

The Valcamonica symposiums

2001 and 2002

Rapport från Riksantikvarieämbetet 2004:6



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Rapport från Riksantikvarieämbetet 2004:6

EDITED BY ULF BERTILSSON AND LOUISE MCDERMOTT



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Cover photos Front cover: 1) Symposium participants visiting the ship setting Ales Stenar, Scania in stormy autumn weather. 2) The "Dancer" engraving at Järrestad, Scania. 3) Images of horses and geometric patterns on one of the engraved slabs of the cist in the Kivik cairn. 4) Engraving of birds – cranes? – at Backa in Brastad, Bohuslän. 5) Symposium participants analysing and photographing at Järrestad, Scania. 6) The beautifully engraved "Shield Carrier" at Hede in Kville, Bohuslän.

Photo: Catarina Bertilsson, RockCare.

Back cover: The central part of the engraving at Grillby in Villberga, Uppland demonstrated by three different documentation techniques; temporary paint of chalkpowder and water, plastic tracing and paper rubbing. Only on the rubbing are the horses above the ship visible with all details (cf. Ulf Bertilsson's article). Photo: 1) Gerhard Milstreu, Tanums Hällristningsmuseum, Underslös. 2) and 3) Catarina Bertilsson, RockCare.

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Valcamonica symposia

20 Symposia in 34 years – 20 simposi in 34 anni

- | | | | | | |
|-------|------|--|--------|------|--|
| I. | 1968 | Symposium International d'Art Pré-historique, UISPP. | XII. | 1994 | Prehistoric and Tribal Art: Rock Art and Archaeology. |
| II. | 1972 | Les Religions de la Préhistoire, UISPP and IAHR. | XIII. | 1995 | Prehistoric and Tribal Art: Myths, Signs and Memories. |
| III. | 1979 | Prehistoric Art and Religion. | XIV. | 1996 | Prehistoric and Tribal Art: Images, Symbols and Society. |
| IV. | 1981 | International Consultation of Specialists on the Study, Documentantion and Conservation of Rock Art, UNESCO. | XV. | 1997 | Prehistoric and Tribal Art: Graphics and Semiotics. |
| V. | 1982 | Rock Art and Museology – Arte Rupestre e Museologia. | XVI. | 1998 | Prehistoric and Tribal Art: Shamanism and Myth. |
| VI. | 1984 | Rock Art: The Future of Research. | XVII. | 1999 | Prehistoric and Tribal Art: Deciphering the Images. |
| VII. | 1989 | The Roots of Art. | XVIII. | 2000 | Prehistoric and Tribal Art: Conservation and Protection of the Messages: Inventory, Archives, Recording. |
| VIII. | 1990 | Rock Art: New Horizons in Research. | IXX. | 2001 | Parameters and Guidelines for Studying Rock Art. |
| IX. | 1991 | Rock Art: Old World and New World, Convergences and Divergences. | XX. | 2002 | Recent Perspectives on the Documentation and Presentation of Rock Art. |
| X. | 1992 | Rock Art: The Importance of Place. The Site, the Message, the Spirit. | | | |
| XI. | 1993 | Prehistoric and Tribal Art: Symbol and Myth. | | | |

Preface

The Valcamonia symposium has been almost annually organised for almost 40 years. It has become the most well established rock art event of all and a must for anyone wanting to stay updated with the latest ideas and developments in rock art research and management. Professor Emmanuel Anati personifies the symposium and the research institute Centro Camuno di Studi Preistorici in Capo di Ponte, both being his creations. Thanks to that, thousands of students and researchers have come to Valcamonia to study the rock art there and elsewhere in the world. These studies are made possible due to the extensive research library and databases available at the CCSP. But not only researchers and students come to Valcamonica. Tens, if not hundreds, of thousands of school children and tourists – the educated public – come every year to look at and admire the astonishing artistic achievements of the Early Camunians that were engraved on the steep bedrocks at Luine, Nadro and Naquane.

According to history and tradition Valcamonica and Lombardy were also for goal of visits in prehistoric times, made by people that came from as far away as Scandinavia sometimes. The people of this region were named the “Long Beards”, a name that was later transformed into Lombardia/ Lombardy. Whether this historical tradition is true or not, it is obvious from the rock art that connections already existed even in prehistoric times. Many motifs and scenes in Valcamonica’s rock engravings are strikingly similar to those in Scandinavia, especially those in Tanum in Northern Bohuslän on the Swedish West Coast. Another similarity is that the rock carvings of both Valcamonica and Tanum have been inscribed onto UNESCO’s World Heritage List. With that background a close co-operation in management and research has naturally developed between these two European rock art centres. This co-operation started already in the 1980s but became more intense during the 1990s and especially after

that the National Heritage Board in Sweden set up its’ RockCare project within the framework of the Raphael and Culture 2000 programmes of the European Commission. This project was successfully run between 1998 and 2001 in close co-operation with the CCSP and ICOMOS’ international scientific rock art committee – CAR.

One result of this co-operation was that it was mutually decided to arrange the Valcamonica seminars of 2001 and 2002 in Sweden. Since this was the first time ever that this major rock art event had taken place outside its place of origin, this was naturally a big challenge. However, the two seminars in Sweden were finally held at Resö in Tanum in 2001 and in Simrishamn in Scania in 2002. The respective titles of the seminars were “Parameters and guidelines for studying rock art” and “Recent perspectives on the documentation and presentation of rock art”. To a certain extent they both mirror a recent trend in this sphere, where aspects of documentation and management have become increasingly important. In many parts of the world, like in the USA, Great Britain, Spain and Scandinavia, research on management of rock art as part of a wider archaeological arena has become established more or less as a discipline of its own. It has sometimes been argued that this may not be to the advantage of ‘true’ rock art research, such research that is (or should be) directed towards the meaning and interpretation of rock art itself. This will probably be a matter for debate in the future too. But it seems obvious that management and research are two sides of one and the same coin. Without management, including protection and conservation of rock art sites, there will soon be very few sites left to research. And without research there will soon be very little of interest to tell people about the meaning and further archaeological implications of the rock art. It seems that one key factor to further integrate these two fields is the documentation of the rock art

itself. Documentation, whether performed with traditional methods or modern high-tech, provides researchers with the possibility to become acquainted with the rock art images in situ with all their details and artistic added values. Details are often revealed which are crucial for understanding the meaning and thus to the interpretation of the rock art. Applied in the right way high-tech methods can be a massive aid in recording and storing this information as well as bringing it home from the field for further analysis and study.

In this report from the Valcamonica seminars in Sweden it is my hope that most of these aspects have been presented and penetrated by the various entries from the participants. It is also my hope that this report will stimulate and further deepen this open dialogue between research and management. This is also illustrated by the fact that arranging the seminars in Sweden was made possible as part of the RockCare project which was granted by the European Commission. One of the main focuses of the project has been to further integrate the works of experts and students, researchers and managers, pupils and teachers and to try to meet with and to stimulate the interest of the public at large.

Finally, I want to thank all participants and other people involved in organising the seminars, especially Ms Lena Alebo, the curator of Österlens Museum in Simrishamn for generously inviting us to her museum and for guiding us at Kivik, and also Ms Agneta Modig for keeping the production process of this book so well organised in its final intense stage.

Tanum, July 7, 2004
Ulf Bertilsson
Project Manager

The Valcamonica symposium 2001

Parameters and guidelines for studying rock art

The art of beginnings

EMMANUEL ANATI

CENTRO CAMUNO DI STUDI PREISTORICI, ITALY

The development of a World Archive of Rock Art (WARA) is stimulating new concepts on the motivations for rock art and on the psychic background of artistic creativity. A world survey on the production of rock art reveals the role of prehistoric visual art as a source for historical reconstruction of the human past.

When we speak of prehistoric art, we usually think of visual art although we know that even the least technologically developed peoples on earth also expressed themselves through music, dance, performance and poetry: they practised the arts of eloquence, of moving and decorating their bodies, and of awakening social or sexual interests. Prehistoric peoples developed various aspects of artistic creativity and externalisation of the self, of which, for the time being, we can only recover (since archaeology does not reconstruct temporal arts) those which left decipherable physical traces. Even with the graphic or plastic arts, the remains that have reached us represent only a minute part of what was originally produced. But these few remnants (which nevertheless number more than 70 million figures) are of cardinal importance in understanding the cultural matrix of humanity. They enable us to reconstruct the way of seeing, thinking, and believing of thousands of generations all over the world. The principal material employed, almost everywhere, by Stone Age man was wood. Besides objects in stone, bone, or ivory and other materials that have not perished, how many were there in wood, plant fibres, tree bark, animal skins, or other perishable materials, which have been destroyed? We know that Palaeolithic man used to leave his marks and trace signs on mud and sand as found inside caves, which he undoubtedly also did outside, just as many tribes do today. In the open air, these works are destroyed by weather. Rare are artistic human creations that survive for thousands of years, and of these only a tiny proportion have been discovered. Who knows how many regions of intensive artistic creation, such as the central Tanzanian plateau, the Tassili of the Algerian Sahara, or the caves of Dordogne, are yet awaiting discovery?

We know very little about the context of the appearance of the oldest evidence, from whence emerge the difficulties in surmising the state of mind, the social context, and the atmosphere that prevailed at the creation of the works. Visual art can be subdivided into “movable art” or mobiliary art – objects – and “immovable art” or immobiliary art, on rocks or in caves. This heritage is scattered throughout the World and covers a time-span of 50,000 years.

In 1984 I conducted a study for UNESCO of the state of research in this field. From this developed the WARA project (World Archives of Rock Art), an inventory of prehistoric art, which today benefits from the support of ICPHS (International Council of Philosophy and Humanistic Studies), UNESCO and the Italian Ministry of Foreign Affairs. The idea is to arrive at an overall vision on the basis of the analysis of 70 million images drawn from more than 20,000 sites in 400 regions of 160 countries of the world.

Art of all periods teaches us about man’s conceptions of the world, his thoughts, and his imagination. This immense patrimony, from its very origins, allows us to reconstruct man’s roots, his lifestyles, economy, preoccupations, customs, and beliefs. Before the birth of writing, art was already a form of writing: a means of memorising and transmitting messages and ideas. Rock art sites are places of initiation, information, and education. A number of these sites are threatened today. In order to preserve for future generations the teachings that they can convey to us, it is imperative to document everything as quickly and as fully as possible.

In the prehistoric periods, as in our own time, art was a fundamental element of culture and of the quality of life. What would our life be without the features that have determined artistic creativity? Yet art is a recent invention. According to our present state of knowledge, and despite the endeavours of researchers to go back earlier than this, art was only born around 50,000 years ago. Mankind has evolved on Earth since the early hominids over 5 million

years ago. From what we know today, art is present only for the last 1/100 of the story of humanity. Art appears to be a rather late acquisition of the cultural package. But since then, it has had an aura of eternity. Artists die, but the art of Lascaux or Altamira is as fresh as that of Picasso, Miró, or Modigliani. It continues to convey emotions and to stimulate the imagination and the intellect. The art of beginnings retains the same freshness as contemporary art and we must recognise its gift: that it continues to speak to us and is therefore contemporary. Although it seems difficult to us today to imagine humanity without art, we should nevertheless remember that the species *Homo* developed its abilities of tool making, of using the fire and of building living huts before the beginning of art. For *Homo intellectualis* to become capable of producing art, he had to have an articulated language, philosophical thoughts, ideology, the abilities of synthesis, abstraction and symbolism, and probably a concept of religion. We may, however, justifiably surmise that man had learnt to play well before: and the play practised by other mammals, from cats to monkeys, is an essential element on the road to the kind of curiosity and intellectual stimulation upon which art was born. Those who do not know how to play will never produce art, yesterday as today.

As for the complex economy, which the appearance of agriculture presupposes, it only developed in the last 10,000 years. The last peoples who continue to live as hunter-gatherers are today relegated to a few marginal corners of the world, in the forests of Congo and the Amazon, in the far north of Canada, and in the deserts of central Australia. They are the last depositories of the feelings, the messages, and the essential and primordial truths of our species. Their way of life will disappear forever in the course of a generation. Their thought and the memory of their precious experience will only survive if their artistic creations are recorded, studied, and preserved. Art alone makes this possible, for throughout the world there are no people that do not produce art. And art is a mirror of mind, soul and heart. Each image is a chapter of history.

The analysis of the data that we have gathered in the WARA project has enabled us to construct a global vision of the phenomenon of "art." We have thus been able to identify three types of signs characteristic of elementary artistic structures: pictograms, ideograms, and psychograms. Their typology and systems of association accommodate

nuances, differences between one geographical zone and another, one period and another, but the base is the same everywhere. We can even assert that there is a universal base common to the visual arts and to dance and music: these are also composed of the interaction between pictograms, ideograms, and psychograms.

Pictograms are images (human figures, animal figures, structures and objects). Ideograms are symbols that are repeated and have a standard significance; in the beginning, in the very early stages, the same ideograms are found all over the World and then there is a gradual diversification of symbols for the different parts of the World. Psychograms are explosions, exclamations. They are not repeated. Each psychogram is unique, but they all follow the same kind of graphic concept. The different modes of association of these three elements changes according to the way of thinking and the cognitive processes of the human mind.

In the visual arts, *Homo sapiens* always expressed himself metaphorically. This reflects a way of thinking and of co-ordinating the associative mental process, which still persists today. When one says of a person, "he's a lion", or, indeed, "an ass", "a pig" or "a snake", we instantly understand the signification. In prehistoric art, some animal images have a metaphorical signification. They are associated with signs which often recur in the category of ideograms or in that of psychograms. The paintings in black of the bison which are found in the cliffs of the Great Plains of northern America represent the great Apache chief, "Black Bison"; the drawing of an eagle in our society represents the Empire, an empire, whether that of Rome, Berlin, or Vienna.

Some paradigms do not change: distinctions must be made between universal paradigms, categorical paradigms, and vernacular paradigms. Universal paradigms are distributed throughout the world at all periods. To give an example, a universal paradigm is that more than 95 per cent of prehistoric art is concerned with only five subjects: anthropomorphs, zoomorphs, structures, objects, signs. Categorical paradigms are those which distinguish one of the five principal categories of societies producing art: ancient hunters, early gatherers, developed hunters, herder-rearers, and societies with a complex economy. A categorical paradigm would be that images of ploughs are represented only by agricultural groups or that domestic animals are represented only by human groups practising domestication. Finally,

vernacular paradigms are in the different styles which characterize particular regions or particular periods: in modern art, stylistic variations such as baroque or art nouveau in Europe, or that of Ming paintings in China, would be called "vernacular". Most major groups of later prehistoric art reveal the presence of vernacular paradigms. In other words, the very structure of art is to be read in the grammar which its typology reveals, and in the syntax reflected by the association of signs: simple association, complex association, sequence and scene.

Visual art reveals the character of the society that created it, but also the personality of the artist, his/her concerns, the way of seeing the surrounding world, the existential relation with nature. It is a proto-writing: we could even say, it is writing before writing. And it is writing in a primary language, because in the very oldest stages, the same modes of expression, the same associations, the same sequences, and the same themes are found throughout the World. Regional characteristics were to become increasingly marked in the course of time, as men adapted to the different geographical zones.

50,000 years of artistic creativity sanctions comparative studies at a global level on the universal constants of cerebral functioning, on the basic process of the association of ideas, which reveal to us fundamental factors concerning the nature of man. As *Homo sapiens* became more vernacular, more specialised in each region, art also acquired local characteristics. Undoubtedly there was an analogous process for language and for other aspects of culture. The principal themes of prehistoric and tribal art all over the world appear to be namely the same: sex, food and territory. These are man's perennial preoccupations. This is all revealed by means of graphic narration, usually metaphorical, which often evokes myths: there are myths of origin, myths of genesis in a poetic spirit pregnant with conceptualisation, imagination, and aesthetic meaning. Most myths, in one way or another, gratify territorial ownership, food resources, sexual relations, or some other moral or ethic requirement of the group.

Prehistoric art may be considered the major patrimony of mankind. It is the key to our intellectual heritage. Today we understand it better than yesterday. It is likely that tomorrow we shall be able to further penetrate its meaning and to further benefit of the knowledge it conveys. But on condition that such knowledge will be accessible, that the documentation is available.

New generations should develop more concern for this heritage, for greater awareness would reward them with enrichment, regenerated and inspired by the immensity, the beauty, and the wonder of the human spirit. From a technological point of view, humanity develops. The material existence of man has advanced, but we discover that his emotional, aesthetic, and spiritual capacities could have been just as elevated 50,000 years ago as they are today. The art of beginnings has much to teach us about culture, education, the interior life of man, and society's ethical and aesthetic equilibrium. Art implies a consciousness of reality and of the imagination, of our senses and of our eyes. It is a window onto the spirit of man since the first artistic creation. Awareness of the forms of nature, the sky and the earth, rocks, landscapes, animals, and men, is the foundation of intelligence. To read the forms of nature, to imitate and complete them, and raise them to abstraction is the start not only of art but also of scientific research. It is the eternal spirit of *Homo sapiens* at work, for he has always been a seeker and a scholar.

Research today is involved with the reading of signs. Prehistoric art is an expression of language that can be deciphered. Each year sees fresh advances in this area, and the reading of this body of evidence prepares the ground for a universal history. A true universal history should also integrate the peoples without writing. The moment that art came into existence, history became possible. But it should go beyond the habit of considering only urban and literate populations. The contribution to world history made by the art, imagination, and creativity of peoples without writing is fundamental: it is the source of all that came later. That is why understanding the art of beginnings can open new horizons not only for culture but also for our awareness of the fullness, depth, and existential value of the human intellect.

The most serious problem concerns its vulnerability. Whatever is not documented today may be lost for ever. This is why it is urgent to progress in the process of documentation and inventory of rock art on a world base. Tomorrow may be too late.

NOTE: the present paper is an abstract of the book by the same author, *La struttura elementare dell'arte*, Capo di Ponte (Edizioni del Centro), 2002.

Pictograms, ideograms and psychograms

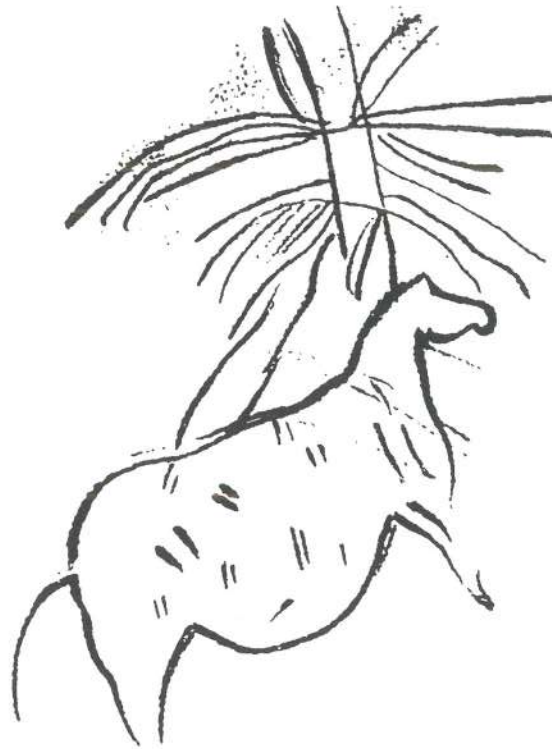


Fig. 1. Elementary grammar of the art of «Early hunters». Pictograms, ideograms and psychograms from La Pileta, Spain. The pictogram is a light brown painting of a horse on the body of which, repeated ten times, is an ideogram consisting of two parallel lines and called «lips», to which «feminine» signification is ascribed. These ideograms were executed at different times with different colour tonalities: red, chestnut, and black. However, the ideogram is the same in each case. Above the horse there is a psychogram in black: a rectangle with stripes issuing from it. Even an apparently simple painting is the accumulation of several hands of several periods. (Tracing by H. Breuil, 1936; WARA Archives W00206.)

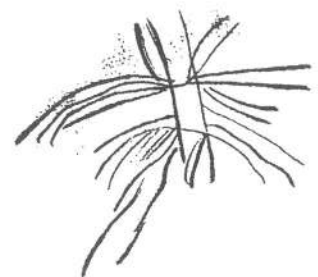
Grammatical analysis



Pictogram: horse



Ideogram: two parallel lines called «lips» are repeated ten times



Psychogram: a rectangle which emanates stripes or rays



Fig. 2. Two figures of animals, one vertical, the other horizontal, are associated with two ideograms of repetitive type with masculine value (branch) and feminine value (eye-shaped sign) in the Palaeolithic cave of Altamira, Spain (art of «Early Hunters»). Beneath one of the animals there is a group of curving lines. Above the two figures is the union of the two ideograms, one masculine (arrow) and the other feminine (lips). (Tracing by H. Breuil, 1912; WARA Archives W00194.)

Grammatical analysis



Pictograms: two figures of animals: one vertical, the other horizontal

Syntactical analysis



Vertical animal with masculine ideogram



Ideograms: two masculine signs («branch» and «arrow»)



Horizontal animal with feminine ideogram



Two feminine signs («lips» and «eye»)



Union of feminine ideogram (lips) with masculine ideogram (arrow)



Psychogram: band of curving lines



Psychogram of curving lines, exclamation, or omen

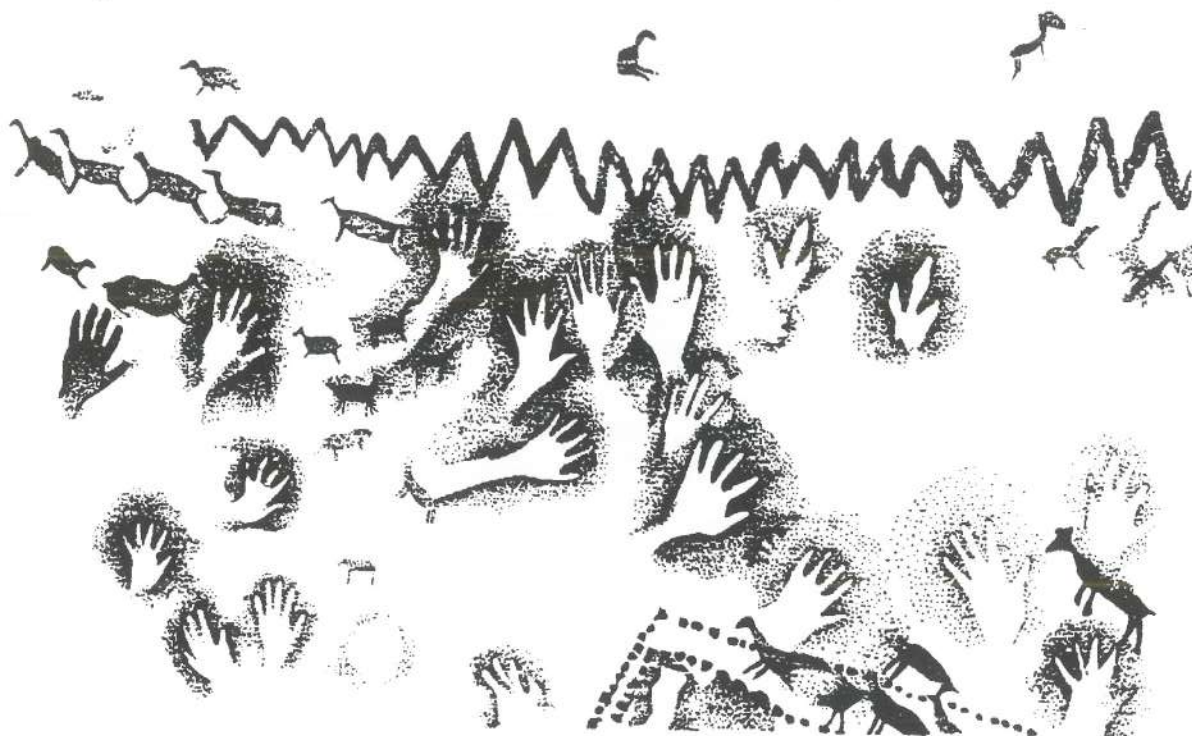


Fig. 3. Cave paintings from Rio Pinturas, Patagonia, Argentina. Art of "Early hunters". Three distinct phases can be discerned: association of graphemes (handprints, animal prints, object-tools, zig-zag), followed by overlapping animals added later, and further later overlapping of a line of points. (WARA Archives W00179.)

Handprints in positive and negative



Animal tracks



Tool-utensil: «axe»?



Zig-zag



Animal figures traced above at a later time



Line of points added later



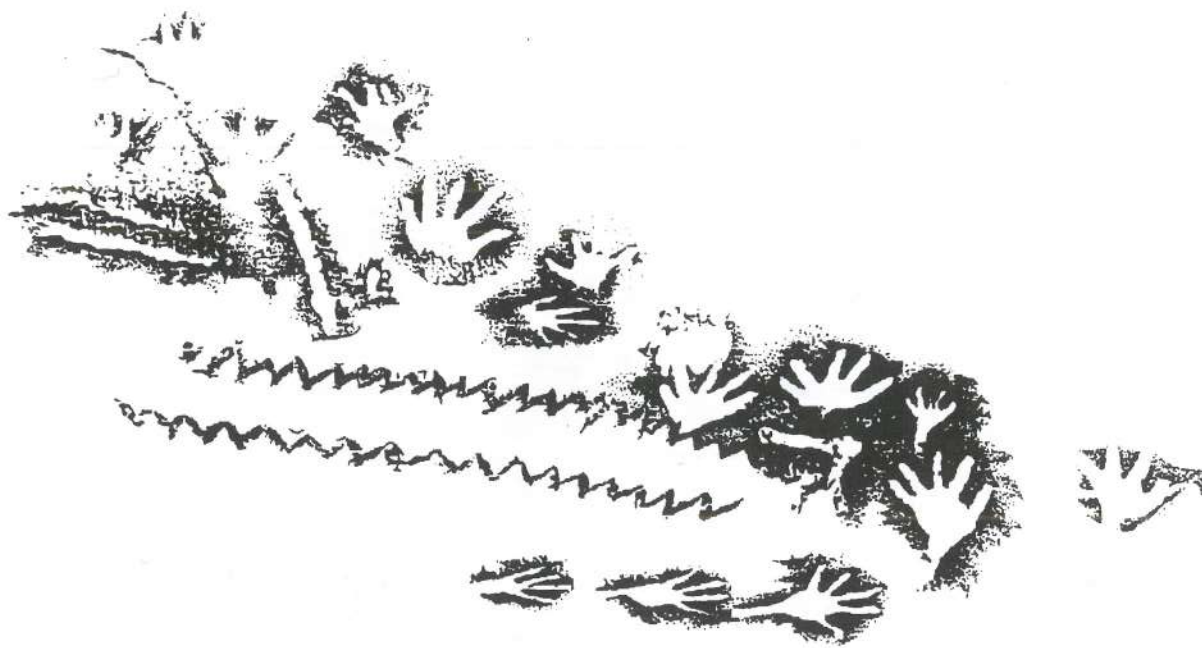


Fig. 4. Rock painting from Queensland, Australia. Negative handprints are associated with negative animal prints, zig-zag motifs, and tools. (WARA Archives W00178.)

Negative handprints



Animal tracks?



Objects: «club» and «axe»



Zig-zags



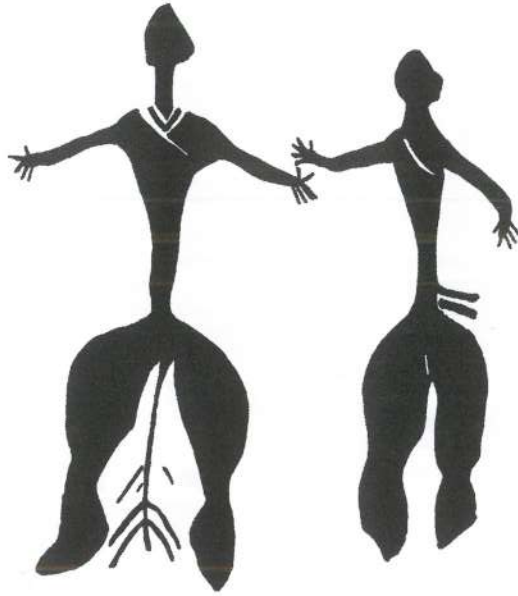


Fig. 5. Symbols of the masculine and the feminine in cave engravings from Gobustan, Azerbaijan (probably Proto-neolithic, 7000–5000 BC). The symbol of the arbolet or «branch» indicates the masculine sex, while the two parallel strokes, or «lips», appearing on the woman's hip, indicate the feminine sex. This image may furnish an indication of the names given by these people to the sexual organs. (WARA Archives W00287.)

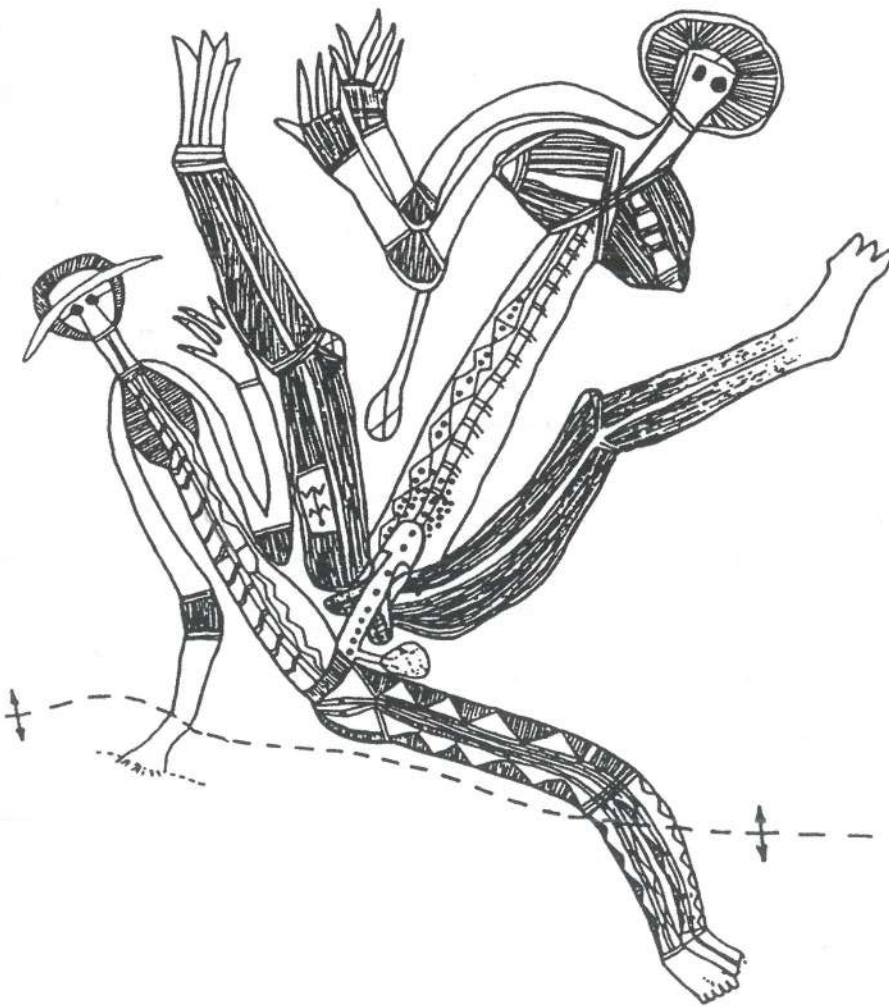


Fig. 6. Bulajang, Kakadu National Park, Northern Australia. Art of the Australian Aborigines, scene of copulation. Note the image of child outlined on the woman's thigh and the dots (sperm?), in the male penis, penetrating the female body. (WARA Archives W00891.)



Fig. 7. Rock painting done by people with a complex economy, Seradina r. 26, Valcamonica, Italy. A man and women dance producing sounds and rhythms, evoked by ideograms. (Wara Archives W00316.)



Fig. 8. Rock painting of Early food producers, which are the expression of an early phase of groups with mixed economy. Toro Muerto, Peru. Scene of dance and music, where the sounds and rhythms are graphically represented by point and lines around the dancers. Each dancer has a different mask, which serves to make recognizable the entity they represent in the context of the dance. (WARA Archives W00318.)



Fig. 9. Tracing of a rock painting, red in colour, from Cedarberg, South-West Cape, South Africa, which reveals the social life of «Evolved hunters». Six people are sheltering under a rock. Above them, purses, gourds, and other objects are suspended from the ceiling. A sort of «arm» connects the figure with the biggest head (probably the chief) with the foremost female figure (with bosom) to his right. Left and above, three ideograms have been drawn, one for each of the human couples. The three seem to indicate the sexual relationship between two of the persons represented. From left to right, they are: stick with closed lips, stick with closed lips, and stick with open lips. (WARA Archives W00233.)

Grammatical analysis



Pictograms: Probably a rock shelter



Group of six people

Ideograms



Three pairs of signs joining the vertical line to horizontal «lips»

Syntactical analysis



A rock shelter, with hanging objects; its name is likely to be indicated by an ideogram in the form of a bird above



Six persons form three couples. Each individual turns the face towards the partner; in each couple one of the partners is taller than the other



First couple: the individuals are attached. The ideogram indicates «lips closed»



Second couple: the individuals are attached. The ideogram indicates «lips closed»



Third couple: the individuals are more distant from each other. The ideogram indicates «lips open»

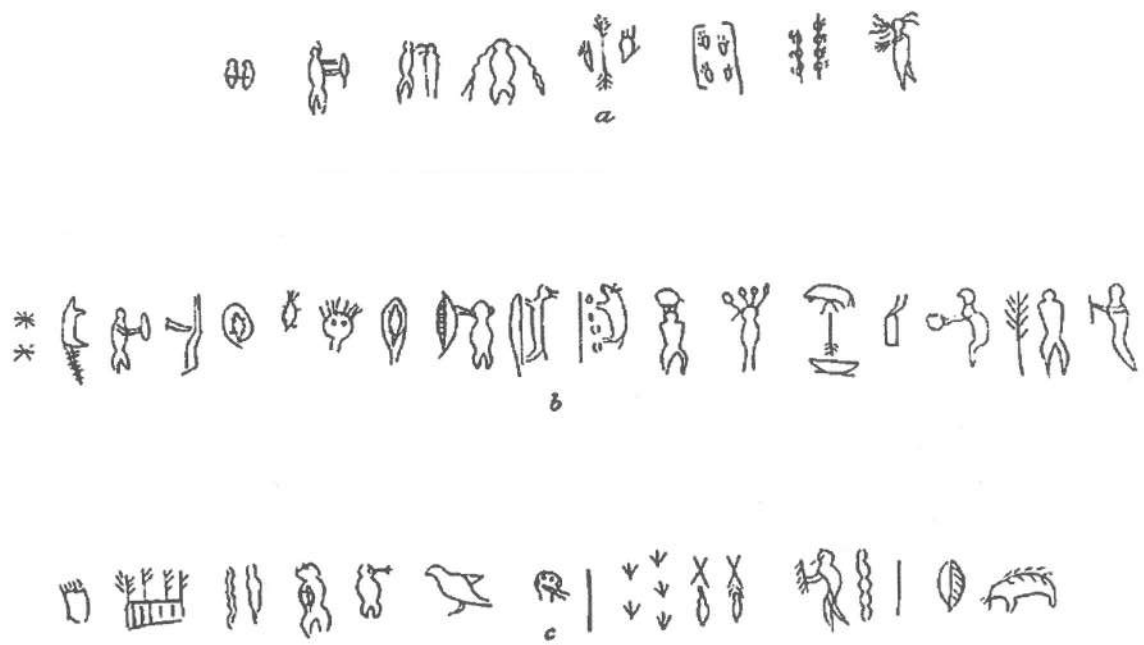


Fig. 10. Graphic memorization of a story which recurs in a song of the Ojibwa tribe, near Red Lake, Canada. It was recorded by G. Mallery in 1874. (WARA Archives W00313.)

Shamanic motifs in the rock art of Siberia and Central Asia

EKATERINA DEVLET

INSTITUTE OF ARCHAEOLOGY, RUSSIAN ACADEMY OF SCIENCES, MOSCOW

In Siberia and Central Asia – the homeland of shamanism – valuable data can be gained from rock art motifs and their comparison with ethnographic material, which indicate that a shamanic world-view was fundamental to the complex symbolism of the native people. Rock art images with shamanic attributes (coats with pendants, drum, drum-steak, headgear etc.) manifest the shamans function as mediators in a tripartite universe. Decorated shaman coats and attributes were a material form, which marked the shamans' special status. Similar attributes of anthropomorphic figures in the rock art give reason to interpret these images as shamanic or protoshamanic, allowing us to trace back the roots of shamanism.

Comparison of the particular details of rock art images with ethnographic evidence for shamanism is a valuable source of knowledge about the lives and ancient beliefs of people without written language. Rock art motifs from Siberia and Central Asia should be intensively used to trace back and date the origins of shamanism in this region and to understand the peculiarities of the traditional worldview.

Siberian and Central Asian native people perceived the world as a complicated system of horizontal and vertical spatial units. Only a shaman was competent at mediating between these spheres: he was the only one who had appropriate knowledge and abilities, and who could comprehend subordination of the worlds and their spatial structure. He could change his essence and appearance in order to penetrate the upper spheres of the Universe, to appeal to divine powers and contact supernatural beings, to be supported by spirit-helpers and generations of shaman-ancestors. His special status and potential were reflected in his ritual attributes and costume (Fig. 1).

A gift of shamanism, the ability to mediate between different spheres of the Universe, was received through a special procedure. A candidate shaman first experienced the state of trance, described

as 'out-of-body' travel, as dismemberment of his body by spirits: as the mystical loss of flesh resulting in a contemplation of his own skeleton. This practice is reflected in the X-ray style anthropomorphic images found at numerous Siberian rock art sites that have translucent chests within which the ribs and/or vertebral column were indicated (Fig. 2.4–6) (Okladnikov 1966, 1971 & 1974; Okladnikov & Martynov 1972; Okladnikov & Mazin 1976; Mikhailov 1987; Chernetsov 1971).



Fig. 1. The Buriat shamanic coat with fringe and drum (from The Russian Ethnographic Museum's exposition).

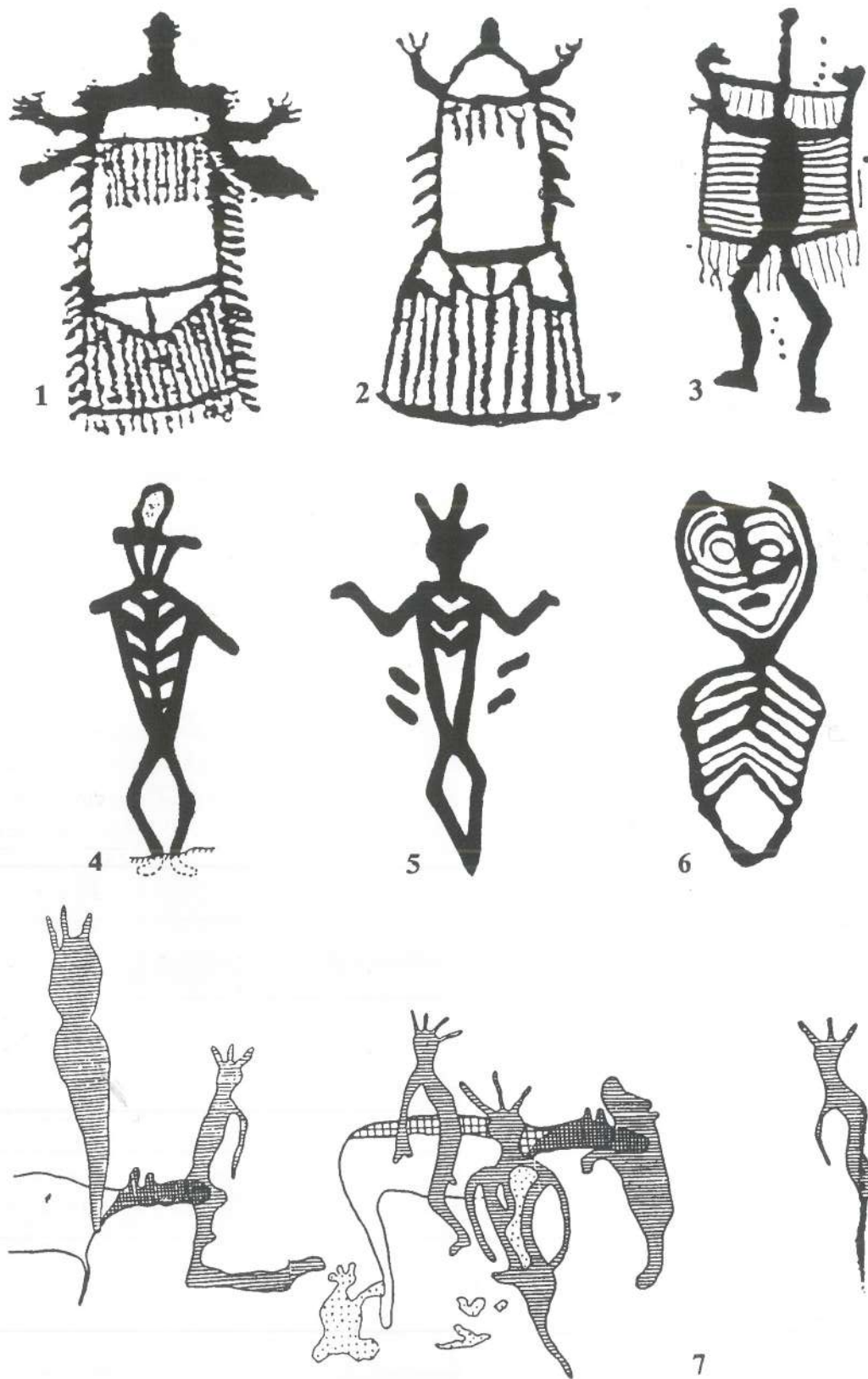


Fig. 2. Anthropomorphs interpreted as related to a shamanic view of the world.

1–3: Altay region (from Kubarev 1988; Kubarev & Jacobson 1996). 4–6: Rock art anthropomorphs in X-ray style Lower Angara, Manzia (4) and Bolshaya Kada (5) rock art sites and Amur River (6) (from Okladnikov 1966, 1971). 7: Composition from Upper Lena River basin (from Okladnikov 1977).

Important evidence for this interpretation of X-ray anthropomorphic images comes from Siberian ethnographic materials. The most detailed description of body dismemberment as a part of shaman initiation survived among the Yakuts. Coming into ecstasies, neophytes suffered the torments of sensations such as head-cutting, tearing of the body with iron hooks, division of joints, de-fleshing of bones etc. Experienced powerful shamans were dismembered three times, while weak shamans passed through this stage only once. This compares with the descriptions of certain stages of shaman initiation and each is marked with an attribute that symbolises the shaman's status (Alexeev 1975; Direnkova 1930; Ivanov 1954, 1979; Ksenofontov 1930; Mikhailov 1987; Popov 1947).

The dismemberment and detailed survey of shamans' bodies by spirits during ordeals aimed to establish whether all of his bones were ready to answer his high vocation. The 'shaman's bones' were a material embodiment of the candidates spiritual abilities and a broken, lost or superfluous bone could cause an obstacle to his election. In order to overcome this the shaman had to pay with the life of a relative. Sometimes, the opposite was the case: a special bone should be absent to mark special potential of the candidate. An old Teleut woman tells of the reasons she was rejected for shamanizing:

"She had a vision. Some people cut her body by joints and put all the pieces to cook into the copper. Two people then came. Again cut her flesh, eviscerate, cooked. Then took out meat from the copper, put it on iron board with iron claws and for a long time closely examined all parts of her body, determining if all the bones and the muscles conform with shaman's vocation. One small bone appeared superfluous, and consequently she could not become shaman" (Direnkova 1930:274–275).

After a long and precise study of the candidate's dismembered body, spirits made a decision on his/ her election as shaman and then integrated the body parts again. Then the shaman would awake. The shaman sees all of the processes of dismemberment and re-assembly of his body: he lies as if dead but his eyes see all of the procedures (Ksenofontov 1930:46–47).

The initial trance experience was a transitive moment in a shaman's life – up to this moment he was a completely ordinary person, but at this point he receives special power and abilities and, imbued with special status, becomes distinct from all other members of the community. Primitive people believed

that these complete changes should cover the physical essence of a person as well as his mental nature. This is the grounds on which common beliefs are based about the shaman's mental regeneration after ordeals, his physical rebirth and the training of his soul by spirits – the mystical death touches only the body, but not the shamans soul. Shamans see and feel all ordeals whilst the spirits train his soul (Direnkova 1930).

The dismemberment of shamans' bodies may be interpreted not only as terrible ordeals, which could be overcome only by the worthy, but also as a sort of death and rebirth into a new social role. Experienced as descend into the underworld ritual death and the dismemberment of a shaman's body signified his acquaintance with initial chaos. It is an essential step, which should be passed in order to overcome the mundane, profane essence of life, for rebirth not only into new role, but also into a new life. Passing over the ordeals gave a new level to his abilities, allowing him to integrate chaotic crisis experiences.

The same concept may be traced in rock art: anthropomorphs in X-ray style may embody shamanic views on the intermediate condition between death and revival, a concept that later persisted in shamans' costumes (Fig. 2.4–6). Important and complex symbolism was retained in the shamans' coat that bore depictions of skeletons on the breast-piece or on the back. According to ethnological cases they are explained as representations of shamans that were brought back to life after initiation, after dismemberment. So, the skeleton imagery on the costumes represented the shamans' skeleton. Another interpretation explains the skeleton parts of the costume as images of his shaman-ancestor's bones, that served as the shaman's shield, his protection and armour, the guarantee of his survival (Ivanov 1954; Alexeev 1975). Materials from Ural region that have revealed analogies between local X-ray style rock art, images on ceramics, and a decorated wooden idol from Shigir (Devlet E. 2000; Koksharov 1990, 1996) suggest that we can probably date the appearance of this mythological subject as far back as the 3rd–2nd millennia BC.

Other opportunities to date these shamanic ideas come from comparison of some Siberian and Central Asian rock art motifs with burial mound paintings and ornithomorphic fringe of the shaman's costume. Some Asian native peoples' shamans worn a special coat in which were embodied their shamanic world-

view. Pendants and images of skeleton parts symbolised the shamans' initiation or that of his ancestors, while the ability of flight, to mediate between celestial and terrestrial parts of the universe, were manifested symbolically in the fringed part of the cuffs and skirt of the shaman's coat and in attached textile and fur pendants, bands and feathers. Shamans can cross boundaries of time and space and change their essence and appearance. A common belief was that during mythical time there were no distinctions in the form and essence of people,

animals and birds. Some scholars considered an ornithomorphic manifestations of the shaman's costume as the most important and archaic feature (Prokofieva 1971). The rock art imagery at some locales include figures that have the 'fringed' body decoration (Figs. 2.1-3; 4.2 & 5.2) (Kubarev 1988; Kubarev & Jacobson 1996; Jacobson 1997; Okladnikov & Zaporozhskaja 1972). Burial mound paintings and engravings from Taz-Khazaa (Fig. 3.1), dated to the pre-Bronze or Early Bronze Age ('okunevo' archaeological culture), and from the

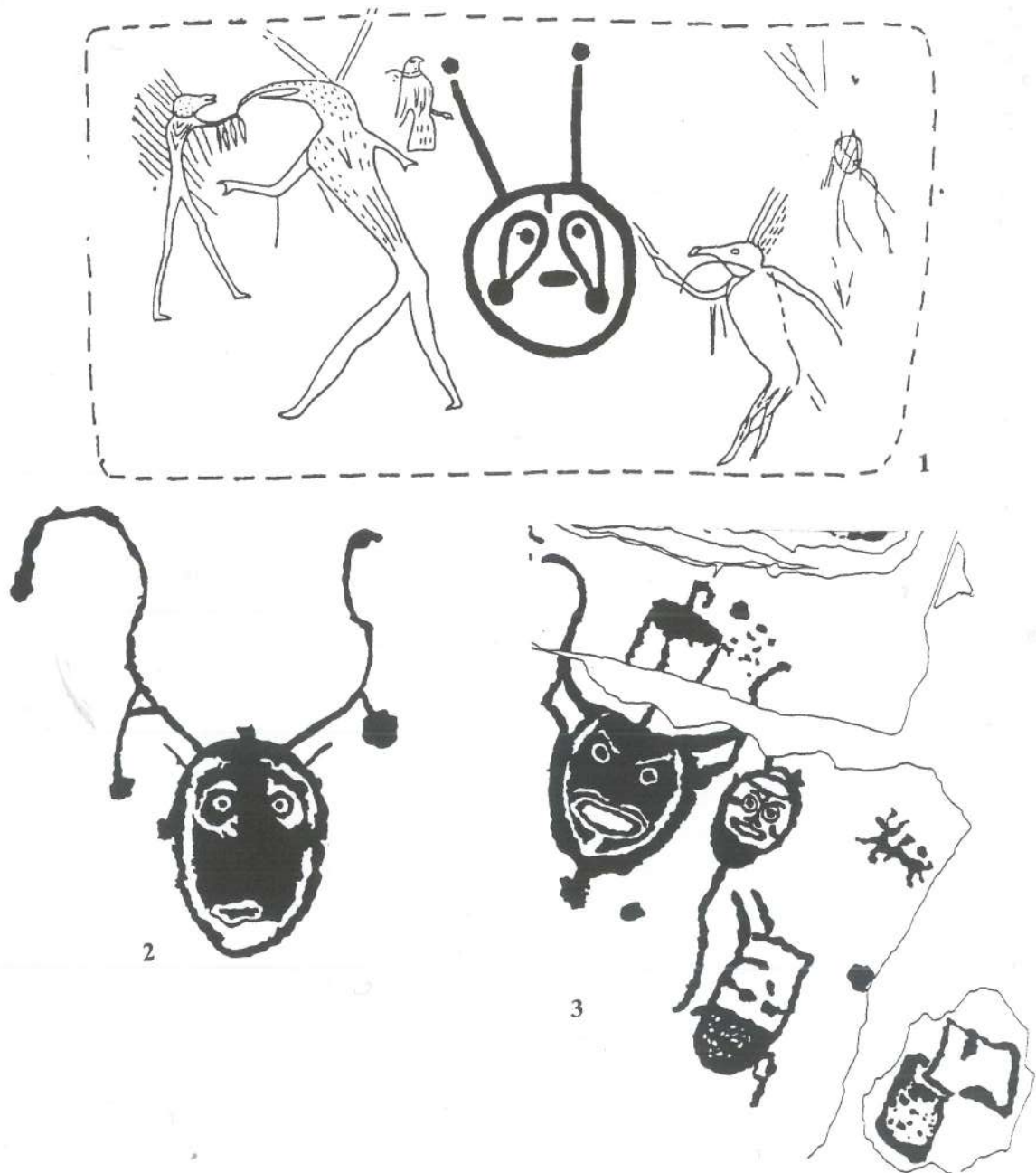


Fig. 3. 1: Bird-headed anthropomorphic figure engraved on the stone plaque from in burial mound Taz-Khazaa (from Lipskyi 1961). 2-3: Rock art at Mugur-Sargol (from M.Davlet 1980).



Fig. 4. Shamans with drums.

1: Maloye Ozero, Khakassia (from Sunchugashev 1990).

2: Mokhsogolokh-Khaya, Middle Lena basin (from Okladnikov & Zaporozhskaja 1972).

Karakol give another example of orithomorphic figures (Kubarev 1988; Lipski 1961).

South Siberian and Central Asian rock art sites give examples of males and females in a very special, perhaps ritual, posture with raised arms and hands in long fringed costumes. Female images usually have more complicated costumes with a prominent skirt-like element. The fringe may be shown on both sides of the figure's torso, as well as at the sides, breast and bottom of the depicted cloth (Fig. 2.1–3). Such images come from Kalbak-Tash (Altay) and the Chuluut River (north-central Mongolia) and belong to the Early Bronze or pre-Bronze Age (Kubarev 1988;

Kubarev & Jacobson 1996; Jacobson 1997; Novgorodova 1984; Okladnikova 1990). The ritual posture, in combination with detailed depictions of complicated clothing, defines their special status (Devlet E. 2001). The present author does not interpret them as shaman images but the similarity of their cloth decoration with important elements of shamans' jackets is obvious. A similar trend in the treatment of anthropomorphic images with bands hanging from the hands and arms continues in Siberian rock art (Fig. 4; 5.2) even in the historic period (Fig. 6.3) while the concept could have pre-Bronze and Bronze Age roots (Ivanov 1954; Kubarev

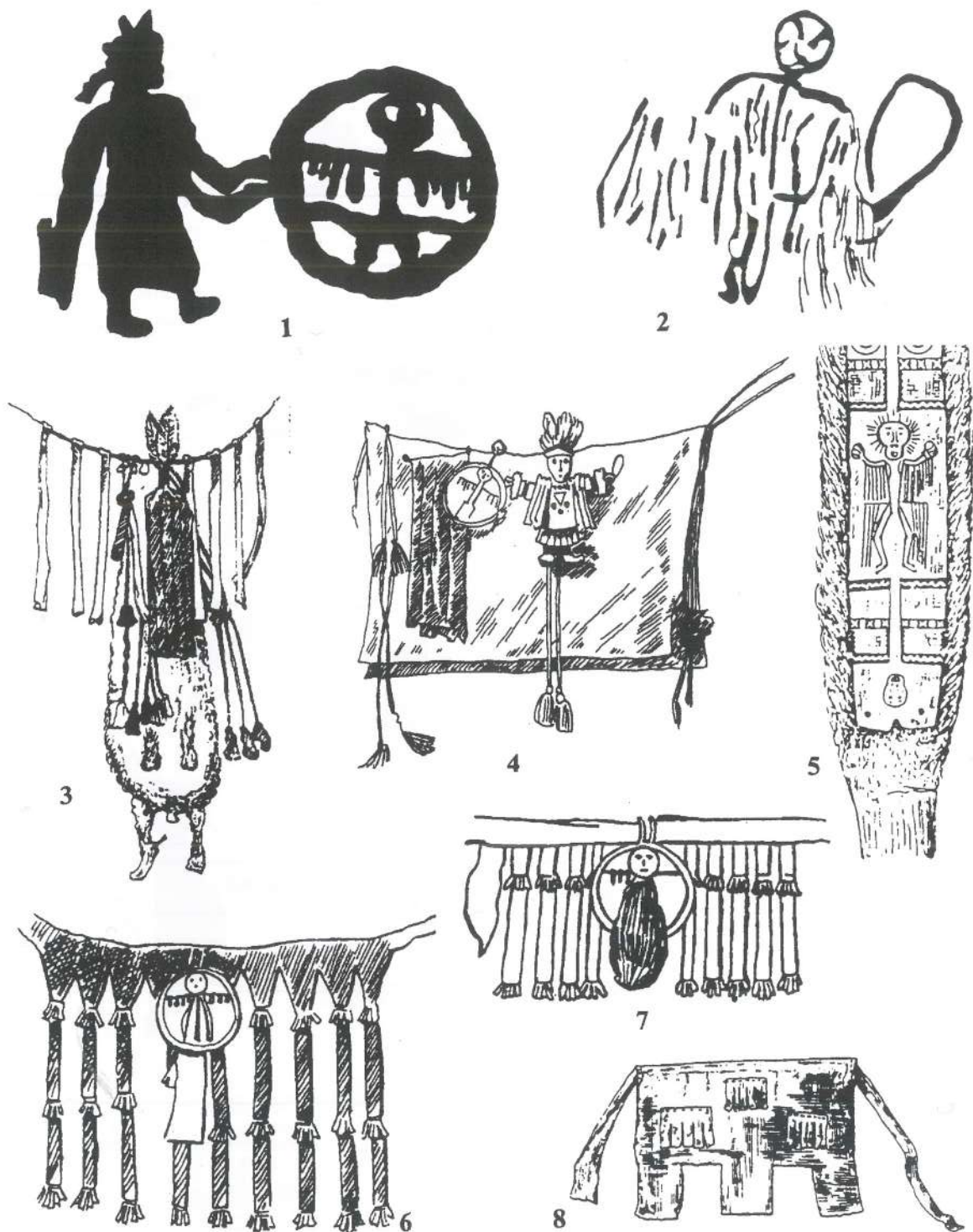


Fig. 5. Shamans with drum and representations of dead shamans in rock art, paintings on drum-skin and on ritual objects.

1: Painting on a drum-skin, Altay (from Ivanov 1954).

2: Rock art from Yelanka, Middle Lena river basin (from Okladnikov & Zaporozhskaja 1972).

3-4, 6-8: Reservoirs for spirits, Altay (from Ivanov 1979).

5: Decorated drum-stick (from Ivanov 1954).



Fig. 6. Anthropomorphs with bows and drums, and rock art images of drums.

1: Oglakhti, Middle Yenisey river (from Devlet M. 1966).

2: Images on drum-skins (from Ivanov 1954).

3-5: Rock art images of shamans and their drums, Altay (from Okladnikova 1988, 1989; Kubarev 1999).

1988, 1999; Kyzlasov & Leontyev 1980; Martinov 1985; Okladnikova 1989; Okladnikov & Zaporozhskaja 1972; Sunchugashev 1990). There is a striking similarity with the anthropomorph that is depicted at the centre of an Evenk shamans' bone drumstick (Fig. 5.5) and other shamanic attributes with pendants and fringe (Fig. 5.3–8).

Besides the coat, shamans used other important attributes to reach altered states of consciousness during ritual travels to penetrate other spheres of the Universe. Headgear, drums and drumsticks seem to be the most important. Decoration of headgear with horns or antlers and of the forehead with masks is represented in some rock art. For example we find anthropomorphs with rays, horns or antlers and masked-faces at sacred rock art places of the Upper Yenisei River (Fig. 3.2–3) (Devlet M. 1980, 1998).

The main 'tool' of shamanic ritual activity was a drum with drumstick. There is little information for dating when Siberian and Central Asian people started to make drums for ritual activity. Ethnologists suppose that bows could have been used initially instead. This may be reflected in rock art compositions from Oglakhty where 'dancing' anthropomorphs draw bows and wear horned and rayed headgear (Fig. 6.1) (Devlet M. 1966). The association of shamans and the drum found iconographic expression in rock art. For example, the drum cross-handle is replaced by a figure with extended hands that are decorated by suspensions that resemble the fringed sleeves of shamans' jackets (Fig. 5.1; 6.3–5) (Devlet E. 2001; Ivanov 1954; Kubarev 1997; Okladnikova 1988, 1989). Such figures in rock art are reflected in ethnological cases – so called 'chalu' that were spirits reservoirs (Fig. 5.3–4 & 6–7). Siberian aboriginal people used to make 'chalu' as representations of dead shamans if his soul began to worry relatives (Ivanov 1979). They sometimes formed a small drum and decorated its cross-handle with an anthropomorphic figure and suspended conical metal pendants or bands or attached this drum to a piece of fabric cut into bands that symbolised the ornithomorphic essence of the shaman. Anthropomorphic representations were sometimes formed with simple rectangular pieces of fabric cut into coloured bands, which Siberian ethnography records as having the same function as a spirit reservoir (Fig. 5.8) (Ivanov 1979). Bronze Age anthropomorphic rock art images and representations of deceased shamans as 'chalu' and other reservoirs for spirits retain the same important iconographic features.

It is not certain if all of the above mentioned rock art figures – X-ray anthropomorphs, male and female persons in fringed coat, figures in rayed headgear, persons with drums and other attributes – are representations of shamans. But, ethnological information provides some reasons for assuming their relation to a shamanic view of the world and system of beliefs. Besides shamans, they may depict persons engaged in ritual activity – healers, narrators, etc., and some images may be described as personifications of their mythical ancestors or spirits.

In Central Asia and Siberia such images often mark sacred rocks – places for shamanic or protoshamanic activity. For example, rock art images of the celestial world cover the middle and upper parts of the Mugur-Sargol sanctuary on the Upper Yenisei River. At the top numerous masks embody mysterious creatures, inhabitants of the celestial world. To enhance their semantic importance ancient artists engraved them much larger than the nearby human figures. The two largest images may depict two creators – divine and evil (Fig. 3.2–3). The range of spirits was conveyed in rock art by the complication of details of facial features and particularly of head-dresses with horns and central antenna. Being pecked on the rock during the ceremonies, masks embodied generalised sacred image of mythical ancestors who linked people with their mythological primogenitors and deified dead relatives. These mythical ancestors were patrons of Tuvan shamans who may have performed ceremonies at the Mugur-Sargol Bronze Age sanctuary in order to obtain the protection of mythical ancestors. Ties of blood with ancestors were of especial importance for Tuvan shamans, since the gift of shamanizing was inherited and the most powerful shamans had a chain of shaman-ancestors (Devlet M. 1980, 1997).

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The philosophy of the image

Which is the relationship between variant and constant in rock art?

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Abstract

This paper presents a critical revision of the foundations of rock art studies. Twenty years after Anati's (1981) first classification of Valcamonica rock art along socio-linguistic lines, and sixteen years after Sansoni's (1985) shift to the study of archetypal associations, we are still omitting an important element: figures' spatial distribution. The author will outline the analytical basis of such an approach and discuss how prehistoric artistic activity developed along spatial-temporal co-ordinates. It will be demonstrated how images engraved on a rock surface are the fruit of the topologic qualities that arose from the cultural variety through iconographic superimposition. The first step consists in raising the image to the state of a hologram; to apply a mental geo-chronological-graphical grid, that means a geographic map of the possibility of the stratigraphic synthesis, an isomorphic transformation of the prehistoric paintings and engravings.

Keywords: constants and variants, figures spatial distribution, prehistoric mentality, philosophy of images.

Ground

*Solo dopo aver conosciuto la superficie delle cose,
Ci si può spingere a cercare quel che c'è sotto.
Ma la superficie delle cose è inesauribile.*

Italo Calvino, «Palomar»¹

The visitor of rock art sites, to my warming, is accustomed to a partial presentation of the prehistoric artistic phenomenon, cause the lacked attention towards holistic interpretation, that it puts in evidence the expressed *topographical possibilities*. In this phase, we will try to throw the analytical basis of such an approach discovering that prehistoric artistic activity develops along space-temporal co-ordinates.

Therefore the image impressed on the full of rocks wall is the fruit of the topologic qualities been born from the cultural variety through the iconographic superimposition.

Introduction

From the analysis of the executive sequence us becomes to such Palaeolithic panels the integral scene is suspended (εκκρεμεί). Lines and curves coexist in a realisation proximity: a work in progress (πρός αποπεράτωση) because it previews empirical change in time (ειμαρμένει) and of the expressive variety (δυνατότητα) in the space. Stirred on the ceiling of the cavern or the full of rocks stamping they offer the feeling of unchangeable (διὸ ἀίᾶἔἑϊβὺδιῖδ). Moving the look from the particular to the all scene, the expressive cohesion in the com-penetration of shape hits us and contained (equality law). To observe, therefore, does not remain a simple throw a look but it has vision and perception of the dimension *gestalten* of the truth in which something of the sum of the parts is represented more that compose it. In such a way it is passed without fractures from the horizontal field of vision that vertical one, helped also from Irregularity of the surface, because to leave to be left over the time events it is ποιήσις, reveals the technique that lasts (διαρκεί/αντέχει), leaving opened (παραχωρώ) the topological treatise (χώρα). The curve lines and the surface really do not come distinguished from the scenic volume favouring the clearance of multi-level ramifications without limits, συνεχές. With the employment of the parallels transformations by means of congruence, «in-finished» condition, (οριακό-limes) is continued to determine (καθο-ρισμός) the psychical relationships (ενόρασις) in one raised of microscopic revolution. Impressing coloured pigments, ordered, in conceptually correct way, according to semantic relations (structured in the way to ζω-γραφίζω like an

«manifested language»)² it could quite throw light on like the topologic positioning of one new engrave figure left on another one (continuing or integrating or blowing up semantic-computational order), breaking the Cartesian co-ordinates, is repetition (μίμησις) able of «make ring» the figurative ends discovering the *woven continuum* of the event³. The volumes distribution of the single languages on the surface of the cavern, darkroom (visual metaphor of the colours), reflect the primitive mentality that in the attempt to distinguish an «internal from an external», is destined to solved in the loss of the orientation⁴, why to interpret is an inseparable part of the sensorial perception⁵. As it has demonstrated by Lévy-Bruhl the collective and mystical primitive mentality beyond to being and also pre-logical, therefore indifferent to the second causes⁶ but in the search of the Arian's wire that effect joins directly cause-effect. The continuous reporting with personal phenomena and experiences one by one perhaps is to the base of the individual search that external in the painting like identification pass-partout. Rising of psychological continuity joins to accumulate of the figurative one in the same horizon, but to eventual times also it breaks it in order to show incompatibility in perceiving events.

To apply the proposed chrono-diagram from Derek Parfit⁷ is of great aid (fig. 1).

Methodological Proposal

After the program of catalogue, the micro thematic analysis task serves to develop a methodological and epistemological architecture on rock art. Therefore to

found a method of unitary configuration, tangentially in rigorous way, until to the mathematical formulation, of variable and analogous inter-variable relations to that essential things are supposed in order to explain dynamics, the transition from state to state, the behaviour of a particular field of events (Gallino, 1987) is to my absolutely necessary warning. To try to penetrate in the mind of whichever actor, generator of rock art, for being able to comprise the modalities with which the networks of memory nodes are untied will turn out of great aid in the structuring of the epistemological levels of the method, of the paradigm (*language like action*), of the bottom and surface structures.

Therefore approximately I assume the following model on the wake of Hofstadter in which all the levels of the system *mind/rock art* is between connected, and their connection is structured like follows:

- Structural members
- Relations between members
- Descriptive language (syntaxes)
- Interpretative language (semantic).

On purpose of the rock art system *mind/art* it is necessary to specify that in our mental processes we use two types of members: a) images and b) linguistic propositions. From a part the images can be faced like representation of objects, between the whose parts exist analogous representations to those observed or an image it is one tightens of able distinguished and digital symbols to represent variable continuous (Pylyshun 1973). The substantial difference of the two epistemological approaches is in accepting the amount of information that an image

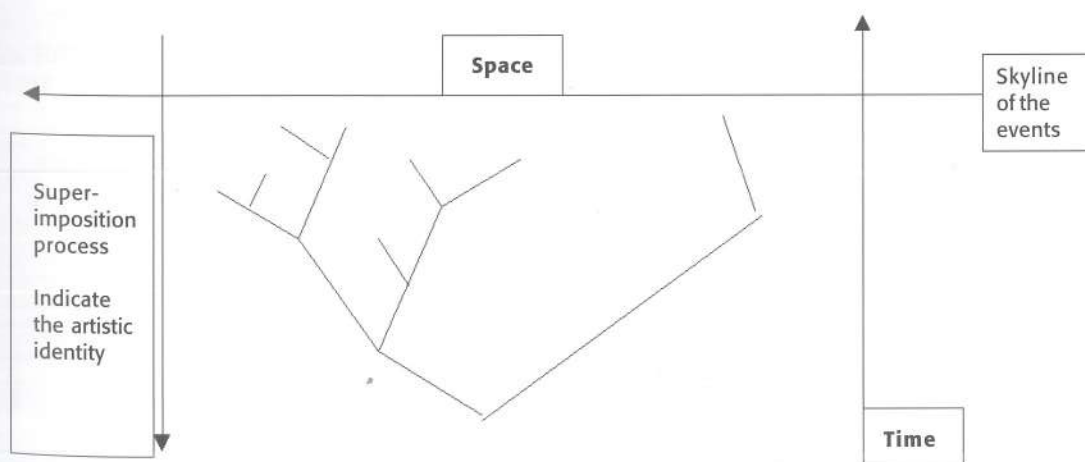


Fig. 1.

can bring the observer less or, that is treatise like *epi-phenomenon* (Johnson-Laird 1983). In the attempt to fuse χωρικότητα and χρονικότητα, conscience of the technique is acquired. As an example the Palaeolithic caves and surface of rocks, probably, are lands (χώων) and temporal container (εγκώλιον χρόνου). The same cave, symbolically compared as the uterus of the Great Goddess Mother, is the line of demarcation between private and public where the pictures/images are *meaning connections* events, in which the parts they are all psychologically continuous, but not – necessarily – connected⁸. It is spoken, therefore, of *mediatic affinities and isomorphism* for which the figure superimposition it acquires the valence of διαλέγεστε between the worlds of the bodies that is the world of the symbols in the presents of the transformation⁹.

Analysis/Application

1. Theoretical Purpose

A first attempt is to rise the imagine to the state of a hologram that is to apply one mental grill: a *geographic map of possibility of the stratigraphic synthesis*, isomorphic transformation of paintings and prehistoric recordings. Which is the hierarchy of abstract in the process of observed? If «to abstract» it means selective «ignore» it is clearly that this *ignore* can have various levels (Piazza, 2000). Then, how we can know that abstract objects date our acquaintance of the physical objects? Which is the probable role of stratigraphy as half of temporal scansion named *epoché* according Husserl definition, in a deep, isolated and humid space outside from the capacity of the light? To such scope we can characterise a fundamental relation of rock art: the semantic conservation, where every single *grafito* can be considered like a space-time position inserted in a much wide structure, where the objects are found in tightened correspondence with the events, that is in simultaneous relation.

2. Paradigma

Now I am going to investigate two important stages of rock art production: the first is that of the process of creating individual images and the second is that of how the scene is organised. Around 1950 J. Young and N.S. Sutherland tried to define a mechanism for the analysis of shape variation, which resulted in a

useful code system¹⁰. A similar approach is expressed in the *Schema System* of Draper, Collins, Broglio, Hanson and Riseman¹¹. What we propose is to apply a statistical and distribution pattern analysis to R.49, Paspardo, Valcamonica (Fig. 2).

Our intention is to understand the semantic diffusion of the engraved figures and contemporary their sedimentation process¹². The analysis of the spatial distribution reveals a strong concentration (about 46%) of huts on the left area of the rock surface, beyond a natural fracture, and a distribution of horses equal to 20%. The rest (36%) are other symbols. A deeper statistical analysis obliges us to refer up to two dispersion models: *expansionistic* (the culture disseminates inside of the original area) and *migratory* (the culture re-positions images in new areas). Applying the Venn diagrams, we are able to recognise the symbolic meaning of the attributes and reveal the eventual correlation's of intersected symbolic groups and thus define the group that is present (Fig. 3a). Indeed, we have a holistic and more objective vision of the cultural skyline in zone, where the cliff lies.

In fact, every particular cultural system is an organised structure in which subgroups constitute the network of equilibrium (Clarke, 1968). We can therefore, speak about a depository of *eso-structures*¹³ and knots of *meso-structures* through the presence of constant-variant¹⁴. In rock 49 the constant is the aquatic bird figure in the centre of the composition variant for the *meso-structures*. The second constant is the hut (type IV-2) that is situated in the lower area (Fig. 3b).

In this case the hut and the aquatic bird take the place of regulators on the information amassed in the macrostructure. In fact, we are in a position to consider the figurative mutations inside of the geographic space of an *eso-structure* from the compilation of a *knot matrix*¹⁵ (Fig. 4) for every single petroglyph, marking the initial and the final state (Fig. 5). Therefore, we are in a position to define the rank of variants able to describe the macrostructure for rock 49. We are thus reading the *memory* in the following stochastic or semi-Markov matrix (Markov 1913).

Conclusion

The present model is based on the calculation of the possible ramifications of the single present symbols on the full of rocks wall. Like this the information

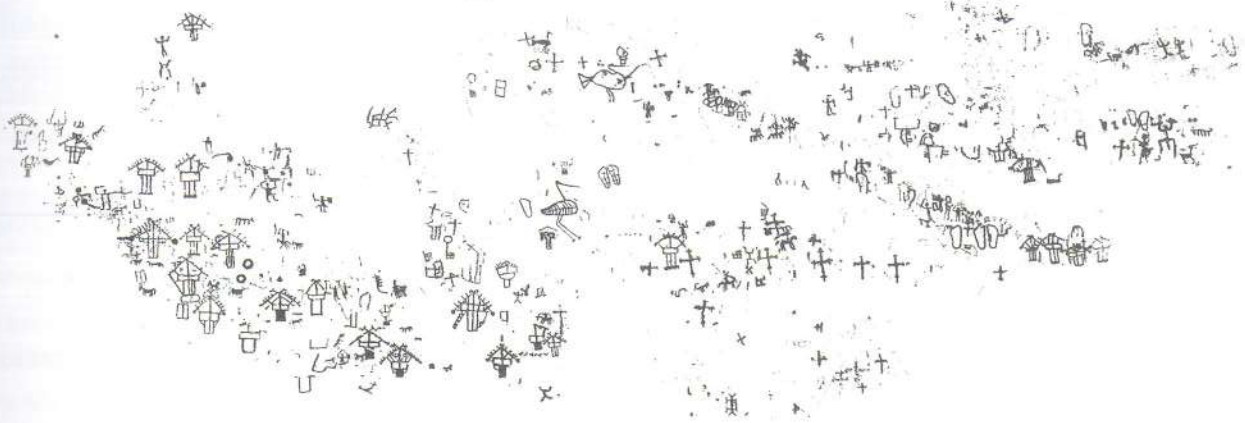


Fig. 2. R. 49 Paspardo-Valcamonica, Italy.

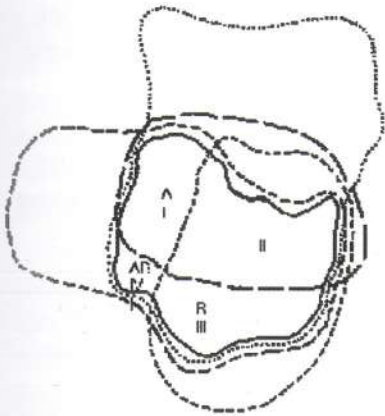


Fig. 3a.



Fig. 3b.

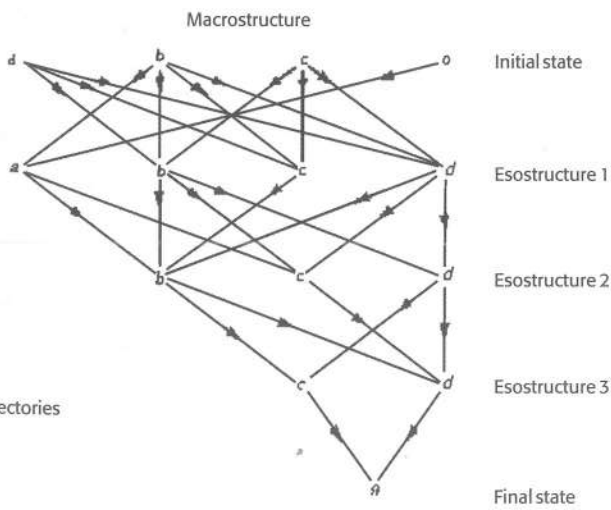


Fig. 4. Trajectories of vacinat mutations between the esostructures.

Initial state	↓	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
Esostructure 1	<i>a</i>	0	<i>ba</i>	0	<i>da</i>
	<i>b</i>	<i>ab</i>	<i>bb</i>	<i>cd</i>	0
	<i>c</i>	<i>ac</i>	<i>bc</i>	<i>cd</i>	0
	<i>d</i>	<i>ad</i>	<i>bd</i>	<i>cd</i>	0
Esostructure 2	<i>a</i>	0	0	0	0
	<i>b</i>	<i>ab</i>	<i>bb</i>	<i>cb</i>	<i>db</i>
	<i>c</i>	<i>ac</i>	<i>bc</i>	0	<i>dc</i>
	<i>d</i>	0	<i>bd</i>	0	<i>dd</i>
Esostructure 3	<i>a</i>	0	0	0	0
	<i>b</i>	0	0	0	0
	<i>c</i>	0	<i>bc</i>	0	<i>dc</i>
	<i>d</i>	0	<i>bd</i>	<i>cd</i>	<i>dd</i>
Final state		0	0	<i>g</i>	<i>g</i>

Fig. 5. Knot matrix.

that is gained goes compared with other panels that introduce various variants-constants of same figurative eso-system.

Notes

- 1 After to only have known the surface of the things, it can be pushed to try those under. But the surface of the things is inexhaustible.
- 2 Chomsky, N., *Mental constructions and social reality*.
- 3 Deleuze, G., *Differenza e ripetizione*, Bologna, 1986.
- 4 Parigi, S., *L'occhio e la camera oscura: storia dell'abbandono di una metafora*, Iride/3, 1989.
- 5 Zeki, S., *L'elaborazione dell'immagine visiva*, Le Science (Scientific American)/Quaderni, n. 101.
- 6 Lévy-Bruhl, L., *La mentalité primitive*, Presses Univ. De France, Paris, 1922.
- 7 Parfit, D., On «*the Importance of Self-Identity*», The Journal of Philosophy, LXVIII, 21 October, 1971.
- 8 Parfit, D., 1971.
- 9 Klages, L., *Vom Kosmogonischen Eros*, München, 1922.
- 10 Young, J.Z., *A Model of the Brain*, Oxford University press, 1964 and Sutherland, N.S., Muntz, W.R.A., *Simultaneous discrimination training and preferred directions of motion in visual discrimination of shape in Octopus vulgaris* Lamark, Pubbl. Staz. Zool. Napoli 31: 109–26, 1959.
- 11 The *Schema System* embodies a knowledge-based approach to scene interpretation. The thousands of tokens (in our case, the «value» of the petroglyph) that are extracted from an image can be grouped in a combinatorial explosive manner. Therefore, knowledge is the *Schema System* is not limited to the descriptions of objects; it includes information about how each object can be recognized [...]. Object knowledge can encompass three-dimensional structure, two-dimensional appearance, and geometric and co-occurrence relationships with other objects and objects parts. Control Knowledge addresses the efficient extrapolation, organization, and matching of image information to stored models and the ordering of constraints to insure efficiency and consistency in the evolving interpretation [...]. The *Schema System* can be described from two perspectives: 1) the object-specific schemas and 2) the system level, describing how multiple schema instances interact, in Draper, Collins, Brolio, Hanson, Risema, *The Schema System*, International Journal of Computer Vision, 2, 209–250, Kluwer Academic Pub., Boston, 1989.
- 12 Every figure has a semantic value. Our intention is to collect this meaning throughout the semantic analysis of the whole panel. That means to understand the semantic relation between the superimposition, for example, of the same figure in different time or the superimposition of different figures in the same culture time horizon.
- 13 Eso-structure: the immediate figurative context. Meso-structure: the set of possible connections between several eso-structures. Macro-structure: is the integral figurative hologram.
- 14 Constant: the element that composes the eso-structure, the immediate scene reticulum. Variant: the property of the meso-structure and of the connecting unit.
- 15 Knot matrix: the square of the probable transformation trajectories of a petroglyph in space and time.

Figurative gestures: an introduction on how to study the use of gestures in figurative material

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While studying rock images and other figurative material in Bronze Age Scandinavia there is one thing that too often has been overlooked – the use of gestures, a non-verbal, narrative expression of communication that may help to reveal fundamental values in a society as well as relations among its people.

This short introduction on how to study the use of gestures in figurative material in general and in rock art in particular does not aim for analysis and interpretation of all occurring gestures. Instead its purpose is to emphasise two of the many non-verbal expressions of communication in an oral society – figurative gestures, an expression where images display “frozen movements of meaning”.

Since gestures embody both natural and cultural components as expressed emotions and highly specialised signs or signals, it is important to not only recognise the gesture but also its surrounding and associated context. Gestures are embodied memories used in cultural transmission. This makes their character highly conservative and longstanding. This is especially true for gestures based on emotional expressions and used in ceremonial or repeated activities. In figurative expressions like rock art, it is likely that gestures became standardised to favour understanding.

With an example of a closer study of one gesture i.e. human figures with large spread out five-fingered hands, it is my intention to draw attention to the deeper expression of meaning that gestures most definitely had as a pre-scriptural, figurative expression. While departing from the situational context of the gesture/image and relating it to contemporary or related sources under certain conditions, there is a possibility to understand the complex and multiple uses of gestures. As a result of being archaeologists coloured by our own time and chirographical society we have tended to treat figurative gestures as attributes. The examples will

show that small details like the situational context, the angles of arms and size of figures do indeed have importance. What we before treated as one gesture or attribute might, according to its situational context, be several completely different expressions. These expressions may be a result of expressed emotions, symbolic signs or a replacement of attributes.

While studying rock images and other figurative material in Scandinavia there is one thing that too often has been overlooked – the use of gestures, a non-verbal, narrative expression of communication. Today we have a wide definition of gesture, which includes a meaningful movement of the body and/or its limbs (including the face). The movement is supposed to transfer a message to a receiver. Some gestures are intended to accompany speech and others speak for themselves as expressed feelings. While discussing gestures in a historical and pre-historical sense, the meaning tends more strictly to include coded signs/signals, feelings or movements of the body that mirror social class, rank or gender (Gombrich 1982; Roodenburg 1991; Thomas in Bremmer).

In the epoch of the early Western science gestures were seen as a universal and natural body language that everybody could understand. As time passed and knowledge increased it has become obvious that gestures are not a universal language; they have many social and cultural differences, appropriate meanings being understood according to their performance within different contexts. It seems most probable that gestures in a general sense include both universal and particular elements. Like the human being, gestures consist of both natural and cultural components. A gesture can be a natural and uncontrollable reaction of the body such as blushing, crying or laughing. It can also be a culturally controlled form of communication such as hand signs and different signals.

Those who study gestures are mainly anthropologists, linguists and sociologists. The reason for their studies is that gestures can, in a relatively objective way, expose a society's fundamental values and mentality because non-verbal communication often concerns relations and feelings among humans. Such relations that can be exposed by gestures include expressions of affection, hate, respect, fear and submission/dependency (Thomas & Graf in Bremmer & Roodenburg 1991).

There are no contemporary written sources that could directly expose the meaning of the gestures that are evident in the Scandinavian rock images. I am though convinced that if such a material should exist, there would not be so many gestures in the images. Also, we would not be able to study the images as pre-scriptural phenomena and as a result we would not be able to catch a glimpse of forgotten choices and their meanings. Archaeology would lose its meaning and become history.

Contemporary with Montelius period V and VI the first phonetic alphabet that could reproduce speech was developed in Greece. The earlier writing systems were more or less administrative tools for state and commercial purposes but speech also includes stories, values and discussions that preserved, transformed and changed the cultural traditions. In about 750 BC, among others, the Iliad and the Odyssey were written down from a multitude of oral recitations and songs (Ong 1990). Several versions of living stories that were varied, repeated and transformed in a never-ending way were now transformed into one "real and authentic" version that was locked in time (Peabody 1975). In these early epic works, the stories of which are even older, there are many scenes that were pictured on the earliest black-figured vases¹ (Boardman 1974, 1998). Some of the figurative material was partly explained in writing and thus some

of the gestures could be explained directly with the aid of the story's context.

If we look for written sources in association with space and not time we find that the earliest epics originating from oral compositions in Scandinavia did not exist until the early medieval times. But archaeological figurative materials showing central scenes from these stories have recently been used to push the time of "origin" back over 700 years to 400 AD. The tendency is that some critical archaeologists use a "best after date" attitude when approaching written sources. This kind of critique typifies archaeologists from historical science and has resulted in the denial of what are in fact legitimate sources – the material artefacts and its contexts. This attitude seems to be the result of insecurity in theoretically discussing and applying concepts such as continuity, transformation and change in archaeological material. Implying this, my goal is to show that archaeologists can and should use materials and sources that are distant in time and space, but only under certain conditions.



Fig. 1. Three examples of bracteats showing central scenes from Scandinavian mythological stories. Above: Odin is healing Balder's sick foal. Below left: The accidental shooting and death of Balder with the mistletoe. Below right: Tyr's sacrifice of his hand in the jaws of the Fenriswolf in order to bind him down and thereby conserve world order. (From Hauck 1985: fig. 70b, 190Avb, 51,1b,1.)

¹ There are actually not so many scenes depicted from the Homeric songs i.e. the Iliad and the Odyssey. There are more scenes depicted from less famous Cycladic songs like the Iliad Micra and Iliad Persis (see Ahlberg-Cornell 1996; Snodgrass 1998). It should be noted that most depictions of narrative scenes on the vases are of a younger date than the Scandinavian rock art.

One such condition is that the phenomenon being studied (in this case gestures in figurative material) should have a superior conservative character and a limited variation of form. Gestures have this character since they have a common biological origin – the human body. The fact that some gestures are based on common biological feelings emphasises this argument even more. The function of gesture in ceremonial and ritual contexts is also an argument since the gesture embodies a living memory. Prehistoric figurative materials that have survived also implicate a strict variation of form. It is only certain people, animals and things that are pictured and there seem to have been rules for how to picture them. The figurative materials are also accumulated wealth i.e. bronze figurines and artistic handicraft (rock art and images on objects), which also includes peoples' time and labour and not only imported and most certainly controlled raw materials. This wealth was most likely controlled by a smaller group of people, involved with power, contacts, storytelling and trade. Another condition is to avoid using the material as analogies, if the local material does not indicate that it might be justified. Instead one should let several examples from the sources inspire to hypotheses, which later can be tested on the local material and its context. The examples will awaken associations that can provide clues. The meaning of the clues can then be tested for their probability according to different methods.

The conventional gesticulation can in certain cultures, periods or field of activities be more developed than in others. In a pre-scriptural situation like Bronze Age Scandinavia we should therefore expect to find a wide variation of gestures. Gestures could very well have functioned as expressions for symbolic signs or actions, as well as expressions for feelings and relations. In certain cases the gesture could also have functioned as a replacement for an attribute. The use of gestures was highly developed within the rock images in the south Scandinavian cultural area. Positions of bodies, arms, legs, hands, feet and fingers show possible signs, feelings and bodily movements like dance, trance and acrobatics. The uses of gestures were highly important since its positions were very clear and not part of the normal body pattern.

Comparing Eva Marie Göransson's (1999) study of gestures on Gotlandic picture stones with the present author's study of Scandinavian rock art it is clear that during the Iron age the occurrence of gestures in

images dramatically decreased and that they became more standardised. This might indicate that the rock art included meanings through gestures which writing later partially replaced. Even in the 11th century we find proof, in the German *Sachsenspiegel* for example, that in certain ways gestures had greater importance than the written word (Schmitt in Bremmer & Roodenburg 1991). Ritual gestures, formal words and symbolical objects could enforce law and commit people to agreements. With this example I wish to emphasise that it took a long time before the importance of writing replaced the importance of gestures, words and images in all layers of society.

Figurative and narrative expressions have in all periods used symbolic gestures to reveal the meaning of a pictured event. The gesture, which really is a movement, becomes frozen in the image. Its exact meaning can be indicated with an attribute, a person or a familiar story that will give the image and the pictured movement a context. The observer will, with the background of his/her references, cultural conventions and the immediate context of the image, be able to visualise what happened before and after the pictured event (Gombrich 1982; Boegehold 1999). The execution of rock images during the bronze age in the south Scandinavian cultural sphere seems to have been of a period when the pictured and "frozen" gestures played an important part for the contemporary peoples' understanding and preserved understanding of the images. Through an understanding of gestures and attributes, our understanding of the images' meaning will increase. The context concerning the identity of pictured human figures, their relation to each other and the pictured event will become clearer. Perhaps the pictured scene belongs to a story? With this as a reflection we can analyse what type of message the image was supposed to send to the receiver.

Once more I wish to emphasise the importance of using the situational context of the gesture for understanding its meaning. We do not have full access to the contemporary conventions and references for understanding the meaning of gestures. We must therefore depart from the situation i.e. the immediate context of the image/gesture. The most reliable material to use is the rock images themselves since they display a huge amount of anthropomorphs in two dimensionally fixed situations. However, we must be critical since most of the panel's images were accumulated over time and they can sometimes

display manipulated images. It is possible that part of or entire images consisted of perishable materials (colour pigments) and that parts of the panel may have been lost as a result of physical or chemical weathering.

It is not my intention to analyse and interpret the meaning of all existing gestures on the rock images. Most likely this would be impossible. I have therefore chosen to study the gestures as a communicative expression in an oral society and give examples on how these can be studied as communicative devices. My example in this article will be to emphasise the situational context of human figures in rock art showing hands with spread out fingers. With this I mean hands with five and sometimes four fingers although there are several examples in the Scandinavian cultural sphere where hands have two or three fingers. I believe that these cases are concerned with an entirely different meaning since the numbers of two and three have symbolical connotations in the contemporary, figurative material.

According to interpretations of Greek images, outstretched hands have generally been considered to originate from an expression of emotion where the body is tensed in reaction to pain or fear (Säflund 1984, 1989; Ahlberg-Cornell 1996). On vases and other medium we can see humans, heroes and gods with angled arms and outstretched hands and fingers, when presented in an unpleasant situations.

With this as a background the human rock images in Tanum with outstretched hands have been studied. There are different versions that may indicate different types of gestures and meaning. Direct parallels to the expression of fear or pain in human figures with arms totally outstretched or in a 45-degree upward

Fig. 2. Examples of Greek material where gestures showing fear, horror or pain are displayed. (From Ahlberg-Cornell 1996: fig. 115, above and Snodgrass 1998: fig. 14, below).



angle with large outstretched hands were found. The associative situations in several cases for these humans indicated reasons for these feelings.

On a panel in Rished in Askum parish we find a human figure with spread legs that displays the above-described arms and hands gesture. Spread legs are a normal position for women giving birth. There is also support for this interpretation from the early Iron Age (the Smiss-stone from Gotland) where a woman is portrayed this way. The figure also has a cup mark between the legs. On the left side there is a phallic man with a sword grasping the woman's right wrist. In contemporary Greek and Etruscan material, to grasp someone's wrist is also considered to indicate the taking of a bride or a relationship of "marriage".

With his right arm the man displays the same gesture as the woman. Does this mean that he is sharing the woman's pain during the birth? Important mythical tales of births of Gods or heroes are often considered to be very painful in the early epics. In a pre-story of *The Tain* (le Brocquy 1969) the men of Ulster were condemned to experience the pain of birth for five days during times of greatest difficulty. The reason for this was that a husband forced his pregnant wife to run against the king's chariot in a contest. She won the race and bore twins on the side of the racing track. While giving birth she condemned all men that could hear her screaming.



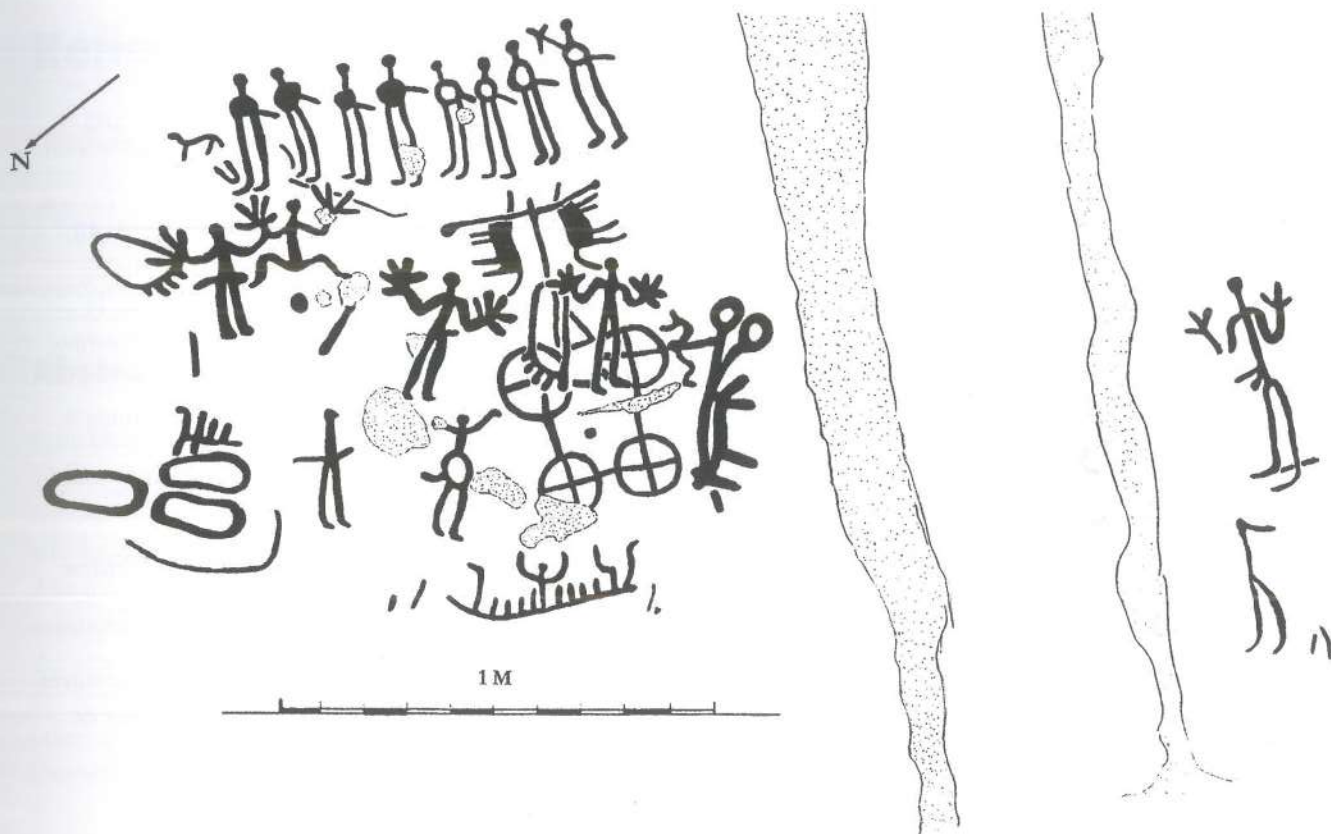


Fig. 3. To the left: scene with a gesture that indicates fear/pain from the rock-panel T12, Tanum parish. Drawing from unpublished documentation (Vitlycke museum archive) made by Sven-Gunnar Broström and Kenneth Ihrestam in 1996. To the right: scene from T75, Tanum parish with the same gesture to indicate fear. Ill.: Åsa Fredell.

On a panel at Aspeberget in Tanum, Sweden we can see a human displaying a similar gesture as a spear is hitting him in the stomach. A third example of this gesture can be seen on the big Litsleby panel where a man is trying to get away from a reared horse.

In all of these examples there are direct indications and associations with other figures that suggest that this gesture was an emotional signal for pain or fear. But human figures doing the same gesture but with the arms in an angle of 90 degrees are found in an entirely different context/situation. These figures are often the largest human figure/s on the panel. It is usually humans carrying weapons or displaying a weapon in one of the hands while the other is outstretched (examples are the big men in Backa and Litsleby but also in Tanum parish: 160, 161, 488, 65 and Askum parish: RAÄ 42:7, 697, 718). In these situations there is nothing to indicate that the human figure is feeling pain or fear. It is more likely that the purpose of the gesture in this context together with the size of the beings should frighten or invoke fear in

the beholder. The gesture might indicate that these humans are powerful and perhaps dangerous. Here the gesture is an attribute and not an expression of emotions.

There are also human figures that direct one or two arms with outstretched hands towards the ground. The meaning is probably entirely different from the two other examples. In Italian figurative material there are indications in some contexts that this gesture might indicate death. In Etruscan material there is a male figurine holding a bowl in one hand and pointing the other outstretched hand towards the ground. The figurine was found in a house urn – a grave context. Säflund (1989) proposed that this gesture is indicative of sacrifice. Considering the context it might as well implicate death. In this case the gesture would be an expression of a symbolic sign. Unfortunately no examples have been found in Sweden that could support this interpretation. There are no situations associated with this gesture that clearly indicate death and the gesture does not occur on panels that do indicate death.

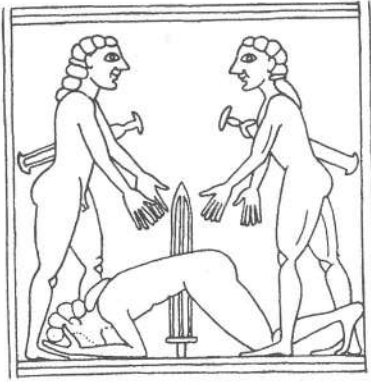


Fig. 4. Greek (left) and Etruscan (right) examples of a symbolic gesture indicating death (spread out fingers towards the ground). Here illustrated by the suicide of Ajax and a figurine found in a grave context (from Säflund 1984 & 1989: fig. 19–6).

It is the author's hope that this discussion has expanded our concept of the gesture to a deeper expression of meaning that is dependent on its local situational context. It was earlier common to treat all anthropomorphic figures with big, outstretched hands as one category called "the God with the big hands". In the shadow of our chirographical society we have lost the ability to treat figurative gestures as a deeper expression of meaning and instead we have categorically transformed all gestures in figurative material to simpler attributes. In the same way as images were reduced to illustrations in relation to text the meanings of gestures in figurative materials were reduced to attributes. To include more gestures in contextual analysis might support my conclusion that the use of gestures includes not only attributes but also symbolic signs and expressions of emotions and relations. The rich material in gestures provided by the rock images should be used by archaeologists on a deeper contextual level of analysis in which the gesture was part of communicative expressions in an oral society. This means that gesture is a conservative and embodied memory with a living function in cultural transmission.

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Reflections on the interpretation of rock art

LILI KAELAS

Abstract

Consideration will be made of the theories and assumptions put forward for rock art in the Alpine regions and southern Scandinavia. Reflections will focus on the post-war period. However, Oscar Almgren's (1934) strongly influential study of southern Scandinavian rock art, according to which the petroglyphs were interpreted as an expression of the fertility mythology of an agrarian society, is taken as a starting point. For Alpine rock art George Dumézil's (1958 onwards) theories on the social triple division of Indo-European people into rulers, warriors and craftsmen with their equivalents in the triple deities – of heaven, thunder and healing – played an important role. Henry De Lumley (1984) also addresses the theory of Indo-European religion, however, in its Mediterranean version, i.e. the cult of the ox, that of the earth-goddess, and the cult of thunderstorms. For the Italian mountain valleys of the Alps, Emmanuel Anati (1964 onwards) too launches the Indo-European myths with a triple set of gods – a celestial, terrestrial and underground deity. However, in order to understand the meaning and purpose of rock art language there is a new approach – the role of rock art within the social system. Recent studies, such as the thesis of Ulf Bertilsson (1987), have focussed on quite a different set of questions: that of spatial relation to settlement areas.

In Europe rock art has been studied for the last 150 years, the main endeavours being to establish tenable chronologies, to study the contents and to reconstruct myths. However, there is still an acute need for analyses of motif associations and comparative studies of motifs common in the southern Scandinavian and Alpine areas in particular. A striking feature in the spread of rock art is that apart from isolated, scattered sites, there is a remarkable concentration of rocks that are covered by a multitude of motifs and signs in these regions. This phenomenon implies that rock art was the vehicle of communication – an intelligible language that the initiated could

read. Today scholars agree that rock art is a religious picture-language, a conclusion that has initiated an endless number of hypothesis and suggestions for the interpretation of the meaning of symbols. This paper will discuss only a limited selection of them.

First a few words about religion. When we characterise religions of our own time, we consider their mythical content. We make distinctions between the great religions according to their conception of divinity (one god, several gods, a trinity, and so on), their views on genesis of life and other eschatological problems. It is natural that this attitude has marked the aim and direction of rock art research to explain the content of rock art figures and signs according to these concepts.

Scandinavia

In one of the most influential analyses of south Scandinavian rock art, petroglyphs were interpreted as an expression of the fertility mythology of an agrarian society (Almgren 1927, 1934). Almgren discussed analogies with Oriental and ancient religions, such as those of Babylon, Egypt and Greece, and characterised Scandinavian Bronze Age rock art as showing ceremonies associated with the fertility cult. Designs of ships, for instance, were considered equivalent to those of the age-old tradition in Egypt, where models of ships – “ships of the gods” – were used at religious feasts. Various rock art scenes with humans were assumed to illustrate the wedding, killing, mourning, resurrection and revenge of a fertility god; the scenes of fighting as ritual games of combat between the fertility god and his opponents; the foot designs, in analogy with Indian folklore, as marking the presence of the god. Elements of magic or religious cults in pictures of, for example, a human with a birds head bearing a round symbol (sun?), or a man ploughing while holding a green branch in his hand, were used as

evidence. The meaning of these and other scenes and symbols was considered in this way to maintain the force of yearly ceremonies.

When the hypothesis of the fertility-cult was launched, it was an argument against that of a mortuary cult, which, also based on analogies with Oriental and ancient religions, had been proposed by other Swedish archaeologists (Ekholm 1916, Nordén 1925). However, the hypothesis of rock art as expression of a fertility cult, had an almost charismatic appeal and became predominant for more than fifty years.

A more extreme hypothesis, related to Indo-European myths, was launched by Bertil Almgren (1962), the son of Oscar Almgren. According to him carts and war-chariots, wheels, ships, footprints etc.



Fig. 1. Ships of various designs, types and dimensions accompanied by cup marks. The ship is one of the most common motifs in Swedish rock art. Finntorp, Tanum Parish.



Fig. 3. Armed human figures in various associations and actions. These figures frequently appear along the coastal region of northern Bohuslän. Finntorp, Tanum parish.



Fig. 2. Footprints are a common motif in Swedish rock art. Torp, Kville parish.



Fig. 4. Horses with and without riders. Tegneby, Tanum parish.



Fig. 5. Ceremonies performed on ships. Fossum, Tanum parish.



Fig. 6. Cart with oxen surrounded by human figures. Rished, Askum parish.



Fig. 7. War chariot. Björneröd, Tanum parish.

were symbols for an invisible deity in its various guises (rather than a particular god or goddess) who came to those who invoked him but whom it was forbidden to portray. He found support for this interpretation in *Tacitus Germania* (the late first century AD), where the cult of Nerthus – the invisible god – is described.

In the late 80s Görman (1987) studied a selected set of petroglyph symbols in Swedish rock art – above all humans, snakes and complex round figures – and compared them with similar motifs



Fig. 8a. (Above right) Wedding scene. Vitlycke, Tanum parish.



Fig. 8b. (Right) Wedding scene. Hoghem, Tanum parish.

on various artefacts from Hallstatt and from Celtic cultures. She tried to identify these designs as the Celtic gods Cernunnos, Taranis and Lugh, and argued that this indicates a shift of the old Indo-European myths to the Celtic religion. It is undeniable that quite a number of rock art symbols have their prototypes in Celtic culture. About the same time as new decorative elements appeared on Nordic bronzes, new motifs can be seen in rock art. It is plausible that the cultural impact caused, along with other noticeable changes in the cultural profile, changes to Late Bronze Age religion. It is of course not excluded that they are associated with Celtic mythology; as there was a strong cultural influence from the Celtic area in southern Scandinavia. Nevertheless, one should not unreservedly accept the interpretation of the Celtic religion as described by late Roman writers, including the names of the gods, which vary from author to author. Some Roman sources assimilate them with Roman deities.

Today there is a unanimous reaction against the theory of fertility-cult (Malmer 1989, Hagen 1990). The theory of sun-worship, another favoured explanation of circular designs, is also met with scepticism, the reason being that there are no real indications of a sun-cult in the Nordic archaeological material, except the Trundholm wagon with its gold-coated disc. However, this does not imply that the sun did not play a dominant role in peoples' fantasies. The sun as well the entire celestial body played an important role in all prehistoric peoples' fantasies and often in their religion.

Regarding agriculture, statistical studies concerning Swedish rock art (Malmer 1981) have shown that the motifs with an agricultural connection are marginal compared with other kinds, including abstract symbols. It also is appropriate to remember that the neighbouring arable land in the richest rock art regions in Sweden and Norway was cultivated only in historical times, actually as late as from the mid-nineteenth century on. Livestock had greater importance than cultivation, but this too does not occur as a major theme in the rock art. More remarkable is that fishing, which certainly was one of the basic food sources in Scandinavia, appears only once as a rock art motif. Nor are fishes a recurrent motif, although salmon appears. Wild animals (game?) – another food supply – occur more often, but hunting scenes are not frequent. Hence, subsistence is not a major theme of south Scandinavian rock art.



Fig. 9. A wheel-cross motif incorporated into the design of a ship, above which hovers a large male figure who holds a smaller ship in his hand. Aby, Tossene parish.



Fig. 10. A cupmark surrounded by adorants. Aspeberget, Tanum parish.



Fig. 11. Formation of cupmarks. Stenbacken, Tanum parish.

Boyer (1991) has presented one of the latest theories on interpretation. He starts by discerning three principal elements: the first is the creation of the solar universe, expressed by horse/boat symbols and referring to the Trundholm wagon and Havamål in the poetical Edda. Secondly is fertility-fecundity, which according to him implies a mortuary cult. Hereby he underlines humans' use of gestures to assure fertility and he postulated that fertility/fecundity is the major character of Germanic-Nordic mythology and of rock art. Further he identifies humans and other symbols with personalised gods in Icelandic sagas, poetical Edda in particular (i.e. the written sources of the late 12th and 13th centuries). Occasionally, attention is called even to Beowulf, probably originating from around 1000 BP (although also suggested to date to the 8th and 9th centuries). Lately, Bertilsson (lecture held at The Valcamonica Symposium in Tanum, September 2001) also argued for a Late Bronze Age/Iron Age religion with personalised gods that were connected with an explicit cult of weapons and rivalry and that the basic structures and elements of these sagas are

presented and depicted in Bronze and Iron Age rock art. At the same time Bertilsson sees obvious evidence of elements from the shamanic religion of the early Stone Age rock art. But although studies of settlement finds show that the basic elements of Stone Age economy continued, one should be critical of making 1500–2000 year long journey backward from the Viking period – seen through medieval eye of written sagas – to Late Bronze Age religion with its strong Celtic elements. From this ensues a crucial problem to solve: how deeply into Nordic prehistory can archaeological finds and observations allow us to follow the roots of late Iron Age religion with named personalised gods and cults.

The Alpine region

As to Alpine rock art, we find a somewhat different but nevertheless parallel situation when examining the types and character of petroglyphs. Here too, symbols for subsistence on rock panels are marginal. The theories of George Dumézil have played a



Fig. 12. A masked man which could be evidence of elements of shamanistic religion. Torsbo, Kville parish.

dominant role for interpretation since the late 1950s. He postulated the social triple division of Indo-European peoples into rulers, warriors and handi-craftsmen, which had their equivalents in the triple deities of heaven, of thunder and of healing. Furthermore, he esteemed that myths had universal applicability and could be recognised in Celtic, Roman and German religions. This theory is strongly questioned today because there is no proof for an Indo-European culture with such distinctive and specific features as his theory anticipates.

The agglomeration of petroglyphs in valleys around Mont Bego in the Alps Maritime prompted Henry de Lumley (1984, 1991) to consider the areas where rock art is abundant as open-air sanctuaries for people living along the Riviera. It is true that the high mountains of Ararat, Sinai and Olympus have had a central role in the myths of Mediterranean peoples. In the same way Mont Bego may have been a religious locale in the Merveilles Valley proper. However, there is in the valley another peak and wall of the mountain chain, which was often chosen, that of the Merveilles, towards which the rock art panels are facing. De Lumley, too, addresses the theory of Indo-European religion with triple set of deities but in its Mediterranean version, an Oriental background is implied. Considering the age-old cult of oxen in Oriental civilisations and the flow of cultural influences from there and the mass of bovine symbols (usually interpreted as oxen) on rocks in this area, it seems that oxen had a central place in the spiritual life of the Sea Alps population, as it did for other Mediterranean populations.

In the Alps, and the Sea Alps in particular, we also find a remarkable complex of symbols in the Fontanalbe Valley – that of rectangles, squares, stippled points united by winding line(s) etc. Some French, Italian and English archaeologists consider these to be symbols of homesteads with fields – a sort of cadastral map. But prehistoric people did not need maps, being familiar with the landscape from childhood. Nor is the alternative interpretation of these composite figures as settlements plausible – where the difference in size of the “huts” and “enclosures” is understood to indicate differences in property and power. But, there was no overpopulation in the area in the Bronze Age and therefore no shortage of ground. Wealth was not measured by the amount of land owned but rather by livestock and hands for cultivating fields and other activities. Consequently the size and control of labour was the

decisive factor for prosperity in prehistoric times. The exploitation of copper mines is additional proof of this. It is thus unlikely that these were symbols of farm complexes. It lies in the character of the “drawings” that they cannot be dated exactly, but there is little doubt that they are from the same period as the ones of weapon motifs. That quite a number of the latter seem to depict real daggers from the Early Bronze Age, as demonstrated by De Lumley, also provides us with the date. Other recognisable items (halberds, axes) also fit into this chronological framework. All this seems to indicate that the rock art tradition in the Sea Alps was short-lived compared to that in northern Italy and South Scandinavia.

Recalling the wild, hostile environment in the chaotic tumble of the barren valleys in the Sea Alps at quite a distance from habitable areas, De Lumley esteems that these circumstances made it unlikely that ordinary people participated in ceremonies associated with the rock art. In the “sacred areas” only priests and the initiated, in the service of the divine, were present. Commoners probably had their (religious) feasts near the settlements in the bottom of the valleys.

Emmanuel Anati (1964, 1974), is also of the opinion that the petroglyphs made by the population of the north Italian valleys expressed Indo-European myths. Here the symbols and signs that were depicted on rocks was a long-lived tradition in the area, beginning perhaps as early as in the 3rd millennium and lasting until the arrival of the Romans. Anati also traced a triple set of gods and found proof for this on numerous rocks or stelae, the surfaces of which were divided into three parts by three different symbols (albeit not always the same) representing respectively a celestial, terrestrial and underground deity. It is noteworthy that in contrast to the repertoire in Sea Alps there occur many more common symbols and signs in North Italian and South Scandinavian rock art.

If the statistics have any significance for interpretation, the depictions of objects directly related to agriculture or livestock is scarce compared to the overwhelming quantity of all other motifs also in the Alpine regions. The only and remarkable exception is bovine, including the horned head (*pars pro toto*), in the Sea Alps (where it predominates), with its Oriental background. In the Orient it had a central place in religion and perhaps a double meaning, symbolising force and power rather than agriculture.

Notably, it was not oxen but cow that were tracking animals in the Mediterranean area deep into historical times.

All in all interpretations proliferate. Gimbutas (1989, 1991), analysing the motives of Mont Bego, arrives at the conclusion that the main components there – bucrania (bovine-heads, snakes, cup-marks, axes) – “undoubtedly are parts of the Old European symbolic structure. Triangular blades of daggers and halberds current in this period of the Early Bronze Age were incorporated in this symbolism not as weapons per se but as triangles, the ancient symbol of regeneration stemming from the Goddess’ pubic triangle, a very frequently encountered symbol all over Europe and especially in megalithic art and architecture”. She does not find it convincing to accept them as a product of an Indo-European society in spite of the fact that the Indo-European element was present in Western Europe at this time. The society that created this imagery was concerned not with ruling warrior gods and chiefs, but with the cycle of life and death (Gimbutas 1991). Thus, according to her study, the Mont Bego images suggest a continuity of pre-Indo-European religion and the depictions relate to rituals of death and regeneration.

Undoubtedly, the great Goddess of the Neolithic had a strong presence along the Mediterranean and southern Europe. The emergence of new elements with the introduction of a new technology and new social structures in Early Bronze Age society did not of course mark a sharp borderline between the two “ages”. The transition was gradual. Added to this, the very nature of religion – broadly defined – is conservative. It is therefore not surprising to find stronger or slighter reminiscences from the older belief of the great Goddess cult in the Early Bronze Age religion, particularly in economically less advanced regions as those of the Sea Alps. Probably the ubiquitous bovine/bovine head is a proof of it.

Still one more rather widely spread interpretative theory should be mentioned. Among others Martelet’s (1991) analysis of the Alpine rock art repertoire concludes that the Old Testament should be considered as a source for pictorial symbolism. In spite of a certain chronological contemporaneity with the Bronze Age the problem of identification of myths in symbols remains to be solved before the Old Testament can be suggested as a possible source through wandering stories from the Middle East.

The role of religion in the social system

As we cannot identify the mythical content of Bronze Age religions we should try a different approach. All agree that rock art is a special symbolic expression of a phenomenon that we call magico-religious. But religion as ideology has not only philosophical aspects; it also comprises social elements. Hence the question, what role did religion play in the social system? The outward and observable forms of religion consist of ceremonies, buildings where ceremonies take place and institutions, i.e. officials and their relation to the congregation. According to anthropological research, ceremonies are modelled and led by officials, who may be priest or chieftains. Religion was not a private but a public matter and may have been a means of conserving social traditions. Anthropological studies have also shown that the exercising of religion can accentuate and secure power and authority for chieftains’ families. With respect to this aspect, it should be possible to illuminate the role of rock art within the social system. Now, a quite different set of questions comes to the fore. What is the spatial relation of rock art to the settlement area? Were places with rock art intended as local sanctuaries for a family or for an entire habitation area? Taking into account the time-range of thousands of years during which the symbols were developed and used and their messages learnt generation after generation, it seems to be evidence of a certain degree of stability in the communication system.

These problems have kept Scandinavian archaeologists busy since the 1970s and the new approach has been rewarding. The results obtained show clearly that in southern Scandinavia there is a correlation between habitation and rock art areas (Nordbladh 1980; Bertilsson 1986, 1987). In some cases it seems to be possible to distinguish a cult centre within a region, as in western Sweden at Tanum (*ibid.*). However, some field studies in Uppland (Hyenstrand in Kjellén & Hyenstrand 1977) and in Trøndelag, Norway (Sognnes 1990) indicate that there are habitation sites with a limited number of rocks which besides their pictorial magico-religious message may have functioned as a distinguishing mark for the territorial interest of an individual farm. There may be similar situations in the Sea Alps. Although it does not necessarily imply that settlements were at the same heights as depictions, which are on c. 2000–2600 m above sea

level. Settlements were surely on lower slopes and along the coast. In northern Italy the geographical situation is different, settlements presumably were also on the lower foothills of the Alps, not necessarily close to rock art locales. But cultivation in historical times has probably wiped out most traces of prehistoric human activities. However, people from other valleys may also have come to participate in principal religious feasts and ceremonies in the regional rock art centres.

There is no doubt that new skills in metal working, which made it possible to manufacture exclusive objects such as chariots and weapons that were used as new symbols of power, resulted in far reaching social and cultural changes. Archaeological finds show an abundance of weapons in Bronze Age centres. In central Europe weapon finds indicate the emergence of a new social group in the Early Bronze Age, that of the warriors. We can disregard the postulation that weapons indicate a warlike epoch. They are in any case a testimony of an epoch in which copper mines or trade over Alpine passes needed protection. In areas with access to rich copper mines, the new technology and trade promoted the growth of wealth and hierarchies. In some areas the upper echelons of chieftain societies developed a princely luxury, as is evidenced by some remarkable graves and their accoutrements and by pictorial scenes on bronzes. A typical feature of the time is that the less wealthy societies also were affected by this development.

When considering southern Scandinavia and adjacent parts of north Germany, archaeological finds have provided a picture of societies that were characterised by inequality between different areas, but even more by unequal distribution of resources between individuals. Besides burials with valuable objects, there is evidence of offerings and hoards of bronze and gold items of varying worth. Hoards are abundant in Denmark and the southernmost area of Sweden, but less frequent in the rest of south Scandinavia. Certain hoards were probably a bronze-smith's hidden stock, but those found in marshes were surely a component of the religious system. The deposition of hoards must have been an important act for the society and those with resources, whose wealth became visible to all at ceremonial occasions. But to whom, on what occasions and for what purposes the offerings were made, we do not know. Nevertheless, we can be sure that they too were connected with myths, though we cannot trace them.

As already mentioned it seems to have been a common habit that symbols of wealth and status became symbols in less prosperous areas as well. For this the rock art repertoire offers convincing testimony both in Alpine areas and in south Scandinavia. For instance the appearance of series' of signs indicate new attitudes and a predilection for weapons, an impressive number of combat scenes and a multiplicity of symbols of strength and war. As Malmer (1989) has convincingly pointed for the petroglyphs in south Scandinavia, the frequency of different themes varies and gives an impression of – roughly speaking – a tripartite division. In Denmark, the central area of the Scandinavian Bronze Age, besides hands and feet, circles and cup-marks dominate. The adjacent zone in parts of Sweden and Norway is characterised by strikingly lively scenes, depicting people in action: chariots, warriors, acrobats, lur/trumpet-blowers, ships with rowing crew and ploughmen. The third zone in the eastern part of south Sweden show, more than is the case elsewhere, types of votive gifts: weapons and clothing.

Therefore, it is not surprising that Nordic scholars have interpreted rock designs of weapons, ships, war-chariots and horses as offering to transcendental powers. According to a new hypothesis by Malmer (1989) the symbols are substitutes for bronzes which people in poorer areas could not afford as offerings. This was a fruitful breakthrough in sociological terms. However, apart from this interesting approach, this may be more typical of the “economic” mentality of our own time rather than a correct assessment of prehistoric thinking. But certain symbols do imply the status of a leading class controlling trade and hence their task to transmit this message to society and demonstrate, using pictorial language, who had the power in this period of changing ideology and social structure.

It is no surprise that the privileged began to protect their interests. In order to legitimate and maintain their power, symbols and ceremonies were used to reinforce it and to explain who had rights over resources. Thus the need to confirm the hierarchical order must have been almost constant. On the other hand there is a large number of images on rock panels, such as snakes and various abstract symbols, which scarcely can be interpreted as status markers. As already mentioned, their prototypes are found as decorations on bronze artefacts in Hallstatt and in the Celtic cultural sphere in central and southern Europe. Trade over Alpine passes into north Italy promoted

the spread of the Celtic influence, including religious ideas. There it met, and perhaps intermingled with, the older Mycenaean and Etruscan elements. The export of bronzes and textiles (see the framed scenes on slabs in the Kivik tomb) to Scandinavia probably from central Europe is the source of these novel designs, though it is not possible to say whether they arrived directly from the production centres in north Italy or through middlemen passing them on from one area to the next. Whether the myths and meanings behind the symbols on imported products were understood and retold here, or adjusted to local traditions, is another question.

Conclusion

It must be emphasised once more that rock art is a rich source of many-sided information, confirming and strengthening data from archaeological sources, and contributing information that cannot be obtained elsewhere. It reflects the different qualities of spiritual life, man's imagination, his philosophical thoughts and conception of the world, and his ability for abstract thinking using pictures, symbols and signs. It truly is not to go too far by postulating that before the introduction of writing, rock art was a kind of writing, a means of memorising and transmitting messages. However, in order to find patterns so that we may interpret their 'sayings', we should, instead of mainly examining the possible meaning of every individual symbol, pay more attention to the frequency of symbol combinations. This study should not be carried out as a separate discipline but in close connection with archaeological research. Hence the study of rock art should focus on the art's proximity to settlement, to graves and fairways. Economic and social aspects, as mirrored by finds and by rock art symbols, should be examined thoroughly in order to draw tenable conclusions; deductions upon which hypotheses about the core of Bronze Age religion are based must have a solid foundation.

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All photos in this article: Vitlycke Hällristningsmuseum in Tanum, Bohuslän, Sweden.