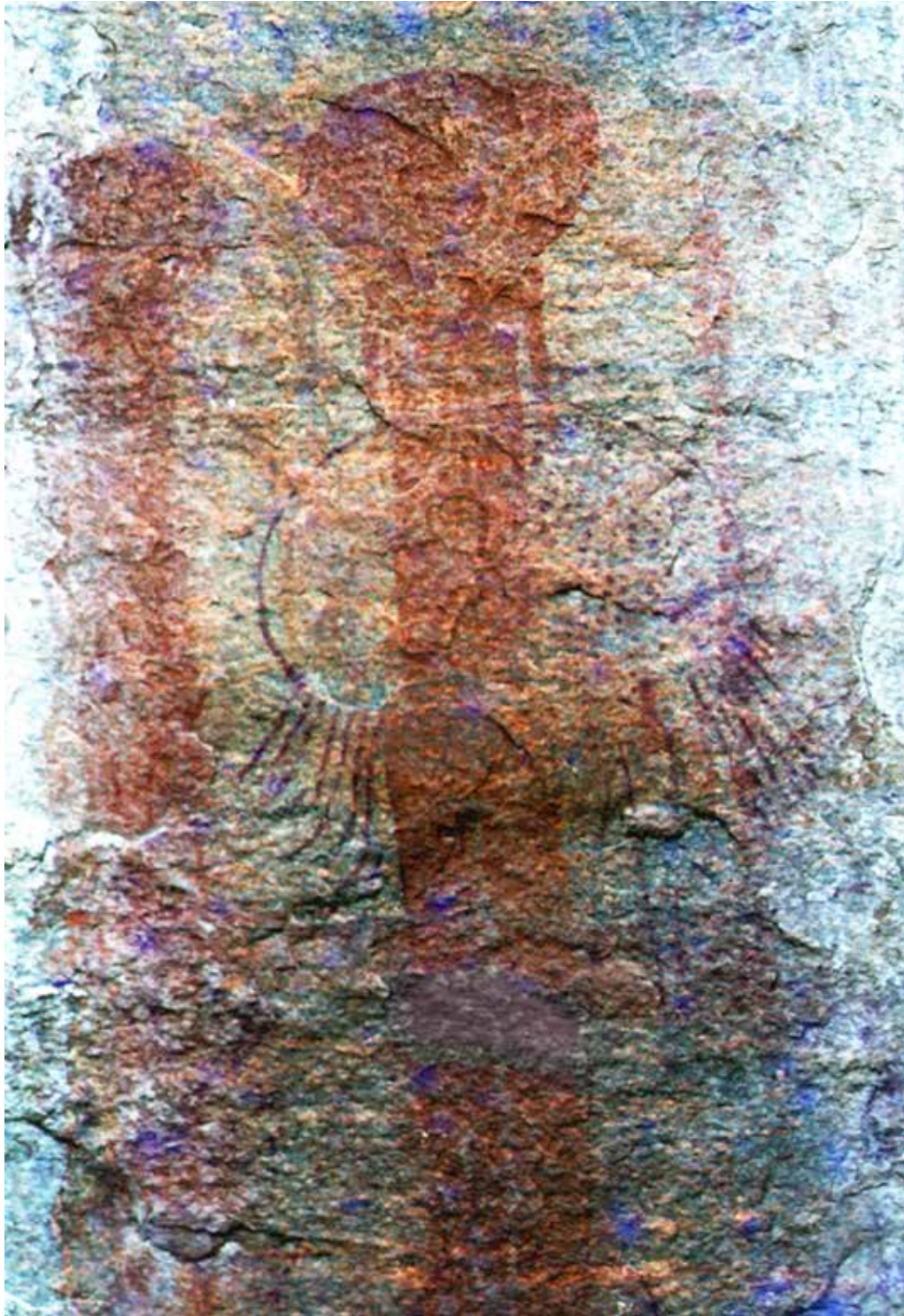
The dominant colors of these paintings are various shades of red and brown, from local earth and stones. Off-white was also used and two-toned figures are frequent. A darker color usually marks the outline, while the filling-in of the defined surface is painted in lighter shades. The outlines were made first. Thin, precise parallel lines often fill in the bodies of human and animal figures alike. Masterful hands used not just fingers to depict these images, but also fine thin brushes.

Some anthropomorphic images are likely to illustrate imaginary creatures, spirits, ghosts, or other supernatural beings. They are frequently

accompanied by symbols: balloon-like forms, net-like patterns, complex assemblages of lines, dots or zigzags, and wavy patterns. Such signs or ideograms may imply a sort of proto-writing with a high degree of abstraction and synthesis (Anati, *The Rock Art of Tanzania*, in press).

Facial details, like eyes, noses or mouths, are rarely depicted. Probably some sort of taboo forbade drawing details of the human face. Figures are essential, almost schematic. Another peculiarity of this style is the presence of vegetal depictions, like fruits and leaves, branches and bushes, which are frequent in this style and absent in other styles of Tanzanian rock art. Less care is given to animal figures than in the preceding and subsequent rock art styles. Several of the actions described, involving groups of anthropomorphic beings, could represent happenings, ritual assemblages or depictions of mythical events. Socialization appears as an important feature of the painters' culture.

This style seems to represent an idyllic age in a sort of 'Garden of Eden'. Social activities and mythological scenes are the main concern of the artists, rather than getting food, as in other phases of the rock art sequence. As mentioned, hunting scenes are absent. The presence of plants and fruits indicate that food



*Fig.3: Detail of a painted surface where at least three phases of the Gatherers style are overlapping each other. Cheke, Tanzania (Anati, 1980)*





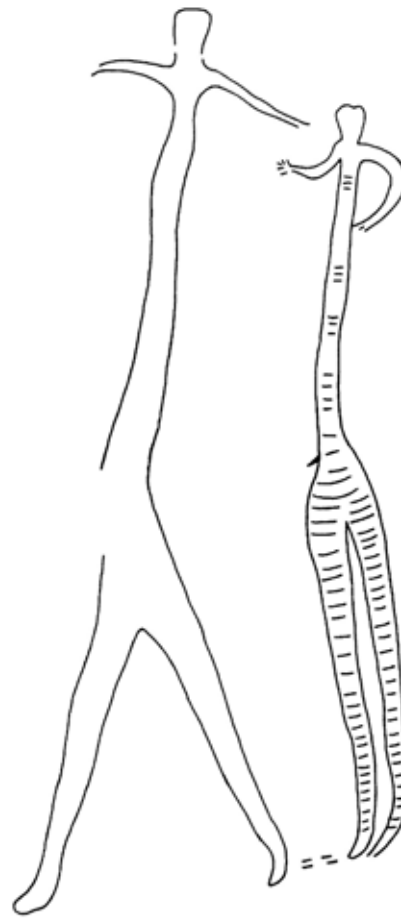
*Fig.4: Rock painting of Tanzania: the record of many ages is superposed on the same surface. The oldest figure in the center of the photo represents a large bird, probably an ostrich (Early Hunters). On top of it a female figure, natural size (Early Gatherers). Overlapping the two previous phases two human figures and an animal (Late Hunters). At the bottom of the photo, the painting an animal and a schematic human figure make the last phase of this rock (Pastoral phase). The surface has been painted in different periods putting figures on top of previous ones. (Base of the photo ca. 1,25m). Mjughada, Tanzania. (Anati, 1980).*

gathering, rather than hunting, was a major economic resource. Their diet might have been predominantly vegetarian.

The deformed images and the presence of surrealistic scenes indicate that such paintings were made in a state of alteration of senses, likely produced by the use of hallucinogenic substances. The making of paintings has taken place in a state of stupor or trance. We can figure out the conceptual setting. But what inspired and pushed the painters to produce these images, while facing the rock surface with brushes in their hands?

In several of the caves and rock shelters of the Tanzanian highlands, new images were depicted again and again on the same rock surfaces by the painters of this category, leaving many levels of painting one on top of the other. Other apparently similar rock surfaces nearby have never been painted. The selected location must have been important, since many phases of their paintings are concentrated on the same surfaces. Thanks to this habit, a series of subsequent sub-styles could be identified. Apparently, these people did not think that the previous paintings were worth being preserved. The act of painting was relevant, whether as a magic act or something else; its purpose was not embellishing rock surfaces. If the place on the rock surface responded to the location and typology requested, it was reused, disregarding previous paintings. How did the mental dynamics work? To whom were these paintings addressed? What did the painter expect from his/her painting?

As the art of this period is stratigraphically located between the Early Hunters and the Late Hunters, it may constitute an intrusive phenomenon. However, it is not clear what kind of intrusion it reflects: a foreign people may have reached the area at that time, or new natural resources and climatic changes may have created new living conditions, or people simply changed their food habits. In any case,



*Fig.5: Two anthropomorphic figures linked by footprints. Early Gatherers. Cheke, Tanzania. (M. Leakey, 1983, p.88)*

what would make people change their food habits? Presumably, something went wrong with their previous ones.

This category illustrates a period of human history, several millennia long, which is distinct from both Early Hunter and Late Hunter episodes. It appears to be a new and intriguing element in the cultural sequence of eastern Africa.

The definition of the style of Food Gatherers in Tanzania opened up a new chapter in rock art research, and led to the detection of other stylistic assemblages with similar features around the world. It became possible to identify the art styles of people who relied primarily on food gathering, who probably followed a diet mainly based on vegetal food. It is different

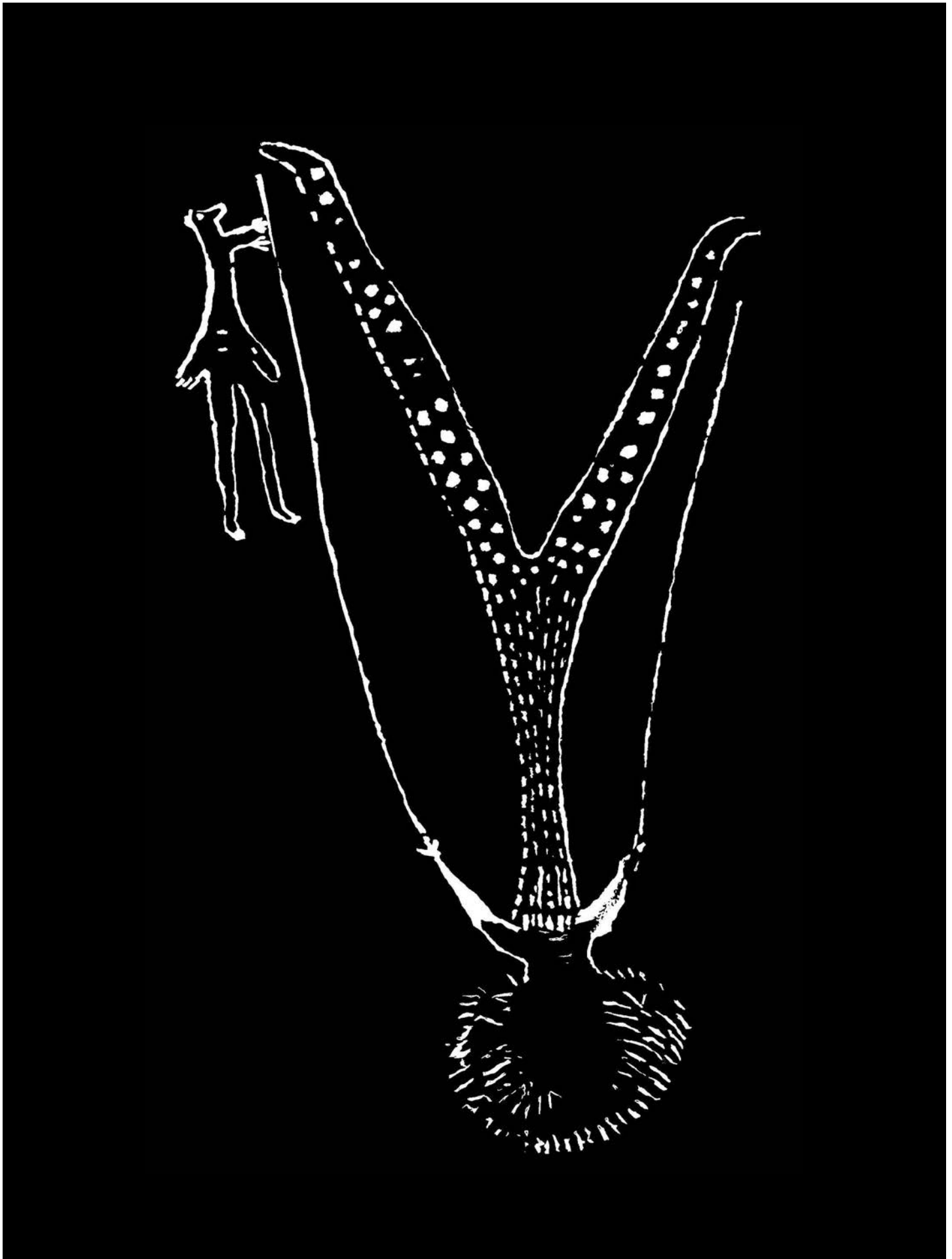




Fig.6 (page 13): Kisesse, Tanzania. Painting of Gatherers. A small anthropomorphic figure with an animal head is near another big anthropomorphic being covered by dots and with a tree-like hairstyle. This figure is upside-down; its arms are extended by lines linking arms to feet. It may suggest the meeting between a human being and a spirit from the world of death. The head has no face, which probably means that it is a spirit. The small being holds one of the long lines in his hands.

from the art of hunting populations, focused on the depiction of animals, likely to reflect a prevailing carnivore diet.

The first possible parallel to this peculiar Tanzanian style concerned another group of rock paintings located in Africa, the so-called style of "The Round Heads" from the plateau of Tassili'n'Ajjer in central Sahara (H. Lhote, 1958; J.D. Lajoux, 1962). Further research permitted the identification of other rock art assemblages from all over the world, characterized by similar features, that could be attributed to Food Gatherers: they were found in Kimberley (Australia), in Texas, California and Mexico (Central America) and possibly also in Spain (Europe) and elsewhere. All over, Food Gatherers had the habit of depicting vegetal themes and painted deformed human and animal images, whose shapes are probably caused by the use of hallucinogens. The gathering of vegetarian food resources probably led to the discovery of peculiar effects produced by some of the collected plants.

An interesting query arises about the Food Gatherers' peculiar visual representation. Art reflects conceptual attitudes and imagination, and diet appears to be conditioning the content of such expressions of the human mind. Is the type of food consumed conditioning myths and memories? Is it conditioning the way of thinking? Is there a conceptual connection between mind and stomach? Examples are showing various aspects and concepts of the rock art of Food Gatherers from different corners of the world. The myths and memories they represented, their range of themes and typologies, differ from those of Hunters, Pastoralists and Farmers: they differ also from the rock art of urban societies, the so-called *murales*, on the concrete walls of towns. Different societies unveil their identity in their



Fig.7: Kundusi, near Kondo, Tanzania. Painting of the Gatherers. Two anthropomorphic figures have ideograms instead of their heads, which indicates their identity. One is a group of lines projected to the outside, the other one is a group of dots.

visual art and reveal their cultural background, concern and also food habits. In the frame of prehistoric art, a new typological trend has been recognized. The previous four major stylistic categories have become five: Early Hunters (EH), Food Gatherers (FG), Late Hunters (LH),

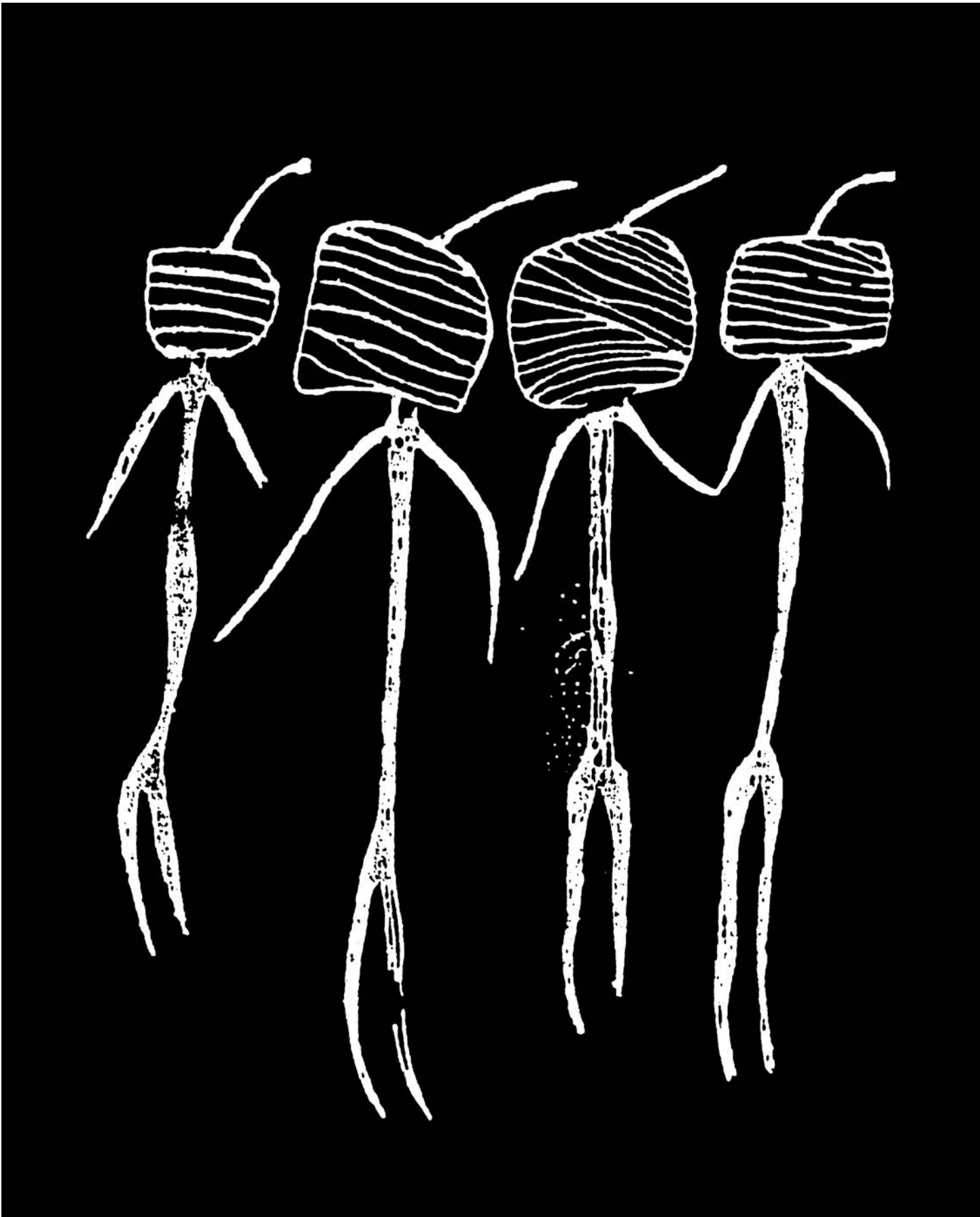




Fig.9: Pahi, Tanzania. Rock painting of Gatherers. An anthropomorphic being with a round head made of dots, is producing words or sounds. (Source: M. Leakey, 1983; WARA Archives W00213).

Pastoralists (PA) and Farmers (FA). Early Hunters may have performed food gathering as well, but had a predominantly hunting economy and carnivore diet, while Food Gatherers had a predominantly gathering economy and a prevailing vegetarian diet. Apart from a few exceptions, the chronological succession of these categories tends to be the same in most places where various categories are present (Anati, 2015). A wealth of imaginative speculation may be awakened by this beautiful rock art style, which illustrates a population who lived in small caves and rock shelters, relying primarily on a vegetarian diet, in a generous and exuberant forest where *'out of the ground, every tree that is pleasant to the sight, and good for food'* was growing edible resources: a strange reminder of the biblical myth of the Garden of Eden. But other people inhabited this region before Adam and Eve. It was a different world, where human bands had to confront with big animals, much bigger than them, that they immortalized by painting their images – often larger than natural size – on the walls of their sanctuary caves. And it was a different world also after this episode, when groups of human beings were hunting the eland or the deer with bow and arrow, and depicted hunting scenes where the hunter faces his prey in small, dynamic scenes. The same happened in other regions of the world where the rock art of Food Gatherers has been identified. Some artists preceded them on the same rocks and some came later and left their paintings superimposed on top of the previous ones. All of them represented their own elements of identity, each different from the others, each inspired by the oral heritage of traditions and beliefs, and each memorized and depicted vanished myths and memories.

Fig.8 (page 15): Kundusi, Kondoa, Tanzania. Rock paintings of the Gatherers. Four figures with hidden faces, probably masks: the line on their heads may indicate their status. They can be dancers or performers. (From E. Anati, *"Il Museo Immaginario della Preistoria"*, 1995, p. 199, fig. 159)



Fig. 10 a/b: Tassili, Algeria. Early Gatherers. Rock art produced in a state of hallucination. General view and detail of a painting illustrating the effect of hallucinogenic mushroom. Series of dots lead from the mushroom to the head. Horizon of the 'Round Heads' style ca. 5,000 BC. Source: G. Samorini, 1989, fig. 9 (WARA Archive W00209 - W00138).

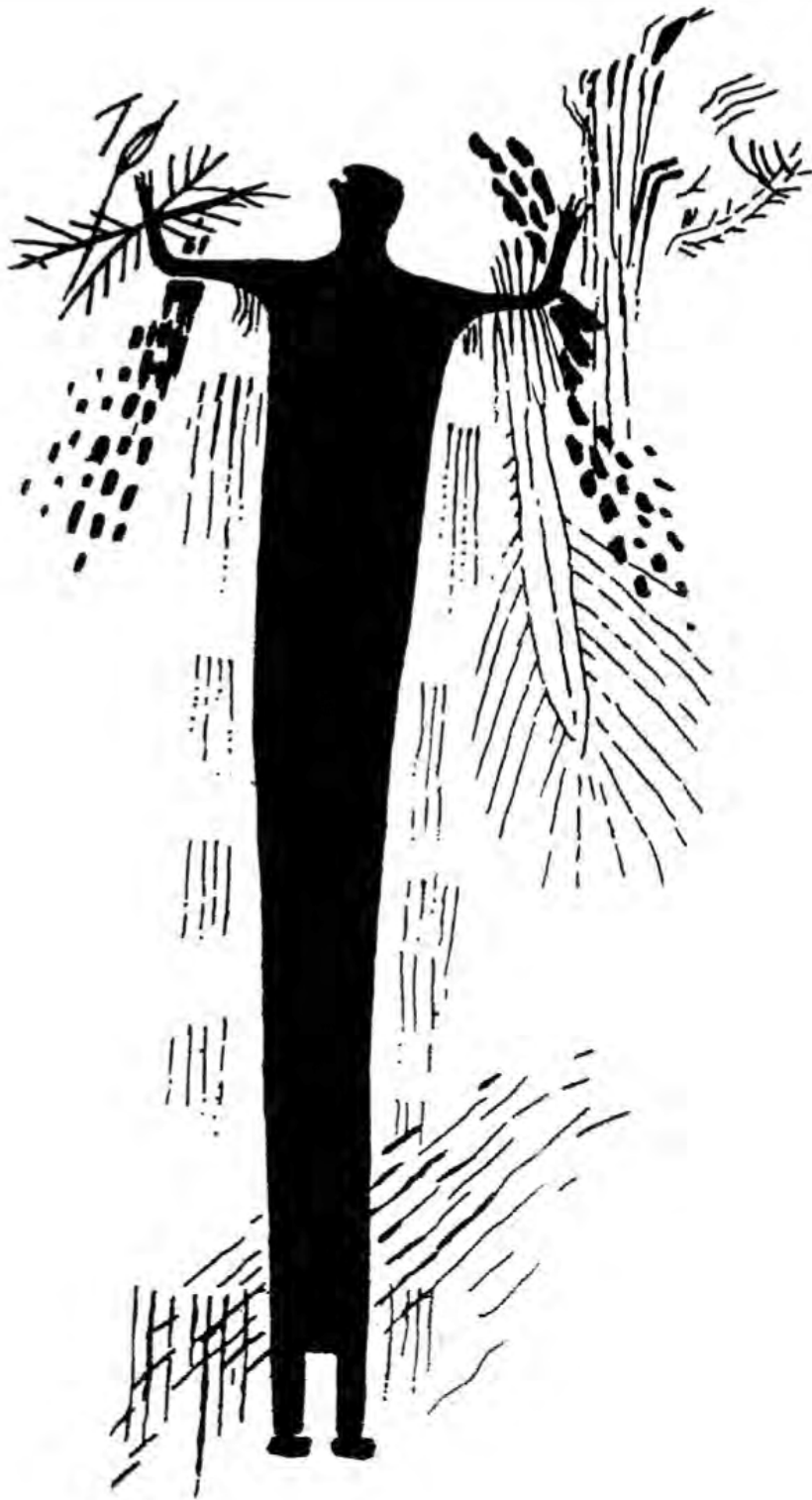


Fig.11: Panther Cave, Seminole Canyon, Texas, USA. Rock painting of Food Gatherers. The anthropomorphic figure over 2 m high, has a mask or a zoomorphic face and is likely to represent a spirit, or its totemic identity. The arms are branches, which produce fruits and emanate energy rays. In the art of Gatherers, ideograms, pictograms and psychograms often appear in a syncretic composition. Source: tracing by Wellman, in E. Anati, 1995 (WARA Archive W07173).





fig.12: Runanza, Domboshawa, Zimbabwe. Anthropomorphized roots or tubers in the art of a late phase of Food Gatherers. Source: drawn after a photograph by E. Goodall, 1959, p. 79 (WARA Archive W00266).

Fig.13: Nabarlek, Arnhem Land, Australia. Rock paintings. Depiction of vegetalia by Food Gatherers. Anthropomorphized yams, with limbs and heads composed of yam tubers.

The painting is in dark red while the natural color of the yam is yellowish-brown. The color is used for its symbolic meaning, not for reproducing 'naturalistically' the anthropomorphic yam. Source: D. Lewis, 1988, p. 290 (WARA Archive W00215).



Fig.14: Kimberley, Australia. Early Gatherers. Rock painting of Early Gatherers defined as Bradshaw style. The figure is about 60 cm high and is painted in a shade which appears today as brown-violet. The anthropomorphic image wears a peculiar hat, a skirt likely to be made of tapa bark cloth or leather, and bracelets. He/ she is holding boomerangs. Yam or kinds of tuber are growing from the body. A rather complex conceptuality appears to be expressed in this image, which was probably produced with a view of its content. Fermentation of certain kinds of yam has hallucinogen effects. Calcareous Incrustations upon figures of this style are dated by C-14 to before 18,000 BP. Source: tracing from photo of G. L. Walsh, 1994, pl. 53, in E. Anati, 2003 p. 422 (WARA Archive W001139).



Fig.15: Shaib Samma, Central Arabia. Dancing scene of the 'Oval Head People'. Men, a woman and a child dance together. The first figure to the right is holding a bush which may be some sort of narcotic plant, and could be the reason for the feast. Source: cf. photo by J. Ryckmans, 1952; in E. Anati, 1968, vol. I, p. 40, fig. 18 (WARA Archive W00096).

Styles and subject matter varied from one society to another revealing, among other things, the diet habits of the artists. The paintings were left on the rocks as records of moments of the human conceptual experiences. They are the testimony of chapters of intellectual ventures and adventure to be brought back to the collective memory of culture.

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# MEMORIES: GROUNDS FOR MYTH

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## INTRODUCTION

The intellectual and spiritual expressions of human beings are evidence of their attempts to understand the forces of nature and life. These expressions reflect man's intuitive ways of observing the perceptible and unintelligible phenomena of existence, while also expressing their inner self by using his/her sensitive and intuitive process of observing, perceiving, memorizing and questioning, while giving birth to different forms of communication and tales.

Expressions of spiritual ideas are found also in the creation of myths, offering the hypothesis that reinvigorated the development of other fields of research, designing new practices and tools for investigations, which throughout history gave birth also to further notions and philosophies about the ethics and aesthetics of life.

'Mythic conceptions and interpretations do not add new elements to an empiric existence, but the premier "experience" is gradually penetrated through the figures of myths, as saturated of the atmosphere. Man does not live with things because they exist. He lives with the mythical figures, not as an appropriation of reality, nor does he become open to the real. He lets the world and himself melt together in his imaginary space, and by so doing, letting not only himself be in contact with his observations and conceptions, but he also, in

parallel, attributes interpretations and sense to them.' (Ernest Cassirer)<sup>1</sup>

My modest supposition is that the expressions of humankind are a universal consequence of humanity's constant observation and memorizing of the world, an intuitive and sensitive functioning of the brain springing from a need to understand and comprehend life and reality, to communicate ideas, to leave traces, to build individual identities and collective cultures, and to progress. The birth of what we call human culture includes, apart from perception and memorization, the abilities to create and to innovate both technology and art.

'In pre-modern societies mystic stories constituted a socially shared 'reservoir of meanings and structures of thoughts' (Paul Connerton)<sup>2</sup> from which people could draw to create new meanings that resembled, echoed, cohered with older ones. The symbolic content of Myth is not exhausted in any single formal arrangement, but rather offers many potential arrangements, each of which count solutions in the system'. (James Paul Gee)<sup>3</sup>

The sense of the sacred and the creation of myth seem to be unique skills of the human being, which are able to found societies and later become tools of their survival.

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1. Ernest Cassirer, *Language and Myth*, Yale University Press, New Haven, CT, 1953, p. 18.

2. Paul CONNERTON, *how society remember*, Publisher: Cambridge University Press; Online publication date: August 2010; Print publication year: 1989; Online ISBN: 9780511628061 1989, pp 56-57 ; CONNERTON, P. (1989). *How Societies Remember* (Themes in the Social Sciences). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511628061

3. James Paul GEE / *MEMORY AND MYTH A PERSPECTIVE ON NARRATIVE* / Department Linguistics University of South CL pp. 18-19 in a *TELLING HISTORY IN DEVELOPING NARRATIVE STRUCTURE* edited by Allyssa McCABE, Harvard University; Carole PETERSON, Memorial University L.E.A PUBLISHERS , ISBN 0-8058-0475-7 – ISBN 0-8058-0475-5

## Hypothesis

Behind the patrimonies of humanity there are human beings from known or forgotten civilizations. Their individual and collective myths or testimonials are the result of their abilities of preservation and of their process of observation, perception and comprehension, shielded in their reminiscences and recollections.

By attempting to understand the essence of human beings and nature, we can recognize how legends and traditions are creative compositions followed by individual and collective observations, interpretations and memorization, while producing suppositions and theories, beliefs and myths that are constantly in motion.

‘Is the duration forged par souvenir or by the memory? We know that we are the only ones who produce our own souvenirs; but there is a memory older than souvenirs, which is related to languages, music, sounds, noises, silence: a memory that a gesture, a word, a cry, a feeling of pain or joy, an image, an event can wake up. The memory of all times, that lies dormant in us and which is the core of creation’. (Edmond Jabès)<sup>4</sup>

This is a universal aptitude of humankind: the ability to inquire, to learn and to attempt to give answers. The arts reflect this rich journey of humanity by offering endless forms of imagery, sounds, metaphors, myths, actions, hypotheses, continuously contributing in the creation of new and innovative means to solve inquiries and to progress.

In *The Origins of the World’s Mythologies*, Michael Witzel, Professor of Sanskrit at Harvard University, working on comparative mythology, gives evidence not only of the

origin, but also of the common structure, of the fundamental narrations from all of the grand myths of humanity, starting from the Palaeolithic period: ‘I had to compare the Greek theology of Hesiod, the Icelandic Eddo, and the Popol-Vuh Mayan, the mythologies of ancient Egypt, Mesopotamia, Japan and India. Once you do that comparison, you realize how these mythologies are similar, how they share a common story line, a chain of fifteen elements found almost always in the same order since the creation of the universe... a part of our mental reflexes, our means of representing the universe.’ (Michael Witzel)<sup>5</sup>

The most fantastic gift bestowed upon humanity is its ability to transform tangible perceptions and memories into abstract or figurative messages. Mythology is a form of communication; it is our way to understand our own humanity within nature by offering suppositions, explanations, justifications, ethics or enlightenments to our limited perceptions of the world’s phenomena.

Human beings use their five senses as their intuition to produce impressions of places, of nature, of the body, of objects. These are integral parts of the process of accumulating memories and producing associations.

‘We take it for granted that we see the world as it actually is, but in fact, we do not. Our perception of the world is the brain’s best guess at what is actually happening, based on the information it receives through the senses. Optical illusions clearly demonstrate that the brain does not always interpret sensory information correctly, by producing a discrepancy between what we see and how we perceive.’ (Min-Suk Kang)<sup>6</sup>

5. Michael WITZEL. Professor of Sanskrit at Harvard University, 14 March, interview with Stephan Foucart, *Cahier du monde*, 21510, 15 March 2014.

6. Min-Suk Kang, et al (2011) *Visual working memory contaminates perception*. *Psychonomic Bulletin Review*. *Psychon Bull Rev.* 2011 Oct; 18(5):860-9. doi: 10.3758/s13423-011-0126-5. in <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3371032/>

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4. Edmond Jabès : *Colloque : le langage dans la psychanalyse*, Aix en Provence 1983, Edition, Belle Lettres, coll: Confluents psychanalytiques, 1984 (ISBN 2-251-33426-2)



The senses are the sources of perception, but our perceptions are always modified and conditioned by our state of mind, our realities mingled with imagination.

'We are so accustomed to considering our identity in a fixed and stable way that we forget that we are very different from a quiet state to an emotional state ... I define the 'second' state as a state in which emotions transform. The poetic state is one in which we can feel in-love, admiring, in communion, amazed, transported, transfigured, inspired. This state is at the limit of the mystical state...'. (Edgar Morin)<sup>7</sup>

## Arguments

Memories refer to both the ability of an individual or of a human group to remember events and to remember oneself within different situations. Pluralities of events and memories form the origin of myths, as of the stories behind the early monuments or painted caves, all portraying the existence of individuals and societies. These expressions are all concerned with the marvels of life and expose the creative complexity of the human mind: generating answers, proposing ideas, composing shared myths and legends that are often translated throughout history into rites, practices or even foundations for further scientific actualities.

'All the cooperation networks, from the cities of ancient Mesopotamia to the Qin and Roman empires, were "imagined orders." The social norms that sustained them were based neither on ingrained instincts nor on personal acquaintances, but on belief in shared myths.' (Yuval Noah Harari)<sup>8</sup>

7. *Sur l'esthétique*, Edgar MORIN, p. 20-21, Robert Laffont, Paris, 2016, ISBN : 2-221-19626-0 edition de la maison des science de l'homme , Paris, 2016, ISBN 978-2-7351-2340-7

8. Yuval Noah Harari, *Sapiens, a brief history of humankind*, vintage books London, ISBN 9780099590088, p. 117-118 ( stone stela -code Hammurabi icono)

Reality and imagination are mingled elements of perception. Imagination that springs out of the act of memorization is a form of creativity, leading humans in their narrative inquiry of reality.

'Narrative is a word of ancient origins and recent popularity. It derives from the Latin word, *gnarus*, which means "knowing", a telling history in developing narrative structure.' (Allyssa McCabe)<sup>9</sup>

Subjective certainties will eventually be formed, deformed or transformed by facts; they are central to our myths and behavior, where questions of ethics and esthetics always join together in the journey of civilization, preoccupied with enquiries. They are the foundations of cultural diversities and traditions and the expression of our pluralism. They echo the functioning of memory and imagination at once.

'Energy and space came into being in what is known as the big bang. The story of these fundamental features of our universe is called physics... the story of atoms, molecules and their interactions is called chemistry ... the story of organism is called biology. About 7000 years ago, organisms belonging to the species *Homo-sapiens* started to form even more elaborate structures called Cultures. The subsequent development of these human cultures is called history.' (Yuval Noah Harari)<sup>10</sup>

The study of the essence of life, based first on intuitive assumptions and associations, is the composition of all pieces of evidence that have managed to last tens of thousands of years. Myths and, later, religions are forms of intellectual spiritualism, an organization of

9. Allyssa McCABE, Harvard University carole PETERSON, Memorial University L.E.A PUBLISHERS P.9/ ISBN 0-8058-0475-7 – ISBN 0-8058-0475-5

10. Yuval Noah Harari, *Sapiens, a brief history of humankind*, vintage books London, ISBN 9780099590088, p. 117-118 ( stone stela -code Hammurabi icono)



people's sensitive inner worlds. They logically argue points of view and compose roles and answers.

Humanity is constantly aiming for the edifice of structured civilizations, living in ethical circumstances and reflecting on universal realities, on our limits, on the cycle of nature and life.

Myths offer an imaginative and creative organization of concepts that are significant to the understanding of values and functioning of peoples, later advancing into common laws and into the building of collective organizations and factual knowledge, while constantly remaining aware of the enigmatic questions of the behaviour of men as of the universe.

'At the same time of the appearance of argumentative functioning on the development of humans' aptitudes for reason and the practice of logic, without any doubt, we talk here about a cognitive capacity of man that plays an essential role in the way humans could master and understand their environment.' (Jean-Louis Dessalles)<sup>11</sup>

The marks, lines and symbols found on rocks, in hidden caves, or in mountains and deserts are attempts to communicate, just like the myths: they are the terminology of the endless endeavor of human interrogation of the mysteries of being and time.

Facts, mixed with creative expressions, reflect men's instinctive ways of grasping unintelligible phenomena, articulating their inner selves in a huge variety of interpretative forms.

'Reality and imagination are ingredients of our intellect. They complete each other. Reality without imagination and imagination without reality would be void of interest. What is captured by our senses awakens a double process, that of acquiring a sense of the reality and that of applying our imagination to search

11. Jean-Louis DESSALLES, *Les origines de la culture*, Le Pom-mier/Cité des sciences et de l'industrie, 2006, p. 109.

for a meaning to such sense. Often discerning what is real and what is imagination is a subjective matter.' (Emmanuel Anati)<sup>12</sup>

Sacred mythological places are often considered to be so because of their forms, atmosphere, natural phenomena, objects and actions performed by humans around them. They become the subject of myths, describing notions in accordance with that view and perception, offering logical narrations between observations and inquiries of the universe, attributing mystic and divine sense to "reality". Mountains are massive shapes, pointing to the untouchable spaces of the universe. There, many phenomena appear – storms, rain, hail. The mountains are in the form of a triangle, a pyramid, and on their summits it is possible to be 'in contact' with the forces controlling nature. The mountains become sacred and thus they are the subjects of many legends.

For example Har Karkom, a mountain in the Sinai Peninsula: possibly it is the actual location of the biblical Mount Sinai, considered a holy site by the three Abrahamic religions, mentioned many times in the Book of Exodus and in the Quran. According to the Jewish, Christian and Islamic traditions, Mount Sinai was the place where Moses received the Ten Commandments. Prof. Emmanuel Anati discovered that it was a key Palaeolithic cult center, surrounded with shrines, stone pillars and over 40,000 rock engravings.<sup>13</sup>

Mount Olympus is the highest mountain in Greece; it was notable in Greek mythology as the home of the Greek Gods and the Twelve Olympians of the Hellenistic period.

Mount Kailash or Gang Rinpoche is a peak in the Kailash (Himalaya) and is believed to be

12. Prof. Emmanuel Anati, President, Atelier Research Center for Conceptual Anthropology, Director, CISPE, Centro Internazionale di Studi Preistorici ed Etnologici

13. Emmanuel ANATI, *The Riddle of Mount Sinai : Archaeological Discoveries at Har Karkom* (2001)

the abode of the Hindu deity Shiva. According to Hinduism, Shiva is the god of gods and he resides at the summit of the mountain called Kailāsa, where he is believed to sit in a state of perpetual meditation. The Buddhists believe that Mount Kailash is the home of Buddha. (Charles Allen)<sup>14</sup>

Mount Ida, also known as the Mountain of the Goddess, refers to two mountains, one located on the Greek island of Crete and the other in Turkey. Mount Athos (Greece) is referred to as the Holy Mountain, connected with both religion and classical mythology. According to Christian faith, after the Ascension of the Lord, the Virgin Mary landed on the island and came upon a pagan temple. (Graham Speake)<sup>15</sup>

The sex of a woman is a delta or a Deleth, another triangular form, pointing down, towards the earth, where it merges with the life of flowers, plants, grains and trees. The word Delet in Hebrew means “door”. The sex of a woman is a sign of the delta, the door to life. Daleth is the fourth letter of the Hebrew alphabet, derived from the Phoenician alphabet, and is equivalent to the letter delta (Δ), the fourth letter in the Greek (and Latin) alphabet. (Laurent Pflaughaut)<sup>16</sup>

I have had several exchanges with the neuroscientist Luc Foubert regarding the processes of observation and the conceptualization of intellectual messages:

‘Nowadays, most of the studies in neuroscience stand on this background acceptance that the development of this particular cerebral structure

(neo-cortex) responsible for perception, consciousness and cultural assimilation is based on the repeated presentation of “shapes” that our mind has been imprinted and trained during early life through (ontogenetic) processes of learning and plasticity, leading to a multi-sensory mapping of a world we re-create... in individual development, these phylogenetic or ontogenetic combinations are subject to shaded grades of plasticity of the sensory motor loops, from the lower levels (reflexes) to the higher levels (reflection) of our inner world’s re-creation: a dynamic of representation and recombination of prototypical forms and of organized tales and ideas.’ (Luc Foubert)<sup>17</sup>

Myths reflect how the mind transforms facts and impressions into linear knowledge. The archaeologist Francesco d’Errico reinforces my understanding that the most fantastic gift bestowed upon humanity is the ability to transform intuition into messages: ‘...about the use of symbolic thinking, use of colors and forms, scientists go back as far as 250,000 years, in Europe or in Africa, their use was perhaps practical as symbolic ... we witness double lecture of reality, where things are attributed sense and a name, and the immaterial become transmittable.’ (Francesco D’Errico)<sup>18</sup>

## CONCLUSION

As an artist, I have started a chronological and cross-cultural comparative study of traditional and contemporary expressions, from graphs

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14. Allen, CHARLES. (1982). *A Mountain in Tibet*, pp. 21–22. André Deutsch. Reprint: 1991. Futura Publications, London. ISBN 0-7088-2411-0

15. Graham SPEAKE, *Mount Athos: Renewal in Paradise*, New Haven and London: Yale University Press, 2002. 294 pp. ISBN 0-300-09353-5

16. Laurent PFLUGHAUT, *Letter by letter by Letter: An Alphabetical Miscellany*, Princeton Architectural Press, NYC, 2007, ISBN 978-1-56898-737-8, p.60

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17. Luc FOUBERT, PhD, *The Introspective Mind*, CNRS-UPR 3293, Unit for Neuroscience, Information and Complexity (<http://www.unic.cnrs-gif.fr>). His current research focuses on the structures and dynamics of the primary sensory cortices dealing with questions relative to the binding of the perceptive unity and multi-sensory integration.

18. Francesco D’Errico, archaeologist /Science & Vie, 1159, April 2014, p.51, a symbolic thinking, University of Bordeaux.

through tales, myths, sounds or body-art, trying to understand what animates our inspiration. I sought to recognize in signs, symbols, objects, forms, myths and tales the universal bricks of communication and the themes, which might differ, but at the same time they are also similar, identical, and thus universal: all preoccupied with matters of our existence. These thoughts have preoccupied mankind all over the world. I believe that they have nurtured patrimonies. Mythology is a part of human imagination and creativity: it is the attempt to seize reality while grabbing the world through feelings, impressions, memorized images, smells and sounds; at the same time, it highlights the limits of human knowledge and physical perception of life and of the universe.

'Mythic conception and interpretation do not add new elements to an empiric existence, but the premier 'experience' is gradually penetrated through the figures of myths, as saturated of the atmosphere. Man does not live with things because they exist. He lives with the mythical figures, not as an appropriation of reality.... He lets the world and himself melt together in his imaginary space, and by so doing, letting not only himself be in contact with his observations and conceptions, but he also, in parallel, attributes interpretations and sense to them.' (Ernest Cassirer)<sup>19</sup>

From the simple need to understand themselves while controlling the natural life, humans have accumulated data, have assembled and transferred knowledge, and have formed communication tools and notions about identity, ethics, aesthetics and organized cultures.

Humanity used physical phenomena as its resources for learning and interconnecting: highlands, deserts, night and day, animals,

19. Ernest Cassirer, *Language and Myth*, Yale University Press, New Haven, CT, 1953, p. 18.

flowers, trees, colors, raging skies, light and winds, birth and death, dreams and memories, etc. became the bricks of all forms of communication.

Humans attempted to explain their behavior in the world through myths. Goddesses and gods mirrored the positive and negative miracles and wonders of people and of the world; they incarnated stories of life and creation, offered explanations for the human behavior, as of the unpredictable behavior of nature. Humans rationalize, analyze, innovate, create, construct and destroy.

Humanity accumulated prototypical references and forms to cultivate complex ideas, and created ethical and aesthetical guides. Myths and philosophies are the expression of those emotions, thoughts, debates and interrogations. Humanity developed its narrations by the re-presentation and re-combination of accumulated memories and impressions, influenced by critical and cognitive thinking.

Jean-Louis Dessalles, professor at the Ecole Nationale Supérieure des Telecommunications, emphasizes these peculiar human abilities, illustrating the universality of communication, apparent in all human societies:

'The first he titles 'events functioning,' this consists of accumulating information, images, and signals that can cogenerate all facts that seem interesting. The second is 'argumental functioning,' which consists of the ability to discuss, judge, and construct specific ideas as 'True' or 'Coherent' of the accumulated information.'<sup>20</sup>

In *The Origins Of The World's Mythologies*, Michael Witzel indeed offers evidence for the origins of myths and of the mutual, fundamental narrations of all grand myths of humanity.

20. Jean-Louis Dessalles, *Les origines de la culture*, Le Pom-  
mier/Cité des sciences et de l'industrie, 2006, p. 107.

All man-made works are the result of human emotions, preserved by memories, sustained with rational thinking and investigation. The Myths and – later – religions are the means of organizing people's emotions and thinking, while Humanity is repetitively reflecting on the world. The comparative method allows historians and scientists to synthesize cross-cultural, religious and mythological records. Working across and between times and cultures, stories, traditions, habits, ceremonies and arts it is possible to find allegories of nature and of men's process of memories, imagination and interrogations. They portray mindful life forces, originated from the social realms of human relations, sexuality, property, cultural belongings, pluralism, and similitudes, within larger realms of birth, life and death.

Myths offer a creative organization of concepts that are significant to the understanding of values and to the functioning of societies, later advancing into common laws and the construction of collectives; however, at the same time they remain constantly aware of the subjectivity of each.

In myths, the narration often refers to imaginative, idealistic, perfect places, conforming to ideals and perfection, the paradise that precedes our ordinary, struggling lives and realities. These notions are found between visualizations of the world and revelations, by using symbols and references borrowed from nature.

Men's capacity to express himself is the fundamental element of our ability to give form to impressions, memories, emotions and cognitive thinking. Approaching the arts brings us closer to the history of memories and communication of mankind.

'Intangible cultural heritage is a living set and a perpetually constant re-creation of practices, knowledge, and representations, enabling individuals and communities at all levels of society to express ways of seeing the world through systems values and ethical standards.' (UNESCO)<sup>21</sup>

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21. Texte de la Convention pour la sauvegarde du patrimoine culturel immatériel-UNESCO- Déclaration adoptée à Istanbul par les Etats participant à la table ronde de l'Unesco les 16 et 17 septembre 2002

# EARLY MEDIEVAL SLAVS IN THEIR MYTHS AND ARCHAEOLOGY

Jerzy Gąssowski (Poland)

In the early Middle Ages (between the 5th and 10th centuries AD), something strange happened in eastern Europe. A new population settled there and soon became a nation that covered over half of the territory. They crossed the river Elbe and entered into the northern part of present-day Germany. The new population was not known in antiquity like Greeks, Romans, Celts or Germans. They were not nomads, because the archaeological research shows that they were farmers and kept domesticated animals (Barford 2001).

They were known as Slavs. In their language, this name comes from the word *Slowo*, which means 'word'. We know that Slav peoples, divided into many tribes, represented a very primitive material culture, which was quite different from the rich civilization that inhabited their lands in the past. Before the arrival of Slavs this population moved to the west and south, breaking the boundaries of the Roman empire to settle in a warmer and richer environment (Craughwell, 2008; Gassowski, 1997).

The fast territorial dispersal of Slavs probably had a connection with the victorious offensive of the Huns, and Slavs may have been part of the Hunnish army. As a matter of fact, the first known Slavic words were registered at Attila's court, somewhere in present-day Romania or Hungary. We know from written documents that at the battle of Orleans Attila's soldiers were not only Hunnish, but also of different origin: the foreigners were mostly Germanic, but there were also some non-Hunnish nomads (Heather, 2006; Man, 2006). No Slavs were

accounted. After the defeat of the Huns, their place was soon taken by the nomadic folk of Avars, whose main camp was set somewhere in Hungary. It was called 'the Ring', but its remains have not yet been found by archaeologists. The Avars organized raids over most of central and western Europe, including Italy. Their main attacks were directed towards Byzantium and Greece. The Byzantines were never conquered by the Avars, but they had to pay enormous amounts of gold to them. The rich Greek towns south of the Danube were systematically attacked, almost every year. In those raids the Slavs fought and robbed together with the Avars. The only difference



Fig.1: The Slavs in a) 6th – 9th Century AD.; b) 10th – 15th Century AD.



was that all Avars returned home, but some Slavic tribes settled down in conquered territories: soon the territories which constitute modern Romania, Bulgaria and most of Greece (except the Peloponnese) were settled by them (Gissaulf, 2006; Gassowski, 2002; Jakimowicz et al., 1965).

There is an interesting difference between the written sources, the myths and the archaeological finds. Byzantine written sources showed the Slavs as a cruel population, ruthlessly killing their enemies and destroying towns and villages. They robbed and plundered the Balkan peninsula, including Greece, and returned home to their settlements north of the Danube. Their return was slow, because of the heavy booty they brought back. The Slavs also took some captives, who were spared in the battles. Surprisingly, back home these captives were treated like members of the family, even though some of them would probably have been sold to slave merchants (Gissaulf, 2006). The most surprising fact is that most of the Slavs, in their large territory, had no treasures, nor robes of gold or silver. Their women did not use any kind of metal or precious-stone jewelry, especially in central Europe. Between the 5th and the 8th centuries neighboring peoples – Germans, Prussians (from present-day north Poland), Avars, Magyars and other nomads from Asiatic steppes – loved decoration in gold, silver and precious stones. In 1904 Bernard Salin stated that, if no metal jewelry and decoration were to be found in central European settlements and graves of that period, it meant that those places were inhabited by the Slavs (Salin, 1904; 1935). As stated above, the Slavic culture shows extreme poverty in archaeological evidence. Did those powerful and brave fighters, robbers and plunderers, live like beggars in their homeland? It might seem strange, but this theory is confirmed by hundreds of excavated

settlements and graves. At the same time, Slavs had a good rural economy: they cultivated rye and kept domestic animals, like cows, pigs, horses and sheep. They were not a hungry people. Greek sources wrote about Slavic warbands led by warlords, whose names are known. But there is no archaeological evidence of their rule at home. It means that power was executed not above people, but *among* the people (Gassowski, 1997; Salin, 1966). In the excavated settlements no house was bigger than the others. In the cemeteries all the graves have the same size and in most cases there are no grave gifts, that is, if there were cemeteries at all. Taking under consideration the number of settlements and houses, there were very few cemeteries and graves. One could say that after death people were taken straight to heaven (or hell). All of the excavated settlements contain the ashes of cremated bodies, sometimes they were put in urns, but often there was no container whatsoever. Some east European Slavic tribes put the urns of their deceased on top of trees. This civilization, as seen from archaeological findings, looks like the dream of a communist (Gassowski, 1965, 2002; Knight, 2007). Myths of origin appeared quite late, at the

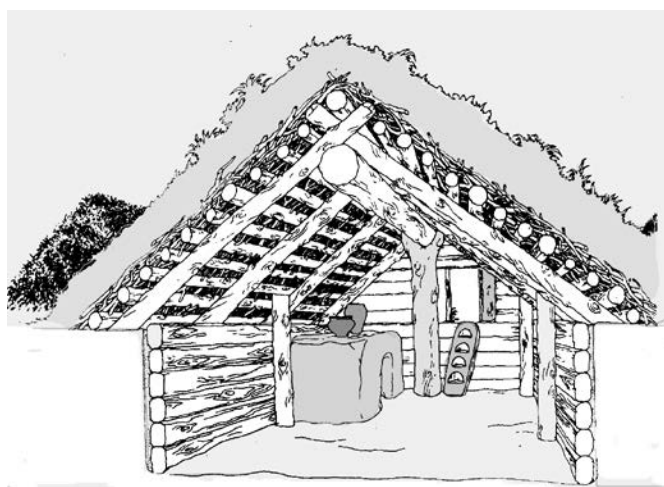


Fig.2: Reconstruction of a Slavic dug-out hut ("Grubenhaus") with a clay oven.



*Fig.3: The Stradow stronghold, one of the largest on the territory of Poland. With permission of Miron Bogacki*

eve of the creation of the first states, mostly in the 9th century. The best-known ones concern Poland, the Czechs, the Croatian Slavs (eastern part of Austria) and part of Russia. In the first three of them, the first legendary ruler and founder of the dynasty was a simple peasant, a villager. The coronation dress of the Croatian prince were the clothes of a countryman and his throne was a simple stone. Exactly the same story was celebrated among the Czechs. On his coronation day, the prince would dress in countryman's clothes and boots, which would be kept for future coronations (Barford, 2001; Gassowski, 1999; Duthilleul, 1963). In Poland the legendary founder of the Piast dynasty was a very poor countryman, who was elected to replace the former cruel ruler, who was eaten by mice. Another popular legend says that three brothers, Lech, Czech and Rus, arrived at a place called Gniezno (derives from the word 'nest') and decided to part ways (Gassowski, 2004). The rapid appearance and large development of Slavic culture was the subject

of a permanent dispute among scholars, lasting over a century and resulting in over a hundred books and articles. Polish scholars were, and still are, divided into two groups: autochthonists and allochthonists. The first group believes the theory that the Slavs, changing their names with time, developed their culture in central Europe since Mid-Bronze Age. The allochthonists, on the other hand, search for their cradle somewhere in the east. Both groups base their theories on the same archaeological, historic and linguistic sources. That means that both use the wrong method. Many researchers forget that ancient nations were devoted to religion. Some religions were limited to one tribe, but there were others which had a very large extent. In the early Middle Ages Islam, which created a new political order, new laws and new nations, had a rapid and big extent, and it created a culture which united many tribes and states into one large territorial system in the Near East, stretching to southern regions of Asia and to northern Africa. It also ruled over important

areas in Europe, like Spain and the Balkan Peninsula (Knight, 2007). It is highly probable that similar religious events happened among the ancient Slavs. The important difference is that whatever is connected to Islam is clearly described from the very beginning of that religion. As for the Slavs, we have very few written sources about their beliefs (Gassowski, 2002).

The Slavs represent a cultural, social and linguistic unit of many tribes. They behaved in the same way, like monks in a huge monastery. According to Salin (1904), in the study of European populations between the 6th and the 9th centuries it is possible to distinguish the territories in which the Slavs settled by the absence of any jewels in excavated houses and graves.

The situation changed quite drastically in the 9th century, probably because of the Viking raids in the Baltic region. They needed to purchase people in order to sell them as slaves to Byzantines, Persians and Arabs, for their harems or as servants. This might explain the large amount of Arabian currency in northern Poland. There was also a visible Viking influence in decorative art. Slavic women started to wear silver jewels and silver became the favorite metal for brooches, bracelets and rings. It is probable that the silver used was obtained by melting Arabian coins (Craughwell, 2008; Depeyrot, 2005).

At the same time, we see the development of so-called strongholds. On the territory settled by Slavs (except in the Balkans) there are around 1,000 of them. The 20% of these were built in the Neolithic period, while the others were built between the 9th and the 12th centuries. They are mostly round structures of wooden logs and earth, and served as defense places. It was suggested that they might have been the seats of local rulers. Unfortunately, most of them do not have any traces of



*Fig.4: Handmade Slavic top.*

habitation; maybe they served as refuges or places for religious or social meetings. Except for the people who had taken up commerce with the Vikings, some important people were keeping up ancient customs. For instance, after the conversion to Christianity of the Polish prince (966 AD), the only distinguishable stone building was the main residence of the prince (later king) Boleslaw, built on an island in the middle of the Lednica lake (halfway between Gniezno and Poznan). In the other settlements, rich or poor, the size of all the houses was more or less the same.

This situation lasted up to the 12th century, in some places even longer. Between the 11th and the 13th centuries the only stone buildings were churches and monasteries. By the end of the 13th century, the first church and monastery made of bricks was the Dominican monastery in Sandomierz, Poland.

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# **“CIRCULAR PATHS” A NEW AND ENIGMATIC, ANCIENT GEOGLYPHS OF THE JORDANIAN BASALT DESERT**

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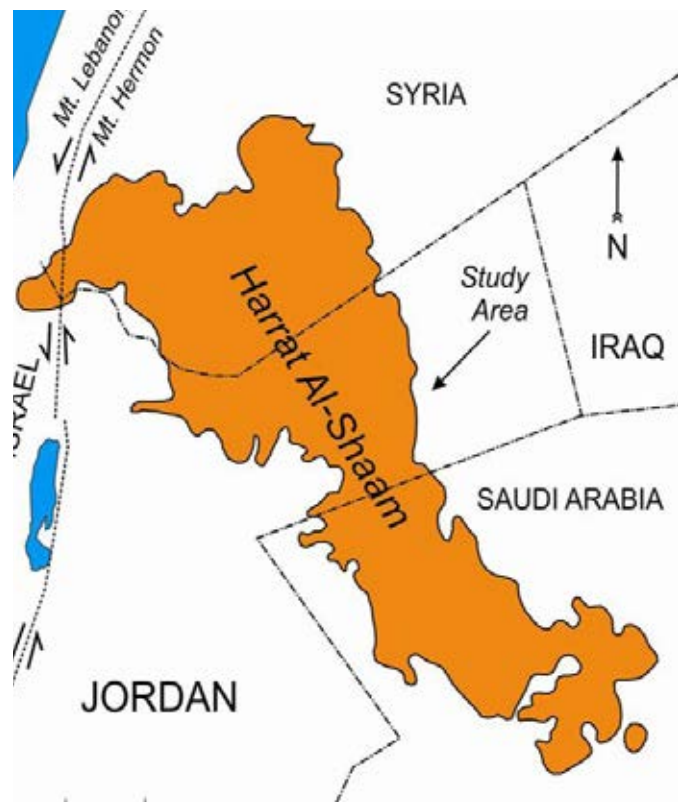
## **Introduction**

The Kingdom of Jordan shares a vast intracontinental basalt plateau with Syria and Saudi Arabia, the Harrat Al-Shaam. It covers 11,400 sq. km (Fig. 1) in the Jordanian panhandle, representing a rugged lava desert at an altitude of 600–1100m above sea level. Scoured by wind in winter and scorched dry in summer, the surface is covered by black basalt boulders, making it seemingly uninviting, hostile and inaccessible. Nevertheless, it contains an astonishingly rich archaeological heritage. Even today, only one highway crosses the area west to east. Otherwise the area can be explored only by 4WD, or as in the past on foot, donkey or camel. In winter rain over the Djbel al-Arab feeds wadis leaving pools that can provide water well into autumn for animals and humans. The area is almost entirely covered by up to 2 m thick loess. Stone heaving (a poorly understood process, possibly driven by glacial freeze-thaw cycles) has lifted loose lava blocks to the surface, densely covering it. Rains washed the loess into the depressions of the hilly plain, forming mudflats or Qa' or Qa'a in Arabic, giving the Harrat a mottled appearance when seen from above. The loess can hold water and the stone cover prevents evaporation. Thus,

vegetation cannot only occur along wadis, but appears also in winter and spring among the stones, providing pasture. Formerly, the Harrat must have been teeming with gazelle, ostriches and ibex. Petroglyphs, commented on by 2000-year-old Safaitic inscriptions (e.g., Ababneh, 2005) depict hunts of wild animals together with horse and camel riders (Fig. 2a, b).

## **Desert kites**

The most striking of the archeological remains in the Harrat are the desert kites (Fig. 3). Named for their similarity to children's kites, kites typically consist of km-long guiding walls (the tails of the kite) converging on a narrow gate



*Fig.1: Map of the Harrat in Syria, Jordan and northern Saudi Arabia*

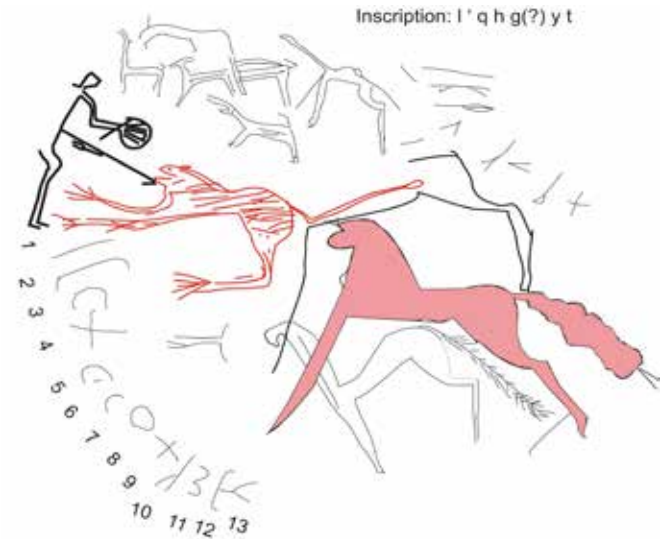


Fig. 2 a,b: Petroglyph with Safaitic inscriptions (a) and interpretation (b): In the center a hunter with spear and small round shield attacking an animal, most probably a striped hyena (*Hyaena hyaena*). Below two and a half horses are outlined, above we see a herd of animals, either gazelle (with short horns) and ibex (with longer horns) or a herd of goats to be protected.

The petroglyph is accompanied by a Safaitic inscription, transcribed and partly translated, dating to about 2000 aBP (photo to S. Kempe)

that leads into a hectare-sized enclosure (the kite's body). These structures are so large that they only came to the attention of archaeologists when postal flights from Baghdad to Cairo commenced in the 1920s (Maitland, 1927; Poidebard, 1928). Today, Google Earth or Bing provide high-resolution images for a large part of the Harrat that can be studied easily. Figure 4 pins more than 550 kites; many more are seen on aerial photographs and the total numbers have yet to be established (Kennedy, 2011). They are also in the Harrat of Syria and Saudi Arabia. These kites are by all probability hunting structures, intercepting gazelle migration. As the figure shows, most kites are part of long chains, extending north into Syria as well as south into Saudi Arabia. They once must have represented continuous barriers across the routes of migrating animals.

We investigated two of the kite-chains in detail, the one marked by yellow pins 8–43

on the eastern border of the Harrat (Kempe and Al-Malabeh, 2010) and the one marked by dark blue pins 1–50 along the southern border of the Harrat (Kempe and Al-Malabeh, 2013a, c). There we also discuss the possible mode of hunting and the stratigraphic position in relation to later, Neolithic agricultural features, suggesting that the kites date to the times of early Neolithic herders. Some of them, however, may still have been used up to the 19th century. The kites themselves have undergone a technological evolution, starting as meandering walls along wadis and playas, followed by the construction of small and simple bag-like traps and larger ones with clover-shaped enclosures. The final stage are kites with very long, outward curving guiding walls leading into star-shaped enclosures with blinds at their end (Fig. 3). These blinds (round or elongated stone circles at the tips of the stars) are the actual traps into which the gazelle,



following the guiding walls, were forced to jump. There they could be easily harvested and killed. All in all the more than 500 kites visible may represent a volume of stone moved equal to half of the volume of the Cheops pyramid (Kempe and Al-Malabeh, 2013a). It could be argued that the desert kites collectively represent one of the largest examples of stone works of humanity from this period.

### Circular paths

In exploring the high-resolution Google Earth images, we discovered another set of geoglyphs, as yet unnoticed by archaeologists: Circular paths (CPs). CPs range from nearly circular to oval, rarely irregular, in shape and have a width of 1–2 m wide (Fig. 4) (Kempe and Al Malabeh, 2013a, b, d). Along these paths the rocks have been carefully moved

to both sides, but not stacked to walls, like in the case of the kites, thereby revealing the underlying lighter loess. Rarely one can see that the stones were preferentially thrown outside (creating a dark ring outside the path) or inside. Thus, CPs characteristically appear as rings lighter in color than the surrounding area. The interiors of the paths have not been cleared from stones (unless they have been incorporated into later structures). Thus, the paths themselves carry the intended function, not their interiors. This is unlike the better known but much smaller tipi-rings, stone circles left by tent sites. The Harrat circular paths, doubling back on themselves, appear strewn across the landscape by the hundreds. They are normally distinct from the linear and much narrower animal and human paths that cover the landscape like spider webs. If one



Fig. 3. A desert kite in the Jordanian Harrat showing a deep stratigraphy (Google Earth picture). The final star-shaped kite supercedes an earlier, unfinished kite overlying an oval “circular path”. To the right an older “meander wall trap”.

would come across a CP on the ground, one would discount them as an irregularity, not realizing that they are a common feature, occurring in enormous numbers. Because of the remoteness of the area, we have visited only three circular paths on the ground so far, 42×40 m (CP1), 33×29 m (CP2) and 33×25 m (CP3) in size. Figure 5 shows them, situated north of the kites nos. 22 and 21 along the southern border of the Harrat. Figure 5 shows the details of the three CPs and Figures 9 and 10 show CP3 on the ground. Figure 11 gives the high-resolution image of CP3, illustrating that even individual stone groups can be seen from space. For this paper, we investigated an area along the kite chain, covering an

*Fig.4: A circular path almost 50 m wide is clearly visible from this satellite image (Google Earth image).*

*Fig.5: Detail of the image in Fig. 7 with the three circular paths visited. The yellow lines mark very meander walls, the blue line marks the ancient pilgrim route to Damascus. Note direction of north.*

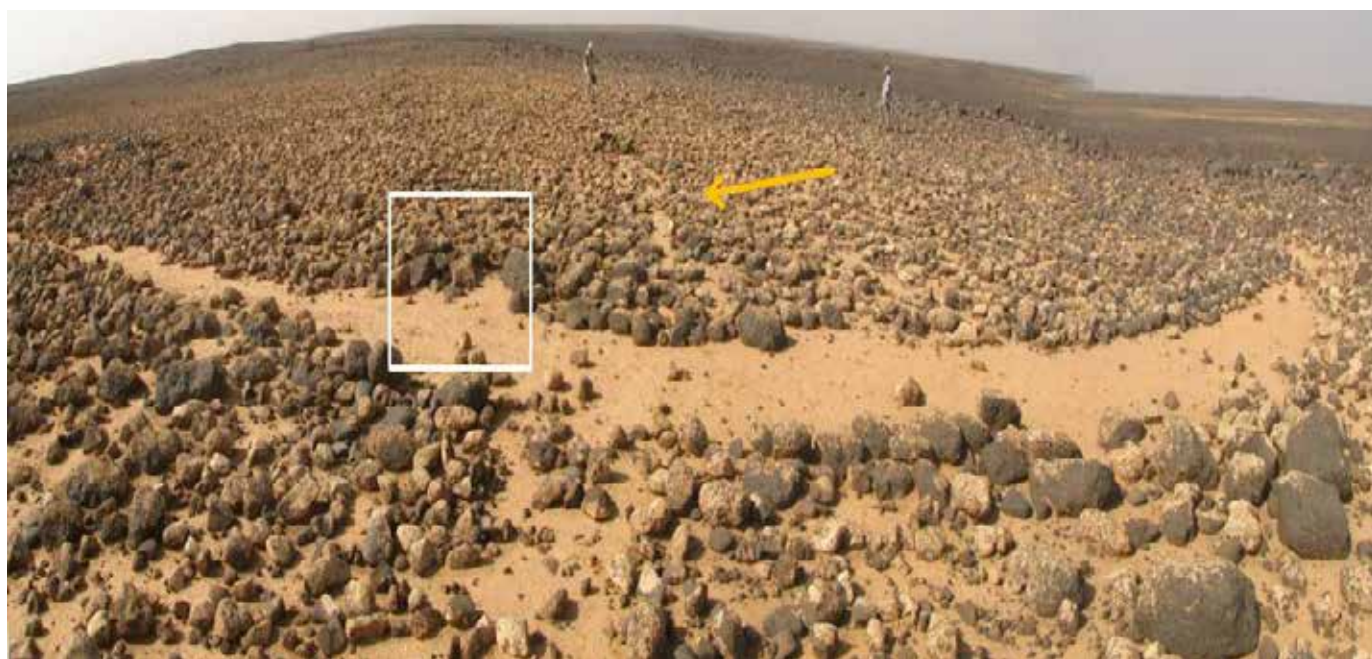




area of 156 sq.km, for which Google Earth recently provided high-resolution images (NE corner 32.206728°N/ 37.804946°E, SW corner 32.120689°N/37.975179°E). The area covers the chain section between the kite complexes L and S including 40 CPs. As can be seen, there is no clear topographical relation between the kites and CPs. Some CPs may seem to be next to wadis, but others occur in the center of the plateaus. Table 1 lists the positions of the CPs and their morphometric data. No 1 is a composite of three CPs, as is No. 15; thus the list contains data on 43 CPs. The columns include lengths, widths (measured from the centers of the paths on one side to that of the other side), perimeters (placed in the center of the paths) and areas within the perimeter. All measurements used Google Earth tools. The

*Fig.6: View of a section of a circular path on the ground (CP1 in Fig.5). (Photo S. Kempe)*

*Fig.7: Panorama view of CP3 on Figs. 7 and 8 on the ground. Note persons standing on the far side of the path. The arrow marks an animal path crossing the circular path. The white box marks a set of stones clearly visible on Google Earth (see Fig. 11). Note also that the interior of the path has not been cleared of stones. (Photo S. Kempe)*



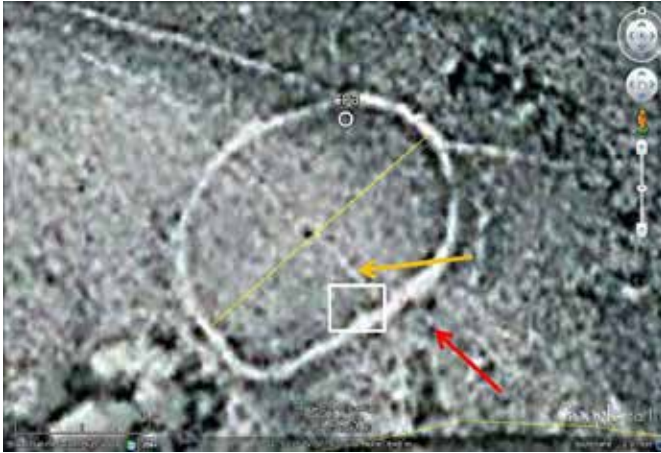


Fig.8: CP3 on Google Earth as close-up. The yellow arrow marks the animal path crossing the circle. Red arrow marks the direction of Fig. 10 image and the white box marks the stones visible in the corresponding box. Note the human path in the north partly incorporating the CP but being less wide than the CP.

circularity is defined as the ratio of the radius calculated from perimeter versus area:  $C = \text{perimeter} / (2 * \pi) / \sqrt{(\text{area} / \pi)}$ . Thus, a low value denotes near-circularity, and higher values oval, elongated or irregular shapes.

Table 1 also lists number of cases (N), their lowest (Min) and highest (Max) values, the Mean (M) and the standard deviation (S) for each measurement. As can be seen from the histogram of areas (Fig. 9), most of the CPs are small (<785 sq. m). The smallest measures 13 x 11 m. There are only two CPs >2000 sq. m. Figure 14 depicts the ratio length versus width, showing that the smaller CPs are more circular than the larger ones. Kite 9 (36 x 33 m) is the one with the lowest circularity (1.005), i.e. the one forming most nearly a circle. The variance of circularity suggests that the CPs were not built by first marking a circle with pole and rope but by simply joining the path by eyesight (which explains some of the irregularities in perimeter shape). So far, we do not know when these paths were constructed. However, there are a few cases where kite walls cross CPs. One of those is CP3 on our list that is crossed by the northern guide wall of Kite O3, suggesting that the kite wall is younger than the CP.

Furthermore, Kite O3 is one of the older in the chain because the guide walls of Kites P1 and N extend across the opening of Kite O3, rendering it unusable. Thus the CPs may be older than the (early Neolithic ?) kites. The kites themselves seem to be older than Neolithic stone huts that occur throughout the area (Kennedy, 2011). On Figure 11 the area of CPs 4 and 5, situated in between the central and southern guiding walls (brown lines) of Kite O3 (to the upper left of the picture) is shown. The northern guide wall was destroyed by building a Neolithic (?) settlement across it. Also, the approach to the enclosure of the kite (the "drive way") was obstructed, suggesting that kite O3 was not in use any more when the settlement was occupied. The numerous stone huts are about 5 m across surrounding a few walled clearings, former gardens, fields or corrals. The CPs 4 and 5, casually crossed by paths, do not seem to be integrated features of the village and therefore may be older than the settlement. Stone piles, about 2 m across, occur at the apex of CP 4 and in the center of CP 5; they are not necessarily associated with the original CPs, but later additions. One of the strangest discoveries yet made on Google Earth pictures in the Harrat is the miniature, about 40 m long, star-shaped kite marked as O5 on Figure 11. The kite is complete with outer and central guiding walls, star-shaped enclosure and 2-m large blinds. One can only speculate about its purpose. Was it built to teach how a star-shaped kite should look like (which is about 50 times larger), or was it a trial to replicate the large traps to hunt a few gazelles near the village?

## Conclusions

The seemingly hostile eastern Jordanian Harrat proves to be one of the richest archaeological landscapes in the Near East. The main structures are the many hundred kites, km-large, highly evolved former gazelle-hunting structures.

No	Circular Path	Latitude	Longitude	Length	Width	Perimeter	Area	Circularity	Description	
		N	E	m	m	m	m2			
1a	Complex large CP	32.170710°	37.932947°	97	50	241	3400	1,166	very clear, irregular, very large CP with 2 adjacent smaller CPs and 3 adjacent 2-3 m wide rockpiles	
1b	Complex small CP	32.170950°	37.933705°	22	22	64	175	1,365	very clear, small, irregular CP with path to large CP and twin-ined with CP1c	
1c	Complex small CP	32.170994°	37.933667°	13	11	38	105	1,046	clear, small, regular CP, sharing perimeter with 1b	
2	Oval CP	32.173567°	37.921139°	108	47	136	1133	1,140	clear, mid-sized, oval CP	
3	Oval CP	32.171638°	37.920626°	48	11	115	531	1,408	faint, small CP with one "s b o r t c u t" crossed by later kite wall	
4	round CP	32.168466°	37.918195°	48	42	146	1563	1,042	clear, large, circular CP with later path, 4 m rockpile in center, adjacent to kite wall	
5	irregular oval CP	32.168753°	37.915992°	62	27	145	1274	1,146	clear, mid-sized oval, acicular path with rockpile at end and later path crossing	
6	round CP	32.164488°	37.920803°	52	46	164	2091	1,012	clear, large, circular CP	
7	round CP	32.163466°	37.913550°	53	44	157	1900	1,016	faint, large, circular CP	
8	round CP	32.161491°	37.900014°	36	31	112	911	1,047	clear, mid-sized, circular CP	
9	round CP	32.179407°	37.911727°	36	33	112	989	1,005	clear, mid-sized, circular CP	
10	round CP	32.181659°	37.899150°	38	29	110	918	1,024	clear, mid-sized, circular CP, with small cleared area at apex	
11	round CP	32.192486°	37.876437°	24	23	77	445	1,030	clear, small CP, with clearings; inside miniature kite	
12	Round with trap CP	32.173894°	37.874501°	47	39	139	1437	1,034	faint, mid-sized, pear-shaped CP with miniature star-shaped trap inside	
13	Round CP	32.178639°	37.882517°	48	42	140	1525	1,011	faint, large, circular CP	
14	Round CP	32.198708°	37.863656°	46	36	128	1234	1,028	clear, mid-sized, circular CP	
15	Double CP	32.197330°	37.914941°	35	19	87	479	1,121	clear, small, pear-shaped double CP, small clearing on apex	
15a	round CP of 15	32.197330°	37.914941°	22	19	69	355	1,033	circular small, part of 15	
16	Oval CP	32.191264°	37.919315°	42	23	107	773	1,086	clear, small, oval CP	
17	round CP	32.191713°	37.907611°	51	45	150	1747	1,012	clear, large, circular CP	
18	round CP	32.199305°	37.913243°	44	39	132	1340	1,017	clear, mid-sized, CP with some clearings	
19	oval CP	32.201910°	37.900892°	24	17	68	346	1,031	clear, small CP	
20	incomplete CP	32.206280°	37.882097°	35	28	117	989	1,050	in part faint or incomplete, mid-sized CP	
21	round CP	32.162805°	37.850562°	31	27	92	663	1,008	clear, small CP	
22	round CP	32.164279°	37.827146°	38	33	110	940	1,012	partly faint, mid-sized, circular CP	
23	round CP	32.149309°	37.859749°	22	19	65	329	1,011	clear, small, circular CP	
24	oval CP	32.147728°	37.861519°	56	26	142	1293	1,114	u n c l e a r , mid-sized, oval CP, over-build with rockpile	
25	round CP	32.146951°	37.866093°	38	28	104	786	1,046	clear, mid-sized, pear-shaped CP	
26	round CP	32.155387°	37.877155°	31	28	94	695	1,006	clear, small, circular CP	
27	oval CP	32.152748°	37.878927°	35	15	85	445	1,137	clear, small, oval CP	
28	Oval CP	32.146531°	37.882312°	29	26	93	649	1,030	clear, small, oval CP	
29	oval CP	32.146260°	37.892018°	19	15	57	237	1,044	clear, small, oval CP	
30	round CP	32.139123°	37.915699°	26	23	77	460	1,013	clear, small, circular CP	
31	oval CP	32.130498°	37.937295°	34	20	89	530	1,091	clear, small pear-shaped CP	
32	oval CP	32.129310°	37.951399°	40	25	104	723	1,091	lear, small, semi-triangular CP	
33	round CP	32.128848°	37.927080°	24	23	78	468	1,017	clear, small CP	
34	round CP	32.128324°	37.924405°	52	45	159	1957	1,014	partly faint, large, circular CP	
35	round CP	32.123287°	37.916122°	46	37	135	1400	1,018	faint, circular, mid-sized CP	
36	round CP	32.122010°	37.889812°	98	37	134	1331	1,036	clear, mid-sized, pear-shaped CP	
37	round CP	32.121916°	37.875242°	51	44	151	1751	1,018	clear, large, circular CP	
38	round CP	32.131728°	37.856456°	55	43	155	1815	1,026	clear, Large, oval CP	
39	round CP	32.126842°	37.843072°	50	45	149	1742	1,007	clear, large, circular CP	
40	round CP	32.142534°	37.829522°	56	49	169	2226	1,010	partly faint, very large, circular CP	0
0			N	43	43	43	43	43		60
60			Min	13	11	38	105	1,005		
			Max	108	50	241	3,400	1,408		
			M	43	31	116	1,072	1,061		
			S	20	11	39	681	0,0848		



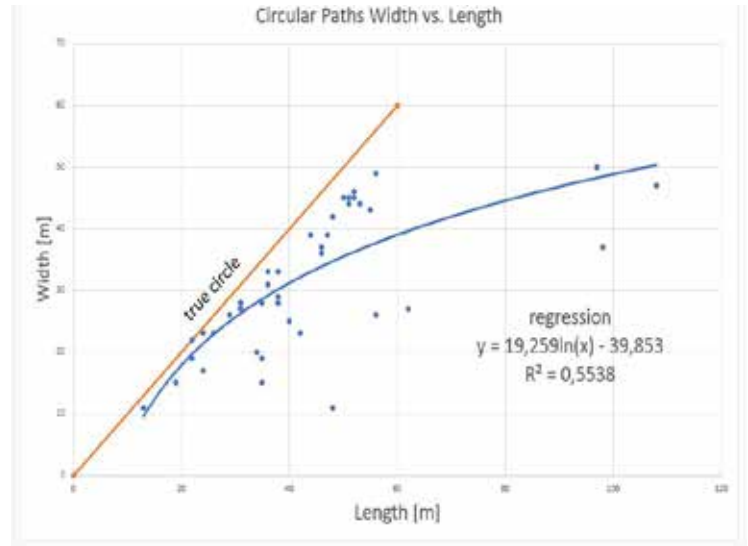
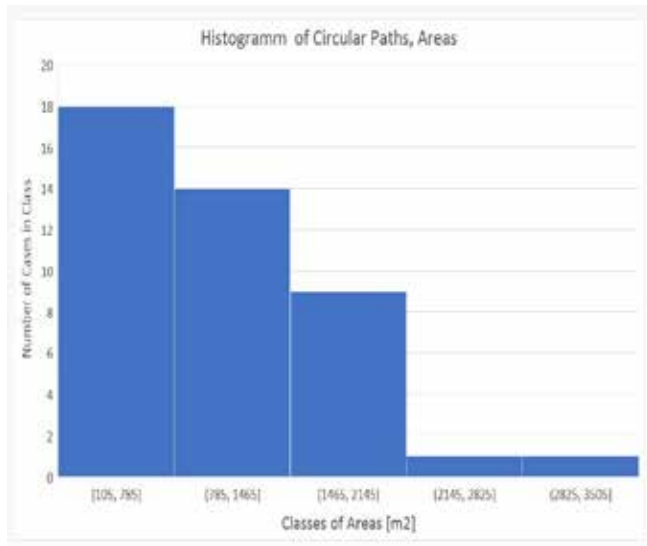


Table 1: List of the morphometric data of 40 CP sites (numbers as in Fig. 12) with a total of 43 CPs. N = number of cases, Min, Max = lowest and highest values, M = mean, S = standard deviation.

Fig.9: Histogram showing areas of CPs divided into five classes.

Fig.10: Plot of CP lengths versus widths and logarithmic regression.

Fig.11: A Neolithic (?) settlement situated in the “drive way” of Kite O3, destroying part of its central wall. Note the elongated CP5 and the round CP 5, crossed by some of the paths serving the settlement. Note also the miniature copy of a star-shaped kite marked as O5.



Their study on Google Earth high-resolution images revealed yet another enigmatic geoglyph, the circular path. These features are certainly anthropogenic; a biological (animal path) or geological (erosion) origin can be excluded. CPs occur in large numbers throughout the entire Harrat. Our study area revealed a density of 40 per 156 sq. km, i.e. 25.5 CPs per 100 sq. km. If this density is representative for the entire basalt desert then we can expect about a total of about 3,000 CPs just on the Jordanian Harrat. Furthermore, we cannot find contemporary structures regularly associated with those paths. There are no stone piles, central structures, areas cleared for tents or walled corrals that would be regularly seen nearby. Thus, CPs seem to be rather ephemeral, possibly determined for one-time uses. Some of the CPs are set in depressions, some lead round low knolls; a regularity as to the choice of their place is not evident.

These are the archaeological and geological facts; but what could have been the purpose of these paths? Were they used to train dogs for hunting? Were they stadions for running contests? Was something planted there? Were they cleared for religious processions? Were they used over long periods or were they only cleared for a single usage and then abandoned? We may never find out for sure, at least not until more detailed work is carried out on these enigmatic structures. Suggestions as to their purpose are definitely welcomed. Our favored model is that the paths were cleared for overnight stays of sheep or goat herds of early herders. When night fell, they would drive the herd together, clear a path around it, so that the dogs could easily run around the herd, holding it together and guarding it against wolves, hyenas or lions.

Whatever the purposes of the circular paths were, one thing is for sure: The Harrat as it is now is a complex palimpsest representing the imprint of millennia of human activities.

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# PAIRED MEGALITHS WITH SCULPTED IMAGES FACING SUNSET AT THE SUMMER AND WINTER SOLSTICES AND THE IMPLICATION OF PARADISIACAL BELIEF

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## Abstract

Two megaliths on Overton Down, the highland zone east of Avebury in Southern England, are described for the mythical messages from the Neolithic and Early Bronze Age that they seem to portray. Each stone bears a carved human image and what appears to be a likeness of the head of a dead animal. Because the true sculpture on the first megalith faces midsummer sunset, the author was motivated to seek whether there was a second megalith also with a carved 'dead animal' and carved human head but facing midwinter sunset. At a distance of 70 m such a carved stone, with two features subtly shaped by the craft of the stonemason was found, thus securing the prediction. A possible explanation of the mythical meaning is proposed.

*Keywords:* Animal sculptures; Avebury; midsummer sunset stone; midwinter sunset stone; Neolithic; rock art.

## Introduction

The author has studied megaliths on the vast chalk downland east of Avebury for the last 20 years. Among the several thousand stones on the high rolling downs there is one particular small zone of a limited area on Overton Down where several megaliths bear subtly carved animal images and a few carved human head images. Hundreds of research visits have been made since 1996 and a corpus of the major megaliths has been prepared that will be

published by 2020. This area of approximately 1 sq. km is part of a little studied world dating from the Neolithic and Early Bronze Age. Within a greater range of up to 3 or 4 km there are the extant Early Neolithic long barrows at West Kennet and East Kennet and the wrecked long barrows on Manton Down and at Rockley. The long barrow at West Kennet is dated to the 37th century BCE (Bayliss et al. 2007). Many dozens of round barrows of the Bronze Age, several still existing, others ploughed out, are everywhere close by. Peter Fowler has written extensively about this landscape and his archaeological excavations on it. The monograph by Fowler and Blackwell (1998) summarizes and discusses the ages-long palimpsest of the high summer pastureland more widely. A first paper of introductory character (Meaden 2014) introducing the latest fieldwork discoveries has been published in *Expression*. In the present paper two noteworthy megaliths are considered. Each bears a carved human image facing the direction of sunset at either the summer solstice or the winter solstice, and each has the image of a seemingly dead beast present on the same stone. It is suggested that the stones express a mythical belief dating from the beginning of Britain's farming era in the fourth and third millennia BCE. In this general expanse of land many thousands of worked flints and shaped sarsen fragments dateable to the Neolithic and Bronze Age have been found and continue to be found and publications are in preparation.

## **A megalith suggestive of death that also has a convincing carved human image facing midsummer sunset**

Figure 1 shows the first megalith. This 15-tonne sarsen lies on an exposed ridge and is easily seen from afar whether from the south, the west or the north. During the author's 36th research expedition, on 22 September 1996,



*Figure 1: The proposed Midsummer Sunset Death Stone with a weather-eroded human image at the right which faces to where the sun sets at the summer solstice.*

inspecting megaliths on the Avebury Hills and Marlborough Downs, the two images on this stone were immediately recognized.

Firstly there is a huge animal head lying sideways, prostrate, at ground level with gaping mouth suggestive of death. Additionally, at the right, is a much weathered, definitely carved image that could signify a bearded priest with headgear.

The latter faces northwest where the sun sets at the summer solstice. The animal head, which may be entirely natural, is more easily recognized as such by turning the photograph sideways. The stone has been named the Midsummer Sunset Death Stone.

### **A prediction was made**

At the time of discovery the author already knew of anthropological comments raised by Professor Mircea Eliade about attested tribal

beliefs in Oceania in which the souls of people who died in the course of the year were thought to reside in convenient stones or rocky outcrops until some propitious day like the solstices when they depart for paradise where the sun sets in the west (Eliade 1958: 136-138).

If something similar was believed by the people of the lost world of the Avebury Hills, might this shaped rock be evidence of a similar kind of myth, expressed by a sculpted figure who shelters souls in the rock until the expectant occasion—in this case midsummer sunset in the northwest—which is the day for departure to a sunset paradise?

If so, might there be another stone nearby, present in similar sarsen rock, that provides evidence relating to a midwinter sunset in the southwest, which arguably might be the auspicious day for departure at the winter solstice?

This line of thought has the huge merit of being





Figure 2: The Midwinter Sunset Death Stone. The animal death head carved at the extreme left of this megalith is shown enlarged in Figure 3. The carved image of this stone's bearded man is cut into the near-vertical edge at the extreme right of Figure 2 (shown enlarged in Figure 4). Note that the distant megalith 70 m away at the top right of the hill in Figure 2 is the Midsummer Death Stone of Figure 1.

a testable prediction that would be put to the proof. The idea carried the anticipation that, had such a megalith existed, it had not been destroyed, as so many others have, by the labour of commercial stone breakers of the 19th century and the 20th century before 1939.

**The prediction succeeds: locating a second prepared megalith symbolizing death and having an impressive human image facing the midwinter sunset**

Three weeks later this proposition was fulfilled. Such a megalith had indeed been prepared in antiquity to serve the community, and it is still present.

On 13 October 1996 the author located the second Death Stone to the west of the first, 70 m downhill (Figure 2). Proof of skilful pecking and sculptural abrasion of the megalith is evident (Figures 3).

This 7-tonne stone also displays the head

of a dead beast (Figure 3). The human head, possibly bearded, is fashioned skilfully along its southwestern edge. In this way, it faces midwinter sunset with the bulk of the stone overlying the image of a prostrate body of an animal, as with the first megalith. The head of the animal is strongly carved.

This is the Midwinter Sunset Death Stone, paired with the Midsummer Sunset Death Stone of Figure 1. Both are visible in the landscape photograph in Figure 2. In the beliefs of the community, might they have served as soul repositories? If so, either would be viewed as the final stepping stone for members of a community nostalgic for their dream of ultimate paradise, which is a concept or desire that is not so different from today's current world religions.

The animal death head carved at the extreme left of this megalith is shown enlarged in Figure 3. The carved image of this stone's bearded man





*Figure 3: Close-up of the sculpture of the head of a horned beast on the Midwinter Sunset Death Stone. Examination shows that the teeth and the horn have clearly been worked.*

is cut into the near-vertical edge at the extreme right of Figure 2. Note that the distant megalith 70 m away at the top right of the hill in Figure 2 is the Midsummer Death Stone of Figure 1. From this simple idea one may begin to judge how a society can develop a system of belief in which stones engage in the action. To commence, early British farmers may have reasoned, perhaps like the Egyptians for whom we know through the Book of the Dead (Budge 1967) and the Pyramid Texts that “the dead are sometimes identified with Osiris, and thus may hope for an agricultural destiny, their bodies germinating like seeds” (Eliade 1958: 199). Furthermore, Eliade (1958: 233), writing more widely and using the lithic omphalos as an example, summarizes by saying that “in every tradition” such stones “protect the dead (as, for instance, Neolithic megaliths), or become the temporary dwellings of the souls of the dead (as among many “primitives”) ... or owe their sacred character to their shape ... or from the symbolism ... which gives them their setting.”

In former times death was often considered to be the start of a transcendental journey to the realm of the divine where immortality awaits. The ambition was to attain the holy heaven, a lasting refuge of peace and perfection, as claimed in so many religions.

Eliade (1958: 136) stated: “Sunset is not regarded as the ‘death’ of the sun (unlike the moon’s three days in hiding) but as a descent into the lower regions, into the kingdom of the dead.” In fact, he recognizes a certain ambivalence for the sun, which he expressed like this: “though immortal, the sun descends nightly to the kingdom of the dead; it can, therefore, take men with it and, by setting, put them to death; but it can also, on the other hand, guide souls through the lower regions and bring them back next day with its light ... The sun draws things, it ‘sucks in’ the souls of the living with as much ease as it guides the souls of the dead ... through the western ‘gate of the sun.’” For example, “in the Hervey Islands, the natives think that the dead gather in bands and twice a year, at the time of the solstice, they try to follow

the sun when it sets, so as to get to the lower regions (Frazer 1922: 239).” More generally, Eliade (1958: 216-227, 233-238) discusses the worldview concept by which stones are held to be the habitat of ancestral spirits.

Speculative mythological questioning can be developed without end, so in the absence of any British Neolithic literature one will never regain the details of vanished myths, but these findings on the Avebury Hills are enough to indicate that a mythical outline can occasionally be attempted by attending to the evidence of carved and positioned stones. In the present case two great stones are arguably awaiting the solstice sunsets.

By the Late Neolithic the people of the Avebury and Stonehenge world were Britain’s first nearly civilized peoples, lacking only writing from among basic cultural achievements. They expressed themselves logically and artistically through sculptured lithic symbols—and surely, too, through the art of paint and wood and artifacts that do not endure in the way that stone does. Figurative art on such stones, as here described, may well have been also highlighted with white chalk, if not colour-painted too.

### Other megaliths in the vicinity

There is a fine Throne Stone with a concave seat close by that does not overlook the two Death Stones. Instead the Throne Stone overlooks what appears to be a Font Stone, an image relating to birth and baptism (*Figure 4*). The font gets repeatedly refilled with rainwater, as indicated by *Figure 4*.

Close at hand the Great Skull Megalith (*Figure 6*) may stand for the Death Deity at year’s end, like Old Father Time, because it faces the direction of midwinter sunrise, which defines the end or death of the old year and the start of the new year. Again quite near is a Female-breasted Stone (*Figure 6*), pyramidal in form, triangular in outline.

Farther off, but within 500 m, is another standing stone 1.5 m high whose modified shape suggests a robin redbreast (*Figure 5*). Here, too, there may be a mythical link with the setting sun at the summer solstice which it faces. The naturally pink breast reddens more when the sun reddens at sunset.

Conclusions about the meaning and purpose of the Death Stones



*Figure 4: The ‘Font Stone’ filled with rainwater.*





Figure 5: Female triangular megalith.



Figure 6. The Death's Head at winter solstice.

On the hills east of Avebury two megaliths are recognized for carved features that suggest a relationship with a tribal concept known in communities elsewhere but possibly applicable here. It is emphasized that there is no question of pareidolia in these examples.

Each bears a carved image of a human head. One faces northwest, the other faces southwest. At ground level on each great stone is the head of a dead animal as if lying sideways. The use of the megaliths likely dates from the Neolithic or Early Bronze Age between 5500 and 3500 years ago. Citing Gordon Frazer (1922: vol. 2, 239), Mircea Eliade (1958: 136) references a clan whose souls of the recent dead assemble in groups until the summer and winter solstices, at which time they expect to travel to the western paradise where the sun sets. Might something similar have once applied here?

Nearby within the same undulating downland of a small area amounting to about 1 sq. km are several dozen other megaliths, some with images, that when considered together imply that the community responsible may have believed in animism. Five interesting megaliths nearby are introduced in the present paper. Future papers are in preparation. David Field (2005, 89), an experienced English Heritage

archaeologist specializing in the prehistoric landscapes of Wiltshire, independently perceived the latent properties of this high chalkland. He recognized "the area as an exceptionally symbolic if not sacred place. It was a special land."

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# **ETHNO ROCK ART: BELIEFS, RITUALS AND EXPERIENCES.**

**THE STUDY OF FEROCIOUS DEPICTIONS INSIDE  
KHOH IN LIGHT OF THE BELIEFS OF KAIMUR  
INHABITANTS**

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## **Introduction**

Since prehistoric times, people have passed important stories down from generation to generation. Although cultures differed significantly throughout history, many of these oral traditions are similar. The study is based on the author's personal survey from 2009 to 2016 in the region of Kaimur, Bihar state, India. The author personally documented several folktales directly related to the rock art sites in this region. The present conditions of the tribes of Kaimur and even the adjoining plain people of the Kaimur range and their customs, dress, habitations, rituals, mode of worship, behavior and methods of herding and cultivation remind us of the characteristics of the protohistoric people, and there is enough archaeological evidence to prove all these. This speculation may take us not far from reality and one may hope that in future it will prove to be authentic. The Kaimur plateau and foothills are predominantly inhabited even now, as before, by aboriginals, that is, tribes and semi-tribes such as the Oraons, Cheros, Kharwars, Bhuiyans and Karias who now reside in the villages mostly in mud-built houses. Significantly, the tradition of painting the walls of their houses still continues, sometimes with

the same kind of symbols and patterns seen in the rock paintings as well as some modified ones. Curiously enough, the tradition of color preparation with powdered geru, oil, sindur (vermilion), juice of the bark trees and of beans and other vegetation, etc, is prevalent even now among the tribal folks of this region. It may thus be surmised that this tradition of color preparation and using it for painting various figures and patterns on the walls may have had been certainly handed down from generations since the earliest rock painters devised them. Khoh is shelter in the local language of Kaimur. The region of Kaimur shows a prehistoric base of the religious practices widely prevalent in the region.

## **Rock art sites of Kaimur**

The rock art of Kaimur is already known in publications (Tiwary 2013; 2011-12: 201-212; 2015: 8-9; 2010: 38-44; 2012: 64-69; 2013: 99-102) and academic forums. But this research has not been noticed by any prior rock art researcher of this region. The rock art of Kaimur (Tiwary 2015: 275-286) is well known from Chand (Tiwary 2015: 535-538), Rampur, Bhagwanpur (Tiwary 2014: 810-829), Chainpur and Adhuara blocks (Tiwary 2013: 9-23; 2014: 144-146) of the Kaimur district and Rohtas district (Tiwary 2013: 86-91). But the most important old pictographs are mainly reported from the Adhaura range which is close to the Mesolithic and is geographically distinct from the rest of the blocks. The region of Adhaura is close to Jharkhand and the chain of rock shelters along the river Son is unique. The landscape of this particular region is quite different. The rock art of this region and the other regional rock art are very much similar in landscape context, whereas the content of the rock art varies (Tiwary 2012-13: 181-191).





Fig.1: Triangular stone known as Bhuni Mai having tika over it, Bhagwanpur block, Kaimur, Bihar, India.

### **Ethno rock art**

After reflection, the author has devised a new term, “ethno rock art” (Tiwary 2013: 1-16). Though it was coined in the context of Kaimur rock art while the author was engaged in field work between 2009 and 2016, he found that it can be used for all rock art in global contexts as well. This justifies the universal application of the newly devised term. In short we can say: “Ethno-rock art is a fact that tries to study ethnic groups that practice rock art or similar art forms on various media and during various occasions to try, interpret and understand rock

art.” The following details are the indirect and direct evidence of local inhabitants providing descriptions of the practice of painting or art in the household and on the walls on special occasions and in ritual practices. The following descriptions are by local inhabitants, mostly related to witches and ghosts and fearful and ferocious things happening. It is very difficult to say whether the stories have been created by themselves recently or passed on by their elders or the old men or women.

### **Myths of the local inhabitants**

Mythology has been a long-overlooked source of information for interpreting the meaning and function of the rock art and present practice of art by the local inhabitants. It is fortunate in the Kaimur to have an extensive collection of myths that can shed light on these art depictions. Mythic narratives sources not only provide additional information for particular execution and symbols, but may also help to define the ferocious, ritualistic, games structure in which they functioned (David 2010: 384). In essence, it appears as if mythical narratives harbor the logic that underpins the structure of shamanic and magical rituals. In order to pursue this idea further, I have undertaken to study a combination of ethnographic information and myths and use this information to suggest interpretations for selected Kaimur rock art images.

1) *Rakat Ke Putaria*. According to folk tradition, the rock paintings have been executed with the colors mixed with the blood of tigers and other animals. Names like Rakat ke Putri (figures of blood) have been coined because of these beliefs. It is interesting to note that Chitrasutram of the Vishnudharmottara Purana, also states that decoctions of tulsin, bhumimba, champa, kusha

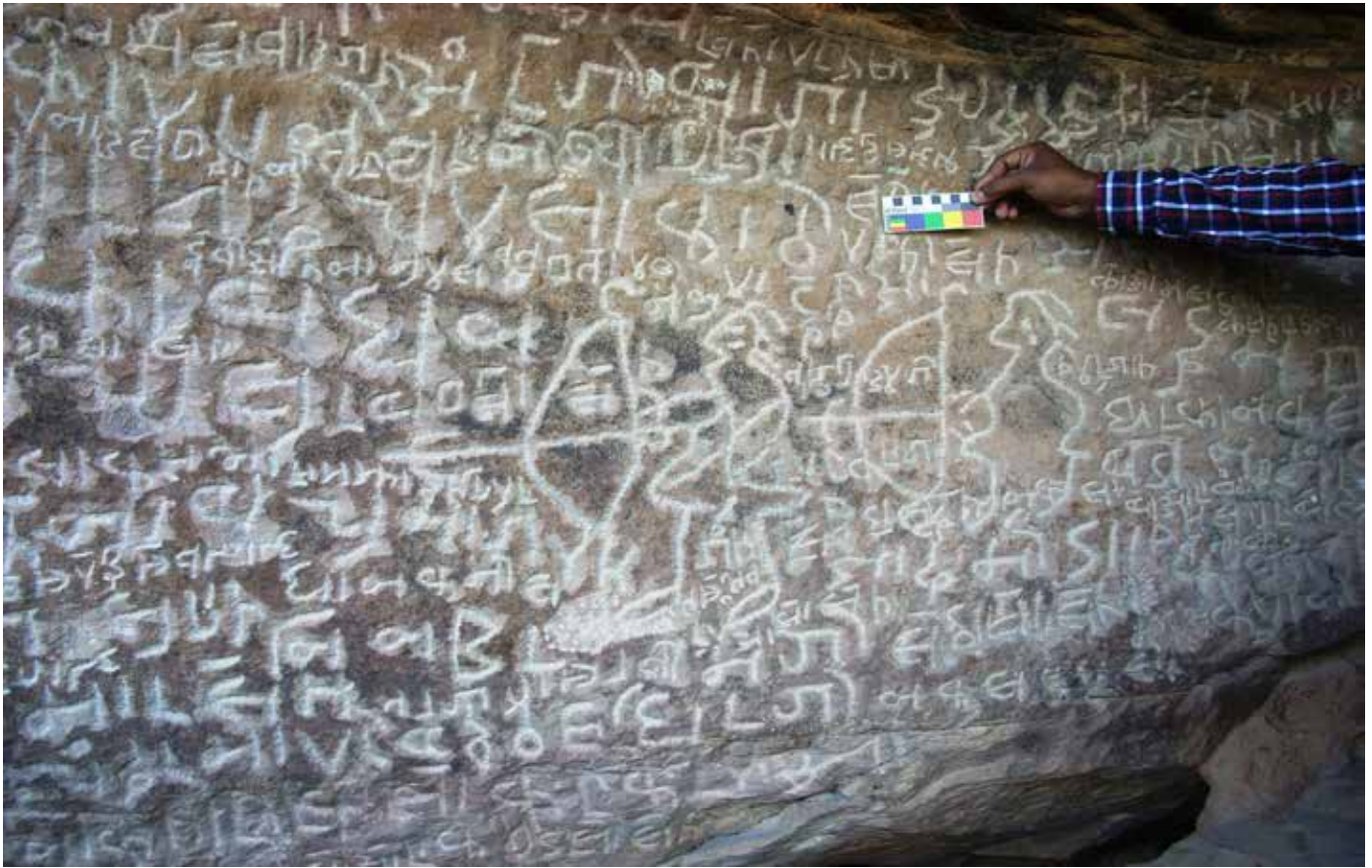


Fig.2: General view of the execution inside the shelter-A, the ghost writing and the open air boulder with engravings of 'ghost writing'-B, Kaimur, Bihar, India.

and maushri plants, milk and sindur provide permanency to the colors (Mathapal 1984: 189). Besides, other ancient Indian texts such as Brihatsamhita, Samarangana sutradhara, Aprajitaprichha, silparatana and Mansollasa have described several kinds of binders known as kalka, vajralepa, vajratala lepa, vajrasanghata, ashtabhandha and bandhodaka (Singh 1983: 53-58), which were prepared with the fruits of tendu, aonla, nagbala, kaitha and mahua, etc. flowers of semal, seeds of salai, bark of dhanvaja and vach trees, mayetha, sainj, resin of srivasaka, devdaru and bel (Singh 1983: 53-58). These are all fruits, seeds, flowers, resin and other materials abundantly available in

the forests and mountains of this area and the literary and folk traditions support their use in colors. The description is related to mythology only.

2) *Mahamanava*. According to Kharwar and Bind inhabitants the depiction of an iconic form of human large size is Mahamanava (a form of large human figure). It is called Mahamanava by them because of its huge size (Prasad 2001: 3). The depictions of this class of figure are always seen along with other human and animal depictions. The evidence of this kind of depiction is noticed from Dewane Mokwa (size 92 x 36 cm) and Chanain Maan in the Kaimur region. This is sometimes found in different





Fig.3: General view of the Guasgir Baba Ka Ashra, pasted colour papers on the occasion of his worship and the drummers and musician and the narrator narrating the mythology about the priest to the author, Kaimur, Bihar, India.

actions in a tall and stout feature depicted on the wall of the cave and shelter called mahamanava, with heavy head gear and long and straight hair or bird or fin-like thing (Fig. 7).

The ethnographic information and the local myths about Mahamanava as discussed above affirm, in all the detail and particularity the broad contours of the beliefs. At the same time, it is hardly surprising that mahamanava were significant to local inhabitants, given that Kaimur tribes are very fearful of these gigantic invisible men usually present in the society which sometimes affect badly and sometimes affect positively society's welfare. The suggestion in this paper, then, is that contemporary ethnographical tradition like paintings, folklore, myths and folktales can continue to inform cultural knowledge regarding both natural history and the supernatural powers that appear to people now, and are conveyed in the painted mahamanava on rock faces.

**3) Khuni rang and hand elbow thumb versus cup mark or post-hole.** The rock art site at Patesar

in Chand Block in the Kaimur district is interesting, as the shelter has some pictographs and naturally made cup-marks, post-holes and cupules on its ceiling. Villagers of the site had many views on both the pictographs (Fig. 5) and the natural petroglyphs. Khuni rang in English is the blood color of humans.

Of the pictographs they believe that: "There was a Jogi [priest], he was a very talented and educated man, he was there with his own family. A one day he murdered all his family members and drew this pictograph in their blood." The villagers still want to know why and how that Jogi murdered his family and what he wrote on the shelter. According to the locals, "These are not only figurative and iconic forms but are in a mysterious script which is very difficult to decipher."

Their beliefs about the post-holes and cup-marks are also interesting. According to them, "The bigger sized holes are the result of head of the gigantic man who impressed his head on this rock, the little bit smaller than the bigger one hole is the elbow imprint of the gigantic man who impressed his elbow on to



Fig.4: General view of the shelter in which on the ceiling and wall of the shelter some of the impression are naturally made, like H- Head impression, E- Elbow Impression and T-Thumb impression, Patesar, Kaimur, Bihar, India.

the rock surface, and the smaller cupules are made by the gigantic man's thumb impression over the rock surface." The description is mythological.

**4) Bhuini mai.** The site is located on the bank of the river Suara at Badki Goria, Bhagwanpur block of the Kaimur district. In the foothills of Badki Goriya on the left bank of the river Suara is a big triangular stone. It may be natural or a human creation. It is located near the rock art site, where there is evidence of regular habitation over the area. According to local people, this is known as Bhuini mai, with tika tradition (Tiwary, 2014: 810-829) for welfare of house members and society. This tradition shows the continuity since early times.

Let us discussed the south Indian megaliths where many scholars reported many symbolic burials bearing pictographs and petroglyphs belonging to the Neolithic, historical and later periods. Some scholars called it megalithic rock art. The present author testifies that this is only a symbolic stone known as Bhuini mai among the villagers, but the traditions of tika are quite interesting. Maybe the stone was erected by their ancestors in memory of their heroes or

deities, we do not know. However, what is its actually meaning according to the villagers? They may call it a menhir, hero's stone, burial, or memorial stone, or they may assume it is a stone fallen from the top of hill forming this shape. Here the important thing is the associated living tradition, which is emotionally direct, rooted in the heart of all local people. It may be erected in the memory of Bhuini mai, who may protect the local people in time of natural disaster or any critical condition, and now it is worshipped as a goddess by the local people. Further, it is significant to note that similar to the rock art in Badki Goriya some information was provided by local jungle dwellers about rock art in rock shelters located in different hills of Makarikhoh.

**5) Guasgir Baba Ka Ashram.** The site (Fig. 4) is located in the Bhagwanpur block of the Kaimur district. The nomenclature of the site is due to the word Gausgir, the name of the priest, Baba, the Hindi local name of the priest, and Ashram, the name for a monastery. The continuous flow of visitors in the shelter has badly affected the pictographs, especially those executed on the ceiling. Visitors perform there rituals such as





Fig.5: Pictographs of human scene from Patesar, Kaimur, Bihar, India.

Fig.6.: Group dance in front of a tree is depicted in the wall of the Raghubirgarh shelter.

Fig.7: An iconic form of Mahamanava executed on the wall of Dewane Mokwa, Kaimur, Bihar, India



firing, and the application of oil and ghee on to the wall and ceiling. On special occasions when they have performed yajna, they have pasted colorful paper over the pictographs. According to local myths, "The so-called Gausgir Baba is still living inside the cracks of this shelter and performing yoga, nobody can see him. If whenever anybody feels or sees Gausgir Baba, they will get everything they want."

6) *Ghost writing*. The site is located near Khaniya village of Khaniya hill, Chand block (Tiway, 2015: 535-538; 2017: 79-84), in the Kaimur range of Bihar. There are four rock shelters and one open-air flat boulder full of petroglyphs. According to villagers, these are executed by a mad man who lost his wife and after that he did all these things in this shelter with the help of iron tools and a stone hammer. They believe that these scripts are the script of invisible power that has power to rebirth his wife. "One time someone will come and read this script and then only his wife will wake up."

7) *Karma festival and dance*. This folk dance, Karma, is performed during the worship of the god of fate who is known as Karam Devta. The Karma dance is a tribal community dance performed by the Binjahal, Kharia, Kol and Kisan, and especially the Oraon tribe which is seen in this part of Kaimur region during the Karma festival. It is important to notice the shelter nearby which is painted with a group dance performed by the old inhabitants. We cannot only compare the mode of dance, we can also understand the purpose behind the depiction or execution of the dance scene and the ritual at the time of festivals in shelters or caves (Tiway, 2016: 793-805). The Karma dance is a tribal dance which is profusely painted in all the shelters of central and eastern India.

## Conclusion

The rock art is unclear. It is presumably related to the ritual that occurred on the rock surfaces. Perhaps these are drawings of the main plants and animals native to the area, and the area was being worshipped, or perhaps these are representations on the rock surface of the individuals who participated in the ceremonies. Or perhaps the pictographs all have astronomical significance and the ritual was related to a solstice or a celestial event. As noted, all of the abstract paintings could represent constellations, but because the tribes also highly valued dreams, they could also be images from dreams. Perhaps the artist had a dream that he believed had significance for others and wanted to share it. One book, *Myths and Reality* by D.D. Kosambi, has many illustrations and descriptions of the myths, folklore, stories and the reality. Another publication by R.G. Bednarik, *Myths about Rock Art*, is also important as the author describes the fake and created stories of rock art and mythology. J.D. Lewis-Williams (2006: 105-114) described San rock art?

The above descriptions of Kaimur rock art are based on the recordings of local inhabitants, especially from old men and women. Sometimes the stories are described by a mature person of about 40-50 years old, and according to him the stories are about their elders. In this context it is very difficult to prove whether the stories are originally as per their elders' stories or are simply modified from time to time.

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# ROCK ART AT BARDAL IN TRØNDELAG, NORWAY MYTHS AND MEMORIES?

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## **Abstract**

Among the Stone Age hunter-gatherer rock art at Trondheimsfjord, Central Norway, four sites stand out with their large, 'naturalistic' representations of elks and reindeer; the sites being located one at each of the major fjord basins. These carvings may represent the beginning of a new era, when the fjord and adjacent valleys become exploited in new ways, with special emphasis on hunting large cervids. The sites may have served as meeting places for different groups or sub-groups, being places where people came together venerating their founding ancestors.

At Bardal, the largest of these sites, distinct Bronze Age carvings, especially ships, were superimposed on the then old elk images. Many of these ships contain symbolic humans blowing on lurs – an ancient form kind of blowing instruments. These images may be seen as symbols of meetings between locals and people coming from the outer world, meetings that gradually were transformed into a memorable mythic past; the importance of the site being re-initiated by the making of new images during Bronze Age and Early Iron Age.

## **Introduction**

Rock art in Scandinavia for more than a century has been sorted into two major traditions – mostly because of motifs present but also due to geographical and topographical locations. There are no distinct geographical borders

between these traditions. They are represented by clusters of sites along coast and fjords, some also along rivers and lakes. Yet, based on the major concentrations, we may still operate with a northern Stone Age and a southern Bronze Age tradition, here referred to as NT of ST rock art respectively. In this paper I focus on the Trondheimsfjord area in Central Norway, where both traditions are richly represented, occasionally being present on the same rocks (Sognnes 2001; 2017).

Trondheimsfjord, an around 130 km long inlet from the coast in its central and inner parts runs almost parallel to the coast. Until around 5.500 BP (Sveian and Solli 1997) the fjord included the present Lake Snåsavatn and the valley between the fjord and the lake. The present fjord may be divided into several basins separated by narrow sounds (*Figure 1*). The southwestern part of the main basin is called Strindfjord, while the narrower, northeastern part of this basin is referred to as Midtfjord. During Stone Age two channels led from Midtfjord into the smaller Beitstadfjord basin that today forms the inner part of Trondheimsfjord; the northern part of the eastern channel today is dry land.

In Trøndelag rock carvings have been known since the middle of 19th century. Most sites contain ST carvings, but around 30 sites (Sognnes 2017) contain carvings and paintings belonging to the NT tradition. One of the most important sites is located at Bardal in Stenkjer at the Beitstadfjord basin, 64° N (Gjessing 1935; 1936; Hallström 1938; Sognnes 2008; 2017). The man panel (Bardal I), which is discussed here, is around 30 m long and up to 10 m high, facing southeast (*Figure 2*). Around 450 carvings are known, representing both rock art traditions. ST carvings dominate but around 50 NT carvings are present too. Several phases from the Mesolithic to Early Iron Age are represented – a time span of more than 6.000 years. Strong



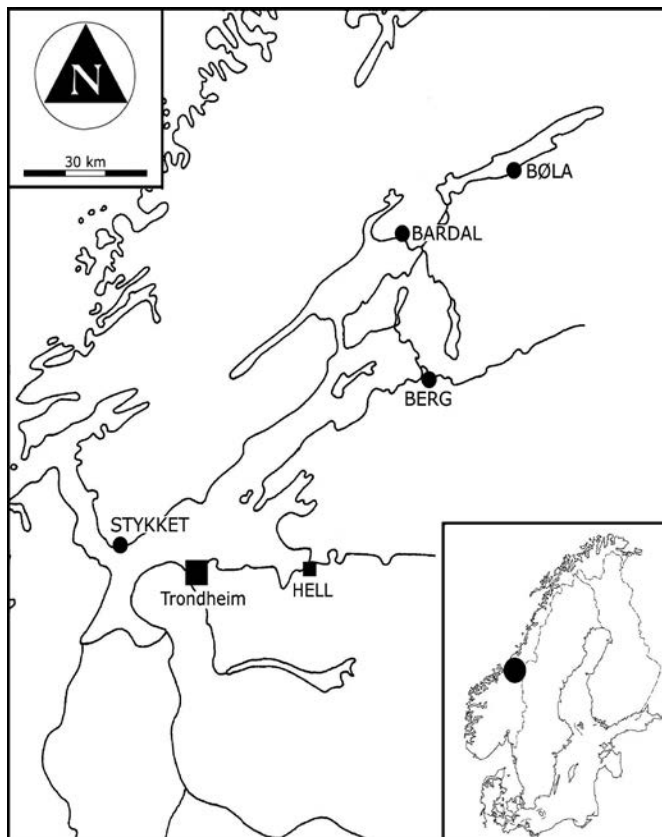


Figure 1: Location of the Stykket, Hell, Berg, Bardal, and Bøla sites at Trondheimsfjord.

weathering of the zoomorphic carvings indicates that there may be a significant time gap between the earlier and later carvings. The long time span during which carvings appear to have been made at this open-air panel makes unique in Scandinavia – perhaps even in Europe.

Based on stylistic criteria a group of full-scale partly superimposed elk images located near the southwestern edge of the panel are claimed to represent the initial Mesolithic phase (Gjessing 1936; Hallström 1938). To the right of these carvings are many smaller, today incomplete, animals – mostly elks. ST carvings are spread widely over the panel, especially in its central part. These were made during Bronze Age and Early Iron Age, the Bronze Age carvings being

concentrated in the central part of the panel. Some Early Iron Age carvings are placed within the Bronze Age concentration, while a curved row of images from this late period is found to the left and below most of the earlier carvings (Sognnes 2017:96).

Two hundred years ago a few ST sites only were known. No one knew anything about this phenomenon, why the carvings were made, made by whom, or what they meant. However, some boat images engraved on rocks at the island of Atløy in Sunnfjord, western Norway, were interpreted as a narrative representation of a sea battle that, according to a prehistoric saga, took place at this island (Christie 1837). Later these carvings were dated to the Bronze Age, but the idea that the rock art represented real events taking place in the past to some degree prevailed (Rygh 1908:4). The zoomorphic NT carvings were identified as a separate tradition in early 20th century (Hansen 1904; Brøgger 1906). One reason for this was the discovery of some of the panels discussed here (Lossius 1896; 1897; 1899).

### Myths of beginnings?

During Early Holocene hunter-gatherers migrated north along the coast of present-day Norway, basing their subsistence on marine resources. Eventually fjords and inland emerged from the ice sheet and plants and terrestrial animals immigrated, among the large cervids, which became the main motifs in NT rock art. The Trondheimsfjord area with both marine and terrestrial animals could be exploited at a different level. Traces of Early Mesolithic settlements along the fjord are, however, scarce (Alsaker 2015:44-45), but scattered finds of artefacts demonstrate that the area was exploited. The apparent lack of dwelling sites, that are frequent at the coast,

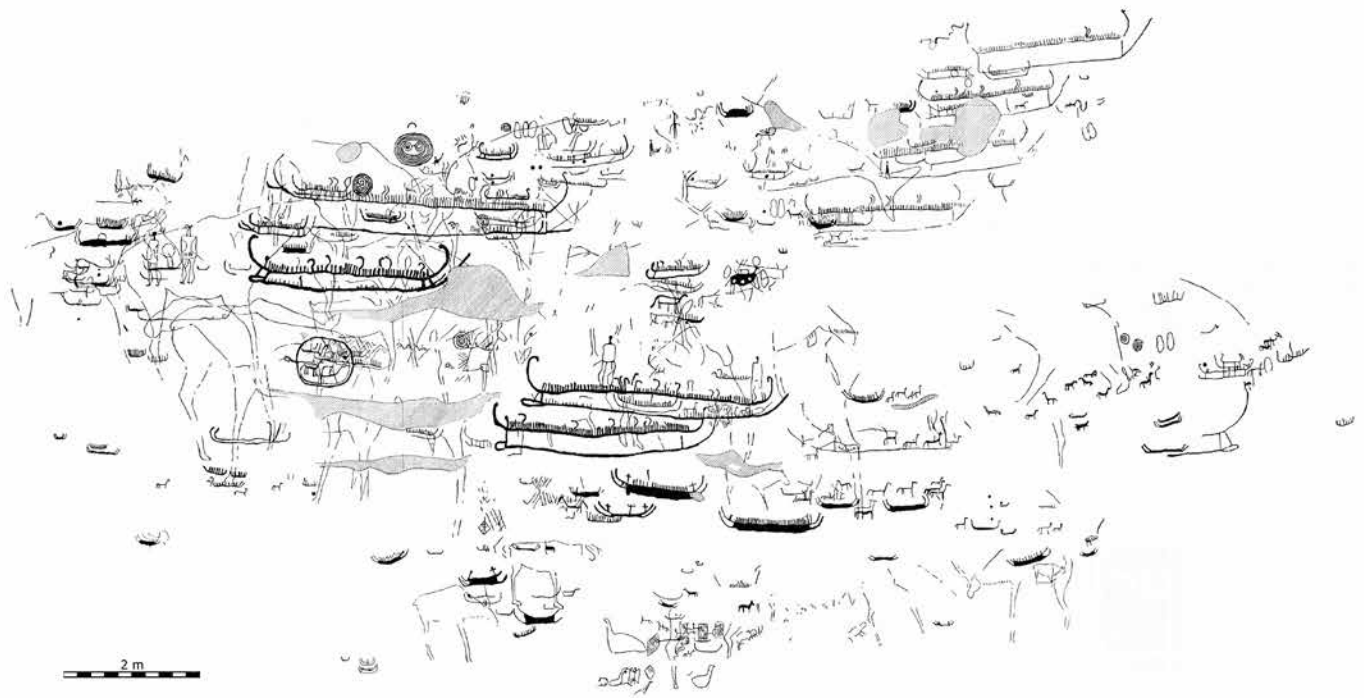


Figure 2: The main Bardal panel in Steinkjer, Trøndelag, Norway (from Gjessing 1936).

may be due to lack of systematic archaeological search for such remains at relevant altitudes above present sea level.

The early NT carvings at Bardal are strongly weathered but a group of large elks (2,3 to 3,3 metres long) together with a 7 metre long whale are identified. These large images were drawn in a 'naturalistic' style, the artists focusing on the outline of the animals. They became known in the 1890s (Lossius 1896), which was the case also for a full-scale reindeer image at Bøla, also in Steinkjer to the south of Lake Snåsavatn (Lossius 1897). Whilst the number of known panels and sites with NT rock carvings during 20th Century increased considerably, no more sites with large 'naturalistic' carvings were found until the 1970s, when similar carvings were discovered at Berg in Verdal and Stykket in Rissa (Sognnes 2017).

The Stykket carvings are located at the north side of the fjord, on a headland where the fjord

widens into the Strindfjord basin. While these carvings may be seen as being located near the western end of this basin, the Berg carvings are located near the inner end of the Midtfjord basin that is separated from Strindfjord by the Frosta Peninsula. Correspondingly the Bardal site is located at the present innermost Beitstadfjord basin, while the Bøla site was located at the 'Snåsafjord' basin. Four carvings, one from each of these four sites, are shown on figure 3. These carvings are believed to represent the initial Mesolithic phase of rock art making in this region (Gjessing 1936; Hallström 1938).

Two full-size reindeer images found at Hell in Stjørdal at the Strindfjord basin (Lossius 1899) have been associated with this early group of carvings, initiating a stylistic later stage (Gjessing 1936:165; Hallström 1938:387). The Hell images are, however, made in a different technique – incised, not pecked or pounded – with more angular outlines. My conclusion

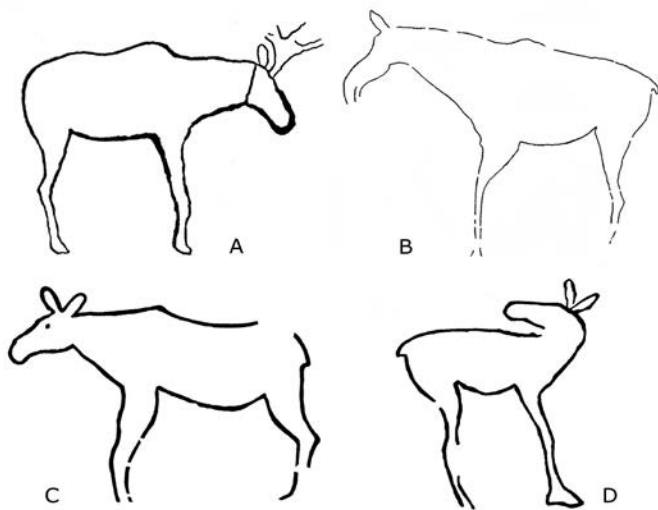


Figure 3: 'Naturalistic' rock carvings from Trøndelag, Norway; A: Stykket, B: Bardal, C: Bøla, D: Berg. Tracings by K. Sognnes (A, C), G. Gjessing (B), E. Bakka (D).

(Sognnes 2017:59-60) is that these images are neither 'naturalistic' nor contoured; they are constructed as a set of separately drawn body parts and thus represent a different mode of construction, which in general appear to belong to a later phase, for instance at Evenhus in Frosta, where the engraved panels did not emerge from the sea until the transition to Bronze Age (Sognnes 2017:109).

When people started exploiting the Trondheimsfjord area is unknown but some scattered, most probably shore-bound dwelling sites, have been identified at the southeast side of the fjord at around one hundred metres above present sea level, which correspond with around 10.000 BP, that is, with the Early Mesolithic Fosna phase. The panels at Bøla, Bardal, and Berg (and Hell) did not, however, emerge from the sea until around 6.000 BP, as evidenced by land uplift curves (Kjemperud 1986), the Stykket panel around 5.000 BP. These are maximum dates for the carvings in question. If connections existed between the artists who made the large 'naturalistic' carvings at these

four sites (e.g. Hagen 1990), the Stykket date is the one that come closest to the actual dates. This is later than previously suggested (Shetelig 1922; Gjessing 1936; Hallström 1938; Hagen 1976), but about that time something must have happened that led to the making of images carved on rocks rendering the larger animals migrating through the forests surrounding the fjord.

The maximum dates suggested above, place the sites in Late Mesolithic, when some important changes apparently took place. The land appears to have been exploited in a different way than before; the fjord gaining more interest. In addition to fish, seals, whales and aquatic birds, which could be caught in the fjord as well as at the coast, a wide range of terrestrial animals, among them elks and reindeer, could be more intensely exploited. Dwelling sites in general became larger and more permanent, which may be the result of a growing population.

It is against this background we should interpret these four initial rock-art sites, not as expressions of hunting magic that was the dominant interpretation during most of 20th Century (e.g. Gjessing 1936; 1945) or as favourable killing sites. The dates suggested above demonstrate that neither the Bøla nor Bardal and Berg sites were located at the seashore when the carvings were made. Rather the carvings may symbolise people marking their territories. They may be physical memories of the take-over of the fjord basins and surrounding landscapes, symbolically marking permanent human presence in this landscape by means of large-scale 'naturalistic' rock carvings.

Each of the four major Trondheimsfjord basins were permanently marked by images representing the largest terrestrial animals frequenting the area; elks at Stykket, Bardal

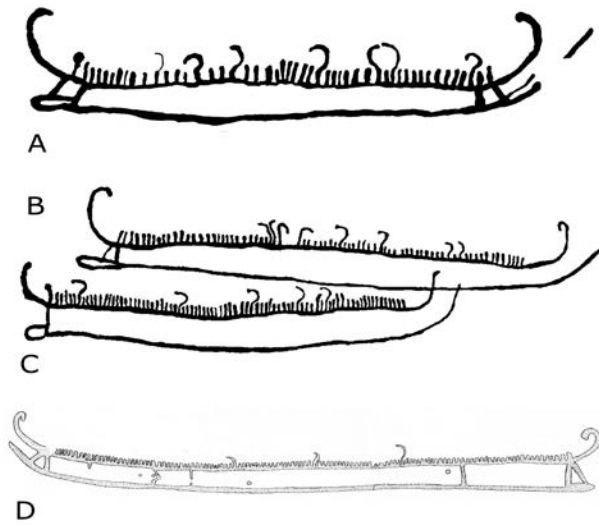


Figure 4: Large Bronze Age ship carvings at Bardal, Trøndelag (A-C) and Torsbo, Bohuslän (D). A = 3.15 m long, B = 3.90 m, C = 3.25 m, D = 4,5 m (from Gjessing 1936; Coles 2005).

and Berg, reindeer at Bøla. At Bardal we also find a seven metre long whale; the largest marine animal represented in this area. By making these images people and animals were linked together but at the same time also met at these particular places. we are dealing with presence; the animals as symbols, the humans in flesh (Sognnes 2013). We may be dealing with places for veneration of elks in particular; the animal that more than any other species lured people from the coast into the fjord.

Within a framework like this, these sites soon would reach a mythic status, as places were the ancestors signified their claims to the land; being places to be visited by generations to come and places where new carvings eventually were made; each site representing a social entity – tribe, group or clan – visiting its own site, venerating the mythic ancestors who created the animals on the rocks. In addition the large Bardal panel may have functioned as a common site for all groups living around the fjord. For Bardal, Stykket, and Berg the

elk was the venerated animal, the reindeer at Bøla. Elks and reindeer following the trails of their ancestors are still common in the region. Reindeer today are less common at the fjord but are still migrate to Lake Snåsavatn during wintertime.

### Memories of meetings?

In Early Bronze Age the Bardal panel again came to play a significant role. Strong impulses from southern Scandinavia reached the area, introducing the ST rock art tradition. Among these new motifs was a ship type (Figure 4) that became the main rock art motif in Scandinavia. Boats and ships capable of carrying domesticated animals – cattle, sheep, and goats together with people, coming from the south, there would be no farming communities this far north.

Boats therefore likely would become symbols of travelling and contacts with the outer world. Inspired by the work of Mary Helms (1998), Kristian Kristiansen emphasises the role of travels in Bronze Age Scandinavia, in particular journeys made by chieftains from Bohuslän, the centre of ST rock art production (Kristiansen 2004:113). It is claimed that these rock carvings in general were made at rocks close to the sea (Ling 2008; 2012). This, however, is not the case for Trøndelag, where the engraved panels in general were located at higher altitudes (Sognnes 2001).

As evidenced by grave monuments and votive finds in addition to rock art, Trøndelag appears as the northernmost European Bronze Age community. In general these new rock carvings were made on pristine rocks, but the Bardal panel became an exception from this, with Bronze Age and Early Iron Age carvings partly being superimposed on the Stone Age ones (Gjessing 1935; 1936). Perhaps this was done as a demonstration against the ancient symbolic



world of the hunter-gatherer predecessors.

Among these new carvings are some exceptionally long ship images that recently have gained interest due to their similarities in size and design with carvings at Torsbo in Bohuslän (Ling 2012). While the Torsbo ship in question is 4.5 m long, the corresponding Bardal ships are between three and four metres long. They clearly depict the same ship type and are drawn in a similar style. Above the gunwale lines these ships have a large number of short vertical strokes that represent the ship's crew. The number of strokes in these cases is so high that it is unlikely that they represent the crew alone. The extra strokes may represent immigrants but also warriors that made it possible for the ships to travel without fearing hostile natives. However, one single armed warrior only is depicted at Bardal. We then may suggest that these meetings were peaceful. Some crew strokes are longer than normal, the elongated part being shaped like semi circles. These strokes are believed to represent blowing instruments, called lurs known from Danish bog finds (e.g. Broholm 1965). Considering the great number of ship images found in southern parts of Scandinavia (e.g. Kjellén 1976; Malmer 1981; Coles 2005; Vogt 2012; Nimura 2016) depictions of lurs, even in their most symbolic forms, are extremely rare. One such stroke is found on the Torsbo boat (Figure 4C), but at Bardal more than 50 examples can be identified on board 13 ships; this large number of lurs thus is extraordinary. An interesting aspect is that the upper parts of these lur images resemble the upper parts of the ship prows and vice versa.

At Kalleby, Bohuslän two groups of warriors blowing lurs are found (e.g. Coles 2005), and some smaller lur blowers are identified at Borge, Østfold (Vogt 2012: 120-122). At Bjørngård, Trøndelag (Sognnes 2001) at least

two carvings are found that most probably render lurs but these were drawn as individual images (Figure 5A-B), not being blown. At the neighbour Hegre farm a Celtic larynx appears to be depicted (Figure 5C). Based on these images we may suggest that Bronze Age people living at Trondheimsfjord knew and had heard these instruments being blown, perhaps on incoming ships. The Bardal panel was not located near the sea, but the existence of the older carvings may have been decisive for re-using this particular panel. Bardal, then, would represent the northern end of a sea route from southern Scandinavia.

We may see these boat images as representing memories of meetings between locals and travellers coming from the south – or local travellers returning home – imagining ships being paddled across Beitstadfjord, the paddlers keeping speed accompanied by lur blowers. At the same time this blowing signalled their arrivals, calling for meetings at the engraved rock, where a large terrace in front gave space for a substantial number of people. The rock carvings today, three millennia later, still exist as a memories of these events.

## Perspectives

Both rock art traditions are represented at some other panels in Trøndelag too, but the number of carvings representing each of the two traditions at Bardal is exceptionally high. The shape of the panel itself is special too, with two converging rows of eye-like depressions crossing the surface (Sognnes 2017:87-88). Images belonging to each tradition appear to have been made during long time after the initial carvings were made; the final phase being dated to the pre-Roman Iron Age ca. 2600-2000 BP (Gjessing 1935; 1936).

The large, 'naturalistic' carvings form a small

part only of the NT rock art images known from Trøndelag (Sognnes 2017), being represented at four sites only, each being located at a major Trondheimsfjord basins. (Correspondingly a single, large 'naturalistic' elk carvings is known from Romsdalsfjord further to the southwest [Gjessing 1936; Hallström 1938].) They may be the very first rock carvings made in this region, but the claim that they represent the earliest phase in a stylistic development (e.g. Shetelig 1922; Gjessing 1936; Hagen 1990) has acted as a straight-jacket for how they have been interpreted. Focus should not be on their stylistic age, but on their locations, meanings, and importance.

The making of the carvings most probably took place at certain occasions separated by long periods when no carvings were made. Yet, being clearly visible on distinct rocks, the large, naturalistic carvings continued to have some meanings for people living in the area, whether hunter-gatherers or early farmers. The terrace in front of the Bardal rock has today, and had before, space for many spectators. However, the Bronze Age and Early Iron Age superimpositions indicate that they represent a break with the past, but at the same time they represent a continuation, being engraved on the same rock. The first ST carvings, among them the large ships with lur blowers may represent a re-initiation of the site, perhaps by new, immigrating people coming on ships carrying both people and domesticated animals.

For both groups it was a matter of presence of people at a rock to which were attached myths and stories about origins and communal activities. During Mesolithic, the carvings may also have represented a reciprocal relationship between humans and animals. For Bronze Age, relationships between humans were symbolically marked by the presence of ships that were the primary means of

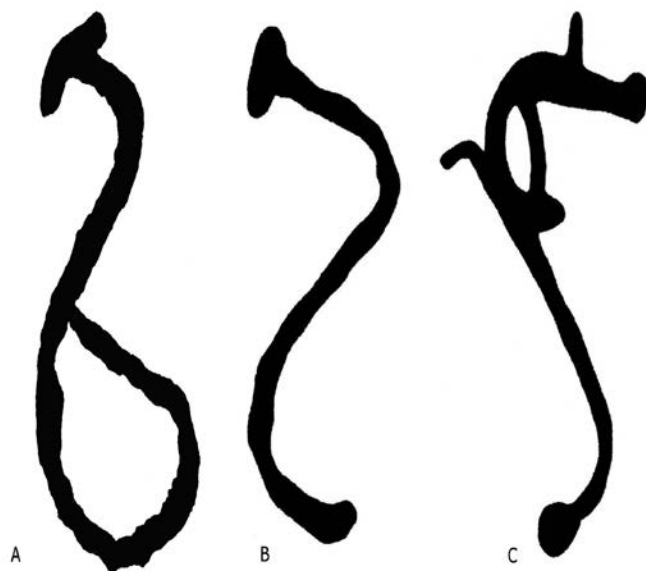


Figure 5: Rock carvings depicting lurs at Bjørngård (A-B) and a larynx at Hegre in Stjørdal (from Sognnes 2001). Images are not at scale.

communications between members of the local world and between that world and worlds far away.

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# NEW PERSPECTIVE ON THE THEORY OF THE “MAIN MYTH”

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The theory of the ‘main myth’, developed by linguists Toporov and Ivanov<sup>1</sup> in the 60s-70s of the 20th century, leads to the identification of the main mythological motif in Indo-European mythology – the motif of the thunderer fighting a serpent. Cognitive and linguistic analysis of this study reveals that the theory of the ‘main myth’ is outdated, since it does not cover all the issues into account. In order to create a new perspective on the study of this issue it is important to keep in mind the historical, philosophical, cultural and linguistic facts which are known now.

The issues of the origin of cognition, knowledge, art and writing refer to a common initial stage, when these concepts were all unified into a single mythological consciousness. Then, in a certain period of time, it gradually generates theoretical concepts on cognition, like space and time, good and evil, life and death. This ‘genetic’ connection indicates the formation of certain particular motifs and of the principles of Natural Philosophy concerning the fundamental principle of mythological consciousness. Thus, this question develops beyond the current interpretation of the theoretical study of the ‘main myth’, including a broader range of issues and objectives.

The new conception is not based on the motif of the thunderer fighting a serpent, but on the

motif of interaction among the four principal forces of nature (genesis), which completes by the birth of the first man (cultured, cognizant). The proposed framework is crucial and develops further not only in Indo-European mythology, but also in world mythologies. The new conception tends to the synthetic perception of the genesis concept, rather than to its separation into different units. Research revealed that the traditional interpretation of the motif of the Thunderer (positive deity) fighting a serpent (embodying darkness) is outdated and requires a new cognitive interpretation, reflecting cognition in thinking of a cultivated man; another important concept is the Tree of Knowledge of Good and Evil, reconsideration of the concept of the Tree of Life, reflecting the struggle of the first man (forces of good) with the consequences of earthquakes and volcanic eruptions (natural forces of evil) for the preservation of the Tree of Life.<sup>2,3</sup>

Particular representations and motifs do not come up from nothing, but they are the result of a mixture of contemplation and pure thought, carried out by the main forces of consciousness. It does not affect only the categories of objective consciousness in theoretical and intellectual fields, but these categories act in every aspect of the formation of human worldview. Every perception of the world is possible only through distinctive acts of objectification, through the conversion of plain ‘impressions’ into inherently defined and structured

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2. Vahanyan G., Stepanyan A. Prehistoric art in Armenia: new discoveries, new interpretations and new methods of research, XXI Valcamonica Symposium “Prehistoric and Tribal Art: New Discoveries, New Interpretations, New Research Methods”, Darfo Boario Terme (BS), Italy, 08-14 September 2004.

3. Vahanyan G. Volcanic eruptions from Mountains of Ararat till Alps, Indo-European myths, Rock art and iconography. Convegno internazionale, L'arte Rupestre Delle Alpi, Capo di Ponte, Valcamonica, Italy, 21-24 October 2010.

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1. Ivanov V., Toporov V. Studies in Slavic Antiquities. “Nauka”, Moscow, 1974.

'representations'.<sup>4</sup> A serpent or a dragon is a symbolic representation of a volcanic eruption or an avalanche. Prehistoric man witnessed natural processes. Wise, knowledgeable and experienced leaders or tribe chiefs had to study, describe, transfer and visualize the observed processes. They had the task to preserve and transfer their knowledge and experience in order to train their people to fight against the evil forces of nature, to survive using the available means. The oldest instrument used to visualize the forces of nature and human interaction with flora and fauna and the four fundamental forces of nature was rock art.

Once in 1,000 or 2,000 years catastrophic volcanic eruptions occurred in the area of the Araratian Mountains and it was necessary to transfer this knowledge in a form that could be available and comprehensible to prehistoric men. The inhabitants of the volcanic Mountains managed the task perfectly.<sup>5</sup>

Each people managed this task in a different way, according to their cultural and linguistic background. It is necessary to recognize the importance of national language categorization and conceptualization in terms of identification and theoretic understanding: this is the only way to discover and understand the fundamental mechanisms that regulate the existence and activity of a native speaker. This can be done by using a particular vector of scientific inquiry, such as the cognitive modeling of cultural forms and linguistic signs according to national experience. This way of thinking denotes Reflective research

4. Kassirer E. The Philosophy of symbolic forms. Volume 2: Mythological thinking. "Uni-ver-sitetskaya kniga" Moscow-Saint Petersburg, 2001.

5. Vahanyan G., Vahanyan V. Araratian Rock art as a paradigm of communication and visual arts in the past and future, The XXIVth Valcamonica Symposium "Art and Communication in pre-literacy societies", Capo di Ponte, Valcamonica, Italy 13 - 18 July 2011.



Fig. 1: A dragon-stone carved from basalt, Armenia

studies the different models of national linguistic categorization – methodological tools, revealing dialectics of interaction between natural scientific knowledge and empirical evidence and orienting interaction between native speakers in a coordinate system, in the frame of a particular cultural and historical period.<sup>6</sup>

The basis, origin, foundation of knowledge and

6. Vahanyan G. The Role of Rock Art Clusters in Mythology, Religion and Magic: the Concept of the Knowledge Spiral, EXPRESSION N°10 Quarterly e-journal of Atelier in Cooperation with UISPP-CISNEP, December 2015.



Fig. 2: The thunderers and serpents/dragons, Armenian Rock art, VIII-IV millennium BC

experience that led mankind to the victory over the forces of nature was the knowledge of the four fundamental forces of nature (the classical elements: fire, air, water and earth). The interaction of these fundamental forces of nature forms the so-called 'super structure'. The symbiosis between the basis and the superstructure brought to the absolute victory of reason over the wild forces, securing the issues of survival and viability of the tribe.<sup>7</sup>

The following principle of 'one over many' entrenched in the consciousness of prehistoric man: each element, taken individually, has the power to dominate one of the other three (these views were further transformed and included in the principles of Natural Philosophy and Metaphysics). So, mankind perceived that a system dominates its constituent elements. A system unit cannot withstand the power of an entire system. A system has qualities that none of its constituent elements possesses on its own (principle of emergence). Thus, the main mythological motifs acquire a certain chain of mediating links, in which, however, a single set of changes is framed, forming a universal

7. Vahanyan G. The Beginning of natural philosophy and metaphysics in the rock art of Armenia. *EXPRESSION* N°6, International Journal of Art, Archaeology & Conceptual Anthropology, August 2014.

way of thinking. This law of thickening or concurrency of correlated units in mythological thinking can be identified in the themes and motifs of Armenian rock art complexes. A number of depictions of thunderers and serpents/dragons (*fig.1*) can be identified. In the prehistoric culture of the Araratian Mountains there are also unique artifacts – the so-called 'dragon-stones', carved from basalt (*fig.1*).

The thunderer is the representation of the cultivated and wise first man. He possesses knowledge and 'supernatural' powers due to his cognitive abilities: he is characterized by wisdom and intellect. He is depicted in rock art and described identically in myths, embodying a hero who meets the challenge of the wild forces of nature threatening the earth. The negative forces are symbolized by a serpent, depicted while trying to destroy flora and fauna, to kill a man, to swallow the sun and the moon (*fig. 2*), to block the access of mankind to water, the source of life.<sup>8</sup>

Knowledge of 'good' and 'evil' is almost always represented in a comprehensive

8. Vahanyan V., Vahanyan G. Armenian Pleistocene Rock Art as Origin of the Universal Visual Motifs of the Indo-European Myths. IFRAO Congress "Pleistocene Art of the World", Tarascon-sur-Ariège and Foix, France 6–11 September 2010.





*Fig. 3: A dragon-stone carved from basalt, Armenia*

stylized form, as the universal concept of the 'Tree of Life' and the 'Tree of the Knowledge of Good and Evil'. Knowledge of good and evil is characterized by the final victory of good (wisdom, knowledge, forces of light – the sun, lightening, etc.) over evil, the serpent/dragon. This depiction is the symbolic representation of the paradigm of victory over the classical elements thanks to knowledge, wisdom and courage of the leaders and tribal chiefs (fearless leaders and sages, that were later exalted and venerated like divine beings, embodying the traditional mythological perception and representation of thunderers).

The authors propose a new conception of the "main myth", which is in all a reconstruction from the concept of the four forces of nature, as expressed in the principles of Metaphysics and Natural Philosophy. The main mythological motif, according to this research, is the one of the birth of the first man, as described in the song The birth of Vahagn. In the Book of letters

Khorenatsi reveals the mystery of the genesis of man by using the language of metaphysics and the teachings of the unity of nature and man, emphasizing that the forces of nature are interconnected and comprise the four fundamental principles – earth, water, air and fire.<sup>9</sup> The song is an artistic interpretation of the original poem, set to music. It is a sequenced description of an algorithm of interaction of the four forces of nature: not the opposition between the first man (thunderer) and his opponent/enemy (chthonian serpent), but the opposition between the principal forces of nature (representing life, synthesized in the act of the birth of Vahagn) and the anthropomorphic force (catastrophic volcanic eruption, symbolizing death and chaos). To this opposition relate all other oppositions, which ensure the victory of good over evil, reason over folly, wisdom over ignorance, light over darkness, order over chaos, life

9. Abeghian M. Old Armenian ecclesiastical literature, <http://www.portal-credo.ru/-/site/?act=lib&id=290>



Fig.4: A dragon-stone carved from basalt, Armenia

over death and so forth. Infinite time stems to the origin that formed the forces of nature.

A comprehensive description of the main motif of the poem-song *The Birth of Vahagn* is recorded in *Armenian History*: “This wonderful song presents the origin/birth of cultivated life as a process of unity of four opposing polar elements in heaven and on earth: the earth, water (sea), fire (flame, smoke) and air (sky)”.<sup>10</sup> Flora is embodied in the form of reeds in the sea, from which Vahagn is born, surrounded by fire and flames.<sup>11</sup> In social and cosmic respect, there are two related but opposing worlds: mankind and nature. In this poem-song the process of volcanic eruption is compared with travail: in travail are heaven and earth, crimson sea and red reed rising from the sea when Vahagn is born. Red reed symbolizes a volcano, smoke and flame rising from its crater, from which the youth is born: the flame surrounding it symbolizes bravery and courage, love and devotion. According to the authors, this song does not have East-Indian or Iranian origins, but it was created on the territory of historical Armenia, according to the

10. *The Armenian History*. V. 1, NAS, Yerevan, 1971, p. 485.

11. Khorenatsi M. *History of Armenia*, “Hayastan”, Yerevan, 1990.

paradigm of Armenian culture and worldview. The “crimson sea” described in the song is Van Sea, which was colored crimson from the magma erupted from a near volcano. The birth of Vahagn – a poetic, figurative description of a volcanic eruption – represents in fact the origin of the god of war, battle and courage, lightning and thunder in the Armenian pagan pantheon.<sup>12</sup>

The analysis reveals many similarities between the old Armenian motifs (the birth of the cultivated hero, the first man Vahagn, his beautiful bride Astghik, the motif of the hero fighting a dragon and liberating water) and the ancient mythology of many different people. For example, in ancient Greek myths there are not only similar motifs, but also similar places: Zeus’ fight against Typhon (a serpent from Cilicia, according to another version from the Caucasus), the creation of men out of clay mixed with water by Prometheus (again, in the Caucasus) and his punishment for the theft of fire (he was chained to the rocks of the Caucasus). Also the Argonauts, led by Jason, set out on the quest of the Golden Fleece (symbol of the ancient knowledge recorded by runes) to the Caucasus (Colchis), where a dragon was guarding a water source and a tree – the symbol of the knowledge of good and evil. According to Norse mythology, the Aesir Odin created the Runes from an oak tree (symbol of the tree of the knowledge of good and evil), coloring it with his own blood<sup>26</sup>. According to Norse tradition, dragons were depicted on runic stones. Their bodies were filled in with runes instead of blood, i.e. dragons guarded ancient knowledge. Knowledge and wisdom (their perception and application) had the value of life or death.

Thus, the entire conceptual meaning of the

12. Shirakatsi A. *Cosmography and the calendar*, Yerevan, 1940.

motif of the thunderer fighting a dragon is entrenched in the mind/consciousness of ancient people. The final battle and its catastrophic consequence (volcanic eruption), recorded by Khorenatsi and passed down from generation to generation as a vivid, realistic, artistic and poetic song, is the first decisive trial for the one who knows and puts into practice the wisdom and knowledge of prehistoric men. The authors study, reveal, identify and interpret this main theme in the main motifs of rock art in the Araratian Mountains.<sup>613</sup>

Also, relations of the “main myth” with the biblical motif of the genesis of Adam and Eve can be identified. They lived in the Garden of Eden, where the four river stake their sources, they were tempted by a serpent and ate the forbidden fruit of knowledge of “the Tree of Good and Evil”, and later they were banished from the site, which from then on is guarded by a cherub wielding a flaming sword (also, a volcanic eruption can often be seen in the depictions of Adam and Eve’s expulsion there). There are also many other relations to old Greek, Kassite-Babylonian, Sumerian-Acadian and Hurrian-Hittite myths, e.g. the theme of Cadmus (hero of Phoenician origins) fighting a dragon; the Vedic myth of Indra (god of

14. Draskhanakertsi H. History of Armenia, Yerevan, 1984.

rains and lightning) fighting Vritra (a serpent or dragon representing drought); Baltic mythological motifs of Perkunas (heaven deity) and Velnias (the devil), etc. According to Christian worldview, the story of Jesus can be seen as similar to Prometheus’: for knowledge transfer to mankind he receives a ‘punishment’ for his deeds: he is “bound” and crucified on the cross, symbolizing the “Tree of the Knowledge of Good and Evil” and the “Tree of Life”.<sup>14</sup> His resurrection symbolizes the revival of the Tree of Life in heaven. His coming as the savior symbolizes the revival of the Tree of Life on earth. From pre-pagan and pagan periods the same theoretical and religious “orientation” was passed to Christianity and penetrated into the frame of medieval Christian doctrine. The plan and architecture of a medieval church show the same characteristic symbols of the four cardinal directions, peculiar to the mythological sense of space. Sun and light are no longer deities but divine attributes. Faith in Jesus as the “sun of justice” replaced the cult of the sun. The four points of the cross are also identified with the four cardinal directions and the corresponding

15. Vahanyan G., Vahanyan V. The Cross, the Swastika, the Star of David, and the Eight-Pointed Star in the Rock Art of Armenia. XXV Valcamonica Symposium “Art as a Source of History”, Italy, 20–26 September 2013.



Fig.5: Illustration of volcanic eruption and solar eclipse. Armenian Rock art, VIII-IV millennium BC



division of the world. On this simple schematic basis was based the increasingly refined and profound symbolic system, in which all the inner content of the faith is objectified in elementary spatial relations.

Human thought formation is based not only on the categories and units of a particular language, but rather on the universal content structures.<sup>15</sup> People frequently use words not on their semantic level, but on the level of their transmitted meanings, i.e. concepts and conceptual features in entirely different, non-respective contexts, without conceiving the way a particular word is formed in the dictionary, which serves as the basis for the recipient to perceive its meaning.<sup>16</sup>

The current level of development of linguistic science presupposes a deep study of the issues of systemic organization and categorization of the vocabulary of a language, analyzing its connections and relations rather than its single words. Language reflects the contemporary culture, but it also carries the imprint of its previous forms: this way, the universal worldview of a certain culture is affirmed, a system of persistent representations. The Armenian language has retained vivid traces of this relation. Vahagn (his name embodies four consonants: v, h, g, n) is a dragon slayer and a thunderer, the liberator of water, directly correlated with the four forces of nature (fire,

water, air, earth) and, accordingly, with volcanic eruptions and lava. The roots of these (the onyms \*van, \*ia, \*an, \*agn and \*uel-) become universal indicators of the relations within the four forces of nature and with the antagonist serpent. They are identified everywhere – in the names of pagan gods, like the Greek Zeus or the Baltic Velnias; in toponyms such as Volosovo, Veletovo, Volhynia, Wawel; in words like Valkyrie, Valhalla, and Wayland; in the names denoting water (“aqua”), etc.

Non-rational (mythological) and rational (discursive, analytical) thinking are different, complementary forms of reflection, creation and perception of the world. Consciousness, based on the conclusions and arguments of human mind, processing the data of senses and sensory perceptions, is capable of modeling the unknown by resorting to the sense embodied in the memory, to sensor/haptic representations. According to the authors, these representations are mostly expressed in the motif of the birth of Vahagn from the four forces of nature, which is the prototype and universal pre-representation within the frameworks of the theory of the ‘main myth’. The records of Armenian historians obtain scientific evidence through the findings of other interdisciplinary studies.<sup>17,18</sup>

17.Gray D., Atkinson Q. Language-tree divergence times support the Anatolian theory of Indo-European origin. *Nature* 426, 2003, 435-439.

18.Vahanyan G. Armenian Rock Art as Visual Knowledge for Understanding the History of Civilization in Asia, Europe and Scandinavia. XXVI Valcamonica Symposium “Prospects on prehistoric art research: 50 years since the founding of the Centro Camuno”, 9–12 September 2015, Italy.

16.Demyankov V. The dominant linguistic theories in the late XX century. *Language and science at end of the XX century*. The Institute of Linguistics RAS, Moscow, 1995, p. 239-320.

17.Boldyriev N. Cognitive semantics: lecture courses. Tambov, TSU, 2000, p. 123.

# THE NEANDERTHAL CONSTRUCTION IN BRUNIQUEL CAVE, FRANCE THE ORIGIN OF MYTHS THROUGH A DISCUSSION OF ANTHROPOLOGICAL STRUCTURALISM

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## **Abstract**

The Bruniquel cave has been known since 1990, when it was discovered by a 15-year-old boy. It has been studied since then, but only on May 2016 a great discovery in archaeology was announced. The new information is that the date of the circular structure made of stalagmite found inside the cave, at first considered to be 47,600 years ago, has been changed to 176,000 years ago – therefore, it could only be considered as a Neanderthal's work. In this article, we intend to discuss the discovery's importance to humanities and sciences, with complex thoughts about the first manifestations of myths. We will try to present the issue through an anthropological structuralism approach, although the Bruniquel find has not been associated with a human creature in a strict sense.

## **The discovery of Bruniquel: the discovery of a big problem**

Amidst the variety of forms and contents that surround us in our daily lives, we wonder about what moves our minds. Would this be solely the universe of collectively shared value traditions, in a very general and broad sense, as suggested by early sociological theories (Georg Simmel, Talcott Parsons, Emile Durkheim), or the universe of each human mind, as indicated by the firsts occidental theories on human behavior (Friedrich Wilhelm Bessel, Wolfgang

Köhler, John Dewey)?

In any case, the work of man on the material medium can be considered as one way to verify this question. In this sense, the artifactual records indicate a mixture of these two sides of the human dimension: the personal/subjective as well as the 'universal', that is the way of thinking and living shared by all the individuals belonging to the same group.

The artifactual records, whose forms usually follow the common path of a certain socio-cultural influence, often attest also more "personal" peculiarities, which might be consciously made by their creator. Since such forms and contents are selected to last forever, they seem to demonstrate a connection with the greatest depths of human subjectivity.

The engine that led to the creation of such forms and content is one of the most difficult questions in anthropology and archaeology, primarily because the material remains through which it can be studied are very few and fragmented. Moreover, there is not an absolute consensus on which theoretical perspective makes a better interpretation for the subjectivity involved in the production of the archaeological records. What is seen is often translated only through the technical-functional viewpoint, because there is a widespread fear of going a little further, of trying to interpret the record.

It is in this sense that the circular structure of the Bruniquel cave, in France, made with fragments of stalagmites and stalactites, can provide clues about the origin of the complexity of human thought, since it has been dated as the oldest art form already recorded, 176,000 years ago (Jaubert et al., 2016).

This kind of discovery, though it may be seen as yet another source for thinking about the birth of symbolic thought, has revealed, however, a new problem. In fact, this problem is constituted as a paradigm which has not been systematized yet.

The very ancient age of this find, as well as its



Fig.1: The circle in Bruniquel cave (from dailykos.com).

insertion in the local continental context, makes it clear that this structure was not built by 'us', but, in fact, by another species: the *Homo neanderthalensis*. So, how is it possible to consider as human something which has been built theoretically by a being which actually is not an average "human being"?

It is a huge problem, because art would involve categories of thought that go beyond the purely technical nature of and the manipulation of environments. It is a phenomenon that comes from the deepest levels of human subjectivity and is finally exposed before our eyes, ears, mouths and hands.

This subjectivity, both in its material and immaterial manifestations, has certain features which are typical of a given culture. Such subjectivity, however, does not come from the peculiarities of each culture, but also from each individual artist.

Perhaps the question asked by the researchers

who presented Bruniquel 'Neanderthal art' (What did they build this structure for?) cannot be answered objectively or, more clearly, according to 'functional' reasoning. The question is not made to look for a possible meaning of the circle, but rather to understand why the circle was important. This method, however, may not produce satisfactory results when the main object is a product of the most subjective side of human thinking, or from a being which is not actually 'human'.

The problem is indeed complex: trying to understand the function of some 'aesthetic' archaeological object means to return to the first anthropological theories of the late 19th century/early 20th century, set on discovering the practical function of each and every artifact. To consider such an object within an 'evolutionary' scale of ideas will lead to the same mistake, since there is neither 'superior' nor 'inferior' art: the technical aspect does not

matter, since art is a subjective expression that often does not have a clear purpose, although we suppose that it was important to its author. If we consider the circular structure in Bruniquel an aesthetic conception (Stolnitz apud Talon-Hugon, 2009: 90), we must consider it as something isolated, that was not built for a given purpose, effect or consequence, but it was simply considered pleasant. An object that catalyzes emotions can also be based on a more specific mind structure, not only of a single person, but, at least theoretically, also of all other human beings.

So, with such a premise, we have to deduce the purpose of Bruniquel's set by what is latent – a completely different mode of understanding from what Arnheim thought could condition human mind: the visual perception (Arnheim, 1976). Therefore, the circular configuration formed by the karst assembly would not have direct references to the real world. Such configuration is something abstract, which carries symbolic content. This observation does not imply that we necessarily have to use some hallucinogenic substance to access the meaning of the image, as Clottes & Lewis-Williams think about the realization of Paleolithic art (Clottes & Lewis-Williams, 2001). Above all, it is the study of the elemental character of the myth, and of the possibility of its ontogenization via the process of memorizing and the reproduction of its forms.

The mythological feature of the Bruniquel archaeological structure and its problematic  
The myth, as understood by Mircea Eliade (1972), is a story or narrative referring to a 'creation' that usually was made possible through the actions of supernatural entities. In other words, it is the best definition to be given to this very early art work, this human Big Bang that the structure in Bruniquel is. However, the nature of myth involves its gradual undoing, insofar as its content acquires new cultural

elements, although it often retains a certain form (it is unknown whether the Venus of Willendorf had the same meaning everywhere in Paleolithic Europe). Thus, the mutation and transgression of myth through time and space, but also the passing away of its origin, is a problem for those who wish to understand how the first myths were created.

The study of primordial myths, which would possess the most elementary characters of human condition, was initiated by Freud through studies about the unconscious (for example, when he used classical references in his studies –Oedipus complex etc.). But these studies gained strength later, with Jung, this time within the idea of a suprapersonal unconscious, common to every human being or, at least, to the members of a given culture (Jung 2007). This collective unconscious would be formed by primordial images, theoretically existing in the imagination of every human being: the collective archetypes.

The Jungian idea is interesting, especially its suggestion that certain myths existing today might be related to certain 'cultural phases': the dream in which Jung describes his descent on a ladder to the deepest level below the earth – the most primitive state of man. However, his idea can be supported by an evolutionary bias of linearity, indicating a single path of understanding along which all cultures and individuals would have to go.

Such perspectives can be used in the study of Bruniquel cave. However, they are not enough to undermine ideas deeply rooted in the social imaginary or just in the imaginary of some researchers about a certain 'primitiveness' supposedly existing in the Neanderthal, and even within the infinite variety of cosmologies created by different ethnic group, both extinct or still existing. In this sense, it is worth recapitulating Lewis Williams, when he stated about Neanderthals' inability to dream, which



would explain why they did not create rock art (Lewis-Williams, 2004).

For the problem of the variety of myths existing among different cultures, we must find a solution that corroborates the existence of a structural systematization in all of them, rather than merely look for their particular meanings. Such meanings can be based on a structure that is common to all human societies, something that is included, according to Lévi-Strauss (2010), both in what is more human (culture) and in what is more animal (the recurrence of a given behavior within the species).

Leroi-Gourhan elaborated a structural-theoretical scheme to understand the magic-religious universe of Paleolithic men. In addition, he presented an incredible idea, based on the relationship between the animal figures represented inside the caves and the paleontological material that was actually found (Leroi-Gourhan, 1995, 2008). He did not find such a relationship, since the skeletons belonged mostly to cervids, while on the rocks there were many depictions of cattle and horses. Now, such discoveries testified that the figures of cattle and horses were not mere representations based on the real world, apprehended directly through perception. They were more than that.

Later, the hypothesis of the Paleolithic magical-religious deities was placed in checkmate, when the structuralist character of their 'topographies' - the association of the binary bison (woman) / horse (man) placed in specific points inside the cave - was questioned by other researchers (Sanchidrián, 2001). Nevertheless, the attempt to establish a structuralist type of relationship has a great importance in the theoretical-methodological history of archeology.

Binary clusters, organized in pairs of opposition, form the basis of structuralist approaches in various areas of knowledge, like

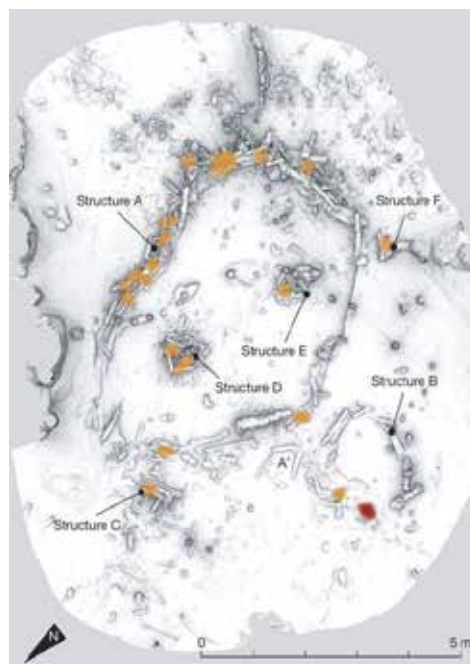


Fig.2: a plant of Bruniquel cave (from nature.com).

in anthropology and psychology. Structuralism originated with Ferdinand de Saussure's linguistic studies in 1916, when he proposed that language was a system in which the elements are related by equivalence or by opposition. In anthropology, Lévi-Strauss highlighted that human societies are organized by opposition pairs, in which the role of the maternal uncle forms the main alliance link in order to establish a minimum kinship relationship (Lévi-Strauss, 2010). This family relationship, the avunculate, is the atom of kinship, which can be found in any culture, from any time and place. It is also related to the mythical character of Oedipian psychoanalysis: in this case, father and son would be the opposite pair and mother and son would be the equivalent one (Goldgrub, 1995), while structuralist anthropology identifies the father as the one who restricts, the uncle is the one who allows.

The structuralist question in Levi-Strauss covers two subjects. In addition to the question of kinship there is another one, more related to the mind, which the researcher will study considering the complexity involved in the phenomenon of the creation of myths.

To Levi-Strauss, myth is defined as a peculiar form of statement, requiring a specific methodology in order to reach its semantic dimension. Also, the Myth has its own function, which can be checked by the unique treatment it imposes on the time factor. Finally, myth is, fundamentally, a way to provide an explanatory framework to the addressed issue (Lévi-Strauss, 2012).

Two necessary derivations arise from this characterization. In methodological terms, it is necessary to decompose the mythical material into 'constitutive units', similar to what linguistics has identified under the names 'phoneme', 'morpheme' and 'semanteme'. The last of this series, immediately after the semanteme, would be what ethnologists call 'mythema'.

The technical process for the structural analysis of myth requires it to be broken down into phrases "as short as possible", with each sentence occupying a numbered sheet according to its order in the narrative. These measures, however, prove to be insufficient because the recommended procedure results in the sequential organization of these cards, ordered in a single direction, which prevents the possibility to grasp the myth's reversibility while reading it.

This objection prompts a new reflection that seems, at last, to be able to find a method endowed with the necessary acuity. The constitutive units of myths are not isolated relations, but bundles of relations. It is only thanks to the combination of such bundles that constitutive units acquire a significant function; moreover, relations belonging to the same category often arise at different moments of the narrative.

Thus, according to Lévi-Strauss, "the myth will develop like a spiral, until the intellectual impulse that produced it is exhausted. The growth of the myth is therefore continuous,

as opposed to its structure which remains discontinuous ("La structure des mythes" in *Anthropologie Structurale*, 2012).

This way, structural analysis would produce a demystifying effect in relation to the belief in the existence of a qualitative difference between primitive and civilized thought. The logic of mythical thought seemed to us as demanding as the one positive thinking rests in, because the difference is due not to the quality of the operations but to the nature of the things on which those operations are directed. In other words, the mental operations of cognitive praxis, from those derived from experience to those linked to pure deductive exercises, do not differ qualitatively.

In his works on myths, elaborated over nine years (*Les Mythologiques*, 1962-1971), Lévi-Strauss can identify the most diverse relations of understanding, in which one or the other element is noticed in other parts of the world in a structurally similar way. The binary character is always present in such relations, making it plausible that something exists because of some other thing which is latent in human mind and arises as the cause for the existence of the myth. Structuralist relations are characterized by a timeless character and can be found in any human culture from any place and time. But what about an apparently represented myth which cannot be defined as deriving from an absolutely human origin, as something peculiar to our species, like what was found in Bruniquel? Could it be also studied with anthropological structuralism as its base?

## Conclusions

The discovery of Bruniquel's circular structures, dating to 176,000 years ago, clear the way to scientific discussions of all kinds: psycho-neurological (Neanderthal cognitive abilities), archeology (selection and manipulation of materials for the creation of artifacts), and so forth. However, such discovery also brings

discussions from others areas of knowledge, different from those typically recognized as proper of natural sciences.

In that sense, perhaps the main question that emerged after this discovery (what did they do this for?) would be best answered by a kind of knowledge not as systemic as scientific thought. After all, human thought is also characterized by abstraction, subjectivity, beliefs and ideologies, values, myths: in short, it is characterized by elements that are not justified directly by self-evident cause/effect relations.

At the same time, anthropological structuralism does not seem to be the most propitious approach to unveil the meaning of Bruniquel cave's rock art. It might seem like only one approach among many others, but it is the one that tries to understand the several systems of comprehension thanks to what is common to all them. This will be a true challenge, even within such pluralist perspective, because this time the creator of the piece of art is not somebody who speaks and expresses himself as we do, but whose essence might be very different.

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# NOTES AND NEWS

## ATELIER, RESEARCH CENTER FOR CONCEPTUAL ANTHROPOLOGY Understanding what happens

We are witnessing the dawn of a new season for the Human Sciences. The season of “specialize or die” is likely to undertake some changes: technicians and scholars comprise two different categories, each one with a different identity and should not be confused. Each category requires a different formation and different conceptual approach.

Broad cultural formations help broad cultural understanding and decision-making. Broad cultural formation develops broad abilities of analysis and synthesis. Knowledge for its own sake is a great privilege of the human species, but when knowledge is able to define causes and effects it produces awareness, thus becoming culture.

Conceptual Anthropology provides multidisciplinary methods of analysis and synthesis. Its orientations include teaching, vocational training and new developments of rational thinking. Data are the base that produces concepts. Inventories and databases provide the raw material of knowledge. The synthesis comes from analysis, and analysis from knowledge. Knowledge without analysis is just as unfruitful as analysis without knowledge. Thus synthesis comes from the analysis of knowledge.

The process “knowledge > analysis > synthesis” has been and still is the basis of the cognitive process. But the kind of knowledge for the new horizons is changing as it derives from a concert of various disciplines. After the season of standardization and technological hegemony, scholars are looking for the “soul”

of things: times are changing and the Human Sciences are bound to play an essential role in the culture and the way of thinking of the new age.

Each happening, each fact, is a fragment of a broader reality. Mankind is made of individuals and also culture is made of a plurality of sub-cultures. The human sciences are composed of different disciplines that join experience and knowledge for the study of Man. To know what makes a culture or a society different from the others we have to know the ‘others’. Each culture is different and each person is unique. Conceptual Anthropology opens up broad views in a dynamic concept of culture, which is constantly evolving but at the same time remains the core of human identity. You are different, I am different, he/she is different. This is a major privilege of our species: each human being is equal, but each one is different. Each human being, like each culture, like each discipline, even a new one, is an issue of the past. Understanding the trends and evolutions of the past is essential to discover the sense of the present.

Sharing the experiences of more disciplines is widening analytical abilities. Each discipline has its own memory, which is the base of its research and progress. The union of more disciplines is the union of their memories, which creates a broader base for research and culture, and provides a wider range of analytical abilities.

Media and encyclopedias can take care of technical memories, but the intuitions and associations produced by the human mind are still irreplaceable. By widening the typology of memories, the conceptual range is being widened. Conceptual Anthropology requires



new orientations in the formation of scholars and in research goals.

The development of computers and the Internet have shown that it is useful for scholars to devote their energies to those notions, intuitions and experiences that the computer cannot provide. It is not worthwhile to compete with Wikipedia but it is worthwhile to enrich Wikipedia and other sources of cultural diffusion.

Technicians should acquire the technical knowledge and perform the important task of solving technical problems and producing the fundamental raw material for research, in the forms of inventories and banks of data. Scholars should have a humanistic thinking to open up new horizons. In the field of urban building a similar difference applies to engineers and architects. Being both does not allow excelling in one of them.

**EXPRESSION** quarterly magazine and the books published by **ATELIER**, Research Center for Conceptual Anthropology, are the expression of this new discipline, which is spreading, engaging students, scholars and other thinkers across five continents.

Its English and Italian publications, conceived for University students but easy to read for everyone, face problems and topics that are usually perceived as a “reserved to experts.” In Conceptual Anthropology the experts are all of us, sons and daughters of the human species. Those who do not know about **ATELIER** yet may try reading one of its books.

Thanking you for being a reader of **EXPRESSION** magazine.

**E.A.**

## WHAT IS CONCEPTUAL ANTHROPOLOGY?

Conceptual Anthropology is the discipline concerned with the arts, rituals, beliefs and other intellectual and spiritual expressions; it combines various sectors of the human and social sciences in respect to behavior, habits and other cultural manifestations, using experiences of the past to understand the present and conceive the options for the future. The concept gestated for some time until it was formalized during the UISPP Congress in Florianopolis, Brazil, in 2011, setting new horizons for human sciences. It was decided to make of the newly proposed discipline, Conceptual Anthropology, a concern of the International Scientific Committee on the Intellectual and Spiritual Expressions of Non-Literate Societies (UISPP-CISNEP).

The goal of this new discipline is to understand human behavior and cultural trends, recurring and isolated phenomena, predictable and unpredictable evolution and change not only in economy and technology, but in social, intellectual and spiritual life, relying upon a vast assemblage of knowledge and concepts from various disciplines. It is a permanent journey of discovery and emotions.

Archaeology and anthropology, the history of art and history of religion, can benefit enormously from cooperation with sociology, psychology, semiotics and other sectors of the human and social sciences. Each discipline has its own memory as the basis of research and the advancement of the discipline itself. Combining disciplines is also a union of memories and concepts for a broader base of research and culture. Today media replace technical and historical memory. But the human mind's insights and associations are still irreplaceable.

Our being and our actions are rooted in memory.

Human behavior relies on memory. When mistakes are made, they often derive from the darkening of memory. On the other hand, positive results come from its good use. Here we are not talking about an electronic memory, but that kind of memory that turns into intuition and rediscovery, the memory coming from the deep well of human minds.

Every human being, like every discipline, focuses on certain aspects of memory and neglects others. Together, various disciplines share wider dimensions of memory. As it becomes clear from the contributions of nearly 200 authors from about 40 countries, in the issues of **EXPRESSION** magazine of the last four years, such an approach offers an immense contribution to the study of the intellectual and spiritual expressions of non-literate peoples.

One of the purposes is the common commitment to the understanding of intellectual and spiritual expressions, with the shared support of multidisciplinary research. As students of various disciplines, anthropologists and archaeologists, psychoanalysts, educators, sociologists, semioticians, philosophers and historians, we all wish to face questions which a shared commitment can help clarify. The meeting of different disciplines offers a new dimension of shared knowledge and greater capacity for analysis and synthesis. Faced with the fashion of extreme specialization, which risks reducing scholars to technicians, Conceptual Anthropology goes against the tide.

No doubt technicians are needed, but we seek a cultural vision and a broad overview in the common work of the humanities and social sciences. Let technicians and intellectuals be aware of their different roles, let them do their

own jobs and then enrich each other through the output of their efforts.

Research has a real social function when it produces culture. When culture is creative and innovative, it promotes the growth of intellect and stimulates new thought. The dialogue is open to all disciplines of the humanities and social sciences as well as to those who do not identify themselves with any specific discipline or who just want to listen. Each listener is a potential transmitter of ideas and ideas grow and spread not only through those who produce them, but also through those who listen. The dialogue does not stop and is a source of growth and enrichment, and also of cooperation and friendship. Research is a provocative, stimulating and inspiring source of awareness.

The world crisis is a cultural crisis, a crisis of values and wisdom that has economic, social and political consequences. Reviving the role of culture is our modest joint effort to contribute to overcoming the crisis.

## RETHINKING EINSTEIN KNOWLEDGE VS. IMAGINATION

*"The true sign of intelligence is not knowledge but imagination"* (Albert Einstein). May we claim that both of them are needed?

Imagination without knowledge and knowledge without imagination are the two extremes of dullness. E.A.

## **APPRENTICESHIP IN CONCEPTUAL ANTHROPOLOGY**

The apprenticeship, under the guidance of Prof. Emmanuel Anati, the founder of Conceptual Anthropology, may last from a minimum of two months to a maximum of one year. It grants the apprentice the title of Research Assistant. The apprenticeship is oriented to the acquisition of practical operational abilities and conceptual formation; it includes participation in research, editorial activities, compilation, organization and layout of exhibitions and publications, the arrangement and cataloguing of ethnological collections, and the planning of cultural and scientific projects. It is a way to touch with your hands and your mind the practical work of producing culture.

Traditional learning as an accumulation of theoretical notions is enhanced by applying the notions in practical activities, learning to do by doing.

During their stay in the Camonica Valley, the student will have access to self-catering accommodation on campus, at a student fee. Preference is given to graduates and other seriously motivated young people with knowledge of the English language and operational abilities on a database. Application in an informal letter should specify the motivations and skills of the candidate, and be accompanied by a curriculum vitae; a copy of record of studies; a copy of identity card or passport; a recent passport-standard photo; and a letter of presentation or recommendation from a university professor or a previous employer. Applications should be addressed by email to: [atelier.etno@gmail.com](mailto:atelier.etno@gmail.com).

## **LEARNING TO BE AN EDITOR**

Readers interested in learning editorial work may apply for three months' editorial training at EXPRESSION Quarterly Magazine. Skills required: perfect knowledge of the English language; ability to manage various relevant computer programs; ability in public relations; special interest in anthropology and archaeology. For applications or further information, please address a letter expressing your interest and motivation, including a copy of an identity document, to: [atelier.etno@gmail.com](mailto:atelier.etno@gmail.com).

## **POSITION OF ASSISTANT CURATOR OF ETHNOGRAPHY**

Graduate students in anthropology and ethnography are given the opportunity for training as curator of ethnography. The engagement consists in classifying old ethnographic collections of art objects from Oceania and Africa. The expected result is the compilation of a catalogue of a given collection, eventually to be published under the name of the compiler. The successful experience gives the apprentice two important additions to his/her curriculum vitae: the publication of a scientific work, and the position of Assistant Curator of Ethnography for the period of time of his/her engagement. The experience takes place in the Camonica Valley, northern Italy, and is expected to last a minimum of three months. Candidates should have mastered the English language and possess a university degree in human sciences.

During their active presence the accepted candidates have access to self-catering accommodation on campus at a student fee. Applications should include a letter expressing motivation, a record of studies, a copy of an identity document and any other document worthy of consideration. Applications should be addressed by email to: [atelier.etno@gmail.com](mailto:atelier.etno@gmail.com).

### **HOW TO BECOME A MEMBER OF THE UISPP**

EXPRESSION, this e-journal, is produced by ATELIER, the Research Centre in Conceptual Anthropology, in cooperation with the UISPP-CISENP (the International Scientific Committee on the Intellectual and Spiritual Expressions of Non-Literate Societies), an organ of the UISPP (International Union of Prehistoric and Protohistoric Sciences). UISPP also offers other facilities, including participation in its World Congress. Membership of the UISPP will ensure your official status as a UISPP Active

Member of CISENP. If you are a member of UISPP, please confirm your status to [atelier.etno@gmail.com](mailto:atelier.etno@gmail.com).

If you are not yet a member, and you wish to attend the World Congress, first become a member of the UISPP. For further information contact the office of the General Secretary: [loost@ipt.pt](mailto:loost@ipt.pt).

### **HOW TO BE A MEMBER OF CISENP**

Very simple. Be active and you are a member. You express your ideas, participate in debates, develop dialogues with other members orally, by email, or through the pages of EXPRESSION magazine. If you have something to say this is your home. Membership to CISENP is free of material charges, no fees requested; it just implies your active conceptual presence. Membership is not exclusive to prehistorians; it is open to all the human and social sciences. It is advisable, but is not compulsory, to be a member of UISPP. CISENP is a free association, free also from bureaucratic procedures.



# THE DESTINY OF MUSEUMS: PRODUCING CULTURE ON A WORLD BASE

VIRTUAL MUSEUMS MAKE THEIR PATRIMONY ACCESSIBLE TO MILLIONS OF VIRTUAL VISITORS

Most of the museums around the world are important sources of education, culture and research. Some small museums may display little known but important cultural, historical or artistic treasures. Many of those located out of major urban centers tend to have a poor affluence of visitors and could become the first victims of the progressive reduction of the government support.

Specific topics interest specific visitors, but they must know where to find them. Museums with an Internet website may join a world database of Virtual Museums.

As a project to save the patrimony at risk, a World Databank of Virtual Museums (VMD) is planned. Indexes will enable millions of people to find and benefit of a patrimony that only a few were previously visiting. Each museum entry should include also a sector of "Museum shop" showing and offering what books and gadgets can be purchased by email.

Also the most crowded museums should have interest in reaching an audience that will learn and enjoy their patrimony without crowding the exhibition halls. Collections and collectors without a museum are invited to join: by creating their Virtual Museum. Virtual presentations of archeological sites are also considered. They would reach a worldwide audience and let people discover hidden treasures that never before had an access to the public.

Museums, scholars, art galleries and collectors wishing to contribute to this project are invited to provide elementary information and contact [atelier.etno@gmail.com](mailto:atelier.etno@gmail.com).

Kindly indicate: "Concerns Virtual Museums". We look forward to world cooperation for the VDM, "Word Virtual Museums".

Cordial regards,  
E.A.

# EXPRESSION

## GENERAL INDEX OF AUTHORS: VOLUMES 1 TO 18

Curated by Sabrina Moles

### **Acevedo Agustín**

Vol.8, pp.63-68, *Hunter-gatherer rock art in two regions of Central-Southern Patagonia: contrasting visual themes, techniques and landscapes* (With Fiore Dánae)

### **Al-Malabeh Ahmad**

Vol.18, pp.33-41, *Cults sites and art* (with Kempe Stephan F.J.)

### **Albio Rubio**

Vol.5, pp.5-6, *A ritual space with paintings and engravings in the La Calera rock art set, Sonora, Mexico* (With Beatriz Menéndez, Quijada César, Vinas Ramon and Santos Nee mias)

Vol.7, pp.64-74, *A ritual space with paintings and engravings in the La Calera rock art set, Caborca, Sonora, Mexico* (With Beatriz Menéndez, Quijada César, Vinas Ramon and Santos Neemias)

### **Alves de Mota Leidiana**

Vol.14, pp.54-64, *First americans: changes of places, changes of theories* (With Wolnei Ferreira Guimaraes Santiago)

### **Anati Emmanuel**

Vol.6, pp.3-24, *Decoding prehistoric art: the messages behind the images*

Vol.14, pp.7-10, *Travel and migrations tales in European Paleolithic art*

Vol.15, pp.7-13, *Decoding prehistoric art: meaningful examples of gender relations*

Vol.16, pp.9-23, *Decoding Paleolithic engravings on bone*

Vol.18, pp.8-20, *Forgotten myths and memories: the art of Early Gatherers from Tanzania to a world pattern*

### **Arsenault Daniel**

Vol.4, pp.3-4, *Canadian shield rock art and its spiritual dimension: an informed approach to the tangible and intangible dimensions of rock art sites in the canadian shield*

Vol.7, pp.5-13, *The Canadian Shield rock art and its spiritual dimension: Finding some tangible and intangible aspects of rock art sites in the Canadian Shield through a contextual approach*

### **Arzarelo Marta**

Vol.14, pp.11-15, *The bifacial phenomenon across time, space and variability*

### **Awadh Kishore Prasad**

Vol.9, pp.88-96, *Rock art of Southern Bihar and adjoining Jharkhand in Eastern India: when, why and to whom?*

### **Basile Mara**

Vol.8, pp.8-14, *Images in time: an overview of rock art manifestations in the Fiambalà region, Catamarca, northwestern Argentina* (With Ratto Norma)

### **Bednarik Robert G**

Vol.14, pp.16-21, *Pleistocene maritime colonizations*

Vol.12, pp.8-10, *Questions and answers about art and rock art*

Vol.16, pp.24-29, *Reading messages into palaeoart*

### **Belfer-Cohen Ana**

Vol.5, p.20, *A Natufian mask face figurine: an insight into the nature of the supernatural being*

### **Ben Nasr Jaâfar**

Vol.8, pp. 15-20, *The Rock Art of Tunisia: When, Why and to Whom?*

Vol.10, pp.7-9, *Sandal engravings in the village of Guermesa (southeast of Tunisia): a graphic memorizing of a forgotten Berber ritual?*

### **Benavente Martha E.**

Vol.5, pp.16-17, *The set of El Arroyo de las Flecha's Rock Art Engravings: Symbolic Associations in the Sierra El Alamo; Caborca in Sonora, Mexico*

Vol.6, pp.109-120, *The set of El Arroyo de las Flecha's Rock Art Engravings: Symbolic Associations in the Sierra El Alamo; Caborca in Sonora, Mexico*

### **Berriet Margalit**

Vol.5, p.6, *Arts and cultures are a journey in the world of mankind*

Vol.6, pp.24-29, *Intellectual and spiritual expressions of non-literate societies: art and culture, a journey through the world of mankind*

Vol.11, pp.7-12, *Male + Female: Humanity: Male and Female in Prehistoric and tribal art*

Vol.13, pp.16-21, *Abstract signs and symbols in prehistoric to modern art*

Vol.18, pp.21-28, *Memories: grounds for myth*

### **Berrocal Emilio G.**

Vol.16, pp.30-33, *The Forgotten Perception*

### **Bertilsson Ulf**

Vol.4, p.4, *Carved footprints and prehistoric beliefs: examples of symbol and myth - practice and ideology* Vol.6, pp.29-46, *Carved footprints and prehistoric beliefs: examples of symbol and myth - practice and ideology*

### **Bettencourt Ana M. S.**

Vol.5, p.7, *Grid patterns in the new iberia rock art iconography, context and interpretations*

### **Binant Pascale**

Vol.4, p.5, *Sexual human representations of the paintings of serra da capivara, brazil: relations in action, narrative relations?*

Vol.11, pp.17-20, *Men, women, children, anthropomorphs and animals*

Vol.13, 9, *Discussion Forum*

- Bjork Carl**  
Vol.11, pp.13-16, *Not always the male*
- Bo Cao**  
Vol.5, p.8, *Research and study on the Guizhou rock art heritage*
- Bo Xiao**  
Vol.5, pp.26-27, *Discussion of reproduction worship in Chinese rock art* (With Zhang Jiaxin and Wang Zhaohui)
- Bonanno Anthony**  
Vol.14, pp.22-30, *The first inhabitants of Malta*
- Boro Luigi J.**  
Vol.8, pp.21-24, *Lluta Valley, Atacama Desert, Chile*
- Bouissac Paul**  
Vol.4, p.6, *Patterns and the Dawn of Cosmological Knowledge*
- Braun Ingmar M.**  
Vol.10, pp.10-14, *Interdisciplinary interpretations of anthropomorphic composite beings in European Upper Palaeolithic cave art: an approach*
- Britten Brian**  
Vol.11, pp.21-25, *Bedford Barrens Petroglyphs*
- Burley Paul D.**  
Vol.4, p.7, *The Stonehenge Sacred Landscape, Pathway to the Stars*  
Vol.7, pp.14-25, *As Above, So Below: Unveiling the Truth About Stonehenge's Sacred Landscape*
- Bury Rick**  
Vol.13, p.8, Discussion Forum
- Chakravarty Kalyan Kumar**  
Vol.12, pp.11-15, *Is Art Necessary for Human Survival?*
- Chakravarty Somnath**  
Vol.5, pp.8-9, *Preliterate art in India: a source of Indigenous knowledge, ethno-history and collective wisdom*  
Vol.7, pp.26-39, *Pre-literate art in India: a source of indigenous knowledge, ethnohistory and collective wisdom*
- Chies Monia**  
Vol.9, pp.13-17, *Celebrating Three Hundred Years of Mani Stone Carving at the Tibetan Buddhist Site of Gyanak Mani, Yushu TA P (PRC)*
- Chippindale Cristopher**  
Vol.8, pp.25-28, *Meaning in the axe-carvings on Stonehenge*
- Christie Jessica Joyce**  
Vol.8, pp.29-33, *Layered Messages through Time: A Case Study of Blue Bull Cave, Canyon de Chelly, AZ, United States*  
Vol.11, pp.26-32, *Gendered Stone Cults in Pre-contact O'ahu, Hawai'i*
- Coimbra Fernando**  
Vol.4, pp.7-8, *Archaeology, rock art, archaeoacoustics and neuroscience: what kind of relation?*  
Vol.8, pp.34-36, *Semiotics in the Rock of the Signs (Barcelos, Portugal)*  
Vol.13, p.8, Discussion Forum
- Clottes Jean**  
Vol.13, pp.22-24, *The Lascaux Shaft*  
Vol.13, p.8, Discussion Forum
- Da Finseca Azizo**  
Vol.13, p.9, Discussion Forum
- Dahl Ib Ivar**  
Vol.8, pp.37-38, *Danish viking marks on stone?*
- Dash Jagannath**  
Vol.13, pp.25-32, *Text, Context and Symbolism in Saora Art: An anthropological Analysis*
- Dawn Giorgi Marisa**  
Vol.8, pp.74-78, *Chalawong: a forgotten site*
- De Figueiredo Sofia Soares**  
Vol.8, pp.39-43, *Paintings from northeast Portugal: beyond script and art*
- Delnoy David**  
Vol.9, pp.18-20, *The Petroglyphs of Huancor, Peru: Form and Meaning* (With Otte Marcel)
- Devage Nandadeva Bilinda**  
Vol.9, pp.67-71, *Rock art of the Vedda people of Srilanka: when, why and to whom?*
- Devlet Ekaterina**  
Vol.16, pp.34-44, *The skull motif in rock art of far east: symbol of death, rebirth and the link between the generations*
- Dieter Maurer**  
Vol.13, pp.33-41, *In picture genesis, the "abstract" precedes and enables depiction and coding—Some arguments and speculations based on the investigation of early pictures in ontogeny*
- Domingo Sanz Inés**  
Vol.8, pp.44-49, *LRA (Levantine Rock Art)*
- Drabsch Bernadette**  
Vol.8, pp.50-57, *The Wall Art of Teleilat Ghassul, Jordan: When, Where, Why, to Whom and by Whom?*
- Dubal Léo**  
Vol.4, p.8, *Heralding the sun*; 15, 5, *The art of representation of sexual intercourse*
- Farruja de la Rosa José**  
Vol.14, pp.31-37, *Neighbouring lands...Neighbouring cultures? The north african (Amazigh) roots of the Canary Islands*  
Vol.16, pp.45-53, *Reading the message? The problem within the interpretations of rock "art" in the Canary Islands*
- Felding Louise**  
Vol.8, pp. 58-62, *Rock Art: When, Why and to Whom? Two Danish Examples*
- Ferraro Lorena**  
Vol.11, pp.82-88, *Engraving Gender in Talampayá rock art, Argentina* (With Vidal Aixa and Pagni Maria Teresa)
- Fiore Dánae**  
Vol.8, pp.63-68, *Hunter-gatherer rock art in two regions of Central-Southern Patagonia: contrasting visual themes, techniques and landscapes* (With Acevedo Agustín)
- Fradkin Ariela**  
Vol.6, pp.3-24, *Decoding prehistoric art: the messages behind the images*
- Fradzhev Arsen**  
Vol.4, p.9, *The treasures of the third millennium from the Russian city of Zvenigorod*

**Franklin Natalie R.**

Vol.8, pp.69-73, *The Venus of Hohle Fels and mobiliary art from Southwest Germany* (With Habgood Phillip J.)

**Funari Pedro Paulo A.**

Vol.15, pp.26-35, *Sexual scenes in serra da capivara rock art, Brazil* (With Justamand Michel)

**Furter Edmond**

Vol.9, pp.21-25, *Göbekli Tepe, between rock art and art*

Vol.10, pp.15-21, *Art is structural magic, not illustration*

+Vol.13, pp.42-53, *Abstract signs in art are shorthand for cultural structure*

Vol.14, pp.38-47, *Colonial artists re-style the same characters*

Vol.15, pp.19-24, *Pregnant is the most consistent typological gender*

Vol.16, pp.54-62, *Recurrent characters in rock art reveal objective meaning*

**Garfinkel Alan P.**

Vol.13, pp.54-70, *Patterned Body Anthropomorphs of the Cosos: How Might Concentric Circle Psychograms Function in Ethnographic Schemes* (With Tirtha Prasad Mukhopadhyay)

Vol.16, pp.126-144, *Neuro-ethological messages from rock pictures* (With Tirtha Prasad Mukhopadhyay and Merchan Villalba Luis Ramon)

**Gassowski Jerzy**

Vol.18, pp.28-32, *Early medieval slavs in their myths and archaeology*

**Ghilotti Francesco**

Vol.4, pp.9-10, *Earth and Subterraneity in Early Sumerian Sources*

**Hans-Joachim Ulbrich**

Vol.10, pp.62-65, *Communicating with the gods: superstition on Fuerteventura and Lanzarote*

**Habgood Phillip J.**

Vol.8, pp.69-73, *The Venus of Hohle Fels and mobiliary art from Southwest Germany* (With Franklin Nathalie R.)

**Hameau Philippe**

Vol.8, pp.79-82, *A commemorative schematic iconography in the Neolithic period*

**He Biao**

Vol.5, pp.13-14, *Survey of the status and protection strategy for the ancient rock paintings in Guizhou*

**Hegg Chris**

Vol.9, pp.26-28, *My first petroglyph language symbols deciphered in West Central Nevada*

**Hodgson Derek**

Vol.12, pp.26-47, *Why is rock art so evocative? Affective depiction of animals from Coso Range Petroglyphs, Southwest California, and Isco, Hazaribagh, India* (With Tirtha Prasad Mukhopadhyay)

**Hochroth Lysa**

Vol.4, pp.10-11, *From survival to conatus: comparative axiology from engraving to painting*

**Holt Deb**

Vol.11, pp.39-46, *Sex and Gender in Wanjina Rock Art, Kimberley, Australia*

**Honoré Emanuelle**

Vol.9, pp.29-33, *Pastoralists' paintings of WG35, Gilf el-Kebir: anchoring a moving herd in space and time*

**Hua Qiao**

Vol.4, p.15, *Research on file construction system of rock art* (With Hui Liu and Li Bin Gong)

**Huang Yaqi**

Vol.5, p.27, *Agricultural worship in the rock art of Jiangjunya, Lianyungang city, East China* (With Zhang Jiaxin)

**Imam Bulu**

Vol.4, pp.11-12, *Changing intellectual and spiritual expressions of the nomadic birhor in Jharkhand*

Vol.7, pp.40-44, *The intellectual and spiritual expressions of a nomadic tribe, the Birhor (of Hazaribagh, Jharkhand, Eastern India)*

Vol.9, pp.34-38, *What kind of society produced the rock art of my region (Hazaribagh, Jharkhand, East India)? Why was it produced, and to whom was the rock art addressed?*

**Jin Yanqing**

Vol.5, p.21, *Research of classification and staging of rock art on Lusen Mountain in Qinghai* (With Zeming Shi)

Vol.7, pp.101-108, *Research of classification and stages of the rock art on Lusen Mountain in Qinghai*

**Justamand Michel**

Vol.15, pp.26-35, *Sexual scenes in serra da capivara rock art, Brazil* (With Funari Pedro Paulo A.)

**Kempe Stephan F.J.**

Vol.18, pp.33-41, *Cults sites and art* (with Al-Malabeh Ahmad)

**Kolber Jane**

Vol.13, p.10, *Discussion Forum*

**Lambert Arnaud F.**

Vol.8, pp.83-85, *The olmec-style rock paintings of Oxtotitlán Cave: new insights and interpretations*

Vol.10, pp.22-28, *Sorcerer-kings in the olmec rock art of pre-classic Mesoamerica*

Vol.11, pp.47-52, *Exploring the symbolic expression of gender fluidity among the potbelly sculptures of southeastern Mesoamerica: a sociological approach* Vol.13, p.13, *Discussion Forum*

**Lambert Georges-N (Joel)**

Vol.9, pp.124-129, *Elements to approach the Magdaleniens' motivations, who lived in the Fontalès' rockshelter* (With Welté Anne-Catherine)

**Lbova Liudmila**

Vol.12, pp.16-25, *Anthropomorphic figurines of ice age art in Siberia: new data and perspectives on the function of prehistoric mobile art* (Tarn-et-Garonne, France)

**Lenoir Michel**

Vol.15, pp.43-51, *Roc-de-Marcamps (France-Gironde) : sexual human representations* (With Welté Anne-Catherine and Martinez Marc)



**Leone Maria Laura**

Vol.10, pp.29-35, *Meanings of the Deer Cave (Porto Badisco, Italy): Neolithic Art*

**Lewis-Williams J. D.**

Vol.8, pp.91-96, *San Rock Art*

Vol.10, pp.36-40, *Art, religion and myth: Were they interrelated in Upper Palaeolithic times?*

**Li An**

Vol.5, pp.3-4, *Primitive religious information embodied in human-face images of rock art of Zhuozishan mountain, Wuhai, Inner Mongolia (With Wu Junsheng)*

**Li Gang**

Vol.4, p.13, *Several understandings on the cave paintings on the turtle stone in Anshan (with Ni Xifeng)*

Vol.5, p.13, *Discovery and pilot study of the Jinsha river Chiselled Rock art in Shangri - La*

**Li Hao**

Vol.5, pp.13-14, *Survey of the status and protection strategy for the ancient rock paintings in Guizhou*

Vol.5, p.25-26, *Research on the development and utilization of the Guizhou ancient petrography research (With Wu Xiaoping)*

**Lødøen Trond**

Vol.9, pp.43-47, *Rock Art as Mortuary Practice in the Late Mesolithic of Western Norway*

**Lopes Cristina**

Vol.9, pp.48-51, *The Rock Art For Art's Sake; An Aesthetic Approach*

Vol.16, pp.73-78, *Symbolism in Navajo Rock Art*

**Lu Xiaohong**

Vol.5, pp.28-29, *Image classification and the symbolic structure of the rock art at the Zuojiang river, Guangxi (With Zhang Yasha and Wang Mingshui)*

**Luo Xiaoming**

Vol.5, pp.23-24, *Manipulation Tactics: a cultural interpretations of rock art images massed in south west China (With Wang Liangfan)*

**Lymer Kenneth**

Vol.8, pp.97-101, *The Prehistoric Petroglyphs of terekty aulle in Central Kazakhstan*

**Menéndez Beatriz**

Vol.5, pp.5-6, *A ritual space with paintings and engravings in the La Calera rock art set, Sonora, Mexico (With Vinas Ramon, Quijada César, Rubio Albert and Santos Neemias)*

Vol.7, pp.64-74, *A ritual space with paintings and engravings in the La Calera rock art set, Caborca, Sonora, Mexico (With Vinas Ramon, Quijada César, Rubio Albert and Santos Neemias)*

Vol.7, pp.64-74, *A ritual space with paintings and engravings in the La Calera rock art set, Caborca, Sonora, Mexico*

**Magnotta Angelina**

Vol.9, pp.52-54, *Rock art in high Lunigiana (MS, Italy) Rock Art Park of Lunigiana*

Vol.10, pp.41-47, *The Myth of Cynus and Ancient Carvings of the archaic Apuan Ligurian people near Pontremoli (MS, Italy)*

Vol.11, pp.53-57, *Moon Worshipping in Prehistory: Fertility God or Goddess?*

Vol.15, pp.40-42, *Male and female in symbolic depiction in high Lunigiana*

**Mailland Federico**

Vol.5, pp.14-15, *Lifestyle of human groups during palaeolithic at Har Karkom*

Vol.9, pp.54-56, *Rock art and pebble drawings: different ways to communicate the same message?*

Vol.10, pp.48-52, *Ibex, crescent and swastika as symbols of a lunar god in the rock art of the Ancient Near East and Central Asia*

Vol.11, pp.53-57, *Moon Worshipping in Prehistory: Fertility God or Goddess?*

**Martin Michel**

Vol.9, pp.62-64, *Comparative study megaceros-rennes*

**Martinez Marc**

Vol.15, pp.43-51, *Roc-de-Marcamps (France-Gironde): sexual human representations (With Welté Anne-Catherine and Lenoir Michel)*

**Meaden Terence**

Vol.4, p.14, *Aspects of the nature and purpose of specific symbols and images in non-literate neolithic and bronze age Britain and Ireland*

Vol.6, pp.-108, *Aspects of the Nature and Purpose on Specific Symbols and Images in the Non-Literate World of Neolithic and Bronze Age Britain and Ireland, including Stonehenge*

Vol.15, pp.52-57, *Phallic and vulvar petroglyphs at drombeg stone circle, Ireland, together with a proposed explanation involving the hieros gamos*

Vol.16, pp.79-91, *Shadows of stone, shadows of ancestors - studies unveiling the planned sexual drama of the hieros gamos, the sacred marriage*

Vol.18, pp.42-47, *Paired megaliths with sculpted images facing sunset at the summer and winter solstices and the implication of paradisiacal belief*

**Merchan Villalba Luis Ramon**

Vol.16, pp.126-144, *Neuro-ethological messages from rock pictures (With Tirtha Prasad Mukhopadhyay and Garfinkel Alan P.)*

**Monamy Elisabeth**

Vol.9, pp.65-66, *Rock Art: When, Why and to Whom? The 'king' from Jubba (Saudi Arabia): a new interpretation*

**Mooketsi Cynthia Ontiretse**

Vol.16, pp.92-97, *"This is a butterfly and it identifies a water container": the relevance of indigenous knowledge in archaeological interpretations*

**Munoz Fernandez Emilio**

Vol.7, pp.45-56, *Colonization of the upper Miera and Asón Valleys (Cantabria, Spain) in the Late Pleistocene and the Early Holocene (With Pérez Bartolomé Mercedes)*

**Mykhailova Nataliia**

Vol.15, pp.58-68, *Sex as transition between worlds in deer hunting society (mythology and rock art)*

Vol.10, pp.53-58, *Deer offerings in the archaeology and art of prehistoric Eurasia*

**Nankela Alma**

Vol.9, pp.72-77, *Rock art: when, why and to whom? Rock Art of Omandumba Farm on Erongo Mountain, Namibia*

**Nash George**

Vol.9, pp.78-81, *Secret signs: mechanisms behind the construction of later prehistoric rock art in western Britain*

**Navarro Alexandre Guida**

Vol.16, pp.63-72, *The feast of animals: art and images on prehistoric eastern amazonian stilt houses*

**Neumayer Erwin**

Vol.13, p.10, Discussion Forum

**Nhamo Ancila**

Vol.9, pp.82-85, *Encoding identity: spatial motif variation as an answer to when, why and for whom rock art was produced in Zimbabwe*

Vol.12, pp.48-56, *Male versus female: variation in representations of males and females in the Huntergatherer rock art of Southern Africa*

**Ni Xifeng**

Vol.4, p.13, *Several understandings on the cave paintings on the turtle stone in Anshan (With Li Gang)*

**Ogawa Masaru**

Vol.9, pp.86-87, *Rock art: when, why and to whom? Rock Art from Temiya and Fugoppe Caves*

**Oosterbeek Louis**

Vol.4, p.15, *Symbols as persona in the dawn of food production in the alto ribatejo, Portugal*

**Otte Marcel**

Vol.4, p.16, *The prehistory of the portrait*

Vol.7, pp.57-60, *The Portrait in Prehistory*

Vol.9, pp.18-20, *The Petroglyphs of Huancor, Peru: Form and Meaning (With Delnoy David)*

Vol.12, pp.57-60, *Duality in Arts*

Vol.14, pp.48-53, *The Chauvet masks*

**Pagni Maria Teresa**

Vol.11, pp.82-88, *Engraving Gender in Talampaya rock art, Argentina (With Vidal Aixa and Ferraro Lorena)*

**Palma Dias Jacinto**

Vol.16, pp.98-111, *Circular architectures and cyclical eternities in archaic Portugal*

**Palonka Radoslaw**

Vol.16, pp.112-125, *Shamans, spirals and warriors-rock art in Castle Rock Pueblo community, Colorado, Usa through Native American oral traditions and archaeological interpretations*

**Pérez Bartolomé Mercedes**

Vol.7, pp.45-56, *Colonization of the upper Miera and Asón Valleys (Cantabria, Spain) in the Late Pleistocene and the Early Holocene (With Munoz Fernandez Emilio)*

**Qian Sheng You**

Vol.5, p.26, *Using the montage technique to read various cave painting site in Guizhou plateau*

**Quijada César**

Vol.5, pp.5-6, *A ritual space with paintings and engravings in the La Calera rock art set, Sonora, Mexico (With Beatriz Menéndez, Santos Neemias, Rubio Albert and Vinas Ramon)*

Vol.7, pp.64-74, *A ritual space with paintings and engravings in the La Calera rock art set, Sonora, Mexico (With Beatriz Menéndez, Santos Neemias, Rubio Albert and Vinas Ramon)*

**Radhakant Varma**

Vol.9, pp.120-122, *Rock art: when, why and to whom?*

**Ratto Norma**

Vol.8, pp.8-14, *Images in time: an overview of rock art manifestations in the Fiambalà region, Catamarca, northwestern Argentina (With Basile Mara)*

**Rebay-Salisbury Katharina**

Vol.11, pp.58-62, *Male, Female and Sexless figures of the Hallstatt culture: indicators of social order and reproductive control?*

**Rifkin Riaan F.**

Vol.9, pp.97-101, *Pleistocene figurative portable art from Apollo 11, southern Namibia*

**Robertson John H.**

Vol.16, pp.5-6, Discussion Forum

**Rocchitelli Andrea**

Vol.4, pp.16-17, *The dynamys of mental movements as a base for the intellectual and spiritual expressions of non-literate people and the origin of development of the human being*

Vol.7, pp.61-63, *The dynamys of mental movements as a base for the intellectual and spiritual expressions of non-literate people and the origin of development of the human being*

**Ronen Avraham**

Vol.9, p.102, *Why art?*

**Ross Jane**

Vol.11, pp.39-46, *Sex and Gender in Wanjina Rock Art, Kimberley, Australia*

**Sachin Kr Tiwary**

Vol.11, pp.73-75, *Are men only active in the past war? Truth in light of the Folklore of the Kaimun tribes*

Vol.18, pp.56-63, *Ethno rock art: beliefs, rituals and experiences, the study of ferocious depictions inside Khoh in light of the beliefs of Kaimur inhabitants*

**Sansoni Umberto**

Vol.4, p.17, *The rock art of Indo-European cultures: concordances, logics and possible common values*

Vol.7, pp.75-89, *The rock art of Indo-European cultures: concordances, logics and possible common values*

**Santos Estévez Manuel**

Vol.9, pp.103-106, *Rock art: when, why and to whom? Atlantic rock art in Galicia and northern Portugal*

**Santos Neemias**

Vol.5, pp.5-6, *A ritual space with paintings and engravings in the La Calera rock art set, Sonora, Mexico (With Beatriz Menéndez, Quijada César, Rubio Albert and Vinas Ramon)*

Vol.7, pp.64-74, *A ritual space with paintings and engravings in the La Calera rock art set, Sonora, Mexico (With Beatriz Menéndez, Quijada César, Rubio Albert and Vinas Ramon)*

**Searight - Martinet Susan**

Vol.9, pp.107-108, *Oum La Leg, a rock art site in the Moroccan Anti-Atlas: who did the engravings, when and why?*

- Vol.10, pp.59-61, *Engravings of sacred, ideological or symbolic signs in Imaoun, a prehistoric tribal meeting place in southern Morocco*
- Vol.11, pp.63-67, *The representation of males and females in the rock art of Moroccan High Atlas Mountains*
- Shaham Dana**  
Vol.5, p.20, *A Natufian mask face figurine: an insight into the nature of the supernatural being*
- Sharpe Kate E.**  
Vol.9, pp.109-115, *Connecting the dots: cupules and communication in the English Lake District*
- Shemsî Kranîqi**  
Vol.4, p.13, *Some aspects of the contemporary use of ancient symbols*  
Vol.9, pp.39-42, *The reflection of social structure through rock art: the case of Zatriq, Kosovo*  
Vol.15, pp.36-39, *Symbols of fertility and protection*  
Vol.5, p.21, *Investigation and research into Dahongyan rock art in Zhenfeng County, Guizhou province (With Zhang Xiaoxia)*  
Vol.5, p.21, *Research of classification and staging of rock art on Lusen Mountain in Qinghai (With Jing Yanqing)*  
Vol.7, pp.101-108, *Research of classification and stages of the rock art on Lusen Mountain in Qinghai (With Jing Yanqing)*
- Smith Benjamin**  
Vol.13, p.9, *Discussion Forum*
- Sognnes Kalle**  
Vol.12, pp.61-66, *From where to why: some examples of rock art locations in Scandinavia*  
Vol.18, pp.48-55, *Rock art at Bardal in Trøndelag, Norway: myths and memories?*
- Soukpova Jitka**  
Vol.9, pp.116-120, *Tassili paintings: ancient roots of current African beliefs?*  
Vol.11, pp.68-72, *Leading Role of Male Hunters in Central Saharan Prehistoric Rituals*  
Vol.12, pp.67-72, *Saharan rock art sites as places for celebrating water*  
Vol.15, pp.69-76, *Penis only for gods? sexual imagery in the earliest central saharan rock art*
- Steiner George F.**  
Vol.12, pp.73-94, *The goddess and the copper snake: metallurgy, star-lore, and ritual in the rock art of Southern Levant*
- Subhash Chandra Malik**  
Vol.9, pp.57-61, *Rock art: a universal creative act*
- Sun Xiaoyong**  
Vol.5, p.22, *Field survey and analysis of mask worship in the Xiliaohe river basin (With Zhang Jiaxin)*
- Tanda Giuseppa**  
Vol.7, pp.90-100, *The use of burial space and social relations between the Late Neolithic Age and the Copper Age in Sardinia*
- Tirtha Prasad Mukhopadhyay**  
Vol.12, pp.26-47, *Why is rock art so evocative? Affective depiction of animals from Coso Range Petroglyphs, Southwest California, and Isco, Hazaribagh, India (With Hodgson Derek)*
- Vol.13, pp.54-70, *Patterned Body Anthropomorphs of the Cosos: How Might Concentric Circle Psychograms Function in Ethnographic Schemes (With Garfinkel Alan P)*
- Vol.16, pp.126-144, *Neuro-ethological messages from rock pictures (With Garfinkel Alan P. and Merchan Villalba Luis Ramon)*
- Tsoni Tsonev**  
Vol.4, p.18, *3D Reconstructions of the Sculptured Emotions in the Copper Age Eastern Balkans*  
Vol.12, pp.95-100, *Art and "Primitive" Cultures*  
Vol.13, pp.71-77, *Conceptualizing the nature of abstract representations in prehistory*
- Vahanyan Gregori**  
Vol.4, p.19, *Beginning of Natural Philosophy and Metaphysics in the Rock Arts of Armenia*  
Vol.10, pp.66-68, *The Role of Rock Art Clusters in Mythology, Religion and Magic: The Concept of the Knowledge Spiral*  
Vol.16, pp.145-156, *Frigg, Astghik and the goddess of the Crete Island*  
Vol.18, pp.64-70, *New perspective on the theory of the 'Main Myth'*
- Vahanyan Vahan**  
Vol.16, pp.145-156, *Frigg, Astghik and the goddess of the Crete Island*
- Van Gelder Leslie**  
Vol.13, pp.78-86, *Finger Flutings, Tectiforms, and The Audacity of Hope*
- Van Hoek Marten**  
Vol.11, pp.76-81, *It's all about the Head. Morphological basis for cephalic differences in male and female anthropomorphic imagery in desert andes rock art*
- Vetrov Viktor**  
Vol.5, p.23, *A complex research of Paleolithic art in Ukraine*
- Vialou Denis**  
Vol.13, p.8, *Discussion Forum*
- Vidal Aixa**  
Vol.11, pp.82-88, *Engraving Gender in Talampaya rock art, Argentina (With Ferraro Lorena and Pagni Maria Teresa)*
- Vinas Ramon**  
Vol.5, pp.5-6, *A ritual space with paintings and engravings in the La Calera rock art set, Sonora, Mexico (With Beatriz Menéndez, Quijada César, Rubio Albert and Santos Neemias)*  
Vol.7, pp.64-74, *A ritual space with paintings and engravings in the La Calera rock art set, Caborca, Sonora, Mexico (With Beatriz Menéndez, Quijada César, Rubio Albert and Santos Neemias)*
- Waller Steven J.**  
Vol.9, p.123, *Communicating with the Spirits Artists Who Pre-Dated Sound Wave Theory Selected Echoing and Reverberant Environments to Depict Echo and Thunder Spirits in Attempts to Communicate with these Spirits*  
Vol.10, pp.69-72, *Thunder Gods in Prehistoric Art, Mimicking Thunder for Rainmaking Rituals and the Psychoacoustics of Reverberation*

**Wang Liangfan**

Vol.5, pp.23-24, *Manipulation Tactics: a cultural interpretations of rock art images massed in south west China* (With Luo Xiaoming)

**Wang Mingshui**

Vol.5, pp.28-29, *Image classification and the symbolic structure of the rock art at the Zuojiang river, Guangxi* (With Zhang Yasha and Lu Xiaohong)

**Wang Xiaokun**

Vol.5, pp.27-28, *Research on face rock carvings in northern China* (With Zhang Wenjing)

**Wang Xu**

Vol.5, pp.30-31, *Petroglyphs on the pacific rim: the rock art of the Xiliaohe river and the Amur river* (With Zhu Lifeng)

**Wang Zhaohui**

Vol.5, pp.26-27, *Discussion of reproduction worship in chinese rock art* (With Bo Xiao and Zhang Jiaxin)

**Welté Anne-Catherine**

Vol.9, pp.124-129, *Elements to approach the Magdaleniens' motivations, who lived in the Fontalès' rockshelter, Tarn-et-Garonne, France* (With Lambert Georges-N. Joel)

Vol.15, pp.43-51, *Roc-de-Marcamps (France-Gironde): sexual human representations* (With Lenoir Michel and Martinez Marc)

**Wolnei Ferreira Guimaraes Santiago**

Vol.11, pp.33-38, *Feminine Sexuality in Prehistoric Rock Art: a path toward structures of mind*

Vol.14, pp.54-64, *First americans: changes of places, changes of theories* (With Alves de Mota Leidiana)

**Wu Jiakai**

Vol.5, pp.24-25, *Discovery and study of two groups of writing on the cliff in the Hongshan culture area*

**Wu Junsheng**

Vol.5, pp.3-4, *Primitive religious information embodied in human-face images of rock art of Zhuozishan mountain, Wu-hai, Inner Mongolia* (With Li An)

**Wu Xiaoping**

Vol.5, pp.25-26, *Research on the development and utilization*

*of the Guizhou ancient petrography research* (With Li Hao)

**Yu Zhuoran**

Vol.4, p.20, *On the disciplines of taking image in Chinese rock art* (With Zhu Yuan)

**Zhang Jiaxin**

Vol.5, p.27, *Agricultural worship in the rock art of Jiangjun-ya, Lianyungang city, East China* (With Huang Yaqi)

Vol.5, pp.26-27, *Discussion of reproduction worship in chinese rock art* (With Bo Xiao and Wang Zhaohui)

Vol.5, pp.27-28, *Field survey and analysis of mask worship in the Xiliaohe river basin* (With Sun Xiaoyong)

**Zhang Li-Na**

Vol.5, pp.17-18, *The special characteristics of the Zhenfeng rock art in Guizhou*

**Zhang Xiaoxia**

Vol.5, p.21, *Investigation and research into Dahongyan rock art in Zhenfeng County, Guizhou province* (With Shi Zeming)

**Zhang Wenjing**

Vol.5, pp.27-28, *Research on face rock carvings in northern China* (With Wang Xiaokun)

**Zhu Houqiu**

Vol.5, pp.29-30, *An ancient sacrificial place: research into rock art in Xianju*

**Zhu Lifeng**

Vol.5, pp.30-31, *Petroglyphs on the pacific rim: the rock art of the Xiliaohe river and the Amur river* (With Wang Xu)

**Zhu Qiuping**

Vol.5, p.31, *Significance of the stabilization works which protect the rock art painting in Ningming district*

**Yuan Zhu**

Vol.4, p.20, *On the disciplines of taking image in Chinese rock art* (With Yu Zhuoran)



**EXPRESSION**  
**NUMBER OF AUTHORS PER COUNTRY**  
**VOLUMES 1 - 18**

163 AUTHORS from 37 COUNTRIES

COUNTRY	NUMBER OF AUTHORS	COUNTRY	NUMBER OF AUTHORS
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Austria	3	Mexico	3
Argentina	7	Morocco	1
Armenia	2	Namibia	1
Belgium	2	Netherlands	1
Botswana	1	Norway	2
Brazil	6	Poland	2
Bulgaria	1	Portugal	7
Canada	4	Russia	3
China	28	South Africa	4
Colombia	1	Spain	8
Denmark	2	Sri Lanka	1
Germany	1	Sweden	1
France	11	Switzerland	4
Japan	1	Tunisia	1
Jordan	1	UK	9
Kosovo	1	Ukraine	2
India	8	USA	11
Israel	3	Zimbabwe	1
Italy	12		



Newspaper Rock, Utah

**Expression Vol.1** *An introduction to Conceptual Anthropology and topics to be discussed in the following issues of Expression Magazine*

**Expression Vol.2** *Conclusions of the XXV Valcamonica Symposium, What caused the creation of art?*

*With articles by Alberto Marretta (Italy), Fernando Coimbra (Portugal) and Johannes Loubser (USA).*



Maori chief with moko. Captain Cook expedition.



South Rock Art (South Africa)

**Expression Vol.3** *Discussion about the premises of our research group*

*With articles by Emmanuel Anati (Italy) and many other issues.*

**Expression Vol.4** *A preliminar selection of the abstracts of participants at the UISPP World Congress "Atapuerca" in Burgos, Spain*

*With articles by Emmanuel Anati and Ariela Fradkin (Italy), Daniel Arsenault (Canada), Ulf Bertilsson (Sweden), Pascale Binant (France), Paul Bouissac (France), Paul D. Burley (UK), Fernando Coimbra (Portugal), Léo Dubal (France), Arsen Faradzhev (Russia), Francesco Ghilotti (Italy), Lysa Hochroth (France), Bulu Imam (India), Shemsi Krasniqi (Kosovo), Gang Li and Xifeng Li (China), G. Terence Meaden (UK), Louis Oosterbeeck (Portugal), Hua Qiao/Li Bin Gong and Hui Liu (China), Marcel Otte (Belgium), Andrea Rocchitelli (Italy), Umberto Sansoni (Italy), Tsoni Tsonev (Bulgaria), Gregor Vahanyan (Armenia), Huiling Yang (China), Yuan Zhu and Zhuoran Yu (China).*



Figure 1. Toca do Souto, Sema do Capivara, Piauí, Brazil. Symbols with a character with a specific character, a pregnant woman

**Expression Vol.5** *Presentation of the final group of abstracts of participants at the UISPP World Congress "Atapuerca" in Burgos, Spain*

*With articles by Li An and Junsheng Wu (China), Aoyungerile and Ying An (China), Beatriz Menéndez/Quijada César/Vinas Ramon/Albert Rubio and Santos Neemias (Mexico, Spain), Margalit Berriet (France), Ana M.S. Bettencourt (Portugal), Bo Cao (China), Chakravarty Somnath (India), Manuel Edo/Ferran Antolín/Pablo Martínez/M<sup>a</sup> Jesús Barrio, Elicinia Fierro/Trinidad Castillo/Eva Fornell/Georgina Prats/Remei Bardera and Concepció Castellana (Spain), Pengcheng Hu (China), Yanqing Jin and Xiaoxia Zhang (China), Fei Li (China), Gang Li (China), Hao Li and Biao He (China), Federico Maillad (Switzerland), Xiaomei Mu and Li-Na Zhang (China), Dana Shaham and Anna Belfer-Cohen (Israel), Zeming Shi/Xiaoxia Zhang and Yanqin Jing (China), Xiaoyong Sun and Jiaying Zhang (China), Viktor Vetrov (Ukraine), Liangfan Wang and Xiaoming Luo (China), Jiakai Wu (China), Qiuping Zhu (China), Liefeng Zhu and Xu Wang (China).*





**Expression Vol.6 Summaries of the UISPP Burgos Congress**  
 With articles by Emmanuel Anati (Italy), Joaquín Arroyo (Mexico), Martha E. Benavente (Mexico), Margalit Berriet (France), Ulf Bertilsson (Sweden), Pascale Binant (France), Paul Bouissac (Canada), Fernando Coimbra (Portugal), Léo Dubal (France), Arsen Faradzhev (Russia), Ariela Fradkin (Italy), Francesco Ghilotti (Italy), Antonio Hernanz (Spain), Mercedes Iriarte (Spain), G. Terence Meaden (UK), Beatriz Menéndez (Spain), Hu Pengcheng (China), César Quijada (Mexico), Albert Rubio (Spain), Neemias Santos (Spain), Alejandro Terrazas (Mexico), Tsoni Tsonev (Bulgaria), Gregor Vahanyan (Armenia), Ramon Viñas (Spain)

### Expression Vol.7 Spiritual dimensions of rock art

With articles by Daniel Arsenault (Canada), Paul D. Burley (UK), Somnath Chakraverty (India), Bulu Imam (India), Mercedes Pérez Bartolomé and Emilio Muñoz Fernández (Spain), Marcel Otte (Belgium), Andrea Rocchitelli (Italy), Ramon Viñas/Albert Rubio/César Quijada/Joaquín Arroyo/Beatriz Menéndez and Neemias Santos (Mexico, Spain), Umberto Sansoni (Italy), Giuseppa Tando (Italy), Zeming Shi and Yanqing Jing (China).

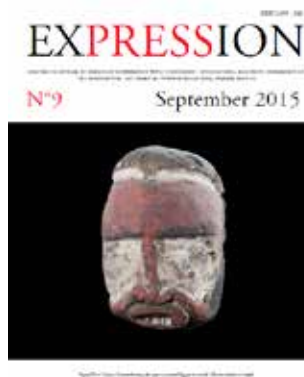


### Expression Vol.8 Rock Art: When, Why and to Whom?

With articles by Mara Basile and Norma Ratto (Argentina), Jaâfar Ben Nasr (Tunisia), Luigi J. Boro (USA), Christopher Chippindale (UK), Jessica Joyce Christie (USA), Fernando Coimbra (Portugal), Ib Ivar Dahl (DK), Sofia Soares de Figueiredo (Portugal), Inés Domingo Sanz (Spain), Bernadette Drabsch (Australia), Louise Felding (Denmark), Dánae Fiore and Agustín Acevedo (Argentina), Natalie R. Franklin and Phillip J. Habgood (Australia), Marisa Dawn Giorgi (Australia), Philippe Hameau (France), Arnaud F. Lambert (USA), Arnaud F. Lambert (USA), J. David Lewis-Williams (South-Africa) and Kenneth Lymer (UK).

### Expression Vol.9 Papers from the WWW Project (Tribal and Prehistoric Art: When, Why and to Whom?)

With articles by Monia Chies (Italy), David Delnoij and Marcel Otte (Belgium), Edmond Furter (South Africa), Chris Hegg (USA), Emmanuelle Honoré (UK), Bulu Imam (India), Shemsi Krasniqi (Kosovo), Trond Lødøen (Norway), Cristina Lopes (Portugal), Angelina Magnotta (Italy), Federico Mailland (Switzerland), Subhash Chandra Malik (India), Michel Martin (France), Elisabeth Monamy (France), Bilinda Devage Nandadeva (Sri Lanka), Alma Nankela (Namibia), George Nash (UK), Ancila Nhamo (Zimbabwe), Masaru Ogawa (Japan), Awadh Kishore Prasad (India), Riaan F. Rifkin (South Africa), Avraham Ronen (Israel), Manuel Santos Estévez (Portugal), Susan Searight-Martinet (Morocco), Kate E. Sharpe (UK), Jitka Soukopova (Italy), Radhakant Varma (India), Steven J. Waller (USA), Anne-Catherine Welté and Georges-N. Lambert (France).



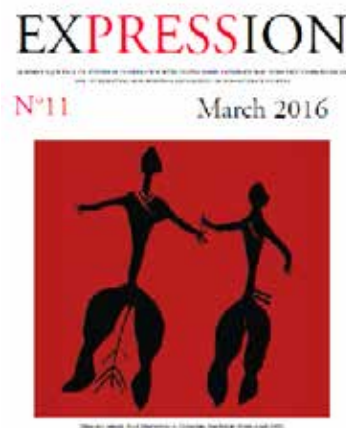


## **Expression Vol.10** *The role of religion, magic and witchcraft in prehistoric and tribal art*

With articles by Jaâfar Ben Nasr (Tunisia), Ingmar M. Braun (Switzerland), Edmond Furter (South Africa), Arnaud F. Lambert (USA), Maria Laura Leone (Italy), J. D. Lewis-Williams (South Africa), Angelina Magnotta (Italy), Federico Mailland (Switzerland), Nataliia Mykhailova (Ukraine), Susan Searight-Martinnet (Morocco), Hans-Joachim Ulbrich (Austria), Vahanyan Gregori (Armenia) and Steven J. Waller (USA).

## **Expression Vol.11** *Papers from the M-F Project (Male and Female in prehistoric and tribal Art)*

With articles by Margalit Berriet (France), Carl Bjork (USA), Pascale Binant (France), Brian Britten (Canada), Jessica Joyce Christie (USA), Santiago Wolnei Ferreira Guimaraes (Brazil), Deb Holt and Jane Ross (Australia), Arnaud F. Lambert (USA), Federico Mailland and Angelina Magnotta (Italy), Katharina Rebay-Salisbury (Austria), Susan Searight - Martinet (Morocco), Jitka Soukopova (Italy), Sachin Kr Tiwary (India), Maarten Van Hoek (Holland), Aixa Vidal/Lorena Ferraro and Maria Teresa Pagni (Argentina).

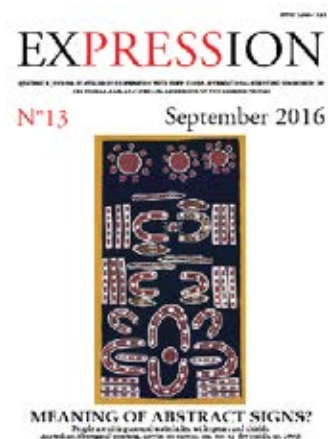


## **Expression Vol.12** *Why Art?*

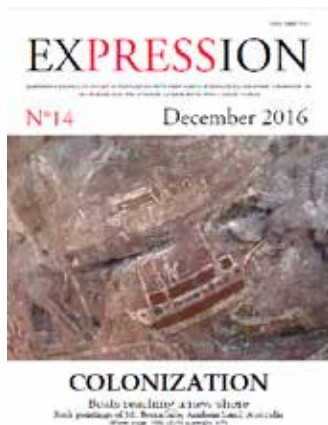
With articles by Robert G. Bednarik (Australia), Kalyan Kumar Chakravarty (India), Liudmila Lbova (Russia), Tirtha Prasad Mukhopadhyay (Mexico) and Derek Hodgson (UK), Ancila Nhamo (Zimbabwe), Marcel Otte (Belgium), Kalle Sognnes (Norway), Jitka Soukopova (UK), George F. Steiner (Switzerland) and Tsoni Tsonev (Bulgaria).

## **Expression Vol.13** *Abstract signs in prehistoric and tribal art: meaning and problems of interpretation*

With articles by Margalit Berriet (France), Jean Clottes (France), Jagannath Dash (India), Maurer Dieter (Switzerland), Edmund Furter (South Africa), Tirtha Prasad Mukhopadhyay and Alan P. Garfinkel (USA), Tsoni Tsonev (Bulgaria) and Leslie Van Gelder (USA).





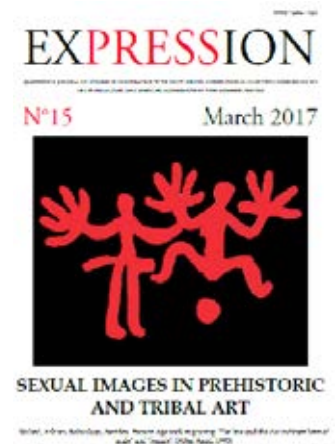


**Expression Vol.14** *Colonization: How did humans reach all the lands of the planet? Many different stories can be like stones in a mosaic piecing together an overview*

With articles by Emmanuel Anati (Italy), Marta Arzarello (Italy), Robert G. Bednarik (Australia), Anthony Bonanno (Malta), José Farruja de la Rosa (Spain), Edmund Furter (South Africa), Marcel Otte (Belgium), Santiago Wolnei Ferreira Guimaraes and Leidiana Alves de Mota (Brazil).

**Expression Vol.15** *Sexual images in prehistoric and tribal art. Since the earliest figurative art, sex appears to be a theme of primary concern. Why were such depictions made?*

With articles by Emmanuel Anati (Italy), Leo Dubal (France), Edmond Furter (South Africa), Michel Justamand and Pedro Paulo A. Funari (Brazil), Shemsi Krasniqi (Kosovo), Angelina Magnotta (Italy), Marc Martinez/Michel Lenoir and Anne-Catherine Welté (France), Terence Meaden (UK), Nataliia Mykhailova (Ukraine) and Jitka Soukopova (UK).



**Expression Vol.16** *The message behind the images in prehistoric and tribal art. What is the immense heritage of images from the past telling us?*

With articles by Emmanuel Anati (Italy), Robert G. Bednarik (Australia), Emilio G. Berrocal (Italy), Ekaterina Devlet (Russia), A. José Farruja de la Rosa (Spain), Edmond Furter (South Africa), Alexandre Guida Navarro (Brazil), Cristina Lopes (Portugal), Terence Meaden (UK), Cynthia Ontiretse Mooketsi (Botswana), Jacinto Palma Dias (Portugal), Radosław Palonka (Poland), Tirtha Prasad Mukhopadhyay (Mexico), Alan Garfinkel (USA), Luis Ramon Merchan Villalba (Colombia), Vahan Vahanyan and Gregori Vahanyan (Armenia).

**Expression Vol.17** *The project 'Cult sites and art' invites colleagues and friends, who can contribute facts, testimonies and ideas, about the function of art in prehistoric and tribal sites and their possible relations to myths, beliefs and cult practices, to contribute to the understanding of the functions of these sites. With articles by Emmanuel Anati (Italy), Margalit Berriet (France), Jerzy Gassowski (Poland), Kempe Stephan F.J. and Al-Malabeh Ahmad (Germany, Jordan), Terence Meaden (UK), Kalle Sognnes (Norway), Sachin Tiwary (India), Gregori Vahanyan (Armenia), Wolnei Ferreira Guimarães Santiago (Brazil).*



# EXPRESSION

N°18 December 2017



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## “*ART AND RELIGION*”

What is the role of religion, magic and witchcraft in prehistoric and tribal art? The intellectual and spiritual motivations of art produced various theories since the first attempts to explain prehistoric art over a century ago. Recent research is revealing more complex conceptual connections. In this book, authors of different backgrounds and countries, from four continents, are presenting examples of specific aspects, providing first-hand data. The confrontation of different ideas and methods is contributing to reconsider some past simplifications and generalizations

### CONTENTS

**Emmanuel Anati**

Introduction

**Jaafar Ben Nasr (Tunisia)**

Sandal engravings in the village of GuerMESSa (Southeast of Tunisia): a graphic memorizing of a forgotten Berbel ritual.

**Ingmar M. Braun (Switzerland)**

Interdisciplinary interpretation of anthropomorphic composite beings in European Upper Palaeolithic cave art: an approach.

**Edmond Furter (South Africa)**

Art is structural magic, not illustration.

**Arnaud F. Lambert (Usa)**

Sorcerer-kings in the Olmec rock art of Preclassic Mesoamerica.

**Maria Laura Leone (Italy)**

Meanings of the Deer Cave (Porto Badisco, Italy): Neolithic Art.

**J. D. Lewis - Williams (South Africa)**

Art, religion and myth: were they interrelated in Upper Palaeolithic times?

**Angelina Magnotta (Italy)**

The Myth of Cycnus and Ancient Carvings of the Archaic Apuan Ligurian people near Pontremoli (MS, Italy).

**Federico Mailland (Switzerland)**

Ibex, crescent and swastika as symbols of a lunar god in the rock art of the Ancient Near East and Central Asia.

**Natalia Mykhailova (Ukraine)**

Deer Offerings in the archaeology and art of prehistoric Eurasia.

**Susan Searight-Martinet (Morocco)**

Engraving of sacred, ideological of symbolical signs in Imaoun, a prehistoric tribal meeting place in South Morocco.

**Hans - Joaquim Ulbrich (Austria)**

Communicating with the gods: superstition on Fuenteventura and Lanzarote.

**Vahanyan Gregori (Armenia)**

Rock art of the Vedda people of Sri Lanka: when, why and to whom?

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## “*MALE AND FEMALE*”

The book includes papers of 20 authors from five continents. It considers human representations in prehistoric and tribal art presenting a broad landscape of different views and cases. In each age and culture a specific choice is emerging in the visual arts, between preferring male or female images, and between having or not the human figure as the main concern. The book presents different cases and views from experts of five continents

Anati, E. (ed.) 2017 *Male and Female*, Capo di Ponte, (Atelier), 119 pp. 60 ill. € 40

### CONTENTS

**Emmanuel Anati (Italy)**

Introduction: Male or Female?

**Margalit Berriet (France)**

Male + Female: Humanity: Male and Female in Prehistoric and Tribal Art

**Carl Bjork (Usa)**

Not always the male

**Pascale Binant (France)**

Men, Women, Children, Anthropomorphs and Animals

**Brian Britten (Canada)**

Bedford Barrens Petroglyphs

**Jessica Joyce Christie (Usa)**

Gendered Stone Cults in Pre-contact O’Ahu, Hawai’i

**Santiago Wolnei Ferreira Guimaraes (Brazil)**

Feminine Sexuality in Prehistoric Rock Art: a Path Toward Structures of Mind

**Deb Holt and Jane Ross (Australia)**

Sex and Gender in Wanjina Rock Art, Kimberley, Australia

**Arnaud F. Lambert (Usa)**

Exploring the symbolic expression of gender fluidity among the potbelly sculptures of southeastern Mesoamerica: a sociological approach

**Federico Mailland and Angelina Magnotta (Italy)**

Moon Worshipping in Prehistory: Fertility God or Goddess?

**Katharina Rebay-Salisbury (Austria)**

Male, Female and Sexless figures of the Hallstatt Culture: Indicators of Social Order and Reproductive Control?

**Susan Searight - Martinet (Morocco)**

The Representation of Males and Females in the Rock Art of Moroccan High Atlas Mountains

**Jitka Soukopova (Italy)**

Leading Role of Male Hunters in Central Saharan Prehistoric Rituals

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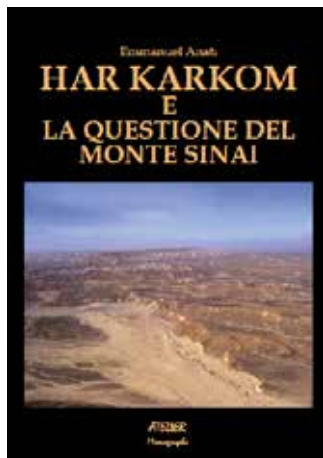
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## **ARCHAEOLOGY IN THE DESERT EXODUS:**

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From excavations and explorations in the deserts that separate the land of Canaan from Egypt, Emmanuel Anati, the scholar who for half a century is exploring these deserts, sums up new discoveries in two volumes. Two richly illustrated books bring new light on the events that inspired the Biblical narrative...and a new re-edition of an important book.



Anati, E., 2016: *Har Karkom e la questione del Monte Sinai*, Capodiponte (Atelier), pp 220; 138 ill., Italian edition, (€30,00)

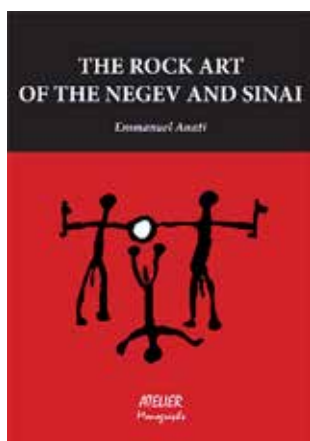
The findings of shrines and encampments of the Bronze Age at Har Karkom, a mountain located in one of the driest places and inhospitable parts of the Negev desert, in the north of the Sinai Peninsula, arouses a global debate on the hypothesis that this mountain can identify with the biblical Mount Sinai. The book presents a summary of the discoveries; it calls into question previous assumptions about the reliability of the Exodus Biblical narrative, both on the location of the mythical Mount Sinai, and on the chronological discrepancies proposed by various researchers. The book is richly documented by photographs, maps and other illustrations, it updates on recent discoveries, analyzing their possible historical significance, suggesting a new vision of the events narrated in the Bible.



Anati, E., 2016: *Esodo tra mito e storia (Exodus between myth and history)*, Capodiponte (Atelier) pp. 340; 138 ill., Analytical Appendix. Italian edition, (€ 40,00)

Different opinions divided the academic world about the historic reliability of the Biblical narrative of Exodus. The events in Egypt, the wanderings in the desert under the leadership of Moses and the events at the foot of Mount Sinai are they based on facts or are they just legend? Broad and systematic explorations on the ground and new archaeological discoveries open up the possibility of tracing back the geographical and environmental context, by providing elements that bring new insight on the historical roots of this magnificent epic passed down from the Bible.

### *ANOTHER BOOK ON THE SINAI DISCOVERIES*



Anati, E. 2015, *The Rock Art of the Negev and Sinai*, Third English edition, Capodiponte (Atelier), 248 pp. 248; 196 ill., €20,00

The book deals with a new theme of Near-eastern archeology: the rock art of the Negev and Sinai. It presents new discoveries and reconsiders content and assumptions of previous articles and of a book by the same author that dates back to 1979. The richly illustrated book is offering a new vision of this immense archive engraved and painted on rocks that reveals events and beliefs of the desert. The rock art of the Negev and Sinai illustrates stories and customs of the Sinai Peninsula over the past 10,000 years. Some depictions of the Bronze Age may refer to people mentioned in the Pentateuch. Others, of Roman-Byzantine times, illustrate life and customs from the age of early spread of Christianity.

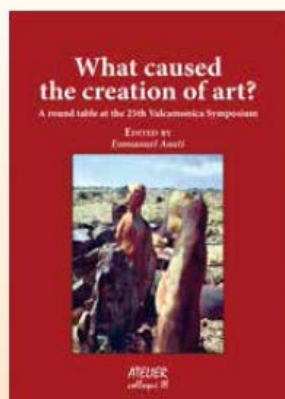
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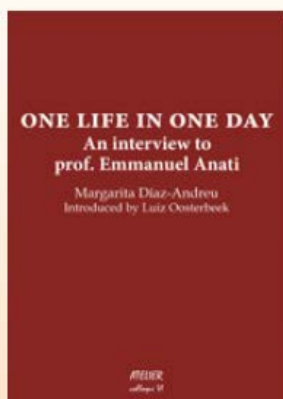
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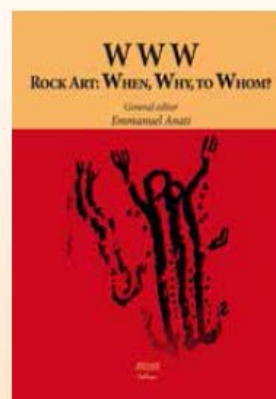
Anati, E. (ed.) 2013. *What Caused the Creation of Art? A Round Table at the 25th Valcamonica Symposium*, Capo di Ponte (Atelier), 44 pp. € 10.

'What caused the creation of art?' People from different disciplines and different cultural backgrounds present contrasting views. And yet, the same question has bothered thinkers for generation.



Diaz-Andreu, M. 2015 *One life in one day, an interview to prof. Emmanuel Anati*, Capo di Ponte, (Atelier), 104 pp. 51 pls. € 20

In the gardens of the campus of Burgos University, while delegates were moving from sessions and lectures to coffee breaks and back, Margarita Diaz-Andreu recorded, for hours, the words of Professor Emmanuel Anati. It was the 5th of September 2014 and when the electric lights of the evening replaced the sunlight, a life-long story was drafted.

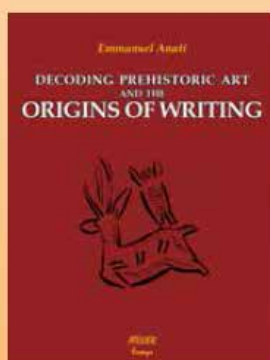


Anati, E. (ed.). 2015 *WWW Rock Art: when, why, to whom?* Capo di Ponte, (Atelier), 218 pp. 184 pls. € 40

How come that Rock art is widespread in five continents? Some sites, in South Africa, Australia or Brazil, count well over one million figures. They were produced over centuries and millennia. What made generations persist in this tradition of marking the stone surfaces with the records of their minds? Why did they invest on it such immense time and energy? Fifty authors from five continent face the query: when, why and to whom?

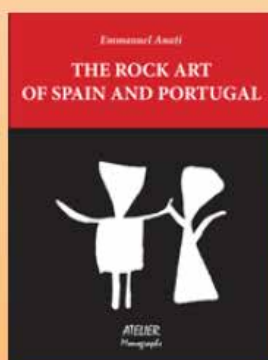
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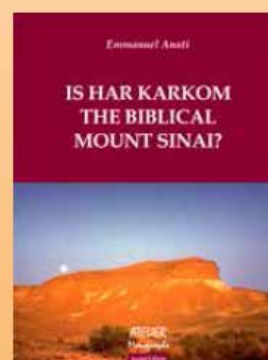
Anati, E. 2015. *Decoding Prehistoric Art and the Origins of Writing*, Capo di Ponte (Atelier), 152 pp. 83 pls. € 20.

This text examines the cognitive process that led to the invention of writing and highlights constants of memorization and associative synthesis held in the mind of Homo sapiens for thousands of years. Some examples of decoding prehistoric art propose a new vision for the beginning of writing.



Anati, E. 2014. *The rock Art of Spain and Portugal, a Study of Conceptual Anthropology*, Capo di Ponte (Atelier), 104 pp. 87 pls. € 20.

An analytical synthesis of the rock art in the Iberian peninsula from the conceptual anthropology approach. The major concentrations of rock art are considered as expressions of their different cultural and social patterns.

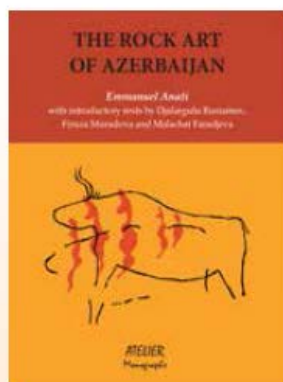


Anati, E. 2013. *Is Har Karkom the Biblical Mount Sinai?* (II ed.), Capo di Ponte (Atelier), 96 pp. 53 pls. € 20.

Remains of ancient sanctuaries and camp-sites tell the story of a hitherto unknown mountain in the heart of the desert of Exodus. Is Har Karkom the biblical Mount Sinai? To what point can we consider the biblical narratives as a source of historical documentation?

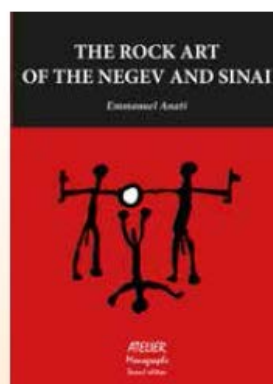
MONOGRAPHS





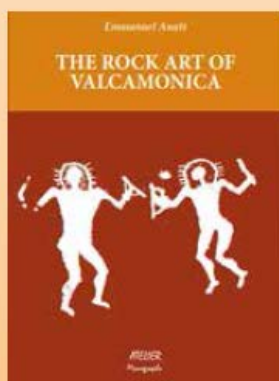
Anati, E. 2015. *The Rock art of Azerbaijan*, Capo di Ponte (Atelier), 156 pp. 190 pls. € 20

In the course of centuries, Azerbaijan, was a great centre of rock art. This gateway of Europe, between the Caucasus Mountains and the Caspian Sea, was a major way of migrations from Asia to Europe. New chapters in the history of art are revealed by beautiful design and stylisation.



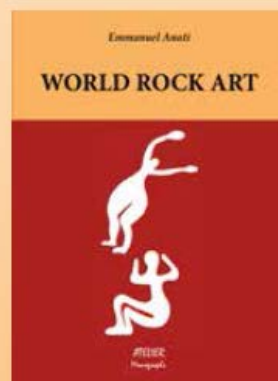
Anati, E. 2015. *The Rock Art of the Negev and Sinai*, second edition, Capo di Ponte (Atelier), 242 pp., 190 pls. € 25.

The present volume is concerned with a new theme of archeology and anthropology: the rock art of the Negev and Sinai, which never had before a general analysis in English. It elaborates on articles and a book written in the last 60 years, to produce a synthesis and an overview.



Anati, E. 2015. *The Rock art of Valcamonica*, Capo di Ponte (Atelier), 260 pp. 153 pls. € 20

Valcamonica, in the Italian Alps, with over 300,000 images engraved on rocks, is the major rock art site in Europe. It is the first "World Heritage Site" listed by UNESCO in Italy and the first rock art site listed in the world. Its study reveals the largest archive left behind by the ancient inhabitants of Europe. After having excavated, traced, described and analyzed it for over half a century, the author presents this synthesis bringing new light on 10,000 years of history. The present work represents a turning point in the methodology of archaeological research. Europe acquires back millennia of its forgotten history.



Anati, E. 2015. *World Rock Art*, Capo di Ponte (Atelier), 208 pp. 193 pls. € 20

This book is a fundamental introduction to rock art studies. It marks the starting point of a new methodology for rock art analysis, based on typology and style, first developed by the author at the Centro camuno di Studi Preistorici, Capo di Ponte, Brescia, Italy. He can be seen the beginning of a new discipline, the systematic study of world rock art.

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