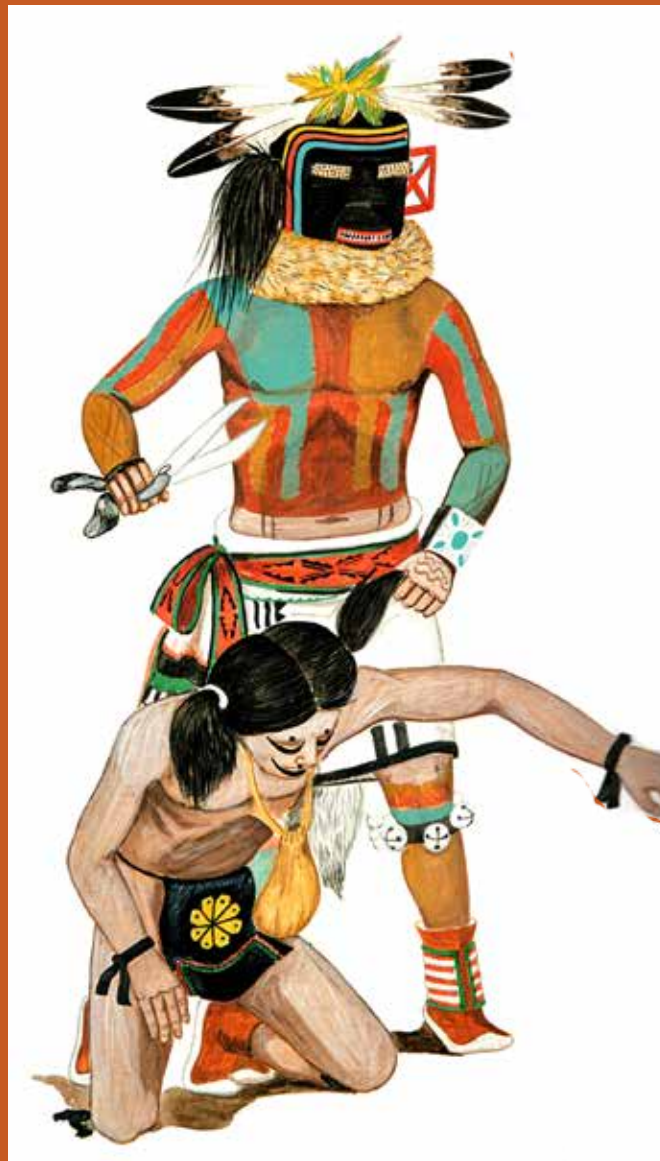


EXPRESSION

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

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MYTHS REVEALED BY ART

EDITORIAL NOTES

PREHISTORIC ART REVEALING MULTI-MILLENARY MYTHS

The images and signs of prehistoric and tribal art illustrate the real and imaginary realm of their makers. They are an immense visual archive to be decoded, representing a world phenomenon that records and memorizes the concepts, facts, and emotions of the moment in which they were made. The images survived, but their meaning is often gone and has to be recovered. They are the expressions of events and myths, providing sparks of beliefs and notions of different ages and cultures. These images and signs are the records of the as yet unwritten chapters of the history of humankind. They are there in front of our eyes, even when we are unable to interpret their meaning. By trial and error, we may make some progress. Even small details in deciphering what they are conveying help to move forward decoding and understanding.

Examples of deciphering prehistoric art have appeared in several previous issues of **EXPRESSION** (mainly in numbers 6, 14, 15, 16, 18 and 27). The present issue has articles presenting such attempts from sites in Africa, Asia, Europe and America. More papers will appear in the future and colleagues are invited to participate in this challenging goal of recovering the content, so that the images may talk again. There is so much to tell about the huge variety of myths, beliefs and traditions documented by visual art. Art is the depository of myths in different corners of the world. Anthro-zoomorphic images in European Paleolithic art, Wandjina spirits of the Kimberley or Quinkan spirits of Cape York peninsula in Australia, the images of supernatural faces in the rock art of Helan-Shan in China, the ancestral images in Arizona and New Mexico in the US, the imaginary sea-creatures of British Columbia in Canada, the surreal beings depicted in the Tassili of Saharan Africa, the spirits departing or arriving on boats in the rock art of Bohuslaan, Sweden, or the surreal images of megalithic monuments along the Atlantic coasts of Portugal, Spain, France, and Ireland are all hiding splendid stories. Let us join in exposing these images and take the challenge of bringing back to life the enormous forgotten patrimony of human imaginary reality. They are wonderful tales that enrich minds and offer to the participant the emotions of exploring the dimensions of human creativity and imagination. The most promising yet unknown discoveries of this well-studied

world are in the expressions of human minds. Friends and colleagues are invited to join in making this patrimony known and understood. Some of the stories may be known to local specialists or local popular traditions, but a crucial step is taken by diffusing worldwide their knowledge, which is making them an active part of world culture. Describing them is worthy and attempts to make further steps are possible. Let us try to under-



Fig. 1. Rock paintings from the Kimberley, Australia. A couple of large figures, almost 1 m high, are accompanied by smaller human figures. A marsupial figure may indicate the name or identity of the two large figures. What story is the painting telling us? According to C14 dating of calcareous incrustation covering figures of this style, they may be earlier than 18,000 years ago (tracing by Walsh in Anati, 2019, *Arte rupestre dell'Australia*, Capodiponte, Atelier).



Fig. 2. Another rock painting from the Kimberley, Australia, belonging to the same style and age. Again, a couple of large figures are accompanied by marsupial figures probably indicating their name or identity. Again, one is dressed with a skirt and the other with series of lines ending up with pompons. They may represent the same beings as in the previous image. In this image they are accompanied by three Y-shaped ideograms out of which something, indicated as dots, seems to be emerging. Who are these beings? What story are these paintings telling us (tracing by Walsh in Anati, 2019, *Arte rupestre dell'Australia*, Capodiponte, Atelier).

stand the meaning. Imagination is the source of culture, art, religion, science, and of most things in our conceptual life. Some of the traditional educational methods of retaining the imagination in fact censure the natural orientation of the human mind. The fear of being criticized for interpreting is just an attitude of conservative research. Avoiding interpretation is wise and sound advice, and we are the bad boys encouraging other bad boys (of every gender) to take the risk of being criticized. Without attempts at interpretation, research will remain in the elementary stage of description. Even then, all of us may make mistakes. And criticism may well come even when you are right.

Even If you present a sound and documented interpretation there is always the possibility of being criticized. If only one out of ten imaginative attempts contributes to an advance in research, it is worth trying. No progress is possible without trials. If you are able to propose the story behind the image, this will be most valuable. If you know what you are talking about, and you have sound evidence, do not be afraid. In any case it will be a creative act. Your text will stimulate and awaken debate. If your ideas are unreliable, control them before exposing them; if they permit of debate, do not worry, as criticism will reach you without delay. Many friends and colleagues are just looking for something to criticize, and you will no doubt hear from them. Even before, our reviewers will help you avoid exposure to justified criticism. Saying something even at the risk of being criticized is an act of courage and culture; having ideas and saying nothing for fear of being criticized is an act of self-impeachment. Research progresses by trials and errors. Sound ideas have to be articulated and debated. Even if you have no ideas about interpretation, just presenting puzzling images, describing them, and posing questions, will be an act of culture through consciously sharing your queries with others. Most works of art, prehistoric, historic or tribal, have motivations and meanings. Let us bring their concealed contents to the surface. By awakening interest on a world basis, we bring back to life a millenary memory that so far has not been given the attention it deserves. We look forward to hearing from you.

A NOTE FOR THE AUTHORS

EXPRESSION quarterly journal is addressed to readers in over 80 countries. It is a periodical on conceptual anthropology. Your paper is intended to produce culture: tell your story to a world of culture. The goal 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. Colleagues having something pertinent to say will find space in this e-magazine, which is reaching people of culture and academic institutions the world over. Papers should have precise goals, conceived for this kind of audience, and possibly be well illustrated. Letters on current topics and short notes are welcome and may be included in the Discussion Forum section. 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. Papers are submitted to reviewers, but controversial ideas, if they make sense, are not censored. New ideas and concepts are welcome; they may awaken debate and criticism. Time will be their judge. EXPRESSION is a free journal, not submitted to rhetorical and 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 and dignity of authors, colleagues, and readers.



Front page image

“The *Hömsona*, a runner. “He Cuts Your Hair” wears a black case mask with a tube mouth, and red, green and yellow horizontal stripes on the forehead. Fox skin ruff, kilt, sash, fox skin. Body painted black or red, green and yellow. He carries a pair of sheep shears, scissors, or a knife, which he uses to cut off pieces of the victim’s hair” (*Homsona* painting by Clifford Bahnimptewa in Wright 1992, 224).

DISCUSSION FORUM

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

DEFINING CULTURAL IDENTITIES

A forthcoming issue of EXPRESSION quarterly journal will consider identities. What comprises the definition of the cultural identity of an ancient site, a geographical area, a style or pattern of art, a myth, a village or an ethnic group? Every archeological and tribal site, object or human group around the world has its own identity. You are invited to define the cultural identity of a site or cultural pattern, object of research or otherwise of your concern.

Among living groups, patterns of human relations, technical abilities, economic resources, art creativity, beliefs, myths and more, are defined by understanding similarities and differences with other groups. Defining may include comparing. When oral or written transmission of traditions is missing, like in most ancient sites, art and material culture, traces of living structures and funerary grounds are the main sources to define cultural identity. Though using different measures, again defining is enhanced by comparing. Defining elements of cultural identity will be an endeavor that may result in a healthy confrontation on what are the main factors of cultural identities. Colleagues and friends are cordially invited to contribute pertinent papers: describing a site, a subject, an event, a human group, or a cultural trend, stressing peculiarities which define identity. Kindly propose the title or the content of suggested contributions and let us know it in advance. Final texts accompanied by illustration should be submitted before 20 October 2020. Please consider the text on “How to conceive your paper” in the pages of this issue.

INTELLECTUAL AND SPIRITUAL EXPRESSIONS

XIX UISPP WORLD CONGRESS, Meknes, Morocco, 2021

Archaeologists and anthropologists intend to meet in Meknes, at the UISPP Congress, 2–7 September 2021. The Congress is planned to include general lectures, scientific sessions, visits to archeological sites, social events, official dinners, press conferences, and open debates. The scien-

tific session on: “The Intellectual and Spiritual Expressions of Non-literate Peoples“(CISENP session 20-2021) welcomes potential participants, inviting them to confirm their intention to attend the CISENP SESSION CONGRESS 2021, by email: atelier.etno@gmail.com. The session will include the presentation of papers, debates and encounters on arts, beliefs, rituals, myths, traditions, and customs, and whatever else inspires the human imagination and creativity. Participants may have one of three possible statuses:

- Active member presenting a paper (the title of the proposed paper and a short abstract should be included).
- Student and/or voluntary member to help at the event (a commitment to attend and actively help during the entire duration of the Congress should be included).
- Observer, coming to listen (reservations are required to get seats during the lectures and other events).

Colleagues, students, and friends wishing to participate are invited to submit a preliminary registration by providing name, postal address and email, along with the copy of a document of identity, to CISENP SESSION CONGRESS 2021, email <atelier.etno@gmail.com>, indicating the status desired, and adding relevant statements. Preliminary registration to the CISENP session is free of charges.

Colleagues and friends who presented titles, abstracts, and even final texts of their papers for the session will rightly enquire about the destiny of their papers. The papers should be in English and are submitted to the evaluation of reviewers. Our engagement to publish accepted papers is confirmed. Texts may conform to of three categories: short notes, up to 1,500 words; papers 1,500–4,000 words; leading lectures (concerning major themes of world relevance) up to 6,000 words. Texts should be in Word; illustrations, separate from the text, should have a definition of 300dpi. Each illustration should have a caption. All the material presented, text and illustration, should be free from copyright and any other limitation. The authors are responsible for what they submit. Each paper should have a short title, possibly no longer than one line. A summary of up to 200-300 words will introduce the text as an abstract which will be submitted to be published in the general book of abstracts of the Congress.

Each accepted paper will be published in an issue of **EXPRESSION**, according to the time of presentation, from now till five months before the opening of the Congress (deadline 1 April 2021). The resulting book, collecting all the papers, is intended to be presented at the Congress. The texts will be available to all participants of the session at the Congress; each paper will be allowed up to 20 minutes,

followed by five minutes of questions and debate. Potential participants are invited not to leave it to the last minute, and submit their papers so that they may be published and distributed in forthcoming issues of **EXPRESSION**.

FURTHER DEBATE ON COLONIZATION

Following the note on colonization in the previous issue of **EXPRESSION**, comments focused on various issues, criticizing colonialism, defining the age of colonialism and its political issues, and even expressing a nostalgic approach to a hypothetical age of pre-colonialism. One main question emerged, which was whether colonization can be stopped. Entire humanity is and always has been in a process of constant and permanent colonization, which concerns all aspects of life: territorial ownership, language indoctrination, new ways of being clothed, the use of new currencies, new kinds of food, education, economy, laws and ethics, different kinds of medicine and cures for diseases or new patterns of cult and religion. The whole horizon of daily life is conditioned by colonization. The process may follow evolution or revolution, forcefully imposed colonization or gradual adaptation.

People who have suffered forceful colonization rightly resent this imposition. Colonization has caused the loss or change of identity and the abandonment of traditional cultural habits. Native Australians and native Americans alike have lost most of their beliefs, their traditions, and their memory, and have acquired the beliefs, traditions, and memory of the colonizers. African tribes are now nations; they have suffered drastic colonization and have lost the tribal way of life. Revivalists profess utopian aspirations to re-establish native traditions and beliefs. These trends suffer from two major handicaps. The way of life is no longer the traditional one. How can people go back to hunting with a bow and arrow if it is easier to buy a piece of meat at the supermarket? Another handicap is the loss of memory. If you do not remember how to talk to the ancestors, the ancestors do not listen to you anymore. Traditional ceremonies have been ruined by the intrusion of alien indoctrination. Tribal history is no longer transmitted by oral initiation from generation to generation, but is that of the anthropologist or the scribes of the official regime.

The past is being idealized, which is a global trend, and in the course of generations memory becomes myth and the traditional way of life is reinvented as the Garden of Eden. But it is not possible to find refuge in the past. People suffering for having had their culture suppressed or repressed cannot go back; they can go forward, regroup

their memory and rethink their traditions, reinventing a new sustainable identity, suitable to a vision of the future, where each person should preserve identity, dignity, and memory. Awareness of ethnic traditions is not just the patrimony of the human group; it is the heritage of all humanity. But could an African Khoi or an Arctic Inuit, colonized to be Christian, or an Arabic Bedouin colonized to be Muslim, go back to ancestral totemic cults? Instead of thinking about how to go back, it should be considered how traditions can contribute to the identity of the future.

Saving what can still be saved of memory is granting the survival of the human heritage; to preserve the knowledge of traditions, customs, beliefs, and other cultural patterns is a source of awareness and wisdom. And it contributes to cultural evolution, a reality that cannot be avoided: the past forms the roots of the future.

Hopefully, the times of military conquests, compulsory conversion, and slave trading are over – or almost. Conceptual colonization, religious colonization and financial colonization still have to be overcome. Another aggressive pattern of colonization is globalization. It displays the apparent benefits of egalitarianism: theoretically, all people are the same, nevertheless the difference between rich and poor is not just apparent. And there are two major dangers. The first is that a society losing local and ethnic identities contains identity card numbers rather than people. And the second is the danger of global vulnerability. What would happen if the world machine of economy, industry, food production, communication, education, and so on is put out of function by an electronic worm? In a megapolis of millions of souls, even the simple cessation of trash collection would produce disasters and epidemics. A cessation of electricity or water supply would be a catastrophe. But then, going back to hunting in the bush or growing your own potatoes, or drinking water from a local spring may awaken alternative utopian movements. Living on hunting or on growing manioc or tubers is still the privilege of a tiny minority of people, but for the billions of souls on this planet it is too late: the hike of mankind is without return.

Colonization is a constant pattern of human society. It should not go to extremes and should not imply the loss of personal freedom and memory. Freedom helps people to integrate and to follow social evolution. Memory is the patrimony of each individual, each family, clan, tribe and nation. It is the heritage that grants identity and dignity to each individual and each ethnic group. The past is there not to go back to but to make us build the future. Analytical papers on this topic or studies on specific cases will be gladly considered.

SPECIFYING THE IDENTITY OF *HOMO SAPIENS*

Hunters, food gatherers, pastoralists, farmers, urban societies, and other human groups display diversified cultural patterns coexisting on the same planet. All living human beings today are considered to belong to the *Homo sapiens* species. Archeologists define cultural patterns according to models of settlement, material culture and art. Urban societies as a pattern developed some 6,000 years ago, farmers and pastoralists some 10,000 years ago. Before that all of humanity survived on hunting and food gathering. Among a variety of emerging queries, two appear to be of particular relevance. First, what conditions or events provoked diversifications of cultural patterns? Second, do such diversified cultural patterns derive or not from a common origin? Can we figure out a common origin of human cultures, the first core of one social structure, one economy, one human unit, and one single place of origin? Could cultures have evolved from a primary clan or other restricted group of people, having peculiar conceptual characters, the primordial fathers of billions of present offspring?

Diversification of cultural patterns is the very core of culture. From what we know, we may figure out a sequence of primary cores: the core of primates, the core of *genus Homo* (hominids or Pithecanthropian core) and the core of *Homo sapiens* species. Each one of these cores had its own cultural acquisitions, and each one of them had cousins that developed in different directions. Some of them were successful and survived, others became extinct. In the early formative times of *Homo sapiens*, other hominids coexisted, Neanderthals and other proto-sapiens families; and groups of Pithecanthropian survived in corners of the Old World also.

Various cousins became extinct or were colonized and absorbed by *Homo sapiens*. Every core emerges as offspring of a previous core and tends to develop differentiated offspring, as still happens today, where Europeans, Chinese, Africans, and others are all considered to be part of the *Homo sapiens* species. Each family of men has traditions and cultural identities in socializing, language, food, and traditions and habits.

What is the common denominator? What defines the identity of the common ancestor, early *Homo sapiens*? Paleontologists rely on skeletal features to classify *Homo sapiens*. But do bones define the conceptual sapience of *sapiens*? How may we classify the many skeletal materials of present-day populations that show anatomical features not fully corresponding to the *sapiens* stereotype? Is their osteological structure similar to that of the European Cro-Magnon? Are Pygmies or Hottentots *sapiens*? Despite their distinct physical characters, they own the pertinent conceptual faculties,

they produce elaborate, fine visual art: indeed, they have the faculties of the *sapiens*.

Conceptual anthropology considers that intellectual abilities define the *sapiens* identity. Among other tangible expressions of cultural identity, such as the refined typology of the lithic material industry, the ability and need to produce certain types of tools, the use of decorative items, there is the habit of producing figurative art as a pattern of culture. Figurative art is a meaningful element as it testifies to the ability to conceptualize an image, leading the hand to reproduce or idealize it. This is a major trend of the *sapiens* identity, implying talents for synthesis, abstraction, and conceptualization. It indicates the skill of a logical concept of reality, allowing the visual transformation of this reality into an image: the materialization of ideas, the idealization of reality, and the visualization of the real and the unreal. It is a unique ability of *sapiens*, which opened up new horizons to conceptual evolution.

Despite the opposition of traditionalist tendencies, the terminology used by conceptual anthropology names *Homo sapiens* the maker of figurative art. In Eurasia, this pattern is present in the Upper Paleolithic as the production of what traditional terms label *Homo sapiens-sapiens*. The terminology of conceptual anthropology eliminates the redundant second *sapiens*.

In Africa, Eurasia, Australia, and the Americas there are traces of visual markings in the form of non-figurative signs, lines, dots, cup-marks, stencils of hands, and other items copied and printed but not intentionally designed by the human hand. These graphic markings are a proto-art, present in the Middle Paleolithic before figurative art, though persisting into the Upper Paleolithic and later. Some tribal groups still perform this kind of non-figurative graphics nowadays, as a means of communication, memorization, and for marking their presence or ownership. The producers of the Mousterian lithic industry, Neanderthals and other proto-*sapiens* groups of the Middle Paleolithic, performed this kind of graphic marking which is not yet fully figurative art: it is proto-figurative art.

It is now being debated whether fully figurative art may be associated with people producing a Middle Paleolithic material culture. In Tanzania, early expressions of fully figurative art may be related to a middle Paleolithic material culture, a hypothesis requesting further verification. As postulated in a previous issue (no. 27), in Europe figurative art was produced by the makers of the Chatelperron culture, and it may well be (though not yet proven) that other groups of people producing pre-Aurignacian material cultures may have had this sort of ability as a cultural pattern. Recent assertions in this sense should first provide tangible confirmation. A fact already stressed in previous issues is

that most likely Neanderthals were not the only inhabitants of Europe in the Middle Paleolithic.

Figurative depictions intentionally shaped by human hands are the tangible expression of the conceptual rationality of *Homo sapiens*. They appear to have fast become a widespread pattern of culture in different areas in Eurasia, Africa and Australia, which are unlikely to have had direct contact between each other at the time. They are the indicators of the presence of the mind of *Homo sapiens*. In Europe, the Near East, and Africa, proto-*sapiens* graphic markings and hand stencils (proto-figurative art) may go back over 70,000 years, while figurative art shaped by hand is today considered to go back thousands of years later.

The emergence of visual art is a fascinating and highly relevant theme, which needs to be clarified. Another meaningful issue concerns the causes of differentiation in style and subject matter of various categories of *Homo sapiens*. Why do some ethnic groups have animals as the dominant theme and others have anthropomorphic figures, objects or signs? How do these peculiarities relate to the way of life of the human group?

Many other questions arise concerning the issue of the identity of *Homo sapiens*. The local features of art, material culture, social structure, typology of habitation sites or economic resources could contribute details of both general trends and the specific local varieties of human expression. Issues on evolution and variations in art styles and subject matter, the diffusion and localization of cultural patterns, and regional specific characteristics may enrich our understanding, open up new horizons of knowledge, and stimulate constructive debates. My good friends, *Homo sapiens* has not yet discovered himself!

A forthcoming issue of **EXPRESSION** will welcome articles on the various facets of the cultural identity of *Homo sapiens*: art, material culture, burial systems, social structure, religion, myths, beliefs, and so on. Colleagues and friends with ideas and something to say or to ask are welcome to participate and share this experience.

FURTHER DEBATE ON THE CULTURAL IDENTITY OF THE NEOLITHIC TEMPLES OF MALTA

A letter to Prof. Anthony Bonanno

Dear Anthony,

Thank you for your successful article on Neolithic Malta which caused queries. Could you please reply shortly to the following questions:

1. Who or what was worshipped in the temples? Ancestors? Gods? Goddesses? Abstract, invisible concepts?
2. What was the identity of the fat being (male or fe-

male?) with changeable heads?

3. What kind of regime could have allowed the availability of the manpower and resources requested to build the temples? What kind of political and social organization?
4. What were the main economic resources of Neolithic Malta? Who provided these resources?

Thank you for your reply...

Emmanuel

(Prof. Emmanuel Anati)

The reply from Prof. Anthony Bonanno

Dear Emmanuel,

These are the brief replies to your questions.

1. Who or what was worshipped in the temples? Ancestors? Gods? Goddesses? Abstract, invisible concepts?

Traditionally, since the 19th century, the most popular identification of the entity represented by the main group of statues, statuettes and figurines (of different sizes) was that of a goddess, procurer of fertility and fecundity and personifying Mother Earth. This view was based on the prosperous volumes of the body of the figures. Even though the sex is not manifested in this standard, stylized group, the characteristic format of their obesity is generally associated with female anatomy. They have been referred to in popular literature and among Neopagans as “Fat Ladies”, even though early 19th-century antiquarians introduced the connection with the “Seven Kabeiroi” of the Aegean, mainly because of the number of statues (7) found at Hagar Qim in 1839. More recently, an alternative interpretation has been proposed, namely that they represent (heroized) Ancestors, or even the votaries themselves. The “Sleeping Lady” from the Hypogeum is the only representation that combines the typical body format of the group and the flounced skirt worn by some of them, with clearly female breasts. The funerary context of its find-spot and her sleeping posture has suggested rites of incubation and interpretation of (induced?) dreams.

Clearly outside that group, the singularly naturalistic, nude female figurine, also found at Hagar Qim in 1839, introduced the “Venus” concept (going back even to the Palaeolithic) into the Maltese context. But its small size and cheap material (clay) could imply a plaything or an initiation object.

2. What was the identity of the fat being (male or female?) with changeable heads?

As explained in 1, the most diffused view is that they are female, at most androgynous or asexual, but never male. Only in the case of two large-sized terracotta figures found inside the Middle Temple at Tarxien has an identification

with “priests” been suggested, because of their relatively individualized facial features. However, the fully restored one has been found to incorporate a non-pertinent fragment for the chest, and an alternative reconstruction of it as a priestess has been proposed.

The changeable heads on a good number of figures of the main group support more their identification as Ancestors or “Strong Social (or religious) Leaders”. The moveable heads could have been used for signaling responses (e.g. “yes” or “no”) in oracular responses, for which there are some supporting features in both temples above ground and underground burial places.

For representations of male sexuality, there is a range of phallic symbols (single, dual, triple), either free-standing or in relief, but never in anatomical association with statuary.

3. What kind of regime could have allowed the availability of the manpower and resources requested to build the temples? What kind of political and social organization?

Certainly not an egalitarian one. The mobilization of manpower to quarry, transport and erect the single blocks required leadership and direction from a single person, or members of an elite group, for each construction. The plan and elevation of each structure also required the knowhow of the quality of the building material and the engineering technicalities we normally associate with architects and/or, as in the case of Medieval cathedrals, master masons. Witness of this knowledge is the intelligent use of the two different types of building stone wherever it was available, namely, the hard-coralline limestone for the outer skin of the supporting outer wall and the softer globigerina limestone for the inner walls and for sculptural decoration. The motivation for such a superhuman effort involved in the construction of each temple must have been a very strong one, and we know from the past historical record that religion was always a very appealing and persuasive motivation.

4. What were the main economic resources of Neolithic Malta? Who provided these resources?

The building knowhow mentioned above and the collective effort required for the realization of each megalithic building project, as well as the refined, consummate expressions of art expended on and around the underground necropolis, imply a fair degree of specialization of a sector of the population, even if not on a full-time basis. The same applies to the running of the rituals taking place inside and around them. This required the input of the majority of the people in the productive economy.

The evidence for such an economy is not abundant. It is almost completely absent from domestic contexts that are

minimal and none of them discovered so far belonging to the Tarxien phase, the climax of megalithic construction. The bulk of the evidence, therefore, comes from the records of the excavation of the Tarxien (by Zammit 1930) and Skorba (by Trump 1966) temples, and the Xaghra Circle communal cemetery (Malone et al. 2009). The economy must have been a very efficient one, based on agriculture (wheat, legumes, and pulses are attested) and domestic animals husbandry (bovines, ovicaprids, and swine). Consumption of seafood seems to be absent in the diet, though sea shells are used extensively for pendants. Trade is attested only by imports of raw materials for hard stone instruments (Pantelleria and Lipari obsidian and Hyblaean flint) and hard stone pendants (dark green stone from Calabria). No evidence so far is available for export of any kind and for religious tourism (e.g. the “Holy Island” syndrome). The main local raw material for building these communal structures is the local stone; for domestic purposes highly perishable materials were used, mainly adobe and wattle and daub.

A.B.

PRE-COLONIZATION AMERICAN NATIVES IN THE AZORES?

If the information is reliable, two bodies likely to be those of American natives were found in the island of Flores and were seen there by Christopher Columbus. Could people

reaching the Azores from America have landed in the archipelago before the Portuguese colonization? Bartolome de las Casas, a Dominican priest and known defender of the rights of the native people, lived in the late 15th and in the first half of the 16th century. According to Anthony Pagden, he wrote that he had found this information in the notes of Christopher Columbus, relating his stop in the Azores during the return of his first voyage, in 1493 (Anthony Pagden, 1999, *A Short Account of the Destruction of the Indians*. New York: Penguin Books. ISBN 0-14-044562-5). Columbus was the first European that we know of to have landed in the Azores coming from the American continent. Could American natives have reached the archipelago before him?

Traces of human presence in the Azores before the Portuguese colonization have been asserted, relying on a variety of traces, indications in ancient maps, reports of domestic animals found in the islands by the first colonizers, and other hints, but they have been denied by the official version of the local history, claiming that nobody ever landed in the islands before the Portuguese colonization. A number of archeological findings, none of them so far clearly dated, have caused assumptions to be made about the presence of Vikings, Phoenicians, Arabs, and others. The presence of American seafarers is an addition... and attributed to the travel notes such authority as Christopher Columbus (Anati, 2017, *Azores, a Visit to the Island of Terceira*, Capo di Ponte, Atelier).

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 - **ON THE DIFFUSION OF CULTURE.** How are human abilities, concepts, and traditions born, and how do they travel and have their course?
- 2 - **SOCIAL STRUCTURE AS REVEALED BY PREHISTORIC AND TRIBAL ART.** How pictures reveal social relations and social organization.
- 3 - **DEFINING THE CULTURAL IDENTITY OF *HOMO SAPIENS*.** Art, material culture, myths, beliefs, and conceptual trends.
- 4 - **WHERE DOES *HOMO SAPIENS* COME FROM?** Where, how and when?
- 5 - **IS *HOMO SAPIENS* THE INVENTOR OF FIGURATIVE ART?** Is visual art the sign of his presence?
- 6 - **PERSONAL IDENTITIES OF ARTISTS.** Identifying the hands of a specific artist, school or tradition in prehistoric and tribal art.
- 7 - **BURIAL CUSTOMS AND PRACTICES** as expression of beliefs in the afterlife. How was the world of the dead conceived?
- 8 - **IMAGES OF WARFARE AND FIGHTING IN PREHISTORIC AND TRIBAL ART.** Their commemorating role and their historical value.
- 9 - **SEAFARING DEPICTIONS: RECORDING MYTHS OR EVENTS?** Considering the story of seafaring and its earliest documentation.
- 10 - **REGIONAL PATTERNS IN ARTISITIC CREATIONS.** What generates local characteristics in artistic expression?
- 11 - **THE ORIGINS OF RELIGION AND THE ORIGINS OF ART.** Possible connections.
- 12 - **WHEN AND HOW 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?
- 13 - **MYTHS OF ORIGINS: WHERE DID THE ANCESTORS COME FROM?** Global and local versions.
- 14 - **THE PRIMARY MYTHS AND THEIR COMMON ROOTS.** Archetypes and other widespread patterns
- 15 - **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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DECODING PALEOLITHIC ART AND THE ORIGINS OF WRITING

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The decoding of Paleolithic art provides a new understanding on the origins of writing and on the evolution of the conceptual abilities of the human mind, and a breach of history into prehistoric times.

Until just the other day there was no clear evidence that Paleolithic people used a graphic system of writing to memorize and communicate everything that modern writing does. The general concept that prehistoric art (that is, what is currently defined as prehistoric art) meant to communicate something has been repeatedly formulated, but various attempts at defining exactly what, did not provide conclusive results in over a century of research in prehistoric art. Some of the European Paleolithic art was considered to be related to Hunting Magic (Breuil); some assemblages of non-figurative markings have been defined as calendric recordings (Marshak). Over ten different hypotheses have been proposed as purpose and meaning of Paleolithic art (Anati, 2003: see chapter on '*Histoire des interpretations*', pp. 44 – 57). These valuable attempts by various authors in the course of over a century, provided a view on the numerous orientations possible of reading the messages contained by the wonderful creativity of Upper Paleolithic artists. Ever since Sir Arthur Evans suggested the possibility of decoding the contents, in 1908, several attempts were made (Evans, 1908). The fundamental works by Graziosi (Graziosi, 1956) and by Leroi Gourhan (Leroi Gourhan, 1965) opened the way to a new look at European Paleolithic art. But no concrete results had been presented on the decrypting of prehistoric art. Now we can announce that a decoding system allows to read Paleolithic pictographic writings.

A new system of analyzing both rock art and mobile art applies multi-disciplinary methods, including linguistic and psychoanalytical ones, to reach an understanding of the syntactic logic of assemblages and sequences of graphemes. Like more recent writing, these have a variety of themes but each document has a subject, accompanied by attributes and verbs. And

they convey, beyond facts, also feelings and emotions. An infinity of data is available about the existing documentation of prehistoric art, defining the subjects represented, style, tools and methods used for producing paintings and engravings, the process of preparation of the colors, types of colors of the paintings, their chemical analysis, their grinding and the binding systems and used materials, the source of the colors (whether the paintings are made of local raw materials or of exotic resources), the kind of surface selected, methods of dating, association of art and material culture assemblages, the kind of environment, the position of the artist while executing the work of art, and much else. And then there are analytical studies of typology, style, shapes, size and measurements, similarities, typological variations, and what else. The key of decoding was not in them.

The target was to discover the content, that is, the messages that the graphic works intended to convey. Sophisticated algorithms led nowhere. The breakthrough of decoding came from the identification of the repetitive presence of three main grammatical forms defined as pictograms, ideograms and psychograms, and the variability of the syntax of association between figures and symbols characterizing the associative system of different societies according to their socio-economic structure.

On a world level of five continents, the typology of prehistoric art varies according to five major kinds of socio-economic categories: Archaic Hunters (without bow and arrow), Archaic Gatherers (Food Collectors), Evolved Hunters (with bow and arrow), Pastoralists (animal raisers), and Farmers (Complex Economy). The different grammatical and syntactic structures led to the understanding of the logic of the sequences; repetitive systems of associations permitted the identification of the metaphorical systems of conceptual communication which characterize each category. This turned out to be the key to reading the contents. Facing the traditional terminology of "hunter-gather-

er”, a subdivision was found necessary between hunters and gatherers. A world-wide typological analysis led to detect the consistent difference in subject-matter, style, grammar and syntactic associations of visual art, between people having a prevailing carnivorous diet and those having a prevailing vegetal diet.

A sector of this research, after considering some general features in non-literate figurative art, focused primarily on the decoding of Early Hunters (Paleolithic) art from Western Europe. These documents reveal trading systems of exchange not only of edible products but also of women. Other documents report on travel and journeys, mythical narrations, didactic tales, and even personal experiences that include sentimental and sexual relations. One document is testifying the arrival of a group of people in Western Europe: a unique Paleolithic historical document specifying also the names in use at the time, of the human group involved, that of the land of their origin and that of the region of their arrival. Now we know how an area, likely the Dordogne, was named 20thousand years ago.

In addition to the disruptive information of these documents, they open up new chapters of the history of millennia before the beginning of traditional history. A new landscape is emerging on the activities, social relations and also feelings and values of Paleolithic society. The decoding of a pictographic literature is assessing a turning point: it is revealing facts, myths, agreements, personal relations, going back up to over 40,000 years before the time that was considered to mark the beginning of writing and history.

The multi-disciplinary methods of conceptual anthropology led to the decoding and reading of what had been considered mute aesthetic beauties. They are documents, in the form of Pleistocene rock art, cave art and mobile art, that bring new light on ages for which no one had registered the possibility of obtaining historical documents.

When was writing invented? The first attempts at writing are millennia earlier than previously thought. New chapters are being added to the history of humanity. Conceptual anthropology, an emerging new discipline, concretely gives tangible results: the discovery of new aspects of human conceptual evolution and human mental processes. Thus, the story of writing is no longer what it used to be, and history is suddenly penetrating thousands of years into prehistoric periods.

Contrary to traditional principles, which tend to define specialized research within the framework of a specific discipline, ample use is made of comparative analyses between prehistoric art and recent tribal art; psychological and linguistic concepts are used to read the messages made up of the association of signs and images of prehistoric art. The method includes comparative analyses between essential criteria of the cognitive systems of both recent tribal populations of hunter-gatherers and those emerging from prehistoric art in different regions, in Australia, Africa, America, Asia, Europe and the Arctic regions.

Thanks to the use of pictographic associations, populations from different continents, in different ages, transmitted legible messages to their recipients. Different pictographic systems display different logical structures. The Early Hunters (Paleolithic) system of graphic communication consists of sequences of graphemes which form non-phonetic but semio-graphic means of communication, following similar criteria for more than 40,000 years. The associations of graphemes show repetitive systems which indicate the presence of conceptual constants.

Textbooks located the origins of writing between 5,000 and 6,000 years ago and the literature still examines whether this happened first in Mesopotamia or Egypt. The process of the formal elaboration of sets of signs, with legible meanings, also took place elsewhere and at different times, in China or Mexico, for example. Other such attempts are recorded in Neolithic and Mesolithic graphic expression. Formal writing therefore does not have a single origin. It derives in different continents from common, pre-existing conceptual systems.

What are the characteristics shared by these different early forms of writing and proto-writing? The distance in time and space between these various analogous manifestations seems to indicate that there are no direct contacts, that they are autonomous local expressions without direct interconnection. They must have had an older common denominator.

Progress in research on the reading of prehistoric art also challenges the evolutionary and structural hypothesis of figurative art as a source of early writing. This research is leading in the opposite direction. Is visual art at the source of writing or is writing at the source of visual art?



GRAMMAR ANALYSIS



Pictograms: two animals figures (horses), one vertical, the other horizontal

SYNTAX ANALYSIS



Vertical animal with male ideogram



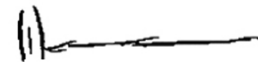
Ideograms: two male signs (branch and arrow)



Horizontal animal with female ideogram



Ideograms: two female signs (lip and ear)



Union of female ideogram (lips) and male ideogram (arrow)



Psychogram: sinuous lines bundle



Psychogram. exclamation or omen

Fig. 1. An engraving in the cave of Altamira, Spain, shows two horses, some ideograms and one psychogram. The dart or spear usually has a male value, like the arbolet ideogram. Vulva and lips ideograms have a female value. The ideograms have male values and female values. A vertical horse is accompanied by a male ideogram, a horizontal horse by a female ideogram. On top of them appears the depiction of the dart ideogram (male) penetrating the lips (female) ideogram. Below the composition a psychogram appears, a sort of exclamation. The document may read: 'Mr. Vertical Horse met Ms. Horizontal Horse: sexual union, oh!' This Altamira engraving may simply tell a love story of 20,000 years ago (tracing by H. Breuil, 1912).

The method is applied on a world basis. The forthcoming text is focusing on Early Hunters European Paleolithic art; previous studies applied to other groups as well, such as Holocene rock engravings of Incipient Farmers from Valcamonica, Italy (Anati, 2015a) or the rock art of Evolved Hunters and Pastoral nomadic populations in the Negev and Sinai, Israel and Egypt (Anati, 2017) The decoding methods are described in the 2015 edition of *Decoding Prehistoric Art and the Origins of Writing* (Capodiponte, Atelier). The full decoding of several Paleolithic documents will appear in a forthcoming abridged and updated edition of the same book.

Today it can be affirmed that Europe has a Paleolithic literature, with accounts of events, myths, records, and personal episodes. The reconstruction of the traditional vision of graphic evolution, which would lead to writing, is now confronted with the proof of the existence of graphic systems of communication giving oral thought a visual, written form, over 40,000 years ago. Figure 1 is an example of decoding.

The meeting between a man and a woman of the horse totem

different authors, starting with Abbé Breuil in 1912, have published and reproduced a small engraved composition from the cave of Altamira in Spain. There are two horses, some ideograms and a psychogram. As verified by comparative analyses of data, the ideograms have male and female values. A vertical horse is associated with a male ideogram (*arbolet*) and a horizontal horse with a female ideogram (oval sign: *vulva*). On top of the composition a dart or spear ideogram (male) joins the lips ideogram (female); the psychogram appears as an exclamation of pleasure or satisfaction. The story can be read as “Mr. Vertical Horse meets Ms. Horizontal Horse, sexual relations, oh!” The decoding seems to reveal the story of Mr. Vertical

Horse and Ms. Horizontal Horse, who realize their dream of love. A puzzling question arises. Who was the maker of this little engraving in a hidden spot of the cave? Could it have been the man or woman directly concerned?

Now the reading appears to be clear, simple and easy. But this tiny message, engraved on a dark corner of a cave, first published in 1912, had to wait for over a century to be decoded. Some cases of decoding and reading Paleolithic art appear in previous issues of *EXPRESSION* quarterly journal (mainly in *EXPRESSION* 6, 14, 15, 16, 18 and 27). The book on the decoding method, its research process, results and the reading of several famous groups of Paleolithic figures and signs never decoded before, has a preliminary version (Anati, 2015b). More results are available in Italian (Anati, E. 2020). An updated English edition will soon be published.

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ANCIENT MYTHS NARRATED BY THE ROCK ART OF CHHATTISGARH STATE IN INDIA

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Introduction

Indian rock art was first noticed in the 19th century in Uttar Pradesh by an Englishman, Archibald Carlyle, in 1867. At about the same time, another Englishman, John Cockburn, started publishing some sites. In Chhattisgarh, Singhanpur rock art sites were discovered by C.W. Anderson in 1910. He visited them many times, not without risk, as a couple of times he was attacked by honeybees. Later, Percy Brown published his discovery in the Heritage of India series in 1917 (Gupta 1967: 37), and Verrier Elwin quoted it and published a black painting from the shelter (El-

win 1951: 163, and Fig. 182). Amarnath Datt talked about Kabra Pahar in 1931 (Gupta 1967: 37).

A major part of south Chhattisgarh was known in ancient times as Dandakaranya, while the north was called Dakshina Koshal. It was mentioned in the epics *Ramayana* and *Mahabharata*. Between the sixth and tenth centuries AD various rulers held power. In the medieval period, the region south of the Vindhyas was Gondwanaland, of which Chhattisgarh was part.

As the region was difficult of access, there was no external interference to affect the lifestyle of the local tribes. The Kalachuris were the first rulers who clearly

dominated over this region for many centuries. After their fall, the Bhonsles of Nagpur ruled the state for a brief period in the 19th century. However, with the decline of the Marathas, there prevailed complete lawlessness throughout the region and many tribal chieftains established their power over small tracts of land. Chhattisgarh was a part of Madhya Pradesh till 1 November 2000. Chhattisgarh (fig. 1) is one of the greenest states in India, with over 44 per cent of its total surface covered with lush forests. Almost half the total population of Chhattisgarh belongs to different tribes.

Discussion

The exact meaning of the geometric designs in the art is unknown in most cases. Some of the recent ones, however, can be interpreted because of the existence of tribes that have kept alive age-old beliefs, customs and stories. Such are the Saoras, who number in tens of

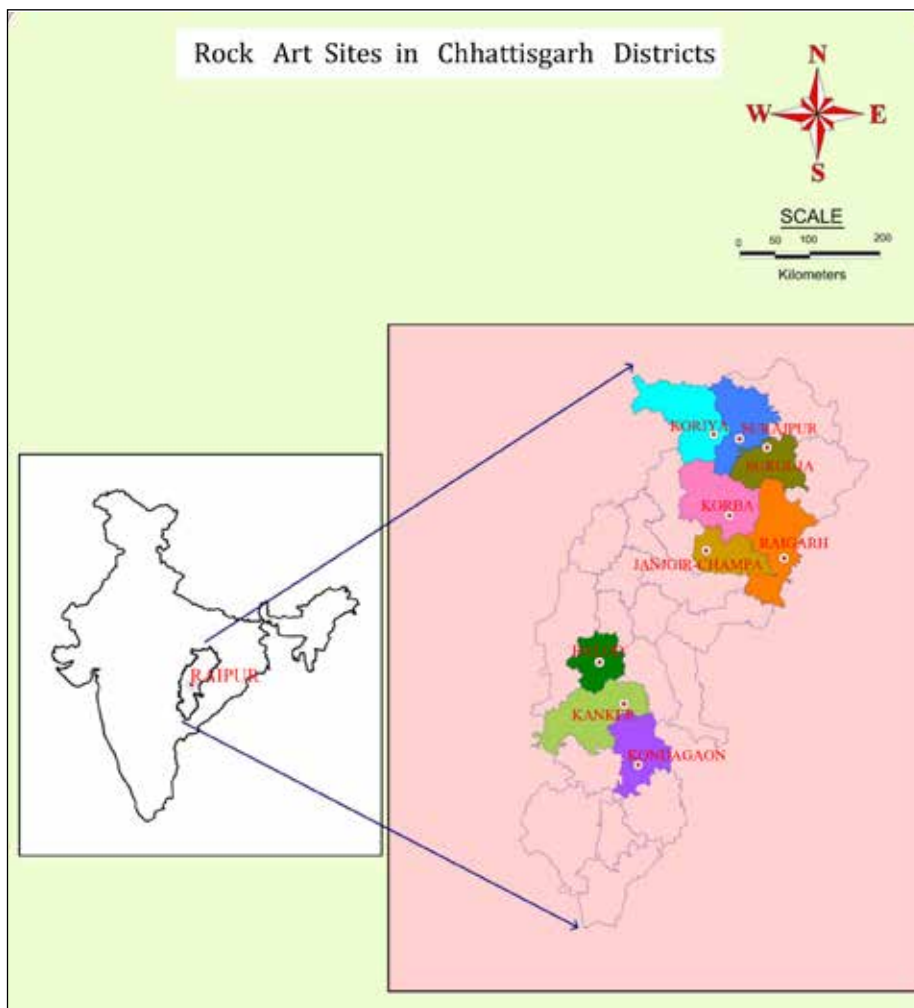


Fig. 1. Map of Chhattisgarh.



Fig. 2. Ancestors' souls reside in these geometrical signs. Ushakothi I.



Fig. 3. A majority of the signs are rectangular but quite a few other shapes exist (ovals, squares and other complex shapes). Ushakothi I.

thousands and are principally found in Orissa, Chhattisgarh, part of Madras and Bundelkhand (Russell and Hiralal 1916: 500). The western part of Orissa and the north of Chhattisgarh belong to the same geomorphological province of India (same tribes, culture and rock art). I shall give a few examples of the meanings of geometric designs that I came across through local testimonies. Tribals believe that their ancestors' souls reside in those geometrical signs (fig. 2) and from time to time they come in their dreams to ask them to fulfil some wish, for example to provide them with an axe/*tangiya*, or to offer them a pig or a goat. It is compulsory for the family to offer them whatever they have asked for.

At Ushakothi I site in Karmagarh village, in the north of Chhattisgarh, is a painted shelter 33 m long and 3.50 m high. It is nearly entirely decorated with geometric motifs in a very attractive way. A majority of them are rectangular (fig. 3), but quite a few other shapes exist (ovals, squares, other complex shapes). Ceremonies still take place in the shelter. As per the local tribals (fig. 4), those ceremonies are conducted to ask for the fulfilment of wishes (*mantas*), with the aid of *baigas* (shamans), to have kids, against sickness, etc. When a goat sacrifice is made as an offering to the gods, the *baiga* drinks its blood. Ushakothi I is, to date, a very important and popular site for the local



Fig. 4. Ceremonies still take place in the shelter. Ushakothi I.

tribes who have not stopped celebrating rituals there for many generations (Dubey-Pathak and Clottes 2017).

According to V. Elwin (1951), squares and rectangles had inner crisscrossing lines for their ancestor's to rest inside them. Triangles were symbols for local gods, and circles symbolized the unity of a family. Straight lines with small circles on them or simple straight lines would be drawn to ensure safety and protection from evil forces and to maintain peace and calm with the ancestors' spirits.

Elwin also narrated how a boy in a village was ill and did not get well even after a first ceremony by the local woman shaman. The shaman then asked the family to sacrifice a fowl and to bring it, together with a decorated pot, to a cave with a stream nearby. "There was a ledge some eight feet above the ground on which she climbed and on the wall of the cave she made a rough drawing (with rice flour and charcoal) of a circle half

divided by a straight line. This was 'to shut the God up'. The straight line represented the God and the circle his prison. There is no door for him to get out" (Elwin 1955: 256). This was probably done because the god was felt to be antagonistic to the boy.

Another example of a particular geometric design is a square with a cross or a blank inside and two small diverging convex lines sprouting out of its four corners. This pattern is seen in Ushakothi I rock art, Lekhapoda (fig. 5) and many other sites in central India, where it is still drawn when a sacrifice takes place at a shrine (fig. 6) or under a sacred mahwa tree. Then, it is made with a paste of rice flour, turmeric powder, soot and vermilion red.

At Kabra Pahar site, a local *baiga* told me that there are many stories about a hidden treasure attached to this site. The main ceremonies take place during Holi. It is believed that when people offer tobacco at this site, the number of images increases.

For example, honeycomb patterns were painted on the shelter's wall from early Mesolithic times. We have noticed it in many sites in central India. These honeycomb signs have been drawn beautifully (fig. 7) on the shelter walls in both states of Central India. patterns are made with a number of crisscrossing lines. At Kabra Pahar shelter (fig. 8) located in Bhojpalli village, in north Chhattisgarh, Raigarh District, this site is at the foot of an impressive vertical cliff (more or less 40–50 m high).

In some shrines there may be found a small block of wood pierced with little holes to represent a piece of honeycomb. At Bodo Okhra I was told that formerly the Saoras there made offerings of real honey. But one day the priest stole it for himself and died, since when the honeycomb has been made of wood (Elwin 1955: 174.) We have not seen these signs in later periods, but stories about them are still going on among elders. Some animals seem to have a particular role and to be the subjects of stories. For example, the spectacular big *goh* or lizard (fig. 9), represented in the Kabra Pahar rock art, has a bad reputation with the Gonds. It is said that since that animal is cursed, putting it into the house of an enemy can cause him a mishap. If nothing is done by a shaman to prevent the mishap, members of the house who see it will become ill, their arms and legs will dry up (like a lizard's limbs)



Fig. 5. This geometric design is a square with a cross or a blank inside and with two small diverging convex lines sprouting out of its four corners. Lekhapoda.



Fig. 6. Pattern drawn when a sacrifice takes place at a shrine.

and their bellies will become distended. This specific disease is called *Haileniyam* by the Gonds. Since merely catching sight of a lizard is considered a bad omen, the person who does must immediately rush to a shaman's to counter the curse. The shaman neutralizes it by performing a ritual which requires the cursed person to bring a cockerel and a coconut, and to sit facing west while the shaman holds the coconut and circles it seven times anticlockwise around the person's head, after which he, chanting all the while, sacrifices the cockerel.

Snakes (fig. 10) are also a part of Central Indian rock art. Some special and fantastic stories are told about them. 'On one of the posts of the house the image of Nag Deo, the cobra god, is made in mud. In Asarh (June), the first month of the rains, which Gonds consider as the beginning of the year, snakes frequently appear. In that month they try to kill a cobra and will then cut off its head and tail, and offer them to Nag Deo, inside the house, while they cook and eat the body. They think that eating the snake's body will protect them from the effects of eating any poisonous substance throughout the year. (Russell and Hiralal 1916: 95).

Fish and crabs (fig. 11) were always used for sorcery practices and also as offerings at the foot of a palm tree to get good sap from it, which will be used to make liquor (Elwin 1955: 193-5).

These stories are still popular among the tribes of Central India. There are all sorts of stories involving animals in their local beliefs. S. Dhanelia from Anthagarh told me that the Chhattisgarh Gonds draw a number of animals on both sides of the entrance to their house (fig. 12) with cow dung every year for Hareli Amavasya (July/August). Those animals include cows, bulls, goats, hens, monkeys, snakes, turtles and fish. They may also make anthropomorphic figures and, sometimes, just some lines and geometric symbols. The purpose of such drawings is to appease the spirits of their ancestors regularly. If any house is left without such drawings at its entrance, it is believed that an evil spirit or ghost may enter it and invade somebody's mind, causing him/her much grief. If that happens, a shaman will have to be called to get rid of the invader. To do so, the shaman will go into a trance to persuade the evil spirit to leave. They will argue. The spirit will generally ask for some sacrifice, or for some drawings to be added to the walls of the house. This goes to show the overriding power images may have in different contexts, and it is thus relevant to rock art interpretation.

Jairam, a 70-year-old-Gond from Tetapara village near Naraynpur, told me that his great-grandparents also used to worship during the rains (July and August), with offerings of coconuts and incense sticks, at the painted shelter known as Likha Pathar on the top of a hill, facing north, 15 m long and 8 m wide. A goddess's name, Jai Dongri Wali, has been written on top of the paintings. The local nearby villagers believe that if they do not have good rains during a monsoon, all

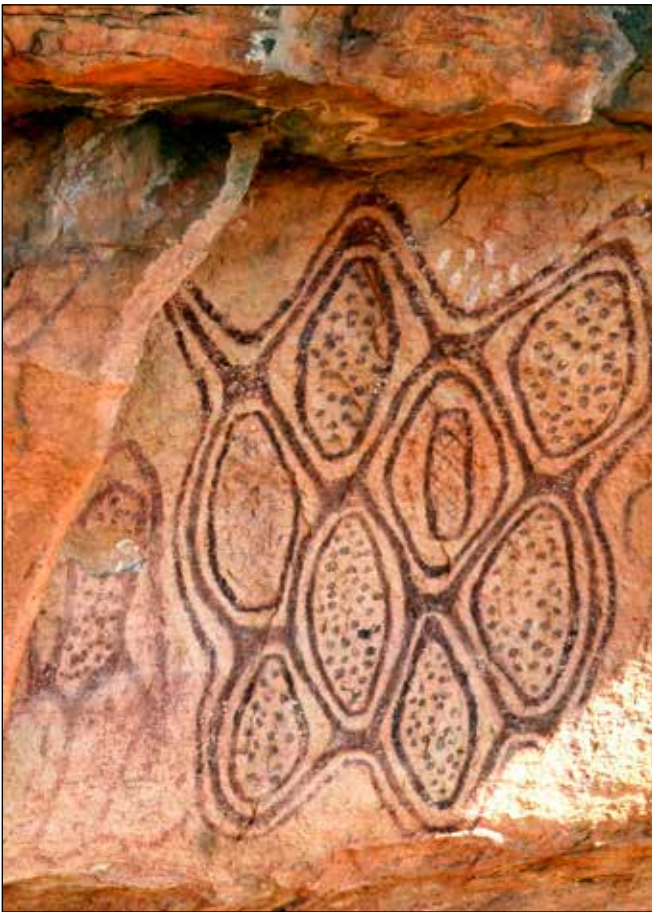


Fig. 7. These honeycomb signs have been drawn beautifully. Dharul, Madhya Pradesh.

they have to do is go to the painted site to worship the images there, sing the *Ramayana* epic all night long, and play their local musical instruments, beseeching the god to grant them good rains.

According to the villagers from Mankeshari village, 5 km south of Kanker, the paintings keep changing every year. They go to the site during festivals to worship them. Surprisingly, no vandalism has been committed there. I was told that once somebody tried to damage the shelter and, apparently, a supernatural spirit gave him a hard slap on the back. After that incident, no one has tried to deface it.

This is a small shelter 5 m long, 5 m wide and 3.2 m deep. It has a few handprints and some human figures, quite a few of which are badly faded.

Majhingarh is a big plateau in Vishrampur village of the Kondagaon district. It is at the top of the Keshkal range and its sites are located in the Keshkal valley cliffs. The painted sites are all around the cliffs. Each year, during the rainy season (July/August), a big, ten-day

fair known as Jatra is organized by the villagers. Many kinds of shamanic practices, *manta* or wish-fulfilling ceremonies, sacrifices for ancestors and local gods take place in the inviting landscape. According to local villagers, Jatra has been held here since time immemorial. The first site, the nearest one, has been totally vandalized and spoilt by smoke. Just a few red handprints are visible (fig. 13). According to a shaman, Bhoduram, from the Kalari village, the *ukeys*, a kind of demons, dominated Keshkal Ghati/cliff. They used to sacrifice humans and to print hands with their blood on the shelter wall. This is why the Majhingarh 1 site is still known as Lahoo Hatha (Bloody Hands). Kshtri Manjhi, an ancestor of the Kalari villagers, killed those *ukeys*. Since then they have a Jatra festival in the same valley in his honour.

The Gonds were formerly accustomed to made human sacrifices to their local goddess, Danteswari, whose shrine is located at Dantewada. Gonds were said to have entrapped strangers and offered them to their gods. On one occasion, as many as 101 humans were sacrificed to avert some great calamity which had befallen the country! (Russell and Hiralal 1916). According to the same authors, before going hunting and in order not to get killed by a tiger, the Bastar Gond king used to sacrifice one human. Human sacrifices were offered until well into the 19th century.



Fig. 8. Honeycomb patterns made with a number of crisscrossing lines. Kabra Pahar.



Fig. 10. A very long snake. Ushakothi I.



Fig. 9. Spectacular big *goh* or monitor lizard. Kabra Pahar.



Fig. 11. Fish of different sizes. Ushakothi I.



Fig. 12. Animals on both sides of the entrance to the house, drawn with cow dung. Bastar.

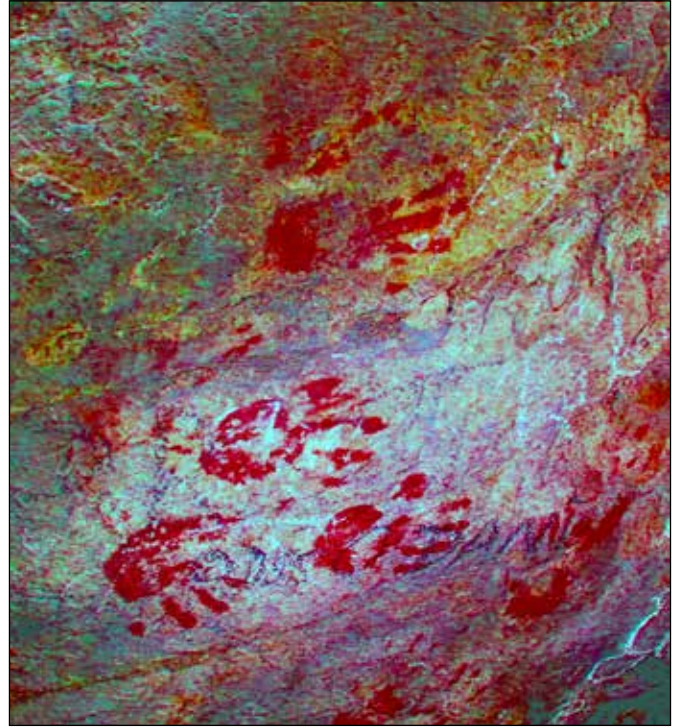


Fig. 13. Majhingarh 1 site is still known as Lahoo Hatha (Bloody Hands).



Fig. 14. Human hunting, Pachmarhi hills. Madhya Pradesh.

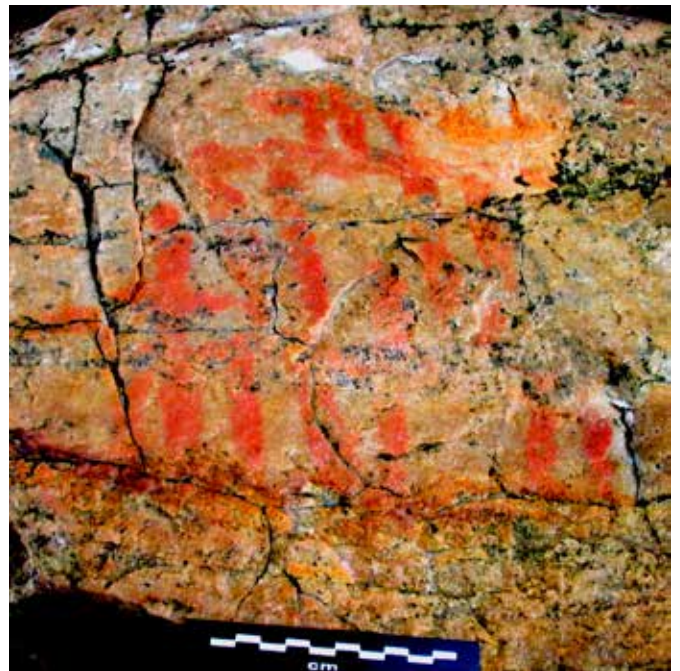


Fig. 15. Similar motif, Angadeo. Limdarha.



Fig. 16. Angadeo, the clan god of the Murias and Marias. Bastar.

We have more stories about human hunting or sacrificing from the Pachmarhi hills (fig. 14) (Dubey 1990, Dubey 1992, Dubey-Pathak 2013).

Crisscrossing line patterns may also refer to Angadeo, the clan god of the Murias and Marias, common throughout Bastar. During Jatra they took them out from their shrines and made a kind of procession; people came out from their houses to pay respect and offer flowers, coconuts and incense sticks. They all got together at one place, a sanctuary of their local god and goddess. They all danced and got into trance. I was privileged to attend several such ceremonies in 2015 and 2016 (fig. 16).

Tribal people have many stories about Angadeo and his big family. I have noticed a similar geometric motif at Limdarha (fig. 15). It is a complex wooden contraption consisting of two, long parallel poles used to carry it about. They are tied to each other by smaller perpendicular crossbars. A fifth pole, the most important one, is in the center, parallel to the two side ones. It has a bird or snakehead and is considered as the actual god. Peacock feathers are attached to the junctions of the poles with the crossbars and also on top of the bird head, which may, in addition, have a bell hanging from its neck. Silver sun and moon figures with coins are often nailed to the section ends of the poles. Silver bands are attached to the long poles. Nowadays, the center

contraption is covered with bright-red ornamented cloths (fig. 17). “The appearance of the Angadeo is very striking and exciting among the local villagers. It is supposed to have the power of directing the movement of all four men who carry it, and guide them now to dance, now to demand food or liquor, now to unmask a witch or thief, for those detections its services are often engaged” (Elwin 1951: 82). Such ceremonies are still taking place exactly in the way described.

Among the human imagery there probably are representations of shamans, even if they are difficult to single out. For example, at Likha Pakhna II, there is an image of a man with one outstretched arm holding an indeterminate object; his head is surrounded by 12 rays, like a sun-figure (fig. 18) and his body is entirely filled in with lines. This spectacular human seems to be dancing (one leg is forward and bent). Could he be a shaman? I have noticed similar examples from other sites of Central India. Shamanism is prevalent among all local tribes where the shaman’s role is most important. He plays the part of a medical doctor, a psychologist, a magician and a priest (fig. 19). He is also the repository of tradition and a source of sacred knowledge. He is in touch with his own and his



Fig. 17. Nowadays, the center contraption is covered with bright-red ornamented cloths. Angadeo.



Fig. 18. A spectacular human seems to be dancing. Could he be a shaman? Likha Pakhna.

community's ancestors, as well as with the gods of the underworld, for their help and support. For example, only shamans were supposed to deal with the many problems related to babies.

Among the Saoras in the neighbouring state of Orissa, shamans were supposed to draw icons for particular gods. Each god was related to a specific subject. So the Saoras have many gods for various health problems, such as a mother not having breast milk for her baby, a baby not growing well, having a fever, refusing milk, or having diarrhoea. In that case their shaman will do all the necessary offerings to appease the god concerned. Gadejangboi is a local god who catches and destroys young children when they are playing. "Gadejangboi often sits down to rest among the picturesque rocks and *gendarmas* that litter the Saora hills. If any child comes to play nearby she may attack him. Shaman must then go to the rock and make an ikon (geometric sign) upon it and a sacrifice" (Elwin 1955: 273). We can thus assume that most of the rock art was created within a

shamanic framework and associated with magical ceremonies, so that a majority of the human and animal figures played a role in shamanic ceremonies.

Gonds have many stories about witchcraft. Witches have special power over the spirits of children. "If a child dies very shortly after birth, his parents will put his or her body into an earthen pot and bury it under the refuse behind the house. They do so in order to protect the body from witches, who if they get hold of it will raise the child spirit, and make it *Bir* or a familiar spirit. They can also make it enter the body of an animal such as an owl, a cat, a dog or a headless man, to harm human beings, according to their wish" (Russell and Hiralal 1916: 85). Such a depiction of a woman with two kids can be seen at the Bhanwarkhol site. The kids are standing on pots, one on each side (fig. 20). A few headless images have also been noticed in the neighbouring state of Madhya Pradesh.

When a family member dies, a different kind of ceremony takes place. On the night after the burial, the family lights an earthen lamp to call the departed soul back. Through the night they keep rice paste in a flat pot, the surface of which has to be absolutely flat and smooth. They perform a ritual in which they offer the dead person flowers, a coconut, incense sticks and, perhaps, a goat or a hen sacrifice. Once this ceremony is over, they wait for the soul of the deceased to



Fig. 19. Dancing shamans from the Bastar area.



Fig. 20. A woman with kids. Kids are standing on the pots. Bhanwarkhol.

come. After some time, some patterns on the surface of the rice paste are observed, testifying to the arrival of the soul. The patterns will be checked again after a few hours. Sometimes they will find the imprint of the hooves of a domestic animal, or of bird claws, or of reptiles. They believe that the soul of the departed has entered one of the animal images drawn on the house walls. After a day of prayers, they will collect all the offerings – coconut, flowers, incense sticks, local liquor and tobacco – and put them by the roadside. All these rituals, they believe, satisfy the departed person's soul, that then goes back. It is a good example of the close relationship between images and the supernatural.

Conclusion

Very old Gonds and Korkus narrated some stories and incidents from their childhood, about going to the rock art site with their grandparents or parents for rituals and ceremonies. Their various stories are mainly related to faith, belief and magical practices.

For example, among the Gonds, one who wishes to transfer his sickness to another person will obtain a cloth belonging to the latter and draw two human figures on it, one the right side up and the other upside down, in lamp black/black. After saying a charm over the cloth he will put it back surreptitiously in the owner's house (Russell and Hiralal 1916). When people are ill they go to their shaman and follow his advice or make a vow to some god that if they recov-

er they will sacrifice an animal. We again have here a striking example. There cannot be any doubt that all sorts of different, intricate stories can be applied to the painted shelters and to their numerous images. With the passage of time, most stories have been lost and we can only get some inkling about them from the beliefs, ceremonies and rock art religion still alive among the tribes.

Note

This article is based on *Powerful Images, Rock Art and Tribal Art of Chhattisgarh*, by Meenakshi Dubey-Pathak and Jean Clottes, a book published in 2017.

All the images and maps belong to the author.

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THE SUNRISE PLANNING OF 50 IRISH STONE CIRCLES AND COMMENTS ON THE SUMMER SOLSTICE AT AVEBURY AND STONEHENGE

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Introduction

During the 2,500 years of the Neolithic and Bronze Ages of Britain and Ireland, farming communities built large numbers of stone circles. Although many of the surviving circles are damaged, hundreds remain in a good enough condition for effective academic study. Apart from supposing that the monuments served some kind of sacred purpose—as for example, ritual and ceremony—little has previously been interpreted, still less evaluated, about their intended functions and usage. However, because evidence expressed through the builders' use of symbols and alignments can now be interpreted, the present work shows to what a high level the planners were astute and numerate. Not only are factors behind the planning principles revealed, so too are aspects of the people's religion (about which the latter will be the subject of a separate paper).

The research focuses on the study of the type of Irish stone circle of Cork and Kerry known as multiple stone circles, in which one particular stone was laid supine on the perimeter of the monument where its bisector meets the diametrical axis. In this paper this recumbent stone is shown to be the hub of first-order solar alignments.

Other stone circles across Britain for which there is related morphological symbolism have been analysed alike. They include several in Aberdeen, Cornwall and Cumbria, besides Avebury and Stonehenge. At the non-Irish and non-Scottish sites, many circles lack a recumbent stone, but use a different kind of symbolic focal stone instead. Yet the planning strategy is similar, and the principal outcomes are comparable.

Crucial is recognizing that the circles were planned to work at sunrise. Because of this, the core practical fieldwork must be undertaken at sunrise. Early farming communities would have worked all the hours of daylight starting at dawn. On any clear-sky occasion, no matter where the people were, they would often have seen the rising of the sun, but on special festival days have gone pilgrimage-style to their local

stone circle to witness the sunrise in the company of others in the community.

We can now appreciate the pragmatism of the planners who paired and positioned particular stones in relation to appropriate points on the horizon where the returning sun rises on pre-selected dates of the calendar. Such functional stones were chosen either for their specific shape or were artificially improved in shape in order to signify masculine or feminine symbolism.

For these reasons, the practical consequences of this research converge on the rediscovery of a working calendar compliant with associated beliefs relevant to a fertility religion.

120 stone circles are known for the counties of Cork and Kerry in southwest Ireland. Sixty-three are defined as multiple stone circles, in which the number of perimeter stones total any of the odd numbers 7, 9, 11, 13, 15 or 17. The circle diameters range from 4 m to 17 m. Each has an axial stone laid flat on the circle's perimeter in the west. Opposite each such recumbent stone is a prominent pair of portal stones serving as an entry point or gateway.

Fifty-seven other circles were built using only five stones (their discussion requires another paper). Of the multiple stone circles, the author has so far studied more than 40 on site. Additionally, although other circles have been destroyed, several 19th- and 20th-century plans are available which have proved helpful. The total studied is 50.

All told, it took the author 30 years of megalith research to uncover the properties of the prehistoric calendar. Its concepts center on the eight long-used festival dates that were integrated into stone circles in prehistoric Ireland and Britain.

The author's studies of megalithic sites began in England in 1983 and have intensified over the years. From 2012 to the present the stone circles of southwest Ireland, northeast Scotland, Cornwall, and Wessex have been examined and re-examined. In these eight years the author undertook 19 research expeditions to Ireland

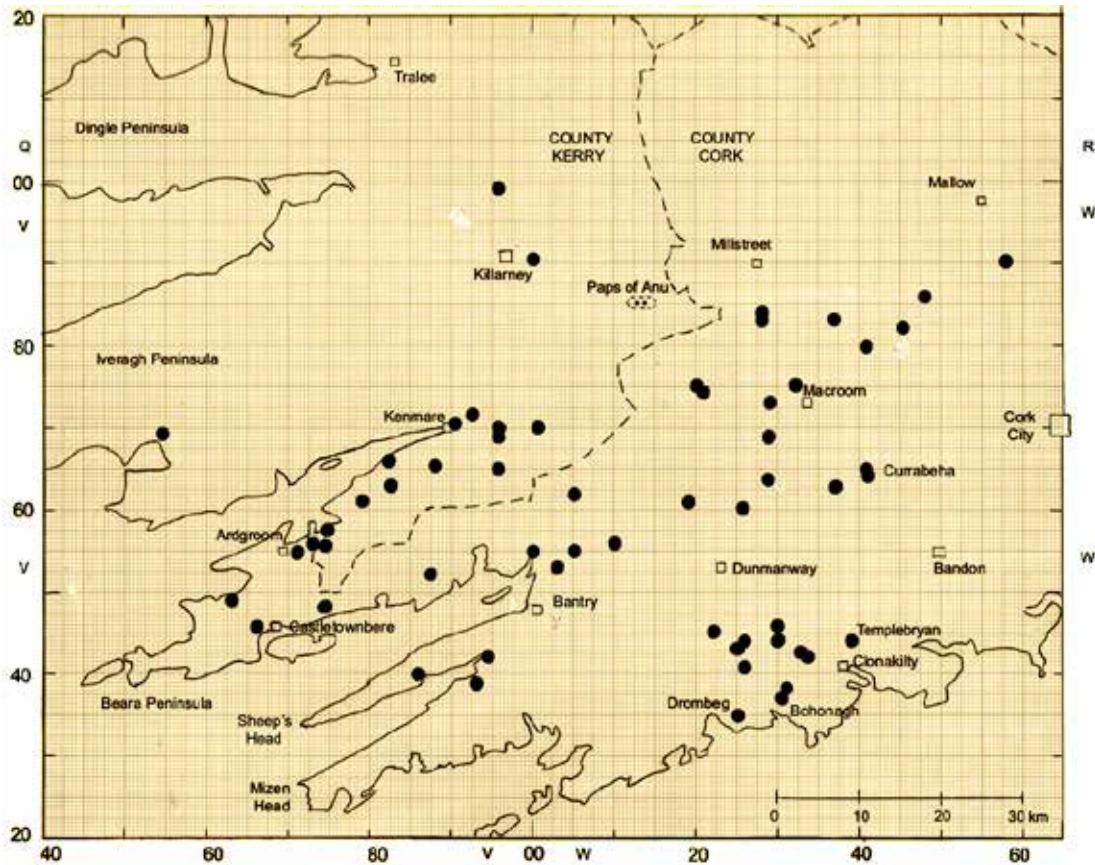


Fig. 1: Locations of multiple stone circles across the counties of Cork and Kerry.

and four to Scotland including Orkney, carried out in all seasons and all weathers including winter ice, deep snow, hail, and heavy rain. Each undertaking lasted from one to two weeks and the expedition day-research total for this period exceeded 160 by the end of 2019. Among the stone circles of southwest Ireland six are state-run and/or council-maintained. They provide safe and easy access. Of the many sites on private land, a few are well kept but most are grossly overgrown or located at huge distances across boggy moorland and windy uplands. Figure 1 maps locations. At times bracken, bramble, trees, fallen branches, and flourishing pine-tree shoots had to be cleared with the permission or help of landowners (e.g. Dromkeal Stone Circle and Templebryan).

Previous work

Boyle Somerville (1909 and 1930) reported his examinations of several stone circles in the Clonakilty region of County Cork. The chief point relevant to the current study is that he noticed that at midwinter the sun sets

almost into a prominent V-shaped notch on the nearby hill to the southwest. Similar observations were found in the present research to occur on specific days at sunrise (and sunset) at several stone circles in Cork and Kerry (these will be reported in a later paper). Barber (1973) published the work of his thesis research finding that the axes of 12 of 30 sites that he studied pointed roughly in the “main lunar declinations and solstitial and solar equinoctial directions.” Freeman and Elmore (1979: S90f) reanalyzed and criticized some of the work. They concluded that “there is no statistically significant evidence that the axes of the recumbent-stone circles were preferentially orientated to the relevant rising and setting positions of the sun and moon” Heggie (1981: 182-184). followed Barber as to the process of tackling research on Irish recumbent stone circles by writing that “the beauty of these sites is the fact that the selection of the orientations is extremely simple: we naturally choose the axis of the circle ... [but] the main difficulty [when observing from a position on the axis] lies in choosing which

direction to look in,” that is, either in the direction of the recumbent stone or *volte face* towards the bisector of the portal positions. Neither is the proper answer. The fullest work undertaken on the stone circles of southwest Ireland is that of Ó Nualláin (1984) who surveyed them for the Ordnance Survey in the early 1970s. The paper is very helpful as a descriptive catalogue of sites. Preliminary papers for Kerry in 1971 and Cork and Kerry in 1975 had previously been published. Short descriptions of every circle were made and small-scale plans included for a total of 48 multiple stone circles and 45 circles of the five-stone type. Ruggles (1999: 100) analyzed his own fieldwork of 1994 performed on 31 stone circles in Cork and Kerry, “where the axial stone and/or both the portals were still present.”

He concluded that the axial stone circles “bear no consistent relationship with any specific astronomical body or event ... Viewing the axial stone circles as a group, then it seems that we can say little about their orientations beyond the basic fact that they aim for the quarter of the horizon between due south and due west.” On p. 101 he concluded, “Certainly, there is no logical interpretation.”

Ruggles and Prendergast (1996: 12) three years earlier had written, “There is also no evidence whatsoever for a systematic interest in the sun, despite the attention that has been given to the solar solstitial orientation of Drombeg (see, e.g., Hicks 1989). This preliminary result was quite unexpected and raises a number of serious questions in the wider archaeological context.” By contrast, as the current paper explains, the planning of every stone circle in Cork and Kerry has everything to do with the sun.

Objectives

Early in the current research programme, two of the axial multiple-stone circles in the Clonakilty region of southwest Ireland (see fig. 1) were fully investigated on many dates of the year and at different times of day. A few other stone circles were partly studied then too (Meaden 2014, 2016, 2017, 2020).

Soon discovered was the inbuilt significance of eight dates of the calendar year spaced at intervals of 45-46 days, starting with either the winter solstice or the summer solstice.

On these occasions, when choosing Drombeg and

Bohonagh as archetypes, it was found that a shadow at sunrise from one of the tall narrow stones in the east falls medially upon a single stone waiting to the west. The receptive stone is the recumbent stone. This drama of union by shadow, as planned by the circle builders, starts at or soon after sunrise and proceeds for several minutes.

Subsequent research objectives were to extend the fieldwork to all the multiple stone circles of southwest Ireland that survive in adequate condition.

It was found that these circles could be ordered into four fundamental categories or type-sites. They all have inbuilt solar-calendrical features.

Methodology

Seeing that the tribespeople had no theodolites and no compasses, but only unaided human eyes, we should not need to overwhelm ourselves with modern technology. Ideally, it can be almost enough to do much the same as the ancients, that is to say, by direct observation on-site at all times of the year while being aware of how sunrise positions have slightly altered since then because of the changing tilt of the earth's axis. Thus, the approach should be simple and straightforward while nonetheless following the principles of the scientific method. Essential is that fieldwork should be carried out at sunrise, with cameras and a high-quality compass, using the scientific method, viz. seeking reliable data by inspection, measurement and photography for cautious evaluation from which to suggest logical hypotheses for testing against sure facts. This can lead to a testable theory by which predictions can be made and put to the proof. Such verification of predictions has been achieved multiple times.

Aspects crucial to this programme include the knowledge of relevant astronomy with respect to solar and lunar movements together with considering traditional symbolism and their meanings.

To have any chance of understanding the secrets of the megalithic monuments, and to rekindle the thinking of the planners, one also needs to examine the shapes of individual stones and determine their locations in relation to others.

Like so many farmers even today, the farming folk worked the long hours of daylight from sunrise to sunset. Therefore, to retrieve the thinking of the builders, modern investigators are advised to commence

their fieldwork at sunrise, and not treat circle centers as the only places for practical observation.

As a consequence, it is found that the directions of sunrise on particular dates of the year articulate the original prehistoric planning policies, and that at many sites it is helpful to watch and interpret the moving shadows cast by select sunlit stones. This awareness has led to the recognition of intentional inbuilt, lithic symbolism, and the fundamentals of an operating calendar.

Elsewhere, the author has unveiled the properties of the 365-day calendar devised in the Neolithic and Early Bronze Ages (Meaden 2016: 20-27; 2017b). Its understanding has been further refined by the current work. The practical calendar is locked into the settings of prearranged stones in which the eight pertinent, annually-recurring festival dates become apparent when the principles of each circle's preplanned functions are recognized.

Results: the calendar

The results of studying dozens of prehistoric stone circles confirm that an eightfold calendar of annual events was in use during Neolithic and Bronze Age prehistory in Ireland and Britain. Eight significant dates were recognized, each separated by 45 or 46 days from the next. It is convenient to commence at 21 December by numbering it Day 1. This is the first quarter day of a four-quarter 365-day year. Thom (1967: 107-117) has discussed multifold calendars too, much of it based on statistical analyses of long alignments marked by standing stones that he surveyed in Britain, especially Scotland, using Gaussian histograms as proof. He did no studies in Ireland. Mackie (2009) has usefully reviewed this and the related later work by himself and others.

The new insights in the present paper evolved from analyzing alignments and stone-to-stone unions by shadow between the rising sun and megaliths of particular shape intelligently placed at specific locations. The key was to recognize which stones were relevant and to observe the resulting shadows relative to a predetermined, waiting stone, usually a recumbent stone, during the first minutes after sunrise (Table 1). Besides providing strong proof that an eightfold prehistoric calendar was widely in use, in the case of Drombeg Stone Circle a sixteenfold calendar was recognized and stone-to-stone linkage by shadow at sunrise photographed.

Table 1: THE NEOLITHIC FARMING CALENDAR

<i>Neolithic calendar day number</i>	<i>Dates on the modern calendar for the 8 traditional festivals</i>	<i>BASIC CALENDAR OF THE 8 AGRICULTURAL FESTIVAL DATES</i> <i>Additionally, the 8 bonfire nights are included and marked by an asterisk*</i>
Day 1	21 December	Midwinter solstice: 1st quarter day Q1
Day 46	4 February	End of winter; eve of spring *
Day 47	5 February	Start of spring; Celtic Imbolc; cross-quarter day; WXQ
Day 91	21 March	Eve of vernal quarter day *
Day 92	22 March	Spring vernal day or 2nd quarter day Q2
Day 136	5 May	End of spring; eve of summer *
Day 137	6 May	Start of summer; Celtic Beltane; cross-quarter day; SXQ
Day 182	20 June	Eve of midsummer solstice *
Day 183	21 June	Midsummer solstice: 3rd quarter day Q3
Day 228	5 August	End of summer; eve of autumn *
Day 229	6 August	Start of autumn; Lughnasadh; cross-quarter day; SXQ
Day 274	20 September	Eve of autumnal 4th quarter day*
Day 275	21 September	Autumnal 4th quarter day Q4
Day 319	4 November	End of autumn; eve of winter *
Day 320	5 November	Start of winter; Celtic Samhain; cross-quarter day; WXQ
Day 365	20 December	Eve of midwinter solstice *

The four quarter days (Q1, Q2, Q3, Q4) and the four cross-quarter days were likely community festive occasions with agricultural trade fairs accompanied by religious ritual and devotion. WXQ stands for the two wintertime cross-quarter dates, 5 February and 5 November on our Roman calendar. SXQ are the two cross-quarter dates of summer, 6 May and 6 August.

The winter and summer quarter dates

The winter and summer solstices, being the first and third quarter dates, are separated by 182 days, for which refer to Table 1.

With Day 1 as the winter solstice (being the first quarter day, or Q1), it follows that the summer solstice (third quarter day, or Q3) is Day 183, which is 21 June on the modern version of the Roman calendar. Thus starts the second half of the calendar year which ends on 20 December or Day 365.



Fig. 2. Bohonagh: A Type-1 recumbent stone circle with tall portal stones (nearest the camera) in the east and the recumbent stone set axially in the west.

The other quarter dates and cross-quarter dates

Two of the eight festival dates occur midway between the solstices on day numbers 92 and 275. The corresponding Roman calendar dates are 22 March and 21 September. These dates are better styled for what they really are: the second and fourth quarter days, Q2 and Q4.

They approximate to the equinoxes, but are best not referred to as equinoxes because prehistoric communities are unlikely to have done so. Such farmers could never count daylight lengths in minutes and seconds as a means of determining which days had equally long days and nights, but they could easily count days on a tally-stick (Chapters 1–13 and 15 of the volume by Meaden (2016) can be read online at academia.edu). Between the four quarter dates, taken in consecutive pairs, are the cross-quarter dates. Their modern, paired equivalents are 5 February and 5 November for the winter period, and 6 May and 6 August for the summer period.

A clan-appointed skywatcher likely had the duty to count the passage of days and monitor the skyline for the point of the daily rising sun. A notched tally-stick could serve as a memory aid (like the one that the author created from a century-old wooden walking stick (Meaden 2016: 20-27)).

A full version of Table 1 for all 365 days has been published (Meaden 2016: 212-221). It includes the directions of sunrise for sea-level landscapes on every date of the calendar year both for the current year and for the era of the third millennium BCE in southern Ireland and southern England.

Results: male-symbolic and female-symbolic stones

Shadow-casting between stones is decisive for interpreting many of the stone circles because that was the *modus operandi* involving the alignments to solar events on the astronomical horizon. The calendar was innovative. In several ways it differs from, and is indeed better than, the irregular monthly calendar that we use today, the one that came to us from the Romans through the ministrations of the church leaders of Christian Europe.

In every recumbent stone circle, the shadow-receptive stone was the recumbent stone laid flat for this purpose. Being low and wide—indeed wider than it was high—it was necessarily located on the western circumference because the sun rises in the east. The recumbent stone at Bohonagh stone circle typifies. The tall and narrow shadow-casting stones are in the east between northeast and southeast. Figure 2 illustrates.



Fig. 3. Drombeg: union by phallic shadow between gender-specific stones that the planners arranged to occur at sunrise on the second and fourth quarter calendar dates in March and September. Photograph by John Davies, March 2019.

The first archaeologists to suggest in print that some stones at British sites were selected for use because their outlines represented symbolically the male and female genders were Alexander Keiller and Stuart Piggott (1936). This was with regard to standing stones at Avebury in Wessex. Among others who realized the likelihood of such attributes was Edward Fahy (1959: 20-21), the excavator of Drombeg stone circle in County Cork. His pertinent remarks were directed at Drombeg's female-symbolic lozenge stone and the adjacent male-symbolic pillar-like stone (fig. 3). He wondered whether this might indicate a fertility religion but he went no further.

The present author, initially unaware of Fahy's comments, instead proved by direct observation supported by photography at sunrise, that the alignment between the stone pair was such as to effect union by shadow at the quarter dates of March and September (fig. 3). The stone shapes, their circumferential positioning and their individual relative angling to the vertical ensured that the middle of the lozenge stone would receive the shadow cast by the pillar-like stone at the optimal times of year.

present author further demonstrated that at many sto-

ne circles circumstances are similar as regards the role of recumbent stones or other female-symbolic stones, including lozenges and rounded forms, as part of the original thinking. The target region for the shadow is the middle of the waiting stone, as explained next.

Results: the multiple-circle types of recumbent stone circles

This research about the intentions of the calendar planners revealed five types of recumbent-stone circle. The four multiple-circle types which have between 7 and 17 stones are treated in this paper (circles with only five stones, named Type 5, will be treated at another time). In every class the axial stone lies recumbent, except for two special cases at Dunbeacon and Ardgroom Outward. They may be early constructions.

Multiple stone circles with portal stones and inbuilt calendar

Type 1

Full eight-festival calendar with sunrise shadows targeting a single passive, receptive stone (always the axial stone, and usually recumbent) in the west, e.g. Bohonagh stone circle.

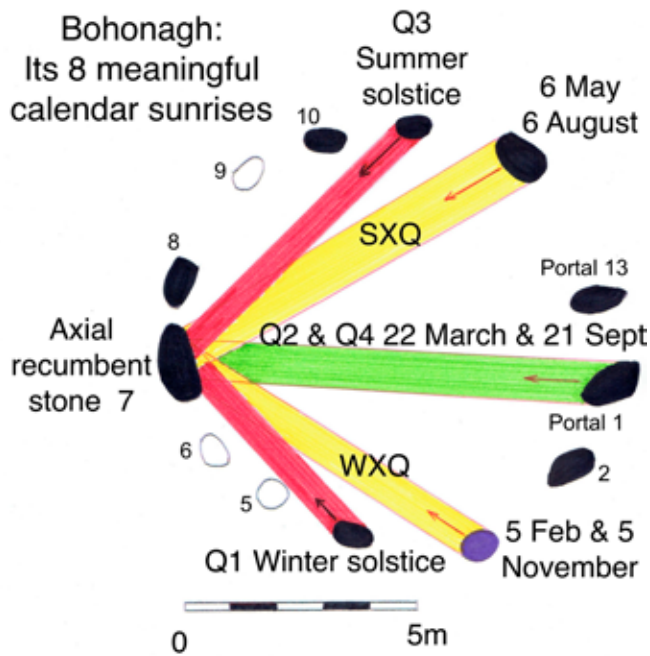


Fig. 4. Plan of the Type-1 circle at Bohonagh, near Ross Carbery.

Type 2

Full eight-festival calendar with sunrise shadow casting for two prearranged receptive stones, one in the southwest sector (namely, the recumbent stone that serves for the summer half year) and one in the northwest sector (for the winter half year). The many examples include Drombeg and Currabeha.

Type 3

Calendrical recumbent circle having Type 1 sunrise directional planning, but only a few stones pairing with shadows in Type 1 fashion (e.g. Dromroe stone circle), or Type 1 recumbent circle with inbuilt directional calendar but no stones pairing by shadow-casting, e.g. Kenmare and Cappanaboul.

Type 4

Calendrical recumbent circle, (1) having Type 2 sunrise directional planning, but with only a few stones pairing with shadows in Type 2 fashion e.g. Gurteen and Teergay, or (2) Type 2 recumbent circle with inbuilt directional calendar but no stones pairing by shadow-casting, e.g. Gortanimill.

Results and discussion of the basic type sites

Type-1 circles as typified at Bohonagh stone circle

Bohonagh stone circle is a distinctive representative of the straightforward type-site designated as Type 1 (cf. Figures 2 and 4). The digit 1 in Type-1 indicates that



Fig. 5. Bohonagh: Sunrise was a little to the south of Portal Stone 1 on 21 September 2017. Photo: Austin Kinsley.

the calendar operates by having a single receptive stone at its focus. Most often, it is due west of the circle center but sometimes just a few degrees off this line. The recumbent stone by definition is always on the axis. In shadow-making stone circles it is the passive element, because it is waiting for the arrival of a cast shadow. The tall shadow-casting stones are in the east, between northeast and southeast where the sun rises. They



Fig. 6. The moving shadow of the portal stone travels along the recumbent stone and at the optimum moment reaches the middle of the stone. Photos: Austin Kinsley



Fig. 7. The Type-2 circle at Currabeha in County Cork, looking across the broad recumbent stone to the two portal stones.

are male-symbolic. Figure 4 is a plan of the 13-stone Bohonagh stone circle, near Ross Carbery in County Cork, not far from the Atlantic Ocean.

In these Type-1 circles the passive recumbent stone in the west receives moving shadows at sunrise from eastern stones for all eight agricultural festival dates.

Action at the quarter dates of 22 March and 21 September is demonstrated in the sunrise photographs of Figures 5 and 6 in which the shadow of the tall narrow Portal Stone 1 achieves optimum union when it reaches the middle of the recumbent Stone 7.

Stone circles in this Type-1 class include the following:
County Cork: Bohonagh, Derreenataggart, Maulatanvally, Reanascreena
County Kerry: Shroneberrane

Type-2 stone circles as typified by Currabeha stone circle

The stone circle at Currabeha South is the type-site illustrated by fig. 7 and the plans in Figures 8 and 9. Although union by shadow works well with respect to the recumbent stone for the festival dates of the summer months, this one stone cannot be the passive stone for the winter half-year because the winter sun that rises in the east-southeast or southeast can never cast winter shadows on to the recumbent stone's inside front surface (Figures 8 and 9).

The problem of winter sunrises was solved by introducing a second female-symbolic stone on the perimeter in the northwest sector. At Currabeha South the ad-

ditional female-symbolic stone is egg-shaped (this is Stone 12 on the plan in fig. 9).

Such secondary stones can also be lozenge-shaped (as at Drombeg and Gortanacra) or broad and low (as at Knocknaneirk), in strong contrast to the high male-symbolic stones of the east.

Stone circles in the Type-2 class include the following:
County Cork: Ahagilla, Breeny More, Carrigagulla, Coulagh, Currabeha North, Currabeha South, Derrynafrinchin, Drombeg, Gorteanish, Gowllane North, Knocknaneirk, Knocks 2 South, Templebryan
County Kerry: Drombohill

Type-3 stone circles as typified by Kenmare stone circle

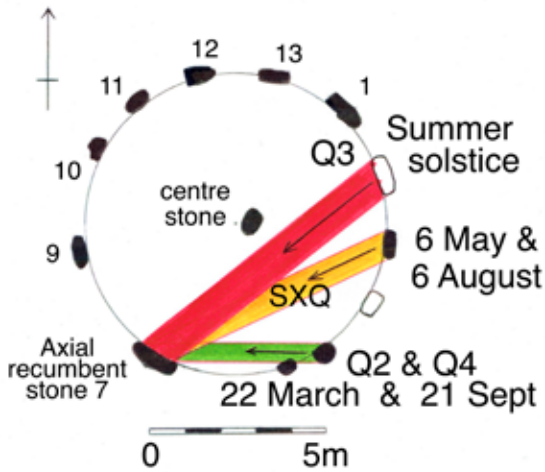
Type-3 circles were also planned as calendrical date indicators. They used Type-1 astronomical-geometry, but introduced few or no shadow-casting stones. Calendrical shadow-casting at sunrise was either limited or completely absent due to hills, mountains or nearby ridge horizons—or the stones were not chosen to be high enough.

County Cork: Cappanaboul, Gortanacra
County Kerry: Dromroe, Kenmare, Lackaroe

Type-4 stone circles as typified by Dromagurteen stone circle

Type-4 circles were also planned as calendrical date indicators. They used Type-2 astronomical geometry, but introduced few or no stones that were high enough

**CURRABEHA SOUTH
STONE CIRCLE**
Summer sunrise calendar directions



**CURRABEHA SOUTH
STONE CIRCLE**
Winter sunrise calendar directions

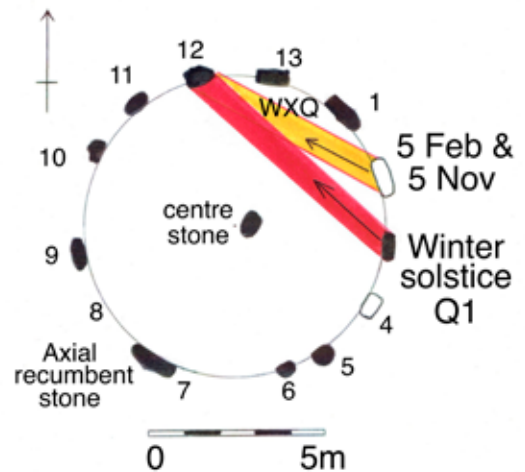


Fig. 8 and fig. 9. Plans of the Type-2 stone circle at Currabeha South.

to cast shadows at sunrise. Any shadow-casting was limited to a few stones or was completely absent due to hills, mountains or nearby ridge horizons.

County Cork: Carrigagrenane, Dromkeal, Glantane East (both sites), Gortanacra, Gortanimill, Maughanaclea, Teergay
County Kerry: Dromagurteen, Gurteen, Uragh Southwest

Further remarks on shadow-casting

In Type-4 circles, as with Type-3 circles, we find that shadow-casting at sunrise was limited to only one or two festival occasions (most often, one or both solstices), or were completely absent due to hills, mountains or even nearby avoidable ridge horizons for which the corresponding stones were not (but could have been) chosen to be high enough to cope.

This suggests that, although the planners sought to have festival-date indicator stones present because these dates were important to the community, actual shadow-casting held no particular interest for them at the time the circles were being planned. Maybe they were the earliest to be built. Seeing that most stone circles in Cork and Kerry appear to be Bronze Age, then perhaps Type-3 and Type-4 stone circles were earlier than Types 1 and 2, i.e. dating from the Early Bronze Age or Late Neolithic, and raised before the concept of stone-to-stone union by shadow had

come to the attention of circle-making pioneers. It is known that in the north of Ireland there are several circles that are definitely Neolithic, while, much nearer to Cork, Grange stone circle at Lough Gur in County Limerick is of the Grooved Ware Culture, which is Late Neolithic (Cleary 2015: 51-77; 2018: 102-123).

Radiocarbon dates at an acceptably accurate level are scarce for any of the Cork and Kerry axial stone circles. O'Brien (1992) summarizes the little that is known. The latest possible dates for the stone circles at Reanascreena and Drombeg are around 1100/1200 BCE but they could be very much older. Fahy (1959: 16-22) wondered whether the fragments of a cremation urn at Drombeg could indicate the Early Bronze Age, if not some earlier date (rather as at Grange stone circle, also in southern Ireland). The Irish Bronze Age is roughly 2400-500 BCE.

Summary

It is found that the positioning of pre-selected perimeter stones in the stone circles of Cork and Kerry are directionally-arranged for pre-decided dates to function at sunrise, usually with cross-diameter shadow-casting to a waiting stone, but sometimes not. The directions appear always to be fundamental to the planned operating of a Neolithic/Bronze Age calendar.



Fig. 10. Two powerfully sexually-symbolic stones survive at Avebury Cove.

Avebury megalithic cove in the centre of the northern circle

Avebury's megalithic cove, dating from 2900 BCE, functioned as a carefully planned four-piece setting of standing stones, in which three of the great stones took on roles having intentional phallic symbolism while the fourth stone is female-symbolic.

Only two of the cove's megaliths survive (fig. 10). One is thick and broad, the other tall and narrow. Stately in their grandeur, they dominate the scene while displaying the inbuilt symbolism that was purposefully devised to denote male and female genders in their role as part of a fertility religion.

The huge broad stone radiates femininity through earthfast passive symbolism because of the central location, vast bulk, and resolute outline. Significantly, this mighty 100-tonne stone was originally attended by two erect male-symbolic stones, one at each side. When William Stukeley arrived at Avebury in 1719, he was told that the other 5-metre tall, narrow stone had been destroyed six years previously (it is indicated in the sketch in fig. 11).

The scene was completed by a fourth stone whose role was crucial to the sunrise action drama at the midsummer solstice. This stone was located several metres from the great cove stone in the direction of midsum-

mer sunrise (fig. 11).

William Stukeley sketched the stone several times. The midsummer-sunrise shadow has been introduced into his illustration from Plate XIV in his book *Abury* (1743). Every year this great stone played an indispensable active role in Avebury's master plan through the power of the shadow's watchable, dynamic development and movement.

Stonehenge

Stonehenge has a recumbent stone at its focus. It is the altar stone, 3 metres long, lying supine in the central part of the monument, awaiting the annual coming of the heel stone's shadow which arrives in midsummer week while the sun is rising. Only then can the shadow enter the monument and reach the center.

When Stonehenge was built, the sun shone in first, before the arrival of the penetrating shadow, after which the sun re-entered for a few minutes more. Sunshine at rising or setting cannot reach the altar stone at any other time of the year (not even at midwinter sunset, which is a common misconception, as explained below).

The 35-tonne heel stone is essential to the unfolding drama. Positioned 77 metres from the passive altar stone, its summit stands proud of the skyline when viewed from low down alongside the altar stone in the

middle of the monument (fig. 12).

The height of the heel stone above current ground level is 4.7 metres. The heel stone leans at 27 degrees to the vertical in the direction of the monument—probably deliberately so. The area of land between this external stone and the monument slopes gently upwards. When the shadow enters the monument, it does so at a height that exceeds 1 metre, and, inside, it arrives at the waiting altar stone. The heel stone was probably set upright initially, but once the altar stone had been laid flat at the monument's founding stage, the heel stone may have been forcibly tilted forwards to lessen its height and ensure that its shadow ended upon the altar stone and not override it.

In midsummer week when Stonehenge was built 4,500 years ago, from some four days before the summer solstice of 21 June until some four days after the solstice, the sun rose on, or practically on, the monument's axis. This direction is just slightly north of the heel stone (fig. 13).

Hence logical reasoning involving the altar stone and the heel stone parallels that of the numerous recumbent circles of prehistoric Ireland and some in Scotland. The outcome at midsummer sunrise is similar, namely achievement of a spectacular stone-to-stone union by shadow (fig. 14).

Hundreds of devotees standing either side of the heel stone could watch the drama, and understand the meaning, -namely, the entry of the phallic shadow through the vulvar medial opening into what is an intentionally female construction.

For the few people able to be present inside the *sanctum sanctorum*, the Holy of Holies, they could watch the male shadow coupling with the female recumbent altar stone (fig. 15) at their annual reunion (Meaden 2017b; 2020a).

On other occasions, when visiting the interior of Stonehenge on any date of the year at any time of day, devotees could have been aware of particular esteem attached to Bluestone 67. This rounded, straight-sided stone with elliptical cross-section stood upright almost touching the altar stone on the Stonehenge axis in line with the heel stone. It could have played an abiding role in the embodied scheme of divine conjugal symbolism at this place.

There may be some resemblance to Shiva lingam icons of similar elliptical cross-sections in association with female pindi symbolism, familiar in Hindu India. The roots of their religion may be about as old as that of the Stonehenge people. By contrast, whereas the religion of the Wessex farmers was snuffed out long ago, Hinduism continues to this day with deep spiritual devotion to divine iconography.

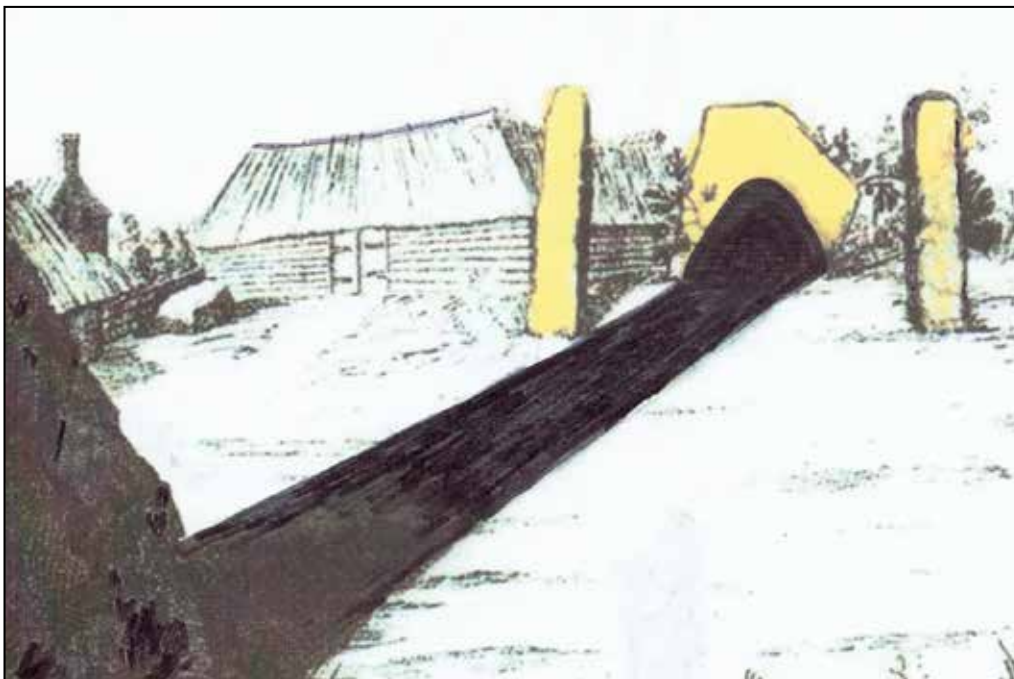


Fig. 11. William Stukeley's sketch, to which have been added the summer solstice shadow of the fourth stone and (at right) the missing pillar stone.



Fig. 12. Relative to the low-lying altar stone at the focus of Stonehenge, the top of the heel stone is seen to stand clear of the tree-covered horizon.

Figure 16 is a photograph of Bluestone 67. It was knocked down when trilithon Stone 55 and its lintel fell. One can tell that in prehistory people had been scraping, abrading, and smoothing its surfaces. Figure 17 provides further useful detail when the same stone is regarded from the opposite direction. Like the other bluestones, Stone 67 had been part of an earlier setting, and this was its final emplacement on the axis behind the altar stone. Work had been done on the stone between change of settings, because a pre-existing tenon had been more than 99% removed. Additionally, a start had been made at making it better resemble symbolically a phallus with the idea of a glans penis (fig. 17). After setting the stone upright on the axis just behind the altar stone, in subsequent years persons responsible at Stonehenge (priests, leaders, custodians) may have allowed or encouraged the practice of touching it, if not abrasively rubbing it, by devotees having hopes of gaining good fortune and raised fertility.

Lastly, there is the matter of sunset in the week of the winter solstice.

Figure 18 shows how today we can see the sun setting along the line of the principal axis. But this view became possible only after Bluestone 67 had fallen. If the latter is restored to the vertical, in front of the Great Trilithon comprising Stone 55 (also fallen) and Stone 56 (still standing), the light of the setting sun would be blocked.

Summary

The Stonehenge of 2550 BCE was a planned fertility religious monument. It is a monument to the living, with a dramatic showpiece manifestly watchable every midsummer week at sunrise. The explanation of union by shadow, as also demonstrated for dozens of stone circles elsewhere in Britain and Ireland, has grown and developed into a well-grounded theory as to Stonehenge's core symbolism and purpose.

By contrast, Parker Pearson (2012: 13), unaware of the current countywide sunrise research on all these stone circles as well as Stonehenge and Avebury, concluded that Stonehenge was a monument to the dead, "a place of the ancestors". Burl (1987) also decided that Stonehenge was "a house of the dead". This is like saying that cathedrals and churches are places of the dead because there are burials in their cemeteries.



Fig. 13. This is a reconstruction of sunrise along the axis of the monument for 2550 BCE, when Stonehenge was planned.



Fig. 14. Midsummer sunrise when the phallic shadow of the heel stone penetrates the monument.

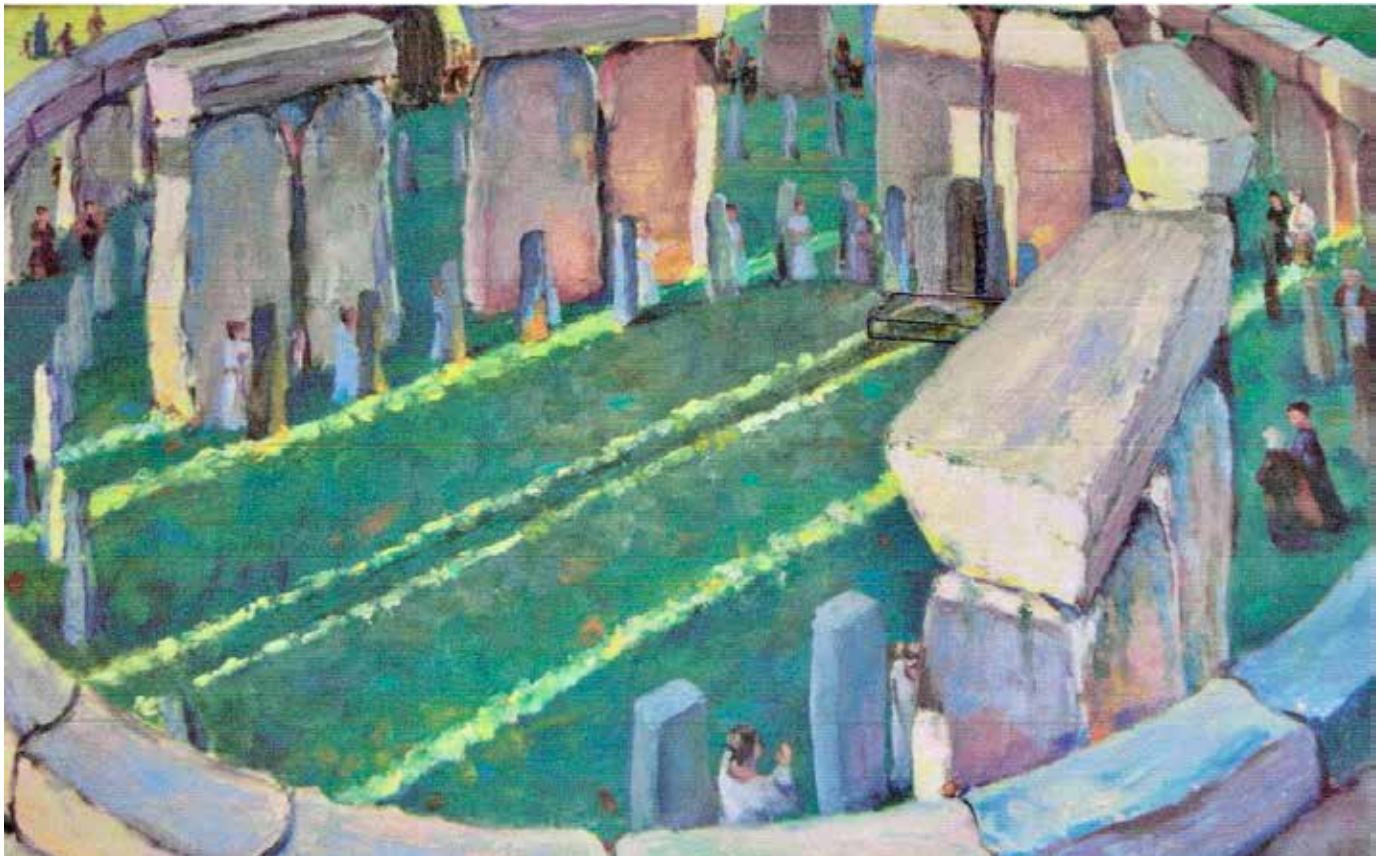


Fig. 15. Diagrammatic experimental reconstruction of the interior of Stonehenge, showing the recumbent altar stone and the vertical dark bluestone behind it. Painting: Maureen Oliver.



Fig. 16. The rounded upper end of Blue-stone 67 showing the elliptical cross-section but with an angled top edge (at right) flattened by repeated rubbing. Photo: Simon Banton

Conclusions

By interpreting the meaningful symbolism built into dozens of stone circles, this research on stone-circle planning has brought to light aspects of the people's core wisdom, beliefs, and calendrical understandings. The people left nothing in writing. They worked with symbols and left an inheritance of interpretable symbolism in stone.

The stones of many prehistoric circles of Britain and Ireland were intelligently spaced in a ring so as to ensure that selected stones in the east accord with the di-

rections of sunrise in relation to a prone megalith in the west for the eight major dates that divide the year. The basis of a former Neolithic/Bronze Age calendar has been reconstructed. Similar results are found at stone circles in particular regions of Ireland, Scotland and England, including Wessex and Cornwall. Through such symbolism, significant aspects and beliefs of the people's *modus vivendi* have been uncovered. The calendar works visually when, during the minutes after sunrise, a shadow from a tall stone in the east meets a female-symbolic stone waiting in the west.



Fig. 17. A glans was being fashioned on the stone that stood vertically behind the altar stone. Photo: Simon Banton.



Fig. 18. Sunset on 15 December 2005.

The conclusion is that for many dozens of stone circles the principles of a readable calendar were planned into stone positioning. Calendrical action can be watched and the theory confirmed by anyone present at sunrise on the right dates. The evenly-spaced calendar actually improves on the irregular monthly calendar that we use today.

Other testable facts include the finely carved ithyphallos on a tall narrow stone at Drombeg stone circle, and the carved vulva on Drombeg's recumbent stone waiting passively in the west (Meaden 2020a: 4-6). The sunrise shadows make a wonderful spectacle, like a moving drama.

At Stonehenge the morphological symbolism and core principles are similar to those of the Irish sites, but the action is staged grandly, in proportion to size and majesty. This arises from the beauty of Stonehenge and the brooding presence of the heel stone, which waits all year for the next midsummer action to be initiated when the sun rises from a cloudless horizon. Sun and heel stone act together. It is dynamic theatrical drama for a huge audience watching outside.

Acknowledgements

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ANOA-1 AND THE BODY PROPORTIONS OF THE NIOLA DOA CORPULENT FIGURES (ENNEDI, CHAD)

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Introduction

Niola Doa is a constellation of decorated rocks located in the northeastern sector of the Ennedi (fig. 1), renowned for the corpulent humans depicted in nearly life-size. Since the discovery by Captain Jean Courtin in 1953, the Niola Doa petroglyphs received much scholarly attention (Allard-Huard and Huard 1983, Bonnet 1960, Breuil 1955, Choppy et al. 1996, De Lapparent 1955, Faleschini et al. 1996, Fuchs 1957, Gauthier and Gauthier 2019, Huard 1963, Huard and Massip 1966, Simonis et al. 1994 and 1998, Soleilhavoup 2018, 2019).

Outside the Niola Doa area, the only two other known sites with petroglyphs representing humans in the same style are at Anoa-1 (Huard and Massip 1966), and Erdi Ma (Negro 1996). Anoa-1 is crucial for understanding this style as a corpulent human appears in meaningful, direct association with cattle figures characterized by sophisticated coat decorations.

The Niola Doa art, as represented in the eponymous

site, also known as NDO-1 (fig. 2), consists of a limited variety of human depictions. In contrast to the standard silhouettes, the whole-body decorations, made of geometric patterns, sometimes mixed with zoomorphic elements, are extraordinarily elaborate and varied.

The fascination with the Niola Doa art owes a lot to its place name, meaning “the place of the young ladies” (De Lapparent 1955). Unfortunately, this etymology is informative only about the men’s readiness in recognizing women in any naked silhouette with a prominent buttock and no male genitals. Indeed, it tells nothing about the real gender of the androgynous figures. At the time of the discovery, the people from the Murdia tribe, settled in the Niola Doa area, affirmed that their grandfathers knew nothing about the authors of the petroglyphs (De Lapparent 1955). It is not surprising, since the Murdia keep the memory of the migration of their mythical ancestor from the Tibesti to the Ennedi (Le Rouvreur 1962).

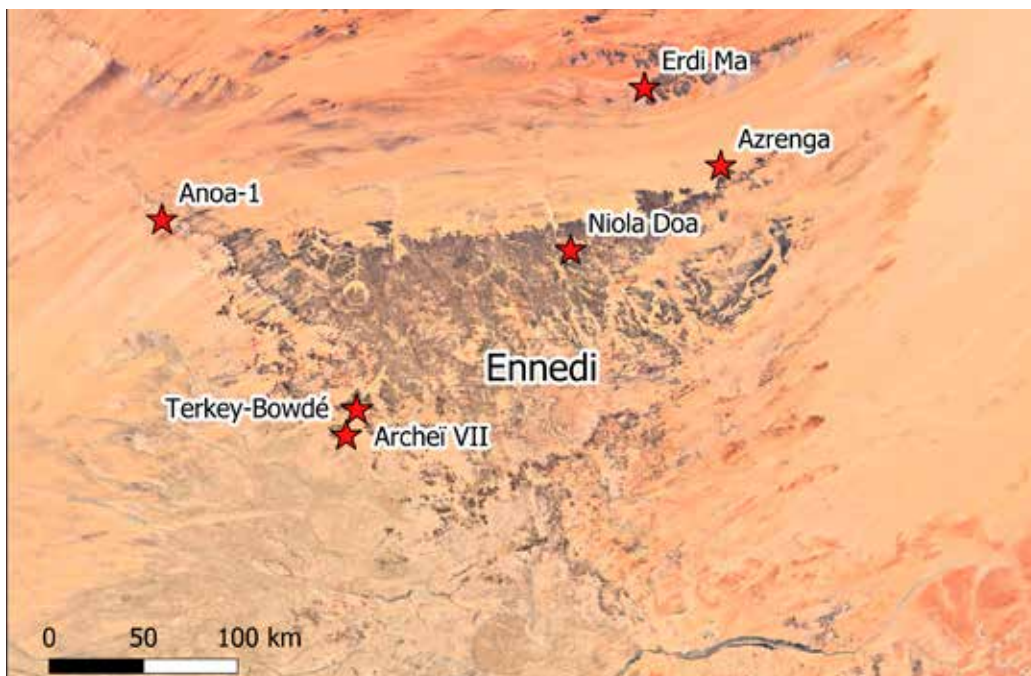


Fig. 1. Location map of the place names and rock art sites mentioned. The satellite image in the background is from Digital Globe (Westminster, CO, USA) - Google Earth (Google, Inc., Mountain View, CA, US).



Fig. 2. The Niola Doa Site 1, also known as NDO-1 (photo courtesy of Gábor Merkl). Corpulent figures in a skirt plus a tiny drum player are associated in a group scene of unknown meaning, but with apparent ceremonial intent.

Methodology

In figurative rock art, the drawing distortions intrinsic to the conversion from the visual experience of the 3D world to its 2D representation define the style. Morphometrics of human figures is thus crucial, since each human group defines itself through a unique vision of the human being. In the Niola Doa art, humans appear in three varieties:

- Corpulent figures, apparently naked, wearing only body accessories
- Figures wearing skirts, shown in smaller dimensions than the corpulent figures
- Drum players, depicted in minimum dimensions compared with the previous ones

In western art, Vitruvian Man is the starting point

for reproducing the endless variety of human types (Torrini Perissa 2013, Abu-Taieh and Al-Bdour 2018). Departures from the body proportions of the ideal man effectively measure the distortions specific to any drawing style, independently of its age and cultural origin.

All kinds of Niola Doa humans have the main articulations represented. Thus, a minimum set of principal landmarks for the morphometric analysis is available (fig. 6). The photographic distortions of the petroglyphs found on slanting surfaces or horizontal rock slabs were routinely corrected by reconstructing 3D models and projecting the images in orthographic mode (fig. 7). Only the corpulent figures constitute a statistically significant sample (fig. 8).



Fig. 3. Weathered paintings in the Terkey Bowdé shelter (orthophoto in RGB colors to the left and the same image processed by *DStretch_CRGB* to the right). The fragmentary figure on the upper part of the panel (indicated by an arrow) closely matches the shape and internal geometric patterns of the heads and necks of the NDO-1 corpulent figures. The enhanced image shows the existence of a small figure in a skirt (evidenced by a dashed contour), similar to the first figure to the left wearing a skirt present on the NDO-1 rock.

The use of digital mannequins in the postural analysis facilitated the understanding of the drawing perspective and its effects on body proportions. 3D rendering by Computer Graphic challenges the limits of the interpretation of iconographic details, since the most likely hypothesis necessarily prevails over neutralism.

The Niola Doa-like paintings

The discovery of paintings reproducing the same iconographic content present at Niola Doa (Gauthier and Gauthier 2017, Lachaud and Lachaud 2017, Lachaud 2018, Menardi Noguera 2017a and 2017b, Negro and Faleschini 1996) made possible the framing of the Niola Doa petroglyphs in the relative regional chronology

initially developed by Gérard Bailloud (1997).

The Niola Doa art includes cattle depictions in both media. Thus, it pertains to the Pastoral Period, which in the Ennedi extends to the Metal Age. Superimposition relationships indicate that the Niola Doa art is older than the paintings of the Tamada style, representing the Recent Pastoral Period (Menardi Noguera 2017a, 2017b, 2018). The fineness of coat decorations in cattle suggests the use of specialized metal implements, similar to the ones documented by ethnographers (fig. 3 in Insoll et al. 2015), which would place the Niola Doa art at the very beginning of the Metal Age, before the general adoption of metal weapons.

The Niola Doa-like paintings confirm the constant relationships between the two kinds of human figures depicted at the NDO-1 site. The much-discussed fragmentary figure from the Terkey-Bowdé cave (Civrac 2014, Lachaud 2017a, Menardi Noguera 2017a, Solelilvahoup 2018) is a significant example, since a previously unreported Niola-Doa-like figure wearing a skirt emerged after re-examination of the painted panel (fig. 3 to 5).

The Anoa-1 site

Anoa is the official place name for a well located at the westernmost fringes of the Ennedi Highland (fig. 1). Wind-sculpted sandstone outcrops recalling the stone cities of the Tassili dominate its landscape. Discovered in 1965 by Jean Courtin (Huard and Massip 1966), the Anoa-1 rock (fig. 9) hosts two human fig-

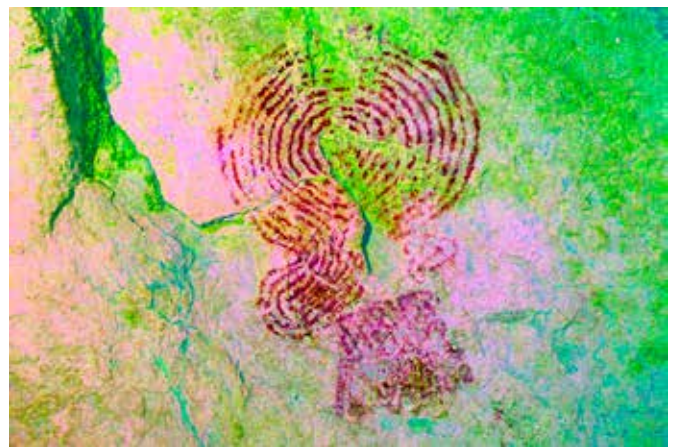


Fig. 4. Close-up of the incomplete figure in the Terkey Bowdé shelter correlated with the NDO-1 corpulent figures (image processed by *DStretch_CRGB*). The small rounded shape to the right possibly represents an earlobe or a chignon. The lower edge of the fragment corresponds to a weathering border.

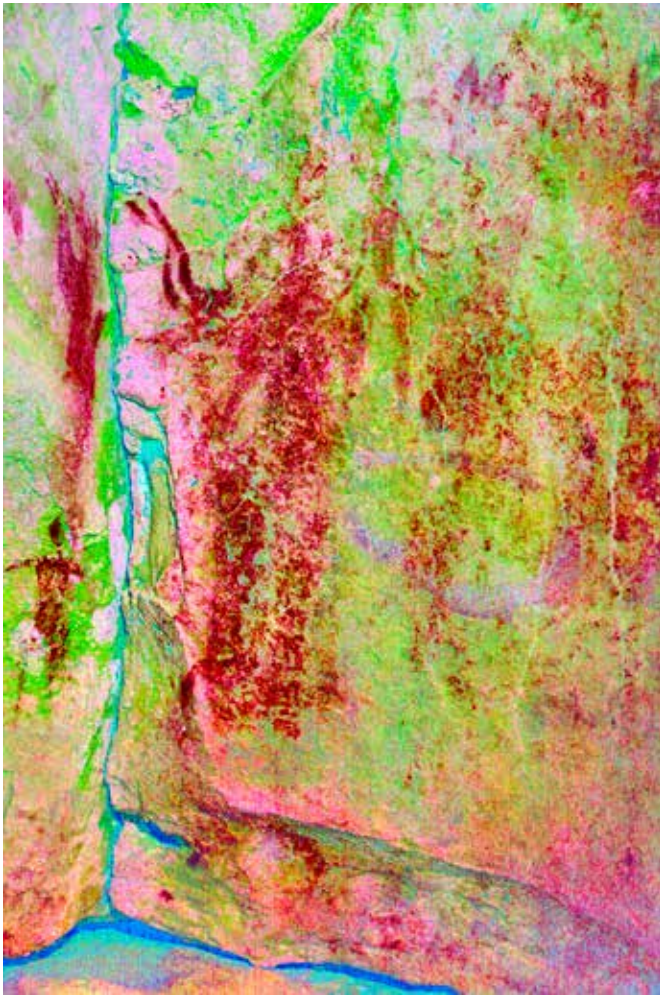


Fig. 5. Terkey Bowdé shelter. To the lower left of the painted head correlated with the NDO-1 petroglyphs, a figure in a skirt in the typical pose of the similar Niola Doa humans is present (image processed by *DStretch_CRGB*).

ures closely matching in style the famed Niola Doa corpulent figures and seven animals, all executed by pecking (fig. 10).

The two humans standing at the center of the rock hold a stick with the right arm bent up, while the left arm is down-stretched. The tallest figure, at the panel center, characterized by a small round head, sports intricate internal body decoration made of nested chevrons and closed contours (fig. 11). The smaller figure to its lower right is shallowly carved, with no infilling patterns (fig. 12). The shape of the head, featured by two small lateral bulges, is the same observed in the NDO-1 corpulent figures. The legs and feet shown in left lateral view indicate that these two figures are facing left.

The morphometric analysis demonstrates that the taller human is outlier respect to the analyzed sample,

while the smaller human is affine to the NDO-1 corpulent figures (fig. 8).

A splendid cattle depiction, with forward-pointing horns shown in full lateral view, flanks the tallest human figure to the left. This animal is likely an ox, as indicated by the appendix hanging from the middle of the belly line, representing the penis sheath, and the triangular appendix hanging before the hind-legs, possibly depicting the residual testicular sac. Nested chevrons and concentric circles decorate its coat (Figs. 10 and 11). The jugular appendix likely represents an artificial body modification obtained for aesthetic purposes by cutting the dewlap in the shape of a pendant, as described in the ethnographic literature (Dioli 2018). The doubling of the belly-line testifies the same artistic habit of enlarging anatomic details observed in the Niola Doa petroglyphs (e.g. Fig. 7). The hooves shown as closed circles are in the bottom view.

Two smaller cattle figures, one featured by a comb-like pattern on the thurl, the other devoid of geometric decorations, adorn the upper left corner of the panel. Long retorted horns and a coat decorated with spiraling contours characterize the cattle figure on the upper right quarter of the decorated surface (fig. 10). The small, schematic cattle figure depicted in front of its forelegs is a late addition, as indicated by cross-cutting relations.

Horned quadrupeds crudely pecked on the lower left quarter of the panel, complete the composition.

The petroglyphs decorating the rocks south of Anoa-1, reported by Choppy et al. (1996) in a minimal number, consist of cattle figures with retorted horns, warriors armed with maces and shields (fig. 13), a few giraffes (fig. 14), plus several oval engravings filled with irregular grid patterns (fig. 15). These oval motifs, comparable with the Azren-ga petroglyphs (Simonis 1996), probably represent shields (fig. 16).

The most puzzling petroglyph surveyed in the Anoa-1 stone city is a pecked motif formed by closed contours, possibly the relic of a figure in the style of the Niola Doa humans (fig. 17).

The isolated cattle figure with forward-pointing horns pecked on the southern face of the Anoa-1-011 rock (fig. 18) is similar in style and execution to the cattle figure central to the Anoa-1 composition and is thus attributable to the Niola Doa corpus of art.



Fig. 6. Orthographic projection of one of the rock slabs known as the Dalles des Italiennes. The image derives from a 3D model (photo courtesy of Ursula Steiner). The enlarged buttock of the corpulent figure might represent an artist's *pentimento*. The head of the figure in a skirt bears the brunt of an ancient iconoclastic act.

Body proportions of the corpulent figures

In the corpulent figures from the NDO-1 site, the prominent belly, buttocks and thick thighs grab attention for their generous proportions (fig. 2 and 19). The height of the corpulent figures is on the average 10 head units (fig. 8), a ratio conferring a great look. As evidenced by morphometrics, the Niola Doa fleshy humans are not realistic portraits but idealized renderings of human beings. The drawing perspective may justify only in part the exaggerated shortening of the upper limbs and the tapering of the torso. The scaled-down shins and feet demonstrate that this tapering is an apparent stylistic convention, intended to focus the attention of the observer on the magnified pelvis, buttocks and thighs.

The drawing perspective of the corpulent figures

Bonnet (1960) described the corpulent silhouettes from the NDO-1 site as depictions in twisted perspective. According to Simonis et al. (1994), the legs of the Niola Doa figures are in lateral view, while the upper body is in frontal view. Referring to the NDO-1 depictions, the physician Jean-Pierre Duhard (in Soleilhavoup 2018), stated that the thighs are in frontal view. The Niola Doa silhouettes totally lack depth cues. No internal anatomic details or internal occluding edges are present. In the terminology set by Deregowsky (1984), they are pure epitomic images (fig. 19). The missing anatomic facial details contribute to the overall ambiguity of the Niola Doa silhouettes and their pose. The corpulent figures sport two small lateral bulges different in size and shape at neck height. The one on the side of the bent-up arm might represent the lower face. The prominent bulge on the side of the straightened arm might represent an ear (De Lapparent 1955) or a chignon (Lachaud and Lachaud 2018). In both cases, it indicates a three-quarter view for the head profiles of the corpulent figures from the NDO-1 site. The lower torso is asymmetric from the armpits to the buttock, being convex below the bent arm and straight below the straightened arm. Its profile is thus consistent with a three-quarter perspective. In all the corpulent figures, except the few known ones without a decorative infill (e.g. Fig. 6), two parallel lines, likely representing a belt, separate the upper from the lower body (fig. 2 and 19). The lower body is in lateral view as indicated by the

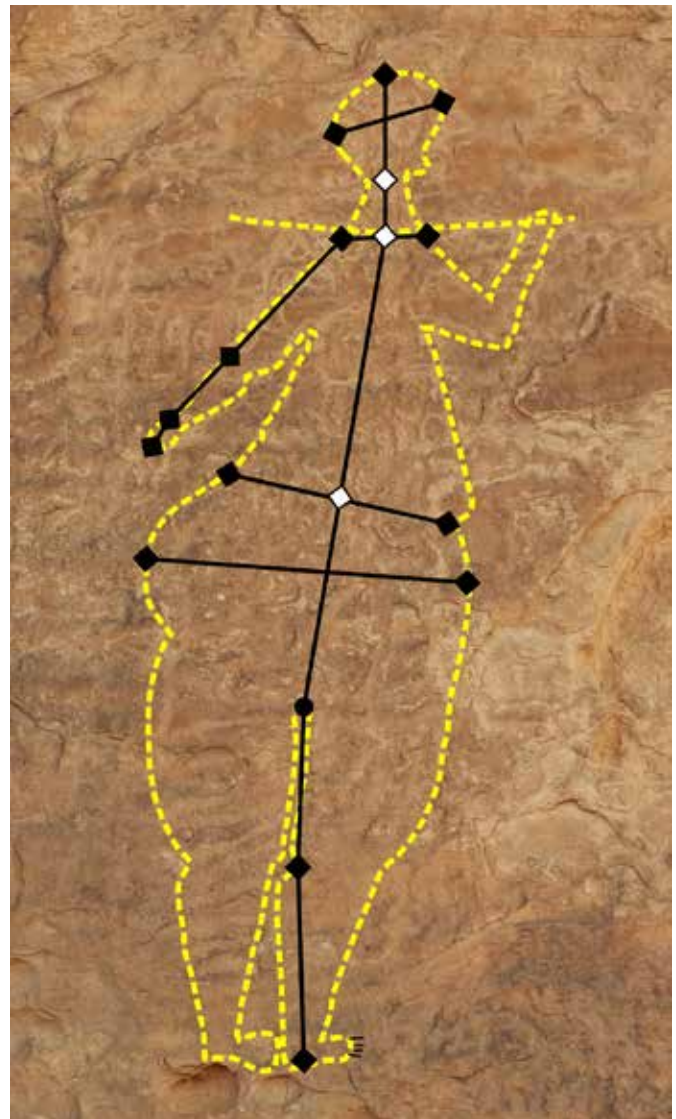


Fig. 7. Site NDO-31. A corpulent figure without internal decorative patterns, evidenced by a yellow dashed contour (photo courtesy of Ursula Steiner). Unrealistic body proportions characterize the humans in the Niola Doa style. Nevertheless, the depiction of the essential articulations makes it possible to select some landmarks for the morphometrics: primary landmarks marked in black, secondary landmarks in white.

rounded gluteus, the knees, the popliteal fossa and the rounded muscular mass of the calves. Depictions of feet are generally from a high point of view (fig. 7). In the NDO-1 figures, the profile of the thighs seems more consistent with a frontal view rather than a lateral view, since both sides of the thigh profiles are equally convex (Soleilhavoup 2018). This peculiarity is not common to all the Niola Doa fleshy humans. In the Dalle des Italiens (fig. 7), multiple contour lines inflate the thighs, altering in a significant way their inner anatomic shape, more consistent with a lateral view. Both lower limbs are straight in all known depictions,

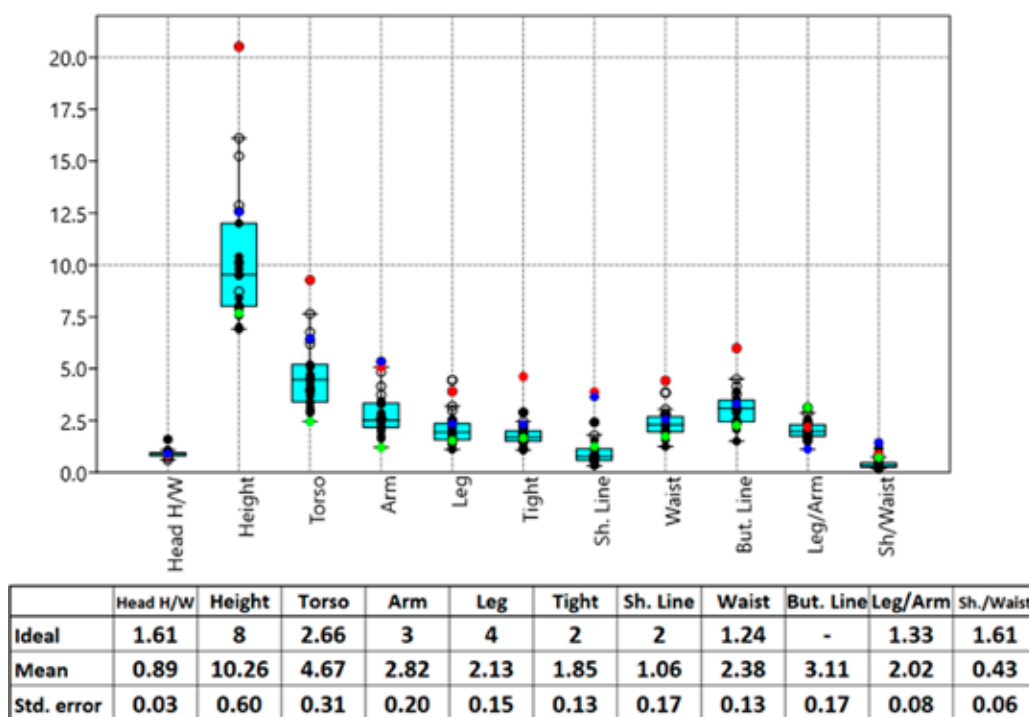


Fig. 8. Box-plots with outliers (at 1σ) and jitters of the body proportions referred to the Niola Doa corpulent figures ($N = 27$). The table reports the statistic summary of the morphometrics performed in Engauge© and Past©. The Anoa-1 tall figure is an evident outlier. The most sensitive parameter in drawing well-proportioned humans is the height to head ratio. Head H/W: head height to width ratio; height: estimated in head unit (8 for the ideal man, 7.5 for the average man); torso, arm, leg, thigh, shoulder line, waist, and buttock line in head unit; leg/arm and sh./waist are the leg-to-arm and shoulder-line-to-waist ratios. Red dots: the tall, corpulent figure from Anoa-1; green dots: the Anoa-1 small human; blue dots: the human figure from the Fuchs' Panel; black dots: the rest of the sample.

with no indices of the femur rotation necessary for an unimpeded lateral view of the leg farther from the observer (fig. 19). In the Anoa-1 tall figure (fig. 10) and the first two corpulent figures from the left in the NDO-1 site, the point connecting the two legs should represent the crotch, since it is at the same level of the gluteal fold (fig. 2). Such a depiction is tricky because the crotch would be not visible in the lateral view of a standing person. However, this point is inconsistently lower than the gluteal fold in the third and fourth corpulent figures. This observation suggests a purely conventional representation of the crotch.

Overall, the body perspective of the corpulent humans varies from a three-quarter to a lateral perspective, implying torsion of the trunk articulations in the figure at the origin of the visual stimulus translated in the studied depictions (fig. 19).

The drawing perspective of the figures wearing skirts

The head of the figures wearing skirts is reduced to a tiny round shape, sometimes with a lower sharp edge, pos-

sibly representing the chin (fig. 2 and 21). At the same time, the neck is exceptionally elongated. The shoulders are symmetric, suggesting a frontal view of the chest. The belly is slightly prominent, and the lower back is straight. The lower body is in lateral view as indicated by the feet and the salient buttock (fig. 21 and 22).

Poses

The two basic types of Niola Doa humans, the corpulent ones and the ones wearing skirts, come in very few, slightly different poses.

The corpulent figures appear in a unique left-facing standing pose (fig. 19) and its less frequent horizontally reflected variant (fig. 6). In petroglyphs, all figures facing left (89%) hold a stick horizontally with the right arm bent, and the left arm straightened downwards with the hand open and spread fingers. The few right-facing figures hold the stick with the left arm bent while the right arm is down-stretched. These systematic orientations indicate that the drawing of the corpulent figures proceeded from the mem-



Fig. 9. The rock home to the Anoa-1 petroglyphs is roughly a parallelepiped block, slightly dipping to the north, 5.7 m high with respect to the sandy plain, 5.3 m large, and 2.2 m thick. The strike of the panel is 115 North.

ory of a template, not from the recollection of a real subject. The only known example of a left-handed corpulent human facing left is present in the Niola Doa-like paintings of the Gran Riparo d'Archei (fig. 7 in Menardi Noguera 2017a).

The trait representing the stick generally intersects the neck, as leant on the throat. Such a part of the stick would be dysfunctional. Likely, the drawing of this object neglected the neck occlusion. In the Anoa-1 tall figure, it does not cross the neck; the artist took care to reproduce the impeded view of the object. Similarly to the sticks, the neck accessories made of animal skins, so characteristic in the NDO-1 site, cross the necks, without interruptions, sometimes reduced to a thin line. Thus, it is impossible to say if this detail corresponds to a neglected occlusion, or it represents the lace tying the object to the neck.

The Anoa-1 scene (fig. 10) and the Fuchs' Panel (fig.

19 in Menardi Noguera 2017) indicates that standing and holding a stick is merely the usual pose adopted by the Niola Doa cattle-keepers in attending cattle. They likely spent most of their time in this pose. Thus, it was the natural choice for representing the stereotyped identity of the Niola Doa pastoral people.

The figures wearing skirts came in two standing poses (fig. 21 and 22). In the most frequent one, right-facing individuals stand with the left arm bent, with the closed hand at shoulder height, and the right arm straightened downwards with the hand open and spread fingers. In the NDO-1 site, this gesture performed by the first figure wearing a skirt mimics in mirror symmetry the gesture of the corpulent figures to its right, perhaps to express reverence by emulation. As in the NDO-1 site, figures wearing a skirt may also appear standing with down-straightened arms, i.e. the basic pose allowing for minimum energy expenditure, which generally does not express any partic-

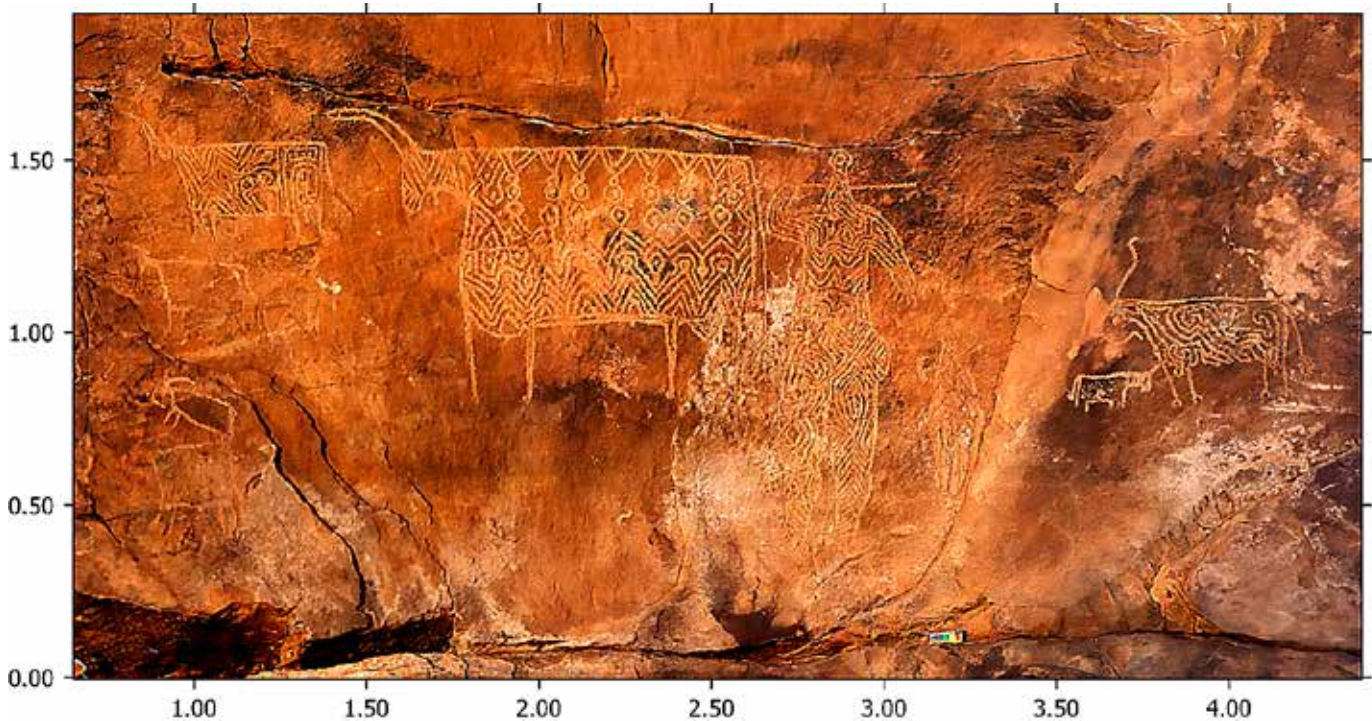


Fig. 10. Human and cattle figures decorate the south face of the Anoa-1 rock (orthographic projection from the 3D model). The two humans pecked at the centre closely resemble the famed corpulent human figures of Niola Doa. The conventional origin of the metric reference system coincides with the lower left (western) corner of the decorated surface.

ular action other than being present.

The digital mannequins developed for the postural analysis proves that it is possible to match the Niola Doa silhouettes by posing approximately only (fig. 19 to 22). In the fleshy figures, the most significant discrepancy is with the leg profiles, drawn independently, without respecting the anatomic constraints.

The vexed question of the gender

Notwithstanding the “dancing ladies” mentioned in the title of the discovery report (De Lapparent 1955), the gender identification of the corpulent figures had a problematic result from the beginning. In 1960, Bonnet wrote that the fleshy figures more likely represent men, using the argument of the hip width biased by the unrecognized effects of the drawing perspective. Simonis et al. (1994), followed by Choppy et al. (1996), stated that the corpulent humans might represent either men or women, but qualified the corpulent figure as steatopygous, adding that the fat distribution pattern, the large buttocks and narrow shoulders slightly favor the identification with women.

Initially observed among the Khoisan people, steato-

pygia is a predominantly female condition due to a considerable accumulation of fat on the buttock, protruding at a normal angle with the back (Wikipedia 2020). The well-rounded buttock shapes of the Niola Doa corpulent figures do not qualify as steatopygous. The young obese men from the Bodi-Me’en tribe documented by Eric Lafforgue (2018) demonstrate that these forms of buttocks are well within reach of African men. Soleilhavoup (2018) argued that identification with women is proven, again taking up the topic of hip width and shoulder narrowness.

As evidenced by the 3D mannequins and morphometric analysis, the body proportions of both kinds of Niola Doa humans are not realistic. Fat accumulations around the hips, typical in obese women, cannot appear in the lateral view of epitomic silhouettes. The pear-shape of the trunks indicates that the Niola Doa artists followed culturally oriented aesthetic criteria, apparently at odds with natural preferences favoring men with a V-shaped bust and women with an hour-glass shape (Maisey et al. 1999, Tovée et al. 1999).

In the lateral view of the legs, the scrotum would disappear. At the same time, the penis would overlap the



Fig. 11. Close-up of the two most significant figures decorating the Anoa-1 rock. The round head of the human figure is exceedingly small with respect to the body, as the figure is 22 head units tall. Similar decorative patterns and an identical execution technique feature the corpulent human and the cattle figure to the left.



Fig. 12. Anoa-1 site. The small human, represented without internal decorations, is more affine by body proportions to the fleshy figures of the NDO-1 site than the taller decorated human on the same panel.



Fig. 13. Site Anoa-1-02, located 400 m south of Anoa-1. Cattle figures with retorted horns associated with warriors armed with maces. The warrior on the lower left wears long feathers in his hairstyle and holds a shield characterized by a checked pattern.



Fig. 14. Site Anoa-1-13. Pecked giraffe. The round shape on the lower right corner might represent a spiked wheel-trap.



Fig. 15. Site Anoa-1-04. Oval petroglyphs decorated with an irregular checked pattern, identical to the Azrenga petroglyphs, located in the eastern corner of the Ennedi Highland.



Fig. 16. Site Anoa-1-13. Oval petroglyph decorated with a checked pattern, held by a sketchy anthropomorphic figure, possibly wearing feathers in the hairstyle.



Fig. 17. Site Anoa-1-09. Relic of a petroglyph internally decorated by contours, possibly representing the bent-up arm of a human figure in the style of the Niola Doa corpulent humans (*arrow*), mainly destroyed by exfoliation. A cattle figure with forward-pointing horns decorates the gap opened by the weathering process of the sandstone outcrop.

silhouette, conflicting with the Niola Doa epitomic vision of the human being, which recognizes outer edges only. Moreover, genitals would fall across the implicit discontinuity between the laterally projected legs, where no easy drawing solution is at hand other than simplification (fig. 19).

Therefore, male genitals lack for the very reason eyes, nose, mouths, and overlapping thighs are absent, i.e. the original choice of drawing standard silhouettes. Fleshy humans devoid of whole-body internal decorations (e.g. NDO-31 in Fig. 6) show the iconic nature of the used template.

The androgynous digital mannequin developed on the profiles of the fleshy figures from the NDO-1 site look consistent with the body shape of obese men (fig. 19). On the contrary, at least one breast should appear along the contour line, as indicated by the female version of the mannequin if the corpulent figures represented women. Thus, the flat upper torso of the fleshy figures pleads in favor of identification with men.

Confronted with the corpulent figures from NDO-1, the tall human from the Anoa-1 site and the cattle-keeper from the Fuchs' Panel have a much more squared, masculine appearance (fig. 19). Their shoulder width is more in line with ideal proportions, since the emphasis is not on fat bellies and buttocks.

Contrary to the corpulent figures, the identification of the humans wearing skirts with women is generally accepted. These pear-shaped figures, with a too slim chest

to admit a breast depiction, do not sport an excess of body fat, if not for the protruding, angled buttock. This feature, also observed in women depictions from the ensuing Tamada style (Menardi Noguera 2018), make for a striking difference between the two kinds of Niola Doa humans and points to the usual man-woman dichotomy. The observed difference in height between the women wearing skirts and their corpulent partners is symbolic. It might relate to the natural difference in height between women and men, a difference in status, or both these conditions combined (Menardi Noguera 2017a).

An ethnographic analogy for the corpulent humans

The aesthetic appreciation of some body-fat excess is a transcultural phenomenon when it relates to women, justified by the perceived ties of female body fat with fertility (Eknayan 2006). On the contrary, appreciation of body fat in men is more cultural-specific. In western art, muscular male bodies received admiration from ancient times. However, in the pre-industrial world, chubby men enjoyed favorable consideration (Ferrucci et al. 2010). Given these generalities, the presence of fleshy figures in the pastoral prehistoric depictions of the Ennedi immediately raises the fundamental question about the very existence in the past of obese persons. Vintage ethnographic pictures of African pastoralists show an absolute majority of lean men and women.

The Bodi-Me'en, a pastoralist people from southern



Fig. 18. Site Anoa-1-011. Cattle figure with forward-pointing horns. This figure is similar to the magnificent cattle figure associated with the tall human in the style of the Niola Doa cattle figures, present on the Anoa-01 rock.



Fig. 19. The articulated 3D digital mannequin developed in DAZ Studio 3D® for the postural analysis shows that it is possible to replicate the NDO-1 corpulent silhouettes by posing in an approximate way only. The dashed line on the right leg of the Niola Doa figure makes evident the multi-perspective nature of the drawing template. In the real world, the left leg would have impeded the view of the right leg. The first androgynous mannequin from left to right is the best match possible with the NDO-1 fleshy human. The second is an obese female mannequin.

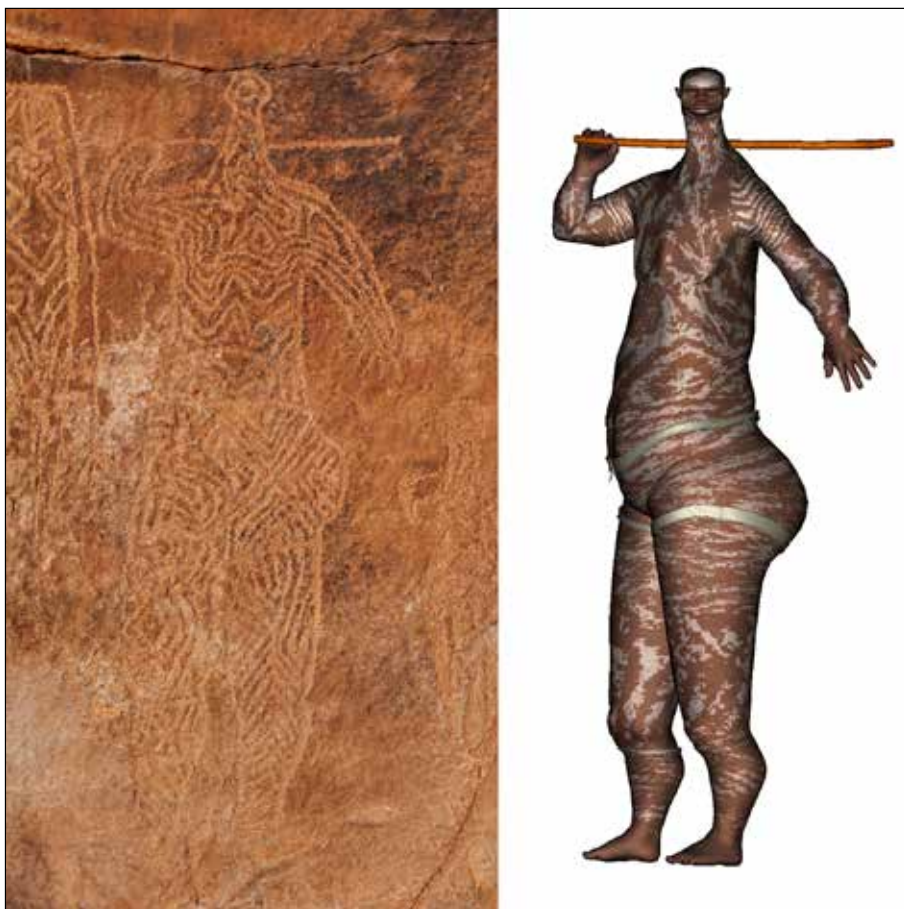


Fig. 20. The digital mannequin developed for the postural analysis of the Niola Doa corpulent figures matched to the silhouette of the Anoa-1 impressive human. The height (22 head units) and the shoulder width, more in line with the body proportions of the ideal man, confer a masculine appearance to the figure, notwithstanding the omission of genitals.

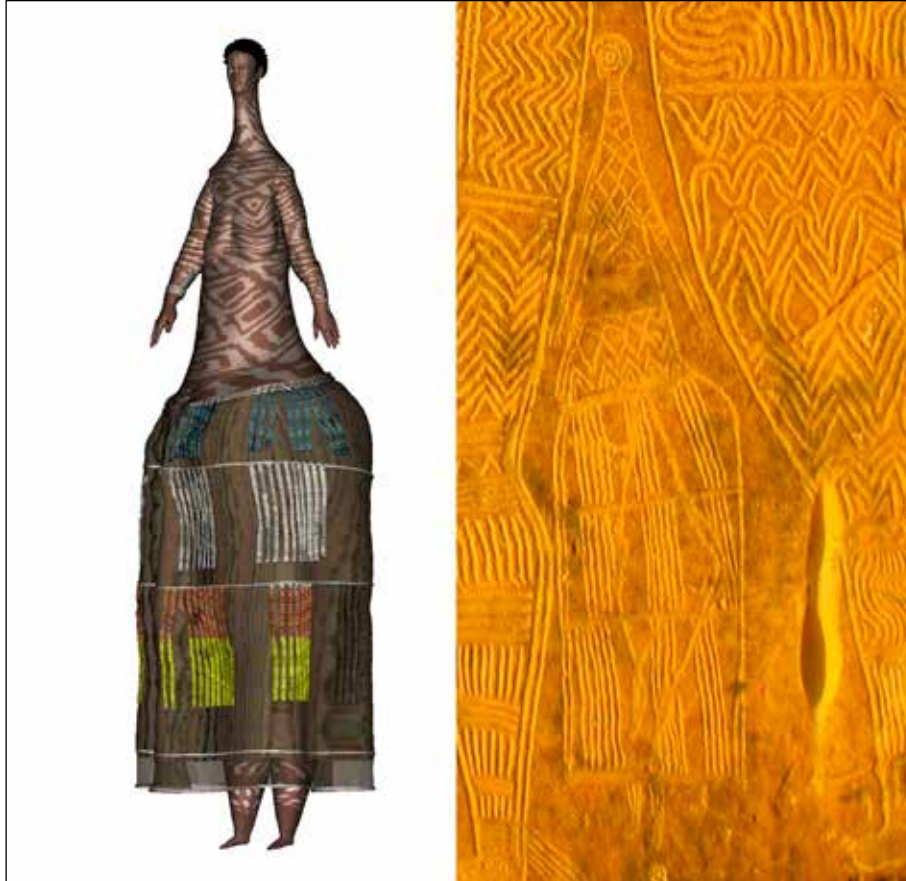


Fig. 21. The digital mannequin developed for the postural analysis of the humans in a skirt matched to the NDO-1, shown along with the Gran Riparo d'Archeï painting (the backdrop on the left is photo courtesy of Merkl Gabor). The colorful gown of the mannequin draws inspiration from the robes worn by the unmarried Nyangatom girl, whose decorative patterns are amazingly similar to the depicted dress. The Nyangatom are agro-pastoralists of Nilotic ethnic extraction, living in an area extended over Sudan, Ethiopia, and Kenya.

Fig. 22. Site NDO-1 (the backdrop is photo courtesy of Merkl Gabor). Figure in a skirt, quietly standing with both arms stretched down. The upper body is in a three-quarter perspective, while the lower body is in lateral view. The digital mannequin approximates the pose but cannot match the silhouette without overriding the rotation limits of the embedded skeleton.



Fig. 23. The young men from the Bodi-Me'en people participating in the fattening contest central to the Kael ceremony sport an evident androgynous look, at odds with their maleness and robust constitution. The genitals would be invisible after conversion of the portrayed people to epitomic silhouettes (photo courtesy of Fitretu Getachew).



Fig. 24. A stereotypical corpulent figure pecked in nearly life-size from the Niola Doa – II site (first reported by Gauthier & Gauthier, 2017). The zoomorphic pattern decorating the belly might indicate the individuality of the depicted person (digital tracing from a picture, courtesy of Ursula Steiner)

Ethiopia, offer an excellent ethnographic analogy for the circumstances under which young African males became obese and may acquire an androgynous look. This people enjoy a simple material culture with little or no use of iron tools and cultivate the tradition of the favorite animal (Abbink 1992 and 1999). Their body decorations include scarification patterns, body paintings, feathers and a variety of belts, bracelets, and anklets. Occasionally they wear trophy-like items, made of animal skins. In June, they celebrate a New Year festival, including a fattening contest known as the Kael (Lafforgue 2018). It involves young unmarried men, who prepare themselves in the preceding period by eating a super-nutrient mixture of cattle blood and honey. The contestants perform a collective dance exhibiting their naked fattened bodies. The fattest dancers become heroes for their clans and gain the admiration of unmarried girls. In the aftermath of the festival, the participants lose the excess weight and regain the physical fitness necessary for carrying on their usually active lifestyle as cattle-herders. The look of the Kael performers strikingly resembles the Niola Doa corpulent figures (fig. 23). The emblem carried on the shoulders, made

of a piece of cowhide, recalls the animal skins ported on the neck by the Niola Doa figures. The fattened buttocks and bellies are impressive. The belts tightened on the naked bodies make the fat accumulations even more evident and produces a visual effect akin to the body segmentation apparent in the Niola Doa fat humans.

Discussion

The identification of the Niola Doa corpulent figures with women produces the weird vision of an artistic world where men do not have a hold, which would be an oddity in the Ennedi art tradition. After reconsidering the conventional body proportions typical of the Niola Doa art, the identification of the corpulent figures with men instead of women seems a much better proposition.

In the pastoral art of the Ennedi, the representations of male genitals are limited to the runners in the Fada style (Final Pastoral Period), who wore penis sheaths, according to an interpretation by Bailloud (1997). Sex is a biological function, perhaps a trivial one for a pastoral society. On the contrary, gender is a social construct always requiring positive actions to unfold. Representation of gender in art is a constant. Clothing, weapons, containers or socially determined activities adequately express gender. Cattle belong to men in all sub-Saharan Africa. Women have milking rights at best. In the Ennedi paintings, the association between women and cattle is always in milking scenes, realistic or symbolic (Menardi Noguera 2018a, 2018b). Guarding cattle and choosing a preferred animal are typically men's affairs. Therefore, the actors in the Anoa-1 and Fuchs' Panel scenes are men, strongly suggesting that all the corpulent figures present in the Niola Doa art are men.

The appearance of humans shown in Anoa-1 and the Fuchs' Panel, more masculine than the comparable figures of NDO-1 and related sites, is justified by the activity carried out. Protection of livestock requires physical fitness. In contrast, positive interaction with women requires charm.

The celebratory intent of the Niola Doa artists is self-evident in the monumentality and landscape placement of their petroglyphs (Simonis et al. 1994). Monumentality is also an outstanding quality of the Anoa-1 rock (Menardi Noguera 2020).

Acquisition of social prestige and related mating advantages are powerful enough motivations under all latitudes for anybody to adopt the most bizarre behaviors. To get obese, the Niola Doa people probably fed on a mix of milk and cattle blood drawn from living animals. Blood as a caloric food is second only to meat but does not require the killing of precious cattle (Shadrack et al. 2009). However, there are limits to the quantity obtainable from a single animal. Only the wealthiest herders among the Niola Doa people might have been able to get an over-abundant intake. By exhibiting their fat bodies, perhaps in a beauty contest, these lucky ones finally got admiration from the women and honors from the clan. The Niola Doa artists celebrated these heroes by producing monumental portraits, in the form of standardized silhouettes, personalized with individually unique body decorations.

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KATSINA RUNNERS IN THE PREHISTORIC ART OF THE AMERICAN SOUTHWEST, 1000 BCE-CE 1300

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Introduction

Ancestral Pueblo runners were especially important in communicating news and bringing novel technology to remote villages. Trails throughout the southwest were the means of linking up communication between sedentary villages by means of runners with messages, scouts for war parties and hunting parties for game. Runners gave villages lifesaving advance warning of

enemy attacks. This paper introduces a number of petroglyphs that may depict runners, engraved on cliff faces located near prehistoric village sites along the river drainages of the northwestern San Juan region.

Figure 1 illustrates trade routes for Zuni that have been mapped out in a general way by Ferguson and Hart (1985). Their map indicates that the northern route went clear to the Abajo (or Blue) Mountains.

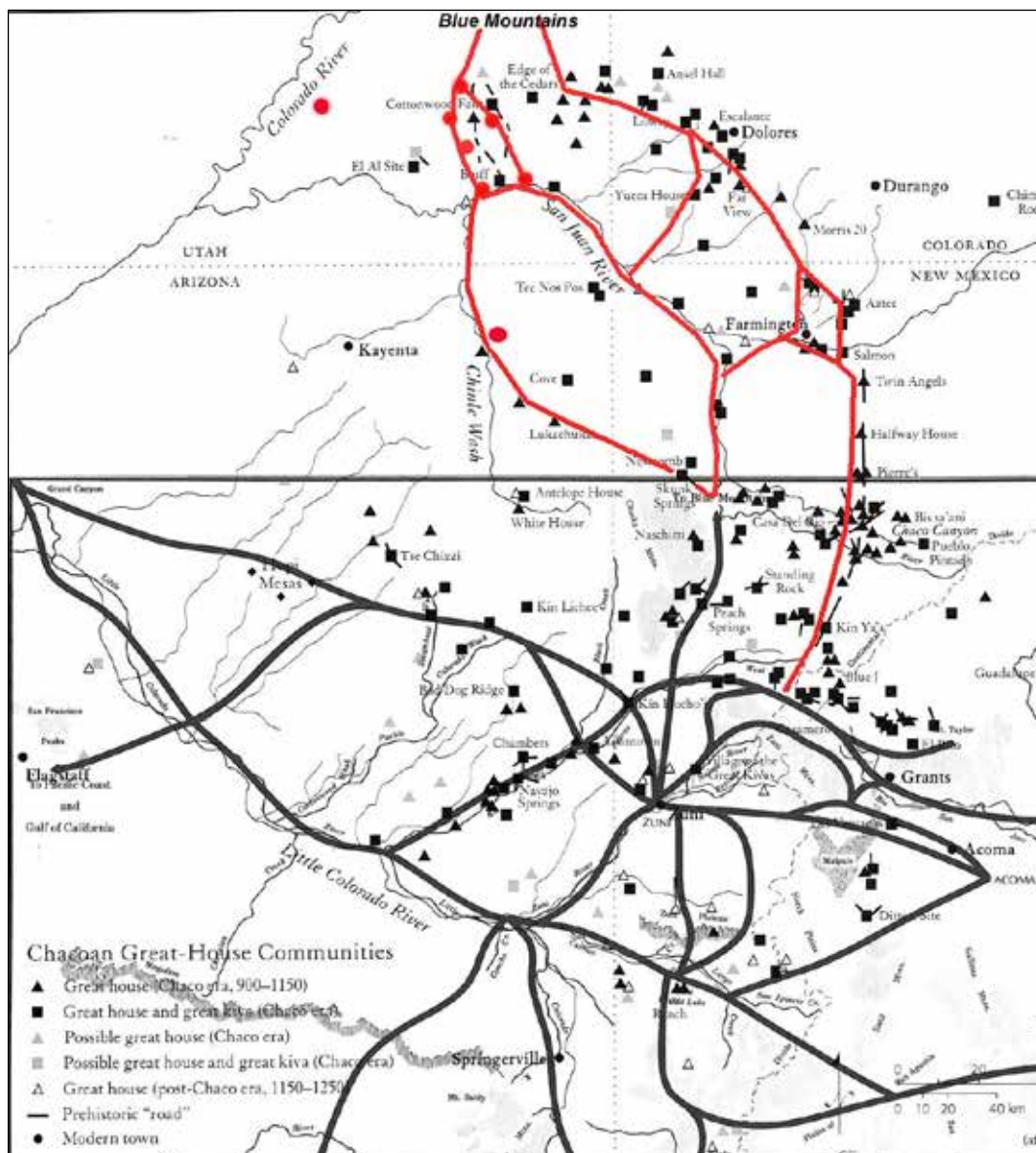


Fig. 1. Maps of Zuni trails in black ink by T.J. Ferguson and E. Richard Hart, 1985, "A Zuni Atlas Major Zuni Trails", Map 20, p 54, overlaid on to John Kantner's 2004 'Great-House Communities and the Chaco World,' Chapter 10, in *In Search of Chaco*. Map p. 72, fig.10.2. I then added the red lines for theorized runner trails. The red dots indicate locations of images of runners on the canyon walls that parallel Chaco roads.

I have placed their Zuni trails on top of John Kantner's 2004 'Great-House Communities and the Chaco World' map of the southwest region and drawn red lines connecting the black squares he has representing major villages. The large red dots are sites of petroglyphs I have identified as runners found very near these routes. The discussion about the identification of these images follows. Obviously, trails and Chaco roads run across open flat high ground, while these specific petroglyphs are confined to cliff faces that generally occur off the trail.

Long-distance running, relay races and kick-stick races were favorite activities for ancestral Pueblo as well as for today. But ritual running goes beyond personal glory and sportsmanship. Winning is for everyone, for the village, for rain and prosperity and its spiritual significance in the Puebloan societies go even deeper. There is a protocol for the clothing and body designs

that are associated with ritual runners. Long-distance runners wear a wide belt that can stash dried meat and berries for sustenance during long-distance running. They might carry a small fetish for good luck and safety. They wear a breechcloth that forms a triangle from around the hips (below the waist) and through their legs to allow freedom of movement. The belt and breechcloth are not connected. On their chest might be painted symbols for protection from misfortunes. Along their arms and down their legs are painted rain and lightning symbols to attract the clouds for rain. White thighs and white stripes are presented to please the Sun Father.

Figure 2. Acoma runners wear V-shape breechcloths that are not attached to their belts but separate, allowing the free movement of their legs as they run. Wavy lines on their arms are lightning and tiny dots are rain as they run with the endurance to bring rain. (Acoma



Fig. 2 shows the runners from Acoma pueblo lined up with their symbols for clouds, rain and lightning painted across their chests. They all wear only a belt and breechcloth.



Fig. 3. Pictograph of runners in Grand Gulch, of Cedar Mesa (Circa A.D. 1100- 1300). The white belts, breechcloths and chest paintings are shown here. (Photo by author 2016)

kick-stick runners 1905, Museum of New Mexico). The Keres runners paint designs on their arms, down their legs and across their chests for protection and good luck against any mishaps along the trail. They run to attract the rain clouds and encourage them to come out and bring rain to their villages. Their chest paintings vary with each runner, and have symbolic significance associated with the sun, speed and rain-bringing cloud spirits called Shiwana. “The Keresan medicine man (*tcaianyî*) and his assistant (*goatcanyî*) ran all the way to the sacred spring where they collected water in canteens and deposited prayer-feathers. They spoke to the Shiwana (rain clouds) asking them to bring rain to their Pueblo. Then they started back and ran all the way,” (White 1935, 91). It is best to “let go of realism,” said a Hopi elder, speaking at a conference on archaeoastronomy. Everything is symbolic. Not only visual symbols, but rituals and metaphors are woven throughout the Hopi language which makes it difficult to translate into English. Parson writes: “Running occurs in many ceremonials and in several forms, but always as an expression of mimet-

ic magic, to assist the movement of Sun and Moon, to speed up the Clouds or to hasten the growth of crops.” (1939, 393)

“In Hopi opinion, the ceremonies may be delayed according to whether the Sun has been traveling too fast or too slowly. His journey is regulated by foot races, (Taos, Picuris, Isleta) or by the pace of the prayer-stick messengers to his ‘house’(at) Hopi,” (Parsons 1939, 201). Figure 3 is a prehistoric painting located in Grand Gulch of runners with full illustrations of their body paint and clothing. Some remnant paint shows the details of chest designs in dots.

At Hopi, “a prayer-stick courier to the ‘Sun House’ at summer solstice slows down his pace on his return so the Sun would not travel too fast and cause it to freeze too early” (Parsons 1939, 393). But this sun is only one aspect.

Bruce Talawema, Hopi, says, “We are running for the people and harmony and unity as a people. The other Pueblos are feeling the same thing. It is a matter of getting there and what we’re carrying in terms of the message of peace and harmony and uniting as a people ...



Fig. 4. Basketmaker II (1000BCE-550CE) Katsina runners from Butler Wash, depicting eyes, shell or bead- ornamented shoulder straps, white cotton woven belt and white loincloth (photos by author).

Time is not important to us, it's how we do it," (Nabokov 1981, 101). The spiritual aspect of running can be understood, as Stephen, writes in "Hopi Journals":

When prayer feathers are deposited for the Cloud chiefs, the Chiefs of the Directions, the bearer "runs swiftly, that the clouds may come swiftly, that his prayers may be quickly answered. His hair is flowing, for thus the Cloud chiefs carry the rain clouds. He makes a far circuit on the first day, because the Cloud chiefs live far away. He goes to all the cardinal directions to call the attention of all the Cloud chiefs. On each succeeding day he travels a shorter radius. Thus, we want the rain clouds to come, nearer and nearer, until on the concluding day of the ceremony they shall have come overhead and poured down their heavy rains upon ourselves, our houses and all the surrounding lands and we see the arroyo full of running water and listen to its sweet sound, (1894, 780).

The Tewa of the Rio Grande pueblos have relay races with teams determined by their moiety. They help control the progress of the sun and moon, morning star and evening star, (Parsons 1939). Alfonso Ortiz, a close friend and professor of anthropology at the University of New Mexico and a native of the Tewa village, San Juan Pueblo, writes that not only are races for the Sun and the Moon but are symbolic of the rain, "racing for rain". The moiety memberships are basically the north side and south side people who compete in races and shinny games. The north side has "Rain Standing Youth" as its patron, and the south has "Rain Standing Maiden," both represented by anthropomorphic fetishes (Ortiz 1965, 393).

Ortiz told me this story in 1979:

I was at one end of the earth track which ran east to west like the path of the sun. An old man who was blind and a wise elder among my people, called me to him and said, "Young one, as you run, look to the mountain top," and he pointed out the Tewa sacred mountain of the west, Tsikomo, Obsidian-covered-Mountain. "Keep your gaze fixed on that mountain, the old man said, 'and you will feel the miles melt beneath your feet. Do this, and in time you will feel as if you can leap over bushes, trees, and even the river.'" (This story appears also in Nabokov 1981, 56).

Ortiz loved puns and he told me this runners' tale: Running Deer and Falling Rocks had a race up a mountain. They ran up a steep road that wound around all



Fig. 5. Two Pueblo II-III (PII, 900-1150 CE, PIII 1150-1350 CE) sites in Butler Wash: 5a), Longfingers; 5b), Wolfman Site, These figures have beaded necklaces, belts and breechcloths signifying they are Katsinas who like to run.]

the way to the top. Running Deer reached the top first, and as he sat resting, he looked around and didn't see Falling Rocks come up the trail. He waited and finally started back down. To this day no one knows what happened to him, but there are still signs along the road that say "Watch for Falling Rocks." (Ortiz 1979). Yes, Katsinas like to run too. For the Zuni, two of the fastest Katsinas were Paiyatuma Paiyatamu, child of the Sun, and the A'hayuta, twin war gods, also children of the Sun. Katsina runners in prehistoric art can always be identified by their elaborate necklaces. When painted, they have decorative colors and designs, but their arms and legs are pale white. When pecked, their necklaces can be deeply engraved or broadly filled in, that exhibit their wealth and status. They do not have arms and legs. That is because Kachina runners are cloud spirits, rain bringers that are impersonated in masked dances as discussed below.

Depictions of Katsina runners in Basketmaker II – Pueblo II petroglyphs are found in Butler Wash east of Cedar Mesa. Unlike the human runners shown in fig. 2, these are spirits without legs or arms, but have beaded cross-bands of shell and stone across their chests. Their belts and the V-shape breechcloths signify that they are runners.

Imagine what you would see of the Katsina runners speeding by, the glint of their eyes, the flash of their white cotton belts, breechcloths and the sparkle from shell beads across their chest and around their waist as they passed. Figure 4 is typical of the oldest panels that are dim and very hard to make out in most cases. Many more engravings are too old and weathered to see in a photograph and present here.

Figures 5a and 5b are more recent Pueblo II - Pueblo III panels with details that are sharp and crisp. They follow the same tradition, depicting the eyes, necklace, belt and breechcloths of a Katsina runner.

Runners are rain-bringers

Katsina (*katcinum* plural), is a Hopi word which has become standardized in Pueblo literature. Katsina is a spirit being but with different meanings among the western Pueblos. For the Hopi, they are spirits that bring rain in the form of clouds. Human runners excite the clouds. The line blurs between human runners and spirit beings that like to run. We learn that runners are rain-bringers and clouds (rain-bringers) are



Fig. 6a. Cottonwood Wash with the entire panel of child rain-bringers, beginning at the right with a male shirt and ending with a very small figure on the left (drawing by author).



Fig. 6b. The male shirt is on the far right and begins the sequence of 17 more small rain-bringers, some with lightning and water symbols.]

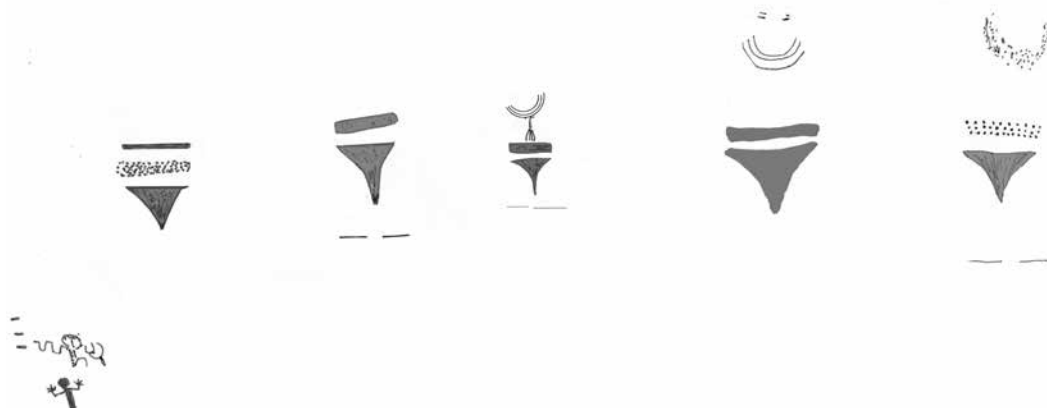


Fig. 6c. Center of the panel showing the waist bands and breechcloths that are visible.

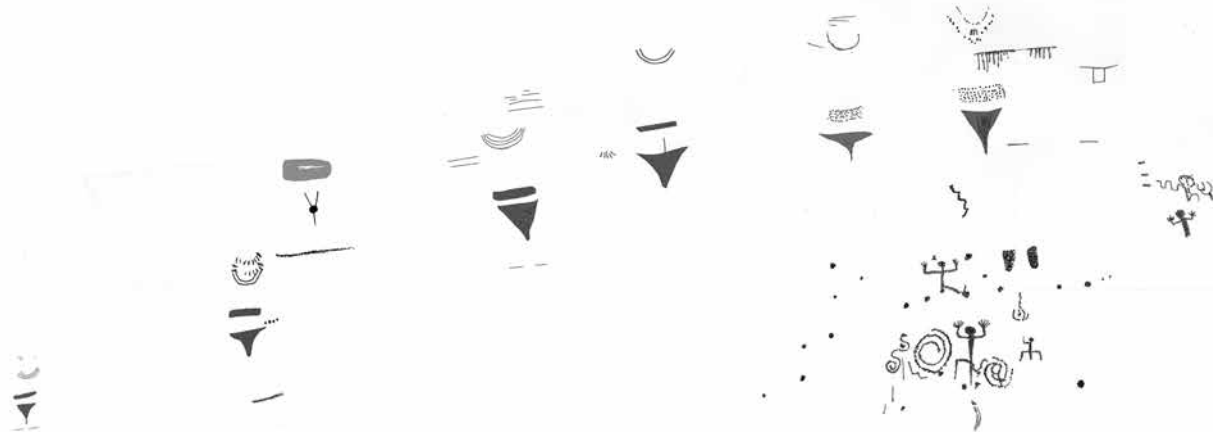


Fig. 6d. Left side of the panel with an area of drilled holes and line drawings.

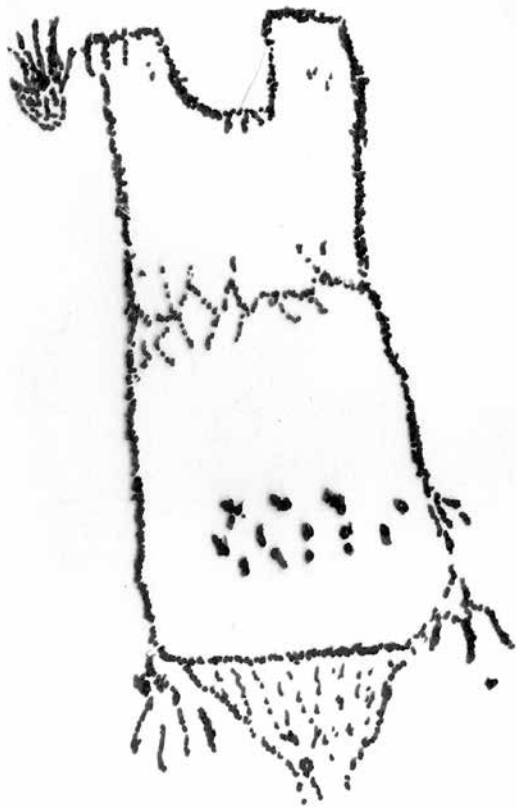


Fig. 7. Close-up of the male woven shirt of high-ranking status on the far-right end of the panel. Fig. 7b. Drawing of the rectangular breechcloth (Tanner 1976, 79).

spirits that like to run and running brings the rain. We learn that Katsinas even like to race against humans. Katsinas are called *koko* by the Zuni and are derived from their origin story, as Bunzel writes:

During their search for the middle (place) the Zunis had to ford a stream. The first group of women to cross, seeing their children transformed in mid-stream into frogs and water snakes, became frightened and dropped them, where they escaped into the water. The bereaved mothers mourned for their lost children, so the twin heroes were sent to see what had become of them. They found them in a house beneath the surface of Whispering Waters (*hatin kai'akwi*). They had been transformed into the Katsinas, beautiful with valuable beads and feathers and rich clothing. Here they spent their days singing and dancing in untroubled joyousness. The twin heroes reported what they had seen, and further decreed that thereafter the dead should come to this place and join the lost children," (Bunzel 1932, 516).

The spirits of the lost children, lost by the mothers crossing the river, were found to be happy in their village under the water. These *koko* always come in a time of need, bringing rain and curing sicknesses for their people. In Cottonwood Wash north of Bluff is a cliff wall with 18 special figures (fig. 6a). They are carved high up and so dim that only the late afternoon sun reveals their forms in relief. They appear mystical with their beaded necklaces and belts, and deeply carved breechcloths. Wavy lines associated with water and lightning are shown with them.

The Zuni and all Pueblos construct pictographic narratives to read from right to left, sunwise, from east to west. What stands out from the rest is the carefully detailed tunic (and loincloth) that begins the sequence on the right. I believe, in keeping with Zuni traditions, this panel represents the spirits of the lost children that bring rain and prosperity to the Zuni people (fig. 6b).

The small figures are associated with the woven shirt engraved at the beginning. It still bears the breechcloth of a runner signifying it is a rain-bringer. Figure 7a is a close-up view that shows the details still visible in this image. There are string fringes on the shoulders and at the base of the shirt and woven patterns across the front that signify the rank and wealth of the wearer (pc C. Lewis, Zuni weaver, 2020). Figure 7b is a drawing

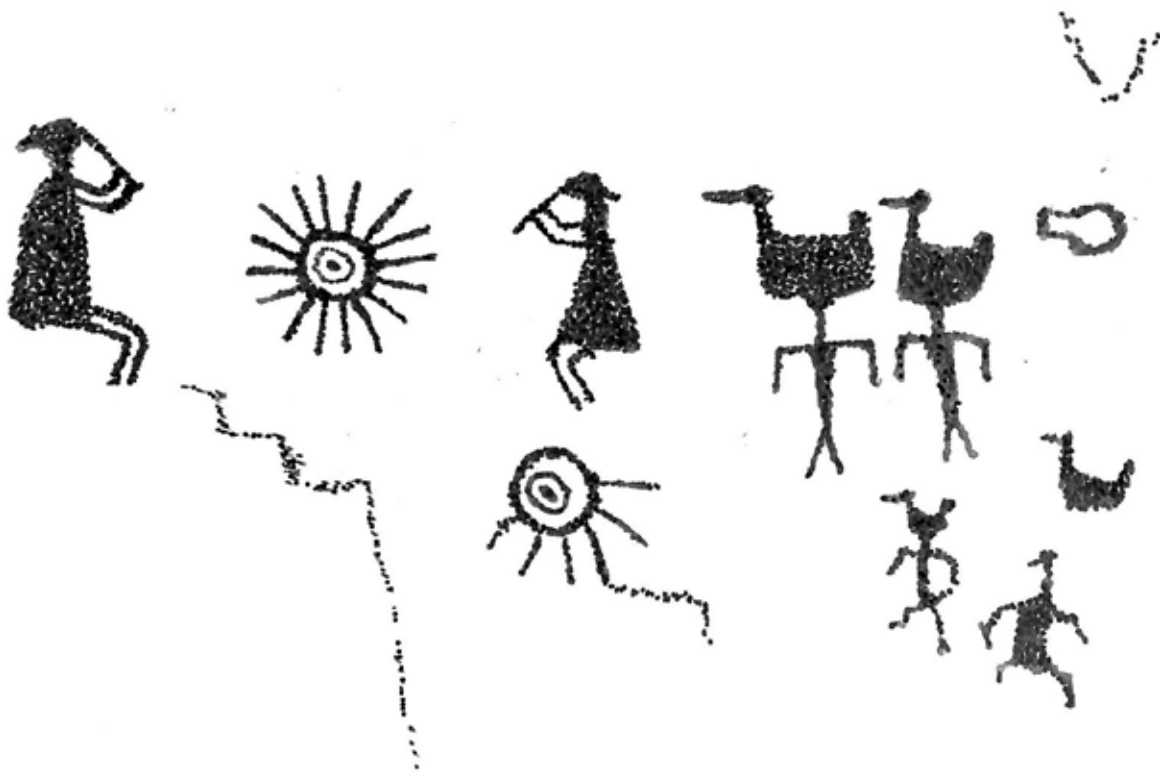


Fig. 8a. Grand Gulch, a Zuni *koko* 'traveling' in the form of a duck. Fig. 8b. Drawing of a panel depicting the twin War Gods (children of the Sun) arriving in disguise as ducks and sitting either side of the sun playing flutes (photo and drawings by author).

of the triangle-shaped breechcloth that runners wear. The assemblage of ancestral Zuni iconography includes lobed circles, crooked staffs, yucca plants, and duck-headed figures that are culturally continuous with contemporary Zuni ritual poetry and ceremonies (Patterson 2019). Stevenson makes several references to Katsinas as ancestor spirits/rain-bringers who take the form of a duck when they travel. Bunzel writes: “The identification of the dead with the katsinas is not complete. When men offer prayer sticks, they offer to the ancients, and to the katsinas, and their sticks are different – those of the katsinas contain, in addition to the turkey feather, that of the duck, for the katsinas travel between their villages and the village of their fathers in the form of ducks.” (1932, 517).

Stevenson writes, “This is because for the Zuni, the katsinas take the form of a duck when they travel,” (1901, 52), and Cushing (1988, 14) writes: “When Pautiwa [Katsina] travels about the country, he as-

sumes the appearance of a duck, putting on its shape and taking it off in the manner of a shirt.” The duck plays many important roles in Zuni mythology, but simply said, it can go under water to bring messages to the Katsina living in Katsina Village and can fly in the air for great distances. A few examples of duck-headed figures that illustrate Katsinas traveling as ducks are in figs. 8a and 8b.

Figure 8a is one of many examples of duck-head anthropomorphic figures illustrating Zuni *koko* in the act of traveling in the form of a duck. The painted panel has details of color that help provide the identity of this duck-headed figure: white, the color of the sun, and red for speed. The bent knees signify youth. Together they may signify the identity of sun youth, Paiyatuma, son of the Sun who loves to race. Figure 8b is a Pueblo II-III panel that shows the twin War Gods identified by two figures that are the same. They are traveling in the form of ducks. The right-to-left direction indicates the Twins are coming or arriving (Patterson 2019). In this panel the Twins are shown again sitting opposite each other and playing flutes to their father, the Sun, as it is seen rising from below. The Sun Father is duplicated to show its movement rising from below the horizon.

Katsina runners would be portrayed, as one would expect, with a duck head and the runner’s white belt and breechcloth. Figure 9 from Grand Gulch is one example of a running Katsina with a white-headed duck-head and necklace and a second red duck with a white head. This katsina has very faint indications of arms and legs painted white, associated with the sun that along with his necklace identify his status as a Katsina. The human runners shown in historic photographs paint only symbols of lightning, rain etc, to please the clouds.

In Figure 9, there appear to be two duck-headed Katsina runners. The one on the right is smaller, while the one on the left is bigger. This is a way of showing time/space in one panel. The smaller figure is traveling (in the past) towards the center, and the central figure has arrived (in the present). This is an example of multiple activities of one actor shown together here. Examples of multiple actors describing the roles and identity of one Katsina is illustrated in fig. 10.

Figure 10 in Canyon De Chelly is a pictograph of a reclining figure painted black with yellow body paint



Fig. 9. Basketmaker II-III, Katsina runner with his white belt and breechcloth and wearing a painted necklace design. He is disguised as a duck while he is traveling, (photo by author).



Fig. 10a. Pictograph in Canyon De Chelly (photo by Robert Marks).

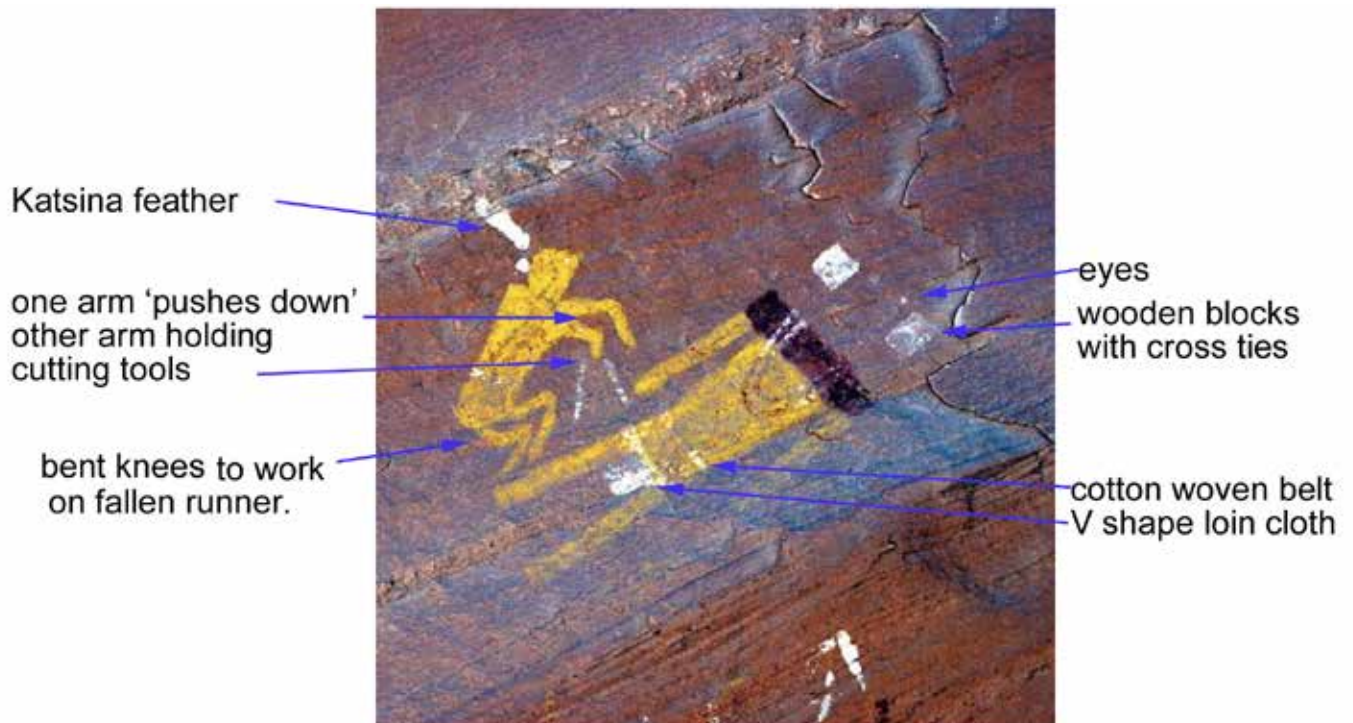


Fig. 10b. Annotation of Katsina runner with hair-cutting impliments in the act of cutting hair. Black and yellow body paint is traditional for a Katsina runner, as seen in fig. 11a, *Palavikuna*, the Red Skirt Runner.

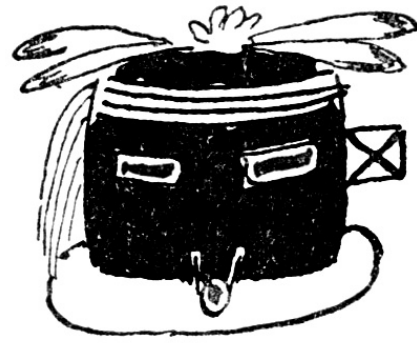


Fig. 11a. *Palavikuna* mask of Red Kilt Runner (from Fewkes, 1903 in Colton 1959, 57). Fig. 11b). *Homsona*, mask of a runner who cuts hair (Colton 1959, 33).

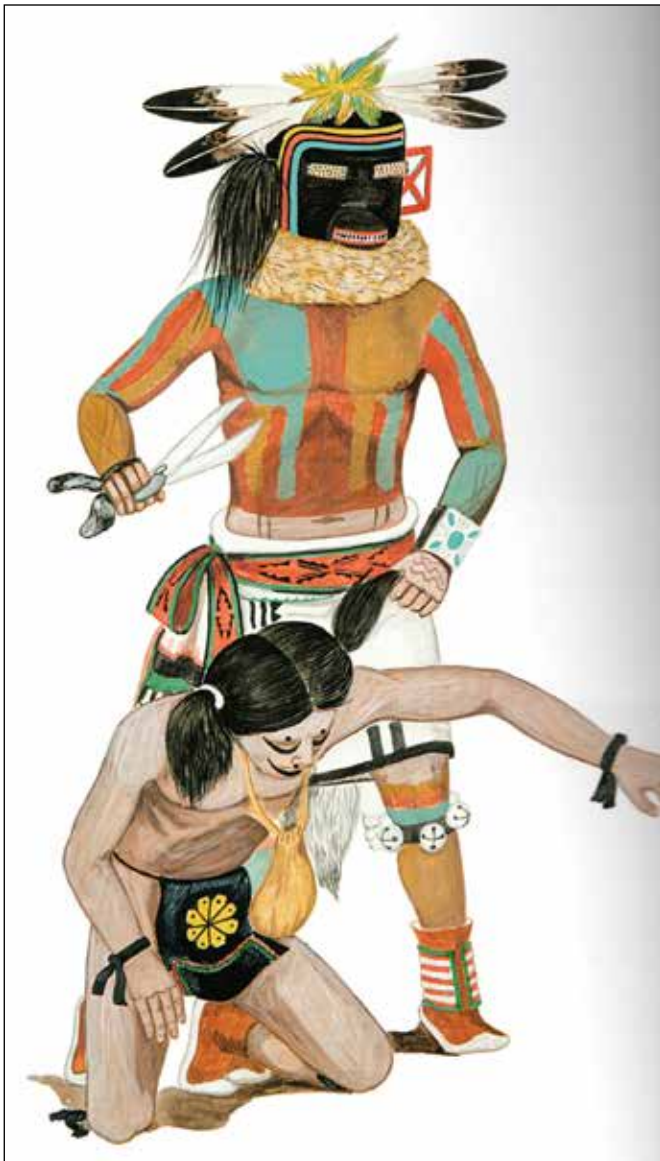


Fig. 12. "The *Hömsona*, a runner. "He Cuts Your Hair" wears a black case mask with a tube mouth, and red, green and yellow horizontal stripes on the forehead. Fox skin ruff, kilt, sash, fox skin. Body painted black or red, green and yellow. He carries a pair of sheep shears, scissors, or a knife, which he uses to cut off pieces of the victim's hair" (*Homsona* painting by Clifford Bahnimptewa in Wright 1992, 224).

and with square ears, wearing a white cotton belt and V-shape breechcloth and he is being attended by a second figure painted entirely yellow, with a white sash and leaning over on bent knees. One arm is reaching out and down towards the reclining figure and the other arm is holding a pair of long implements. It has been previously interpreted by several authors as a portrait of a female Hopi maiden being attended by a shaman (Grant 1978,185; Robins and Hays-Gilpin 2001, 240-241). Further study of this painting suggests to me that these two figures are describing a Katsina runner. They are two actors of the same Katsina identified by their yellow color and the boxy ears of a Katsina mask shown below.

Colton writes: "Runner' katsinas are called the *Wawarus Kachinum*. There are about seventeen different kachinum who run races with Hopi men in the spring. If a *Wawarus* Kachina catches the man with whom he races, he chastizes him in some way such as whipping him with yucca whip, throwing mud all over him, or cutting his hair. If the man wins the race the *Wawarus* gives him a present," (Colton 1959; Wright 1977).

Among these Katchina runners with boxy ears is *Palavikuna*, known as the Red Kilt Runner, and *Homsona*, a runner who cuts hair. He carries a pair of sheep shears, scissors, or a knife, which he uses to cut off pieces of the victim's hair, (from Fewkes, 1903; Stephen, 1936). Many of these Katsina masks have the boxy ears, including the *Homsona* runner who has hair on one side. Figure 12 illustrates the act of *Homsona* knocking a runner down and about to cut off a piece of hair with sharp instruments.

Figure 10b is an annotated version of this painting. It narrates the role of the Hair Cutting Katsina who is recognized by the yellow color, the beautiful necklace



Fig. 13a. Four Zuni runners 1890 (School of Advanced Research Collection), with raindrops and lightning designs on their chests and legs for bringing rain.

that only Katsinas wear, and the boxy ears. What he does is illustrated by the other yellow figure on bent knees, pushing him down with one arm and raising a pair of knives in the other hand. The combination of several figures animate the role of this named Katsina. The Pueblo traditions of ritual running and Katsina runners are evidence of cultural continuity that can be

still seen today. Figures 13a and 13b are photographs of runners around the turn of the 20th century. Runners from Zuni have painted their bodies with symbols of rain and lightning.

Native runners from all Pueblos are champion long-distance runners. Ritual running is portrayed in the literature through many centuries, and continues to this day, with support from their communities. Runners are praised for their endurance and stamina, serving as role models for tribal health and spiritual fitness.

Conclusions

It is safe to say the petroglyph and pictograph panels presented here are portraits of Katsinas (runners). This is what I have heard Native colleagues call them, Katsinas, rain-bringers. They are the clouds and the runners bring them into the villages. For the Zuni, they bring good health to those who are ill and good luck for hunters, For humans, running either to local shrines or long distances, the act of running was for the tribe, for the vitality, health and welfare of the village, and not for personal glory. In doing so it engages the excitement of competition, and sportsmanship that stirs up the Katsina (clouds) and benefits everyone. For the Katsinas, whom Keres call the Shiwana (cloud spirits), running stimulates them to bring rain. Or for the Tewa and the Hopi, running

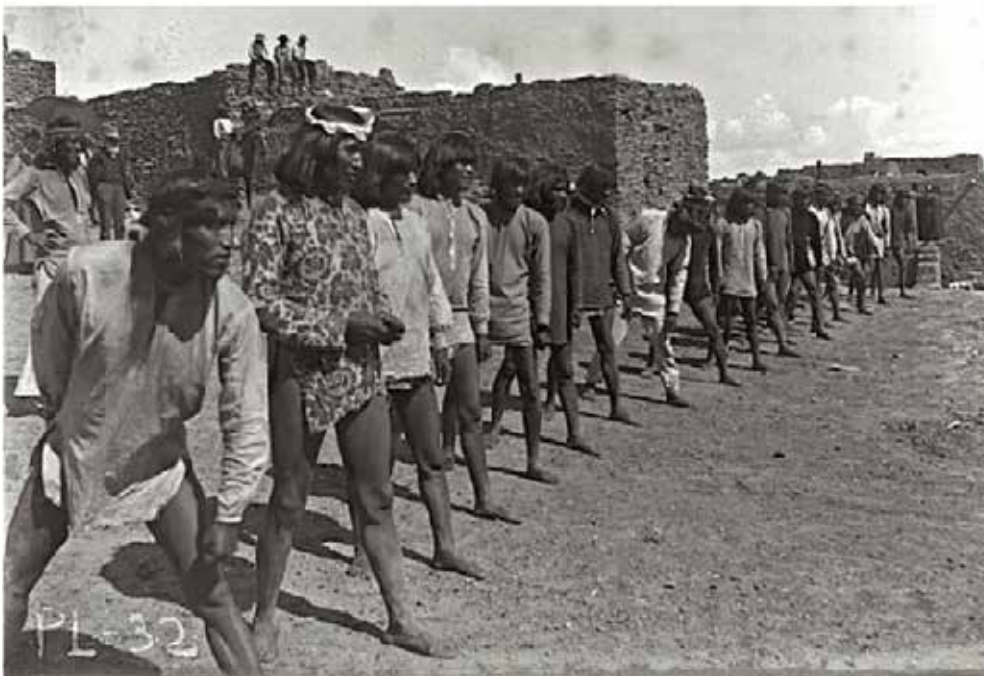


Fig. 13b. Hopi runners lining up for a race are wearing colorful shirts (photos in public domain).

helps regulate the sun on its journey throughout the year. These are the conclusions I have come to after gaining a deeper understanding about ritual running for Pueblo people. But Parsons (1939, 200) sums it up the best: the other important method of controlling or directing the Spirits is harder for us ... to understand. The method of mimetic magic, setting patterns of behavior, which have got to be imitative, compulsive patterns. But from Pueblo point of view this is a highly effectual method which he uses again and again in rites of running for rainfall or snow or to regulate the course of the Sun and Moon, in rites of aspersing or sprinkling water and of smoking to induce rain or make clouds.

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NOTES AND NEWS

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LEARNING A CHAPTER OF CONCEPTUAL ANTHROPOLOGY

SULIMAN THE BEDOUIN

Dilemmas of a society in transition

Suliman, now an adult man with a grizzled beard, was my student when I was teaching at Tel Aviv University. After 40 years I found him again in his tent near the wells of Bir Birein, when he became sheikh of his tribe after the death of his father. A Bedouin sheikh, dressed as a Bedouin, who lives as a Bedouin, a university graduate who speaks, in addition to the dialect of his tribe, literary Arabic, Hebrew and English, welcomes me as if I were his father, kissing my hands. He was talking to a few men. Before dismissing them, he introduces me. Each one of them comes up to me making the sign of reverence.

We sit on the carpet of the tent and the fragrance of coffee is already spreading in the air. It is served shortly, adding grains of *hell* (cardamom), in small cups which by their decoration appear to be Chinese. How strange an environment it is, the tent of a shepherd of goats and camels in the Negev desert, who speaks various languages, uses Chinese porcelain and surrounds himself with beautiful carpets. The *fnjan*, a bronze coffee pot, perhaps in use for generations, has the engravings of blessings in old Arabic script. It rests on some stones on the embers of a wood fire. The tent has neither a table nor a chair, only camel wool carpets striped with intense colors. The only elements above the floor are a narghile and an old-fashioned radio with a square box next to it, perhaps a car battery. In one corner of the tent, against the wall, a pile of blankets and rugs reveals the night furniture. During the day the tent is space, without furniture or furnishings. An oil lantern hangs from the ceiling: it is not a decoration, it is functional, maintaining a dim light.

A dark-skinned young man serves us coffee. As usual, the first cup is poured on the ground just outside the tent as an offering to Jorka, the *jin* (spirit) who invented coffee.

A gentle breeze sways the moving black walls that surround

us. Feminine voices come from the tent next door, a dialogue that arrives smooth, almost soundless, as filtered by the fabric of the curtains.

The vintage was favorable, the rain was generous, the pastures are green and the animals reproduced. The desert has turned from yellow to green. While elsewhere the desert expands and the tribes have to migrate and enter other territories, quarrels break out and grudges are born, in Bir Birein heaven sent a blessing.

How can we explain that heaven sends blessings on one side and curses on the other?

“That His will be done! The Merciful is always right. It is not always possible to understand the wisdom of his decisions and actions. Believers pray that He may bless them. But those who have sinned are punished.”

“Who sends the clouds and the rain?” “They are the *jinins* of the rain, but it is always the Merciful who commands.”

From here an intellectual conversation developed, which one would not expect in the tent of a nomadic shepherd. Two children behind us roll on the rugs laughing. Suliman calls them to order and the games continue in silence. Two black silhouettes, two women, look out of the adjoining tent and call. Suliman replies. In a few moments they enter the tent. Both are wrapped in their black coats, and only their eyes, hands and feet are seen. One of them carries a pot of tea and some large and fine flat pitta breads, the other carries a *paila*, a large bronze tray, with pieces of goat meat on top of a rice base. They put everything on the carpet between me and Suliman and leave without saying a word. Suliman comments: “They are my good wives. Please enjoy this humble meal.” Then he serves a glass of tea to which he adds some greyish leaves. He explains that the shrub is called *rechaniya*, which adds vigor to the tea. The meal is eaten without plates, forks or knives, served with our own hands.

“God’s punishments are varied: desertification, malaria and wars. Another punishment that He sends us are the governments that suddenly set borders and put barriers in the desert. The desert is boundless, why these barriers? How



Fig 1, Beduin tent, Central Negev
(Photo by Anati ISR 65 CIV-5)

do goats know the boundaries? And how can we reach our pastures if they are beyond these borders that had never existed before?”

It seems that punishment, from heaven or earth does not come just to the individual but to entire populations: when the desert expands, the wells dry up, the whole area is cursed. There is no more water and the tribes have to leave while the animals die. Elsewhere, however, as at Bir Birein, there have been rains and pastures; the wells are blessed.

“*Inchallah*, we had rain this year, but in the desert it happens that there are years without rain. This also happened to us. When I was a child my father brought the tribe to these lands because the desert had taken our pastures and the wells were dry. Men and animals died. Then, political frontiers arose which prevented us from returning to our territories. We had large territories and now we have small territories.”

In terms of contemporary society, a few thousand hectares for a tribe of a hundred souls may not seem like a small territory, but for Suliman, a territory that requires only a day’s walk from one end to the other appears cramped. His tribe has a territory of less than one human soul per 1 sq. km. The tribe also has another grazing area: it has two territories, the summer one in the mountains, the winter one in the low plains. It practices two annual migrations that are always the same, from one territory to another. Suliman’s grandfather migrated annually between two much more distant territories, before the barbed wire had divided the desert between different nations.

Occasionally there are quarrels about the use of the wells that in other times led to feuds. Now dialogue between

two sheikhs resolves the argument, sometimes in a practical way: “I give you a well, you give me one of your daughters, or some camels.” Usually daughters and sons are not lacking to sheikhs; it depends on the number of wives. And also, camels are not lacking. What is missing in the desert is water. And the wells are disputed.

Some important wells are free by tradition: nobody owns them, everyone can draw water from them. Each well must be regularly cleaned, there are collapses and sediments, and usually a clan takes over the cleaning and any repairs. Often a small business is associated with it, a tent-shop which sells coffee, sugar, salt, flour, a few chickens, some grass or root with medicinal powers, and tanks of diesel fuel, but everyone has access to water. These wells are meeting places and market places. Others are in tribal territories and their use is reserved to the tribe. They can vary in ownership and in the desert, they constitute a real-estate market and also a reason for alliances and tribal quarrels.

A new factor is now being introduced into this millennial competition for water sources. “Now the settlers are looking for water. They drill in our territory without even asking us for permission. Among the Bedouins, if you enter a tribal territory, you are supposed to ask the sheikh for permission first. Instead they believe they are the masters and we fear that they want to take our wells. They don’t respect desert traditions. They don’t know them. They have different traditions. The desert is the territory of the Bedouins. They are intruders. How can we defend ourselves?”

“Settlers don’t care about the shallow wells of the Bedouins. They seek much deeper water. If they find that it would be

an advantage also for the Bedouins.”

“They want to develop agriculture. Settlers will arrive. And our space will go to them. The contrast between shepherds and farmers has not stopped since the primordial twins. And the peasants invade the shepherds’ territories. At the time of our fathers it was the shepherds who occupied the farmers’ lands. Today it is the other way around, *fallachin* (farmers) are expanding and Bedouins are hunted in the driest areas. The Bedouin world is a free world, truly free, in a space without borders where everyone can live free. Agriculture is a slavery. Man becomes a slave to his crops. The Bedouin world has created a great culture, a great religion, and a dignity of man that the *fallachin* and the inhabitants of the city do not have. We are the real Arabs. Others call themselves Arabs but we are the real ones. Now everything is dying. We are at the end of a happy age.”

The conversation reveals nostalgia and perhaps even a submerged longing for at least virtual revenge: to recover with words what the facts are taking. Memories of greatness overwhelm feelings of despair for a contingent reality that Suliman considers discriminatory and humiliating. This sense of distress and marginalization develops in a population that is perhaps the one that has the most living space per head in the world, but which feels it has lost its power. It seems a contradiction, but the Bedouins feel like noble desert princes, and every limitation imposed on them becomes an offense. “The sedentary people consider us as inferior. Their behavior offends us. They do not respect our culture.”

“Once upon a time feuds and tribal struggles led to tribal solidarity and heroism. Everyone fought for their own tribe. This is our history. Some tribes have conquered large spaces, whole kingdoms, others have lost and no longer exist. The times of warrior fantasies are still in our memories and make the history of each tribe.”

The Bedouins had moments of glory. They awoke to the call of the Prophet from the deserts and oases of Arabia, they proudly rode their horses and conquered with sword in hand, even if not always fighting, crossing Sinai, all of North Africa, up to Andalusia. And in Asia they went all the way to China. The Bedouins had conquered the world. They were pulled by the blowing wind. It was the revelation of the new faith that led them to victory. Religion pushed them to conquer and other religions then rejected them. “Today’s world, at least a good part of it, has been shaped by that rebirth of the Bedouin world, in the drive of a new revealed faith. This is the faith of believers. The rest of the world is left to the non-believers.”

“Or believers in other faiths?”

“Those who don’t believe in the Prophet are non-believers.”
The Bedouin civilization has had other moments of luck,

and new realms have arisen at various times. More recently, the oil rush has turned sheikhs into emirs and their tribes have moved from camels to Rolls-Royces. “Faith rewarded them and the Prophet guaranteed them oil. But not all tribes have had this luck. Some received the promised reward: some tribes were privileged, others mortified. Can there be injustices in decisions that come from heaven? We are not affected by this luck. But these are the choices of the Merciful. Prayers don’t change His decisions.”

“I see from here many tents in the valley. What do these people live on?” Suliman looks with pride at the valley that stretches at our feet, strewn with black tents belonging to his tribesmen. “We have many animals which are our main asset. Goats and camels breed and once a year, we have the Bedouin animal market. But people go, sell, exchange or buy every Friday at the Abu Hajaj wells. We also sell leather and wool, camel, sheep and goat wool. Hunting is also a resource. Gazelles, wild goats, antelopes, ibexes, foxes, hares, and other desert animals provide meat, horns, skin, and bones that are used for crafts. Desert herbs are also in demand in the market. We collect them, dry them, and sell them. There are medicinal and aromatic herbs that do well. Caravans were once our traditional activity. Goods were brought from one country to another. Weapons and even blonde women were also sold, which were in great demand. Today this market is dying, the borders set by the states cause increasing difficulties. We still smuggle weapons and women, but it has become dangerous.”

“Are there Bedouins working in town?”

“There are always more. They move away from traditional life and do jobs that the Bedouins had never done before”

“I see you have a radio in your tent, you listen to the news, you know what’s going on in the world. Your fathers knew what was going on in their tribe and in the neighboring tribes, you know what is going on in the world. And the world is changing, not just the Bedouins.”

“The government has given us identity cards. They want to check us out. Bedouins don’t like to be controlled.”

“The government also gave you doctors, health care, education and schools for children. It gives you subsidies for each child. For this they need to know who you are and how many children you have.”

“Since the doctors came, we are sicker than before. Before we had our medicines. Now there are pills. Before the sick children died and the healthy ones were always healthier. It was better. Now fewer children die but most of them are always sick.”

“Would you rather continue to live without doctors? Would you like to have no schools? Does it bother you that you have subsidies for the children?”

“They have different laws from ours. Now we are no longer free. We are cataloged. These government laws want to repress Bedouin culture. These identity cards are a slap. They tell us to become modern. How can you be modern? Everyone becomes a number. We are what we are and we want to be who we are. Our identity comes from our honor, from our actions, from our tribal relationships, from our families, from our fathers, from our traditions. What are these ID cards? They ignore who you are: you become a number, they annihilate us.”

“You studied at the university, you speak various languages, you also have a house in town, and you choose to live in a tent in the desert?”

“I have to take care of my people. If I weren't here we wouldn't even have our lands any more. The Bedouin world is dying. Some tribes have abandoned traditional life, have camped near the cities, instead of tents they build shanty towns, bidonville, men and women lend themselves to doing humble jobs that the Bedouins have never done. A woman should serve her husband but not the customers of a restaurant. Young people want to go to the city, have a job, have money to spend. They meet young people with different cultures and forget our traditions. They no longer know how to pray. They also abandon religion. Sooner or later the punishment will come.”

“Do you pray?”

“Like every believer I pray five times a day, every time I repeat the verses I know.”

“I remember that when you were at the university you didn't pray, I don't know if you believed ...”

“Even now I don't know if I believe, but I pray because this is our tradition, it is what unites many peoples, it is a teaching that the Bedouins have given to the world. The Prophet is the son and father of the Bedouins.”

“You don't know if you believe but five times a day you say ‘God is great’.”

“I have to set an example for my people. My father and grandfather were believers, I can't betray traditions.”

“But what does this God, if he exists, do?”

“He does everything, he rules the world, he decides the fate of the people, he does good and evil, he gives birth and makes us die.”

“What if he doesn't exist?”

“To believe is not to know. The problem is that I don't know if I believe.”

“If he didn't exist, how would the world work?”

“The Scripture explains everything. What else could cause the alternation of day and night? How could time be marked if there was no lunar cycle? Who is sending drought and rain? Who else could create the order that governs the world? Something or somebody should coordinate all this:

but what? If I don't believe, what do I believe? Believing fills the void of knowledge, but we cannot help asking ourselves questions.”

“What if the order of the world is a meeting of forces: the force of the sun, the moon, earth's gravity, the winds that carry the sand, the clouds that bring the rain?”

“Someone or something is directing all that. All these forces are not autonomous, they depend on other forces which in turn depend on something or someone. What we don't know helps us to imagine and imagining leads us to believe.”

“Great civilizations like those of the Greeks and Romans believed that there were many gods, and that each of them was the pilot of different forces. Many million people are Buddhists, they have a prophet but do not have a god.”

“The Bedouins have many *jinins*, the *jin* of the wind and the rain, the evil *jinins* who bring death and the beneficial *jinins* who bring luck, they are real, we meet them, they unveil themselves in our dreams, but the sacred Scripture tells us that all are governed by the Merciful who spoke to the Prophet.”

“And do you think that someone, from heaven or from the depths of the earth, reads every soul of millions of believers and also non-believers, and judges their thoughts and deeds? Is everyone singularly controlled?”

“If someone is rewarded and someone is mortified, there must be a reason.”

“Do you think someone wants to reward some and dishearten others?”

“Punishments affect sinners. These punishments do not come from the moon or the sun. Someone or some force decides and plans the punishments.”

“Do you think this God decides earthquakes, wars, epidemics, drought, hunger, pestilences? Who decides and orchestrates all the disasters? Who establishes miseries and riches? And if he decides all this, do you think we need to pray to him? He does not need your prayers to take his decisions.”

“If God exists he is a severe god. If he can do everything, if he decides the fate of life and death, if he brings drought, war and destruction, perhaps he does not listen to the prayers that define him Merciful. In the holy Scriptures he says that he will be vindictive and bad with non-believers and also tells us that we should be bad, ruthless with non-believers, and that he will be generous, munificent, magnificent with believers. Am I a sinner if I revere and talk to a non-believer? If God exists, perhaps he wants to punish us. We consider ourselves believers but he considers us non-believers. Whom we consider non-believers are privileged by Him. Now they also take our lands. They are the ones who win wars, they are the ones who overcome hunger and pestilences. We are the ones who endure the



Fig.2 Praying Beduin (Photo by Anati, NEGEV 79 A XXXIV-32)

calamities. Those looking to us as non-believers are privileged and rewarded. We who consider ourselves believers are punished. And this God creates dissensions and antagonisms between believers and we kill each other. But it affects city citizens and country *fallachin* more. He is more forgiving with the Bedouins.”

“Maybe it’s the desert that protects its inhabitants.”

“Bedouins live according to traditions, but even these traditions are in crisis. The young people leave the tribe and go to the cities to work. Believers become non-believers. Doubts and uncertainties arise. The schools taught new concepts, I absorbed them myself, but when my dying father asked me to take his place as sheikh, I came back, and I’m happy to live in my tent. In the city, in the house that my father gave me, with the studies he wanted me to do, I was not myself. I rediscovered myself by returning to live in my tent.”

I always learned a lot from my students and in one day Suliman gave me a mountain and many valleys of thoughts. The meeting was moving and provocative, and full of life, true communication and affection. We hugged each other before I went back to my Jeep. The sun was setting. The desert had taken on a pearl-gray color with some flashes of ocher-red on the horizon. The sky was intensely blue. The two women had come out of their tent and looked away, waving their hands. Two children chased each other. In the valley below were the silhouettes of black tents intertwined with small gatherings of animals, goats, camels, a few mules. Suliman was there, standing, still and silent, in front of his tent, while I drove in the Jeep along the steep track that climbs the hill.

E.A.

NOTE

This narrative is a lesson outside the classrooms, with free access. The narrative method escapes rhetoric and notionism. The target is to educate, teach and transmit notions, which lead to learning, thinking, understanding present and past realities, enquiring about conceptual dilemmas, learning by combining history, anthropology, ethnology, human geography, and sociology without realizing. This story is a lesson that can be read, learned and absorbed in 45 minutes. It is an example of the teaching method of conceptual anthropology. Without realizing it, what did you learn from this reading?

1. **Introduction** to Bedouin society: semi-nomadic shepherds, polygamists: men may have several wives, the community is governed by the sheikh or chieftain, transhumance or seasonal migrations, vast tribal territories, and the importance of the ownership of the wells. Presence of a colored servant: presence of servants of different ethnic backgrounds. The role of the sheikh is transmitted in the family from father to son. Dominant male function. The women cook and serve the meal but eat on their own.
2. **Character:** pride and honor are dominant values. The word “humiliation” is repeated: easily touchy, superiority-inferiority complexes. Apology for the Bedouin society. Conservative trends. Tribal identity is a dominant value.
3. **History:** a society that boasts a past glory, now feels close to sunset, currently in a state of transition. Emphasis on moments of glory. A tribal version of the story passed down orally.
4. **Ethnography:** etiquette traditions; the furniture of the hut, technological levels, lighting. The sheikh has his tent, his women are in the tent next door. A Bedouin meal. Characteristics of food and how it is served and consumed. Food preparation: female role; coffee preparation, male

role. Type of rugs: camel wool, intense striped colors, local hand-weaving.

5. **Economy** pastoral: based on cattle breeding. Animals raised: camels, goats, donkeys. Horses symbols of prestige but absent in poor tribes. Importance of grazing territories. Hunting and harvesting of natural fruits contribute to the economy. The once lucrative caravan activities are on the way to extinction. Regulations for access to water wells. Economic ability of a sheikh to have a home in town and send his son to study at university.
6. **Evolution**, cultural and social: Fear of innovations, changes in Bedouin society, the birth of shanty towns, the presence of medical and educational facilities but reluctance to accept them. School, health services, and social services imposed by a government deemed alien. Exit from analphabetism.
7. **Religion**: spiritual crisis. Believers but doubts and influences arise from the encounter with other cultures. Monotheistic religion with ancient syncretism, *jinn*, desert spirits. Wish for recovery of a faith that is suffering from decay. The new less-believing generation.
8. **Policy**: conflicts with governments that impose limitations. Criticism of political frontiers. Fear of expansion of agriculture and colonization. Introversion. Desire for autarchy a redeeming desire.
9. **Social crisis**: confrontation between conservatism and liberalism. Open-mindedness and willingness to dialog with the different. Generous character and available for dialog. But suspicious of innovations.
10. **Method**: the lesson applied the panoramic use of the multi-disciplinary system, various disciplines involved. The notions were learned without the student or reader realizing that he had studied. In this text, a framework of a culture in transition, a specific case has been used: the Suliman Bedouin as an image of Bedouin society. Using sample as an example. Didactic system from singular to general. From concrete practice to theory and notion, not conversely. Difference from traditional teaching that proposes theory and notion, often omitting current practice and reality. In a single reading session, a general overview of the social identity of a specific society is offered, like an entire conventional anthropology course.

APPRENTICESHIP IN CONCEPTUAL ANTHROPOLOGY

The Atelier Research Center for Conceptual Anthropology is accepting apprentices in conceptual anthropology from graduate students and other seriously motivated candidates. The apprenticeship consists of the acquisition of practical operational abilities. Each candidate will receive an individual orientation, aimed at producing culture with the hands and mind, learning to do by doing. Applications or further information: <atelier.etno@gmail.com>.

WHAT IS CONCEPTUAL ANTHROPOLOGY?

PREMISE

Conceptual anthropology is the discipline studying the spirit of culture, arts, beliefs, traditions, and other intellectual and spiritual expressions. It is the subject topic of **EXPRESSION**, a quarterly journal published in English, and of books issued by ATELIER, Research Center for Conceptual Anthropology. ATELIER is an experimental laboratory created and directed by Prof. Emmanuel Anati. The headquarters are in the Alpine village of Capodiponte, Camonica Valley, Italy, a major center of prehistoric rock art, which is on the UNESCO list of the world's cultural heritage, and where the scientific discipline of rock art research was born over half a century ago.

HOW CONCEPTUAL ANTHROPOLOGY WAS BORN

The idea of creating a unique base for the study of art, religion, social relations, and other intellectual, emotional and spiritual aspects of human culture had been in maturation for some time. It took a first formal step during the International Congress of Prehistory at Florianopolis, Brazil, in 2011. The debate at first concerned the need to change the basic orientation of prehistoric studies. A discipline mainly based on description had to change into a discipline that used descriptions of findings to understand their spirit and conceptual context. But... was it easier to change the orientation of a traditionally well-established discipline or to create a new discipline? In the fields of prehistoric, archeological and anthropological sciences, the presence of different orientations is a healthy factor to be preserved. Within this frame, a new discipline was born. Participants at the session of CISENP (International Scientific Commission on the Intellectual and Spiritual Expressions of Non-Literate Peoples), chaired by Prof. Anati, decided to recognize the fledgling discipline of conceptual anthropology as the commitment of the commission. With CISENP collaboration, the research center ATELIER started operating in 2013, publishing **EXPRESSION** quarterly magazine. To date, over 200 authors from 43 countries on five continents have published articles in **EXPRESSION**. In seven years, Atelier has published over 50 books that form the basis of the new discipline.

THE PURPOSE OF THE NEW DISCIPLINE

The purpose of this new discipline is the understanding of human behavior, the processes of changes and development, recurrent and isolated phenomena, cultural changes and development. It combines the experiences and methodologies of different disciplines, from psychology to history,

from archeology and anthropology to sociology, art history, and the history of religions. These are all aspects of culture that lead to the minds that produce culture, the motivations and causes of what emerged as effect. Each discipline of the humanities is a font of conceptual enrichment for the others. The multidisciplinary research is proving to be a source of innovation for each one of the single traditional disciplines. Aimed at first at studying prehistoric and tribal societies, conceptual anthropology is opening up to new sectors such as the trends in contemporary societies and the social and cultural phenomena that characterize them, as is evident in Atelier's recent books.

THE CONCEPT OF CONCEPTUAL ANTHROPOLOGY

Conceptual anthropology studies the concepts and motivations of cultural expression and human behavior brought to light by archeology, anthropology, history, and other sectors of the humanities. The aim is to understand patterns and trends. Every event and every detail express part of a wider reality. Humanity is the set of humans, culture is the set of cultures. Conceptual anthropology opens up landscapes in the dynamic vision of culture that is evolving and changing, but always remains the core of human identity. Knowing the processes of change in culture, in its various aspects, art, religion, behavioral tendencies, and social and economic processes opens up perspectives for understanding evident and also less evident tendencies. Each discipline has its own memory that is the basis of identity, research, and the advancement of the discipline itself. The combination of disciplines is also the union of memories on which to draw for a new base and more extensive research and culture. Today the media and encyclopedias take charge of technology. But the human mind is still irreplaceable in its instincts, intuitions, associations, and emotions. Conceptual anthropology also explores these aspects. Every discipline and every expression of culture, like every being, focusses on certain aspects of memory and neglects others. The memory of various disciplines has a wider dimension than that of a single discipline. For conceptual anthropology the union of various disciplines of the humanities is opening up wide areas of analysis and comparison, avoiding sectarianism.

In the face of extreme specialization which reduces researchers to technicians, conceptual anthropology goes against the current. It tends to encourage the acquisition of broad humanistic culture and to train intellectuals, a derogatory term for experts but relevant to conceptual anthropology. Technicians and intellectuals have different backgrounds, different roles, and different orientations. No doubt technicians are needed and this is the trend of higher education in many

cases: to create specialists, trained with technical knowledge to be employed in a given functional sector. The conceptual anthropology scholar is also a specialist but with different criteria and different views. Vast ranges of knowledge open wide horizons and promote a panoramic cultural insight, to understand the spirit of man in its decision-making expressions, its imagination, feelings, emotions, relations with others and with oneself, and cultural and conceptual conditioning. The function is to acquire consciousness and use it to explore new horizons, and to understand the roots of events, social trends and behavior. Understanding is determining human relations and action.

EDUCATIONAL TOOLS

1 Specialized publications as educational means

Publishing is the main educational and training means, accessible to everyone in all countries, free from the dependence on the four walls of the classroom. **EXPRESSION** journal comes out as four issues a year, it carries out a continuous discourse, an accumulation of data and concepts, in a global overview. It is the main educational tool for conceptual anthropology. Over 200 authors with various backgrounds and from different world regions make it a natural encyclopedia that is enriched with each issue: it produces culture, collaboration, dialogue, and intellectual progress, connecting readers in 80 countries.

Other ATELIER publications are expressions of this new discipline, involving students, scholars, and followers, without geographical limits. They also reach tribal societies in Africa, Australia, and the Pacific. Education and training are carried out through an open formula, available at world level, that is, reading. The traditional lecture in a classroom affects at most a few dozen students; education through publications, both printed and online, reach multitudes without displacing them and is accessible everywhere in the world. Surely there are many thousands of potential acolytes. An important target is reaching them and letting them discover the contents. The publications, in English and Italian, designed for the level of university students, are deliberately easy for everyone to read. For conceptual anthropology, all of us members of the human species are potential students. Being aimed at the conceptual aspects of anthropology, this publishing project proposes new horizons of teaching and the dissemination of culture.

2 Acquiring practical experience in conceptual anthropology

In addition to the slow but expanding process of education through the diffusion of publications, training in conceptual anthropology is carried out with practical work: learning by applying the discipline effectively. Compared with education in the classrooms of uni-

versity courses, the new trend goes against the current. The concept of apprenticeship is based on the individual training of each student, a personalized school to guide each student to discover not just the practical application of research but also her/his potential identity. Today's students are the teachers of tomorrow. Since there are no university courses in conceptual anthropology, the training is based on the individual practical work of each candidate. Graduate students in anthropology, archeology and other disciplines of the humanities are the ideal type of candidate. In addition to individual practical training, there are also group activities: seminars, conferences, and joint research projects.

3 Seminars

Specific themes are addressed, with written contributions from various participants, some of which find space for publication and dissemination in **EXPRESSION** quarterly journal. The common language of 80 different countries is English. Local matters like local trends, and local artistic expressions like rock art or local social and cultural issues are used as experimental topics for both research and teaching. The main means of cooperation remains the call for specific topics that attracts authors to contribute articles in **EXPRESSION** journal. Each issue is a sort of seminar, opening debates and relations between authors and readers.

4 Conferences

To facilitate meeting and keeping alive the dialogue between followers of the new discipline, specific sessions are organized on the occasion of international congresses in archeology and anthropology that bring together a limited number of participants from the entire world and have a limited impact as educational tools.

5 Research teams

Researchers joining in team-research have access to laboratories, databases, and other resources of the **ATELIER** Research Center. Topics suitable for teams bring together researchers from various disciplines with common targets. Purely theoretical research is not excluded but as of the present, the tendency is to prefer specific practical themes.

6 Exhibitions

The organization of exhibitions has the aim of involving the general public. The cultural-educational slant of exhibitions refers to the principle of knowing the past in order to discover the present. Themes in anthropology or archeology unite in common effort different disciplines of the humanities as well as graphic designers, architects, artists, educators and communications experts to provide for the public a deep conceptual penetration into circumscribed areas .

ATELIER has been geared to an autonomous identity, aimed at open horizons of research and teaching, and also

proposing a new type of concrete cultural tendency, sustainable, active, open and conscious, without barriers. It makes culture by producing culture; teaching is done by spreading knowledge and awareness. The classroom for teaching is the planet earth. What matters is the results.

RESEARCH IN PROGRESS

The research carried out is published and disseminated worldwide. Results are not meant to be stored in academic cellars. They reach institutions and researchers and produce culture.

Some multidisciplinary research projects in progress:

-Making history of prehistory

-Decoding prehistoric art

-The role of women in prehistoric and tribal societies

Some of specifically monographic research projects:

-Variable characteristics and functions of the decorations on the tapa cloths in the Pacific islands, Melanesia and Polynesia

-The significance of the monuments related to the cult at Har Karkom in the Negev desert, Israel

-The meaning of changing dominant pictograms in the period sequence of prehistoric rock art of Valcamonica, Italian Alps

Planned future research projects:

-The roots of culture

-Cultural trends: yesterday, today, tomorrow

-Defining the identity of Homo sapiens

-The conceptual roots of writing

-The origins of religions

The research results are published in **EXPRESSION** journal and **Atelier** monographs. Research is always in progress. Discussions and insights, further progress in research, and further contributions provoke the constant movement and confrontation of ideas.

MAKING HISTORY OF PREHISTORY: DETAILS ON ONE OF THE TOPICS IN PROGRESS

One of the research projects in progress concerns the acquisition of historic notions in prehistoric times: making history of prehistory. The method is a new system of analyzing prehistoric art to decode the intent of the early artists behind their depictions. The method is producing unexpected positive results. And the outcomes promote discussion and produce written texts, some published in issues of **EXPRESSION**. It is a dynamic system that combines research and teaching and leads to concrete results, accessible to the public, as evidenced by published results. A conceptual analysis of Australian Aboriginal art has led to the reconstruction of cultural evolution process-

es, events, migrations, the arrival of new populations, and changes in cultural and historical influences in the millennia previous to Europeans' rediscovery of the Australians. The results, though so far partial, are presented in the book *Australian Rock Art: A Study in Conceptual Anthropology* (Atelier.Edit, 2019, 234 pp.) (It is at present available in the Italian edition).

Other research in conceptual anthropology, on the rock art of Valcamonica, has collected data and conclusions of half a century of research and publications to reach a decoding of 10,000 years of events. Each rock engraving has behind it a motivation, and therefore also different depths of reading. For ten millennia the Camunni peoples recorded their history through rock art: what did they intend to communicate? And what is the history of the ages that they are conveying to us? The purpose of the new trend is to transform the archeological findings into historical documents, to reconstruct the history of what until now had been prehistory. Valcamonica offers Europe the history of its formative ages through the conceptual decoding and reading of rock art. Europe is discovering 10,000 years of its own history. The results are presented in the book *The Rock Art of Valcamonica* (Atelier.Edit, 2015).

Other research with a similar vision concerns decoding Paleolithic art, which was brought back to light and described for over a century. The methods of conceptual anthropology permitted the deciphering and reading of what had been considered mute beauties. This research led to results of exceptional significance by decoding certain paintings and engravings that contain messages in a pictographic writing system being used 30,000 years before the invention of the alphabet. During 100 years of research, no one imagined their contents, now decrypted. They are documents that open up new light on ages in which nobody conceived the possibility of obtaining historical documents. They reveal trading systems of exchange not only of edible products but also of women! Other documents report on travels and migrations, and even personal records that include sexual relations. In addition to the disruptive information of these innovations, they open up new chapters of history, ages before what had been considered the beginning of history and writing. The decoding of these documents brings the origin of writing to millennia earlier than previously thought. New chapters are being added to the history of humanity. The first results are published in the book *Decoding Prehistoric Art and the Origins of Writing* (Atelier, 2015).

The resulting publications clarify the discovery of new aspects of human conceptual evolution and human mental processes. Conceptual anthropology concretely presents its tangible results and contributes far-reaching innovations.

WHAT IS CISENP?

CISENP is the International Scientific Commission on Research into the Intellectual and Spiritual Expression of Non-literate Peoples: A commission of UISPP: *Union Internationale des Sciences Préhistoriques et Protohistoriques*. For additional information see the Notes and News of **EXPRESSION** 28. For contacts: atelier.etno@gmail.com. CISENP is a free association, and is free also from bureaucratic procedures. You become a member if you so decide, and ask <atelier.etno@gmail.com> to be included in the list of members. For the present year membership is free. Members receive **EXPRESSION** quarterly journal free. Membership ceases if inactive for two years.

MEMBERSHIP OF THE UISPP

EXPRESSION quarterly e-journal was founded and is directed by Emmanuel Anati. It is produced by ATELIER Research Center for Conceptual Anthropology, and has the cooperation of the UISPP-CISENP (International Scientific Committee on the Intellectual and Spiritual Expressions of Non-literate Peoples), an organ of the UISPP (International Union of Prehistoric and Protohistoric Sciences). UISPP also offers other facilities, including participation in its World Congress. For membership application contact the office of the General Secretary at: <loost@ipt.pt>.

HOW TO GET THE LAST ISSUE OF **EXPRESSION** FREE

Just send the following message to <atelier.etno@gmail.com>: "I wish to receive the last issue of **EXPRESSION** quarterly journal free of charge", and include your name, postal address and country. Free issues are offered to individual readers, not to institutions. It may be easier to subscribe, but the last issue of the magazine is offered free to any individual person asking for it.

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EXPRESSION is a quarterly e-journal in conceptual anthropology. The annual subscription includes the four annual issues: for 2020, issues 27–30. The current annual subscription for 2020 is €20.00 (c. US\$22.00) for individual subscribers and €40.00 (c. US\$44.00) for institutions. The cost of each back issue is €10.00.

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Australia	9	Mexico	4
Austria	3	Morocco	1
Belgium	6	Namibia	1
Botswana	1	Netherlands	1
Brazil	10	Norway	2
Bulgaria	1	Poland	2
Canada	5	Portugal	8
China	29	Russia	4
Colombia	1	Saudi Arabia	1
Denmark	2	South Africa	4
France	13	Spain	8
Germany	1	Sri Lanka	5
Hungary	1	Sweden	1
Israel	3	Switzerland	4
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Japan	1	Ukraine	4
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N°29 September 2020



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Sow Rock Art (South Africa)

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Discussion about the Targets of Expression Research Group



Figure 1. Toca do Salitre, Serra de Capivara, Piauí, Brazil. Symbolic male character with his acolyte character, a pregnant woman.

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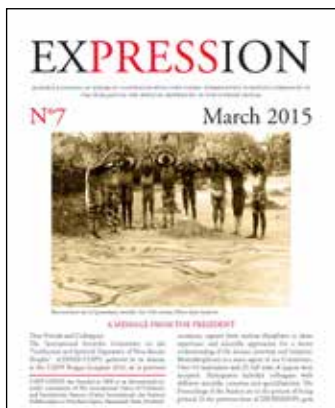


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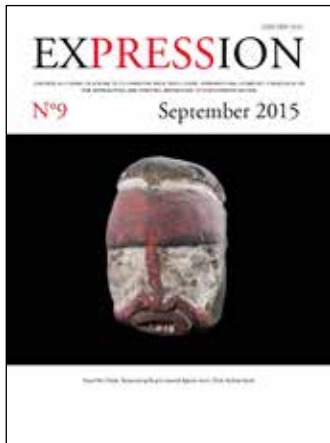


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June 2015

Rock Art: When, Why and to Whom?

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



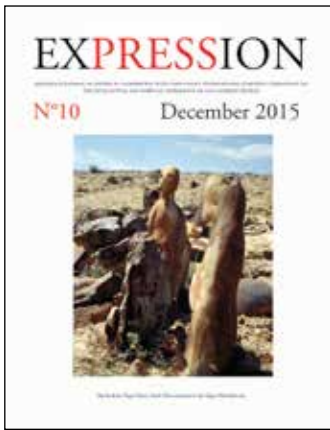
Expression 9

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).

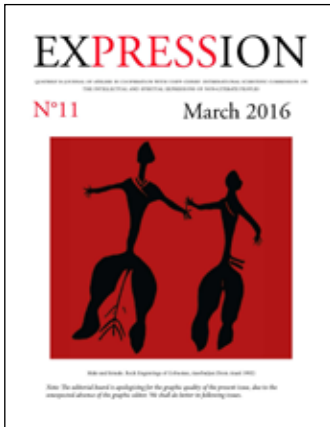


Expression 10

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).

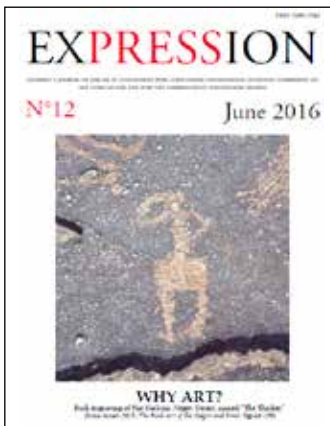


Expression 11

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).

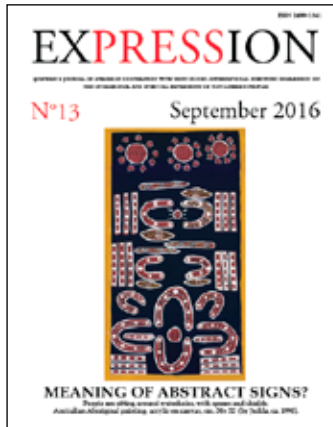


Expression 12

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 Sognnes (Norway), Jitka Soukopova (UK), George F. Steiner (Switzerland) and Tsoni Tsonev (Bulgaria).

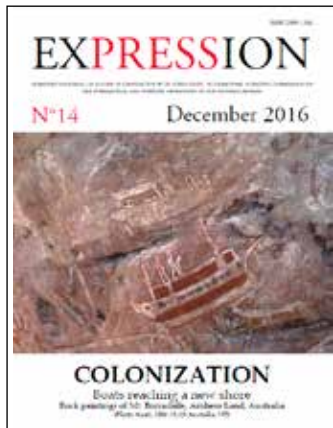


Expression 13

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).

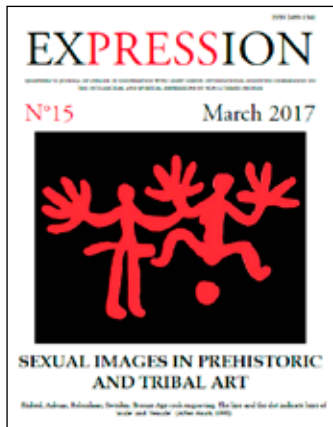


Expression 14

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), Shensi Krasniqi (Kosovo), Angelina Magnotta (Italy), Marc Martinez/Michel Lenoir and Anne-Catherine Welté (France), Terence Meaden (UK), Nataliia Mykhailova (Ukraine) and Jitka Soukopova (UK).

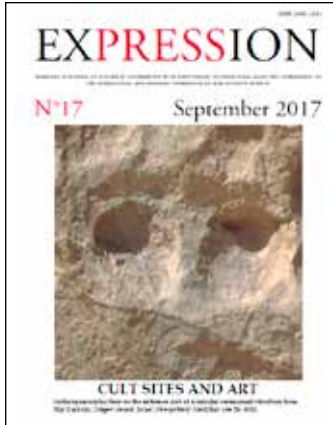


Expression 16

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. José Farruja de la Rosa (Spain), Edmond Furter (South Africa), Alexandre Guida Navarro (Brazil), Cristina Lopes (Portugal), Terence Meaden (Uk), Cynthia Ontiretse Mooketsi (Botswana), Jacinto Palma Dias (Portugal), Radoslaw Palonka (Poland), Tirtha Prasad Mukhopadhyay (Mexico), Alan Garfinkel (Usa), Luis Ramon Merchan Villalba (Colombia), Vahan Vahanyan and Gregori Vahanyan (Armenia).

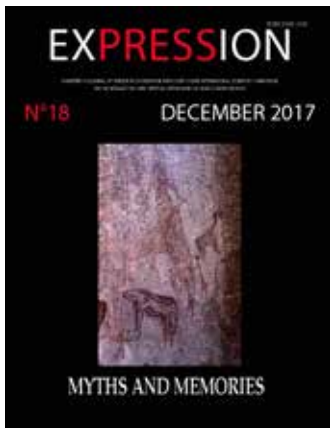


Expression 17

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).

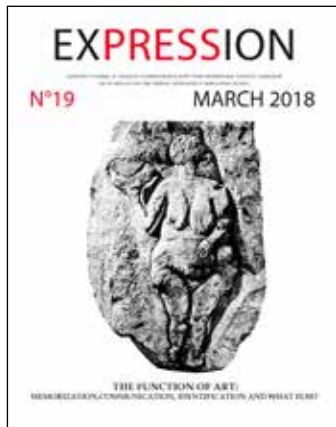


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December 2017

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), Gregor 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).



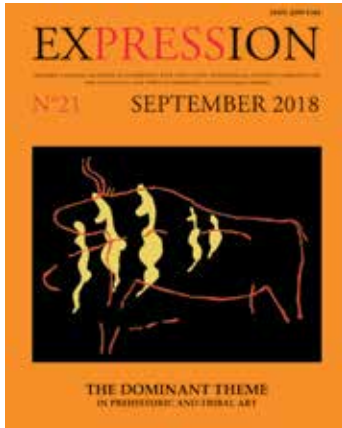
Expression 20

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).

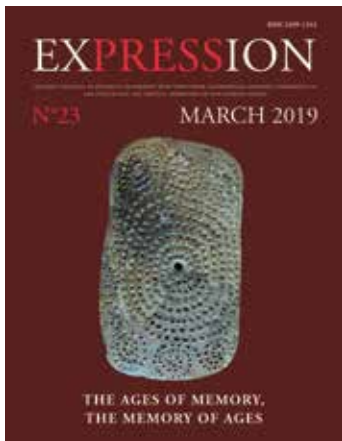


Expression 22

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).

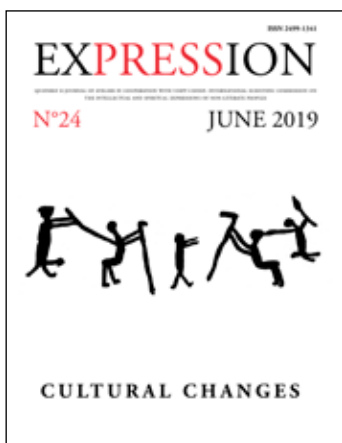


Expression 23

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)

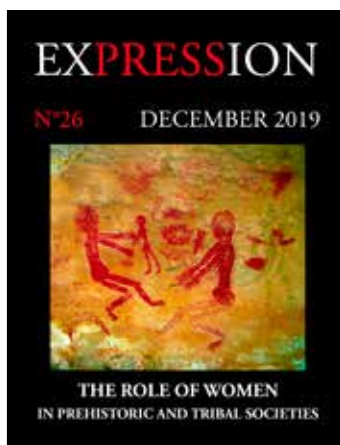


Expression 25

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)

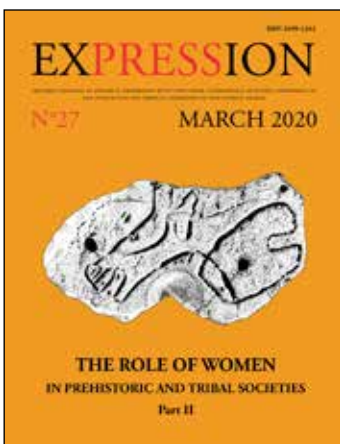


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December 2019

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)

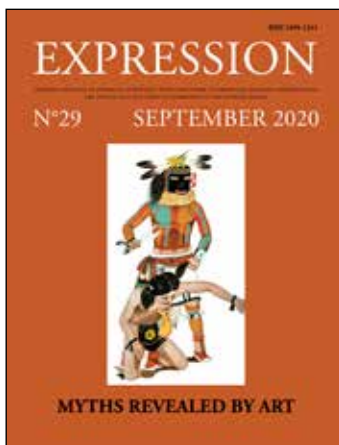


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June 2020

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)



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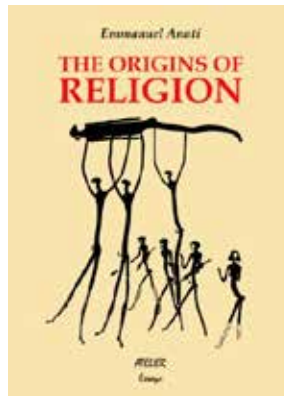
September 2020

Myths Revealed by Art

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

It is a pleasure to announce the publication of a new book by Atelier,
Research Center for Conceptual Anthropology:

THE ORIGINS OF RELIGION



How and when did religions originate? The study of prehistoric art is revolutionizing our knowledge of prehistoric religions. The rock art sites have been places of worship and tribal identity for millennia, serving as archives of myths, beliefs and rites, all of which evolved, diversified and acquired regional and ethnic features. Visual art, however, is not the earliest evidence of the presence of religion. Archeological discoveries of burial customs and burial goods accompanying the dead in their journey to the other world, and newly discovered prehistoric shrines, reveal concepts and beliefs going back even before the origins of art. When and how were the first religious concepts and rituals conceived? And how did religions acquire their present shape? As presented in this book, the evolution of archeological and anthropological evidence and analysis contribute a new look to the origins and history of religion.

Enclosed is a link to our updated **catalogue**
<https://drive.google.com/file/d/1LKbFYTgf4C2K7o4SSuBLXDibf4IBsJma/view?usp=sharing>
and a free copy of issue 28 of **Expression magazine**,
an illustrated academic e-journal born from the collaborative encounter
of minds engaged in different countries to understand the meaning and value of the human footprints
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Best regards
Gisele
Atelier Secretariat

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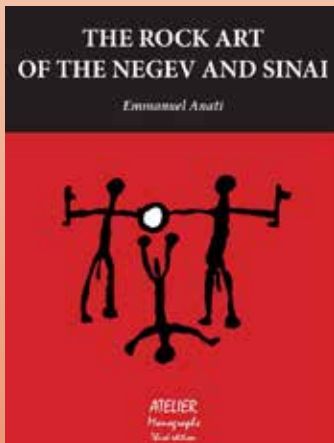
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ARCHAEOLOGY AND THE BIBLE

Atelier is pleased to present

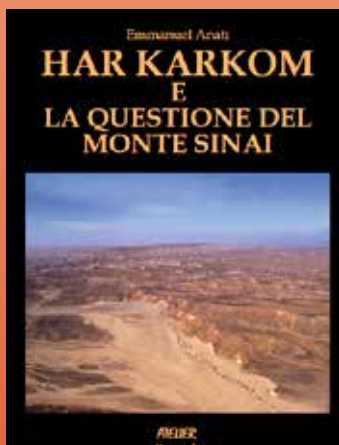
ARCHAEOLOGY IN THE DESERT EXODUS: NEW DISCOVERIES RELATED TO BIBLICAL ARCHEOLOGY

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
Capodiponte (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

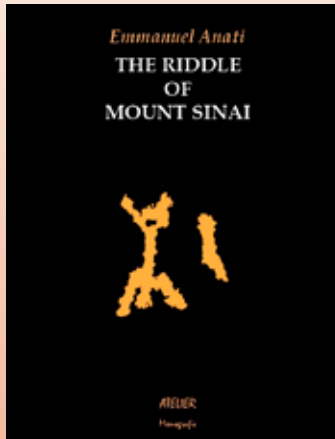
Capodiponte (Atelier), pp 220; 138 ill., €30,00

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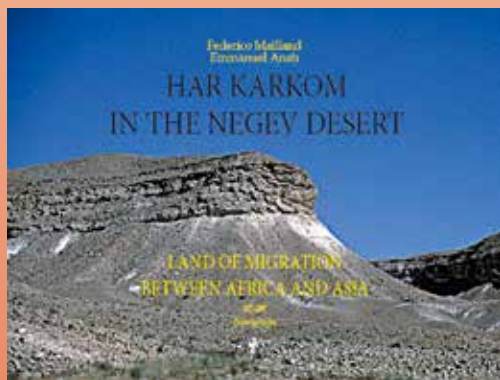
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Anati, E.2017, *The Riddle of Mount Sinai*, Second English Edition

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

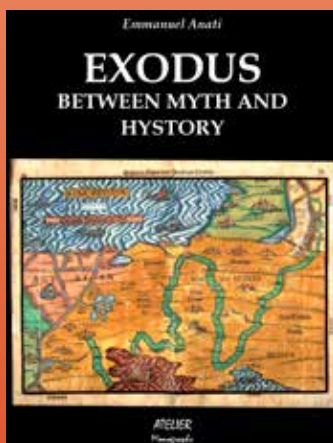
What is the true story behind the biblical narration of Exodus? The discoveries of the Italian archaeological expedition at Har Karkom, in the Negev Desert, tell the hitherto unknown story of the sacred mountain in the heart of the desert of Exodus, reflecting surprising similarities to the events and 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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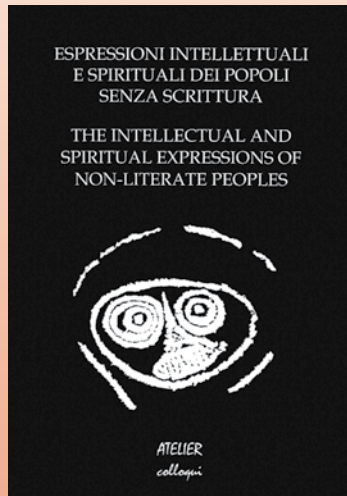
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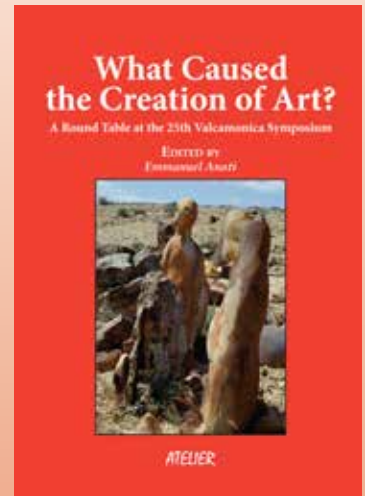
Il segni originari dell'arte (In Italian)

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.



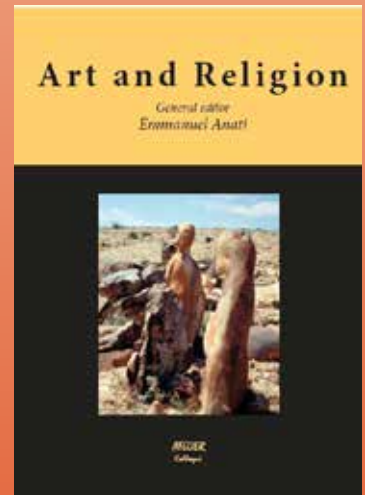
Sogno e memoria: Per una psicoanalisi della Preistoria (In Italian)

A series of papers presented at Congresses of Sociology, Psychology and Psychoanalysis concern. The analysis of human behavior and of graphic art extenations 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.



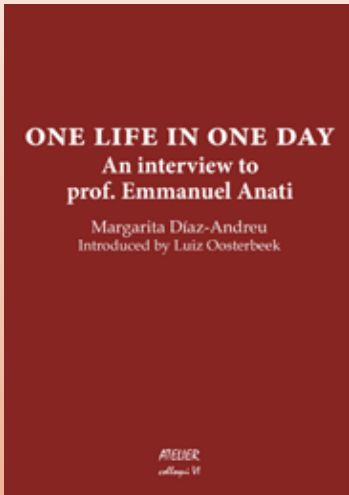
Art and Religion

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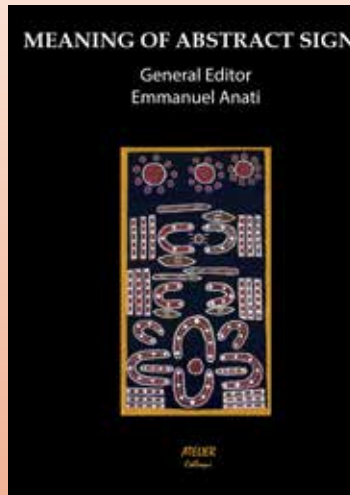
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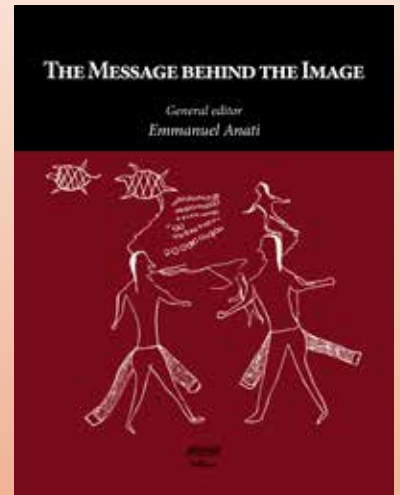
One Life in One Day. An interview to prof. Emmanuel Anati

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.



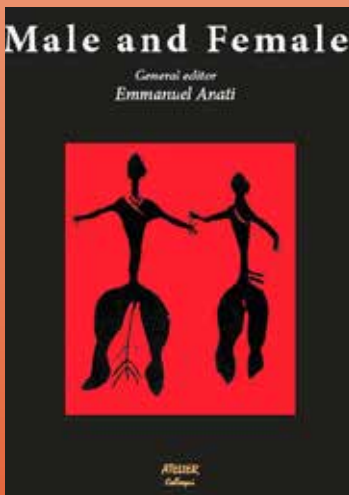
Meaning of Abstract Signs

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.



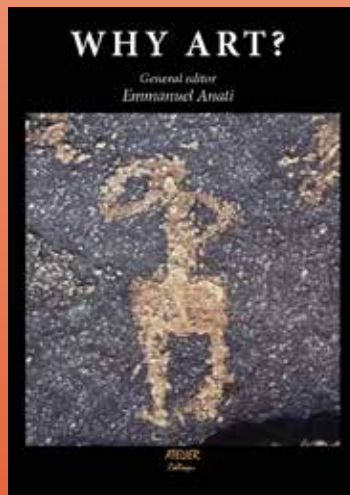
The message behind the image

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.



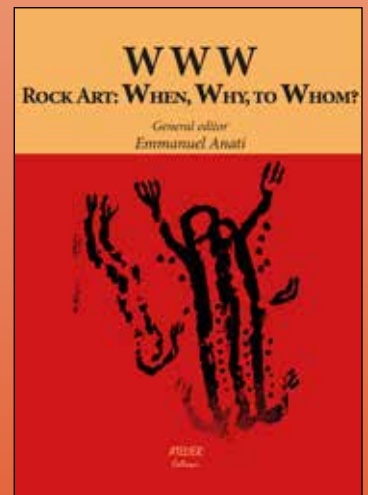
Male and Female

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



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?

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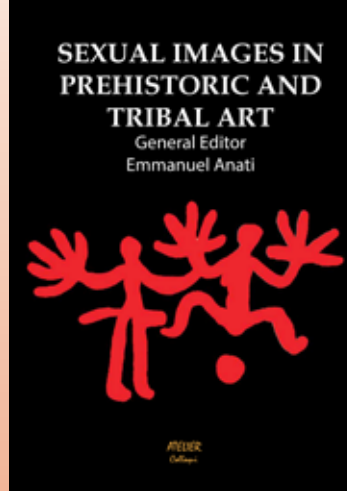
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Colloqui



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 negli 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.

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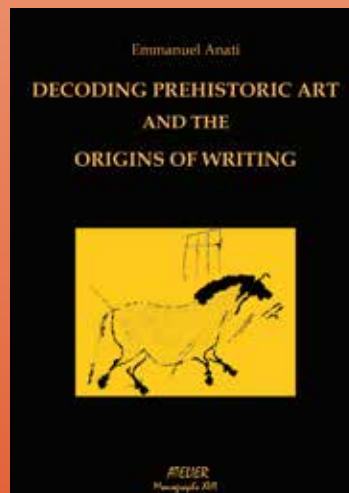
Essays



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.



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.



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?

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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.



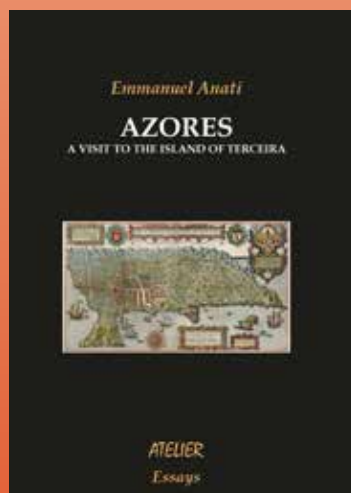
Iniziazione e riti di passaggio (in Italian)

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?



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.

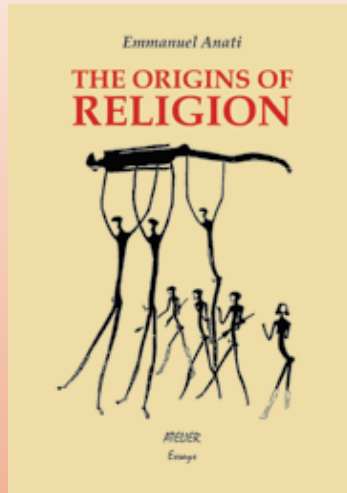
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Essays



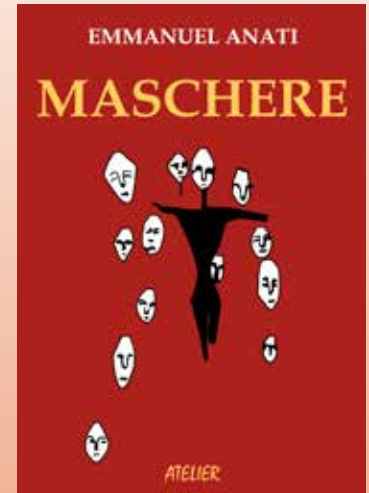
Mito tra utopia e verità (in Italian)

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.

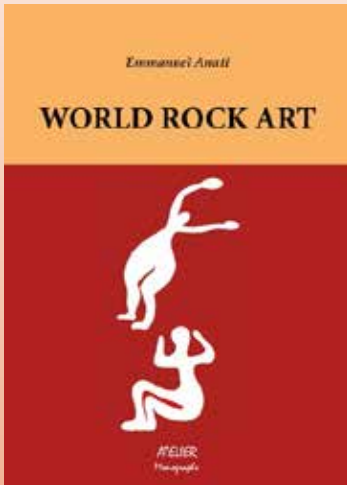


Amore e sessualità (In Italian)

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.

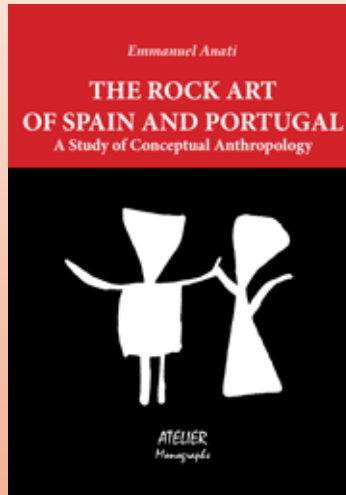
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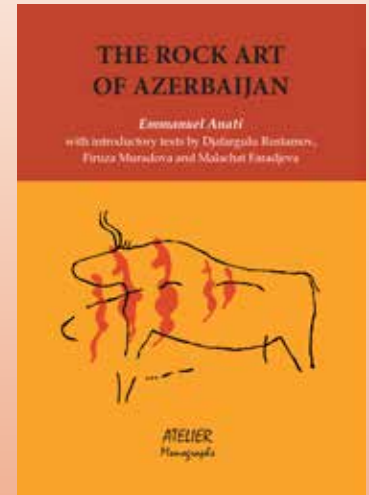
World Rock Art

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

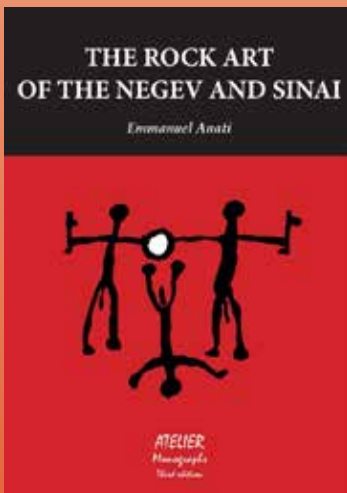
An analytical synthesis of the rock art in the Iberian peninsula from the conceptual anthropology approach. The major concentrations of rock art are considered as expressions of their different cultural and social patterns.



The Rock art of Azerbaijan

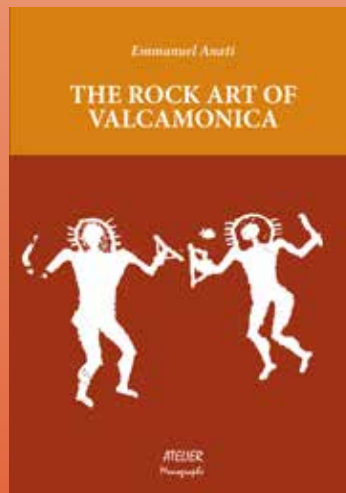
Over the course of centuries, Azerbaijan, was a great centre of rock art.

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*.



The Rock Art of the Negev and Sinai

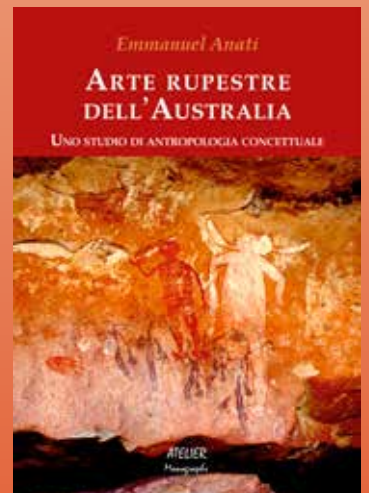
The present volume is concerned with a new theme of archeology and anthropology: the rock art of the Negev and Sinai, which never had before a general analysis in English. It elaborates on articles and a book written in the last 60 years, to produce a synthesis and an overview.



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.



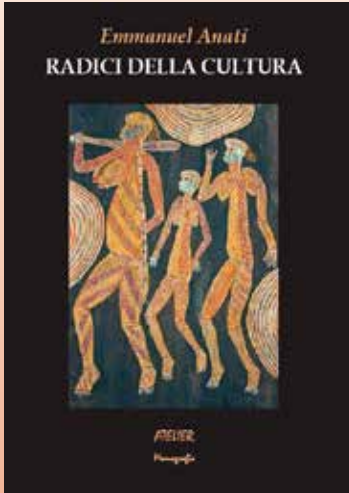
Arte rupestre dell'Australia (in Italian)

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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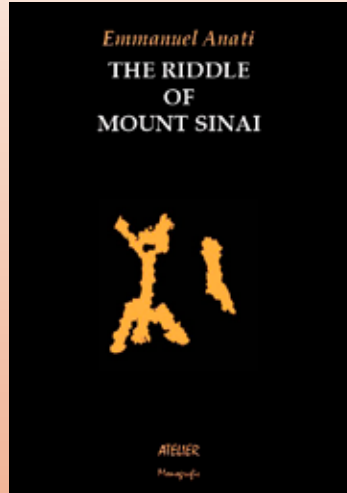
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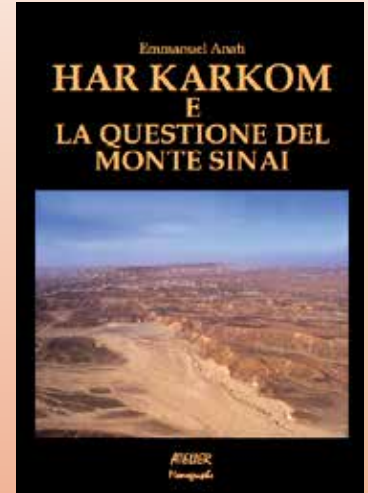
Radici della cultura (in Italian)

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.



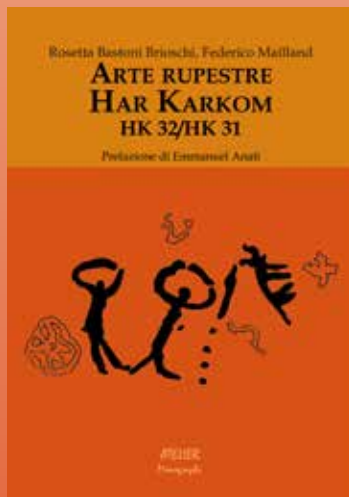
The Riddle of Mount Sinai

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.



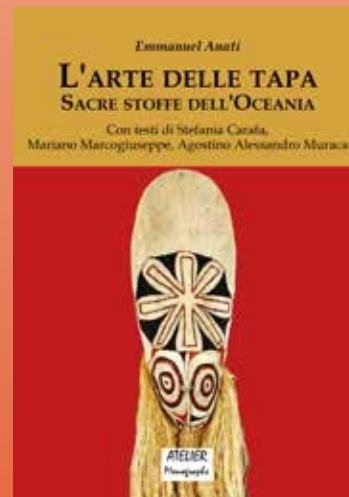
Har Karkom e la questione del Monte Sinai (in Italian)

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.

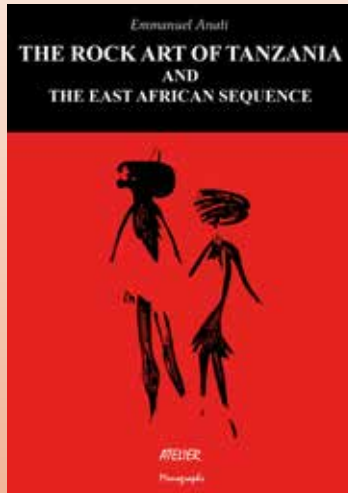


L'arte delle tapa. Sacre stoffe dell'Oceania (in Italian)

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.

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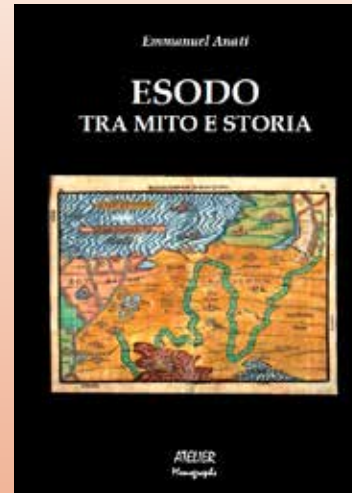
Monographs



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.

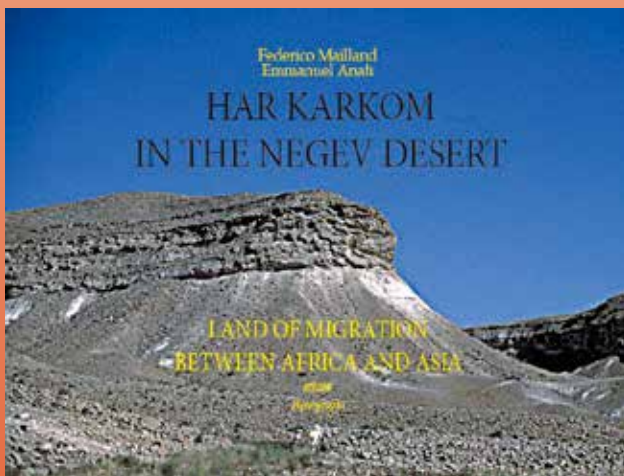
Stylistic phases and periods are covering millennia.



Exodus

Between Myth and History

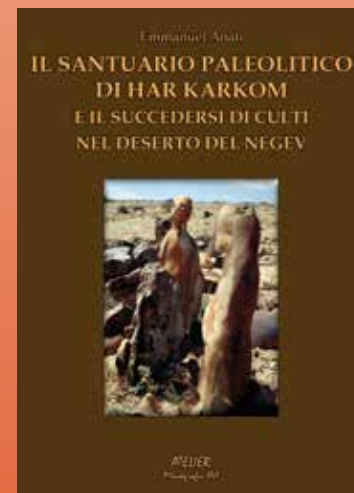
The epic of Moses: is it myth or history? The Biblical narrative of the exodus and the revelation of Mount Sinai are a monumental literary work that has been passed down for well over two millennia, after being transmitted orally for centuries. What would have really happened during the Exodus? How did 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.



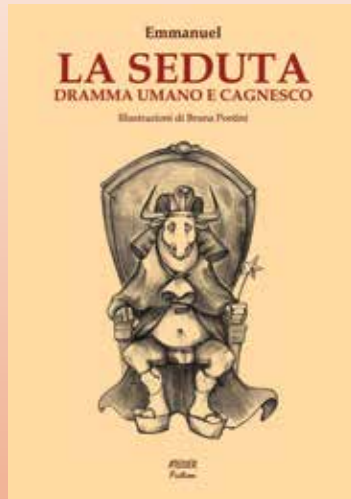
Il santuario paleolitico di Har Karkom (in italian)

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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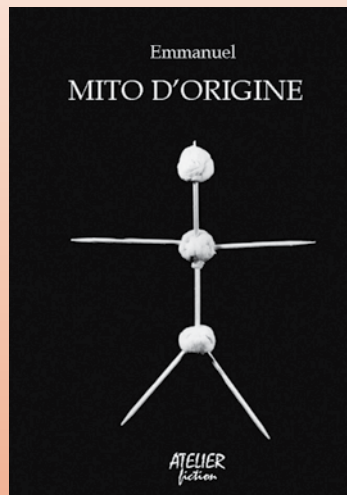
Fiction



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.

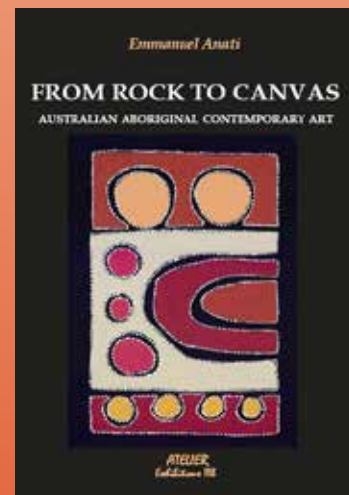


Exhibitions



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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