

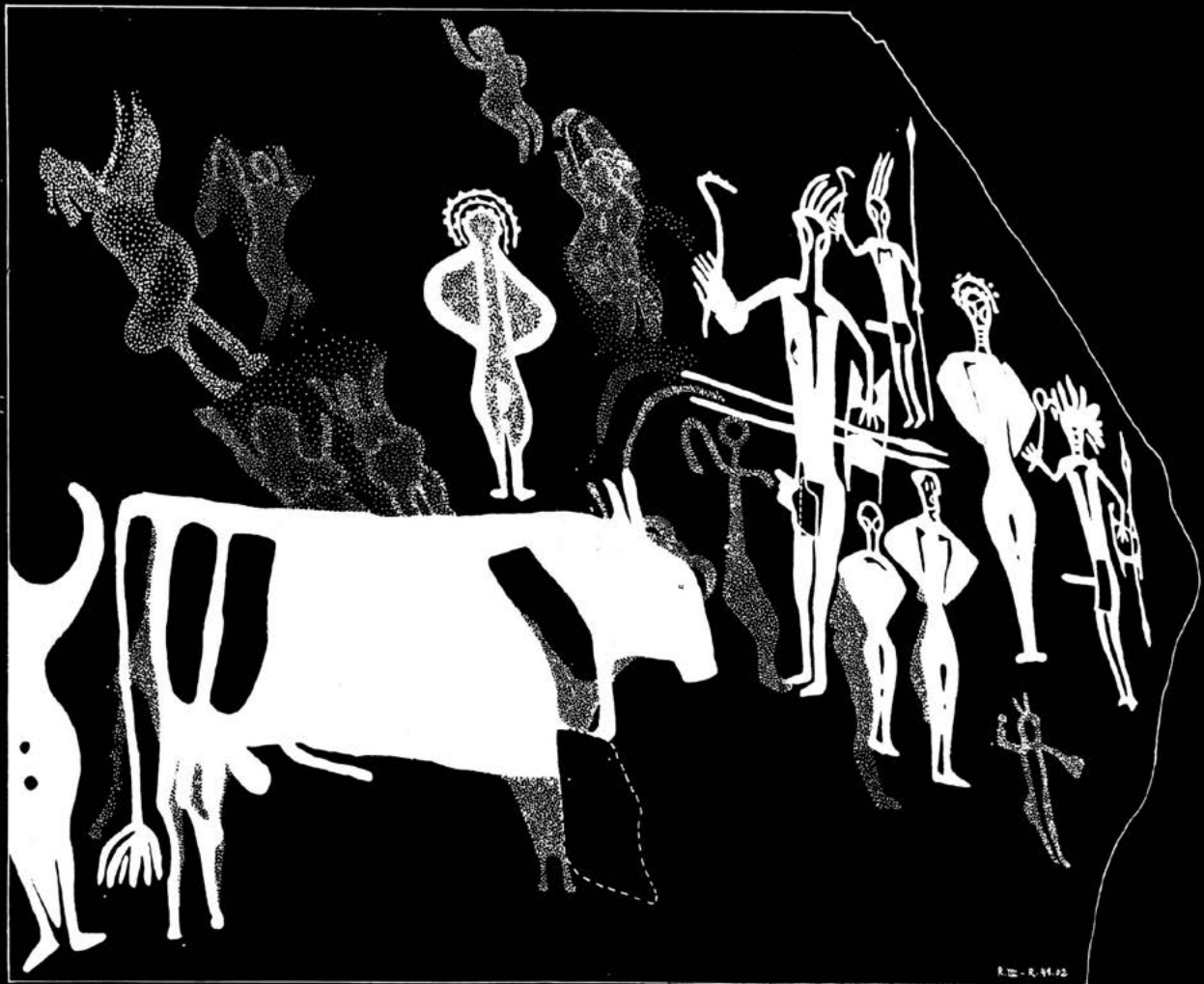
# EXPRESSION

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INTERNATIONAL SCIENTIFIC COMMISSION ON THE INTELLECTUAL AND SPIRITUAL EXPRESSIONS OF NON-LITERATE PEOPLES

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**CONCEPTUAL TRENDS  
AND CONCEPTUAL SURVIVAL**

### CONCEPTUAL TRENDS AND CONCEPTUAL SURVIVAL

What is happening in the minds of a clan moving in the savanna, collecting whatever edible is offered by nature? The minds of buffalo hunters likely have other concerns; those of a group of people growing rice in a field, also; those attending a conference on high-tech, or those participating at a meeting on real-estate investment, or a fraternity of monks praying in a monastery, have other kinds of worries. When direct knowledge or history is not available, archeology may provide information on the variety of material and conceptual life of past cultures. Likely, visual art, for whoever produces it, will reflect different interests and involvements. What they all have in common is socially sharing efforts of survival. The human mind is oriented toward survival in its various forms, physical, social, ethnic, economic, ideological, political. What makes the difference, thus evidencing the cultural identity of each human group, is the conceptual orientation which defines the distinctiveness of the unit involved.

Today as yesterday the identity of nations, clans, families and even university chairs is defined by their tendencies, in their balance between innovation and conservation, and between the personality of the leader and the acolytes. Trends conditioning opinion and education can manifest themselves also in scientific research. From national governments to clan chiefs, to school teachers, the strength and the weakness of the leader may determine patterns. This happens also in the academic world where the imposition of tendencies may define or limit the freedom and integrity of studies and the progress of scientific research. Some of the topics recently faced by **EXPRESSION** quarterly journal are related to this central issue of cultural identity, the socially shared efforts of various aspects of conceptual survival, from patterns of settlement, to art, to intangible expressions such as traditions, beliefs, myths, and rituals.

The present issue faces various views of this common denominator, including forms of associative sedentarization, aspects of habits, faith, and artistic expressions. The topics are of a global concern, though the articles concern specific matters in three continents, urbanization in southern India, traditions and beliefs revealed by the rock art in the Arabian Peninsula, the possible conceptual meaning of natural shapes related to Neolithic megalithic monuments and the environment in England, and rituals and myths of North American Natives.

The archeological remains are the source for understanding the past and people's varied searches for the survival of iden-

tity. What would we be able to understand about the present without some knowledge of the past? One of the many emerging outputs is that no cultural identity is static. Each society, like each conceptual tendency is born, is evolving, and is destined to expire. Conservative tendencies to ideological static immobility do not grant survival, nor stability, as they do not respond to the very nature of their own existence. Cultural and conceptual survival is subject to evolution, like the life of each being, from birth, to growth, aging, and death. And like the life of each being, the creations of the human intellect, imagination, expectations, ambitions, and also beliefs and rituals are subject to evolution, in the frame of the changing socio-cultural and conceptual context. For all of them aging is an inevitable process.

Tendencies in art, like neo-classicism, may mark fashions, not ages, though the identity of an age may be marked both by its new messages and by its expressions of revivals or decadence. Going back can hardly be a solution for the future. Nevertheless, contemporary artists may try to imitate the style of Giotto, or the Parthenon caryatids, philosophers may reinvent things said by Aristotle some 2,300 years ago, and social movements may attempt the revival of old recipes. In past issues the revivalist movements of native peoples have been considered as expression of needs of defining or recovering cultural identity. As it emerged, strictly conservative movements are having less chances of survival than open-minded movements aware of cultural evolution, the inevitable impact of socio-cultural indoctrination and of changing living conditions. Analogous considerations on conceptually oriented tendencies may apply to revivalist social or political movements and academic orientations alike. Nostalgic or ideological attempts at restoring old forms of way of life or socio-political formulas have occurred in the past and are still occurring today. Can we imagine restoring a Tsarist regime in Russia, a Nazi government in the heart of Europe, an empire in China, or an Islamic caliphate in the Middle East? Today yes, we can. Sometimes reality may overcome imagination. Faith may favor the belief in the eternal actuality of old rules or in the success of formulas that failed in the past. Even when the restoration of old regimes or dictators' formulas look like expressions of a popular aspiration, they require imposition and involve the limitation of freedom, repressive, despotic leadership, brainwashing, inquisitions, the prohibition of listening to alternative opinions and the voices of other sources.

Recurring cultural patterns follow the concept that similar causes may lead to similar effects, departing from the simplest of axioms: no matter language or country, whoever is

hungry wants food. History teaches us that analogous drifts repeat themselves though in different cultural contexts. The remains of buildings implying forced labor provide examples of autocratic regimes, at least in the last 10,000 years. Is it likely that the builders of the pyramids did so following their democratic wish to gratify the ego of the pharaoh? Is it likely that the soldiers who conquered empires in China, Mesopotamia, Africa or South America went happily to die following their wish to gratify the ego of the emperor? The fact that people willingly kill themselves for the Mikado or the mullah requires some rethinking of conceptual trends and conceptual survival.

Cultural changes in language and religion, and different ways of living are recorded by history. Did comparable events happen before history as well, in prehistoric times? From the succession of phases of rock art displaying changes in typological, stylistic, and conceptual patterns, it indeed seems that drastic ideological changes may have taken place in prehistoric periods as well. In the present issue examples of conceptual variations are provided by the different styles and typologies of rock art in Central Arabia.

In past issues of **EXPRESSION**, the stylistic variations in the rock art sequence of the Camonica Valley in Italy, Gobustan in Azerbaijan, the Negev Desert in Israel, or northern Tanzania have displayed such typological and stylistic changes as to indicate rather drastic conceptual changes from phase to phase. But in no case farming communities went back to depict and think like hunting-gathering clans. And no breeder of sheep and goats in the Alps, Azerbaijan, or the Negev ever indulged in drawing elephants.

Cultural evolution may present similar processes in different times and backgrounds. As discussed in the articles of this issue, urbanization evolved in southern India, modifying the way of life of people 10,000 years after the earliest urban settlement at Jericho: the same process took place in different cultural, conceptual, and economic contexts, in a different age, as shown in an article in the preceding issue. Natural shapes of rocks are likely to have been given conceptual meaning in England, 4,000 years before modern surrealistic art; mythical spirits were worshipped to enhance rainfall in North America a few hundred years ago, while similar beliefs and performances were addressed to the Wandjina spirits in the Kimberley, Australia, in the antipodes; and emirates are likely to have existed in Arabia 5,000 years before the recent Arabian emirates, ages before Swiss banks were invented.

Cultural patterns are the effect of evolution which is shaped by both socio-conceptual conditioning and contextual realities. Cultural identity is defined by cultural patterns and the survival of cultural patterns depends on how they are dealt with by people. But cultural identity includes both traditions and innovations. The apology of cultural identity acquires a strengthened justification if besides protecting old customs it

is able to express innovations. An ancient expression of wisdom says that there is nothing new under the sun. Something may appear to be new under the moon. Things should be looked at with diverse kinds of lighting. Re-thinking how to look at the nature of cultural identity may contribute to a better understanding of the past and perhaps also of the present. Readers are welcome to express their ideas.

E.A.

## A NOTE FOR THE AUTHORS

**EXPRESSION** quarterly journal is a periodical on conceptual anthropology addressed to readers in over 80 countries. It offers a space of expression and communication to researchers and authors from all over the world. Published papers are intended to produce culture: your article is addressed to a world of learning, make it enjoyable also to people who are not specialized in your research field. Articles are expected to be stimulating and pleasant to read. The target of **EXPRESSION** is to promote dialogue, knowledge, and ideas concerning the intellectual and spiritual expressions of non-literate societies. It is an open forum in conceptual anthropology.

Papers should be conceived for an audience involved in various fields of the humanities, mainly anthropology, archeology, art, sociology and psychology. Your ideas, even if related to a local or circumscribed theme, should awaken curiosity to an international and interdisciplinary audience. The visual aspect is important for communication with the readers: quality images and text should complete each other.

Authors should talk openly to the readers, avoiding long descriptions, catalogues, and rhetorical arguments. Refrain from unnecessary references and from excessive citations. They make the reading dispersive and do not make the article more scientific. Consider that short articles are more read and appreciated than long ones. Letters on current topics and short notes may be included in the Discussion Forum section.

Publication in **EXPRESSION** quarterly journal does not imply that the publisher and/or the editors agree with the ideas expressed. Authors are responsible for their ideas and for the information and the illustration they present. Papers are submitted to reviewers, not to judge them but to help authors, if needed, to better communicate with their readers. Controversial ideas, if they make sense, are not censored. New thoughts and concepts are welcome; they may awaken debate and criticism. Time will be their judge. **EXPRESSION** is a free journal, not submitted to formal traditional regulations. It offers space to controversial issues, healthy debates, and imaginative and creative papers, if they are conceptually reliable and respect the integrity, ethics and dignity of authors, colleagues, and readers.

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### Front page image

Sha'ib Samma, Arabia. A ceremonial event of 5,000 years ago, as recorded by the rock art of Central Arabia (see Anati, this issue)

# DISCUSSION FORUM

**The Discussion Forum invites readers to be active protagonists in debates of worldwide interest in Conceptual Anthropology.**

## MYTHS AND BELIEFS TOLD BY ROCK ART

What can we learn about myths, beliefs, and cult practices from rock art and other visual records left behind by past cultures? Every society that produced visual art has used it for fixing, memorizing, and transmitting its intellectual and spiritual traditions. This happens in Christian churches, Hindi temples, Buddhist monasteries, decorated caves and in rock art sites, among literate and non-literate societies alike.

The relation between art and religion is a topic faced in the present issue of *EXPRESSION*, it was dealt with in past issues and will continue in forthcoming ones. Colleagues and friends concerned with prehistoric and tribal art, those involved in religious studies, and those interested in psychology, art, and mythology are cordially invited to share their knowledge, records, and ideas.

Figurative art exposes aspects of the minds of their makers, concerns, events, and beliefs which offer chapters in the history of human conceptual adventures. Besides being in themselves an important source of knowledge of art and religion, they provide relevant sources for research in the conceptual identity of its makers, relevant for psychology, sociology, and anthropology alike. The comparative outlook of the many facets of imagining the invisible is enriched by the contributions of new documentation, new ideas, and new thinking, considering a site, a culture, a period, a fashion or a style. Papers may focus on specific cases as well as on general trends, the description of the images, myths and traditions, or rituals and religious beliefs as revealed by the images in both prehistoric and historic cultures.

## SEDENTARIZATION AND URBANIZATION

The article “Rethinking Jericho and the Birth of the World Earliest Town”, in *EXPRESSION* 30, has awakened a debate on the birth and development of urban settlements. As a cultural trend, urbanization developed very late in the process of cultural evolution. The first town is just 10,000 years old, compared with over 4 million years since the

emergence of the *Homo* species. Urbanization gradually spread and in some corners of the world it arrived just a few years ago, as we learn from one of the articles in this issue. Urbanization is not a natural feature of our species, nor is it, as often claimed, a direct outcome of sedentarization. From the layers of human deposits in caves and open-air sites in Africa, Asia, and Europe, we know that human nuclear clans maintained fairly permanent living sites in the last half a million years.

How did this new pattern of life come into existence? Probably economic and social reasons interplayed. Newly introduced means of food production and other economic activities demanding more manpower may not be the only reason. The function of markets uniting socialization and commerce and the development of trade as a major economic resource played their roles. The concept of community and the fascination of assembling may have played their role too.

As we have seen in previous issues of *EXPRESSION*, religion and medicine healing may have had a function at Jericho; ceremonial and ritual gatherings also played their role, as emerging at Göbekli Tepe in Anatolia or in Malta, in the heart of the Mediterranean Sea.

Urbanization has changed the social structure and the daily life of society. It favoured both, human relations and the spread of epidemics, culture and education, and psychological pathologies. Understanding the collective, political, and economic implications of this relatively recent trend is a fundamental part of research in the humanities. Now, urban centers have grown even in the most unthinkable areas of the planet, among the sands of the Arabian desert, in the heart of the Amazonian tropical forest, or in the arctic frozen lands of Siberia. Why do millions of people select the most uncomfortable climates and environments to build their daily life and their future?

The foundation of Jericho, the earliest known urban settlement, marked a determining event in the history of mankind. Ever since, the pattern of urban settlement has expanded to constitute over three-quarters of the world's population, an increase that awakens divergent opinions. Is this a permanent orientation leading to the globalization of an urban humanity, or can we foresee an inversion of tendencies, a turning point in the opposite direction? Could the evolving habit of digital communication change the trend?

Could there be a loosening of the metropolis's fatal attraction and a going back to living in the countryside? What are the factors that may lead one way or the other? Environmental conditions including pollution and climatic changes, social relations, means of communication, educational, medical and leisure facilities, economic potential resources, concentration of manpower, and other issues influence development, which may vary, from age-old urban centers like Beijing, Jerusalem or Rome, to an oil-field or



a mining site where recent towns have developed in the middle of nowhere.

Stories about the start of urbanization have been told ever since the beginning of history. The myth of the birth of Rome or the biblical account of the tower of Babel are traditional examples. Archeological discoveries provide other examples where the boundaries between history and myth are not always well defined. The birth, social life, and economy of sites like Goebekli Tepe (Anatolia), Jericho (Palestine), Banpo (China) or Machu Picchu (Peru) are still open to different hypotheses.

Since the paper on Jericho in **EXPRESSION** 30, new articles on sedentarization and urbanization appeared in subsequent issues, including in the present one. The topic remains open to additional contributions.

## COMMENTS ON THE MALTESE MEGALITHIC TEMPLES

**A letter from Anthony Bonanno,  
June 27, 2021**

Dear Emmanuel,

Thank you for the last issue of Expression. As always, this journal is a treasure trove of reflections and observations on various conundrums that beset the archaeologies of so many parts of the world.

You have regaled your audience with a masterly account that squeezes in such a short length – not so short really – myriads of questions for some of which we have only partial answers (often just scratching the surfaces) and for others we have no answers at all. We are still groping in the dark; but at least you bring up some of the old questions, and many new ones, in the light of new developments and discoveries, like the Goebekli Tepe structures. I wish I could even try to answer some of the questions you raise. ....

I thank you for renewing international interest in the wonderful Maltese megalithic phenomenon.

Best regards.

Professor Anthony Bonanno  
The University of Malta

## MALTA AND THE MEDITERRANEAN

**A letter from Luiz Oosterbeek  
July 6, 2021**

Dear Emmanuel,

I read with the greatest interest your article on the Malta Neolithic temples (**EXPRESSION** 32).

Malta has always been a puzzling context, precisely because

of the “contradiction” between the exuberance of the burial contexts and the residual evidences of settlements that would “match such complexity”. However, I believe you bring into the discussion several important arguments: to abstain from simplistic characterisations (ceremonial vs non-ceremonial), to consider a wider geographic scale (Malta as a gathering space for diverse communities, the assemblages evidencing similarities with contexts from different points in the Mediterranean), the contrast between demography and temples (Malta vs Gozo), etc.

My understanding is that further DNA studies (I believe Caroline Malone conducted some) will reinforce evidences of diverse origins of buried individuals. Looking at Malta and Gozo as isolated islands is simply a perception mistake: the late Neolithic is already a strong commercial network (and, as you say, this late Neolithic of Malta coincides with the Chalcolithic in the East Mediterranean) and, which I think is very relevant, that would have conditioned the understanding of space by the various communities. Although farming tends to “reduce” the landscape to a “closer” controlled territory, trade does the opposite and resumes the wider understanding of landscapes of hunters (largely related to the territories of the hunted animals). Circulation of ideas (anthropic deities), techniques (architecture, artefacts) or raw materials (flint, obsidian) are evidences of such trade. The position of Malta could render it mostly adequate as Mediterranean central place for population seasonal concentration, related to ceremonies and trade, indeed.

Malta is, also, the westernmost “temple” cluster, since towards the West such concentrations are not so evident (to the exception of Los Millares), but it is also well in line with Megalithic (and not only false corbelled) constructions, that predominate in the West (Atlantic façade). By the time of the first megalithic constructions in Malta, Northern African materials are found in Iberia or Southern France, also demonstrating the presence of this important, even if mainly prestige, trade.

Best wishes, and thank you for the insightful interpretation!

Professor Luiz Oosterbeek,  
Polytechnic Institute of Tomar, Portugal  
President, The International Council for Philosophy and  
Human Sciences

## AN AUSTRALIAN ROCK ART PUZZLE: HUNTER-GATHERERS, HUNTERS OR GATHERERS?

A study of conceptual anthropology on the rock art of the three northern peninsulas of Australia, evidenced the presence, in what appear to be the older phases, of different styles, each with its own typology, reflecting different eco-

conomic backgrounds (Anati, 2019, *Arte rupestre dell'Australia, uno studio di antropologia concettuale*, Atelier).

A specific stylistic and typological pattern is concentrated on animal figures, while others have, as dominant themes, anthropomorphic images and, others again, non-figurative graphemes. Visual art is a mirror of the artist's cognitive system and is a fundamental source for defining both the dietary and the conceptual setting.

On a world level, we recognized specific typologies in the visual arts, for societies relying primarily on carnivore diet and those relying primarily on vegetal diet. The dominant grapheme in each category is a significant diagnostic element. (Anati, 2015, *World Rock Art*, fifth edition, chapter 7 "Economic and Social Context", pp.45–54).

Some Australian rock art researchers recognized different phases in the early horizons, such as Chaloupka (1984) for the Northern Territories, Trezise (1971, 73, 92) for the Cape York peninsula, and Walsh (1994, 2000) for the Kimberley. Their pioneering work has been the base for further analyses of stratigraphy that allowed detecting specific typological assemblages.

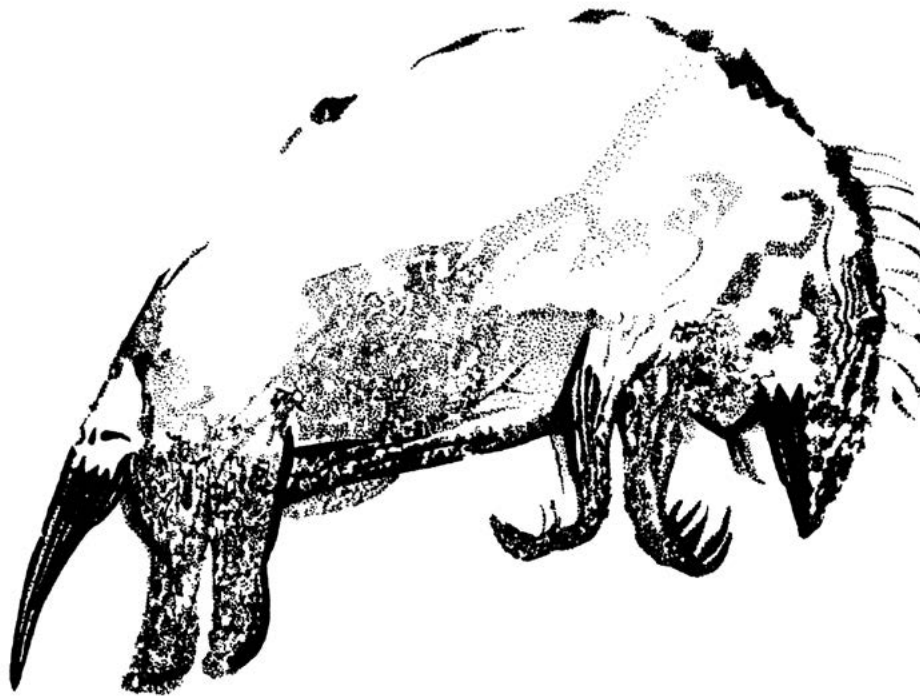
As defined in the mentioned monographic study (Anati, 2019), the three major peninsulas of northern Australia appear to have, with a few variants, the same stratigraphic sequence of the early stylistic sequence of rock art horizons. After a few phases of pre-figurative and proto-figurative patterns, a horizon is dominated by zoomorphic

figures in a specific figurative style. It is followed by a long sequence of phases, displaying different stylistic patterns, where the dominant theme is the anthropomorphic figure. Doubts exist on the precise succession of over 20 detected stylistic phases as some may be contemporary to each other and have coexisted; however, three major stylistic horizons seem to be confirmed, for all three peninsulas, first a succession of non-figurative and proto-figurative styles including handprints and other stencils, then the phases of the archaic zoomorphic figures, then a long and varied sequence of styles where the anthropomorphic images are the dominant theme.

When possible to verify stratigraphy, cup-marks appear to be common since the beginning and persisting in all the horizons. Some stylistic and technical variations may allow to separate the older cup-marks from the more recent ones. Some appear to have been reused and reshaped throughout the entire sequence in all three peninsulas.

The stencils, mainly hand prints and tools, are present from an early phase, already in the pre-figurative horizon. They become dominant in the proto-figurative phase and persist as a secondary theme in successive phases. In some cases hand-stencils appear to be recent, likely a revivalist expression. In the proto-figurative horizon, animal foot-prints are frequent and tend to disappear thereafter. The same can be said for stencils of tails and other parts of the animal body.

Full animal figures, in a specific style, usually dark mon-



Kakadu, Arnhem Land. Figure of a Pleistocene animal (extinct over 15,000 years ago) defined by experts as *echidna zogglossum* (Anati, 2019, p. 57).

ochrome, which includes the frequent use of fine lines defining both tessellations and outlines, appear to be present in one horizon with several phases, mainly in Arnhem Land and in the Kimberley. They include extinct animals, an element that would relate them to a period previous to their extinction. These zoomorphic figures are related to abstract graphemes and in some doubtful cases, to anthropomorphic ones. In such cases, besides being the dominant theme, the animal figures are drawn with much more care and realism than the human images.

The numerous animal figures of successive horizons present different styles. Usually they are together with anthropomorphic figures and in the whole of a horizon they may be as common as anthropomorphic figures, being usually related to them, though the anthropomorphic images are the dominant theme for both quantity and size. A localized style of Arnhem Land representing fishes as dominant theme, according to the stratigraphic sequences, appears to be among the most recent phases. It reflects a specialized economy and diet of a certain population in a determined geographical area.

In these various horizons we may formulate a variety of dominant patterns based on the relation between three basic elements: 1- Non-figurative, sub-figurative including stencils, hand prints and animal steps foot prints, 2- zoomorphic and 3- anthropomorphic.

Additional tests appear to confirm the tentative chronological sequence of Anati 2015. According to the typological conceptual analysis, in fact, out of all the early styles of the three northern peninsulas of Australia, one group of phases and style only appears to focus primarily on detailed and well-conceived animal figures and belong to a population having hunting as the major economic and dietary resource. All the other styles have anthropomorphic figures as the dominant theme and likely reflect an economy where food gathering is the main resource. (cf. Anati, 2015, cited).

A tentative explanation of this alternation of stylistic patterns may be that a prevailing hunting economy was practiced by some human groups when a large-size prehistoric fauna was available for hunting. When this fauna decreased in the northern peninsulas, food gathering prevailed over hunting as the basic food resource. In the Cape York peninsula, a more recent stylistic horizon of rock art, where animal figures are dominant, is present in a late pre-contact phase. Besides these exceptions, most of the sequence of rock art in the three northern peninsulas seem to indicate that food gathering mostly prevailed over hunting as a main source of food.



Kimberley, North Western Australia, fruits or tubers seem to be growing on the body of an anthropomorphic figure (Anati, 2019, p. 120).

## FORTHCOMING NEW DEBATES

Readers are proposing themes for debate. When at least three articles are submitted on the same theme, the topic is considered for a forthcoming issue.

1. **ORIGINS AND DEVELOPMENT OF URBAN SETTLEMENTS**
2. **POSSIBLE CONNECTIONS BETWEEN THE ORIGINS OF RELIGION AND THE ORIGINS OF ART.**
3. **RITUALS AND BELIEFS:** universal and local patterns.
4. **DECODING PREHISTORIC AND TRIBAL ART:** meaning and purpose.
5. **WHERE DOES *HOMO SAPIENS* COME FROM?** Where, how and when.
6. **IS *HOMO SAPIENS* THE INVENTOR OF FIGURATIVE ART?** Is visual art the sign of his presence?
7. **IMAGES OF WARFARE AND FIGHTING IN PREHISTORIC AND TRIBAL ART.** Their commemorating role and their historical value.
8. **SEAFARING DEPICTIONS: RECORDING MYTHS AND EVENTS** Considering the story of seafaring and its earliest documentation.
9. **WHEN AND HOW DID PEOPLE FROM THE NEW WORLD (AMERICA AND AUSTRALIA) DISCOVERED THE PRESENCE OF THE OLD WORLD (AFRICA AND EURASIA)?** What did they know of the Old World before recorded contacts?
10. **MYTHS OF ORIGINS: WHERE DID THE ANCESTORS COME FROM?** Global and local versions.
11. **DEFINING THE CULTURAL IDENTITY OF *HOMO SAPIENS*.** Art, material culture, myths, beliefs, and conceptual trends.
12. **PERSONAL IDENTITIES OF ARTISTS.** Identifying the hands of a specific artist, school or tradition in prehistoric and tribal art.
13. **BURIAL CUSTOMS AND PRACTICES** as expression of beliefs in the afterlife. How was the world of the dead conceived?
14. **IMAGES OF WARFARE AND FIGHTING IN PREHISTORIC AND TRIBAL ART.** Their commemorating role and their historical value.
15. **REGIONAL PATTERNS IN ARTISTIC CREATIONS.** What generates local characteristics in artistic expression?
16. **VERNACULAR DECORATIVE PATTERNS AND THEIR SOURCES.** Decoration of objects, huts or rock surfaces as the expression of identity.

## PROPOSALS FOR NEW DEBATES

Proposals for papers and suggestions on these and other issues are welcome.



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*Authors are responsible for their ideas and for the information and illustrations they submit. Publication in EXPRESSION quarterly journal does not imply that the publisher and/or the editors agree with the ideas presented*

# THE ROCK ART OF CENTRAL ARABIA

Emmanuel Anati

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## Prologue

The *Rock Art in Central Arabia* is the subject of research which resulted in four volumes published by the *Institut Orientaliste* of Louvain University about half a century ago (Anati, 1968-1974). This study was concerned with a new subject, requiring new systems of analysis and new techniques of detection. The present paper reconsiders some of the results then obtained.<sup>1</sup> Rock art, that is, engravings and paintings on rock surfaces, consists of archeological findings, and the task of traditional archeology is recording and dating. Besides these technical aspects, it represents the record of human minds, a source for what people felt and thought, what they had to memorize, communicate or express visually. It contains the heritage of human thoughts and feelings, a tremendous and unique source of information about the spirit of people from different ages, a paramount source of history and culture. In recent years, after the publication of these volumes, a new discipline came to life, a new archeology, the study of conceptual contents or conceptual anthropology. When the task of conventional archeology has been achieved, that of conceptual anthropology starts.

Style and typology are fundamental factors in the study of rock art. Like pottery or flint implements, the typology of rock art also varies and different patterns and styles relate to specific associative logical and mental processes. The image of an axe or a dagger may provide, besides its age and that of the related figures, also its function in the story told by its graphic context. Beyond the chronological concern of the archeologist, what was the concern of the individual or the

society that produced the image? Why did they have to record their testimony on the rock?

For some traditional archeology, research may be considered concluded by proposing a date. For conceptual anthropology, these technical identifications are the base to start research, to understand the human motivations, the social and economic context, the way of life that produced it and the cultural identity of their makers, using pertinent analytical methods. This conceptual trend developed in the last few years, involving also rock art research in Valcamonica, Italy, in Gobustan, Azerbaijan, in the Negev and Sinai, Israel and Egypt, in Tanzania and elsewhere. The four volumes on Central Arabia then published anticipated such recent trends.

The cultural setting defining the kind of economy, the social life, beliefs and cult, the implied activities and traditions, are defined by contents. Main categories of economic systems, such as hunting, food gathering, pastoralism, agricultural or complex economy, are often evident from style and typology. The images reflect a way of thinking. The dominant theme in rock art is a dominant mental theme, whether concerning anthropomorphic, zoomorphic images, objects and tools, or non-figurative patterns, is of primary relevance for defining the conceptual identity and the socio-economic background of its cultural horizon.

In the analysis of this Central Arabian rock art, each assemblage had its dominant theme, some focusing on abstract signs, others on human and human-like figures, others again on animals. And obviously, the kind of animal species varied; cattle breeders depicted cattle, and sheep breeders represented sheep, and hunters, whatever animal was their wished prey. The visual art is an expression of the human mind and reveals its concerns. It is a source on the minds and concepts of their makers. Also, the associations of figures have diversified syntactic patterns, some assemblages form scenes, others are sequences or other kinds of visual associations. The kind of syntax is the expression of

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1 Anati, E. 1968a. *Rock Art of Central Arabia*, Vol. 1. The oval-headed people of Arabia. *Bibliothèque du Muséon*, Vol. 30, Institut Orientaliste, Louvain; 1968b. Vol. 2. Part I: Fat-tailed sheep in Arabia; Part II: The realistic dynamic style of rock art in Jebel Qara, id. 1972. Vol. 3. *Corpus of the rock engravings*, Parts I and II, Id., 1974. Vol. 4. *Corpus of the rock engravings*, Parts III and IV., id. Photographic documentation, stratigraphic analyses and bibliographic references are provided in these four volumes.

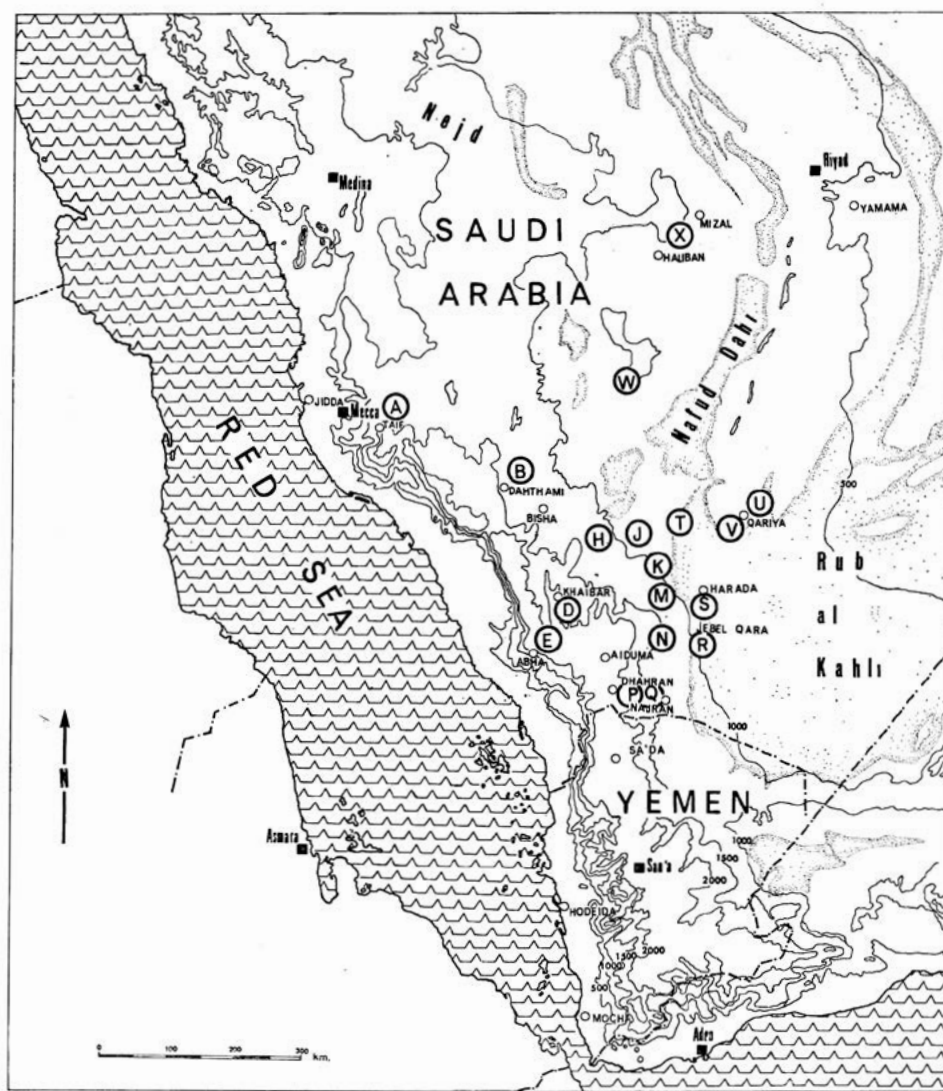


Fig. 1. Map of the sites visited by the Philby-Ryckmans-Lippens Expedition, 1951-52 (Anati, 1972).

the associative system of its maker's mind and reveals aspects of his/her way of thinking.

The relative chronology is defined by stratigraphy, by the succession of phases on the rock surface, according to what is defined "horizontal stratigraphy". Absolute chronology is established by external technical analyses. The results are indicated by dates, according to the occidental system of Before Christ (BC) or After Christ (AD). The social and conceptual implications are reflected by the cultural content of the rock art.

### Research Methods

The work on the rock art of Central Arabia resulted in the four volumes mentioned above, and consists of a study of 232 photos of the *Philby-Ryckmans-Lip-*

*pens expedition* held in 1951-52, representing about 100 engraved rock surfaces.<sup>2</sup>

The methods used for this research, half a century ago, were conceived for its case study. The available sources were photos taken by somebody else, in a geographic area of rock art which at the time was practically unknown and which was never visited by myself. Each photo had just an indication of a site name often non-existent on the then available maps. The dimensions of most of the images were not provided. The approximate size of images could be figured out when photos included people near the engraved rocks. Most of the photos were in black-and-white. No information was available on oth-

2 For details about the *Philby-Ryckmans-Lippens expedition* see the mentioned volumes.

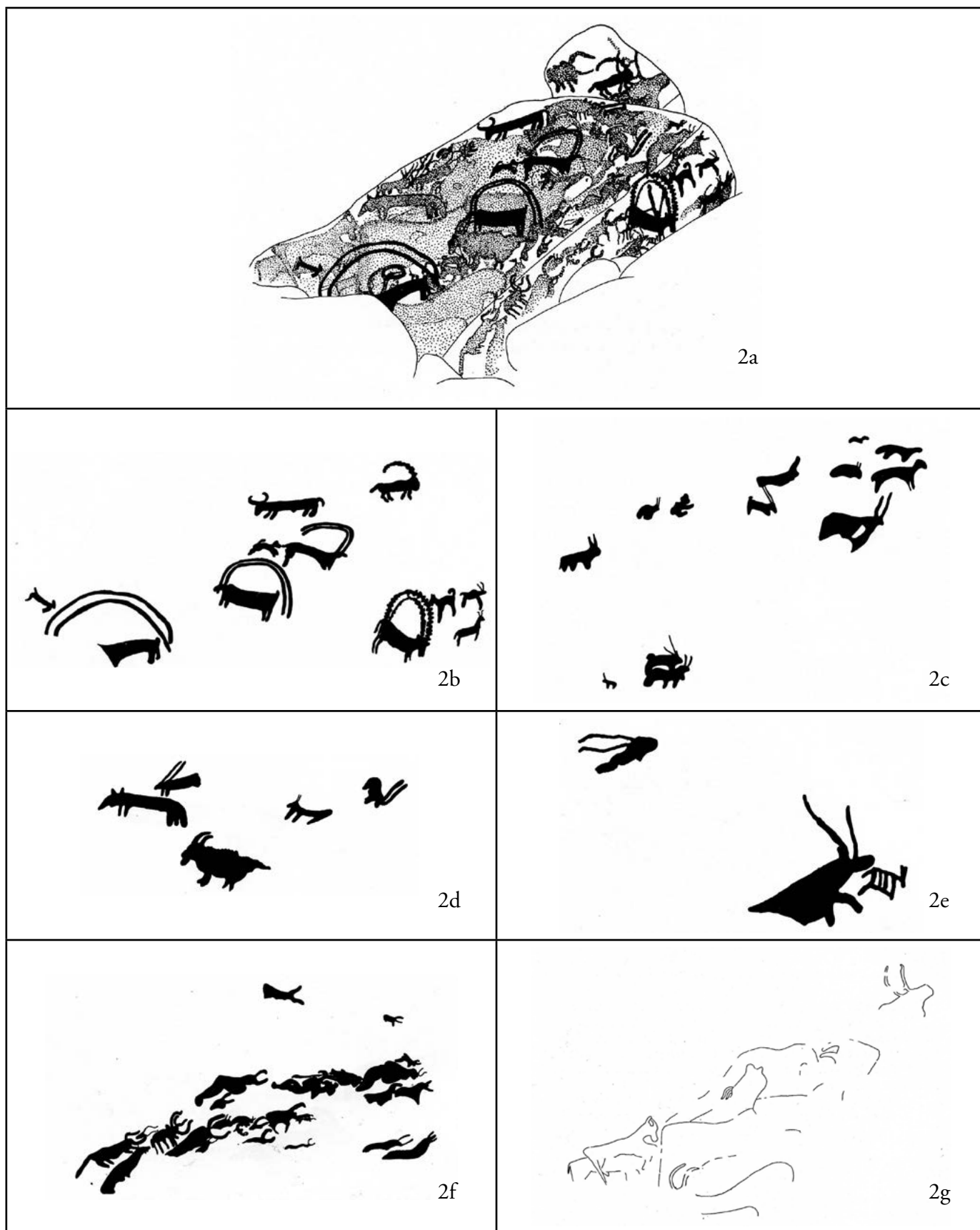


Fig. 2. Dahthami, Summit of hill east of the well. The identification of phases. Nine assemblages display six stylistic horizons, five of them from the Hunting and Pastoral age. Noteworthy is the Dahthami style (fig. 2f), illustrating early herds of cattle and anthropomorphic figures displaying bovine horns. The earliest phase (fig. 2g) is what remains of the Early Hunters, mostly destroyed by the later superpositions (Anati, 1972).



er related archeological finds. In many rock art sites, the tools used for the engravings are found at the foot of the engraved surfaces. In the present case no information was available on the accompanying tools. Also, other finds may be related to rock art sites, such as burials, structures or heaps of stones. No other documentation was available besides the photos. It was a challenging work concerning a photographic archive, the content of which depended on what could be extracted out of it. Each photo could be seen as deserving a caption of five words or as a document providing hundreds of items of meaningful data. Each one of the many overlapping phases of engravings is the result of the action of human hands which are dictated by human minds. Each one has specific messages, but seen all together they could barely be decoded. A way had to be found to study each phase separately.

A method of lighting dimmer-calibration on large-scale projections of transparencies was used to identify and isolate the various levels of the engravings. It included the micro-definition of innumerable cases of superpositions, lines, incisions, engravings, pecking patterns, seen in magnified proportions, thus emphasizing technical differences in the various engravings and permitting the establishment of the succession of overlapping carvings. The method is explained in the four volumes and elsewhere.

The definition of the succession of phases overlapping each other on the same rock was the necessary step for any analytical research. Each level of engravings on each rock had to be isolated, reconstructed in its available integrity, its position defined in a stratigraphic sequence and with its possible relation to the stylistic assemblages of other rock surfaces.

Each phase is the product of specific people, expressing their identity and representing a moment or period of time. As the research has shown, the rock engravings may produce not only descriptions of images and dating, but also history and culture.<sup>3</sup>

Several rock surfaces had such a complex sequence of superpositions that, at first, no clear view appeared of the overlapping layers. Each phase of engraving displayed characters to be defined, the dominant theme,

the degree of details of schematization and of synthetic graphic, the kind of associations, whether the relation between images was that of the scene, the sequence, the association or otherwise. Each phase presented its own typology and style.

The analysis of a rock surface may cause doubts about the stratigraphic sequence. Even when the photographic detail of two superimposed lines of a few millimeters is magnified to the size of an entire wall, sometimes doubts may arise on what is the later line which is cutting the previous one, but when several cases of superposition occur on the same surface the possibility of error lessens. When just one rock surface is being recorded, there may be doubts about the sequence of phases. Two or more surfaces of similar horizons in superposition are more reliable than just one. In the present case, the stratigraphic study concerned some 100 rock surfaces. Stylistic and typological successions mostly repeated themselves in 100 rock surfaces, thus reducing almost totally the possibility of error in the stratigraphic sequence.<sup>4</sup>

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4 Rock art chronology relies on four factors:

1. Stratigraphy.
2. The testimony of evidence by its own content.
3. Stylistic and typological contexts.
4. Technical labs dating of specific spots.

1. Stratigraphy, consists in defining the sequence of execution of different phases of rock art on the same surface. If a figure is overlapped by another, it was done first and the overlapping figure is later. This is establishing the local relative succession of execution on the same rock surfaces. Stratigraphic validity depends on the ability of detecting the sequence according to overlapping, degrees of wear, patination and other factors.

2. The testimony of the context provides details on existing data. If a figured tool or object is recognized as belonging to a certain period, likely it was represented when the object was in use, thus providing its probable age.

3. Stylistic and typological contexts: if the figure of an animal is represented, for example an elephant, the image likely belongs to an age in which that animal existed and was seen. Or if a special kind of hat is depicted, such a detail may be an indication of a time in which the hat was used. Also symbols or ideograms may be stylistic evidence for its possible age: symbols like the cross or the crescent may indicate their age and goal. The degree of naturalism or schematization of an assemblage is another indication of its cultural context.

4. Technical dating refers to specific samples, thus to spots, and relies on the relation between the tested sample and the related rock art. If, for example, some organisms have grown on top of an engraving, the dating of the organism tells us that the rock art on which it grew precedes that date. It does not provide the date of the engraving. Proposing doubtful datings of single figures without identifying their cultural context is unempirical. To make sense, dating should refer to cultural horizons, not to spots on the rock surface. C14 testing provides the dates of the material tested, not of the engraving which is below it. Analyses on erosion or patination processes are so far not seriously reliable.

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3 A wider overview of typological and stylistic meaningful data to identify the social and economic nature of the makers is defined in *World Rock Art* (Anati 2015). The story of near-eastern rock art exploration and research is reported in the chapter, "The discovery of Near Eastern rock art", in my *The Rock Art of the Negev and Sinai*, 2017, pp. 27-38.

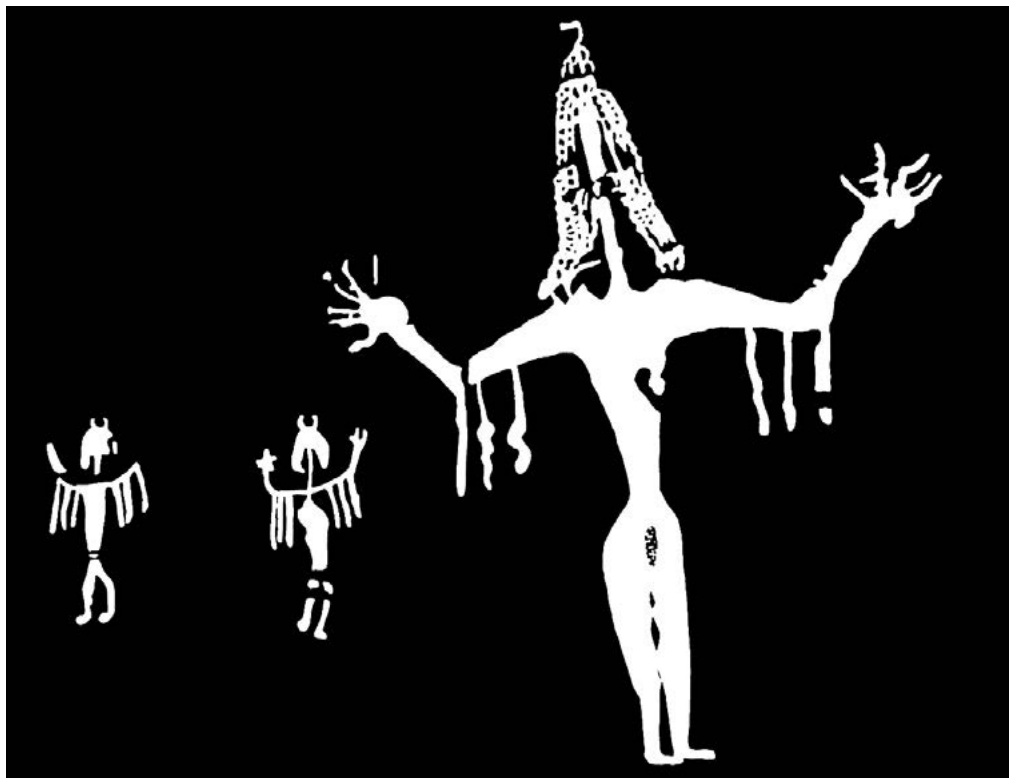
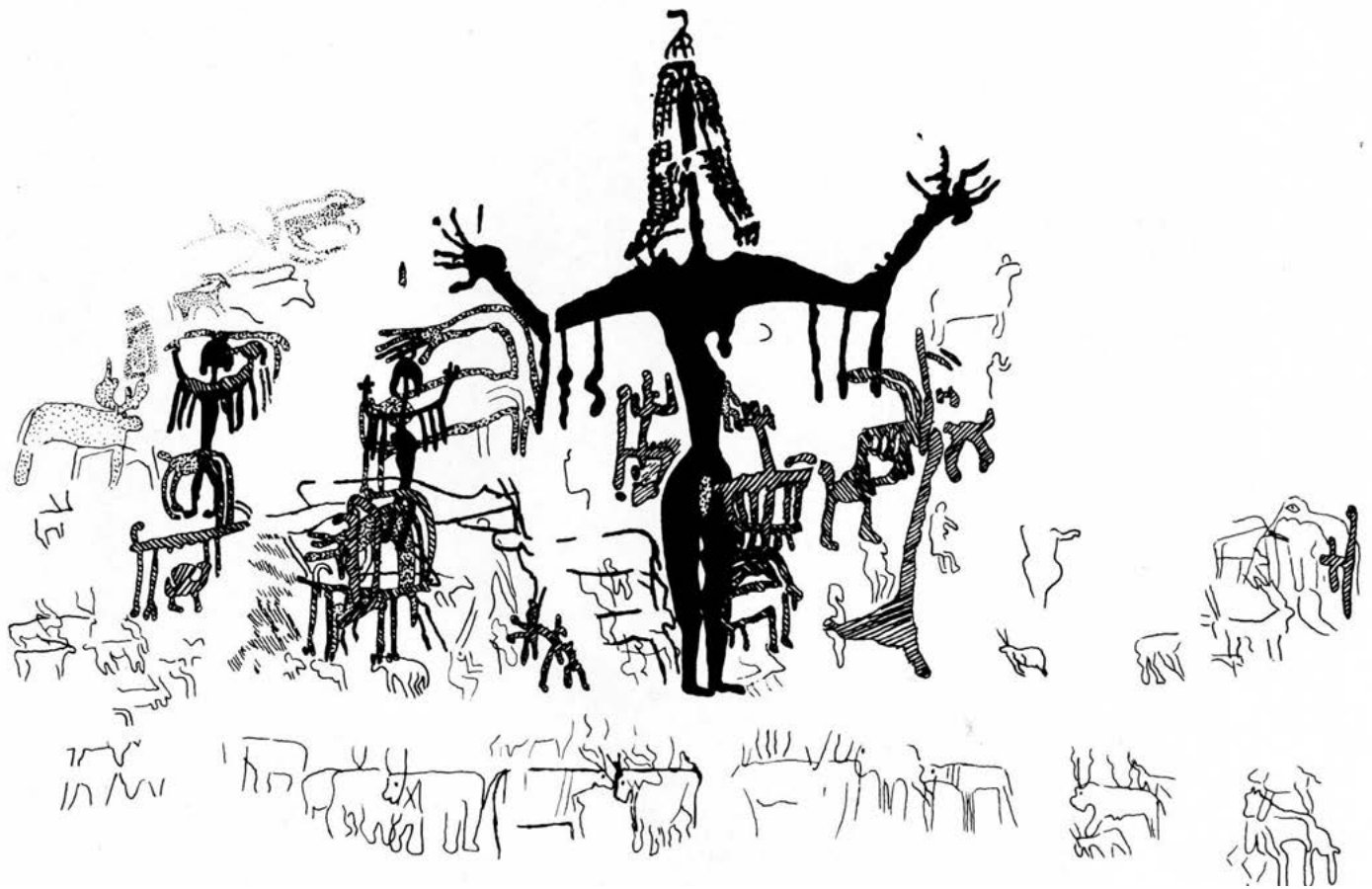


Fig. 3a, b. Qahra small rock hill, 1 km east of Umm Ruqaiba. A rock surface displaying six main phases of engraving, from Literate to Early Hunters. The dominant figure is that of the long-haired female, likely to represent a goddess of the Late Hunting and Pastoral age. The earliest phase amounts to about 60 finely engraved figures, attributed to the Early Hunters age (Anati, 1972).

The definition of phases, each representing a specific episode and theoretically a cultural horizon, is the first operation to conceive a conceptual order. A rock surface having several phases of engravings is like a book with several pages. You cannot read all the pages together. To understand the content, each page has to be read separately. The four volumes were mainly devoted to the definition of the stratigraphy of each one of some 100 rock surfaces. The work of decoding the horizontal stratigraphy lasted 7 years (1961–1967), analyzing several hundred assemblages; it determined 38 cultural horizons, each one with thematic and stylistic peculiarities, representing specific characters and typologies. It provided the sequence of episodes of human presence and their intentional recording on the rock surfaces, each having its style, typology, concerns and motivations.

The main results consisted in the production of a database on the stratigraphy of about 100 engraved rocks. Not one but several early populations of the area were identified for the first time. It also tested the innovative research method of horizontal stratigraphy in rock art, based on a detailed system for the analysis of superpositions, which is now applied in various countries.

To the best of my knowledge no other such detailed stratigraphic analysis of rock art was ever undertaken, and no other stratigraphic sequence of such a number of rock surfaces was ever attempted for the rock art of Arabia, neither before nor after my four volumes.

Some absolute datings were then proposed relying on figures of weapons and tools which corresponded to objects found in excavation levels in Mesopotamia, Syria, Egypt and other near eastern sites. Some of these absolute datings relied upon the data then available and were later modified, like those referring to the beginning of the Neolithic Age, or that of some types of inscriptions. New elements are available about the absolute dating of detected cultural horizons. Absolute datings may still change due to research in progress but the relative succession of cultural horizons, after half a century, remains the same as what was then established.

### The Chronological Framework

The comparative analysis of the stratigraphic succession led to the establishment of four main ages of rock art in the studied area: *Islamic*, *Literate*, *Hunting and Pastoral*, and *Early Hunters*.

### The Islamic Age

All the phases having elements dating after the Hijra (622 AD) are attributed to the *Islamic* age. Some are recent, including *Wusum* or tribal marks which are a sort of signature, acts of presence or of grazing rights over territories. They are still in use as markings on camels and other animals to certify ownership. Animal and human figures are present in all the Islamic phases. The most frequent animal figures are the horse

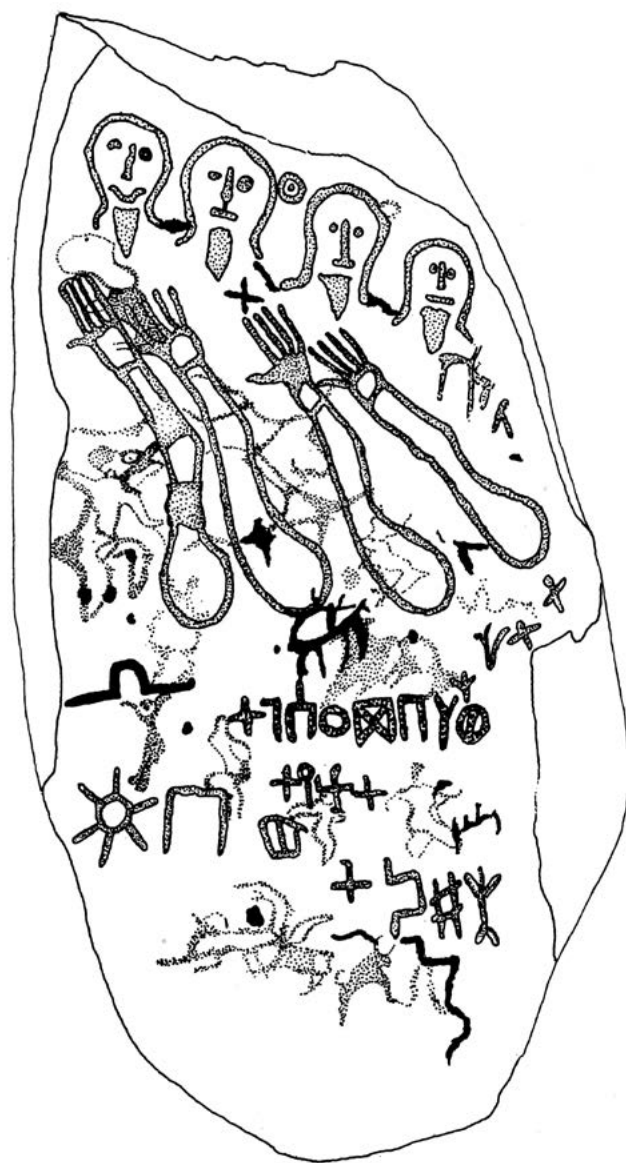


Fig. 4. Wadi Sharia, c. 70 km northeast of Abha. Between previous and successive engravings is a phase of the Late Hunting and Pastoral age named Head-and-Arm style. Four “bearded ancestors” and their arms dominate the surface. Is it a sacred rock? Are their souls believed to be hiding inside the rock? (Anati, 1972).



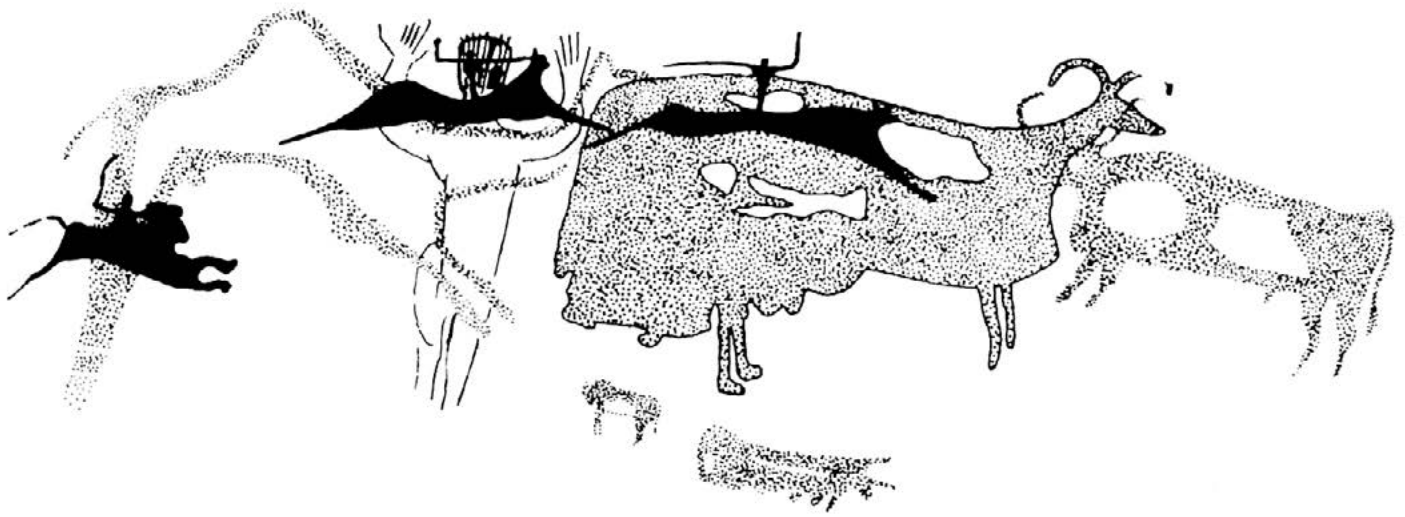


Fig. 5. Ain el-Jamal (or Dhabah) in the Qara range, 9 km northeast of Hima. An example of horizontal stratigraphy. The blackened horse riders belong to the Literate age and overlap four phases of the Hunting and Pastoral phases (Anati, 1968b).

and the camel. Some figures of palm trees and other vegetation are present as well. Inscriptions accompanying these engravings are related to stylistic sub-periods. Also figures of swords and other tools and weapons help to attribute them to specific Islamic phases.

### The Literate Age

The *Literate* age includes the phases currently associated with southern Semitic inscriptions. These are the graphic expressions of people first attested with the spread of local writing in the middle of the first millennium BC or shortly before. They represent an age in which literacy was widespread and many producers of rock engravings were able to write. Thousands of inscriptions with different kinds of script accompany the figures. Both the inscriptions and the figurative styles indicate that the area was colonized both by tribal groups originating from further north up to the borderlines with Mesopotamia, and those originating from further south, up to the coastal areas of the Arabian sea. This mountainous region was a melting-pot of different tribal groups. But it is likely that the presence of pastoral grounds and hunting game may not have been the only reasons attracting people there. What other resources may this region have offered? Could it be spices and drugs? Or what else? Questions about the natural resources of this region remain open.

The most represented animals are the horse, the ostrich and the camel. The horse is attested only in the

Literate and Islamic periods; it does not appear in previous ages. The domestic camel is dominant in these two ages and appeared first in the last phases of the Hunting and Pastoral age; it is present earlier as a wild, hunted animal.

According to the variety of styles, different ethnic groups coexisted. We know, for instance, that a style characterized by galloping horses is always connected to Himyarite inscriptions. Other stylistic patterns are related to other types of writing. Those having no scripts were given names according to the locality where they were found. Some figurative complexes having no scripts may belong to the time-range of the *Literate* age. Within this age, only one subdivision has been made, between the figures related to specific scripts, and those that might either belong to it, or be slightly earlier. In the local charts these two complexes are counted separately but kept in the same classification of the Literate age. The available data should allow more detailed studies of the different ethnic groups represented in this period.

### The Hunting And Pastoral Age

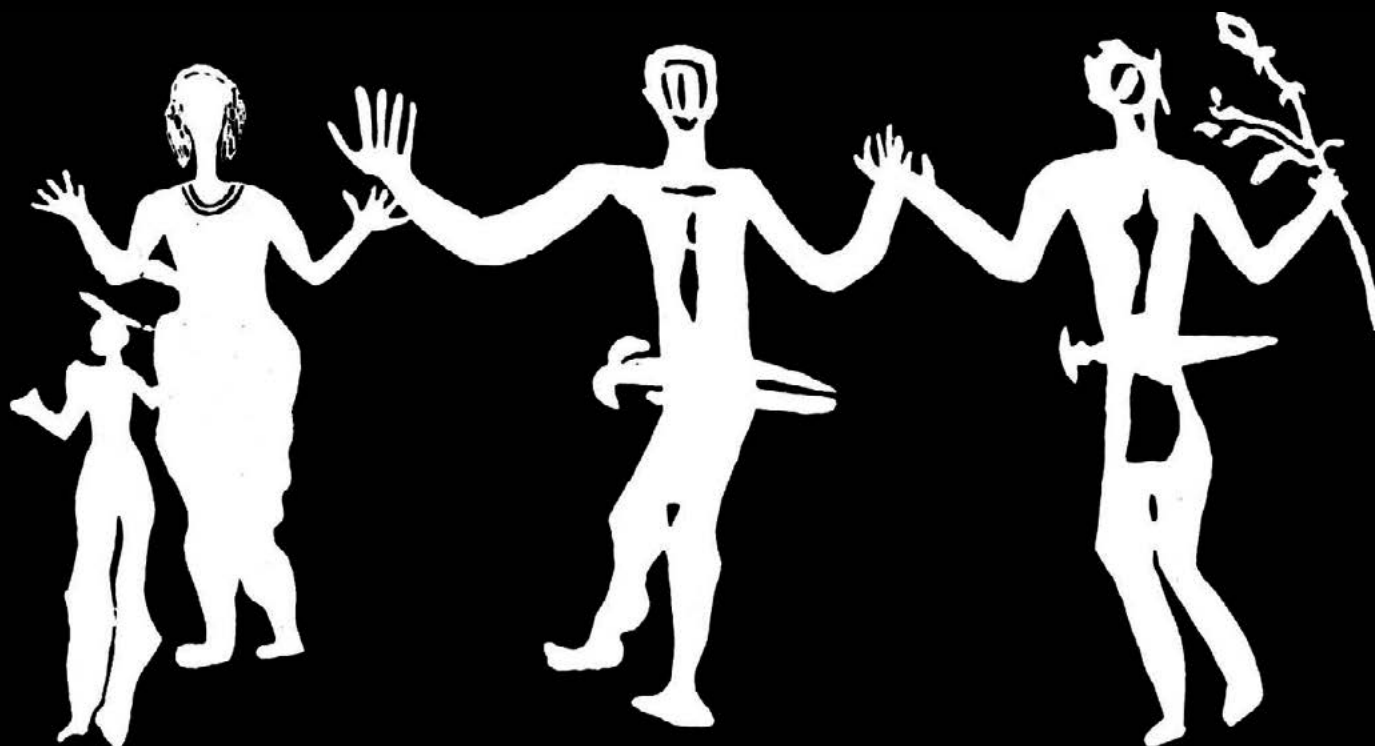
In the *Hunting and Pastoral* age, the rock engravings are the work of non-literate peoples whose represented economic activities are primarily hunting and herding. However, these may not have been the sole economic resources. Furthermore, some sort of proto-literacy may have existed. A few series of signs organized in rows





Fig. 6. Nasla Thaniyya, about 25 km southeast of al-'Ain wells. The central anthropomorphic figure is almost natural size (likely c. 1.60 m high), overlapping a previous figure of the same size. Several spots on the surface indicate stones thrown. The earlier image has figures of praying people with upraised hands on both sides. This early image has a crown-like head-dress; one hand holds a shield and two spears, the other a sickle-sword. The being was engraved twice, intentionally on top of each other. The first was accompanied by praying people, the second has been the target of stone-throwing. Fallen gods may become devils, a process concerning both divine leaders and human leaders. Throwing stones to chase the evil appears to have been an ancient tradition (Anati, 1968a).

Fig. 7. Shaib Samma, south of Najd Harir. This dancing or performing scene shows two male figures, one of them holding a vegetal branch. A woman and a youth participate or observe. As specified in the four books, similar branches, likely to be narcotic plants, appear in Sumerian seals and in other figures of Mesopotamian offerings. The presence of the woman and youth is repeated in other scenes and may indicate the teaching purpose of the image (Anati, 1968a).



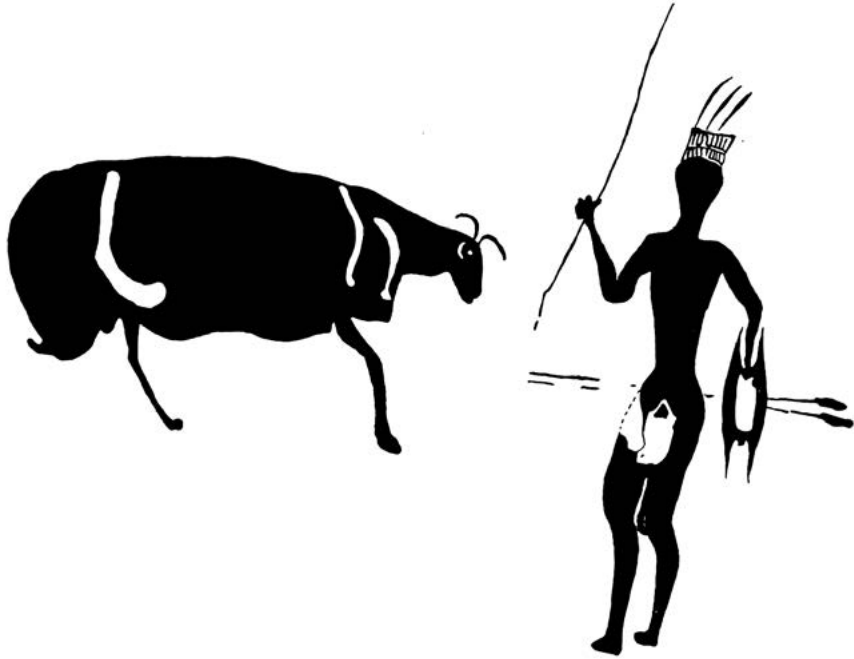


Fig. 8a. Najd Hariri. A fat-tailed sheep is related to the image of an Oval-headed image. The human figure, likely to represent a black man, is dressed with a small cache-sexe, and has a hat or head decoration with two vertical rows of parallel lines and three long feathers. It holds a shield and spears. The assemblages of the Oval-headed people include two different populaces, one displays features and objects related to the Syro-Mesopotamian area, the other representing what appear to be black people probably of African origins. This second group is related to the fat-tailed sheep. Though being in the same region and having similar weapons and tools, the two groups, defined according to their possible relations as northern and southern, may represent two different human groups (Anati, 1968a).



Fig. 8b. Shaib Samma. Comparing the previous figure, two almost identical figures have a similar cache-sexe, similar feathers on their head, and both have a shield and spears. But they display different body features. One has a distinctive stylized face shape, is holding a tool defined as a sceptre, and the other not. One is attributed to the southern negroid group, the other to the northern Mesopotamian. Are they images of the same or of two different people? (Anati, 1968a).

have been suggested to be early undeciphered writings, though no specific study has been carried out on them. This age provides a remarkable variety of styles and typologies, classified into five periods: Late, Middle I, Middle II, Middle III, and Early Hunting and Pastoral. Over 20 typological-stylistic groups have been detected in the *Hunting and Pastoral* age, a long period of many human adventures, having the rock art as the testimony. The variety and wealth of typologies reveals the presence of creative and imaginative societies, and of several human groups each one displaying its own interests and concerns.

The history of this age could probably fill many volumes. It is a history recorded by the direct protagonists, in ancient times, in the form of rock art: the decoding of rock art may bring it back to become chapters of history. A history of forgotten human societies, during millennia, of the so-called “Empty Quarter”, may become a utopian reality.

Some specific styles, likely to represent specific ethnic groups, display a similar style with different degrees of patination on the same rock surfaces, and may have lasted for centuries. Many of the images appear to us as of high esthetic value. This may add to their historical value, as the gift of being attractive to our modern society.

From new analyses, the detected sequence of typologies of this age appears to have started well before 6000 BC, the date proposed half a century ago. The date may change again, but the relative sequence and succession of assemblages remains as it was defined half a century ago.



Fig. 9. Sha'ib Samma. The makers of this scene have rubbed off previous carvings which are hardly visible. The central figure is a male ox which had been reshaped as evidenced by three different pairs of horns, one crescent-like, one curved forward, and the last, small, almost straight. Eight human figures are depicted in the section of surface visible in the photo. Five are women and three are males, all of them exposing their sexual organs, even those wearing a cache-sexe. This composition seems to represent a ritual. The male figures, holding a kind of sceptre in their right hands and a shield and spears in their left hands, are obviously in no position to use the weapons. Four female figures hold their hands at their belts, the exclamation-mark-like sign between their thighs indicating their exposed sexual organs. The different positions held by the men and women and the probable presence of a priestess with upraised hands (only half of her visible in the photo) provide an insight into a ceremony of ox worshipping or sacrifice. As documented in the book, tools and head decorations find parallels in the near-eastern Chalcolithic and the Early Bronze contexts (Anati, 1968a).

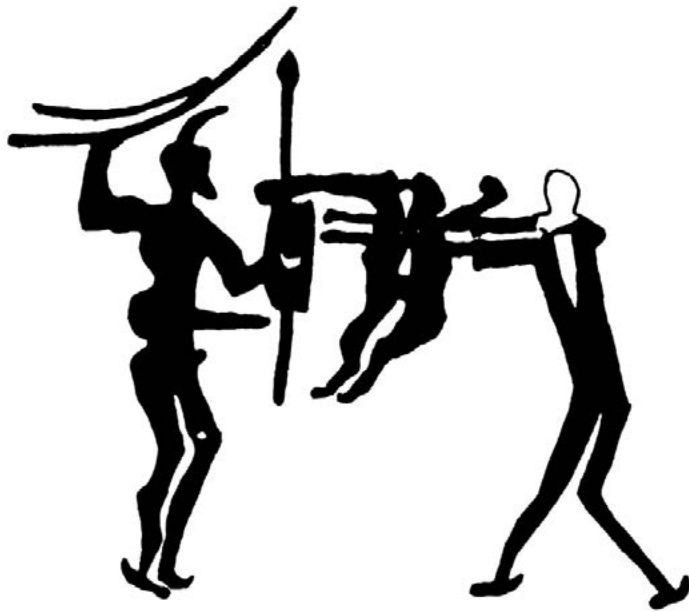


Fig. 10. Baraq Siba east of the eastern tip of Kaukab Hills. Three human figures of the Oval-headed group are marching or dancing, conveying a sense of discipline. Their legs slightly bent give the impression of moving in synchrony. They hold in one hand a sickle-sword and in the other a shield and two spears. They have a crown-like head-dress with varied upright decoration. The parallel lines of the crown are reminiscent of masked figures in the Chalcolithic frescoes of Tuleilat Ghassul, in Jordan. If the objects in their hands are, as it seems, sickle-swords, they are Mesopotamian tools. Sumerian parallels are discussed in Vol. 1, p. 88 (Anati, 1968a).



Fig. 11. Near Khashm Huqul, northern tip of Kaukab Hills in Qara. The big woman and her servant, Oval-headed figures of a large female and a smaller male. The male wears a cache-sexe, holds a shield in one hand and an object in the other. His head-dress has the usual central feather and two lateral protuberances or horns. The female wears a long dress and some cloth coming down from the shoulders on the left arm. The left arm holds a bow and arrow. Around the neck, two parallel lines may indicate necklaces. Is this woman a goddess? The scene displays a case of left-handedness. The male holds the shield with the right and the weapons with the left hand. The female holds the bow with the left hand (Anati, 1968a).





Some typological groups of rock art appear to represent well-organized and well-armed ethnic entities. The presence of shields is an indication that hunting was not the only reason for being armed. Groups of human figures holding weapons and tools are graphically represented in disciplined teams, indicating a planned and structured social organization. Images of datable tools indicates that this mainly happened in what traditional archeology names the Chalcolithic and the Early Bronze Age. The images of well-organized armed teams indicate the presence of powerful human groups and their social and political background. These people were not just hunting and pastoral groups in the middle of nowhere.

Several phases of rock art display a variety of hats and head decorations, some looking like crowns, which are likely to indicate the identity of the holders. Some of such decorations may be the attributes identifying divinities or ancestral spirits, others, the social status of the represented people. Other personal signs seem to indicate the presence of a stratified society. Probably not only tribal groups lived in the area, but also more socially complex cultures. The presence of local kingdoms or emirates, several thousand years ago, is not to be excluded.

The rock art images of known tools, objects and weapons, mainly of Syrian and Mesopotamian derivation, hint at the presence of active relations or trade already

in early times. Various hypotheses are related to what may have been the local items of trade or exchange: mineral or vegetal goods? Precious stones? Some kinds of spices or drugs?

Pastoralism patterns changed in the course of time. Goat and sheep are prevalent in some phases; in one period the fat-tailed sheep is prevalent, in other phases cattle prevail. Several early styles represent large groups of domestic oxen, indicating an age of early streams of cattle herding. It is not clear as yet, how old it may have been. The change in the grazed species likely indicates variations in the foraging resources. This may imply climatic changes. It seems unlikely that large quantities of bovines could have survived in the area in today's foraging conditions.



Fig. 12a, b. Between Najd Musamma and Najd Sahi. An act of offering is described in fig. 12a. On one side is a bearded warrior holding a shield and weapons, on the right an asexual being without weapons is holding what seems to be a couple of small beings, attached to each other. This same couple of beings connected to each other, likely mythical twins, occurs also elsewhere in the rock art of the area. One may question why such scenes are recorded. What was the function of the recording: a ritual act, a didactic function, a means of recording, a meaningless act, or what? Nearby, fig. 12b is a strange combination of two anthropomorphic figures in profile forming one anthropomorphic figure in frontal view. A spirit? The union of body and soul? Again, meaning and function pose questions (Anati, 1968a).

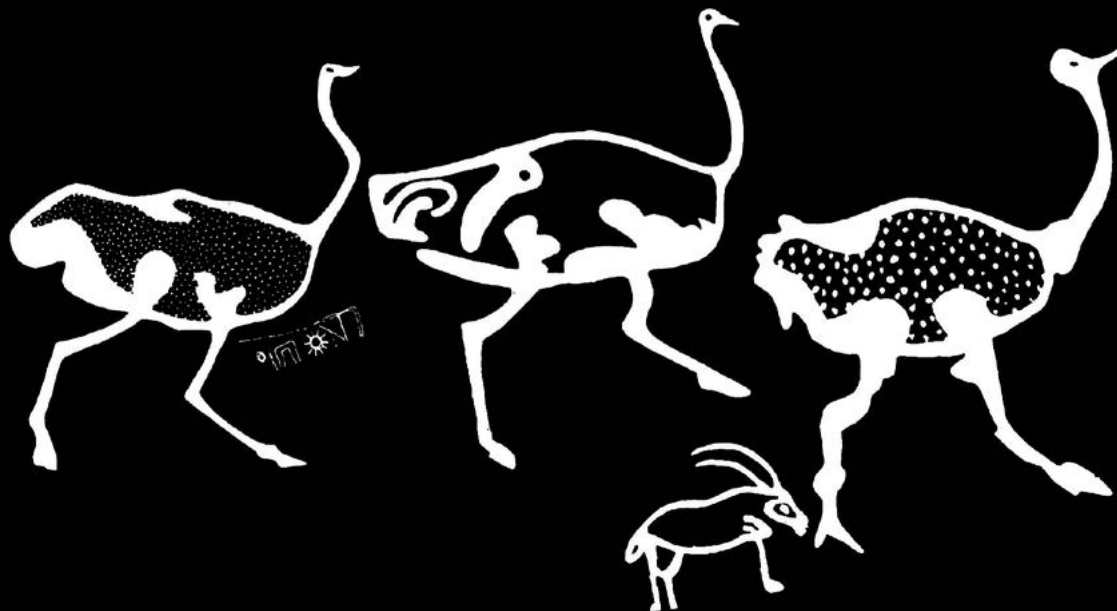


Fig. 13. At the mouth of Shaib Huqul, eastern side. Ostriches may have been easy game. They are frequently represented with figurative details which display a search for esthetics. Apparently people enjoyed producing rock art (Anati, 1968a).



Fig. 14. Shaib Huqul, eastern side. A group of three beings occupies the entire rock surface. The upper human figure, in a seated position, is larger and higher up. A sword with lunate pommel is at the belt. A feathered decoration appears on the head, while on the bosom there is a heart-like shape, probably an indicator of identity. Below, two standing figures, likely females, have long curled hair. Each holds an object which may indicate identity or role: the left one holds a handle with an oval head, while the left one has an elongated object with an s-shaped end. They both have a gigantic toggle-pin at bosom height, as discussed in the book, likely a status symbol. The objects have parallels in Mesopotamia and Syria-Palestine, from the third millennium BC (see Vol. 1, pp. 134-35). The scene seems to show a revered male being assisted by two female servants, probably an emir or other leader (Anati, 1968a).



Some engravings describe social events, like group dancing or performing rituals. Others describe myths and beliefs, showing images of semi-human imaginary beings, revealing aspects of religion and mythology. It looks like people had a rich spiritual life.

Both male and female divinities (or ancestral spirits) appear to have been worshipped. The presence of female divinities is attested in at least two periods. In one phase of the Late Hunters and Pastoral age, large-sized women with long hair and emphasized sexual attributes are shown to be surrounded by smaller human figures. In an earlier phase, the image of an armed woman is accompanied by a male servant much inferior in size.

One of the four books is dedicated to what we named the oval-headed people, a population that probably lasted in the area for several centuries, displaying a rich variety of cult ceremonies and performances. Two different human groups are included in this style. Some of them were black, likely of African origins, and grew the fat-tailed sheep. Another group display weapons of probable Mesopotamian typology, raised bovines and scarified them in their ceremonies.

One of the questions concerns the origins of the fat-tailed sheep, widespread in Africa, believed to have originated in Asia and crossed to Africa from Arabia. Here it appears related to a black people, presumed of

African origins, likely to have crossed from Africa into the Arabian Peninsula.

In some of these engraved assemblages the dominant theme is the human image, in others animal figures, in others again more abstract motifs. This diversity in the dominant theme indicates conceptual diversities. Different people were different also in their cultural background. Likewise, varieties in the associative syntax are relevant. For some, the associative pattern of the images is that of the descriptive scene, for others the association or the sequence of graphemes. This variety of the visual syntax indicates the different ways of thinking, as already evidenced in other regions of rock art.

Hunting appears to have been a major concern of several rock art makers throughout the entire period. Likely, it was a relevant economic resource and also an attractive topic. In the early phases, spears were used; the bow and arrow became popular later. The use of the domestic dog in hunting appears at a certain point of the sequence.

A particular style defined as realistic-dynamic describes

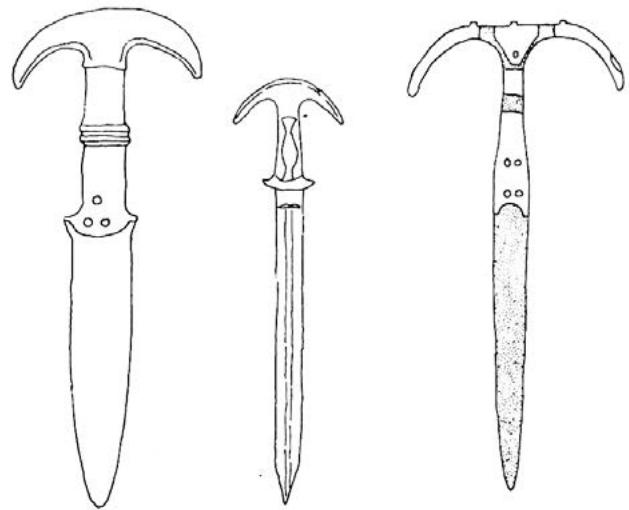


Fig. 15a, b. Bark Al-Sha hillocks, in Shaib Shia.

A. Bearded Oval-headed males are performing a mock-fight. Play-fighting implies fighting as a habit. They wear the usual head-dress of the Oval-headed group. Both have a dagger with the broad lunate pommel of the Mesopotamian Early Bronze type. In one hand they hold a double-convex small bow and an arrow with a trapezoid arrowhead. In the other hand they hold a sickle-sword, another weapon of the Mesopotamian Early Bronze age (Anati, 1968b).

B. Mesopotamian and Syrian metal daggers with lunate pommel from the Early Bronze Age (Y. Yadin, 1963, vol.1, p. 44).



Fig 16. Shaib Musamma, about 30 km north of Hima. The realistic-dynamic style may have covered a time range from the Neolithic to the Early Bronze Age. It does not represent a single ethnic group but a way of life based on hunting with bow-and-arrow. Other styles and human groups coexisted at the same time, representing cattle breeding and other ways of life. At the center of this scene is a small, monstrous, phallic creature with a human body and an animal head, likely representing a mythical being. On both sides a couples of armed men hold ibexes by the legs, probably a ritual. At the extreme left, a woman and a child are watching. The woman seems to be explaining to the child. This rock may have been a prehistoric blackboard for an initiation study class. Is the child learning a ritual? Such figures may stress the role of women in education. Unfortunately, the prehistoric artist did not leave a caption (Anati, 1968b).

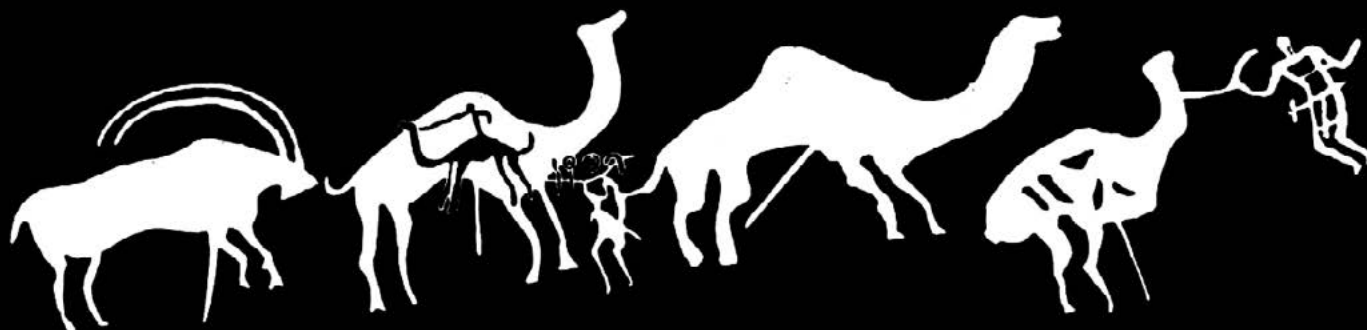


Fig. 17. Shaib Smma. A hunting scene in the realistic-dynamic style, describing four animals wounded by spears: an ibex, two camels and an ostrich. Two men with daggers at their belt use a curved stick or tie to hold two wounded animals. In archeological terms the scene is attributed to the Early Bronze Age. The small figure of a man on camel-back may belong to the Islamic period (Anati, 1968b).



Fig. 18. Shaib Musamma, about 30 km north of Hima. Hunting a camel using bow and arrow in the realistic-dynamic style. The spears wounding the animal have a lighter patina and are later additions. Below the animal there is a mythological being with an animal head, horns and tail, similar to the mythical figures present in other scenes (Anati, 1968b).



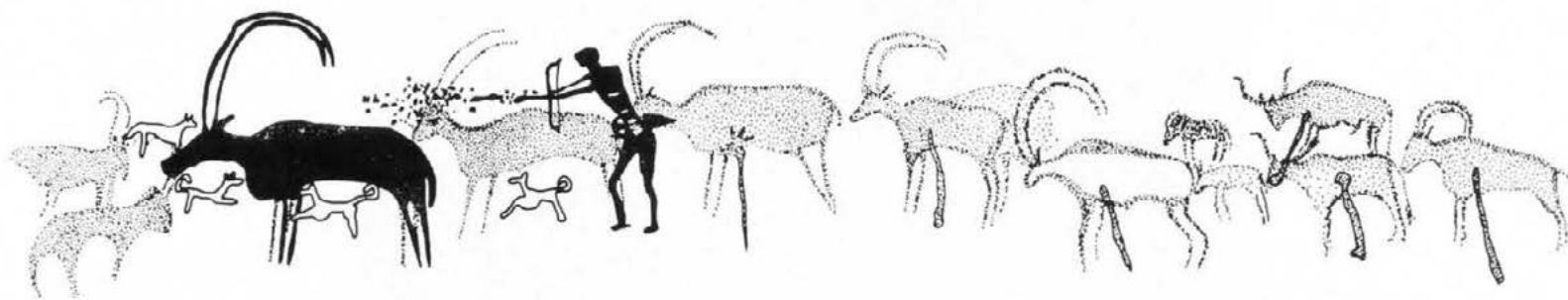


Fig. 19. Shaib Samma, some 10 km northeast of Hima. This impressive panel appears to be over 3 m long. It shows a succession of three phases, having different shades of patina and different composition syntax. Each later phase incorporates figures of the previous phase. *The earliest phase* shows a sequence of at least twelve animals, each one wounded by a spear. *The second phase* changes syntax: a scene replaces the sequence. The arrow replaces the spear. One of the ibexes was re-pecked. Behind it a hunter is added, transforming the static sequence into a simple dynamic scene including hunter and hunted. The hunter uses a double-convex bow and holds the usual dagger at his belt (Early Bronze or Chalcolithic). The arrow is depicted twice, once in the bow and once in flight. In front of the arrow a series of peckings shows the trajectory. This detail, showing the motion of the arrow, is present in the realistic-dynamic style of various regions of Near Eastern rock art. *In the last phase*, four dogs were added, producing a complex scene with three subjects: hunted animal, hunter man and active dogs; they surround the ibex to help the man in the hunt. Both, the conceptual background and the hunting method, evolved in the three phases (Anati, 1968b).

not only hunting scenes, but also rituals, where strange imaginary beings are protagonists. The early phases of this age are characterized by images of hunted animals being wounded, in groups or sequences. Scenes showing humans hunting animals appeared later, indicating a change in the logical process of mental association. The domestic dog, which is generally absent in the early scenes, helps the hunter in later ones.

The documentation was published half a century ago. It offers a vision of the human adventures and life in what was defined as the Empty Quarter, an Empty Quarter that was also empty of history, an Empty Quarter which is full of creative and dynamic life, with a wealth of historical records to be decoded from the rock art.

### Early Hunters

The *Early Hunters* is the earliest of the four ages. The main images are those of wild fauna. A few human figures also appear, mostly naked fat women with conspicuous breast. This age includes at least three different styles, some representing animals of large size, others consisting of almost miniature thin incisions. Being stratigraphically located under numerous later phases, many of their images have been cancelled by the superpositions. They are detected mainly in the surfaces without other, later engravings. Also, some of these thin figures are difficult to detect on the photos

and may have escaped our observation.

In the analysis of the fauna by Prof. Eytan Tchernov, published in Volume 4, Early Hunter levels include images of large-size fauna, like the rhinoceros, the elephant and wild bovines. Such fauna requires a different sort of foraging from the present, indicating an age in which the climatic conditions were markedly different from today. The date of extinction of the big fauna in the region is not clearly established but we may consider that this Early Hunters horizon indicates a rather early date for the beginning of rock art in the region.

### The Cultural Sequence

Several styles have been recorded in each one of the ages. The *Hunting and Pastoral* age is most varied and also the richest in depictions. Many millennia of history of different populations have been memorized by the direct protagonists. As shown in the four volumes, subject matter may vary considerably from one style to another. Each style also has its own typology and figurative patterns, its own approach to scenes and compositions and its own esthetic values. It also has its own motivations. Some may have had an educational purpose, functioning as blackboards of initiation classes for young novices. Others are expression of worship, others again may have functioned as records of events, of agreements or of wish-

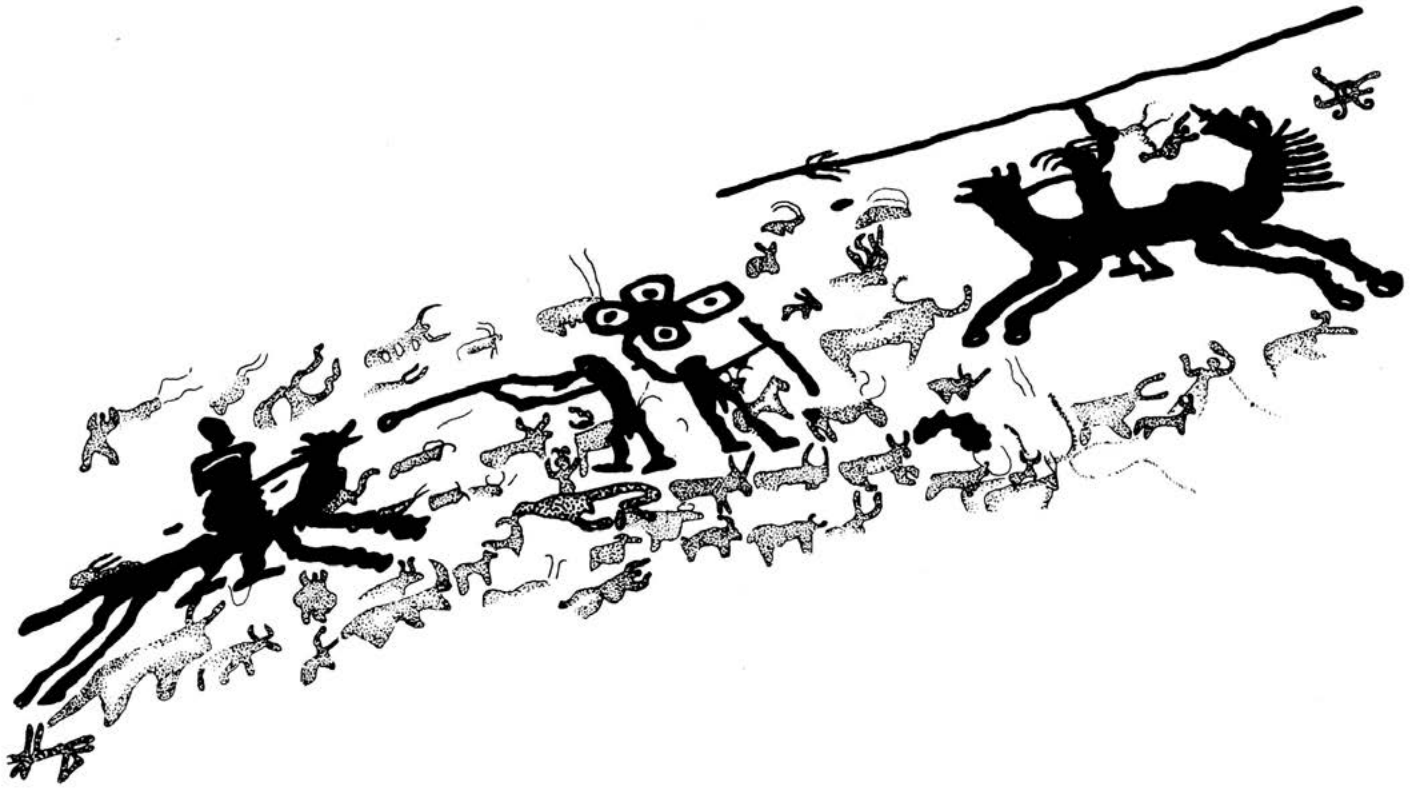


Fig. 20a, b. Hill to the east of Umm Ruqaiba, region of Qahra. General tracing of a rock surface displaying an Islamic description of fight. A blow-gun is in the hands of one of the images. An earlier phase is isolated on fig. b. The Dahthami style is one of the oldest of the Hunting and Pastoral age and does not display hunting but mainly herds of cattle. The image is a composition of 56 figures, 49 animal figures, mostly oxen, one ideogram and 6 human figures, mythological images or masked beings with horns on their heads (Anati, 1974).



Fig. 21. Dahthami wells, top of the hill. Tracing of a rock which includes 14 phases, a sequence of superimpositions covering from the Islamic age to the Early Hunters, a record of well over 10,000 years on the same surface. Each assemblage was recorded separately, each one representing a page of this history book engraved on this rock (Anati, 1972).

es. All of them are an immense source of historical reconstruction. The traditional concept that Arabia was a peripheric secondary area for the history of the Middle East, simply that of nomadic hunting and pastoral people, needs rethinking.

The study of typology, style, chronology and evolution, and of the succession of cultural horizons, is evidence that some styles (and obviously the culture of their makers) may have had relatively long lives, lasting for generations, with various phases. At the same time, different styles may represent different people having coexisted in the area at the same time.

From the study of the oval-headed people we learn that certain styles have a centenary duration and an inner evolution of their own. The makers of the *Oval Heads style* are likely to have survived for ages along with other human groups, each producing its own style of rock art. The study of cultural evolution implies a multidimen-

sional analysis. The main point of departure, always, is the local stratigraphy of the rock surface. Within each local phase, there may appear elements of chronological value such as weapons, tools, ethnologic behavioral information, habits and rituals, physical anthropological data provided by the human figures, and fauna repertory with climatic and foraging implications. In some cases, there seems to be a geographical fluctuation of a style, which may appear first in one region and then in another.

### Conclusions

The rock art sequence classified in this research covers a time range of millennia in which the Empty Quarter was full of life, from the age of Early Hunters, during which images of extinct fauna were represented, to the Islamic age. Chapters of the past emerge from the testimony left by its inhabitants in their engravings.

The recorded documentation provides a source of culture, and a source on the role of the Arabian Peninsula in the history of civilization. The methods of stylistic analysis and the relative stratified chronology are the basis for the compilation of new chapters of history that define the central role of pre-literate people. History no longer starts with writing.

The rock art reveals that several forgotten cultures lived and evolved in Central Arabia and their story is thus being returned to us as a source for the history of civilization. These human groups left their imprints on the rocks, and these may be of the utmost relevance to world history. Like Mesopotamia, Egypt, Greece or Rome, they produced culture, revealed imagination and high artistic skills. Probably they expressed their graphic abilities also on wood and other organic materials, but the engravings on rock are what has survived. The raw materials are available as are the methods, so the work may proceed. Their monuments consist not of gigantic buildings but of precious documents engraved on the surface of rocks, sometimes only a few centimeters in size.

The analysis of density of engravings for the area, as recorded in the four volumes, reveals two major periods of creative exuberance and density, one in the Literate age, corresponding to the first half of the first millennium BC and the first half of the first millennium AD<sup>5</sup> and a period which may correspond to the sixth to the third millennium BC.<sup>6</sup>

Theoretically, it may be presumed that in these areas, these two periods offered better climatic conditions and more foraging resources than other periods.

One aspect of these Arabian rock engravings worthy of further consideration is its high graphic and esthetic value. Besides being of great historical value, besides opening up new research methods in archeology and anthropology, besides being a paramount source of education, they are important and most meaningful chapters of art history. They are the expression of creative and imaginative visual art. Their images will be suitable and useful for museums, exhibitions, cultural and touristic promotions, and educational programs. They are the “Louvre of the desert”.

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5 In terms of traditional archeology, to the Late Iron Age, and the Hellenistic, Roman and Byzantine periods.

6 In terms of traditional archeology, to the Early Bronze Age, the Chalcolithic and part of the Neolithic period.

But the next step is to go back to the raw material recorded in the four volumes, undertaking analyses of conceptual anthropology, turning archeology into history, reconstructing the many millennia of history that the people left registered on these rocks and that research now has the task of decoding. Such work may be undertaken as well in other regions of the peninsula, as so many other areas appear to be wealthy in rock art. Their prehistory may become history by letting the images tell their contents.

The processing system used then, half a century ago, remains an innovative groundbreaking research method. It is a unique case in which the stratigraphic analysis of some 100 engraved rock surfaces provided the documentation for the story of different cultural horizons and people, in an area of Arabia, for a time range covering well over 10,000 years. And it is also a landmark for the history of rock art research. The data collected are fully documented, published and available to all.<sup>7</sup>

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7 As mentioned, the results were published half a century ago by a prestigious and authoritative university press, and no alternative has so far been proposed, either on the method used, or on the stratigraphic sequence and the conclusions reached. I cannot avoid mentioning that a generic denigration of this work was published by a couple of colleagues who may not have read it or understood the content and the results obtained. Their superficial, disinformed and misleading assertions may have had other-than-scientific goals as, besides easy statements, no alternative solid stratigraphic succession of typological phases of rock art in Central Arabia has since been proposed. This unjustified textual aggression could not have been ignored in the present text, but besides these few words as a footnote, we are avoiding additional related evaluations, as the main goal of the present paper is not blasting frivolous criticism, but speaking of historical contents and culture.



# NEOLITHIC ART AND ANIMISM ON THE AVEBURY HILLS OF SOUTHERN ENGLAND

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## Introduction

Religion has long occupied and influenced multiple facets of people's lives, most obviously when worshippers spend time on rites and prayers wishing to communicate with imagined divinities in sky and earth. Early societies additionally perceived a profound sacredness in their living landscapes. From the Neolithic onwards as farming ways and routines developed and became widespread, farmers increasingly hoped to benefit from divine help in order to overcome problems to do with the cosmos, weather, and fertility of livestock and land which they judged necessary if their herds and harvests were to have successful outcomes. Improved fertility of farm animals was continually sought and appeals by women for pregnancy and safer birthing were understandably yearned for. Among accustomed religious beliefs was the notion of animism, whose powers were believed to control, or be factors in, people's lives. Specifically, animism was regarded as a supernatural power inhabiting everything with conscious life, and for that reason having the means to help or hinder human interests. The root of the word animism is *anima*, the Latin for soul or life.

What is more, any objects or geological features, especially those with an outward resemblance to some aspect of a presumed deity or being or animal, were deemed to possess a *numen* or divine power or spirit. Such features, being symbolic images, when rediscovered today can be clues to appreciating aspects of a lost culture formerly laden with highly valued mythical and practical knowledge by the community. This includes, especially, animism in relation to stones, as summarized by Anati (2020: 85-91).

Pointers to specific examples of prehistoric animism lie in the detail of surviving monuments when conceivable symbols and images are present and accessible for investigation. Among possibilities, intriguing evidence survives in distinct classes of creatively retouched megaliths of the British Neolithic and Early

Bronze Ages, which is the subject of this review.

In southern England on the chalk hills east of Avebury, there are many subtly refined megalithic shapes that delight and astonish as they mystify present-day passers-by as to meaning and purpose. Consequently, this paper describes particular shaped stones in this delimited part of southern England that best exhibit discernible evidence of prehistoric animistic belief. We begin by summarizing the archaeological situation as currently known regarding megalith findings across the local prehistoric landscape.

## The Avebury environment

Late Neolithic stone circles and two long stone avenues constitute the most obvious and best-known parts of the World Heritage Site at Avebury in Wessex (fig. 1). The huge stones numbered about 600 when construction was completed in the third millennium BC. They stand on the flattish plain whose winterbourne streams are the headwaters of the River Kennet. Other major constructions on this plain include earthen long barrows and chambered long barrows dating from the Early Neolithic. The plain is surrounded by chalk hills known as downs which occupy the skylines to the east and south of Avebury, as well as Windmill Hill to the north-west. The hills, too, were occupied from the Early Neolithic, as proved by the presence of long barrows. The chambered long barrow on the hill at West Kennet is dated to c. 3630 BC (Whittle et al. 2008).

East of Avebury the heights are known as the Marlborough Downs whose area exceeds 100 sq. km. A part of this expanse is the smaller upland zone of current prehistoric interest (fig. 1) which embraces the downland regions known as Upper Overton Down, Totterdown, Temple Down, Fyfield Down and Mantown Down. In them are six Early Neolithic long barrows and many small monuments dating from the Neolithic to the Early and Middle Bronze Ages with their round barrows.

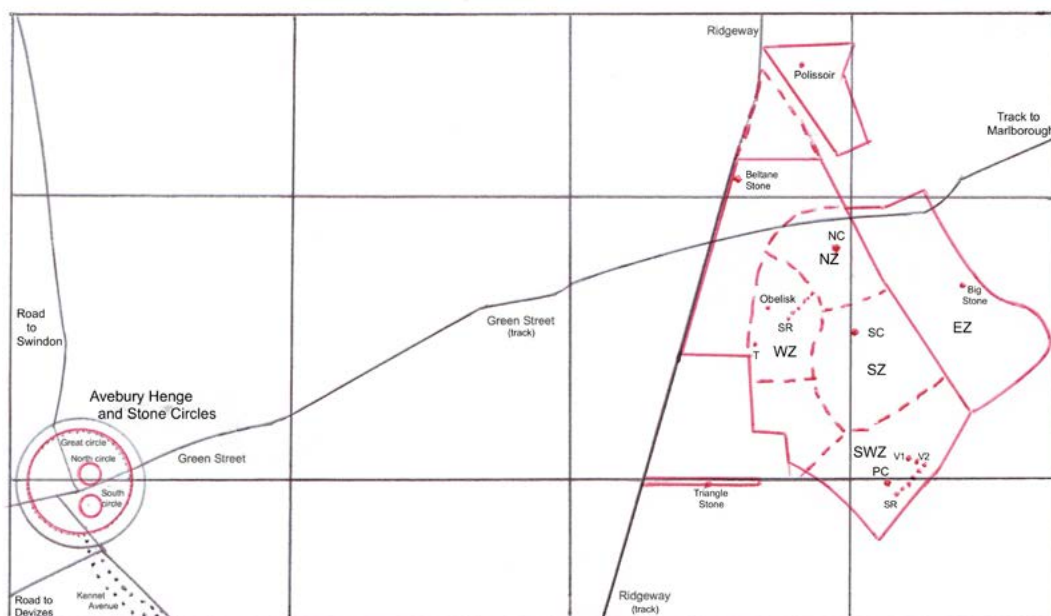


Fig. 1. Locations on a 1-km grid of the upland zones of specific interest (altitudes 210-240 m) in relation to the lower chalklands with Avebury and its megaliths (at altitude 160 m). NC = North Circle, SC = South Circle, PC = Pickledean Circle, ST = stone row; NZ = Northern Zone, EZ = Eastern Zone, SZ = Southern Zone, WZ = Western Zone, and SWZ = South-western Zone.

Within this area is a much smaller tract of 1 sq. km of Upper Overton Down which was a focus of long-term community activity and is the study territory in this paper. In the map of Fig. 1, the primary part is divided into five named zones, in all of which there are positioned or worked stones of various kinds.

For example, at a particular site in the Western Zone is a splendid, 2-m long, narrow, worked megalith which is arguably a fallen, male symbolic obelisk (fig. 2). Close by are two pointer symbolic stones from each of which alignments go to the obelisk and to the solstice sunrises over the nearest ridge. One is female symbolic lozenge-shaped. This three-stone setting looks to be a fourth-millennium prototype of the great obelisk down at Avebury which centres a third-millennium BC stone circle. In the same sq. km on the down there are other simple stone settings, including disturbed stone rows and rings of stone, which together suggest that the hills saw much activity from the Neolithic onwards and which therefore overlap with what was later happening on the Avebury plain below.

In the Southern Zone we draw attention to the female symbolic triangular standing stone (fig. 3).

In both the Northern and Southern Zones, a ring of stones surrounds a small mound, each a tumulus of unknown purpose but inferably sacred and not typical of round barrows of burial character (figs. 4 and

5). The stone rings are now incomplete.

Towards the bottom of a southern slope of the upland dry combe known as Pickledean or Piggledene is a much-damaged stone circle with a fallen centre stone (fig. 6). Additionally, there are many other stone settings or specially positioned stones in this 2 sq. km tract of land.

### The Avebury Stones, the Hill Stones and the Origin of the Sarsen Stones

On the lower plain at the site of Avebury, a start was made around 2900 BC on raising the first stone circle. As further circles were raised over the centuries, this lower area became the most important part of the entire region (figs. 7 and 8).

Each of the first two stone circles was 100 m in diameter. The southern circle was centred by a 6-m high obelisk. After a while, they were enclosed by a 400-m diameter stone circle comprising 98-100 megaliths together with an external, 6-m deep ditch and a high bank outside (Meaden 1999). Next came the long stone avenues, and afterwards Silbury Hill. Compare Figs. 7 and 8 with the plan in Fig. 1. The chalk uplands with their lesser shrines continued in use while all the grand ceremonies took place at Avebury below. The traditional, mineral name for these megaliths is sarsen which is a hard silica-cemented sandstone that





Fig. 2. A worked longitudinal sarsen stone in the Western Zone. In the distance is the ridge that tops the Northern Zone.



Fig. 3. Female symbolic sarsen stone. In the distance, close to the tree, is the ring of stones of the Southern Zone.



Fig. 4. The ring of stones topping the ridge in the Northern Zone.



Fig. 5. The ring of stones that terminates the ridge in the Southern Zone.

was formed in the Eocene on the sub-tropical, chalk sea-floor (Bentnall 1946). It is important to know that early in the fourth millennium BC woodlands were being opened up for the first time, and Early Neolithic farming began in “scattered small clearances” partly for “animal husbandry” (Gillings and Pollard 2004: 23-25). This progressively led to the first fields for arable use and a trend to scrub with wooded areas remaining. The earliest sarsen monuments were the chambered long barrows. The steady reduction of woodland meant that more and more sarsen

stones were coming into view. This was because most of them lay *in situ* as broad, thick, naturally-cracked flattish beds of sandstone rock that were up to a few km long due to lying along the bottoms of the shallow wooded combs on the downs. There were many tens of thousands of these mostly flattish stones. The community thus had a wide choice from which to select apposite stones for cultic purposes. The stones from these fissured beds were of all shapes, and many were polygonal with straightish edges. Because the worked stones of arguably animistic character dis-



Fig. 6. Pickledean Stone Circle in the South-western Zone.





Fig. 7. Avebury henge and some of the surviving stones in the southern quadrant of the 400-m Great Circle and of the 100-m South Circle.



Fig. 8. The quadrants of the 400m-diameter Avebury bank-and-ditch henge. Photo: Pete Glastonbury.





Fig. 9. The great bear in the Northern Zone facing uphill to the north-east.

cussed in this paper are found concentrated only in a small, 1-sq. km area of the extensive Marlborough Downs, it means that wherever any suitable stone had been found in antiquity, it was moved from its find-spot to this particular area, and the features of lithic interest were improved by the mason's hand. This is how it came about that on these hills – but only in the circumscribed region under discussion – there is a collection of megaliths having attributes of interest to believers in animism. These features began as natural aspects, as to shape or other property, that were improved by the community's skilled craftspeople to generate lifelike artforms that accorded with the beliefs of their cult. The work is subtle, and often minimal, but the labour would have been arduous because sarsen stone is very hard.

### The Images

In brief, the motivation for creating the subtle rock images was likely to be animism. The Neolithic hill people established a sacred area of land (fig. 1), on which they also raised three rings of stone,

at least three stone rows, the obelisk setting, many positioned single stones, several paired stones, and probable shrines. Numerous, meaningful, small finds have been found too (Meaden 2014: 96-101).

There are good images representing bear, sheep, sow, frog, toad, beaver, hare, deer, and raptor. Others include, boar, ram, bull, fish, seal, whale, and feline. The few human images that are also present will be discussed with others in a further paper.

The rediscovery of these overlooked images came about as the author noticed more and more modified megaliths during repeated expeditions to Upper Overton Down. One expedition was particularly auspicious – a turning point – and yet on some return visits certain of the images were tricky to see anew. This is because, in order to view particular images at their best, the patient researcher needs to be present at an optimal time of day, usually with the sun shining, and the grass, nettles, bracken, brambles, and gorse kept low by grazing cattle and sheep as happens in most, but not all, recent years.

The first undoubted artform noticed by the author





Fig. 10. The sheep in the Eastern Zone in the light of the midsummer early morning sun.



Fig. 11. Northern Zone: head of a white sow illuminated after sunrise at the summer solstice





Fig. 12. Eye of the white sow. Being a left eye, a sow is implied, not a tusked boar.

was the 25-tonne, crouching, Great Bear which faces north-east. It is close to the nearest part of the north-south ridge of the down (fig. 9). Aspects of the head had been minimally modified by the handiwork of a capable mason.

Nearby was what the writer then suspected could be a white sow megalith, and yet to be entirely sure it seemed that it would really need optimum conditions of sunshine on a better occasion. The sow image is described after the next one about the image of a sheep found on a morning when the most helpful, ideal conditions for fieldwork research arose following a clear-sky sunrise on the morrow of the summer solstice in 1996. This was 22 June after watching sunrise on the high downs. The upper limb of the sun had shown at 4.52, and the full orb at 4.56 British Summer Time.

The first finding that early morning was a well-executed image of a sheep's head in profile on a megalith that was aglow in the low-angle, midsummer sunshine (fig. 10). This is the eastern side of a 1-m-high stone on the upper slopes of the Eastern Zone (fig. 1). The megalith had been transfigured by a sculptor's art into a left-side relief portrait of a ewe, uncannily similar to the sheep in the flock everywhere on the downland all around that day. The stone is bi-colored, given that the sheep's carved eye is sur-

rounded by a broad ochre-coloured patch. Could the sheeplike stone have meant more to Neolithic worshippers than just the obvious spectacle of a female sheep? Is it an example of mythical imagery? Was the stone considered animated, to be addressed in pagan fertility devotion in the guise of a ewe goddess and mother of the flock?

A few minutes later the pig-like stone was reached that had been seen on an earlier occasion and thought might denote a white sow (fig. 11). This time the low morning sun of midsummer week was lighting the stone very differently as to vertical angle and compass direction, and this meant a very positive result. There was no doubt that it was the head of a sow with open mouth and a finely executed left eye made by hard-stone pecking (fig. 12). What enriched the sculptural art so well was the brightness and direction of early-morning sunshine and the limited plant growth.

From folklore and received wisdom dating from the Iron Age and later times we know that a white sow was a hugely popular animal figuration and symbol of the British goddesses Freya and Cerridwen. Was this stone a precocious indication that belief in the white sow had begun very much earlier in prehistory – indeed, up to two millennia before the previously recorded divine sows?

Barbara Walker (1983: 956) in her *Dictionary of Symbols and Sacred Objects* relates that Astarte, Cerridwen and Demeter manifested themselves as sows, while Syr, meaning sow, was one of Freya's names. Freya, a much adored Nordic and Celtic goddess, may well have had an antecedent of similar name in earlier Britannica.

The color of this stone is one of the palest on these high downs and similar to a sarsen resembling a white boar which is also greyish-white and discovered another day a short distance away.

Soon, two more cult images were confirmed that midsummer morning. One was a frog and another a toad, both vivid bearers of water symbolism in ancient times.

The author had wondered on a previous occasion whether the frog-like stone might represent the water-loving animal (fig. 13), but this time he was convinced. The great frog is in right profile when viewed from the south-east, suggesting a bullfrog. By contrast, in what concerns gender assignation, note



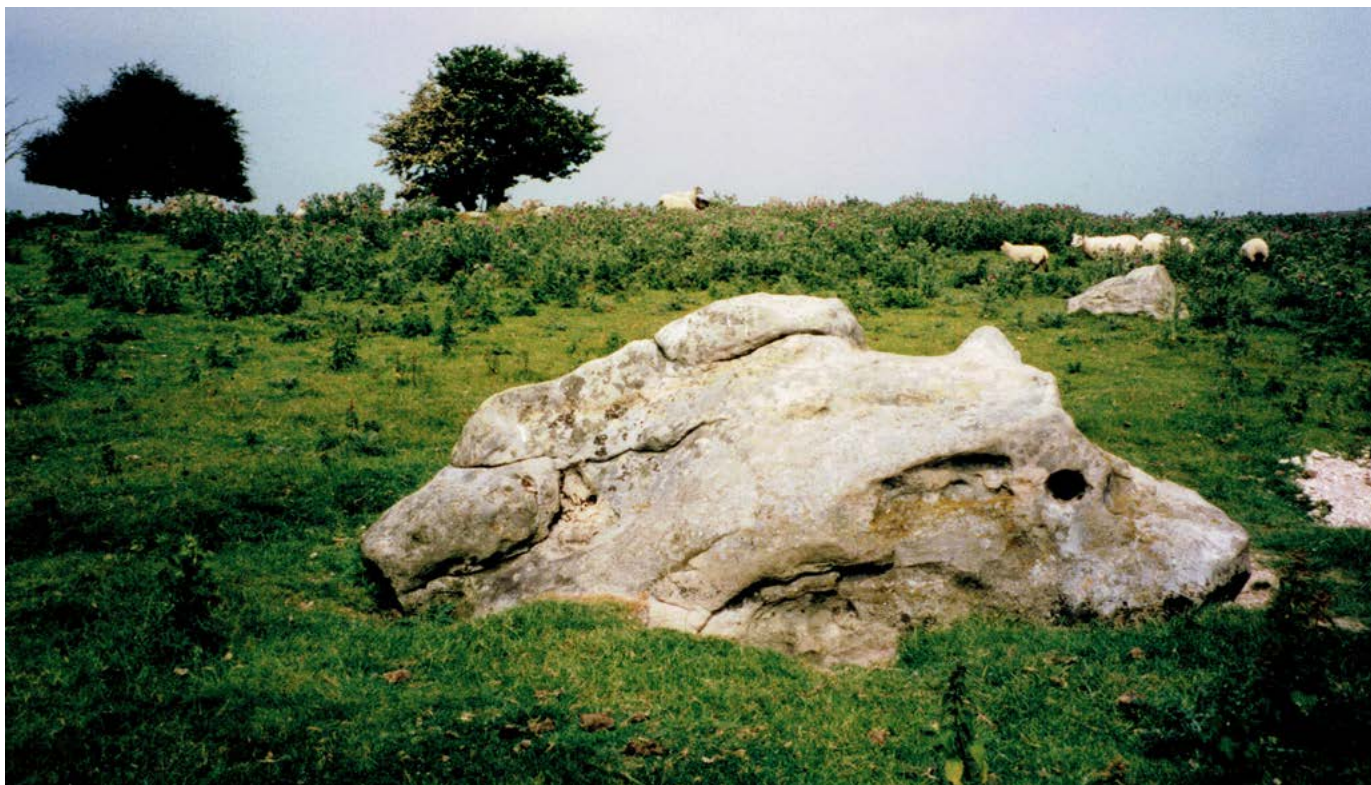


Fig. 13. Northern Zone: The frog in right-side profile.



Fig. 14. The toad in the Southern Zone, looking downhill.





Fig. 15. A beaver in the Western Zone.

that left-side body profiles or heads often imply femininity as with the sheep and sow stones (see figs. 10 and 11). The frog is easy to miss, the optimum angle of view is limited and high grass and nettles can in some years obscure the characteristic features. In the agrarian world of prehistoric fertility rites, the frog is a creature like the bear whose subterranean visits were said to give it knowledge of the world of the earth mother, and because the frog is amphibian it also has access to her water realms. For these reasons it was well regarded for supposed powers of fecundity and as a harbinger of fertility. This explains why the frog was assigned magical properties and treated as an epiphany of the goddess throughout the Mediterranean and European Neolithic world (Gimbutas 1989: 252-256). So, here on these Avebury Hills, the frog is another cult stone watching over the trackways and horizons of the eastern countryside.

On every later expedition the hunt for images was resumed. An early question was, if the last-described stone represented a frog, is the next one (fig. 14) a toad? Being another amphibian, the toad shares in frog symbolism. Its loud croaky voice can warn of or herald potential danger, and as a nocturnal animal it can do so in the darkness of night. So, the animistic toad was another potential guardian stone.

And might this worked stone (fig. 15) evoke the out-

line of a beaver, another water animal?

There are other animal representations, and human heads too, which will be included in a book under preparation, *The Lost World*.

So, next, what of the birds of the sky?

Is this raptor an eagle, or a hawk like the common buzzard? Its carved back imitates closed wings that are primed as if ready to launch into flight (fig. 16). The image in Fig. 17 may depict a red-breasted bird (perhaps, but not necessarily a robin). It faces west. When the sun sets red, the faintly ochre-red breast reddens too. West-facing likenesses or sculptures of birds call to mind universal mythologies that birds are the agency by which souls of the dead are transmitted to paradise beyond the western horizon where the sun sets. This may explain why the rear of this bird-like image looks like an open-mouthed corpse, possibly representing the souls of the dead (fig. 18). This is remindful of the paired stones less than 500 m to the south and on the same west-facing slopes with an open prospect to the far west (Figs. 19-21), that reflect the same functional idea of an afterlife destiny for the souls of the dead. A fuller account is provided by Meaden (2017).

Fig. 19 shows the big stone with an open-mouthed animal corpse lying sideways and a human head with head-dress at the right, turned to the direction of





Fig. 16. A raptor or bird of prey.



Fig. 17. A red-breasted bird in the Western Zone.





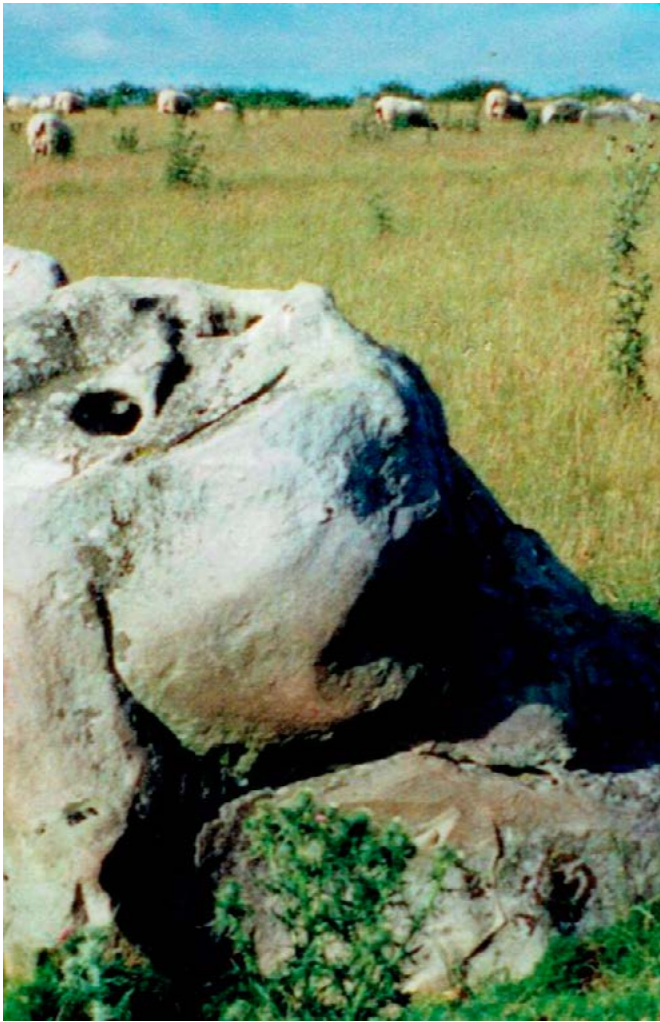


Fig. 18. The rear of the bird-stone is corpse-like.



Fig. 19. The midsummer-solstice sunset death stone (South Zone, facing north-west).

sunset at the midsummer solstice.

The second of these soul stones (fig. 20) in the South Zone bears the right-side profile of a solemn human head (fig. 21), which is angled to sunset at the mid-winter solstice. Again, there is a corpse carved upon the rear of the stone. The author located this second stone by prediction (Meaden 2017). Having noticed the first such stone (the midsummer one in Fig. 19) the forecast was that a second stone had likely also been prepared for the second solstice, at midwinter. This reasoning arose because of known tribal beliefs as recorded by James Frazer (1922: vol. 2: 239) and Mircea Eliade (1958: 136), according to which the souls of people who died during the course of the year were thought to reside in convenient stones or rocky outcrops until some propitious day like the solstices when they departed for paradise, where the sun sets (Eliade 1958: 136-138).

If something similar was believed by the people of the lost world of the Avebury Hills, might these modified rocks be evidence of a similar myth, expressed in stones which shelter souls as repositories until the day and time arrive for departure to a sunset paradise? Such beliefs would comfort a nostalgic community dreaming of paradise, which is a desire not so different from expectations held by advocates of today's world and tribal religions.





Fig. 20. The sculpted image of a lifeless horned beast on the midwinter-sunset death stone.



Fig. 21. On the same stone, facing the midwinter sunset, is a human head in right profile.

## Conclusions

The grand Wessex downland east of Avebury is more than a pleasing, upland landscape. For the ancient communities this verdant land was a magical panorama with sacred sites and scenes, imbued with spiritual values, incorporating a megalithic network of interrelated shaped and positioned stones. All the stones here described stand in a limited zone only 1 sq. km in area. The remainder of the Marlborough Downs (more than 100 sq. km) have been walked and searched but appear to be devoid of carved stones.

The people who occupied these heights likely believed that natural and physical objects, in being endowed with mystical properties, required to be revered in the hope of receiving favors from spirits residing in them. For example, the frog megalith could have been honored when a need for rain was paramount because we know that such practices involving frogs continue today in India and Sri Lanka, for example. The toad stone was thought to be a megalithic guardian which croaked, night or day, at signs of danger when positioned, as indeed it is, alongside a potential ceremonial pathway, at a high point on elevated land having a southerly prospect. The sheep was a core component of the farmer's domain of fertility, meat, and wool, so the megalith was located to receive the full light of the almighty, fertile, rising summer sun. We further add that hundreds of sarsen stones are missing from these

downs, having been split and removed by a commercial stone-breaking industry that continued for over a century. We shall never know how many of these megaliths were image-prepared stones that had served operationally during the animistic period.

Thus, as demonstrated by the evidence of deduced animism in such stones, the hardworking devout Neolithic peoples of these uplands sought success in farming and animal husbandry by developing a reassuring, uplifting spirituality in the stones and lands of their earth mother. Animistic beliefs in Britain are now known to be up to 6,000 years old, and our esteem for these peoples of antiquity rises higher than ever, as we become knowing custodians and evaluators of their art. The beginnings of religion are, of course, another matter. They belong to the remote Middle Paleolithic. As Anati (2020: 199-206) explains “they go back at least 100,000 years.”

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# CLOUDS IN THE PREHISTORIC ART OF THE COLORADO PLATEAU

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The way we see the world shapes the way we treat it. If a mountain is a deity, not a pile of ore; if a forest is a sacred grove, not timber; if other species are biological kin, not resources; or if the planet is our mother, not an opportunity – then we will treat each other with greater respect. Thus is the challenge, to look at the world from a different perspective.

David Suzuki

## Introduction

The ancestral people of the southwest were sincerely concerned about rain for their survival. Whether they were agriculturalists or hunter gatherers, or both, rain brought germination and growth to both plants and animals. To all of the groups discussed herein, their whole world appears animate. Bunzel writes: “Not only are night and day, wind, clouds and trees possessed of personality, but even articles of human manufacture, such as houses, pots, and clothing, are alive and sentient ... All matter has its inseparable spiritual essence” (1935, 483). These people developed a close relationship with clouds that they perceive as spirits endowed with sacred water that is essential for all life on earth. They nurtured their relationships by addressing clouds as *Shiwana*, *Kosinankos*, and *Katsinas* (Keresan), *Uwanami* and *Koko* (Zuni), *Katcinum* (Hopi), and *Hactcin* (Apache), that translate as spirits that bring rain, or rain bringers.

They all composed prayers, songs, and ritual poetry that were passed down through generations. They conducted ritual running events to excite the clouds and draw them out for a race with the runners. The Pueblo groups crafted skin drums to beat thunderous sounds that rose up out of canyons and frightened the clouds into spilling their water. They imagined little invisible beings whose breath of mist concealed them while they threw lightning sticks at the ground. They gave names to the whirlwind who wrapped himself “in a wool of dust”. They conducted ceremonies that strictly adhered to traditions that were based upon

successful performances that pleased the cloud-beings. To the Athapaskans, specifically the eastern Apache, everything, including mountains, rivers, rocks, wind, and clouds, were *Hactcin*, meaning ‘endowed with spirit’. They named the clouds of the four directions who housed lightning and thunder within their bellies. They fashioned bullroarers, wind instruments made of small wooden slats, decorated with symbols of lightning and thunder to simulate the sound of thunder that would draw rain out of a cloud.

## The myths

Emergence myths are the very foundations of every society known to mankind. They all have a beginning story that forms their cultural identity and their moral values and is the structural fabric that regulates nearly every aspect of social behavior. One only has to look at the religious iconography to find the similarities in prehistoric art that may identify the closest contemporary group of people. Religious iconography is passed on through generations, retaining elements of tradition that do not change over time. Though the old worlds of the western, middle east and eastern geographic areas have alphabetic or ideogram written text, so did the Aztecs and Mayans in the New World. What is absent in the American southwest is a thorough study of the iconography of the native people. It is documented in the ethnographic literature and material items displayed in museum archives. Even so, the prehistoric art of this study area is difficult to identify without a broad knowledge of the indigenous foundation myths. It takes diligent research comparing multiple cultural myths to find a commonality with what is represented in the prehistoric iconography.

The following are examples of cloud imagery that span a time from 1000 BC to AD 1300. Their cultural identity is based upon diagnostic elements in the panels, mirrored in the emergence stories that frame the different worldviews of each group. The early Basketmaker petroglyphs (c. 1000 BC to AD 200) are known to be



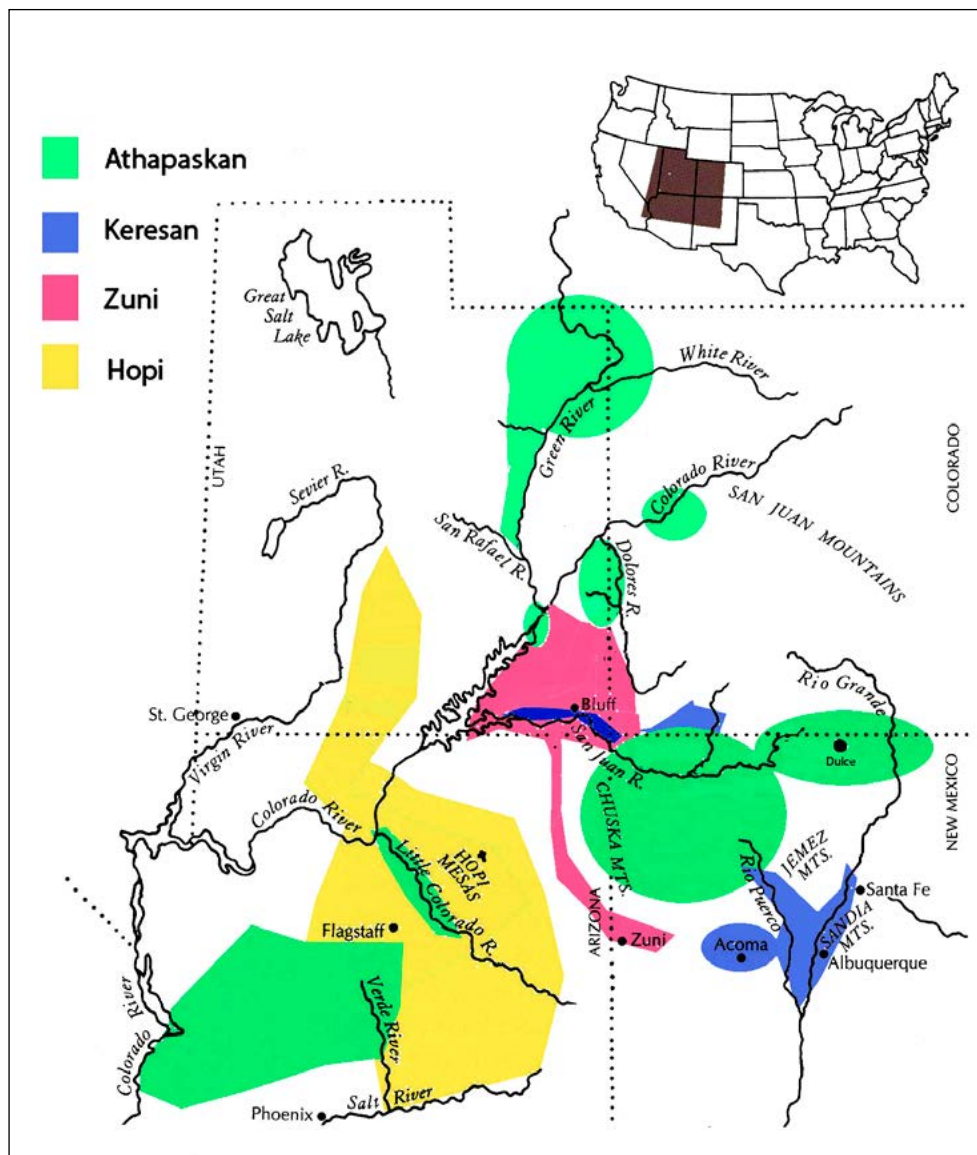


Fig. 1. Study area with cloud images and proposed cultural affiliations.

ancestral Pueblo. They are culturally associated with the western Pueblos of Hopi, Zuni, and Acoma, who give clouds a name, along with lightning and thunder. The Fremont (Athapaskan) petroglyphs of AD 200-900 are subject to the same scrutiny. Their iconography parallels the emergence stories in greater detail, and their use of body gestures and postures are easy to identify. Traditional Apache symbols are abundant on baskets, skin paintings, sand paintings, and clothing, drawing a cultural continuum with symbols of rain, lightning, thunder, and wind, that form components of prehistoric cloud imagery. Archeologists are beginning to acknowledge Athabaskan cultural identity in the

Uinta Basin as one branch of the Fremont.

These four cultures associated with the cloud motifs discussed here are color-coded on this map in a very general manner (fig. 1).

The interpretations presented here are formed through the lens of animism and the cultural context of each group. In this animated worldview, the clouds, the sky, and the landscape form a theatrical setting for creation stories and memory places to the people who lived here.

Rain bringers is a general term for all the cloud-beings. One group depicts them as anthropomorphs with round heads, stick bodies, and arched outspread



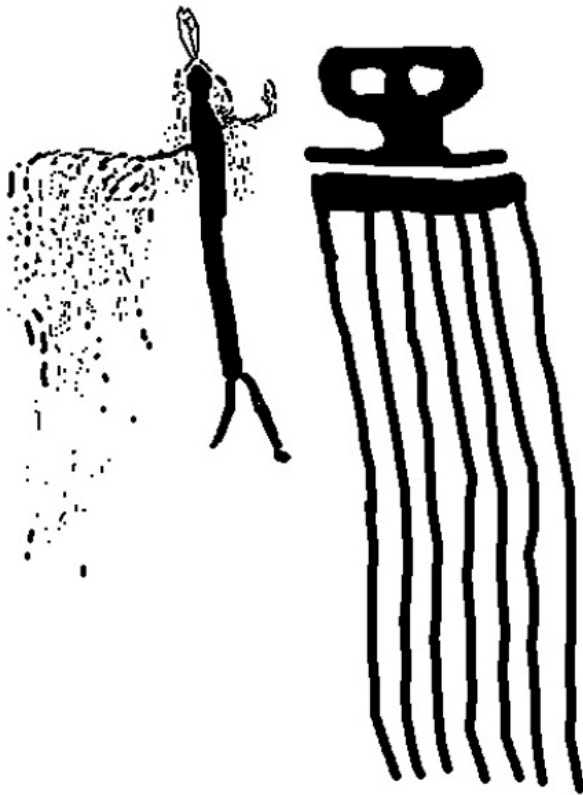


Fig. 2. Rain making ceremony with rain cloud, attended by the slender rain priest with a tall prayer feather rising from his head. He is issuing smoke from his mouth that he blows in front and behind his head. From his arm he is sprinkling sacred water to simulate rain. In his left hand he raises a prayer feather that signals his intentions of praying for rain. The large cloud-being is poised slightly toward him with large open eyes in full attention. His body incorporates the symbol of rain coming down to the ground. (DM)

arms from which rain and lightning descend. The legs with feet morph into lightning 'roots' that go into the ground. Another group sees cloud-beings as full squareish bodies with rain 'beards' descending from between their legs. Still another group sees the clouds as 'cloud houses' with tiny heads bearing a feather on each side. They have a V-shaped body outline with rain, hail, snow, virga, lightning or thunder elements housed inside. The earliest cultural group uses a large outline boxy form with hanging hands and feet in reference to the spirit of the deceased that has become a rain bringer. A more recent cultural group of Hopi cultural association uses ideograms for clouds with symbols of lightning and rainbows attached to them. Hopi clouds are not animate or anthropomorphized symbols of clouds; lightning and rain continue to be represented in their pottery designs, woven textiles, and silver work.

Rain making ceremonies are sometimes referred to as imitative magic. It is thought that by re-enacting rain making' with water, smoke, and sound effects, the clouds will participate by producing rain. Examples include rolling polished round stones called 'thunder rocks' across the floor to 'call the thunder' and imitate the sound of thunder; blowing tobacco smoke in six directions imitating the rain maker's misty breath, and sprinkling sacred water to induce rain to fall (Bunzel 1932, 492).

Cultural affiliation is also determined by geocentric referencing. Both the Pueblo and Athapaskan groups prefer a right-to-left trajectory in their pictorial narratives. There is a subtle difference in their starting point. The Pueblos orient themselves to the north-west, the direction they claim to have come from. The Athapaskans are oriented to the northeast, that may indicate where they came down from. In contrast, the Numic groups (Uto-Aztecan) entered the southwest from Mexico and the Great Basin region and are oriented to the south. Their cultural preference is a left-to-right trajectory. Their cultural colors differ as well. For the Pueblo, a narrative story begins in the north (yellow) and proceeds to the west (blue), then south (red), then east (white) in a counter-clockwise rotation from right to left. The Athapaskan cultures begin at the east (black) and progress to the south (blue), the west (yellow) and the north (glittering). This cultural preference is recited in their traditional naming



Arm gesture = 'sky'  
head + arms + legs  
+ body = 'being'  
fringe = rain  
total = 'Cloud Being'

Arm gesture  
signifies 'holding  
something  
in the belly.  
Space between  
legs is empty.

Arm gesture is  
'reaching up'  
toward the sky  
'overhead' with arms  
clasping overhead.  
Light scattered dots indicate  
light or scarcity of substance;  
'light rain overhead' that didn't  
come down (between the legs).

Dot in the center = 'here'  
concentric rings = 'dispersed'  
Birdtracks = 'sky world'.

Arm gesture =  
'stop'; held back'.  
Birdtrack hands  
and feet = sky domain

Fig. 3. Three anthropomorphic 'clouds' represent one cloud-being in a narrative of rain and no rain. The cloud-being at the top with arms out and arched downward represents a 'sky' symbol incorporation. Between his legs is incorporated the symbol for rain. The rain (beard) is full and touching the ground. Its feet are pointed to the left. The second figure is standing with its arms bent toward its belly, and the rain-beard has stopped coming down. Even lower towards the center is a third figure with arms circled overhead, reaching up to the sky while its 'cloud' body is disintegrating. On the right is a figure with horizontal arms gesturing 'Stop' or 'Hold back'. It has bird track hands that are associated with the domain of birds who live in the sky world. Above are concentric circles with a dot in the center. One circle with a dot means here or in this place. Multiple concentric circles mean to disperse, as the rings disperse outward when a stone is dropped in water. The wavy line attached to it means water and the line with a bird track indicates an exit out to the sky. (JLW)

of their colors, that are assigned a cardinal direction. Their linear trajectory portrayed in their art begins in the east and dips down ever so slightly to the south and rises slightly to the west.

Figure 2 depicts an imitative ritual of a rain bringing ceremony displayed in one simple composition. The gestures combined with symbols of rain and moisture animate the imitative rain making ceremony.

A more complex narrative is displayed in a progression of one cloud's condition that changes over the course of the panel composition (fig. 3). The orientation of the feet of the cloud figure reveals the direction of the narrative. The first cloud has rain coming down through his legs, called a rain-beard. It is full and touching the ground. Next is the same cloud with arms curled around holding its belly and the rain has

stopped coming down. There is nothing between its legs. Finally, the cloud is reaching its arms up toward the sky. The cloud's body is lightly pecked and is dissipating out into the air. The adjacent symbols expand on the idea that the rain and water have been held back using the arm gestures of the stick figure, and dispersed, using the concentric circles. They are combined with a dot for the idea of here or in this place. Added to this is a wavy line for water and a bird track associated with the sky world. All of these symbols provide the context of clouds becoming empty and there being no rain (Patterson 1997, 2020; Martineau 1973, 2021).

All of the components in this panel, fig. 4, are associated with rain making ceremonies, such as the snake dance performed at Hopi and Acoma pueblos. The



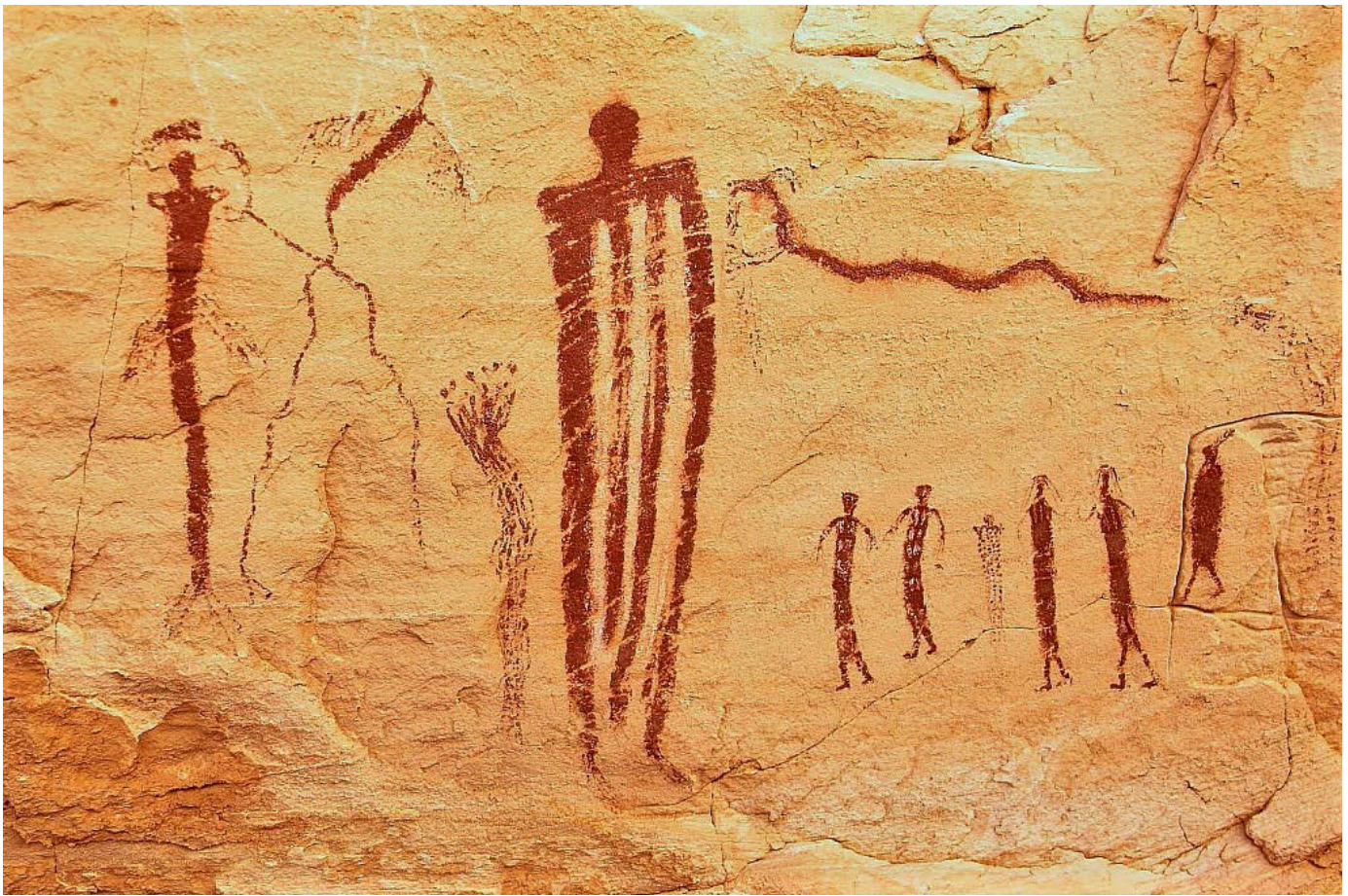


Fig. 4. A narrative of a rain making ceremony with human participants approaching a large cloud-being in the center. The figure on the far right is wearing a tall prayer feather. The next two human figures are tall, holding long, delicately painted, prayer wands. A tiny rain cloud separates them from the next pair of humans who are painted with white dots. A horned serpent is approaching the cloud-being spewing moisture from its mouth. Behind the central cloud-being is a bundle of snakes associated with lightning. A slender being with lightning feet is releasing birds with lightning attached to their tails, imitating the lightning that flies across the sky. (DM)

theme is imitative of rain making elements to entice the cloud-being to release its rain. The two pairs of human figures may represent the actions of single participants of different roles who move in ritual symmetry for this ceremony. The taller figure with a prayer feather is moving back and forth. He is addressing the tiny rain-cloud symbol with his prayer wand. The two painted figures with dots like those of the cloud behind them are also positioned with one lower than the other, that indicates the motion of one individual moving forward and backward. On the right, a single priest-like figure stands still while praying over the ceremony. The horned serpent combines the symbols associated with water, including the moisture dripping from its mouth as it approaches the cloud-being. The scene on the left combines symbols of bird flight

with that of a trail of lightning that flies crisscrossing the sky.

The actors in fig. 5 are imitative of rain bringing ceremonies, with all the necessary components needed to entice a cloud-being to reciprocate their efforts of a successful rain ceremony. All are actively engaged with their individual powers to bring rain. Even their V-shaped feet are imitative of “standing in soft mud” (Martineau 1973).

Examples of cloud-beings with lightning are similar to what can be observed with clouds captured with modern photography, fig. 6. Clouds seem to be standing on lightning feet like the roots of plants that go right into the ground. Pictographs of cloud-beings with lightning feet are found at Little Wildhorse, Buckhorn Wash, and Virgin Springs sites.





Fig. 5. A rain bringer variation with a tall slender figure, incorporating the symbols for sky, rain, and lightning coming from its feet. It is accompanied by one figure holding two long prayer wands. A second stands under a dark cloud with thunder emanating from it. A third is sprinkling moisture from his hand and pees sacred water on to the ground. The fourth figure is carrying a dragonfly spewing moisture from its mouth. (DM)

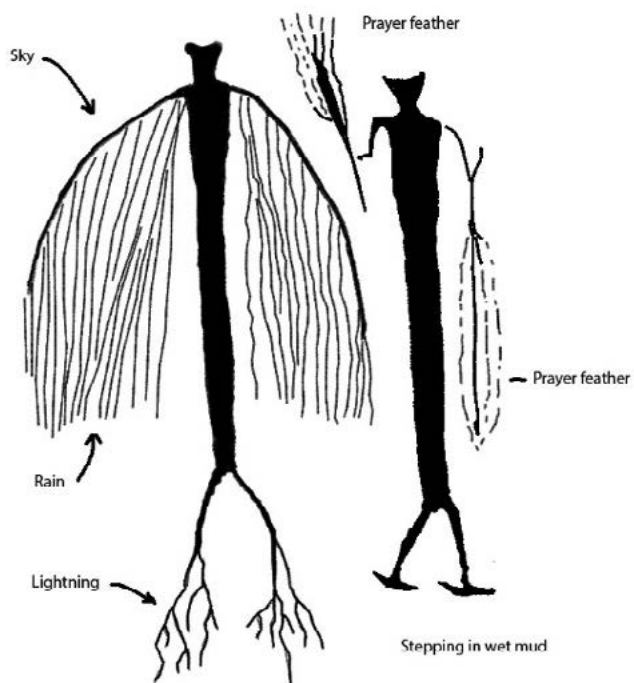


Fig. 6. A drawing of the cloud-being with lightning feet and attendant with long prayer wands, stepping in wet mud resulting from the rain. Photograph of a cloud with lightning. (SB)





Fig. 7. Cloud burst with rain reaching the ground. The identifying symbols include the arm gesture with limbs outstretched and arched representing the sky, and the rain-beard between its legs that reaches the ground level (CP). Photograph of a cloud burst (public domain).

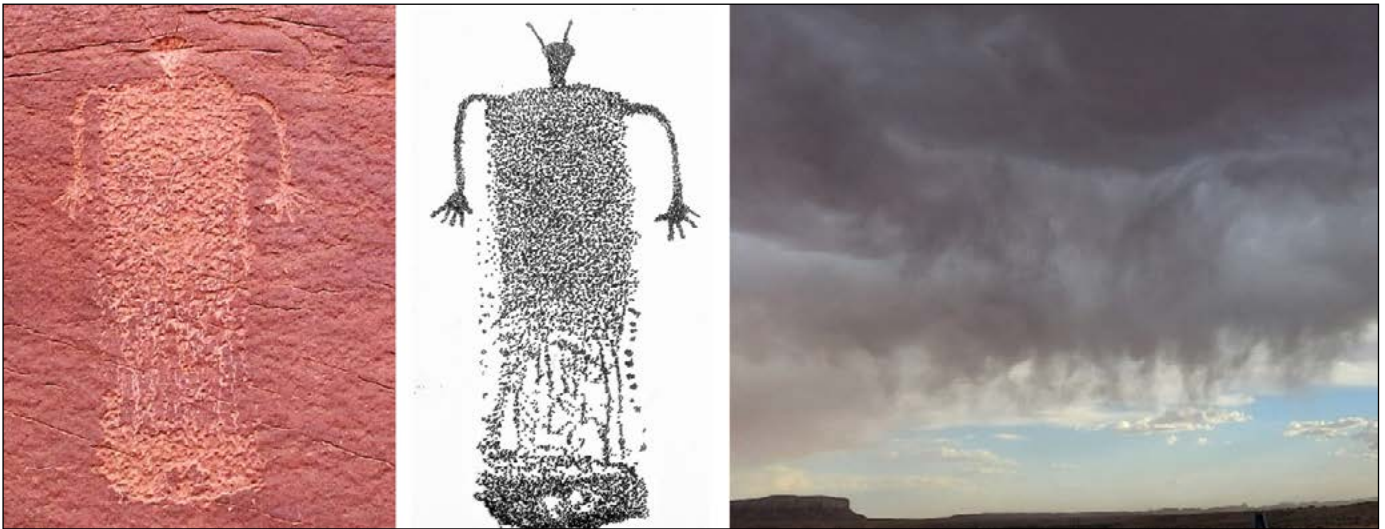


Fig. 8. Clouds with virga streaks of rain never quite touch the ground. This figure has little antenna that are pointed up, a gesture of 'Pay attention'. The arms are pointed down and the hands are flared in the gesture of caution. The ground is pecked in solid, but there is daylight between the cloud's body and the ground. The dots, rather than lines, indicate virga streaks, rather than heavy rain. (CP)

Another variant of a cloud-being resembles the profile of a cloud burst with heavy rain (fig. 7). The feet are flat, level with the ground and the rain-beard reaches ground level. In contrast to fig. 7, a cloud with virga streaks of rain is illustrated by the petroglyph in fig. 8. The arm gestures suggest a downward movement, but the flared fingers on the hands signal caution, or halt. This combination cleverly portrays the unique way in which virga rain comes down from inside the cloud and stops before hitting the ground. It either evaporates, or in some cases, goes back up into the cloud.

### Clouds and rainbows

Clouds with rainbows are found throughout the study area. For the Pueblo cultures, rainbows are ladders that the Katsinas (rain bringers) use to climb down to the earth. The Pueblo people paint the four colors of the directions in a ladder motif across the face of the rain Katsina masks. Some use only black-and- white ladder motifs. The ladder hanging from the cloud-being in fig. 9 and fig. 10 represent rainbows. Both maybe depictions of clouds with virga that are often accompanied by rainbows.

Hopi petroglyphs of clouds and rainbows are found



Fig. 9. This cloud-being has a very sparse rain-beard between its legs that does not touch the ground level where his feet are. It has a ladder hanging down from its belly. Ladders represent rainbows used by Katsina spirit-beings that can travel down to earth and back up again. Rainbows often appear in front of exceptionally light rain showers. Photograph (SB).

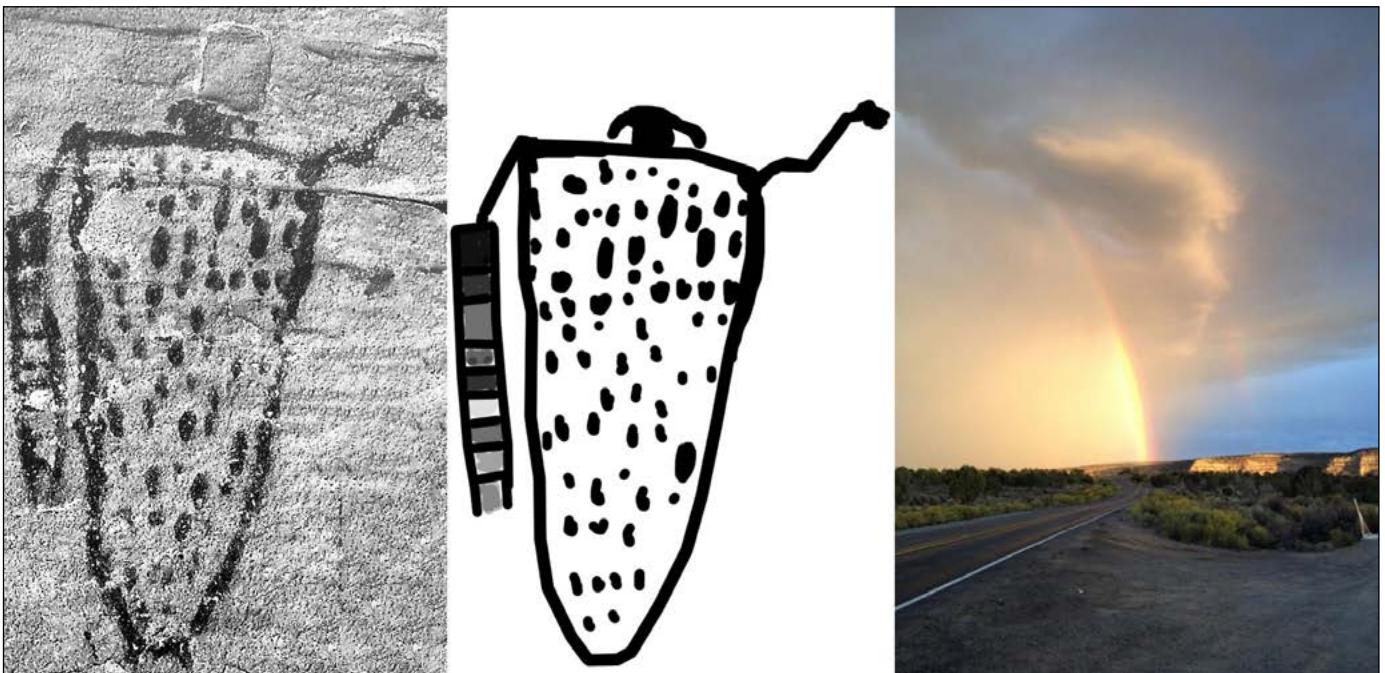


Fig. 10. A cloud-being with light rain holding a ladder, symbol for a rainbow. Photograph of a cloud with virga and rainbow. (CP)





Fig. 11. A and B are petroglyphs of clouds near Holbrook, AZ. A, depicts a terraced cloud, with a vertical ladder and diagonal zigzags lines representing lightning. B, depicts the terraced 'snow' cloud symbol bisected by a pole ladder, a metaphor for a rainbow. C, is from Tutuveni, a Hopi site that depicts rain cloud symbols above a corn plant. Note the roots extending over the edge of the rock symbolizing "going into the ground." In the center is a photograph of a pole ladder used in prehistoric times, (Cow Canyon Museum). The pole ladder has the same profile as the one shown in the petroglyph B. D, is a small section of a mural that depicts a snow cloud and a rain cloud that demonstrates the cultural continuity of Hopi traditions with these two cloud symbols. (The "Massive 48-Foot Mural for the Hopi Exhibition at Dallas Museum of Art, Dallas, Texas 1/9/2018") (CP).

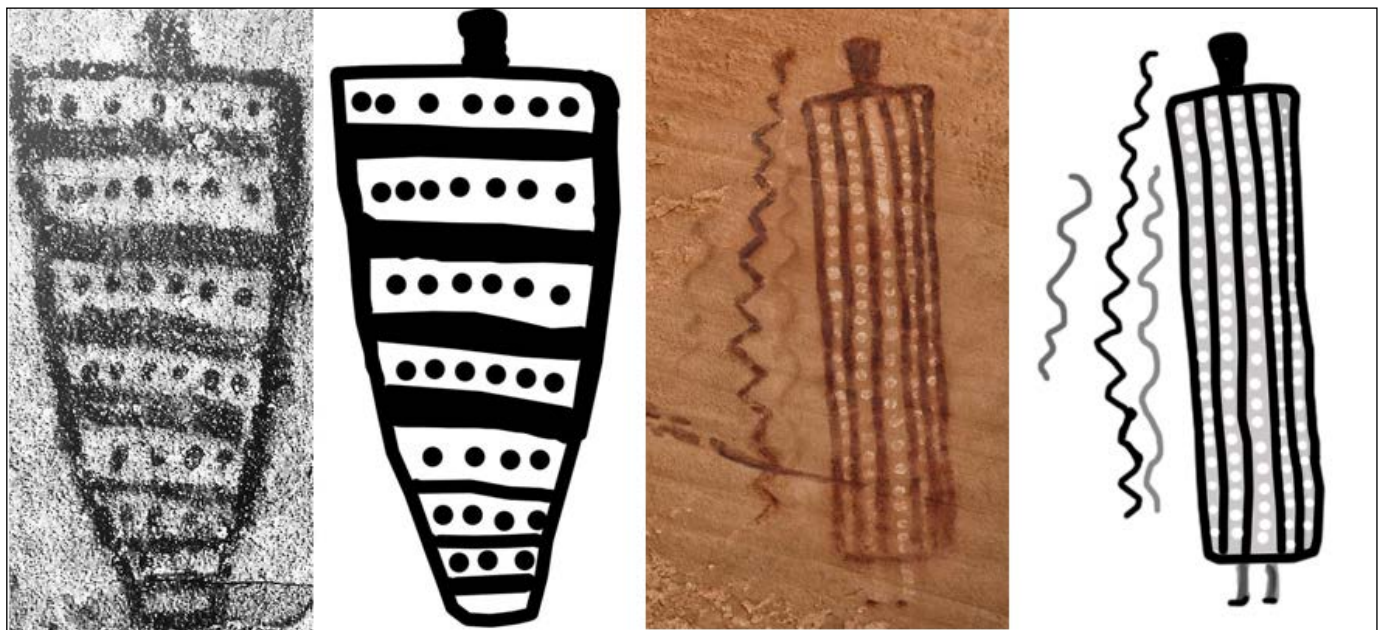


Fig. 12. Cloud with lightning and hail, described by a Zuni informant as "ribbons of hail" (Bunzel 1932). Hail is depicted by round rather large dots representing hail stones.





Fig. 13. Pictograph of a cloud-being variant (with ears) has its arms outstretched and light rain coming down from its arms but heavy downpour from its body. The tall ears mean that it is 'listening' to the prayer messages of the hummingbird approaching on the left. The 'lightning snake' under its arm is stimulating the rain to fall. It resembles a passing storm cloud that floats by, leaving a lot of water in its wake (CP). Photograph of a cloud with lighting and rain (SB).

south of the Hopi villages near Holbrook. Clouds are portrayed with symbols and are not personified. A snow cloud is the terraced symbol, while a rain cloud is rounded half circles joined together. Other Pueblos have adopted these symbols in their contemporary graphic designs on pottery and textiles (fig. 11).

The depiction of hail clouds is very rare, owing to the fact that hail is detrimental to gardens of agricultural groups like the Zuni and Keres. But not so for the hunter gatherers. Hail is beneficial for wild grasses whose windblown seeds drift across the landscape before a storm. Hail stones create tiny potholes in the soil leaving a small ball of frozen water to hydrate any seeds submerged by the impact (fig. 12).

The cloud-being in fig. 13 combines the symbols of a snake associated with lightning with the hummingbird, believed to be a messenger with prayers to bring rain. The outstretched arms with rain and full body of rain descending looks very much like the storm cloud with lightning pictured on the right.

### Kersan myths

The emergence myths of a culture can bring to life the stories that have been written on the stone walls. The following are examples of cloud-beings, described in the Keresan emergence stories with names and personalities of each one. The *Shiwana*, *Kosinankos*, and *Katsinas* (Keresan), *Uwanami* and *Koko* (Zuni) are from the stories recounted in ethnographic texts, and the Keresan diagnostic elements from an early Basketmaker II panel are published previously in Patterson (2018, 2019).

The Katsina panel (fig. 14) named by Native people is said to represent Katsinas or rain bringers. It depicts a Keresan Pueblo emergence story of the first man created, called Koshari, who teaches the people how to conduct a rain ceremony and by incorporating a little imitative magic. The Koshari is pictured on the far right with his hair tied up in cornhusks. He makes a drum that when struck with a baton imitates the sound of thunder that comes from clouds. The sound of thunder is shown rising up from the drum. He calls

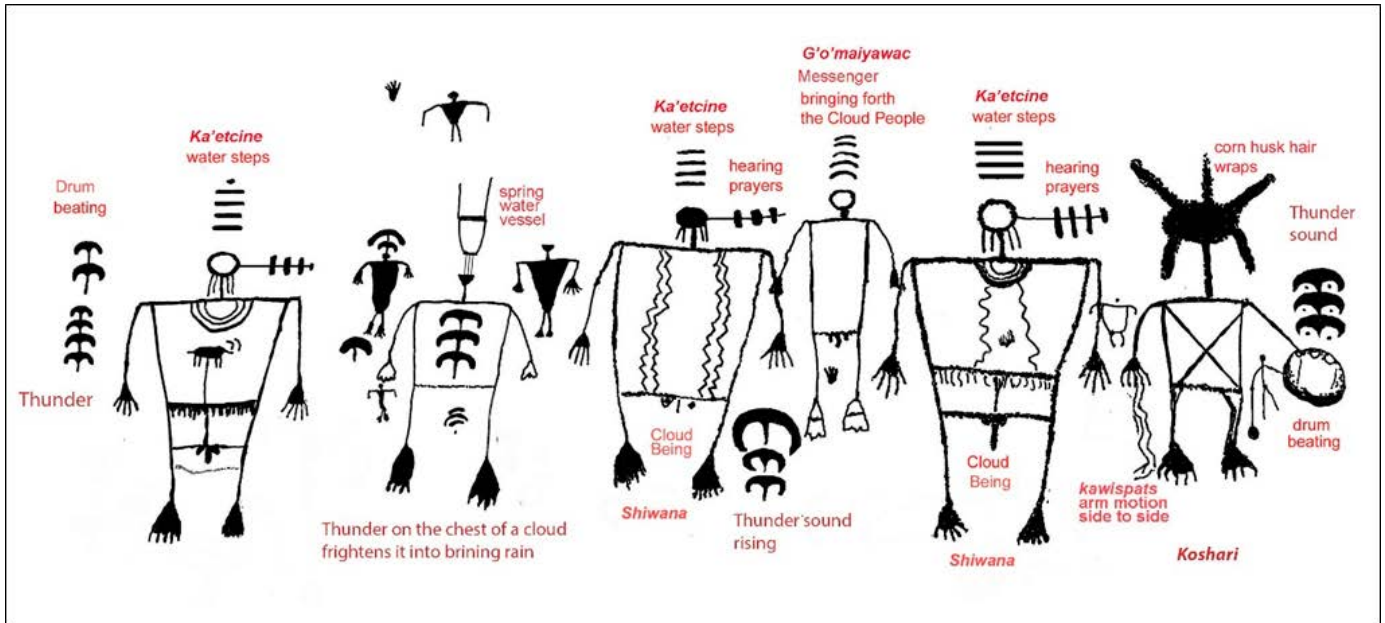


Fig. 14a. The Katsina Panel, located on the San Juan River. These cloud-beings of the Basketmaker II era are simple outline forms with a posture of hanging arms and legs; a spirit being, not a living being. The flat lines over their heads are called water steps, called *Ka'etcine*, the steps cloud-beings take down from the sky. The vertical bars attached to the left side of their heads represent sound bars that go into their ears. Lightning is running down their chests (CP 2018).

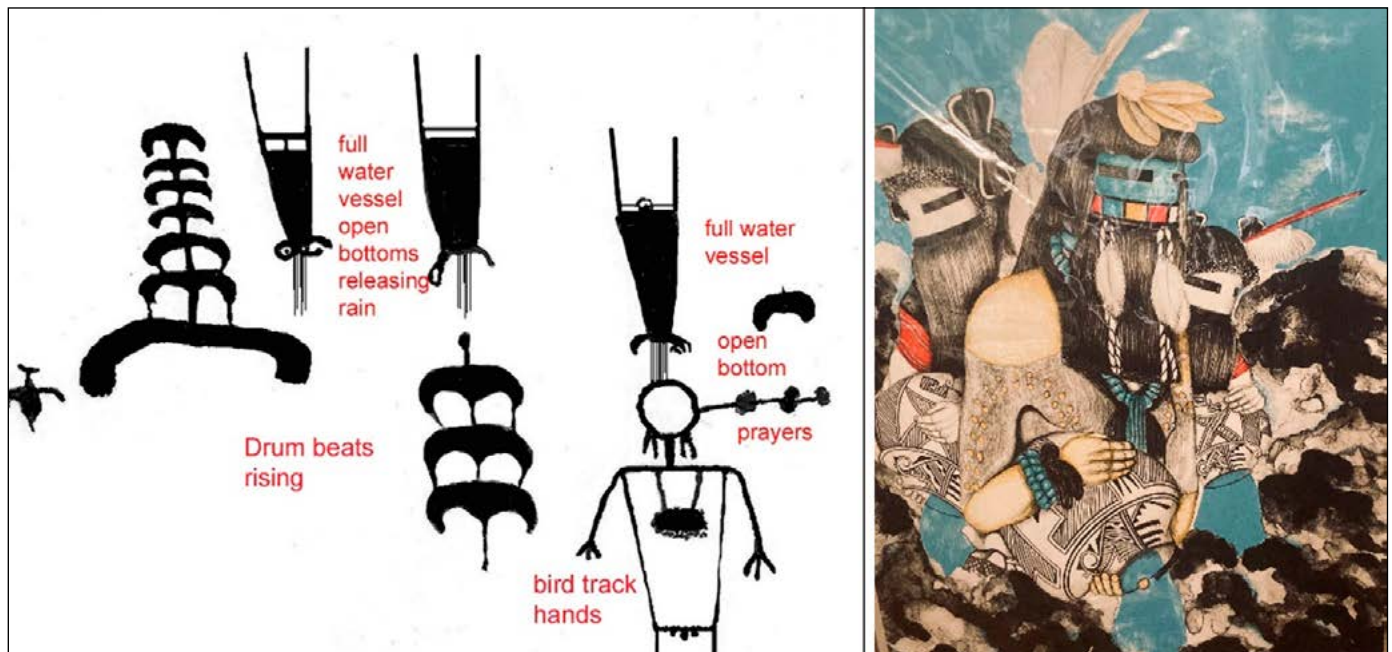


Fig. 14b. The far left end of the panel showing the water vessels opening up and rain falling out of the bottoms. Thunder is rising all around, causing the cloud-beings to release their water. A contemporary painting illustrates this concept of cloud-beings with water vessels pouring out the rain through the cloud (CP).

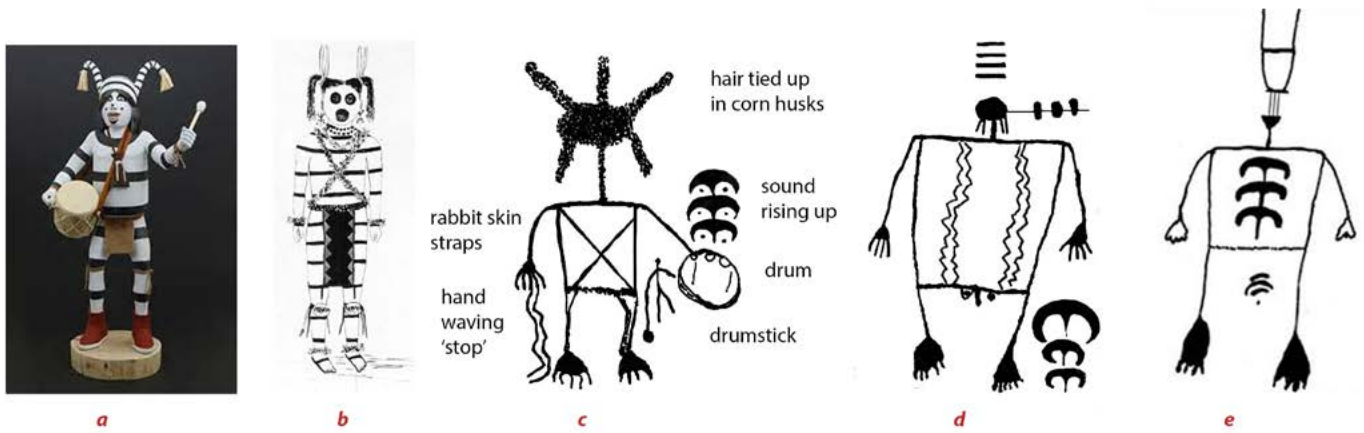


Fig. 15. a) The Koshari Katsina with a drum and a baton. b) Keresan Koshari with rabbit skin bow straps and his hair tied up with corn stalks. c) Koshari and his drum in the Basketmaker II Katsina Panel, with Koshari demonstrating the use of a drum to create the sound of thunder. The symbol for thunder is the arcs that are rising out of the drum he holds. d) The sound of thunder is shown on its own, rising up next to a Shiwana with lightning going down the front of its body. e) Shiwana with the symbol of thunder beating on its chest and frightening it enough to release the water in the vessel above its head.

on messenger Katsina from ‘many skies’ above to bring forward the cloud-beings called Shiwana. The vertical bars attached to the left sides of their heads represent sound bars, the words or songs of prayers, that go into their ears. Lithophones are oblong stones that ring like a bell when struck. They are found strung together in prehistoric kivas of the Keres and Tewa. They were identified by an informant as kiva bells used to call the priests to the kiva (Brown 2014). They are shown here to represent calling the cloud spirits to come down. The symbol for lightning is running down their chests. The sound of thunder is rising up from the ground and then on to the chest of a cloud-being with a water vessel shown hanging above its head. The far left of the same panel (fig. 15) shows the water vessels opening and rain coming out.

The Keres have the oldest tradition for rain bringing Katsinas. They have basically two Katsina societies, one for rain making and one for making medicine. Their creation myth begins with “In the ‘beginning’ Iatiku created the ‘first man, the Koshari’ who was already a self-proclaimed expert in rain making and taught the people rain making ceremonies with dance and song accompanied by a drum and rattle. He was equally confident in knowing everything about medicine” (Stirling 1942, 45). These two societies are represented in the early BMII panel (Katsina Panel), with the Koshari figure holding a drum and rattle for rain making, and having bear claw feet, the iconic em-

blem for medicine and curing.

The Keres express their relationship with clouds by naming them *Shiwanna*. The lightning is caused by the *K’oBiticiaya* who hide in the clouds by piling up the mist to conceal themselves. They carry lightning bolts that they throw down to the ground. The *Shiwanna* live in the west and the *K’oBiticiaya* live in the east (Stevenson 1890; White 1932a).

Koshari taught the people how to make the sound of thunder. (Stirling 1932; Stevenson 1890). Thunder is not a spiritual being. It is a sound associated with lightning and comes from within the clouds. The depiction of thunder coming out of the clouds is illustrated in fig. 16. It combines a cloud-being issuing thunder out of its head and from its mouth. The panel reads from right to left, using the illusion of two clouds that are small in the distance and are much larger when they arrive. They project the rumbling sound of thunder out from their heads. Curiously, we call clouds that rumble thunderheads.

The Keres also describe the *K’oBiticiaya*, who are little cloud-beings that live in the east. They hide behind the mist and vapor of clouds. They carry lightning sticks that they throw back and forth behind the clouds, or down from the clouds to the earth.

Keresan altar paintings show them associated with lightning and rain. Symbol combinations of rain and lightning and the little faces of the *K’oBiticiaya* are used on Katsina masks.



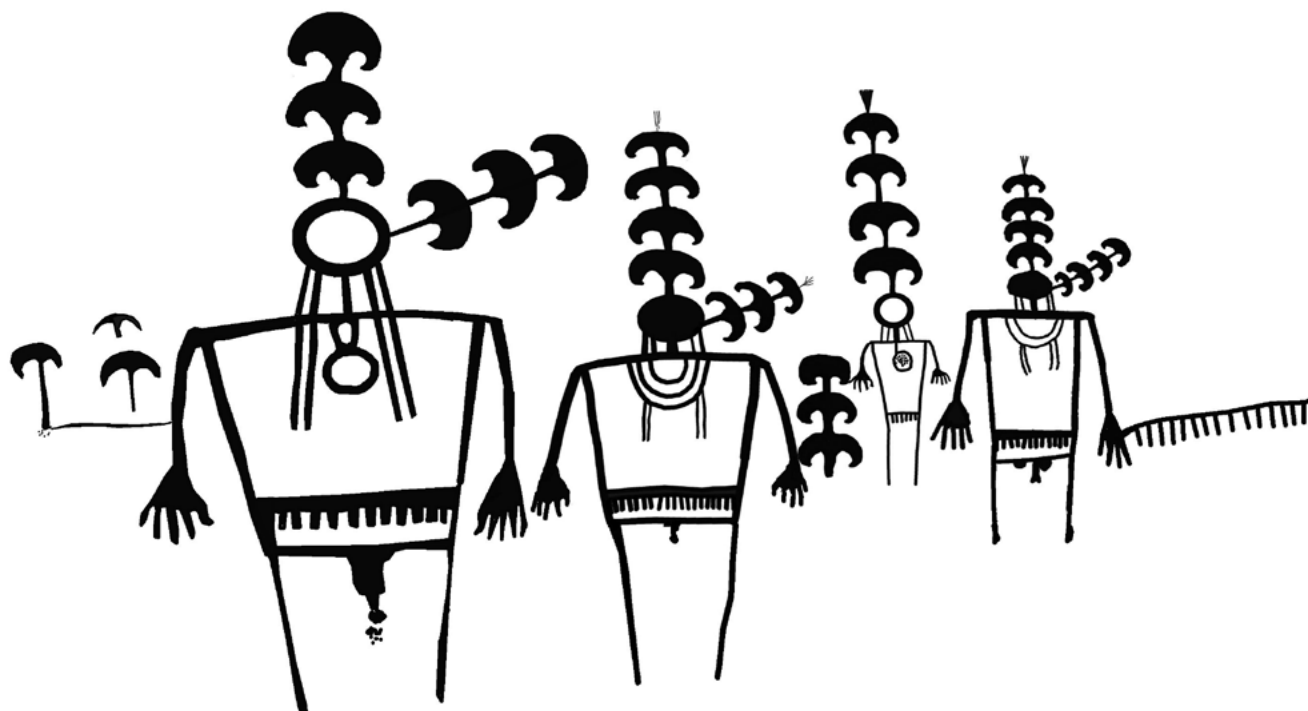


Fig. 16. Panel of thunder emanating out of the cloud-being's mouth and head.



A



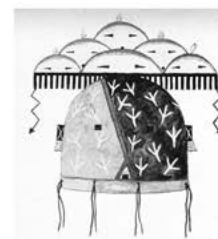
B



C



D



E

Fig. 17. *K'oBiticiaya* and rain and lightning, altar painting and Katsina masks with rain clouds and lightning. Keresan *K'oBiticiaya*, cloud spirits of the east (White, 1932a, 1932b, 1942).

## Zuni myths

The Zuni view all supernaturals as rain makers.

The *Uwanami*, a term generally translated as rain makers, are water spirits. They live in all the waters of the earth, the four encircling oceans and the underground waters to which springs are gateways. Cumulus clouds are their houses; mist is their breath. The *Uwanami* are associated with the six regions and are probably the Zuni equivalent of the Keresan *Shiwanna*, or storm clouds. The “bringers of clouds and rain” are prayed to as “those who have attained

the blessed place of waters,” and when they return, they come clothed in rain. They represent storm clouds that grow heavy in the summer” (Bunzel 1992, 510, fn 42).

The petroglyphs in fig. 18 are located along the opposite side of the San Juan River across from the Katsina Panel discussed in fig. 14. The Zuni cloud-beings adhere to Zuni metaphors found in ethnographic documentation. Bunzel writes: “The sky (*a'po'yan'e*, stone cover) is solid in substance, and rests upon the earth

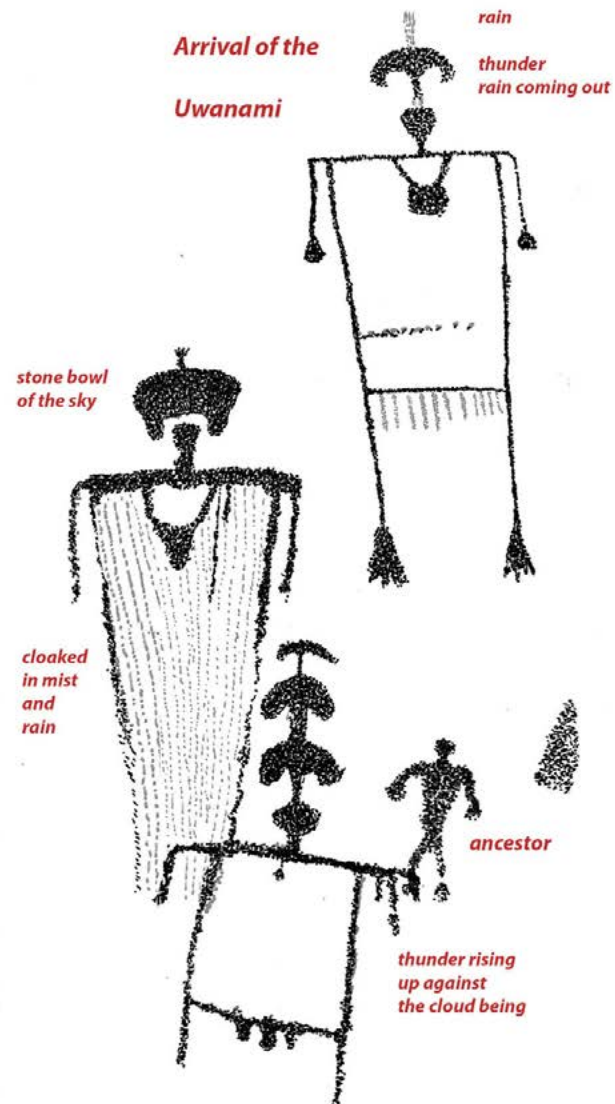


Fig. 18. The cloud-being in the upper right wears a valuable stone ornament around his neck signifying his identity as a Koko, a rain bringer. Above its head is the symbol of thunder combined with rain above and below. His elevated position suggests that he is coming down from the sky or arriving. Lower on the left is a cloud-being cloaked in rain, standing under a ‘stone bowl’ of the sky. To the lower right, alongside it is a thunder cloud-being with the sound of thunder rising out of its head, up against the side of the rain cloud-being. The little human figure on the right may identify these cloud- and thunder-beings as Zuni ancestors, who become rain bringers in the afterlife.



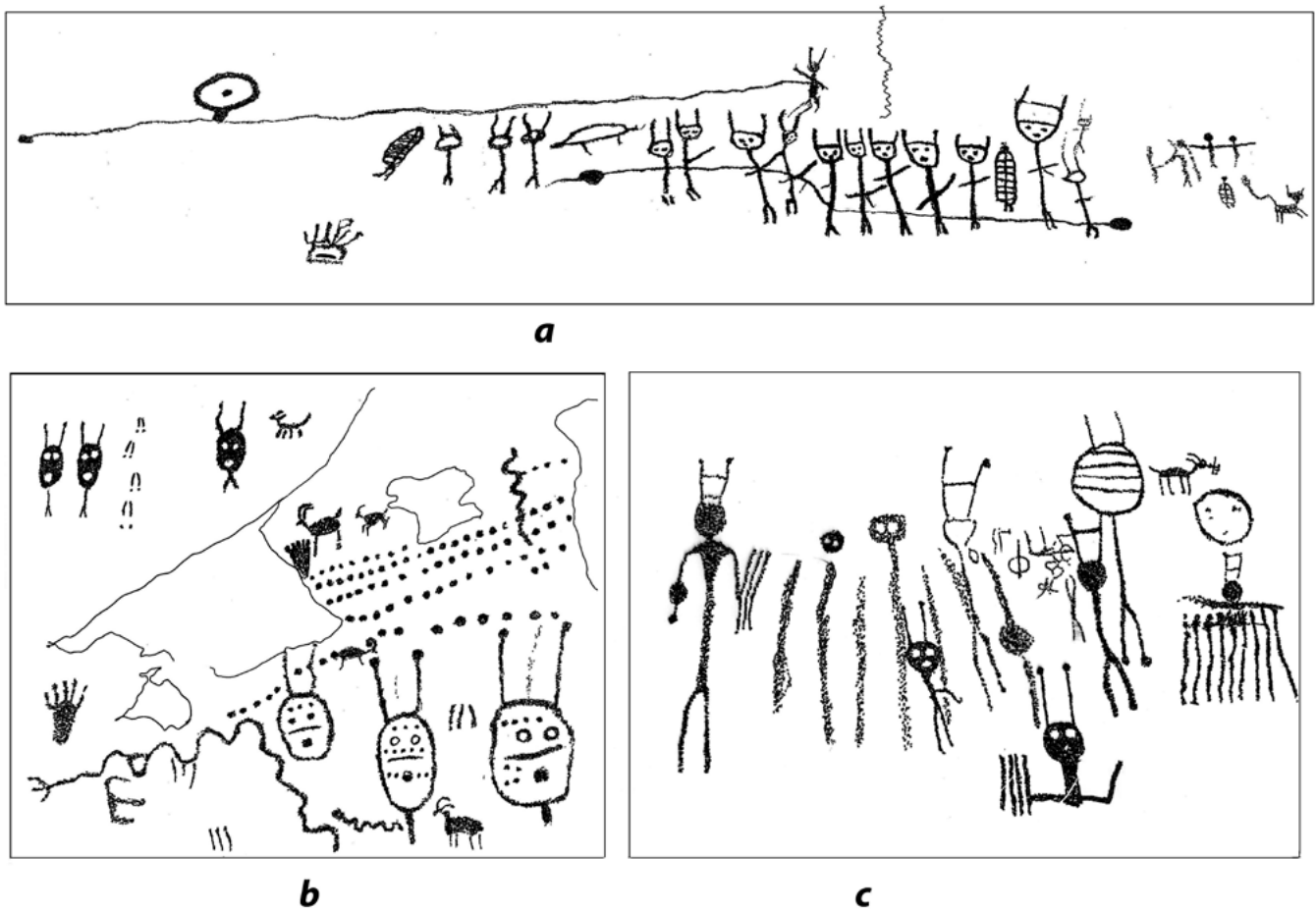


Fig. 19. A line of *Kopetaiya* of Zuni with stick bodies and round heads. They carry lightning sticks and symbols of rain and water vessels on their heads.

like an inverted bowl” (1932, 487). Cloud-beings have a wide solid arc over their head. Thunder cloud-beings have crescent-shaped arcs of sound rising from their heads, as illustrated in the Keresan Panels. I have not found a Zuni myth describing the origin of thunder, so I believe it was borrowed from the Keres. Bunzel writes:

The Zuni ceremonialism centers around the *A'lacina.we*, the ancients or ancestors who are ‘keepers of the roads’ the beings who guide, protect, and nourish human life. They bring the blessings of rain and clouds. They are ancestors “who have attained the blessed place of waters,” and when they return, they come clothed in the rain.” When, on summer afternoons, the great cumulus clouds pile up along the southern horizon, a Zuni mother will point them out to her children, saying, “Look, there the grandfathers are coming.”....However, this identification with the rain is not restricted to the *A'lacina.we*, but appears also in beliefs concerning other supernaturals, especially the *U'wanam.i*,

the so-called rain makers, and the *koko* or masked gods or *katsinas* (1992, 510).

*Uwanami* are Zuni cloud-beings or *KoKo* (fig. 18). They wear valuable stone or shell necklaces that are still worn by Zuni priests today. Petroglyphs of the Keresan *Shiwanna* Katsinas are shown with simple string necklaces. The stone bowl sky is a Zuni metaphor that describes the sky as a solid form, that differs from the Keres who describe it as porous, constructed of beams from sacred trees of the four directions and layered with “four skies above”. For the Zuni, *Uwanami* cloud-beings do not have lightning symbols on their chest or water vessels above their heads with bottoms that release rain. Nor is the *Koshari* represented in petroglyphs or mentioned in the Zuni myths. The Zuni have the *Kopetaiya*, little spirits associated with thunderstorms and sudden tempests, (Bunzel

1992, 513, 664) stick figures with round heads, antenna, and bands across their faces. They differ from the Keresan version with their full bodies and interior lines (fig. 19).

### Athapaskan myths

The question of what language group the Fremont belonged to is hotly debated. Karl Schlesier, author of *Plains Indians A.D. 500-1500* writes:

It is a clear north to south time slope suggesting that Fremont developed in the northern region, close to the Idaho border and in northwestern Colorado. The evidence indicates the Fremont was neither a peripheral Anasazi nor a mysterious Uto-Aztecan branch (it was replaced in toto by Uto-Aztecs.) The only reasonable option left is that the Fremont were Apacheans; because all variants shared in an essential Fremont identity, all were Apacheans. The Fremont exhibits some Archaic traits which had existed in the area in pre-Fremont times and no surprise be taken as a result of cultural adaptation. Fremont developed from Avonlea II antecedents, and that the variants became the bulk of the Apacheans in the Southwest. Aikens 1966, 1967 proposed the Plains and Apachean links, this au-

thor sees no better fit for the evidence ... it might also be interesting to match the anthropomorphs of the rock art with the *ag'n*, *gabe*, or *hacti* (mountain spirit) concept of the Apache's. (1997, 333)

His point prompted me to take a deep dive into the mythology and social behavior of the local Apachean groups and compare the ethnographic literature with an extensive data base of photographs and drawings of Fremont sites that I have assembled over the decades. The Apachean expert, Morris Opler, stresses the fact that the creation stories of the Jicarilla Apache support their culture like pillars in the foundation of a great building, and they are unchangeable over time. The myths provide an accurate guide to Jicarilla culture. He steadfastly insisted that the Jicarilla and Lipan Apache (eastern group) were the most authentic. It is their myths that provide a guideline for identifying iconic elements in the prehistoric art of the Uinta Basin Fremont area.

I have found Schlesier's hypothesis is supported by the anthropomorphic figures that clearly represent Apachean Gaans and *Hactcin* (mountain spirits). Depictions of cultural heroes, warriors, runners, the Emergence Mountain event, and the Holiness Rite are found in sequence along the predicted inner mountain route shown in fig. 1. A draft of this study is under way. Only the cloud motifs are discussed herein. The emergence stories of the Jicarilla center on the creator spirits. *Hactcin* means something like spirit or god. The most powerful creators are Black *Hactcin* and White *Hactcin*. Actually, everything has *Hactcin* in it, the clouds, wind, trees, mountains, animals, plants, and so on. The following excerpts are from the Jicarilla Emergence myth that pertain to clouds.

Then White Hactcin sent for Thunder of four colors from the directions. And these thunders brought clouds of four colors. The rain fell from these clouds. Then Hactcin sent for Rainbow to make it beautiful while they planted these things on the mountain. (Opler, 1994, 16)

Grey *Hactcin* is also an important spirit, and he goes everywhere with his dog. But...

In the beginning the dog was just like a Hactcin in appearance. This was because the Hactcin made everything. He was listless however and did not do anything. And Hactcin noticed this and spoke to him. He said, "Why don't you

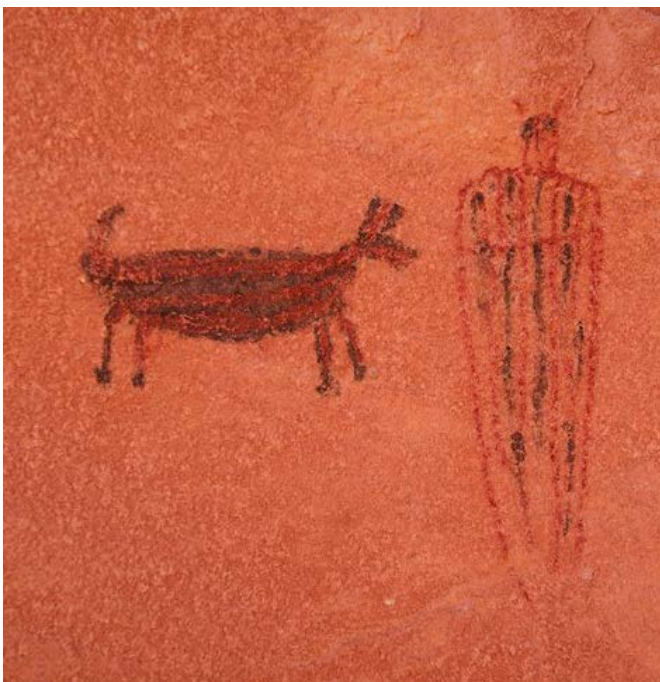


Fig. 20. This very small image of a canine and spirit figure may be Grey *Hactcin* spirit and his dog. The dog has a curled tail of a domestic dog, not the straight tail of a wolf or coyote. They both are painted with grey bars and red outline. Grey *Hactcin* travels through the sky world visiting all the cloud-beings, along with his dog. (DM)





Fig. 21. Cloud houses carrying rain and lightning and thunder inside. The dark solid figure is a *Hactcin* traveling among the clouds. The narrative begins on the right and the figures get larger as they draw closer. The dominant figure is a large black cloud outlined with white dots and bright lightning within. Below are faint images of two *Hactcin*, each with a dog on their shoulder. Silhouette handprints accompany many of the figures. The panel is very old and faded with areas that have spalled off. (DM)

do something? Why don't you work?" "I don't care to work. I am too lazy. I had better turn into the form of a dog, I guess. Let my hands be round." At first his hands were like ours, but he did not use them and just stayed home so they became round.

When Hactcin made the dog in his present shape he took some of the yellow from the afterglow of the sunset and put it above each eye. And he took some of the white of the morning glow and put it on each paw. This was the sign that the dog would protect people. (Opler 1994, 6-7)

There are many painted panels depicting cloud-like spirit figures accompanied by a canine with a curved tail, white paws, and white-tipped ears. They appear in the Harvest Panel, seven times at the Great Gallery panel, the Perfect Panel, Moki Princess panel and the Temple Wash panel, all in Utah. Some dogs have a white band around their belly. Only the Apache have this long myth about Gey *Hactcin* accompanied by a dog. In fact, one informant said that all *Hactcin* have a dog and they are different colors depending upon the *Hactcin* they belong to.

This story continues and Grey *Hactcin* is sent to check on all the villages to see how they are doing.

Opler writes:

When everything was completed on this earth. One thing was yet to be done. Grey Hactcin was sent up to the sun to ask him how he liked what had been done, the work done on earth.

Then talking Hactcin gave pollen and specular iron ore to Grey Hactcin. "Whenever you pass those people who live in the center of the sky, the Cloud People, offer this to them, but do not go into their home, even though they want you to go in. Sprinkle these and then pass on (Opler 1994, 170).

Grey Hactcin and his dog traveled on the sun's rays. They arrived at the home of Black Cloud (east). They saw those people. Cloud People invited them to come in. Their home was pretty. Rainbows and lightning were inside. But these two passed, nevertheless. They paid no attention to all this. They said, "No, we must go," and they sprinkled specular iron ore and left (Opler 1938, 170).

Grey *Hactcin* travels through the sky world interviewing the different clouds and is able to see inside their house that is beautiful with lightning and thunder inside. He may be present in this panel, painted in solid color and tapered body that contrasts with the other cloud houses (Figures 21 and 23).

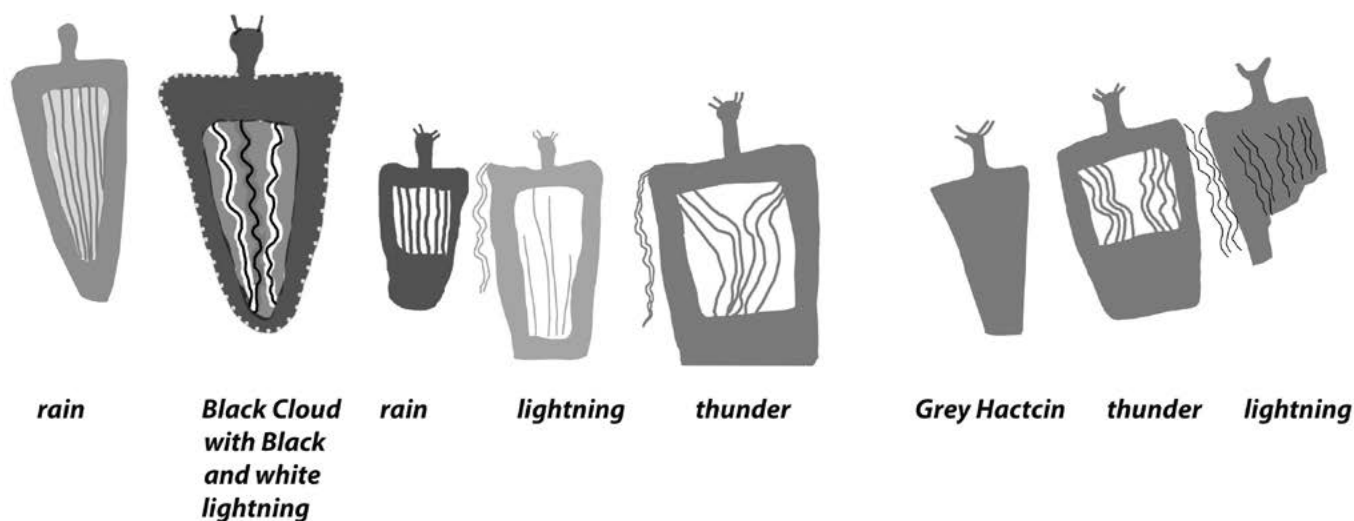


Fig. 22. Drawing of cloud houses with lightning and thunder inside.



Fig. 23. Close-up of the lower row with the solid painted *Hactcin* accompanied by a quadruped, possibly a dog, moving right to left. The panel has a second row of dark sender figures with a quadruped perched on one shoulder. Without a tail or horns it is unclear if it is a canine or an ungulate. The curved tail may not have survived the centuries. The juxtaposition of dog/*Hactcin* is revealing. The dog is leading the *Hactcin* by standing on his right shoulder, and next, the dog is 'talking' to the *Hactcin* while standing on his left shoulder. The dog's orientation to the left is a diagnostic element of Athapaskan preference for right-to-left direction.

Although fig. 23 looks as though there are two or more *Hactcin*, it may be just one *Hactcin* in motion, traveling with his dog. They are positioned below the cloud houses painted above the ledge, that defines the realm of sky world and earth world.

Next on the way they came to Blue Cloud People (south). They offered pollen and specular iron ore and passed on. Next, they came to Yellow Cloud People (west) and again refused to come in, but sprinkled pollen and specular iron ore instead. Next, they came to the home of Glittering

Cloud People (north). They sprinkled pollen and specular iron ore as before. The people tried to make them come in as had the others, but they were afraid to enter. "We must hurry," they said. "We must see Sun Hactcin and Moon Hactcin." So, they passed all the four homes, and they went on toward the home of the Sun. (Opler 1938, 170)

### Thunder

The bull-roarer is an instrument that simulates the sound of thunder. It is thought to call or excite thunder. "It is part of the Jicarilla rain making ceremonies,





Fig. 24. Apache bull roarer: picture from J.W. Powell, Smithsonian Director 1892.

but not the other Apachean groups who are non-agricultural.” Sticks of lightning-struck pine have thunder and lightning painted on them that are similar images of clouds with thunder (Opler 1938, 163).

Bull roarers are made from lightning-struck pine trees with the symbol of thunder painted on them. A string is attached to the head, and it is whirled rapidly in a circular motion over one’s head, creating the sound of thunder. The roaring sound it makes gives it the name bull roarer. Many tribes use them but paint their own traditional designs. These are Apache and seem remarkably similar to the cloud images of thunder. The myth explains how bull roarers are procured for ceremonies.

Then to Black Wind Hactcin they said, “Black Wind Hactcin, you must over to Black Lightning Hactcin and ask him for some lightning riven wood. Bring that and invite him come too.”

When Lightning was asked to come, he agreed to do so. He stepped into a black cloud. He was going to travel in that black cloud. He entered it from the top of a mountain and sent his arrow, the black flint, and split a spruce tree. He broke it. It splintered and pieces blew in different directions. The one which fell to the east, he picked up and brought along. (Fn 1, Thus, he made the bull-roarer.)

With the piece he had picked up he made something. He cut it with his black flint. He made it the shape of that black flint. He brought it to the corral ... He tied a string to the lightning riven stick and spun it, making a noise while

these Hactcin came forward. He stood by the large corral and made a noise with his stick while the Hactcin entered. (Opler 1938, 149)

Cloud houses contain various forms of weather events including lightning, hail, thunder, rain, and snow. Figure 25 marks the events of Grey *hactcin*’s travels through the sky and meeting each one. Figure 26 illustrates a few from still another tradition.

## Conclusion

We have seen through the ethnography and mythical texts that clouds are rendered as animate beings, with formal names and personalities rendered by the descriptions in the oral narratives of each cultural group. They transmit their identities following the rules of style, body postures, and iconic idioms dictated long ago. Traditional narratives survive through time because they are formulated on the cultural wisdom of the environment and a relationship based on reciprocity with the cloud-beings.

Through the creation myths many diagnostic elements can be identified in the prehistoric art of the American southwest. The combination of spirit figures and canines is unique to the Jicarilla Emergence Story. The story of the Koshari, rain ceremony, drum, and thunder rattle are unique to the Keres. The story of ancestor spirits as rain bringers is unique to the Zuni.

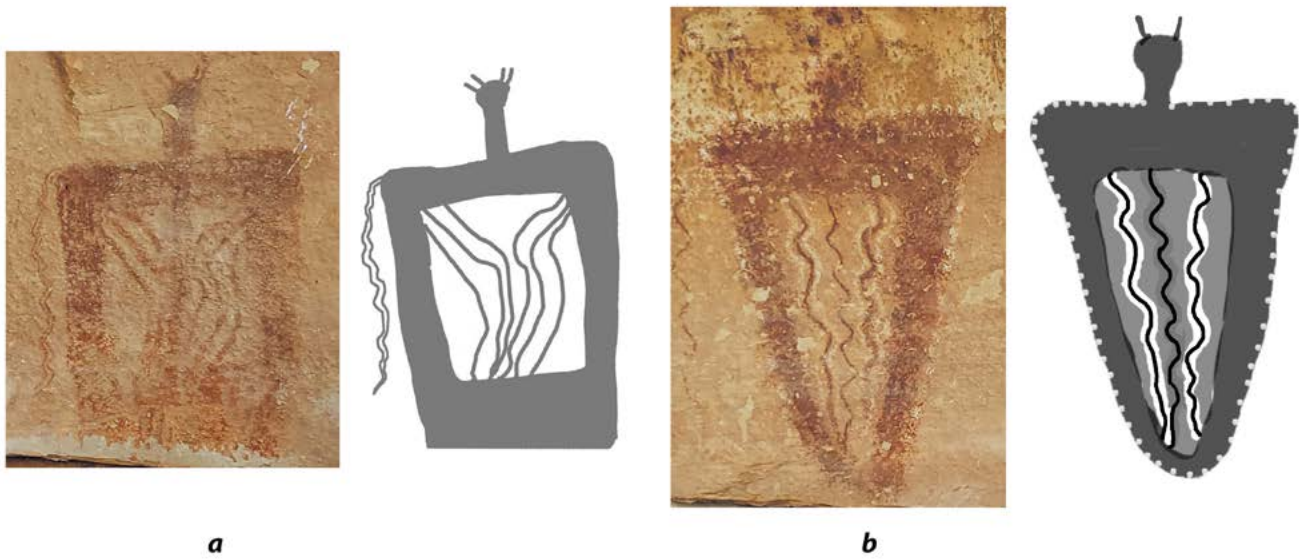


Fig. 25. a) A cloud house with thunder inside. It is square shaped with thick walls. b) A pictograph of Black Cloud with lightning inside. It is trapezoidal with a thick black outline encircled with little white dots and white lightning in two vertical stripes. The center line is black. The whole composition resembles what the text describes as a black cloud that Lightning stepped into and then shot his arrow of black flint at a spruce tree, splitting it into riven sticks.

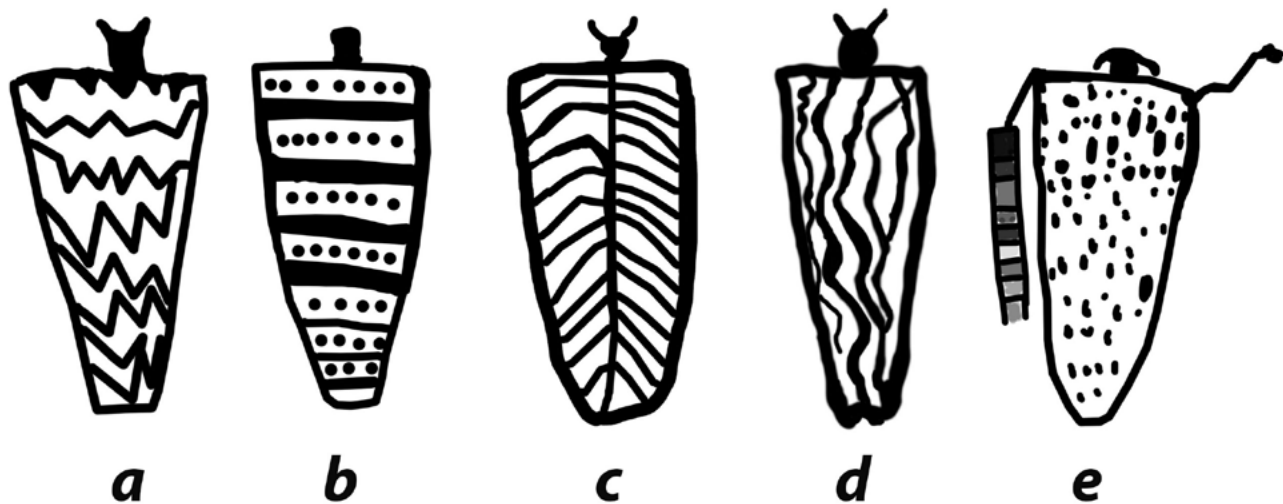


Fig. 26, clouds with a), lightning, b) hail, c) sheet lightning, d) thunder and e) virga streaks with a rainbow.



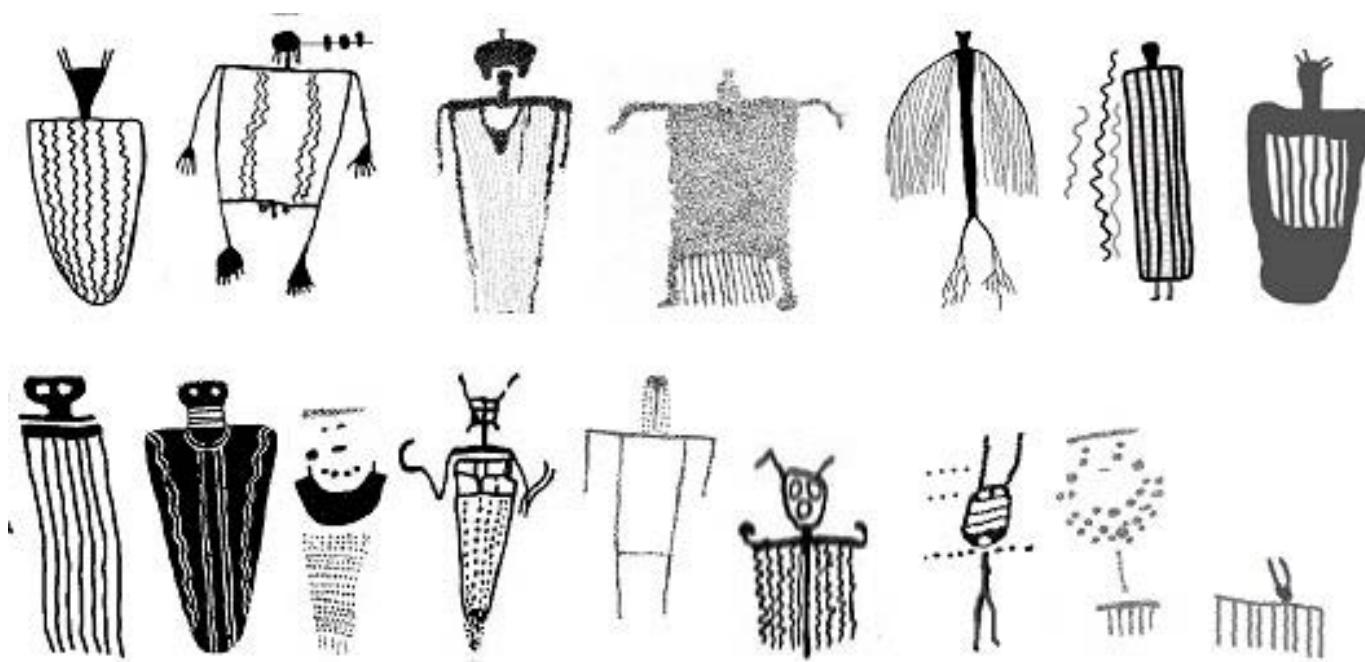


Fig. 27. Clouds are anthropomorphized with striking dissimilarities. Yet each form uses rain, lightning, and thunder symbols for their identities as clouds. They are animate and created from the imagination according to separate cultural traditions. Each form is rooted in the mythical language of idioms and social imagery. Some are cloud houses, some are sky beings, some are ancestral spirits, some carry lightning sticks, some bring rain, and others bring thunder, and they are all the rain bringers we call clouds.

In the animate world, everything has a spirit and a personality. I have grown to love the ingenious ways of knowing clouds through their visual representation. They lived by the natural laws of reciprocity, requiring extraordinary dedication to their prayers and ceremonies, especially in their artistic renderings engraved or meticulously painted on the sandstone walls. Animated through spatial positioning and body postures, we can get a glimpse of rain ceremonies taking place with the cloud-beings embedded in the rock face, yet going about their business in the minds of preliterate people.

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# THE ORIGIN AND DEVELOPMENT OF URBANIZATION IN SOUTH INDIA

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# Prelude

Agriculture is believed to be a prerequisite for large and permanent settlements, which help to preserve surplus production and create economies of scale. The conventional view holds that cities first formed after the Neolithic Revolution, with the spread of agriculture. The advent of farming encouraged hunter-gatherers to abandon nomadic lifestyles and settle near others who were surviving by agricultural production and natural resources. Agriculture yielded more food and commercial production, which made dense human populations possible, thereby supporting settlement development. Farming led to dense, settled populations, and a food surplus that required storage and could facilitate trade. These conditions seem to be important prerequisites for urban life. Many theorists hypothesize that agriculture and metal technologies preceded the development of

urban centers and led to their growth. Urbanization is the process by which rural communities grow to form sophisticated ways of life or urban centers and, by extension, the growth and expansion of settlements with satellite centers. Similar evidence was envisaged in the Palar river basin in the southern part of India by the end of last millennium BCE.

The River Palar is one of the largest rivers in south India. Its origin is in the eastern ghats in Karnataka and it travels through Tamil Nadu before discharging into the Bay of Bengal on the east coast. It runs across in a southeastern direction (Henry Frowde 1908: 253-260) and the river system consists of a series of streams which flows from west to east into the Bay of Bengal. Rivers in the region have provided an environment for human settlement at all times. From the prehistoric period down to the present day, man continued



Map 1. Lower Palar and Early Iron Age settlements.

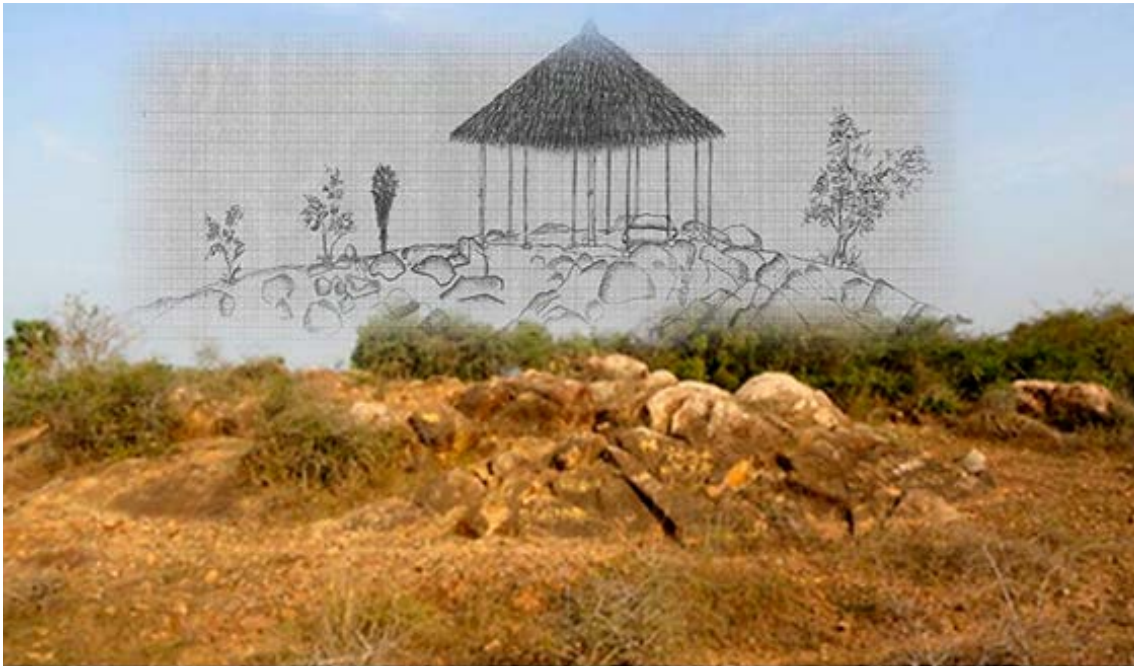


Fig. 1. Circular dwellings, Early Iron Age.

to occupy this land-form as it provided natural fertile soils on the river floodplains for raising crops. Kanchipuram, a large settlement with many satellite centers, evolved in the Lower Palar river valley by the end of the last millennium BCE. These rivers have yet another advantage, which is that they provide an easy communication for movement from the land to the coast (Bay of Bengal). It may be noted that important trade routes of ancient times are located in the river valleys (Gosh 1989: 213). By the end of the last mil-

lennium BCE, the region appeared as a hub of various activities and Kanchipuram had developed as the best urban center in the south.

Kanchipuram lies at 11–12° 00' latitude and 77° 28–78° 50' longitude with a coastline of 87 km on the east (Map I). The region was one of the important centers and hubs of large settlements with many satellite centers in the south by the time of the early centuries of the common era. The present Kanchipuram city is situated on the banks of the river Vegavati, a channel of the Palar



Fig. 1. Circular dwellings, Early Iron Age.



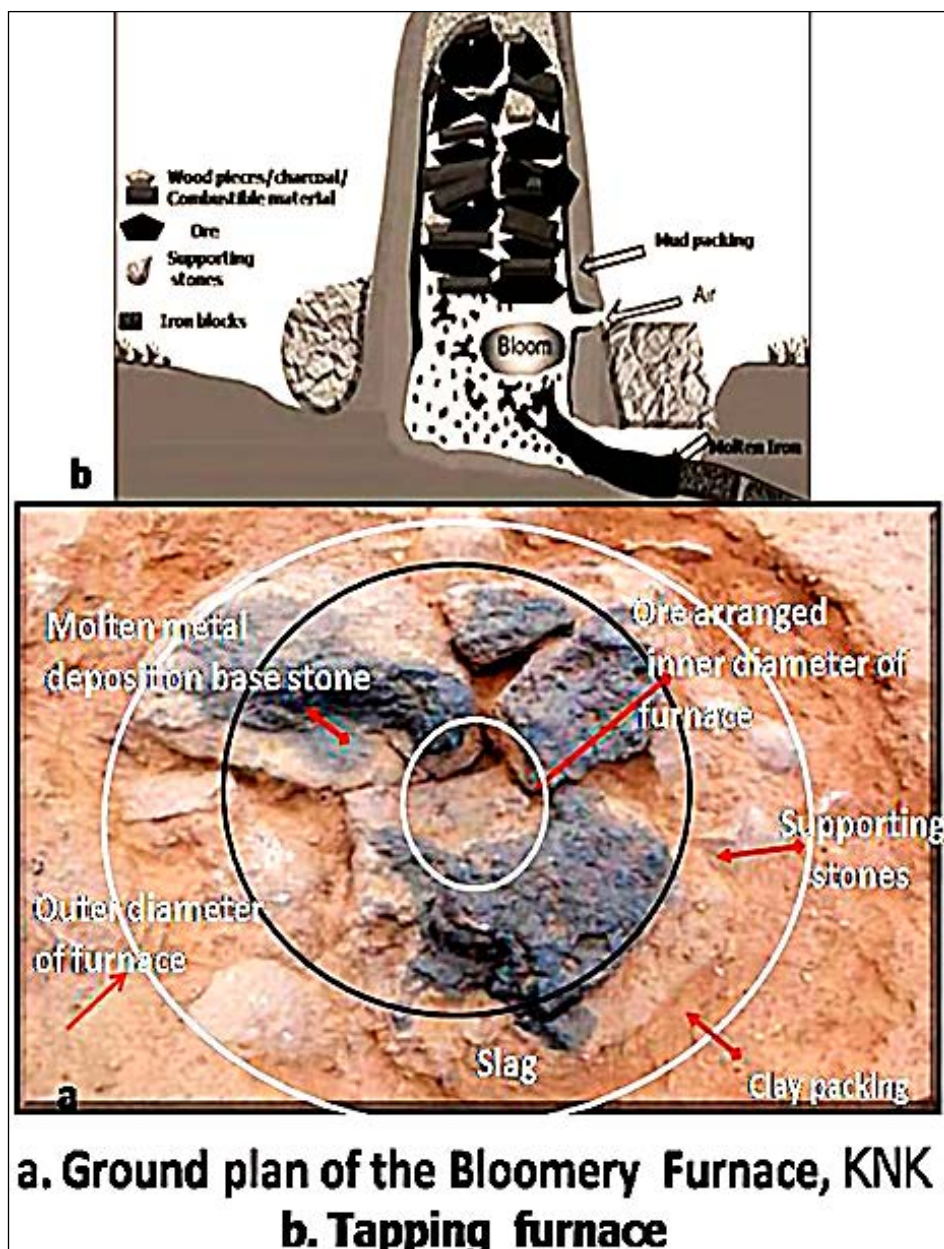


Fig. 3. Bloomery smelting, KMK.

River and connected to the Bay of Bengal. The region has an average elevation of 83.2 m above sea level and the flat land slopes towards the south and east. The region has many geographical advantages, such as more stable upland, not very far to the sea coast and also connected through the River Palar. All suitable geographical setups of the region have been utilized by human beings from the Stone Age (Pisipaty 2017).

#### Archeological evidence from excavations

Archeological explorations and excavations were conducted by the present author in the lower Palar re-

gion from 2000. Much new evidence, ranging from the Paleolithic to the medieval, were discovered for the first time in the region. The archeological record relating to the Early Iron Age and early historical periods are considered in the present discussion.

#### Early habitations and iron smelting areas

It may be presumed from the available evidence that the circular aligned dwellings (Fig. 1) with perishable materials with big boulders as demarcation were the construction style of the Early Iron Age people in this region. Floors with post-holes, mud-packed rubble



Fig. 4. Iron smelting area, KMK.

floors, brickbats, etc were noticed in the habitation areas. It was also found that all the settlement boundaries were well demarcated and also well protected with water bodies on two sides and huge boulder fencing on other sides. A huge boulder alignment like a cyclopean wall (30 x 1.5-2 m) was noticed in a disturbed condition (Fig. 2).

Within the settlement, a series of iron smelting furnaces was noticed with slag, terracotta pipes (tuyeres) on the southern side. From the evidence we can firmly conclude that the bloomery method was the smelting process in the region during the Early Iron Age (Pisipaty 2020).

**Early iron smelting and technological evolution** The Early Iron Age technology landscape can be characterized as having different waves of evolution and growth in the region. The metallurgy of iron in the region gradually evolved over centuries from slag-rich simple wrought iron to corrosion-resistant steel iron. By the end of the last millennium BCE, smiths in the region developed the metallurgy of iron and mastered

the techniques of large-scale production and corrosion-free iron. Such techniques have been prevalent in the region for a very long time and promoted long-distance trade commerce. Early smelting methods reported from archeological excavations are discussed below. Development in metallurgy has appeared in the region in three different stages, as follows:

- I. Bloomery iron smelting and forging
- II. From wrought iron to steel
  - Carburization, accidental and/or deliberate
  - Quenching and tempering
- III. Crucible iron or wootz steel

### **Bloomery smelting**

This was the earliest form of smelter capable of smelting iron. A bloomery is a type of furnace once widely used for smelting iron from its oxides. A bloomery's product is a porous mass of iron and slag called a bloom (an iron bloom). This mix of slag and iron in the bloom is termed sponge iron, which is usually consolidated (shingled) and further forged into wrought iron. The bloomery has now largely been superseded





Fig. 5. Terracotta pipe with iron deposit from PLN.

by the blast furnace, which produces pig iron. Tripathi (2001) has discussed various aspects of the construction and operation of ancient Indian iron furnaces.

### Evidence for the tapping furnace

The tapping furnace or bloomery smelting furnace had a hole near ground level that could be opened during the smelt, to release a flow of hot, molten waste slag (black), separating it from the solid metal bloom. Furnaces were variable, with an internal diameter at the base of 0.3--1 m. Tapping furnaces (Fig. 3), best known from the Early Iron Age to medieval periods, had a hole at ground level in the furnace wall that could be opened during the smelt so that the slag could run out. It may be noted that evidence for the slag-pit or non-tapping furnaces is not reported in this region.

### Crucible smelting

Crucibles used for iron smelting were generally wide shallow vessels made from clay. By the end of the last millennium BCE, India was a production center for high-quality steel and exported such products to different parts of the world. It may be noted that crucible steel is generally attributed to production centers in south India where it was produced using the so-called wootz process. It is also assumed that its appearance in other locations was due to long-distance trade.

The earliest known potential evidence that may be linked to ferrous crucible processes smelting has been reported at Kodumanal, near Coimbatore in Tamil Nadu (Sharada & Ranganathan 2004). The site is dated between the third century BCE and the third century CE (Craddock 2003).

Iron quality has been considered based on carbon content such as cast iron (2--4%) and wrought iron (less than 0.1%). The much more valuable steel has a delicately intermediate carbon fraction, and its material properties range according to the carbon percentage. It may also be noted that high-carbon steel is stronger but more brittle than low-carbon steel.

Crucible steel sequesters the raw input materials from the heat source, allowing precise control of carburization (raising) or oxidation (lowering carbon content). Fluxes, such as limestone, could be added to the crucible to remove or promote sulphur, silicon, and other



Fig. 6. Iron ore dump, PLN.



Fig. 7. Terracotta crucible in situ, PLN.

impurities, further altering its material qualities. Crucible steel is commonly referred to as wootz.

The crucible is a container (usually terracotta) that can withstand very high temperatures and is used for metal smelting and carburizing. The preliminary investigations have reported that crucible steel production (corrosion-resistant iron) was carried out in the pre-industrial era, in Tamil Nadu in the southern part of India. It was reported for the first time at Palmella (PLN) in the Kanchipuram region in 2011 by the present author.

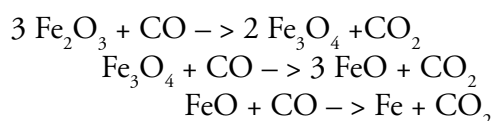
An early iron smelting and workshop was found in three different areas in Palnerllur village. Iron ore and slag, terracotta pipes (Fig. 5) in different measurements were unearthed from the village. Crucibles (Fig. 7), unfinished or fritter-away objects (Fig. 8), iron mould-like objects, etc were also unearthed from the excavations.

Near the workshop area, an ore dump was retrieved from the site. The ore was broken into small pieces like the round balls reported from Palnerllur excavations (PLN). Any large impurities in the ore could be crushed and removed and roasted. It may be made for pre-roasting the ore (Fig. 6). The ore is roasted in a fire to remove any moisture in the ore. After roasting for a few hours and cooling down, the ore is broken into pieces of an inch (2-3 cm) (more or less) and together with charcoal (layer by layer) heated in a furnace.

The presumed and widely accepted theoretical model for the process inside the furnace during smelting may be the following:

Hydrated iron oxides ( $\text{Fe}_2\text{O}_3 \cdot \text{H}_2\text{O}$ )  $\rightarrow$  haematite ( $\text{Fe}_2\text{O}_3$ )  
 $\rightarrow$  magnetite ( $\text{Fe}_3\text{O}_4$ )  $\rightarrow$  wüstite ( $\text{FeO}$ )  $\rightarrow$  iron ( $\text{Fe}$ )

If we assume the ore has been roasted, and the water driven off any hydrated iron oxides, the chemical reaction can be expressed thus:



The development of metallurgy has appeared in three stages in different periods in India, as follows:

- Early Iron Age (from the end of second millennium BCE-700 BCE)
- Middle Iron Age (700-100 BCE)
- Late Iron Age (100 BCE/CE-600 CE)

Iron implements in the first stage were sometimes replicas of early bone and/or stone objects of the Neolithic period, indicating a gradual transformation of medium



Fig. 8. Fritter/waste iron from iron workshop, PLN.



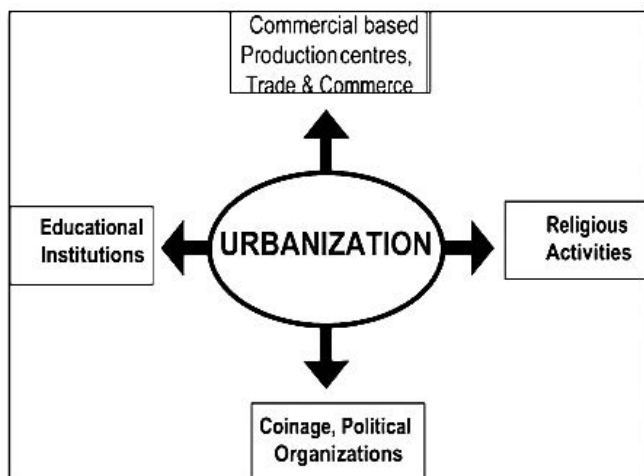


Fig. 9. Urban growth and development.

that is modeled after bone prototypes.

In the second stage or Middle Iron Age in India (700-100 BCE) smelting is common but the techniques of carburization and quenching were becoming discerned. Carburized iron production not only encouraged inter-regional trade but also attracted long-distance trade. Production of different trade items increased, for instance, bead-making and ceramic industries to meet the consumption of local and long-distance trade. Through trade, regional contracts and socio-cultural exchanges also happened. No need to mention that trade and commerce made the settlements affluent.

During this stage, it may be noted that many socio-cultural changes appeared for the first time in

the region. Among these, memorializing death and the construction of megaliths were sumptuous and significant. The traditions appeared throughout the region with little variation. It may be due to the availability of raw materials and geographical conditions. It may also be noted that very strong faith and dedicated worship appeared in the southern part. Highly skilled and more laborious efforts appeared in the construction of complicated structures with huge dressed or semi-dressed blocks for after-death rituals.

By the end of the last millennium BCE, large settlements with urban features grew with satellite centers in the Lower Palar region. Another advantage of the Kanchipuram region is that connectivity and water transportation through the Palar to the east coast further facilitated trade. Through trade, religious thoughts were spread within the continent. Along with the religious centers, educational and philosophical centers were also developed which attracted not only indigenous but also long-distance traders.

The third stage is considered as an advanced stage of iron metallurgy. By this time the metallurgy as well as the utility of iron objects had been tremendously increased. Commercial good-quality iron and steel production of the region attracted trade with other continental regions and became a major demand product of the region.

The evidence reveals how early iron technologies, settlement patterns and socio-cultural systems developed in the region. Iron technological know-how gradually



Fig. 10. Kailashnath temple, sandstone-built early survived structural temple in Dravidian style (6th Century CE).



Fig. 11. Town planning in the shape of the lotus (descriptions in regional literature).

penetrated into the region during the early period of the last millennium BCE. The unearthed evidence, such as the number of furnaces in a more than 2-km stretch indicates mass iron smelting and manufacturing of objects in the area. It may be true that the location of early habitation sites was dependent on environment and resources for a subsistence economy. Needless to say, the continuous occupation of a region for a longer period will show not only an increase of population and settlement size over a period of time, but also an increase in all-round development. The Kanchipuram region by the end of the last millennium BCE became one of the most popular and best urban centers in the southern part of India.

Memorization of death also appeared in a special way and differently from other regions. Different shapes and sizes of memorial structures in all typologies in one place is not only rare evidence but is also reported for the first time in the burial architecture, particularly the shapes of cists and dolmens within a circle, are a new feature in the burial architecture in the region and elsewhere (Pisipaty 2019). It is a remarkable unique feature of the Lower Palar region during the Early Iron Age. Hundreds of structures in a sprawling area are further indicating that a very large settlement existed for a very long time in the region during the Early Iron Age in the Lower Palar basin.

## Urbanization and development

By the end of the last millennium BCE, the region appeared as a hub of large settlement with many satellite centers, as far as the east coast. It may be noted that the growth may be due to the different reason (Fig. 9) and details are discussed in the following.

Gradual migration and expansion of settlements were noticed during the early historical period towards the south on the banks of the River Vegavati and the Palar. It may be due to the shifting and splitting of the Palar's course in time and the main course of the Palar was connected to the east coast, which would facilitate trade. The settlements during the early medieval period in the region appeared on either side of the River Vegavati up to the left bank of the Palar. Furthermore, it was the period of main trade between the regions. Through trade, Jaina and Buddhism entered the region and established their own settlements. Political activities were also consolidated for the first time under the patronage of the Pallavas. The impetus can be seen in multidirectional forms, such as administrative, art activities, formation of settlements based on religion and educational institutions, trade and commerce.

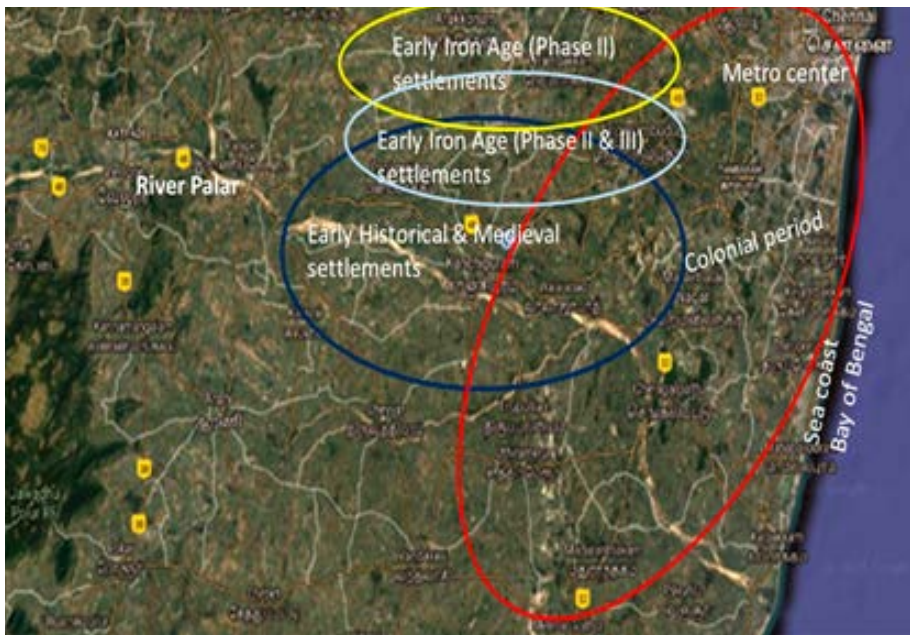
## Political consolidation

The region was the capital of the early Cholas as far back as the second century BCE and the Pallavas in between the sixth and ninth centuries. The successive dynasties from the Pallavas to the Vijayanagar kings added to the architectural and religious grandeur and value of the city. This region was always ruled by illustrious monarchs from very celebrated dynasties like the Cholas, Pallavas, Rastrakutas, Vijayanagaras, Nayakas, and Pandyas, together with Muslims and British.



Fig. 12. A peacock flying.





Map 2. The spread of settlement and urbanization in different periods in the Lower Palar basin.

### Educational center

Kanchipuram was destined to become a great center of art and literature. Many references to it can be found in the Sangam Tamil compositions. Institutions for the advanced study of Vedas, called *ghatikas*, were also established here and this gave literary pre-eminence to Kanchipuram. The eminence of Kanchipuram was further elevated by Adi Sankara

Bhagvatapada Acharya, the founder of a line of ascetic thinkers and saints. The Advaita philosopher and the great acharya, Sri Sankarabhagavathpada, established Kamakoti pitha in Kanchipuram. Furthermore, the great philosopher-saint Ramanuja (born at Sriperumbudur near here) had his early education at Kanchipuram.

The region is the home of many things during the

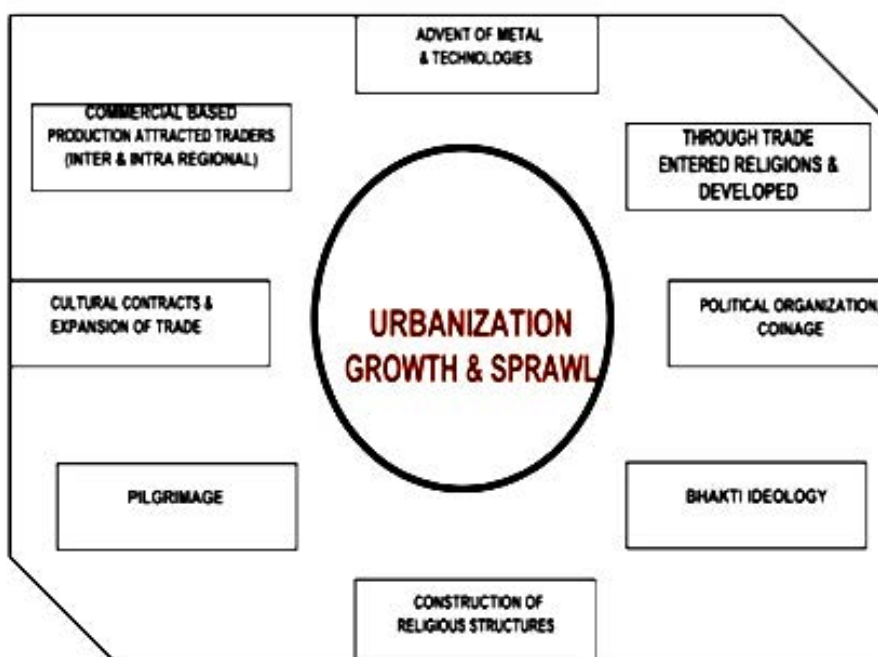


Fig. 13. Influencing factors behind urban growth.



Fig. 14. Colonial architecture (18<sup>th</sup> CE).

early historical period, some of which are: the Buddhist educational center (*Terravada*), the Jaina learning center (one of the *catur simhāsana*), Śaiva and Vaiṣṇava-kṣetra *saṅgam* of philosophy, and a famous advanced educational center (*ghatika*).

### Religion

This region has given quarters to all the religions from the beginning. In fact, it is the only place that has given quarters to all the religions which took root in this country, that is, Jaina, Buddhism, Saiva, Vaishnava, and Saktha. It is also interesting to note that all the four major Indian religious schools, Buddha, Jaina, Saiva, and Vaishnava, have had their own periods of ascendancy and royal patronage in the city. Moreover, Jaina, Saiva, and Vaishnava continued as a living faith to this day.

### Panchakanchi

Jaina, Buddha, Shiva, Vishnu, and Brahma Kanchipurams are collectively known as Panchakanchi (five Kanchipurams). Jainism is believed to have been begun in Kanchipuram by Kunda Kundacharya (1st century CE). Until the advent of Nayanmars and Alwars, Jainism grew in the region with royal pa-

tronage under the rulers of Kanchipuram. The conversion of Mahendravarman I of the Pallava dynasty from Jainism to Saiva under the influence of Appar was the turning point in the religious geography of the region. Later Cholas and Vijayanagara kings were tolerant towards Jainism, leaving traces of Jainism in Kanchipuram, although it remains a living faith in Kanchipuram.

Kanchipuram, once the city of a thousand temples, spread extensively on either side of the River Vegavati during the early historical period, when it was the center for many phenomena (Pisipaty 2018), such as Buddhism and Jainism, Saiva (*shetra*), Vaishnava (*shetra*), *Sakthishala* (Goddess Kamakshiamman), an important *Teertha* (place for holy dip) for the pilgrimage of Hindus ((*vsaptasindhu* (seven rivers), *pancha tataka* (five ponds), *ekdakupa* (eleven wells), *ushnasarovaram* (hotwater spring) (*kanchimahatyam*)), the only sacred city (*mokshapuri*) for Hindus in the south, the Sangam of philosophers (alwars, nanmars, acharyas – Adisankara, Ramanuja, etc) and philosophy (*advita* and *visistadvita*), a famous advanced Vedic educational center (*Ghatika*), an early trade center, an administrative center, and evolved South Indian architecture (Dravidian style, Fig. 10).





Fig. 15. Modern metro center, east coastal.

### Town planning

The region was a most popular urban center in the southern part of India and was described in the literature with different names. Some of them are: Pralayasindhu, Brahmapuram, Sivapuram, Vishnupuram, Satyavratakshetra, Muktishetram, Kamakkottam, and Adipeetham. The early literature describes the beauty of the region and the well-planned architecture of the settlement. In Sangam literature, the city was described as having a lotus flower shaped architecture. In ten songs (*Atapattu*), the outer walls are made with bricks, appearing like the center of the many-petaled lotus flower (Fig. 11) which is like the navel of Thirumāl in blue, from which rose the four-faced Brahman.

The lake is like a beautiful peacock's wings (Fig. 12). The *Nediyam* is the body of the peacock, the mouth, Atiyur, is the area that is now known as Chinakanchi, a description that appeared in twelfth-century CE regional literature.

Trade and commerce were promoted in this region. Through trade religions, such as Jaina and Buddhism, entered and established their own setups. During the Bhakti movement the region became a center of religious prominence. Under Alvars and Nayanamars, followed by the Acharyas, the region was further glorified with Saivism and Vaishnavism, along with philosophy. Gradually political consolidation under the hegemony of the Pallavas and their followers en-

riched the region. The royal income from trade and commerce was transferred to religious beneficiaries. It appeared in the form of the construction of massive structures and land grants for maintenance during the period of the Pallavas and those who came after. Construction of temples and art attracted tourists and increased pilgrimage, up till now.

During the colonial period, settlement gradually migrated and shifted towards the east coast (Map 2) and developed as a metro center with a dense population.

### Inferences drawn

The Lower Palar river in the Kanchipuram district is considered to be a focus of history and civilization in the southern part of India. This region served as human habitation right from the hominids till today. It is possible that the early humans not only made tools on the riverbank but also lived there. It may also be true that where stone tools and equipment were fashioned provided evidence of early human migration. The archeological record clearly indicates that Acheulian was the earliest stage of hominin occupation of the subcontinent (Pappu 2001). To understand more about the time-frame and the behavior of early inhabitants right from the Early Stone Age and their movements, more research is required. Further studies will help to understand the lifestyle and technological abilities of the earliest human inhabitants of the region.



Fig. 16. Colonial architecture (18<sup>th</sup> CE), Metro railway.

By the end of the last millennium BCE, the region became a popular urban center in south India. Furthermore, it was also a trade center during the early historical period. The region yielded a number of imported and imitation wares from the excavations which bear testimony to the close trade and cultural contracts with other regions. It was also a capital city of the popular south Indian rulers such as the Cholas and the Pallavas.

During the early historical period, it was the main hub of a large urban settlement with urban characters along with many small satellite centers up to the east coast. Coastal connectivity through the River Palar was an added advantage to the region which facilitated trade activities (Fig. 13). Trade with other regions in general and particularly long distance further increased the wealth and fame of the region, which attracted not only the rulers of different regions but also religious sects. Religious propagators of different sects and philosophers further gave importance to this region. With urban sophisticated features, Kanchipuram appeared as the best city among many for living for Hindus (*Kāñcī Māhātmyam*) and pilgrimage for all religious sects of India. It may also be noted that this is the only important holy place for all indigenous religious faiths.

Political consolidation promoted the cultural contacts and expansion of trade from the 10<sup>th</sup> century CE, including that between the South Asian and Southeast Asian kingdoms and China, and cultural contracts

blossomed from the 11<sup>th</sup> to the 13<sup>th</sup> century CE. After the 16<sup>th</sup> century CE, the settlements gradually migrated towards the coast during the colonial period. Kanchipuram, once a popular hub of a large settlement, now appeared as a satellite center to the metro Chennai. During the colonial period, the main concentration and spread of the settlement moved towards the coast, probably to facilitate trade and easy access to other regions.

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# NOTES AND NEWS

## ATELIER, RESEARCH CENTER FOR CONCEPTUAL ANTHROPOLOGY

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### WHAT IS “ATELIER”?

Atelier Research Center for Conceptual Anthropology is a workshop for research, experiment, and debates on intellectual and spiritual expressions: traditions, art, religion, and other social and conceptual aspects of human society. It is a meeting place for the human sciences, where artists, philosophers, anthropologists, semioticians, psychologists, and students of other disciplines find a common language. Atelier organizes meetings, seminars, and exhibitions; it has a space for exhibitions, a laboratory and meeting facilities in Valcamonica in the Italian Alps. It has a publishing department producing books and the quarterly journal ATELIER. It is open to all those wishing to participate and share knowledge, ideas, and debates. Link to the [catalogue of publications](#) (Aug. 2021)

### WHAT IS CONCEPTUAL ANTHROPOLOGY?

In a previous issue of **EXPRESSION** (29) a detailed description was presented of conceptual anthropology, which interested readers are invited to consult. In short, conceptual anthropology is the discipline that looks at concepts, the meaning, motivations, and effects of human expressions: the conceptual dimension of being. It analyzes the bases and drives of social and mental manifestations, behavioral habits, beliefs, rituals, and artistic creativity. The target of conceptual anthropology is to acquire a broader consciousness of human behavior and relations, socialization factors, their roots and their outcomes. Born to be applied to archeological matters, mainly to prehistoric and tribal art, conceptual anthropology is fast expanding to other sectors.

Faced with the fashion of extreme specialization, which risks reducing scholars to technicians and operators to robots, conceptual anthropology goes against the current. It relies on a broad cultural humanistic outlook. Technicians are useful and necessary, but conceptual anthropology pro-

poses a new, albeit ancient, logic disposition, based on panoramic humanist and social perception backed by dynamic and practical analytical methods.

The media may accumulate technical and historical memory and indoctrination. But the insights and associations of the human mind, uniting memory with emotions and intuitions, are still irreplaceable. Our being and our actions are rooted in memory, which is multi-millenary stored experience, not necessarily conscious, but nevertheless active and reactive. When mistakes are made, they often derive from memory fogging. Positive results come from the good use of logic dictated by intuition deriving from memory, may it be conscious or not.

This new discipline took shape during a congress of the International Union of Prehistoric Sciences in Florianopolis, Brazil, in 2011, in the meeting of a session planned and chaired by Professor Anati. It was first named “The New Archeology” and then renamed Conceptual Anthropology. Atelier Research Center, based in Valcamonica, Italy, is its world center. Further development led to the creation of an editorial sector dedicated to conceptual anthropology. In nine years, over 60 books have been printed in Italian, French and English. The quarterly journal **EXPRESSION** is published in English, reaching researchers, institutions, and other motivated readers in 85 countries. The over 230 authors are from 45 countries of five continents.

### WHAT IS CISENP?

**CISENP is the International Scientific Commission on Research into the Intellectual and Spiritual Expression of Non-literate Peoples**, an organ of UISPP, the *Union International des Sciences Préhistoriques et Protohistoriques*. Being a UISPP commission, UISPP members are the main core of the commission. However, CISENP is a free association. Anyone may join by asking <atelier.etno@gmail.com> to be registered as associate. Associates receive the **EXPRESSION** quarterly journal for free. They are con-



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UISPP is the International Union of Prehistoric Sciences: *Union Internationale des Sciences Préhistoriques et Protohistoriques*. It is the organ of professional operators in this sector. EXPRESSION quarterly e-journal is produced by Atelier Research Center for Conceptual Anthropology, with the cooperation of UISPP-CISENP, an organ of the UISPP. UISPP also offers other facilities, including participation in its World Congress. For membership application contact the office of the General Secretary at: [rzmrt@unife.it](mailto:rzmrt@unife.it)

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Brazil	17	Netherlands	1
Bulgaria	1	Norway	2
Canada	5	Perù	1
China	31	Poland	2
Colombia	1	Portugal	9
Czech Republic	1	Russia	5
Denmark	2	Saudi Arabia	1
France	13	South Africa	4
Germany	1	Spain	10
Greece	1	Sri Lanka	5
Hungary	1	Sweden	2
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# EXPRESSION

## N°33 September 2021



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BIMONTHLY E-LETTER OF THE COMMISSION ON  
INTELLECTUAL AND SPIRITUAL EXPRESSIONS OF  
NON-LITERATE PEOPLES

*UISPP-CISENP was founded in 2006 as an international scientific commission of  
The International Union of Prehistory and Protohistoric Sciences  
(l'Union Internationale des Sciences Préhistoriques et Protohistoriques)  
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**EXPRESSION** is a  
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consider issues emerging from  
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peoples to unlock the nature of  
human languages, cognition and  
spiritual thinking. Pre-literate  
children, prehistoric *homo  
sapiens*, and traditional tribes

## Expression 1


September 2013

### An Introduction to Conceptual Anthropology

and topics to be discussed in the following issues of Expression Magazine

**EXPRESSION, No. 2, November 2013**  
BIMONTHLY E-LETTER OF THE COMMISSION ON  
INTELLECTUAL AND SPIRITUAL EXPRESSIONS OF  
NON-LITERATE PEOPLES

*UISPP-CISENP was founded in 2006 as an international scientific commission of  
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to consider the human mind  
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understanding of the  
intellectual and spiritual  
expressions of non-literate

We note with pleasure the  
productive discussions held  
at the **XXV Valcamonica  
Symposium**, from the 20<sup>th</sup>  
to the 26<sup>th</sup> of September,  
2013 in Capo di Ponte,  
Italy. Many speakers  
participated in increasing  
understanding about “*Art as  
a Source of History*”. Many  
plan on submitting papers  
for the Burgos meeting at the  
“*Atapuerca*” UISPP  
World Congress in 2014.  
**EXPRESSION** is herein  
publishing the Valcamonica  
Symposium conclusions as  
well as excerpts from the  
new *Andur* publication in  
English “*What caused the*

## Expression 2

November 2013

### What Caused the Creation of Art?

*Conclusions of the XXV Valcamonica Symposium. With papers by Massimo Minini (Italy), Fernando Coimbra (Portugal), Johannes Loubser (USA), Tang Huisheng (China), Claudine Cohen (France), Michael Francis Gibson (Belgium), Robert Bednarik (Australia), Emmanuel Anati (Italy).*

**EXPRESSION, No. 3, January 2014**  
BIMONTHLY E-LETTER OF THE COMMISSION ON  
INTELLECTUAL AND SPIRITUAL EXPRESSIONS OF  
NON-LITERATE PEOPLES

*UISPP-CISENP was founded in 2006 as an international scientific commission of  
The International Union of Prehistory and Protohistoric Sciences  
(l'Union Internationale des Sciences Préhistoriques et Protohistoriques)  
President, UISPP-CISENP: Emmanuel Anati*



**EXPRESSION** invites us  
to consider the human mind  
and spirit. Join our  
interdisciplinary dialogue with  
UISPP-CISENP and all those

We note with pleasure the  
birth of the new *Center for  
Desert Archaeology and  
Anthropology* in the Negev, in  
Mitze Ramon, about 100  
kilometers from the site of  
Har Karkom. Take a look,  
in this issue, at Emmanuel  
Anati's announcement and  
call for collaboration from  
international researchers.

In this, our third issue of  
**EXPRESSION**, we seek  
to clarify that we are the  
**NON-LITERATE  
PEOPLES** referred to in

## Expression 3


January 2014

### Discussion about the Targets of Expression Research Group

**EXPRESSION**

BIMONTHLY E-LETTER OF THE COMMISSION ON INTELLECTUAL AND SPIRITUAL EXPRESSIONS OF NON-LITERATE PEOPLES

**N°4** April 2014



**EXPRESSION** invites us  
to consider the human  
mind and spirit. Join our  
interdisciplinary dialogue  
with UISPP-CISENP and all those  
thirsty for an understanding of the  
intellectual and spiritual  
expressions of non-literate peoples.

In this issue of **EXPRESSION**, we present a  
preliminary selection of the abstracts of participants  
in the UISPP World Congress “*Atapuerca*” to be held  
in Burgos, Spain from 3-7 September 2014.

UISPP-CISENP was founded in 2006 as an international  
scientific commission of The International Union of Prehistory  
and Protohistoric Sciences (l'Union Internationale des Sciences  
Préhistoriques et Protohistoriques) President, UISPP-CISENP: Emmanuel Anati

*As always, we are interested in your comments and  
feedback in an exchange of questions, ideas,  
and images on the CISENP Discussion Forum blog,  
which will help prepare fruitful discussions for the  
symposium. In our next issue, due next before we start,  
we will publish contributions sent to the Editor or  
blog: [cisenp.org](http://cisenp.org).*

*As a preliminary commission CISENP will be preparing  
a list of all geographical regions and from a number of  
disciplines and interdisciplinary perspectives. The  
spiritual and intellectual expressions of non-literate  
peoples constitute a particular focus in the research  
of such an interdisciplinary research, encompassing  
the cognitive neurosciences, psychology, and  
genetics – we could say perhaps including the  
evolving mind – on the interdisciplinary field of  
“*Conceptual Anthropology*”.*

*We seek to investigate intellectual and spiritual  
expressions, as well as a theoretical which to dis-  
cover the human mind. Decoding the significance  
and purpose of visual images, signs and symbols  
means decoding our collective memory built over  
thousands of years in the present. CISENP  
invites your queries and input regarding your own  
research activities. Let us know what path you  
are on, in our way to Atapuerca.*

Candidate abstracts.

## Expression 4

April 2014

### A Selection of Abstracts for Session a the Uispp World Congress “Atapuerca”, Burgos, Spain

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

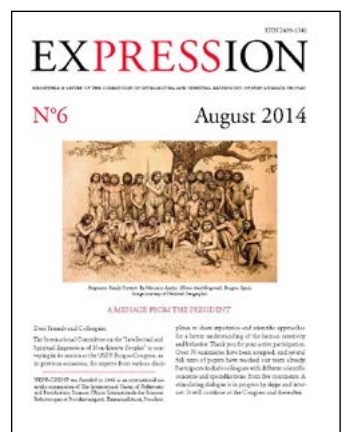


## Expression 5

June 2014

### Additional Abstracts for the UISPP World Congress “Atapuerca”, Burgos, Spain

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



## Expression 6

August 2014

### Summaries of the Session at the UISPP Burgos Congress

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



## Expression 7

March 2015

### Spiritual Dimensions of Rock Art

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

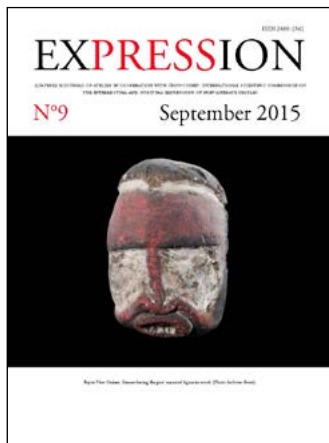


## Expression 8

June 2015

### Rock Art: When, Why and to Whom?

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



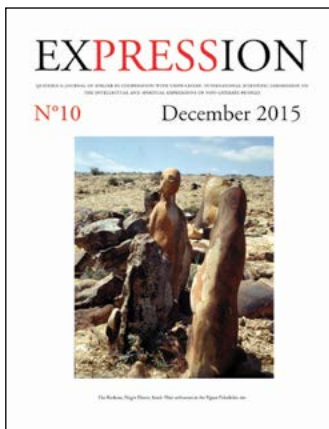
## Expression 9

September 2015

### Tribal and Prehistoric Art: When, Why and to Whom?

*Presenting the WWW Project.*

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

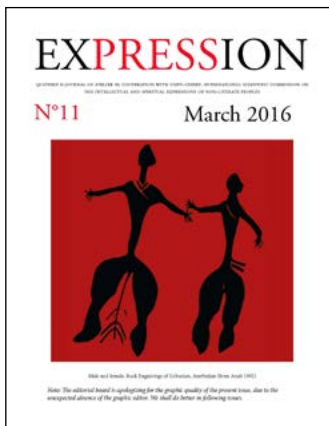


## Expression 10

December 2015

### The Role of Religion, Magic and Witchcraft in Prehistoric and Tribal Art

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

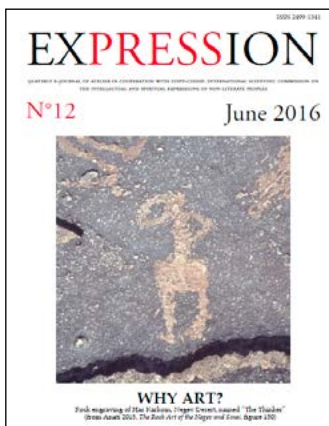


## Expression 11

March 2016

### Male and Female in Prehistoric and Tribal Art

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



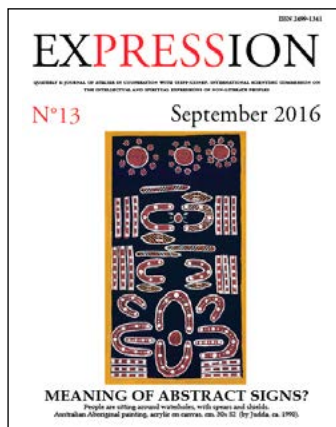
## Expression 12

June 2016

### Why Art?

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



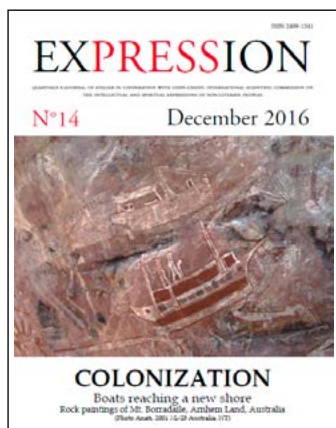


### Expression 13

September 2016

## Abstract Signs in Prehistoric and Tribal Art: Meaning and Problems of Interpretation

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

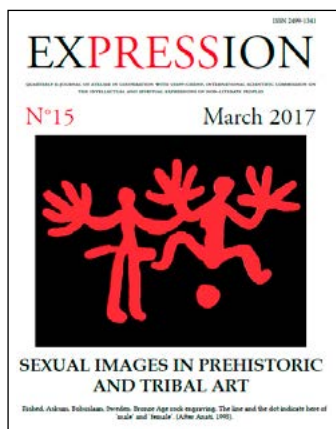


### Expression 14

December 2016

## Colonization: How Did Humans Reach All the Lands of the Planet?

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



### Expression 15

*March 2017*

## Sexual Images in Prehistoric and Tribal Art

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

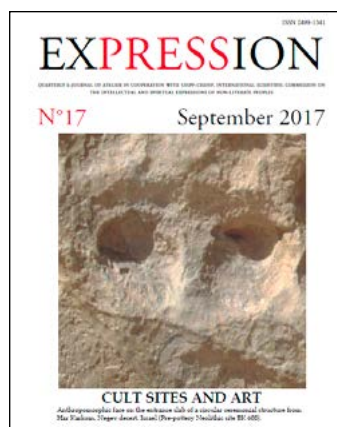


### Expression 16

*June 2017*

## The Message Behind the Images in Prehistoric and Tribal Art

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

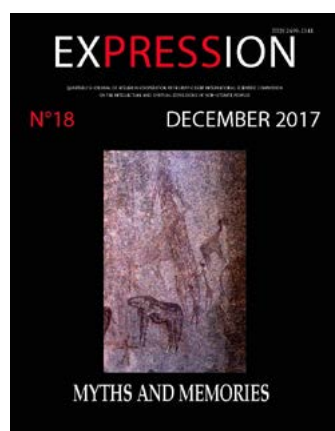


## Expression 17

September 2017

### Cult Sites and Art

With articles by Emmanuel Anati (Italy), Margalit Berriet (France), Jerzy Gassowski (Poland), Kempe Stephan F.J. and Al-Malabeh Ahmad (Germany, Jordan), Terence Meaden (UK), Kalle Sognnes (Norway), Sachin Tiwary (India), Gregori Vahanyan (Armenia), Wolnei Ferreira Guimarães Santiago (Brazil).

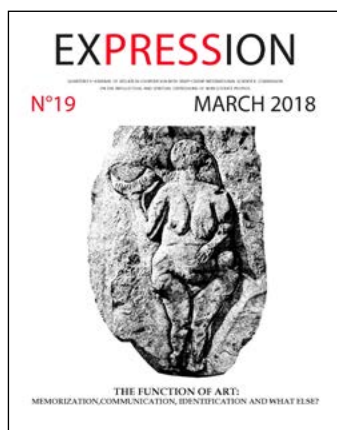


## Expression 18

December 2017

### Myths and Memories: Stories Told by Pictures

With articles by Emmanuel Anati (Italy), Margalit Berriet (France), Gassowski Jerzy (Poland), Kempe Stephan F.J. and Al-Malabeh Ahmad (Germany, Jordan), Terence Meaden (UK), Tiwary Sachin (India), Kalle Sognnes (Norway), Gregori Vahanyan (Armenia) and Wolnei Ferreira Guimarães Santiago (Brazil).



## Expression 19

March 2018

### The Function of Art: Memorization, Communication and What Else?

With articles by Bulu Imam (India), Devlet Ekaterina (Russia), Kraniqi Shemsi (Kosovo), Lopes Cristina (Portugal), Maurer Dieter (Switzerland), Moulton Susan (USA), Vahanyan Vahan (Armenia), Villa Marta and Nisi Domenico (Italy).



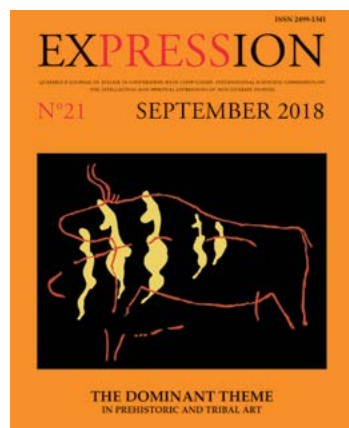
## Expression 20

June 2018

### The Function of Art: Memorization, Communication and What Else?

#### Part II

With articles by: Mailland Federico (Switzerland), Marler Joan (USA), Mykhailova Nataliia (Ukraine), Prasad Awadh Kishore (India), Warland Jacinta (Australia).

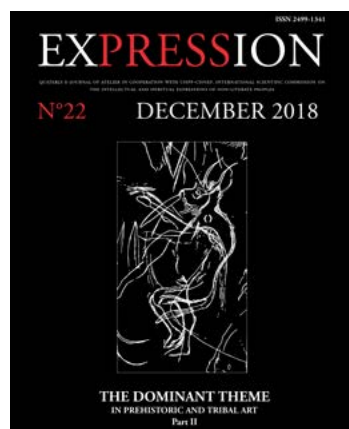


## Expression 21

September 2018

### The Dominant Theme in Prehistoric and Tribal Art

With articles by: Emmanuel Anati (Italy), Shanandoah Anderson (USA), Sara Garcês, Luiz Oosterbeek (Portugal), Michel Justamand, Gabriel Frechiani de Oliveira, Suely Amâncio Martinelli (Brazil), Gregori Vahanyan, Vahanyan Vahan, Baghdasaryan Vard (Armenia), Jessie Van Cauter, Marc De Bie (Belgium).

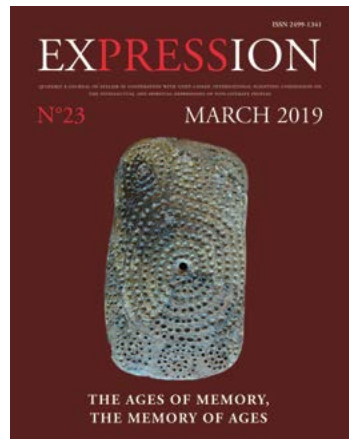


## Expression 22

December 2018

### The Dominant Theme in Prehistoric and Tribal Art - Part II

With articles by: Emmanuel Anati (Italy), Margalit Berriet (France), Amélie Bonnet-Balazut (France), Bulu Imam (India), Carol Patterson (USA).



## Expression 23

March 2019

### The Age of Memory, the Memory of Ages

With articles by: Emmanuel Anati (Italy), Fernando A. Coimbra (Portugal), Leo Dubal (France), Santiago Wolnei Ferreira Guimarães (Brazil), Liudmila Lbova, Tatyana Rostyazhenko (Siberian Federal District, Russia), Aixa Vidal (Argentina)



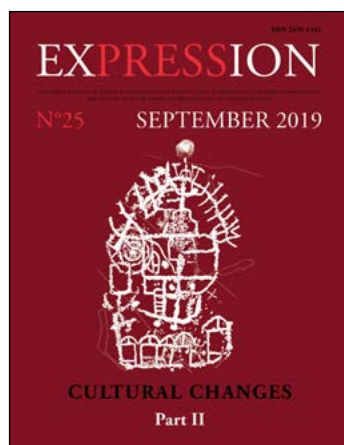
## Expression 24

June 2019

### Cultural Changes

With articles by: Robert G. Bednarik (Australia), Brian Hayden (Canada), Michel Justamand, Gabriel Frechiani de Oliveira, Pedro Paulo Funari (Brazil), Majeed Khan (Saudi Arabia), Tirtha Prasad Mukhopadhyay, Armando Pérez Crespo (Mexico), Simon Radchenko, Dmytro Nykonenko (Ukraine)



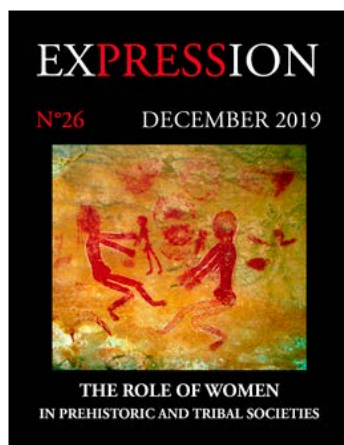


**Expression 25**

*September 2019*

**Cultural Changes - Part II**

*With articles by: Emmanuel Anati (Italy), Jean Clottes (France), Luc Hermann (Belgium), Carol Patterson (USA), Raj Somadeva, Anusha Wanninayake, Dinesh Devage, Resta Fernando(Sri Lanka)*

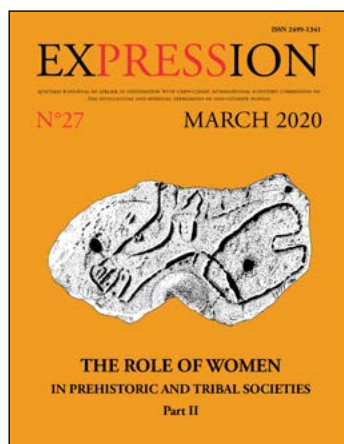


**Expression 26**

*December 2019*

**The Role of Women in Prehistoric and Tribal Societies**

*With articles by: Emmanuel Anati (Italy), JSantiago Wolnei Ferreira Guimarães (Brazil), Michel Justamand, Gabriel Frechiani de Oliveira, Antoniel dos Santos Gomes Filho, Vanessa Belarmino da Silva, Pedro Paulo Funar (Brazil), Majeed Khan (Saudi Arabia), Ruman Banerjee (India), Somnath Chakraverty (India), David W. Robinson (UK), Jitka Soukopova (UK)*

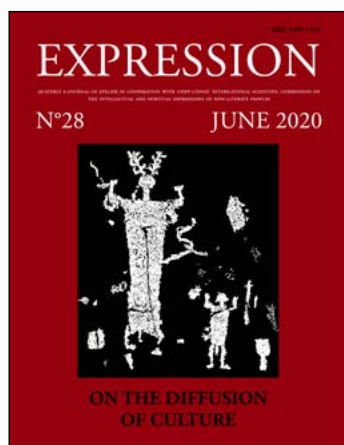


**Expression 27**

*March 2020*

**The Role of Women in Prehistoric and Tribal Societies - Part II**

*With articles by: Emmanuel Anati (Italy), Meenakshi Dubey-Pathak (India), Luc Hermann (Belgium), Maria Laura Leone (Italy), Carol Patterson (USA)*

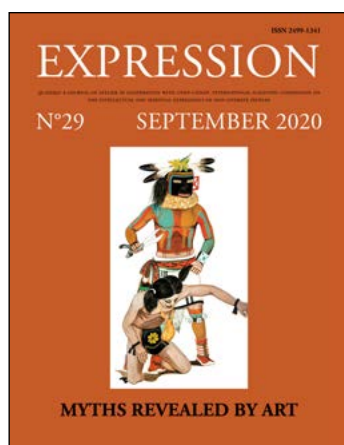


**Expression 28**

*June 2020*

**On the Diffusion of Culture**

*With articles by: Emmanuel Anati (Italy), Herman Bender (USA), Anthony Bonanno (Malta), Luc Hermann (Belgium), Annik Schnitzler (France), Jitka Soukopova (UK)*



**Expression 29**

*September 2020*

**Myths Revealed by Art**

*With articles by: Emmanuel Anati (Italy), Meenakshi Dubey-Pathak (India), Terence Meaden (UK), Alessandro Menardi Noguera (Italy), Carol Patterson (USA)*

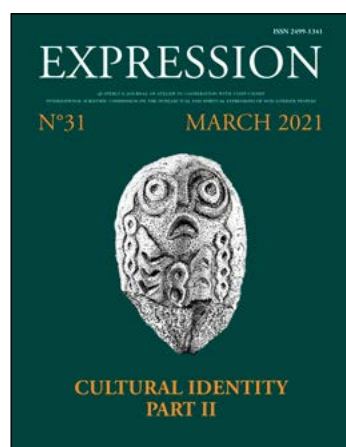


**Expression 30**

*December 2020*

**Cultural Identity**

*With articles by: Emmanuel Anati (Italy), Amélie Bonnet Balazut (France), Stavros D. Kiotsekoglou (Greece), Giuseppe Orefici (Perù), Jitka Soukopova (Czech Republic)*

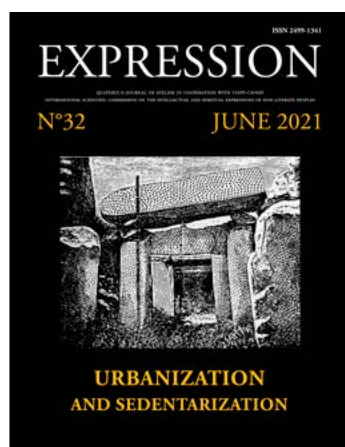


### Expression 31

March 2021

#### Cultural Identity - Part II

With articles by: Emmanuel Anati (Italy), Léo Dubal (France), Michel Justamand, Cristiane de Andrade Buco, Vitor José Rampaneli de Almeida, Antoniel dos Santos Gomes Filho, Albérico Queiroz, Gabriel F. de Oliveira, Matteus Freitas de Oliveira, Leandro Paiva (Brasil), Terence Meaden (UK), Alessandro Menardi Noguera (Italy)

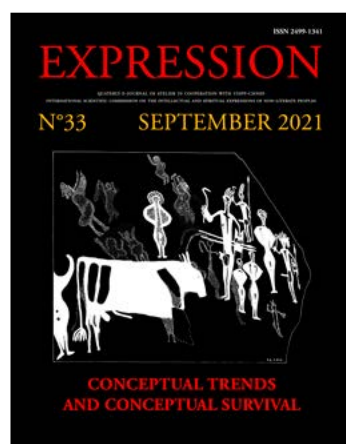


### Expression 32

June 2021

#### Urbanization Origins

With articles by: Emmanuel Anati (Italy), Behrooz Barjasteh Delforooz (Sweden), Samira Narooyi, Safoura Kalantari (Iran), Solange Macamo, Vitalina Jairoce, Arlindo Zomba, Laurinda Mutimucuo (Mozambique), Mário Varela Gomes (Portugal)



### Expression 33

June 2021

#### Cultural Trends and Conceptual Survival

With articles by: Emmanuel Anati (Italy), Terence Meaden (UK), Carol Patterson (USA), S. Rama Krishna Pisipaty (India)

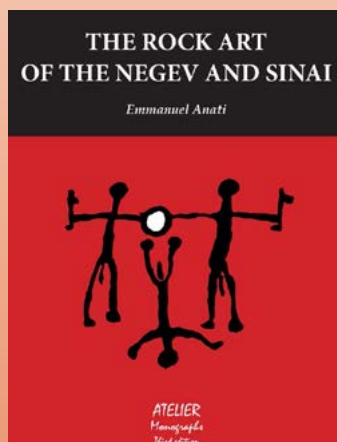


# ARCHAEOLOGY AND THE BIBLE

Atelier is pleased to present

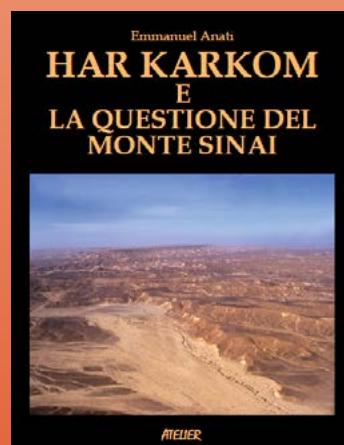
## ARCHAEOLOGY IN THE DESERT EXODUS: NEW DISCOVERIES RELATED TO BIBLICAL ARCHEOLOGY

From excavations and explorations in the deserts that separate the land of Canaan from Egypt, Emmanuel Anati, the scholar who for half a century is exploring these deserts, sums up new discoveries in the following volumes. Richly illustrated books bring new light on the events that inspired the Biblical narrative.



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

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



Anati, E., 2016: *Har Karkom e la questione del Monte Sinai* (*Har Karkom and the Question of Mount Sinai*), Italian edition

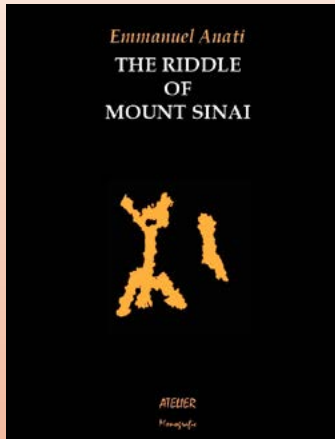
Capo di Ponte (Atelier), pp 220; 138 ill., €30,00

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

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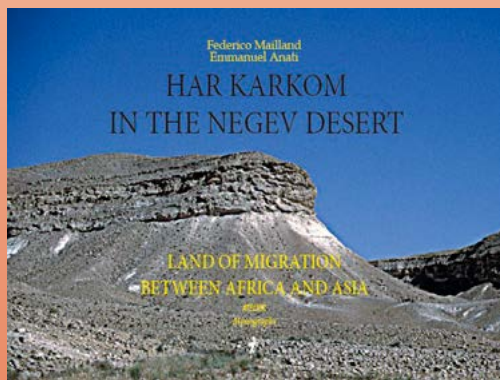
Information or orders: [<atelier.eto@gmail.com>](mailto:atelier.eto@gmail.com)



Anati, E. 2017, *The Riddle of Mount Sinai*, Second English Edition

Capo di Ponte (Atelier), 260 pp. 141 pls. € 40

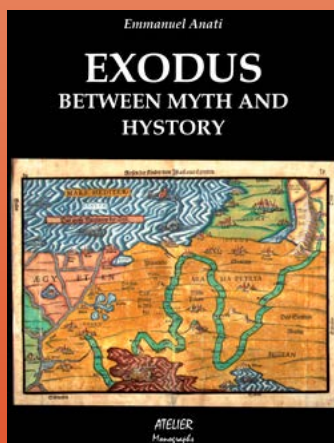
What is the true story behind the biblical narration of Exodus? The discoveries of the Italian archaeological expedition at Har Karkom, in the Negev Desert, tell the hitherto unknown story of the sacred mountain in the heart of the desert of Exodus, reflecting surprising similarities to the events and conditions described to us, albeit in mythicised form, in the Old Testament. The mountain was a paramount cult site and the archaeological discoveries go far beyond the expectations. This well documented volume also helps to clarify a major question: to what extent may we consider the biblical narration as a source of historical documentation.



Anati, E.; Maillard F., 2018, *Har Karkom in the Negev Desert. Raw Material for a Museum on Two Million Years of Human Presence*

Capo di Ponte (Atelier), 130 pp., 534 pls., € 110, English Edition

A mountain located in the land-bridge between Africa and the rest of the world yielded traces of ages of human presence ever since the first steps of the human ancestors out of Africa. The archeological discoveries tell us of two million years, from the earliest stations of archaic Pebble Culture, to recent Bedouin camping sites. The site became a holy mountain with shrines and other cult structures already in the Paleolithic; it developed into an immense cult site in the Bronze Age, likely to be the biblical Mount Sinai. The present book is displaying the results of over 30 years of fieldwork, the raw material of the sequence of ages, for a museum on Har Karkom in the Negev Desert, presenting the story of humankind as concentrated in a mountain of a few square miles in the middle of one of the most arid and nowadays most inhospitable spots in the Near East.



Anati, E., 2018: *Exodus Between Myth and History*, English edition

Capodiponte (Atelier) pp. 388; 138 pls., Analytical Appendix., € 40,00

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

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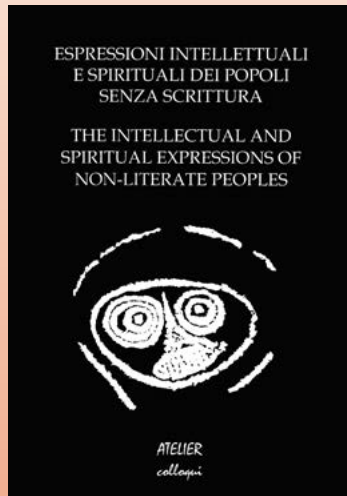
# ATELIER' PUBLICATIONS

## colloqui



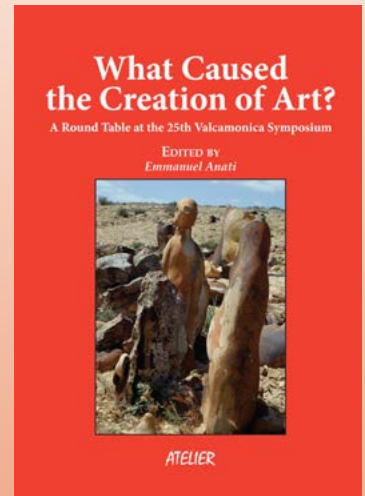
### Il segni originari dell'arte (In Italian)

Proceedings of the Colloquium held at the University of Urbino in 2010. Essays by nine authors who deal with the theme seen from various disciplines: Anthropology, Archaeology, Art History, Semiotics, Psychology, Psychoanalysis, Sociology.



### Espressioni intellettuali dei popoli senza scrittura (In Italian, English, French)

Proceedings of the Colloquium organized in Valcamonica by the International Union of Prehistoric Sciences in 2012. Essays by 30 authors from 11 countries on the intellectual expressions of the primary societies.



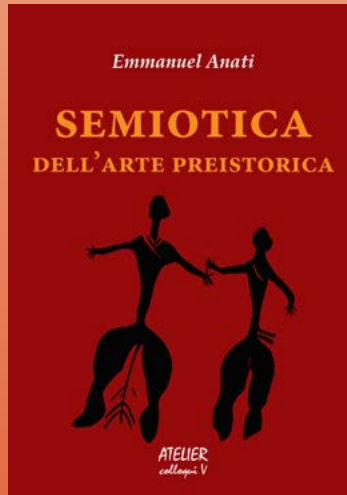
### What Caused the Creation of art? A Round Table at the 25th Valcamonica Symposium

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



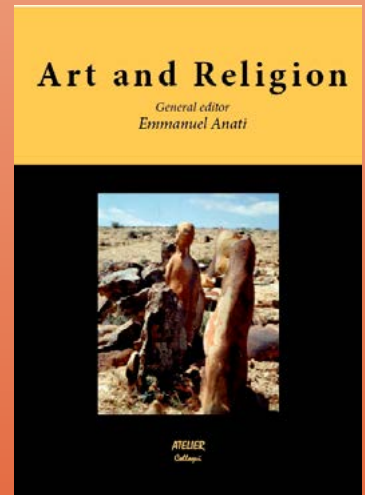
### Sogno e memoria: Per una psicoanalisi della Preistoria (In Italian)

A series of papers presented at Congresses of Sociology, Psychology and Psychoanalysis concern. The analysis of human behavior and of graphic art externalizations is opening new perspectives to the social sciences and multidisciplinary cooperation.



### Semiotica dell'arte preistorica (In Italian)

The conceptual meaning of the forms, the metamorphosis of shapes into sounds, sounds in forms, ideas into images, thoughts in words, it is the very basis of identity of the intellectual being, of 'Homo intellectualis'. This mechanism stimulated, over the years, some of the author's papers and lectures in congresses and conferences of semiotics, sociology and psychology.



### Art and Religion

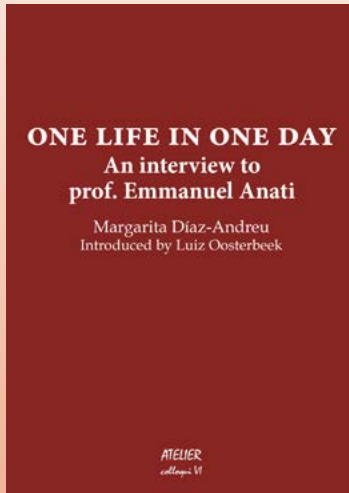
What is the role of religion, magic and witchcraft in prehistoric and tribal art? The intellectual and spiritual motivations of art produced various theories since the first attempts to explain prehistoric art over a century ago. Recent research is revealing more complex conceptual connections. In this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

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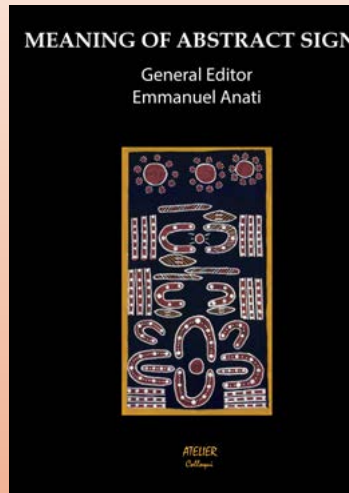
# ATELIER' PUBLICATIONS

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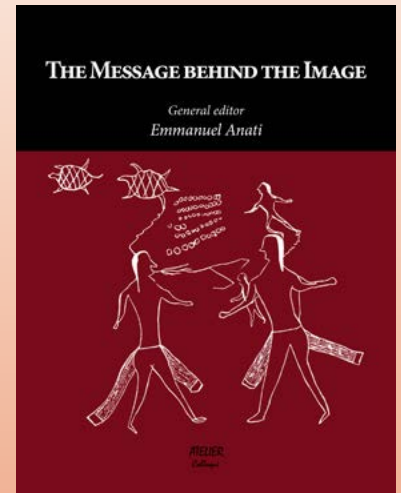
### One Life in One Day. An interview to prof. Emmanuel Anati

In the gardens of the campus of Burgos University, while delegates were moving from sessions and lectures to coffee breaks and back, Margarita Díaz-Andreu recorded, for hours, the words of Professor Emmanuel Anati. It was the 5th of September 2014 and when the electric lights of the evening replaced the sunlight, a life-long story was drafted. It concerned just one aspect of Anati's life, that of his experiences as a scholar in the human sciences.



### Meaning of Abstract Signs

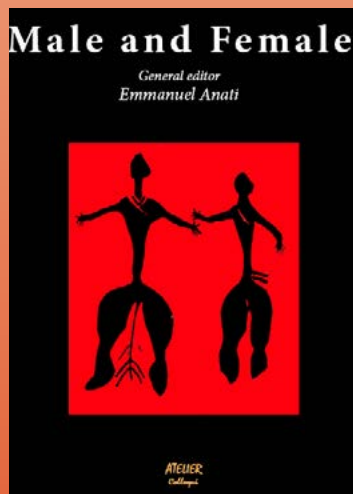
The clan was planning a fight against another clan that had abused hospitality hunting kangaroos in a reserved ground. The painter recorded the gathering of the elders to decide the expelling of the guest clan. He represented the elders and the warriors by standard signs. The art-dealer sold the painting as an "Aboriginal abstract composition". The meaning came from the people of the clan who saw the painting explaining the recorded event. Other examples and studies attempt at defining the meaning of abstract signs.



### The message behind the image

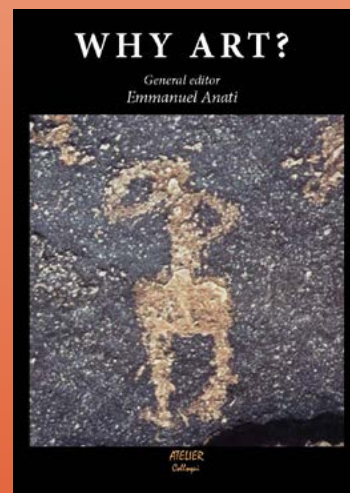
Prehistoric and tribal people have left behind millions of images, in Africa, America, Asia, Europe and Oceania. Was their purpose just that of embellishing rock surfaces? What pushed people from all over the world to record their memories throughout the ages?

This immense heritage, whether intentional or not, is full of messages to be read and understood.



### Male and Female

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



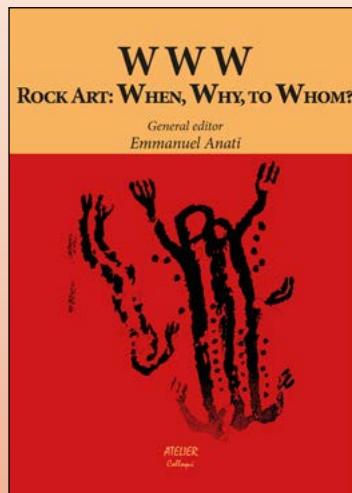
### Why Art

The volume presents a search of contents by scholars from different continents with different experiences. Prehistoric art is like the literature of more recent times, some depictions may concern science, others religion, some may be school textbooks and others fiction. The decoding of prehistoric art helps to approach the understanding of contents and motivations.

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# ATELIER' PUBLICATIONS

## Colloqui



### WWW - Rock Art:

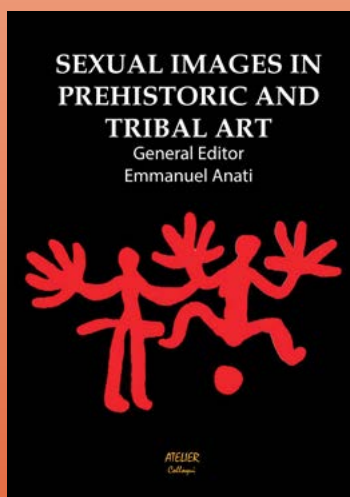
#### When, Why and to Whom

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



### Colonization

From an original land of origins, likely to have been in Africa, the ancestors of humankind colonized all corners of the globe. Other primates still survive in their limited habitat; humans live in the equatorial regions as well as near the Arctic pole. How did such colonization take place? Authors from five continents replied to this question: a selection of their papers appears in this volume.



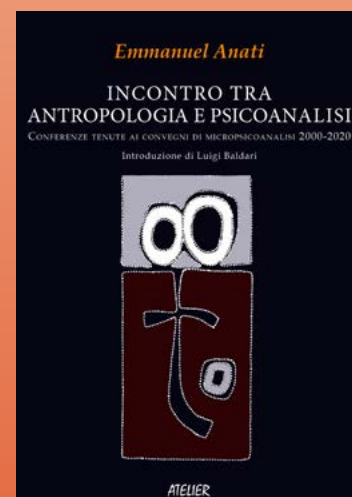
### Sexual Images in Prehistoric and Tribal Art

Since the earliest figurative art, sex appears to be a theme of primary concern in every corner of the world. Why were such depictions made? In some cases oral traditions allow us to identify the cause or the inspiration. Can we trace back the stories behind the images? Sharing knowledge is favoring an overview on images, myths, rituals and customs related to sex, in prehistoric and tribal art.



### Etnogastronomia La cucina dei popoli (In Italian)

Tra le 10.000 popolazioni che vivono oltre 200 Paesi del pianeta Terra, abbiamo scelto le cucine di undici punti del globo, descrivendole nelle loro caratteristiche essenziali, fornendo ricette accettabili dal gusto occidentale, e realizzabili con prodotti facilmente reperibili. Capire il sapore del diverso, è saper apprezzare non solo i cibi, ma anche i sorrisi dei popoli.



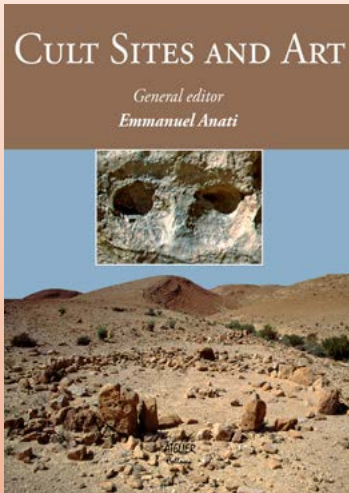
### Incontro tra antropologia e psicoanalisi (in Italian)

The volume collects 16 lectures by Anati at conventions of psychoanalysts on his conceptual system to overcome the frontiers that separate different disciplines, for a new vision of research in the human and social sciences.

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# ATELIER' Publications

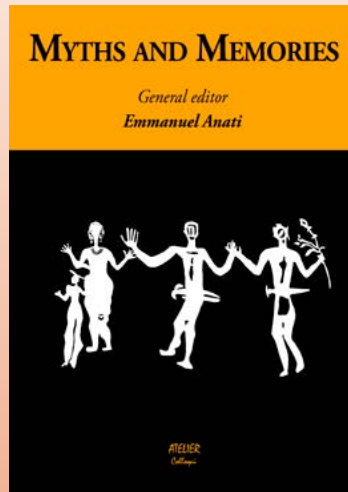
## Colloqui



### Cult Sites and Art

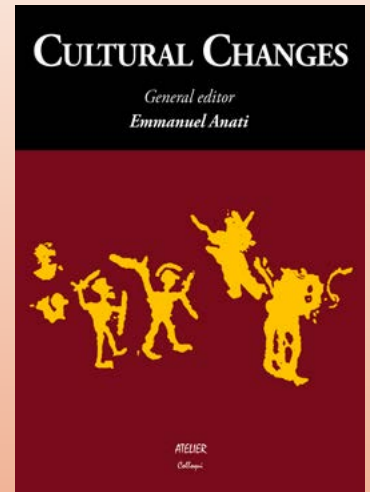
The volume is the printed version of number 17 (2017) of *EXPRESSION*, the quarterly online journal on conceptual anthropology. Sites of worship have had religious images and symbols since prehistoric times.

The relationship between religion and art emerges in its variants and in its purposes. Significant examples are presented by the authors, in Israel and the Middle East, in Armenia, Tunisia, Europe, Central Asia, Kazakhstan and Kyrgyzstan, showing a conceptual archetype that has persisted since distant prehistoric times.



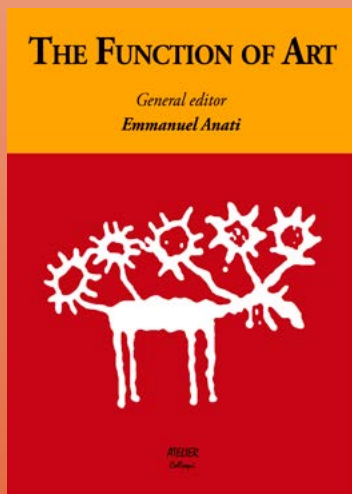
### Myths and Memories

Was the mind of early man much different from ours? Decorated caves, megalithic monuments, early shrines, sites of rock art, are the containers of myths and memories, the testimony of the immense variety of beliefs and habits, the source for an as yet unwritten history of mankind: the existential expressions of people's real and imaginary, myths and memories. Different facets of the theme are considered by nine authors of nine different countries of three continents.



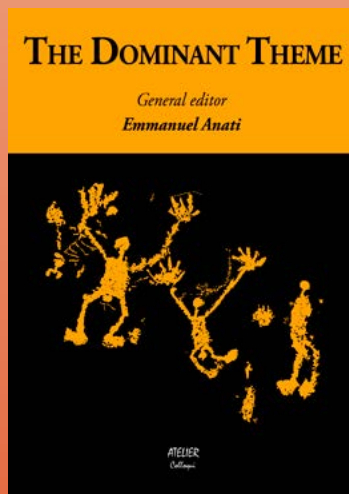
### Cultural Changes

By its own nature culture moves and changes. The reasons that led to these changes are not always evident. When available, the causes help us to conceive what the past can teach us about understanding the present and attempting figuring out the future. Eighteen authors from ten countries in five continents present different aspects of cultural changes. Each article contributes a small but meaningful tessera of the fascinating mosaic of cultural changes in a world perspective.



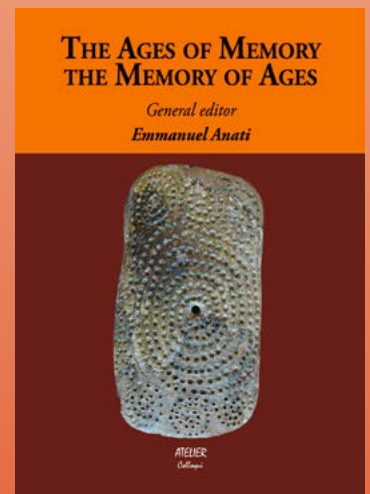
### The Function of Art

Recent studies are stressing that prehistoric art had as many different purposes as those of more recent written literature, religious and not, historical or imaginary, aimed at memorization, communication, magic, commemoration, recording, affirmation of cultural or ethnic identity and much else. Such functions may vary from site to site and from one culture to another.



### The Dominant Theme

Like any other style or period of visual art, each assemblage of prehistoric and tribal art has a dominant theme. Some focus on anthropomorphic figures, others on animals, others on signs, symbols or ideograms. Well-known sites of prehistoric art display millenary sequences of different phases showing changes in the dominant theme from one period to another. What is the meaning and function of the dominant theme? Visual expressions are a mirror of the mind and soul of their makers.



### The Ages of Memory The Memory of Ages

When prehistoric art is decoded it becomes an invaluable cultural source in itself. An additional step is attempting to use it as a document to reconstruct the cause of its creation. What did actually happen, what were the reasons that brought about the graphic production that has reached us, and what story does it tell? "This is not the task of archaeology!" Right! It is the task of conceptual anthropology.

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# ATELIER's PUBLICATIONS

## Essays



### Origini della Musica (in Italian)

How and why did music originate? What function did it hold for the individual and for society? The book presents the oldest documentation of prehistoric art and archeology on the presence of music, dance and musical instruments. The text is accompanied by figures of the oldest musical instruments known to date and images depicting music and dance.



### Iniziazione e riti di passaggio (in Italian)

What are the origins of baptism, circumcision, marriage and burial? The practices of initiation and rites of passage of certain Aboriginal clans of Arnhem Land, Australia, reveal the archetypes of accepted practices which are still common to many peoples of the world. The ritual has the dual role of educating and socializing. It has maintained stable their life of clans for millennia, serving as the glue between individual and group.



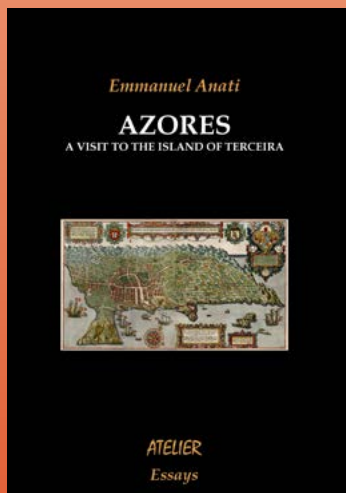
### Chi sei? Chi sono? Alla ricerca dell'identità (in Italian)

The problems arising from the search for identity begin in the infant and accompany the human being to the last breath. Defining the identity of the person, of the nation or "race", concerns all people from the Early Hunters to the most advanced urban, literate cultures. The present study is proposing a historical dimension to an archetype of the cognitive system. When does the need to define the identity start, and why?



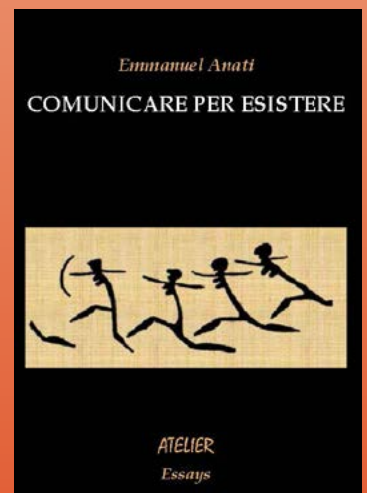
### Nascere e crescere da nomadi. La relazione madre-figli nelle società primarie (in Italian)

A study of constants and variants between human societies of hunters-gatherers and urban societies in the mother-child relationship reveals archetypes and variants. The mother-child relationship is the backbone of all species of mammals and acquires special rules in primates.



### Azores: a Visit to the Island of Terceira

When did man first arrive to the Azores islands? The Portuguese colonization in the 15th century marked the beginning of the official history. Is there a history before this history? The controversy, between the traditional history and the advocates of a previous human presence, finds partial solutions in the dating and decoding of traces indicating ancient human presence.



### Comunicare per esistere (in Italian)

This text, inspired by travel notes of about 40 years ago, seems now to refer to prehistory. Aboriginal people have made a jump of millennia in two generations. Today they speak English, live in houses, drive cars and use the shotgun. Their lives changed since the 70s of the last century.

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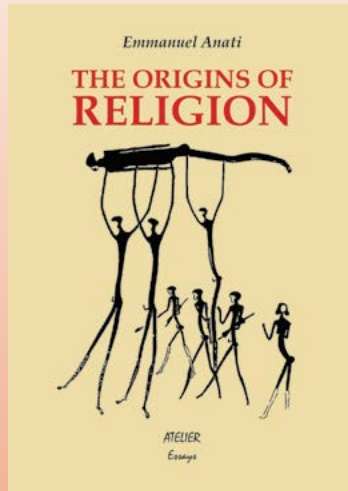
# ATELIER' PUBLICATIONS

## Essays



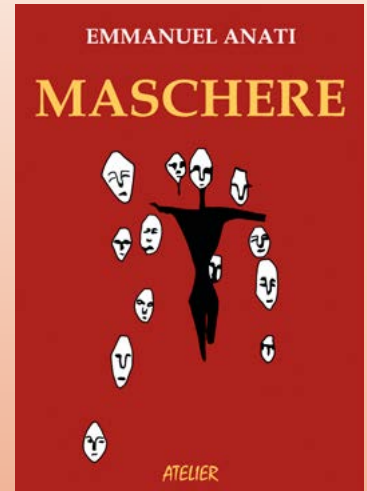
### Mito tra utopia e verità (in Italian)

How do myths originate? The production of myths proves to be a constant of the cognitive process of all human societies. Parameters of this process are examined: the roots of a distant memory, the itineraries of idealization, sublimation and structuring. Similar myths from different cultures reveal recurring conceptual criteria. From the beginning man feeds the myth and the myth feeds the man. Myths feed myths.



### The Origins of Religion

How and when did religions originate? The study of prehistoric art is bringing a revolution to our knowledge of the origins of religious thought. Rock art sites have held for millennia the function of places of worship and tribal identity, serving as archives of myths, beliefs and rituals. Visual art, however, is not the oldest evidence of the presence of religion. Burial customs and other material traces are bringing us further back to the origins of religious behaviour.



### Maschere (in Italian)

What is behind the mask? The mask can hide the identity, but can also reveal an identity submerged, both as an object-mask or a conceptual-mask. Going back to the roots, an aspect of the cognitive process of the mask awakens questions on the comparison of human tendencies, between globalization and individualism. Tracing the history of the mask reveals recurring phenomena of man's relationship with his own identity.



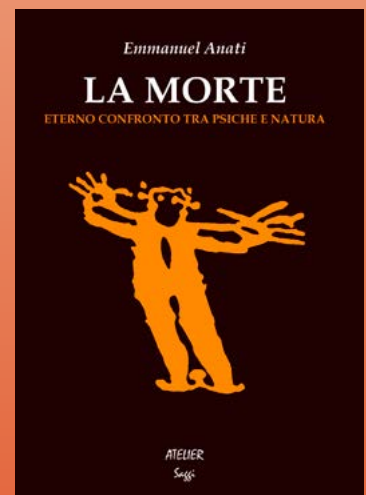
### Guardare l'invisibile. Religione, miti e spiriti degli aborigeni australiani. (in Italian)

Some scholars in the history of religions affirm that religion was born in the Neolithic age. People coming directly from the Paleolithic bluntly contradicts this preconception.



### Amore e sessualità (In Italian)

Love and sexuality, a theme of all lives and many books, is considered under the aspect of conceptual anthropology. Biological impulses, cultural rules and individual feelings meet in different cultures, in different formulas and lead to a vision of how they work and interact socially, psychologically and emotionally on the human being and on the social context.



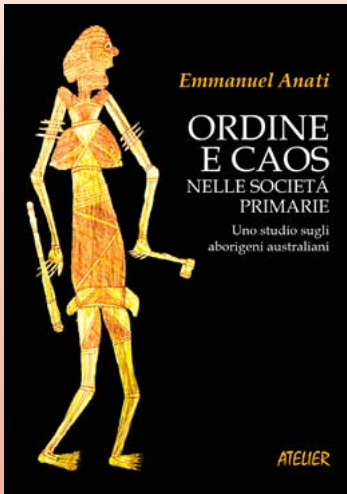
### La morte (In Italian)

Knowledge and beliefs about death and the afterlife generate the formation of similar conceptions in different cultures and populations. Similar anxieties and fears cause similar speculative effects in combining the real with the imaginary. The idea of the soul's survival after the death of the body turns out to be at the origins of both religions and philosophy. Conceptual analysis defines elementary processes of cognitive logic, in the constant confrontation between knowing and believing.

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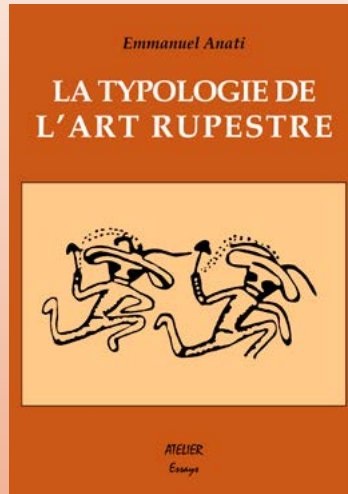
# ATELIER' PUBLICATIONS

## Essays



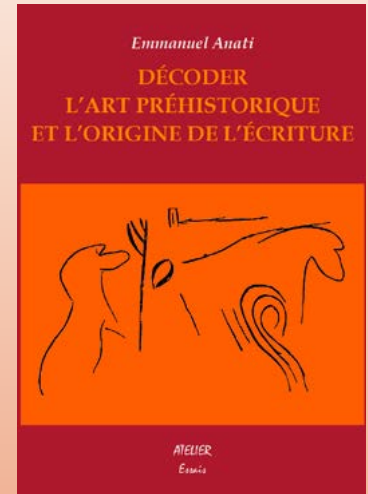
### **Ordine e Caos nelle società primarie. Uno studio sugli aborigeni australiani. (in Italian)**

Order and chaos are compared as a principle of the binary concept that characterizes the search for an elementary logic of what man is able to hypothesize about the behavior of the world around him. To what extent does the order of nature determine social order in primary societies?



### **La typologie de l'art rupestre (In French)**

Rock art is a human expression, produced over the millennia, on five continents. In the frame of the UNESCO "World Report on Rock Art: the state of the art" (2008), the author presented a typological structure of rock art, which has since been updated and revised.

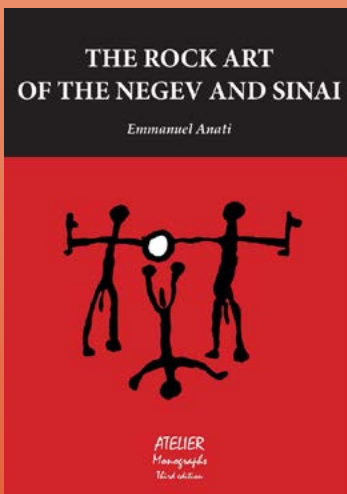


### **Décoder l'art préhistorique et l'origine de l'écriture (In French)**

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

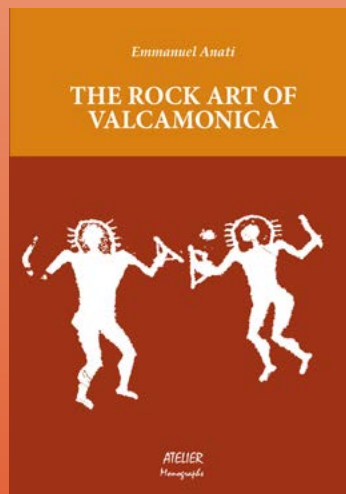
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## Monographs



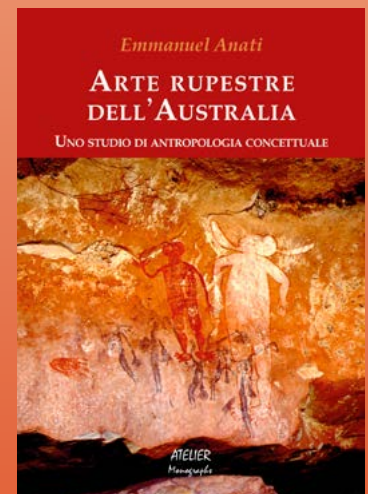
### **The Rock Art of the Negev and Sinai**

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



### **The Rock Art of Valcamonica**

Valcamonica, in the Italian Alps, with over 300,000 images engraved on rocks, is the major rock art site in Europe. It is the first 'World Heritage Site' listed by UNESCO in Italy and the first rock art site listed in the world. Its study reveals the largest archive left behind by the ancient inhabitants of Europe.



### **Arte rupestre dell'Australia (in Italian)**

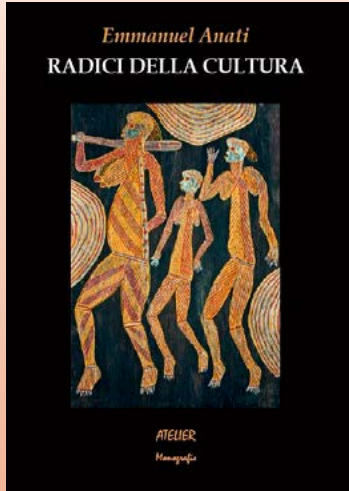
The Australian aborigines until yesterday were hunter-gatherers, creators of visual art according to ancient traditions and beliefs. The rock art tells their story and the history of art of 50,000 years.

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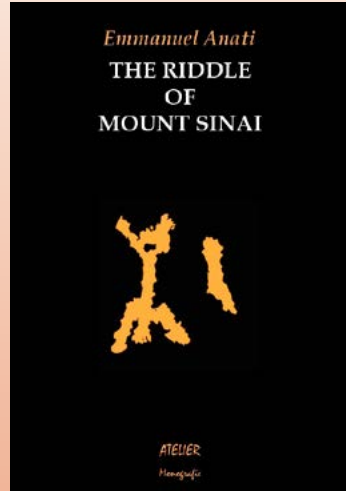
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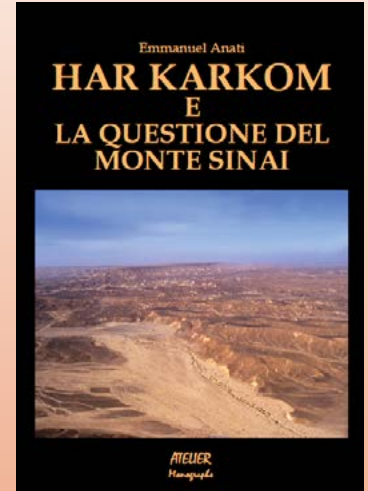
### Radici della cultura (in Italian)

The history of culture is the history which unify the whole humankind. As Yves Coppens wrote in the preface, from the very first flint tool four million years ago to the conquest of space, the human adventure shows an hyperbole, which from the beginning of history, through the ages, builds the reality of present and project us to the future.



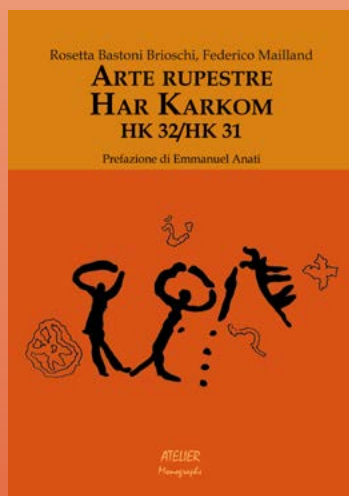
### The Riddle of Mount Sinai

What is the true story behind the biblical narration of Exodus? The discoveries of the Italian archaeological expedition at Har Karkom, in the Negev Desert, tell the hitherto unknown story of the sacred mountain in the heart of the desert of Exodus, reflecting surprising similarities to the events and conditions described to us, albeit in mythicised form, in the Old Testament.



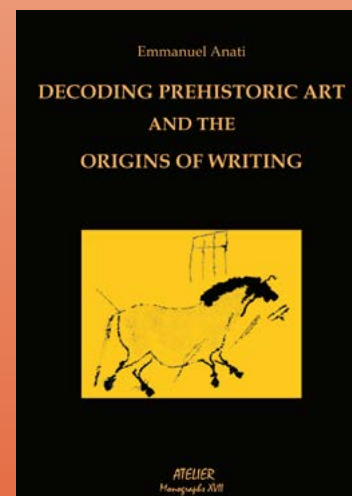
### Har Karkom e la questione del Monte Sinai (in Italian)

The findings of shrines and encampments of the Bronze Age at Har Karkom, a mountain located in one of the driest places and inhospitable parts of the Negev desert, in the north of the Sinai Peninsula, arouses a global debate on the hypothesis that this mountain can be identified with the biblical Mount Sinai.



### Rock Art - Har Karkom HK 32/HK 31 (in Italian)

Within the frame of the Archaeological Italian Expedition in Israel, the present book is a record of rock art in two adjacent sites on the plateau of Har Karkom. The rock art is in the same area with tumuli, altar stones, stone circles and other megalithic structures. Some of the rock engravings are on these monuments. The rock engravings are described and illustrated by numerous photos and tracings.



### Decoding Prehistoric Art and the Origins of Writing

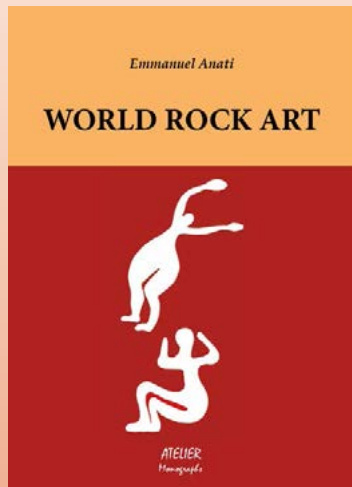
This text examines the cognitive process that led to the invention of writing and highlights constants of memorization and associative synthesis held in the mind of *Homo sapiens* for thousands of years.

Some examples of decoding prehistoric art give a new vision for the beginning of writing.

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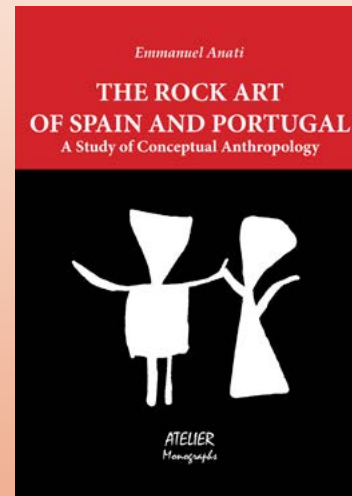
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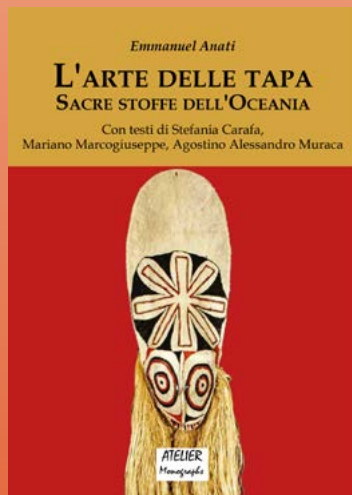
### World Rock Art

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



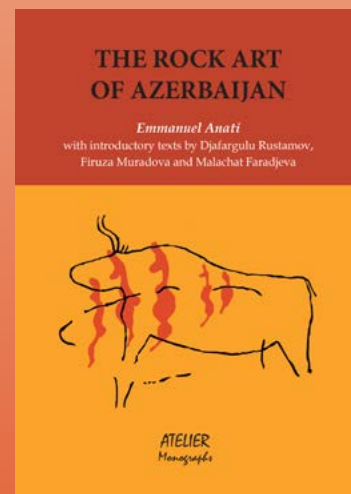
### The rock art of Spain and Portugal

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



### L'arte delle tapa. Sacre stoffe dell'Oceania (in Italian)

The tapa is a non-woven fabric, a kind of felt produced from the bark of some species of trees. Their origins are much earlier than the invention of weaving. Their roots go back to the Old Stone Age. Indirect testimony of their antiquity are provided by the discovery of tools used for the manufacture of tapa in archaeological layers and by figures of tapa cloths in the rock art.



### The Rock art of Azerbaijan

Over the course of centuries, Azerbaijan, was a great centre of rock art.

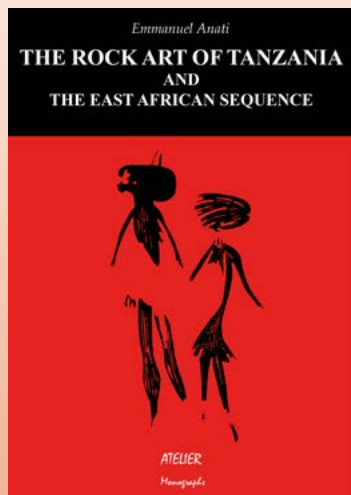
This gateway of Europe, between the Caucasus Mountains and the Caspian Sea, was a major way of migrations from Asia to Europe.

Showing influence and connections with both Europe and the Near East, the succession of phases of rock art illustrate the movements of cultures and ideas from Paleolithic to recent times, shedding new light on the early movement of *Homo sapiens*.

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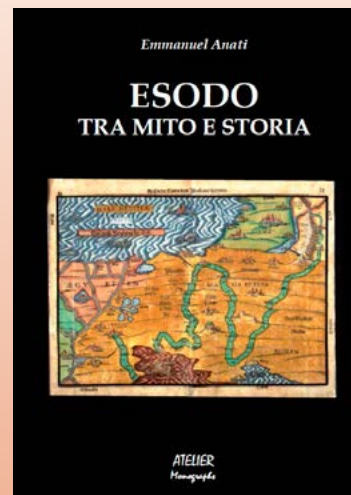
# ATELIER's PUBLICATIONS

## Monographs



### **The Rock Art of Tanzania and the East African Sequence**

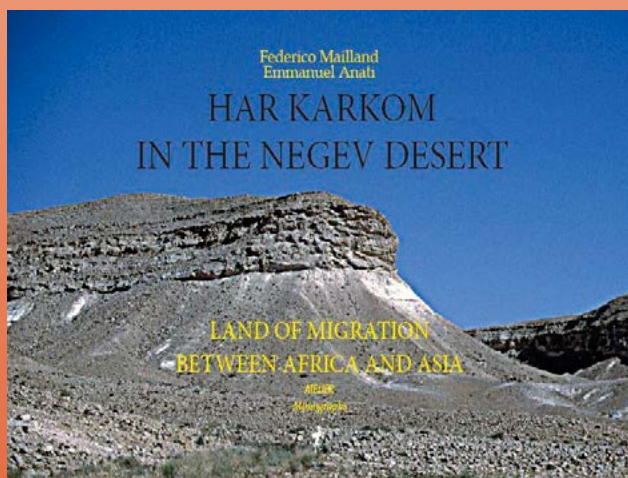
The rock art of Tanzania, in over 200 caves and rock shelters, is presented in this book using the analytical method of Conceptual Anthropology. Stylistic phases and periods are covering millennia.



### **Exodus**

#### **Between Myth and History**

The epic of Moses: is it myth or history? The Biblical narrative of the exodus and the revelation of Mount Sinai are a monumental literary work that has been passed down for well over two millennia, after being transmitted orally for centuries. What would have really happened during the Exodus? How did monotheism emerge? Who were the mentioned people of the desert met by the children of Israel? The central episode of the epic is the revelation at Mount Sinai.



### **Har Karkom in the Negev Desert**

A mountain located in the land-bridge between Africa and the rest of the world yielded traces of ages of human presence ever since the first steps of the human ancestors out of Africa.

The archeological discoveries tell us of two million years, from the earliest stations of archaic Pebble Culture, to recent Bedouin camping sites.



### **Il santuario paleolitico di Har Karkom (in italian)**

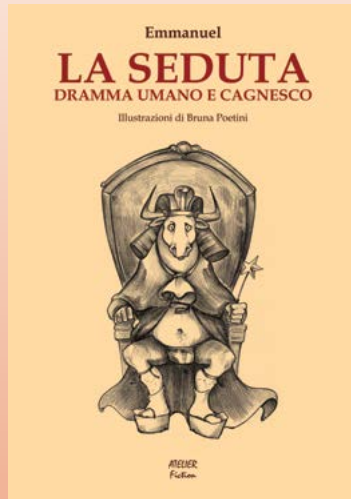
The discovery of a Paleolithic sanctuary, the oldest known, in the middle of the desert, and right in the desert of the biblical Exodus and the perennial exodus, along the great migratory route between Africa and Asia, awakens questions about the spiritual and conceptual world of the origins of religion. The surprise of this volume is that it reveals how and why. Concepts and beliefs emerge that gave rise to one of the oldest religious expressions in the world: it adds a new chapter in the history of religions.

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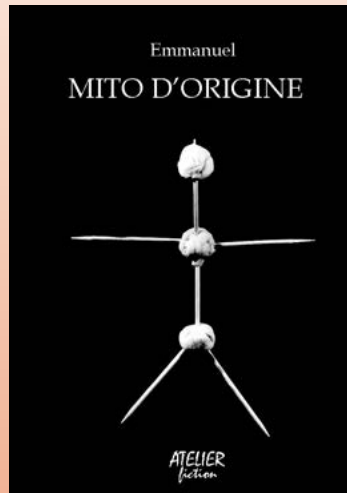
# ATELIER'1 PUBLICATIONS

## Fiction



### **La Seduta (in Italian)**

This work of the author's youth reflects a biting social commentary that after half a century seems to have not lost its charge. It was written in the 60s of the last century, in the climate of postwar youth revolt. It was published for the first time in 1979 in a bi-monthly magazine. It now comes out in a revised edition.

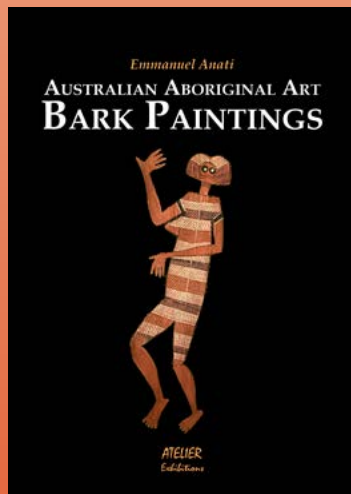


### **Mito d'origine Epoca dei Sogni (in Italian)**

The first works of Atelier Fiction, Mito d'Origine and Epoca dei Sogni, tell stories that at first sight seem to come from another world. Between reality and dream, realism and myth, symbols and metaphors, they accompany us in the space of flooded memories. Balls and sticks wander, meet and multiply in black space, always accompany the shadows and the lights of thought. They are works created by the author at a young age now published for the first time, a few decades after since they were first conceived.

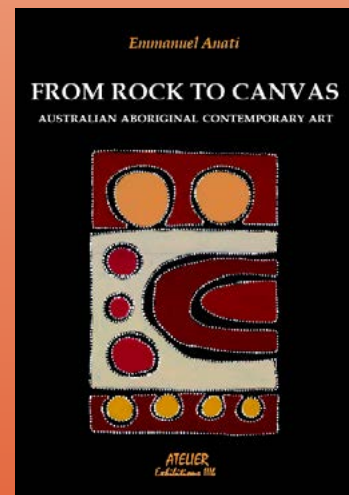


## Exhibitions



### **The Art of the Australian Aborigines Bark Paintings**

Australian Aborigines have produced paintings on tree bark that, in addition to being remarkable artworks, store myths and memories, emotions and human relations. What remains today of authentic bark paintings, made by Aborigines for themselves, is an extremely small group.



### **From Rock to Canvas Australian Aboriginal Contemporary Art**

Turning from the Stone Age to the age of air-conditioning in a generation is an experience which leaves its mark on artistic expression. The canvas paintings made by contemporary Aboriginal artists, whose fathers painted on rocks or tree bark, display a momentous revolution in the spirit of a generation that has leapfrogged millennia.

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