

EXPRESSION

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

N°28

JUNE 2020



ON THE DIFFUSION
OF CULTURE

EDITORIAL NOTES

ON THE DIFFUSION OF CULTURE

How are human abilities, concepts, and traditions born, and how do they travel and have their course? This question arises in almost every study or research in anthropology and archaeology. It may arise in every event, conversation, thought or daily habit. It may arise even when you think about your meal: how was this dish invented, where is it from? After fire was mastered, grilled meat became the most widespread dish and did not need a plate. Food today, apart from fire or heat, requires a plate and a cooking pot. How, why and where did such habits become part of culture?

The first homeland of humankind is believed to be a corner of Africa. Other primates grew there as well and they are still there. Over 2 million years ago the ancestors of man produced the first tools to enhance the abilities of their hands, and expanded their territory, reaching Asia and Europe. How? Why? But we could also ask how and why did Magellan, Cook, Vasco da Gama, Bougainville and others want to discover new unknown lands. More recently explorations of Antarctica were followed by the explorations of the moon which may soon be followed by explorations of the planet Mars. Human colonies are not yet present there, but plans for colonization may come and culture may expand beyond any previously conceived limits.

Human colonization never stopped. High mountain ranges, regions of thick forest and faraway islands were reached and settled much before the invention of wheeled vehicles and motor boats. Islands, like Crete, have traces of human presence already over 100,000 years ago. By then seafaring had developed enough to allow the landing of entire clans on islands where they settled down for generations.

From what we know, the earliest traces of human ancestors out of Africa, in the Near East and parts of Eurasia, go back 2 million years. Men and women with their children, carrying just what they could carry on themselves, reached Australia 60,000 years ago, America 40,000 years ago and several islands of the Pacific less than 1,000 years ago. They conquered the planet. How and why did this diffusion take place? In the course of a few millennia, hundreds of islands were populated in the Pacific and seafaring people introduced and developed different habits and patterns of culture. Major islands, like Greenland or Madagascar, became populated by different waves of migrants. The history of man is made of many stories, many events, many adventures, many acts of daring and courage that reveal the marvelous human adventure of curiosity and inquisitiveness. They reveal your heritage, whoever you are, the identity of your ancestors: ex-

plorers, discoverers, conquerors pushed by the biggest fault and the biggest gift of our species: curiosity.

Clamorous events like the diffusion of European culture in Australia totally changed its ethnic identity; the diffusion of Christianity in Latin America or of Islam in Asia and Africa introduced new values and changed beliefs, cultural practices, behavior, concepts, and social traditions. Society, habits and human relations were no longer the same. The diffusion of culture imposes new patterns and eliminates previous ones.

The diffusion of cultures, the colonization of new living spaces, in deserts, isolated islands, in almost inaccessible mountain ranges, the expansion of cultural patterns, the elimination of other cultural patterns, and the meeting and mingling of cultures and traditions resulted in modern humanity. This reality is made up of an infinity of adventures. Some find space in this, and future issues of **EXPRESSION**. Small details may inspire big thoughts.

Culture marks the destiny of humankind. Near Eastern Neolithic peasants penetrated into Europe, where the main economy was still that of hunter-gatherers. It was an “illegal invasion of extra-communitarians” that disturbed the previous traditional way of life, changed the ethnic character of Europe and created a new European identity and civilization which, in the course of time, conquered the rest of the world. The spread and conquests of the Chan agricultural people submitted pastoralists and hunters and created the Chinese identity and civilization, and the biggest nation on earth. The Roman empire submitted “Barbarians”, conquered people from Iberia, Gallia, North Africa and the Near East, and created a new cultural and social pattern: it was the bases of a conceptual background that favored the birth and growth of Christianity. Many other events defined the diffusion of culture. Every story, every tradition, every archeological testimonial find is relevant. Even small events of tribal migrations, of cultural influence, are part of global history.

Queries like the roots of Aboriginal arrival in Australia, the diffusion of colonization of Polynesia, the colonization and subsequent abandon of early cultural adventures in the Tassili and other areas of the Sahara Desert, the early penetration of peoples in the tropical forest of Amazonia or in that of the Congo, the process of colonizing some tough regions like the Tibet high range or the Kalahari, the Rub el-Khali or the Gobi deserts, are significant events revealing the spirit of man. Every story, every myth, like every archeological find, tells us a chapter of the diffusion of culture. Sometimes, a piece of pottery, a rock painting, the intro-

duction of a domestic animal or plant, or other relics of human action, may reveal a story of migration or of influence, or of cultural diffusion. Other issues of **EXPRESSION** will host other papers on cultural diffusion. Colleagues and friends having stories, ideas, documents to share are cordially invited to join and propose their papers.

A NOTE FOR THE AUTHORS

Please consider that **EXPRESSION** is a journal on conceptual anthropology, addressed to readers in over 80 countries around the world. It is not a periodical specialized in a specific sector or area of archeology. Make your text appealing and avoid dry technical reports. Your paper is intended to produce culture: tell your story to a world of culture.

EXPRESSION quarterly journal is published by Atelier Research Center with the cooperation of UISPP-CISENP, the “International Scientific Commission on the Intellectual and Spiritual Expressions of Non-Literate Peoples” of the UISPP (*Union Internationale des Sciences Préhistoriques et Protohistoriques*, International Union of Prehistoric and Protohistoric Sciences). 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 illustration 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 for their evaluation, 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 realistic 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

Zurla, r. 70, Ceto. Tracing of the Celtic god Kernunnos, characterised by his deer horns, his torques, and his serpent (Anati, this issue, p. 24).

DISCUSSION FORUM

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

PREHISTORIC ART REVEALING ANCIENT MYTHS

Prehistoric and tribal art illustrates the real and imaginary world of its makers. Events, happenings, beliefs, rituals, and myths are delineated, suggesting fundamental information about the spiritual and social life of ages and cultures. Images and signs are the records of chapters yet unwritten in the history of humankind. Often the images are there in front of our eyes, and we are unable to decipher their meaning. Examples of understanding what they are conveying may help other colleagues to solving similar problems. A few examples of this decoding have appeared in previous issues of **EXPRESSION** journal of conceptual anthropology. Now, a forthcoming issue of **EXPRESSION** is planned to focus on this topic. “Why” is one of the earliest words of infants and accompanies us during our entire life. In different corners of the world, art objects and rock art are the depository of myths, rituals, and beliefs: 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 Kokopeli images and many others of Arizona in the US, the imaginary sea-creatures of British Columbia, the surreal beings depicted in the Tassili of North Africa, or the spirits departing on boats in the rock art of Bohuslaan, Sweden, or the decorations of megalithic monuments along the Atlantic coasts of Europe, Portugal, Spain, France, and Ireland, have splendid tales to tell. Can we unite in our attempts to unveil their fantastic stories? Friends and colleagues are invited to join in making these images known to the readers of **EXPRESSION**. These are all scholars and students in the humanistic sciences in over 80 countries of five continents. All these images may be well known to local specialists but by diffusing worldwide their knowledge and meaning, and awakening interest in their conceptual contents, an important step is taken: they become active part of world culture. The fear of interpreting is a complex of old-fashioned research. I remember the words of an old professor, when I was

a student over 60 years ago. He was telling us that the task of archaeologists and anthropologists is limited to describing. Interpreting may cause criticism as it is “non-scientific”. “If you want a quiet career, never say something that is not already known.” The only innovation allowed is something like: “I found a new, very old, flint point. If you show that point, no one can say that you are wrong. But yet somebody may claim that it is not very old.” Luckily, the trend has changed for such traditional disciplines as archaeology and anthropology. Without attempts at interpretation, research will remain in the elementary stage of description. And even at this stage all of us may make mistakes. But should we prevent the human mind to go one step further? Of course, if you are able to propose the story behind the image, this will be most valuable. Can you reply to “Why”? Even If you present a sound and documented interpretation there is always a possibility of being criticized. If you know what you are talking about, do not be afraid. Your text will stimulate and awaken debate. In any case it will be a creative act. If your ideas are debatable, do not worry: 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. But saying something even at the risk of being criticized is an act of culture; having ideas and saying nothing is an act of self-impeachment. Research is progressing by trial and error. Ideas have to be said and debated. But even if you have no idea about interpretation, just presenting puzzling images, describing them and posing questions, will be an act of culture and consciously sharing your queries with others. Never stop asking “Why?”. Every site of rock art has motivations and meanings. Let us bring them to the surface. By awakening interest on a world basis, we bring back to life these sites of millenary memory and identity that have not so far been given the attention they deserve. If you have a topic to propose, please propose it. The address is <atelier.etno@gmail.com>. We look forward to hearing from you.

DEFINING THE CULTURAL IDENTITY OF *HOMO SAPIENS*

A forthcoming issue of **EXPRESSION** quarterly journal may address the identity of the common ancestor of the whole of modern humankind: early *Homo sapiens*. Who is he? Paleontologists rely on skeletal features to classify *Homo sapiens*. But are bones sufficient to define the conceptual sapience of the *sapiens*? How may we classify the many skeletal materials of living populations today that show anatomical features not fully corresponding to the *sapiens* stereotype? Are Pygmies or Hottentots *sapiens*? Is their

bone osteological structure similar to that of the European Cro-Magnon? Despite their distinct physical characters, they have the pertinent conceptual faculties and they are producers of elaborate visual art. Of course, they belong to *sapiens* societies. By using the term *sapiens*, it seems logical to define the meaning of the classification.

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 industry, there is the habit of producing figurative art as a pattern of culture. Figurative art 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 the talent for synthesis, abstraction, and conceptualization. It indicates the skill of a logical concept of reality, allowing the visual transformation of this reality into image: the materialization of ideas, the idealization of reality, and the visualization of the real and the unreal. It is a unique ability of the *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, printed but not intentionally designed by the human hand. Such graphic markings are a proto-art, present before figurative art already in the Middle Paleolithic, though persisting into the Upper Paleolithic and later. Some tribal groups still perform this kind of non-figurative graphics nowadays, as means of communication, memorization, and for marking territory. The producers of the Mousterian lithic industry, Neanderthals and other Proto-*sapiens* groups of the Middle Paleolithic, already performed this kind of graphic marking which is not yet figurative art.

Figurative depictions intentionally shaped by human hands are the tangible expression of the conceptual rationality of *Homo sapiens*. They appear suddenly, fast becoming a widespread pattern of culture in different areas in Eurasia, the Far East and Australia, which are unlikely to have had direct contact at the time. They are the indicator of the presence of the mind of *Homo sapiens*. In Europe, the Near East and Africa, Proto-*sapiens* graphic markings and hand stencils may go back over 70,000 years, while figurative art shaped by the hands of *Homo sapiens* is today considered to go back some 40,000 years.

According to available chronological dates obtained by laboratory analyses, if, as it seems, they are reliable, such expressions of figurative visual art in Australia and Borneo, representing animals and/or human beings, appear 20,000 years earlier than in Europe, going back c. 60,000 years. Is *Homo sapiens* present in Australia so much earlier than in Europe? The earliest dates of figurative art as a widespread cultural pattern so far come from Australia. Where did figurative art start first?

Is *Homo sapiens* a single racial stock or are there several different cores of *sapiens*? If indeed *Homo sapiens* derives from a single nucleus, as currently maintained, where does he come from? Where did he originate? So far, the origins of *sapiens* have been considered to be in Africa. As defined in a previous issue of **EXPRESSION** (issue no. 18), early traces of his figurative art are present in Tanzania. A succession of varied features of animal figures and a rich sequence of different stylistic phases hint at an early period for the earliest phases. But no precise dates are presently available.

How do we understand the discrepancies in dates? Various considerations are open to debate: any human ability necessarily precedes its material execution. Different conditions and different inspirations may cause its factual formulation. In other words, the mental ability of producing figurative art may be there in a latent form; its material realization may take place when conditions or events provoke it.

Another consideration regards the missing evidence. Theoretically, if paintings on animal skins or tree bark preceded the paintings on rock surfaces in Europe or Australia no evidence is available on materials that did not survive. Nevertheless, archaeology relies on findings and such discrepancies in the dates of the first appearance of figurative art remain an open question to be understood and explained. What caused the dynamics of diffusion? How did early *sapiens* walk all over the planet (yes: walked!!) from the African Cape to the Tasmanian Cape and the Fuegian Cape? He did not have any means of transportation, not even a bicycle. When the three capes were reached, the human population density was most likely less than one soul per 100 sq. km. It was not overpopulation that caused migration. Other primates did not have the same diffusion. Our cousins the chimpanzees and other apes still survive in their piece of bush. *Homo sapiens* was most likely pushed on by his curiosity, another of his features, that is, the need to look beyond the horizon to discover the unknown. Among other acquisitions, curiosity produced beliefs beyond knowledge. Both successful and unsuccessful efforts of confirming beliefs and making them become knowledge have been a major factor in the conceptual evolution of humankind.

Despite various opinions, some major queries seem to remain unsolved: where is the place of origin of *Homo sa-*

piens? What were the reasons for his diffusion? How did figurative art originate and why? What was the core of the conceptual heritage that *Homo sapiens* spread with his migrations out of his original homeland?

Many other questions arise from the daily fieldwork of archaeologists and anthropologists 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.

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

INTELLECTUAL AND SPIRITUAL EXPRESSIONS ARTS, BELIEFS, RITUALS, MYTHS, TRADITIONS AND CUSTOMS

XIX UISPP WORLD CONGRESS, Meknes, Morocco,
September 2 - 7, 2021

Over 1,000 archaeologists and anthropologists will meet in Meknes, at the UISPP Congress, originally planned to take place 1–6 September 2020, now postponed to September 2 - 7, 2021. The Congress is planned to include general lectures, scientific sessions, visits to archaeological sites, social events, official dinners, press conferences and open debates. The scientific session on: “The Intellectual and Spiritual Expressions of Non-literate Peoples “. (CISENP session 20-2021) is welcoming potential participants, inviting them to confirm the intent to CISENP SESSION CONGRESS 2021, by email: <atelier.etno@gmail.com> indicating suggested status. The session will present papers, debates and encounters on the sources and the expressions of culture: arts, beliefs, rituals, myths, traditions and customs, memories and what else inspires the human imagination and creativity.

Participants may have one of three possible statuses:

1. Active member presenting a paper (the title of the proposed paper and a short abstract should be included).
2. Student and/or voluntary member to help at the event (engagement to attend and actively help during the en-

tire duration of the Congress should be included).

3. Observer, coming to listen (reservations are required to get seats during the lectures).

Colleagues, students and friends wishing to participate are kindly invited to submit a preliminary registration by providing their 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 the relevant statement. Colleagues and friends that presented titles, abstracts and even final texts of their proposed papers for the session rightly enquire about the destiny of the papers. Our engagement in publishing them is confirmed. The papers should be in English and are submitted to the evaluation of reviewers. The submitted texts may join one of three categories: short notes, up to 1,000 words, papers 1,000–4,000 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 200-300 words will introduce the text as abstract and, at the same time, will 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 5 months before the opening of the Congress. The resulting book, collecting all the papers, is intended to be presented at the Congress. Since the texts will be available to all participants of the session at the Congress, each participant of the session will dispose of up to 20 minutes, followed by 6 minutes of questions and debate. Potential participants are invited not to leave it to the last minute and submit papers as soon as possible.

A NEW-OLD ISSUE FOR THE DISCUSSION FORUM: COLONIZE! DECOLONIZE!

Populations in many parts of the world, which have suffered the violence of being colonized, tend to cultivate decolonization movements. Legitimate desires to reacquire a lost identity and the nostalgia for traditional life are accompanied by the wish to restore ethnic traditions and recover lost memories. The tie to the past, the wish to be what your ancestors made you be, is a major cultural element in both tribal and urban societies as well as among ruling, royal, imperial or chieftain dynasties.

Colonization is concerned with many aspects of life, from new ways of being clothed to the use of new currencies, new kinds of food, education, economy, laws and ethics, different kinds of medicine and cure for diseases, cult and religion, to many other aspects of human thinking and relations. The entire horizon of daily life is changed. Is it possible to go back?

Colonization has caused the loss or change of identity and the abandonment of the traditional cultural habits of many people. Their entire life was altered, thus creating the justified sense of being victims of violence. Native Australians and native Americans alike have lost their beliefs, their traditions, and their memory, and have acquired the beliefs, traditions, and memory of the colonizers. Revivalist trends profess utopian aspirations to reestablish native traditions and beliefs. To what extent are such aspirations pragmatic? These trends suffer from two major handicaps. The way of life is no longer the traditional one. How can people go back to live in huts where houses are available? How can they go back to hunting with spears if they own guns? And moreover, these guns are rarely aimed at hunting buffalos or kangaroos, since it is easier and cheaper to buy a piece of meat at the supermarket.

A second handicap of conceptual decolonization revivals is that the natives have lost large sectors of their memory. The entire humanity is getting a daily base of colonization, from school to tv, to cultural influences that touch each one. But entire populations forcefully colonized by invaders have no doubt been colonized more than others. What they know of their lost gods or ancestral heroes comes, at least in part, from the literature of the colonizers. The traditional ceremonies are reconstructed but the memory is forged by the intrusion of alien indoctrination and ways of interpreting the past. The history of tribal people is no longer transmitted orally from generation to generation, it is that of the anthropologist or of the scribes of the official regime.

Nevertheless, it is vital for both the colonized and the colonizers to save and revive fading ethnic identities as much as possible. As much as possible should be done to preserve the characteristics, beliefs, and traditions of minorities and others who risk being engulfed in an amalgamation of identities that will result in the loss of identity. Local ethnic groups are a very important part of human identity, which is made up of the many faces of the many identities. All of us are part of human history and no part of history should be destroyed. Homologation would be a disaster for human identity and culture. Local ethnic identities must be saved and given space of expression.

In the context of the present reality, it is instructive to provide a general historic overview of colonization.

The age of colonization started with life. Then the planet was colonized by humans. Other animal species were colonized. Homo sapiens, out of Africa, colonized five continents; Near Eastern Neolithic farmers colonized the hunter-gatherers of older Europe; Phoenicians colonized half of the Mediterranean shores; Europeans colonized America and Australia; Christianity colonized a quarter of humanity; Islam colonized another quarter. The history of humanity is a history of colonization.

Can history take us back? What would happen if Australia and America were decolonized and returned to the native people? Could huts replace the towers of Sydney or Manhattan? And what would happen if Europe returned to the hunter-gatherer clans of prehistory? And what would happen if the planet were decolonized of humans? Without colonization history would not exist, and the bipedal ape would have remained in an enclave of the central African bush and perhaps disappeared long ago.

Colonization is the alternative to extinction, for viruses as for humans. We are lucky that the present Coronavirus is not strong enough to decolonize the planet. But who knows? Perhaps the next virus will have greater success. Can a virus decolonize the planet? Let us not be so sure that it would be impossible. The main point would be to be the first to decolonize the virus, the other colonizer. If its colonization is disturbing human colonization, some antidotes are necessary.

Of course, it is vital for the survival of the human heritage, for the wisdom of all, to preserve as well as to know and understand as much as possible about the traditions, customs, and beliefs of cultural patterns that are at risk of disappearing. It is vital also to avoid forgetting traditional knowledge. It is most vital that each human person and each human group preserve his/her own identity, dignity, and traditions. Traditions are identity and are part of each individual. Awareness of ethnic traditions is not just the heritage of each individual and of each ethnic group, it is

the heritage of the entire humankind. But could an African Khoi or Arctic Inuit, colonized to be Christian, or an Arabic Bedouin colonized to be Moslem, go back to ancestral totemic cults? Would that last? Traditions are part of us, they may be lasting but they are not eternal. Recently, over half of the humanity has been colonized by ideologies, fascist, nazis, communist, religious, etc. Evolution, seen as good or bad evolution, seen as progress or regression, produces waves of new ideas. Would the nostalgic desire to go back to origins take us back to the origins? What will happen next? New ideas, new beliefs, and new habits are bound to colonize anew both colonizers and colonized. What comes next relies on, and changes, the present. It will not bring us back to the past. It will bring a future.

The times of military conquests, compulsory conversions, and slave trading are over – or almost (though not everywhere). A new subtler colonization is taking their place: ideological or conceptual colonization, religious colonization, financial colonization, and emotional colonization. How to face decolonization? Could Swahili, a language developed in recent centuries by colonizing merchants, be replaced by the previous original 2500 languages and dialects of the Bantu tribes of East Africa? It is more likely that Swahili might be replaced by English, an even more colonizing language.

Eliminating the eternal natural human trend of colonization does not seem possible: ideas, human relations, economic resources, events, the acquisition of new knowledge, and conceptual evolution are strong colonizing factors. We are our own colonizers.

Colonization will inevitably go on unless humans are going to be colonized by some other being. Even a microscopic virus could overcome the armada of the conquistadores. The issue will then be how to decolonize the invisible enemy. And if the battle is won, would that stop the trend of colonization? The future, as the past, is likely to continue sequences of ages defined by different types of colonization.

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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CULTURAL DIFFUSION AND CULTURAL INTROVERSION IN THE ALPS

ROCK ART AS A SOURCE OF HISTORY¹

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A story before history

The literature that precedes writing comes in the form of rock art, a means of visual communication and memorization that finds its highest European concentration in the Alps, a region mostly covered by ice in the late Pleistocene and scarcely populated by humans thereafter, in the last 14,000 years. Nevertheless, there are 300,000 rock engravings in Valcamonica alone and an estimate of over half a million in the entire Alpine area. Why right here?

The Alps are a mountain range that separates the Italian-speaking populations and cultures from those who speak French, German, and Slovenian to the north. The Alps are natural barriers that mark and have always marked boundaries; also, they are a region of microcosms, original cultural patterns that have arisen there and sometimes have spread beyond their area of origin. These mountains have always had two relevant prerequisites for human life: the population density has always been less than that of the surrounding large valleys; and they have been areas where different peoples and traditions meet and communicate with each other.

The mountain environment, characterized by slopes and close valleys covered with woods, grassland and rocks, has dictated its cultural dynamics. In such a landscape, agriculture has limits in comparison with fertile plains, while hunting and the gathering of wild fruits tend to be preserved and to have a greater impact on the economy, in the past as in the present. Livestock finds favorable pastures and, from the Neolithic period on, animal rearing has been an essential Alpine resource encouraging, by transhumance, the human presence and close encounters of people and cultures, even at high altitudes.

The topography of mountain passes and narrow val-

leys surrounded by mountains promotes the development of circumscribed cultural patterns far more conservative than in the main plains.

Because of its location in the heart of Europe and its cultural characteristics, the Alpine area has had a profound impact on the history of Europe. Processes of acculturation and cultural penetration that occurred over millennia have generated local developments and give the Alpine area its cultural features.

The largest concentrations of rock art, Valcamonica, Valtellina, and Mount Bego (and other minor ones) comprise the maximum intensity of rock art in Europe. Why here? Surely the human mind is strongly influenced by the environment and that particular concentration of artistic creativity seems to meet a rule. Throughout the globe, the greatest concentrations of rock art are in the less densely populated regions. Some of the major clusters of rock art are in now deserted areas.

Pre-Neolithic evidence

Alpine rock art reflects cultural and conceptual episodes that determine emerging chapters of history in still prehistoric millennia. Climate obviously affected the population. During the late Pleistocene, the Alps were covered by glaciers. In the Camonica valley before 14,000 years ago, there is no evidence of human presence except for a phase of glacial retreat about 40,000 years ago, attested by Middle Paleolithic flint implements found in a cave near the village of Nadro in Valcamonica.²

At the end of the Pleistocene, with the retreat of the glaciers, the area became populated by fauna that attracted hunters. Their bivouacs, often seasonal or short-duration camping sites, preserve traces of the early human colonization of the Alpine area. During the Holocene, there were short periods of intense cold phases, so-called microglacial episodes, with the

1 The present article is an elaboration, with updates and new ideas, of some chapters in my *The Rock Art of Valcamonica* (Atelier, 2015), where all the bibliographical references are cited. They are omitted in the present paper.

2 For this and other references or details of this text see: Anati, 2015, *The Rock art of Valcamonica*, Capodiponte (Atelier).



Fig. 1. Distribution of rock art and menhir-statues in Northern Italy and the Alpine area.

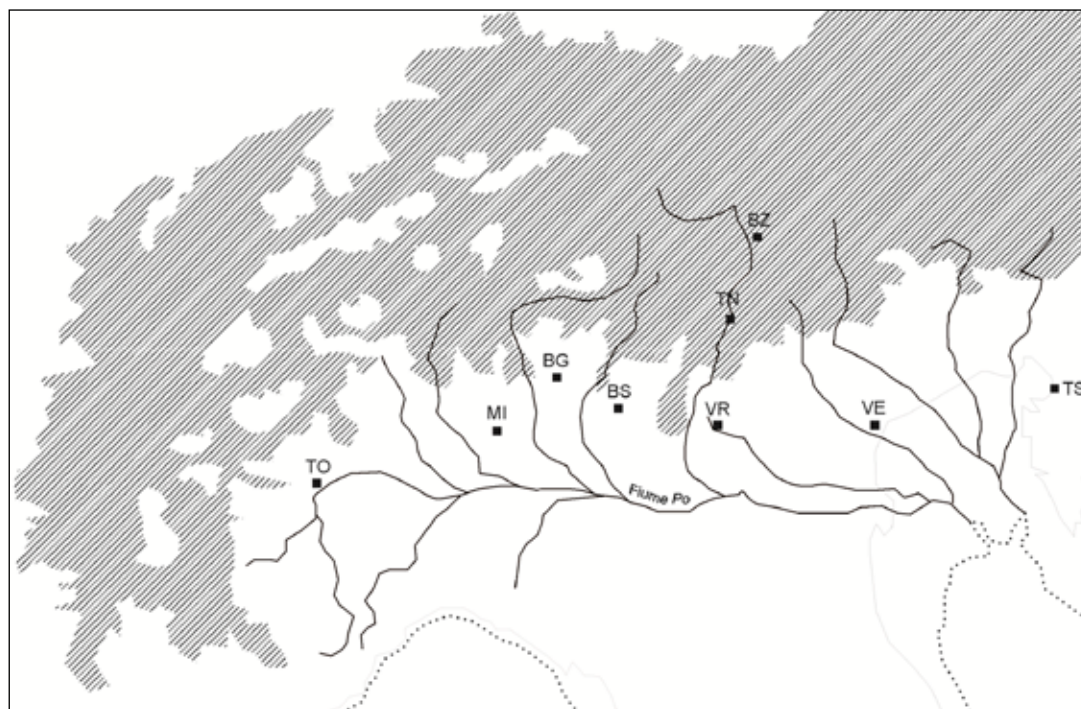


Fig. 2. Maximum expansion of glaciers in the last Glacial Period in the Alpine area around 20,000-18,000 BP.

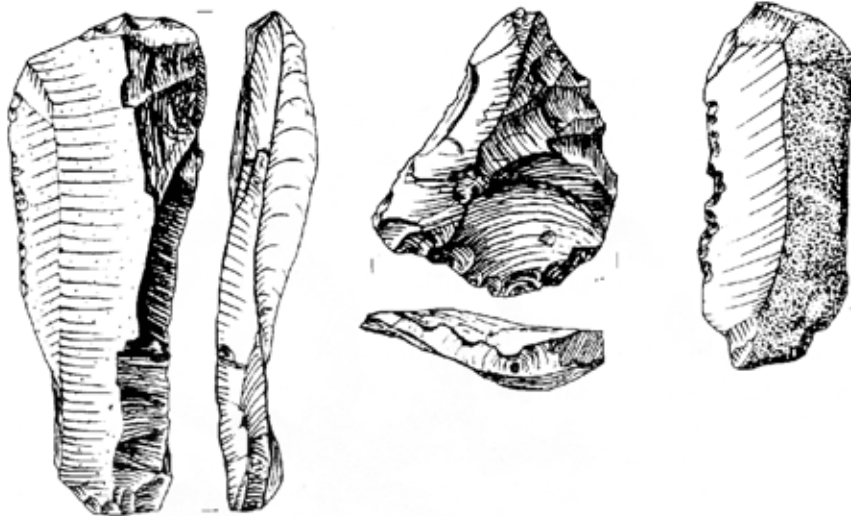


Fig. 3. Foppe di Nadro, Shelter 2, Ceto. Flint implements with heavy patina, from the Middle Palaeolithic Age.

temporary expansion of alpine glaciers, two of which appear to be particularly intense, one in the sixth millennium BC marking the transition between Epipalaeolithic and Neolithic cultures, and the other, around 900–800 BC, marking the transition between the Bronze age and the Iron age.

These microglacial episodes coincided with the closing of the high mountain passes, limiting the movement of human groups, causing introversion, which theoretically should correspond to periods of conservatism. Instead they mark cultural transitions from one typological horizon to the other for both rock art and material culture. They are not only periods of cultural and conceptual changes, but also of important innovations. It seems that periods of isolation are no less important than intense communication for the development of culture.

The Neolithic

The passage from the Proto-Camunian rock art style of large animal figures, related to the Epi-paleolithic period, to that of the Neolithic with its anthropomorphic schematic style, marks a radical thematic and conceptual change. The dominant theme passes from large-sized animal figures to small schematic anthropomorphic figures. It is the conceptual transition of the dominant theme from the animal, the prey, the food resource, to man himself, discovering his own identity.

The images reflect the transition from a conceptual religious animistic worship of animals and their spirits to new conceptions of the supernatural or better, of what is not explained by knowledge, thus producing beliefs.

Neolithic rock art illustrates solar worship and various practices related to the cult of the dead. There are also images indicating the cult of certain animals: the dog, the first animal to be domesticated, and the bull.

Frequent couples of human figures with head and without are likely to represent the two aspects of the same being, body and soul, accompanying each other. Similar couples with similar meaning are known in

other tribal iconographies.

Other images indicate the rock as receptacle of the soul of the dead. The human body and the rocks are the two alternate repositories of the soul. When the body dies, the soul abandons it and finds a new shelter in the rock. In some cases, the rock art appears as a search for communication with the rock surface or with the powers hidden behind it. Images in the rock engravings hint at the presence in the Alps of a widespread dualistic concept of the world and of existence. The rock surface marks the limit allowed to the living people, who are on one side of it. On the other side, behind the surface, is the space of the souls, that they cannot reach. The surface of the rock is the border between two worlds.

The dualistic concept, still practiced by some tribal people, conceives of the complementary function of elements that complete each other, like men and women in human society. The world is made up of earth and sky. The living space is made up of land and air; men stand on the earth, the source of food, and breathe the air. Both earth and air are sources of life. Life and death are the two aspects of existence, life being the union of body and soul; their split is the cause of death. Death is a different kind of life, a limbo of the soul, awaiting rebirth.

The world and society are seen as binary entities, society being made up of males and females, the world be-

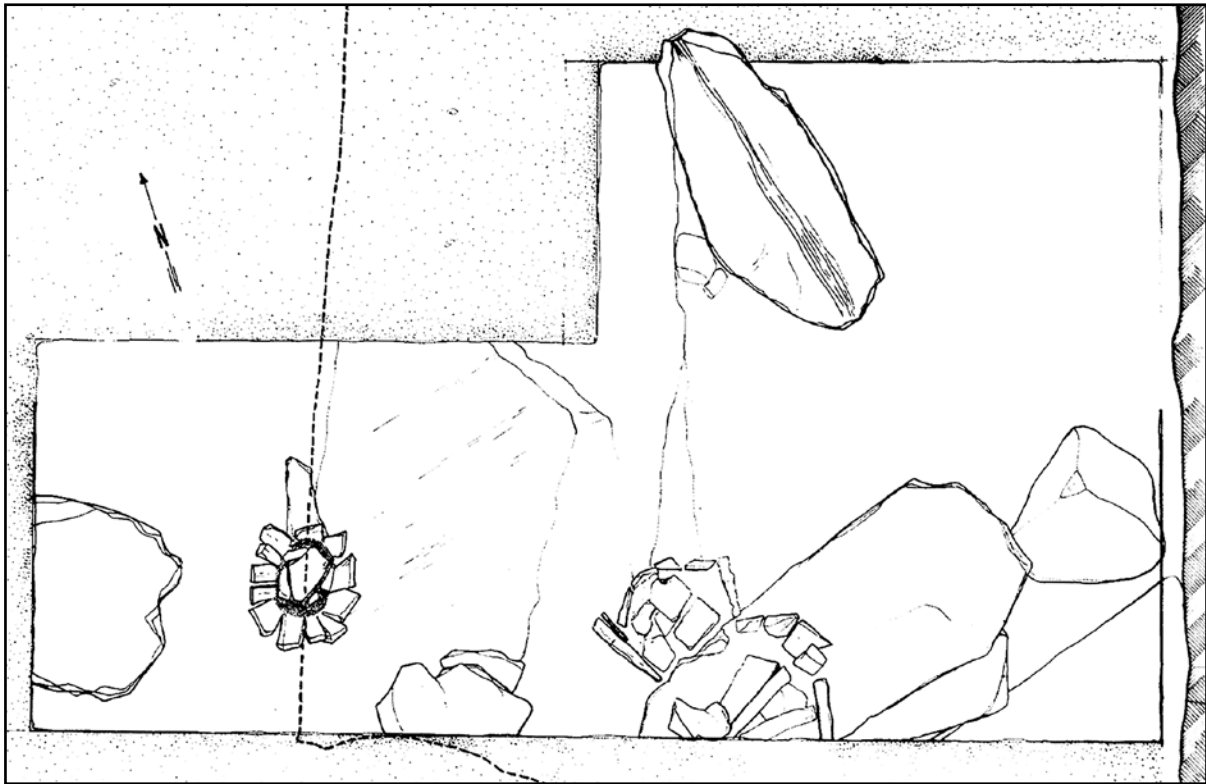
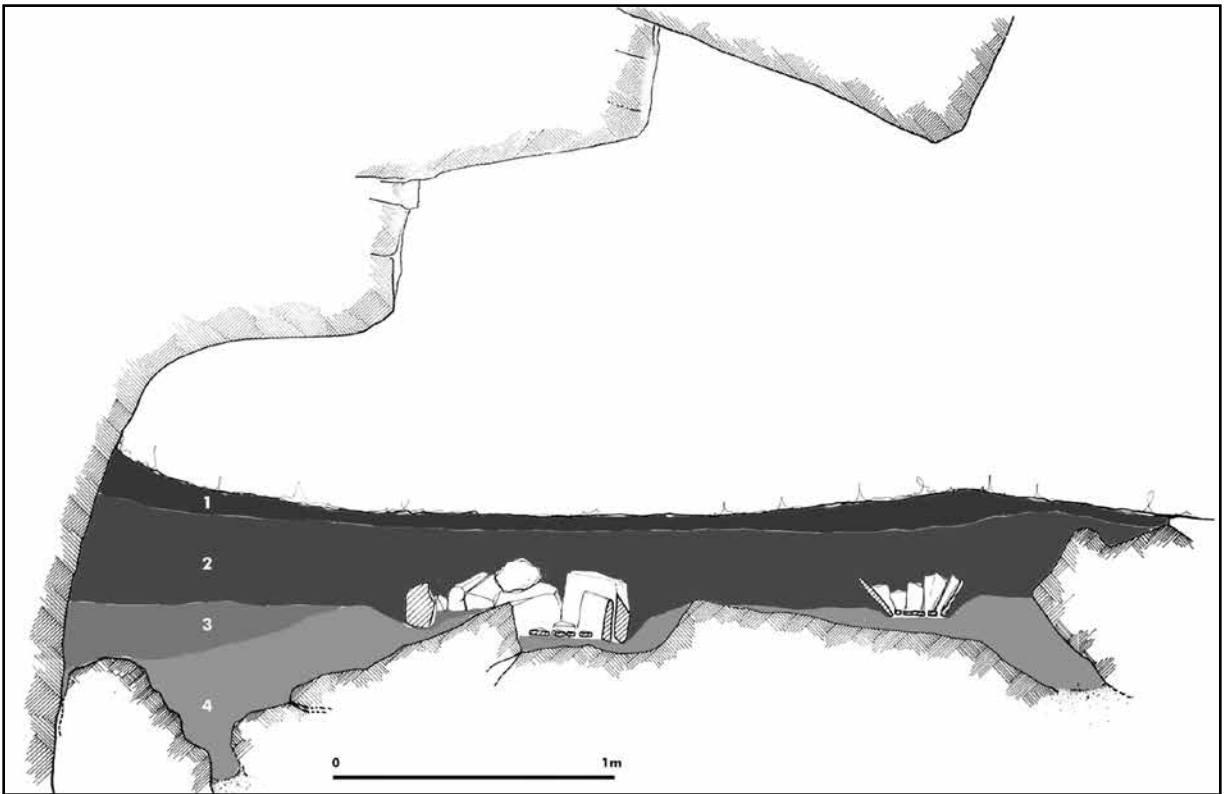


Fig. 4. Shelter II at Foppe di Nadro has been excavated from 1977 to 1979 by the CCSP with a licence from the Archaeological Soprintendenza. Several layers of human activity were unearthed, with evidence of temporary sheltering, burial and cultural events. The upper level (1977) led to the finding of circular stone structures of the Iron Age with fragments of ceramics. The following stage of field work (1978) led to a stratigraphic study of lower levels that contained finds of the Bronze and Iron Ages. In 1979, excavations continued. We found a Chalcolithic burial in the Northern area. At level 4 we found flint microliths. Three Middle Palaeolithic flint implements came from the cleaning of the terrace in front of the shelter. Sectional view of the shelter with the four layers of human activity outlined from dark to light greys; plan of the excavation; details of two fire place.



Fig. 5. Crape, r. 6, Darfo Boario Terme. Rock engraving of an elk, animal that was extinct in Valcamonica before the Neolithic. These animal figures of the Proto-Camunian Period are superimposed by inscriptions in north-Etruscan letters engraved some millennia later.

ing made up of earth and sky, time being split between day and night, the human ability to see depending on light and darkness. This complex ideology is clarified in a recent book on the origins of religions (Anati, *Origini delle religioni*, 3rd edn, 2020, Capodiponte, Atelier). It is a chapter in the history of religion which manifests itself in various localities around the globe, including in Alpine rock art.

In a later phase of the Neolithic, something new is revealed in rock art. This is a vaguely humanoid large figure, reaching a height of over 2 m, ethereal spirit or ghost, occupying central positions on rock surfaces, likely representing what was believed to be sheltered inside the rock, behind that surface that could not be crossed by the human body but could be reached by man's imagination. Men conceived of souls or spirits having a shape, in the image of the human body.

If the rock is the receptacle of the souls of the dead, the rock art may be in some cases the ground to see



Fig. 6. Foppe di Nadro, r. I, Ceto. Archaic abstractions: anthropomorphic figures and symbols. Down, three headless praying figures around a disc. Top left a praying figure next to a disc with central cupmark; in the upper right an headless praying figure next to an instrument (axe?). (Neolithic, tentative dating, fifth millennium BC). Dimensions: 60 x 90 cm.

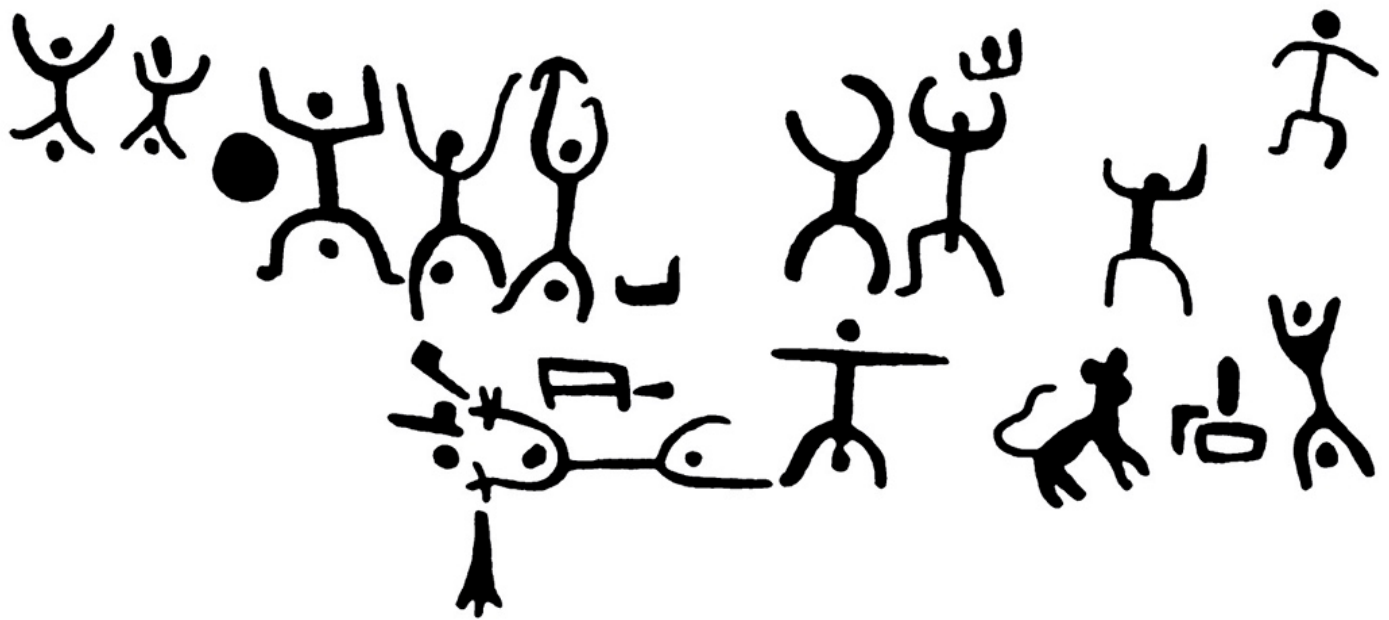


Fig. 7. Naquane, Valcamonica. Funerary scene. The horizontal figure, presumably the dead person, and most of the worshippers appear to be females. The dead is surrounded by objects which will probably accompany her in the tomb. To the right, a scene seems to describe an altar, a female worshipper and an animal possibly to be sacrificed. The image relating to the person in charge of the burial appears to be male. Above him, a male individual is accompanied by a headless figure and an image of a head-and-arms spirit. The couple of worshipper-and-headless is considered to be the split between body and soul which may indicate the presence of a shaman (Anati, 1961).

beyond and to communicate with the other world, the invisible world of the souls, behind the rock surface. Stone, the hardest element of the landscape, is not accessible to living bodies, it is the receptacle of the souls. Engraving on its surface is a way to convey messages to both sides: to the upper world of the living and below, to the hidden world of the dead.

The Chalcolithic

For most of the Alpine populations economic resources evolved towards both farming cultivation with the plough and animal rearing, while hunting and gathering persisted as important resources. In the Chalcolithic period, new conceptual entities are represented in rock art, and new shapes of rock surface are preferred, isolated boulders and rocks with natural vaguely anthropomorphic shapes. The menhir statues and monumental compositions reflect another change in the ideology of the Alpine peoples. A new feature was introduced, that of movable boulders, shelters of souls and power, in Valcamonica and Valtellina, Val d'Aosta, the Swiss Valais and Adige Valley-South Tyrol, besides the rock art on unmovable rock surfaces.

A distinctive trend evolved at Mount Bego, in the

French Maritime Alps, where a different economic background, based on cow pastoralism, originated a cult of a sacred mountain in the summer pastoral areas and an ideology relying on the main source of survival, the bovines. Metaphorical rock engravings mostly represent beliefs and practices related to the dominant image of the bucranium or schematic bull, accompanied by weapons, tools and other symbols. Some rocks display patterns related to the flowing of some liquid, probably water or blood, likely related to divinatory, magic or religious practices. This important concentration of rock art, studied mainly by the team of H. de Lumley, persisted from the Chalcolithic to the Bronze Age. In the same period the Valcamonica sequence displays similar typological and stylistic patterns, but a different ideology, without the dominant image of the bucranium.

Mount Bego developed a peculiar tribal trend. In other major concentrations of rock art, the menhir statues, vaguely anthropomorphic monoliths, are adorned by figures of weapons, tools and other attributes, displaying local facies in different Alpine areas, of an ideology that comes from outside, like older menhir statues in European regions such as the valley of the Danube river or the

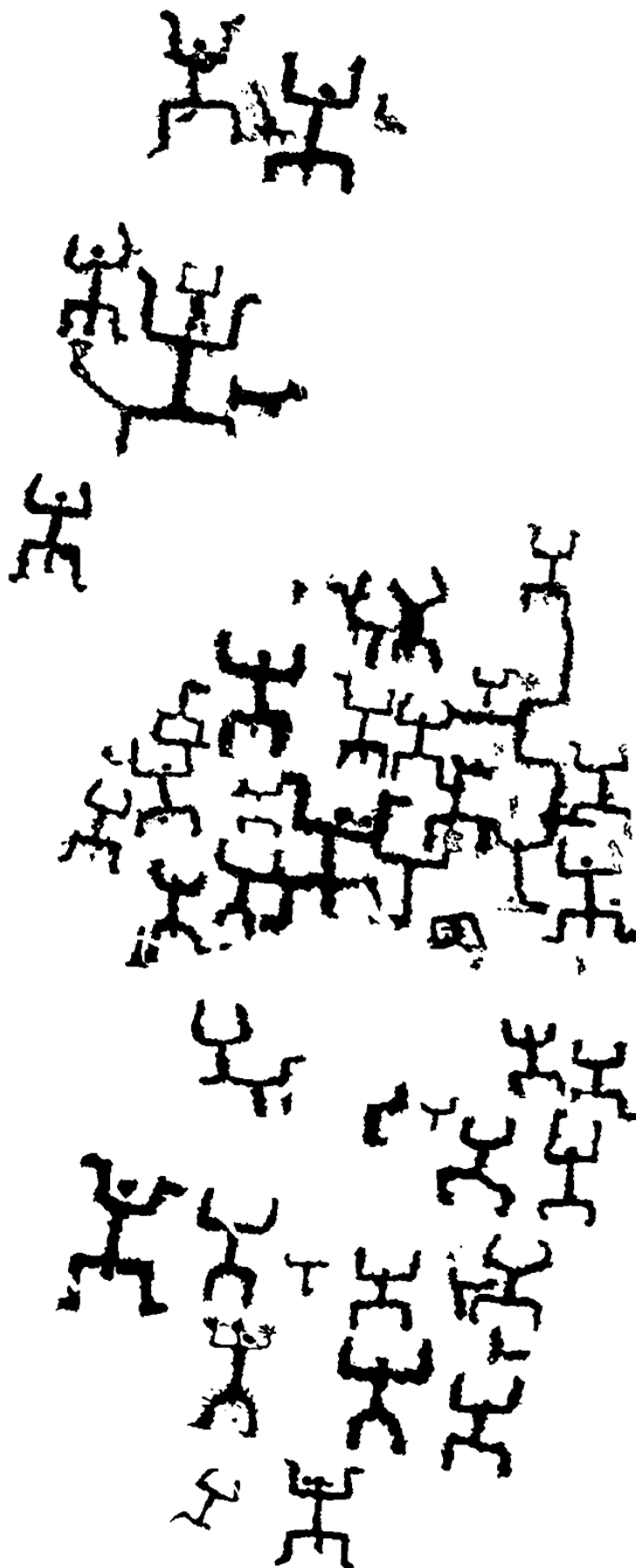


Fig. 8. Naquane, r. 50, Capo di Ponte. Tracing of a composition of schematic anthropomorphic figures of the final Period I or Period II A. Several couples of human figures can be seen: one headless and one with head. Lower left is a figure with large hands and rays issued from his body. The last figure at the bottom seems to wear an animal mask.

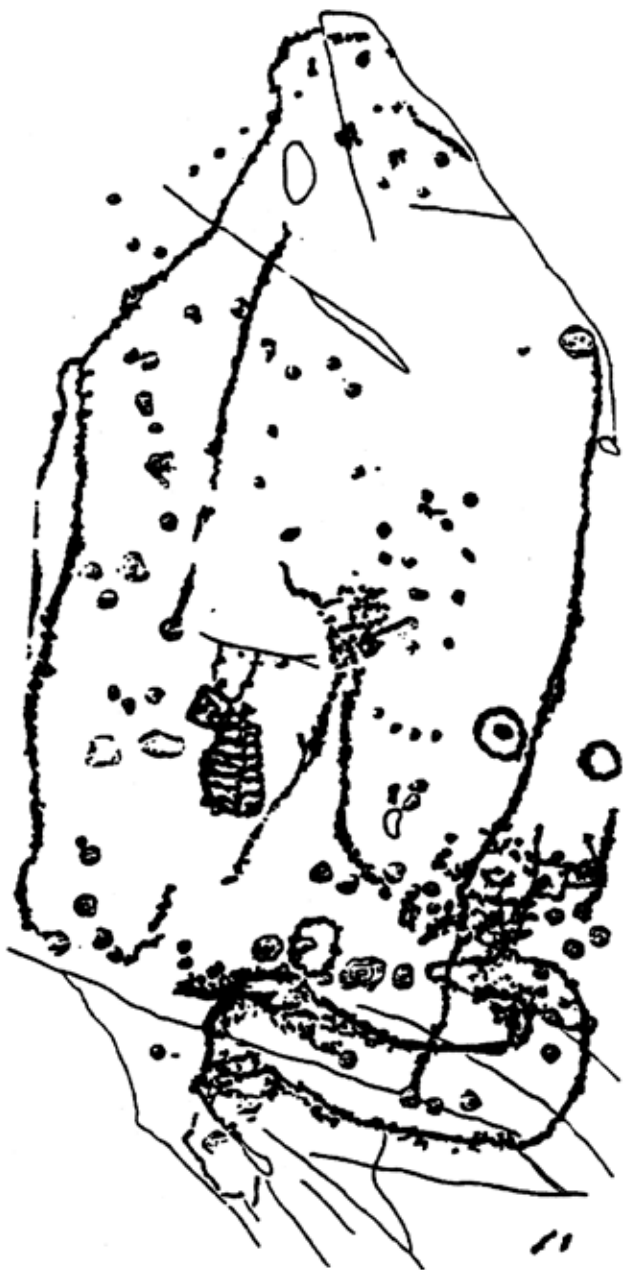


Fig. 9. Luine, r. 34-A, Darfo Boario Terme. Proto-Camunian deer or elk and the great anthropomorphic figure (more than two meters in length) from the end of Period II. The vertical lines of the anthropomorphic figure overlap the animal, crossing its horns, snout and back. Above the deer one can see a scutiform next to a smaller, squared figure. The scutiform is decorated with seven horizontal lines bisected by one vertical line and appears fresher and more recent than the great anthropomorph. The stratigraphy of this group indicates: first phase - deer or elk; second phase - large anthropomorphic figure; third phase - scutiform and small rectangular sign: the numerous cupmarks are later than the anthropomorph and in several cases overlap it.

European Atlantic coast (both areas of early seafaring). The menhir statues represent the cult of anthropomorphic supermen, or super-spirits, a religious movement that penetrates into the Alpine zone combined with the cultural revolution related to the diffusion of metallurgy. Various innovative concepts and materials seem to come from different directions but all indicate intensified international relations.

The probable common denominator of various innovations is the development of economic activity that will later mark the destiny of Europe: trade imposing markets and contacts. Trade causes the dissemination of ideas and beliefs. And these follow local variety. The need of communication overcomes the easiness of isolation. Communication and cultural diffusion result in the penetration of new ideas and fashions.

The menhir statues and the monumental compositions engraved on rock surfaces represent images of supernatural entities, often covered by figures of weapons, tools, jewelry and more, likely to be metaphors of their powers and qualities. Images appear to be allegories: following ethnographic similarities, a dagger may signify powerful, seven daggers can mean seven times powerful. Spectacle-spirals are a symbol of fertility, six of them signify six times fertile, or very fertile. The so-called carpet pattern of a rectangle, sometimes with fringes, covered by parallel lines or a chessboard pattern, may have a double meaning, that of territory and that of the ceremonial coat of the shaman or leader, meaning lord of the territory. Figures of cervines and other animals may signify lord of the animals or lord of plenty.

As analyzed in *The Rock Art of Valcamonica* (Atelier, 2015), the menhir statues of the Alpine region signify a peculiar concept. The anthropomorphic prototype of the ancestral soul assumes a cosmological identity: roundish heads are the sky; the rectangular body represents the territory; the lower part of the body, often triangular, is the underground or the world of the dead. The three basic geometric shapes are symbols of three parts of the universe: heaven, round; earth or territory, square; and the underworld, triangular.

It appears as a sort of geometrical synthesis of the three elements that make up the world: sky, earth and underworld. Together they form a body similar to that of humans. The previous binary concept of life and death, of society and the world, is now replaced by



Fig. 10. Borno. Schematic tracing of face n. 1 of boulder I. It presents on the same surface an almost complete iconographic repertoire of menhir-statues. This composition is the result of additions in at least four phases. In each phase symbols were represented that reflected the ideas and trends of the moment, of a particular school or a given holy man.

concept of the trinity. The world is no more just earth and sky; a third element, the underworld, is added. It is a complex spiritual concept that sees the entire world acquiring an anthropomorphic shape and becoming the object of worship.

The body itself of the cosmological being becomes the incarnation of the spirit of the universe. In some

monumental compositions, the three parts appear also separate, side by side or associated as autonomous entities. It is a symbolism similar to that of the giant Purusha in Indian mythology that manifests itself in Sanskrit scripts and images over a millennium later.

As already mentioned, these Alpine menhir statues are offspring of earlier ones from other parts of Europe. Anthropomorphic statues representing spirits of the Neolithic, legendary ancestors, or heroes of mythical epics, indicate the spread of a new religion acquiring different characteristics in different parts of Eurasia, from the Atlantic coast of Spain and France, to the heart of China. Various ethnic groups create their own patriarchs or supermen. In this age most people needed leaders stronger and more powerful than those they had on earth in their daily life.

In the form they acquire in Alpine areas, they are the oldest evidence of the tripartite concept that anticipates or conceives of the Indo-European vision of the world and its successive derivations, from the Giant's Purusha, the father and creator of the universe, identified with the universe itself, to the tripartite concept of Indo-European society intuited by Claude Lévi-Strauss, to the divine trinity of Christianity. The age of these concepts in the Alpine area in the third millennium BC, may indicate that the Alps are the nest of an ideology which later evolved and dominated Europe and beyond.

Surprisingly, this case is somehow aligned with the biblical concept that sees the desert, the uninhabited space, as an incubator of prophets: "The prophets come from the desert." Here it seems that prophets came from the mountain, another space dominated more by nature than human crowds.

Each Alpine rock art period is a chapter of history. It is a history to be rediscovered, a history concerning the entire continent and beyond. The conceptual adventure illustrated by the menhir statues, their essential concept, their diffusion and their local religious factions may have been a significant trend in the formation of European cultural identity.

The Bronze Age

The Chalcolithic cosmological entities were stone images with an anthropomorphic face and a virtual body having images of weapons and objects as metaphors of attributes. In Bronze Age rock art there fol-

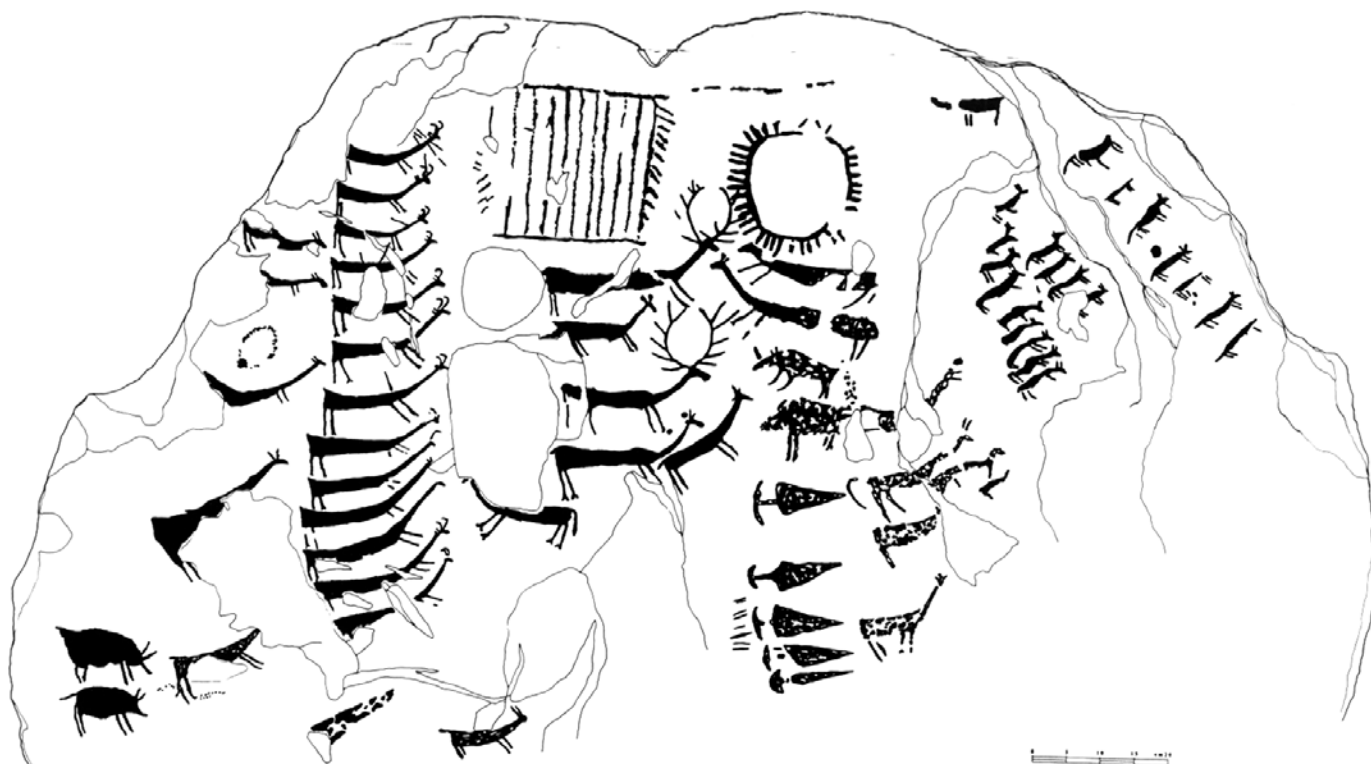


Fig. 11. Menhir-statue Ossimo 7. Tracing of the engraving on the boulder. The circular radial element, called solar disc and defined as an astral symbol, and the rectangular element, called 'priest cloak' or 'small carpet' and defined as a sign of territory, are interpreted as a symbolism of sky and earth. Animals, daggers, and other graphemes were added at various subsequent phases as attributes or votive items.

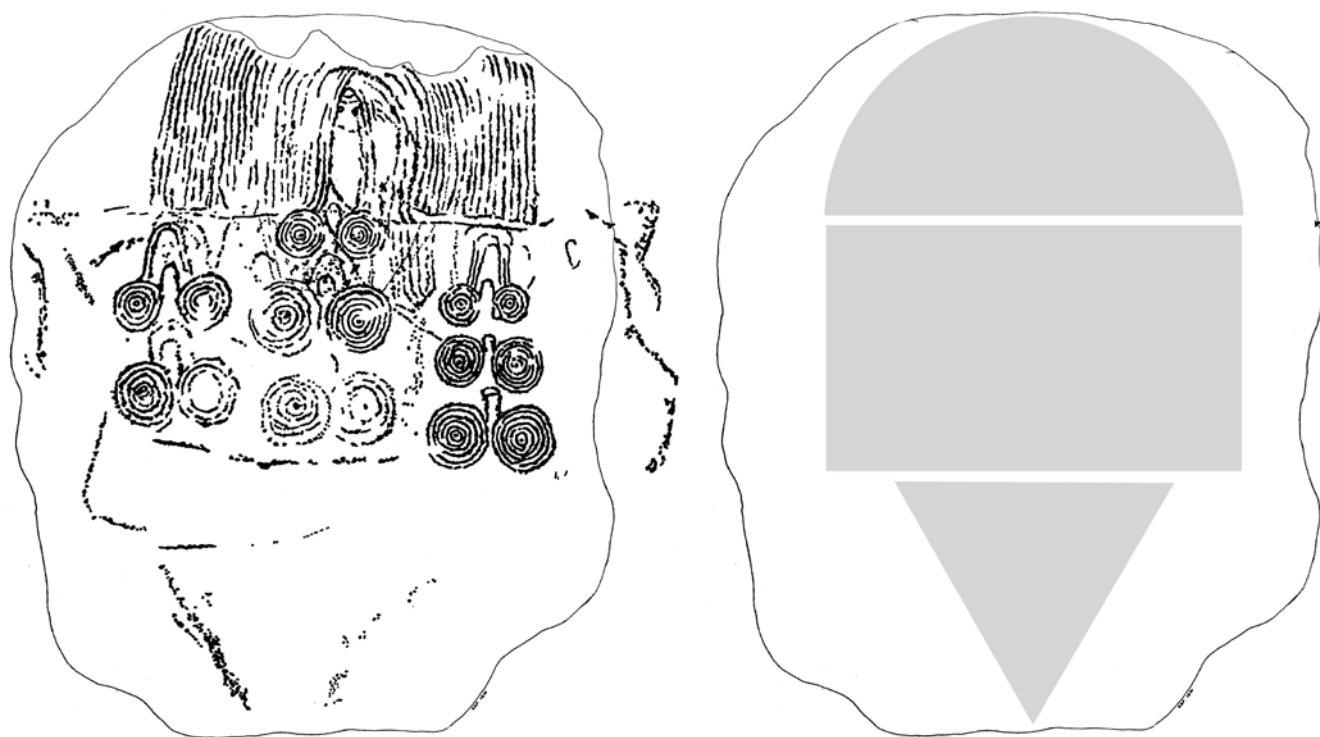


Fig. 12. The Boulder Ossimo I. An erratic boulder with a rounded and smoothed form was chosen as a divine body; man has engraved on it the soul, life, and the attributes of the represented entity. A kind of lunar face is centrally located in the sector at the top. Below the motif of spectacles-spiral pendant, fertility symbol, is repeated eight times. The iconography is subdivided in three sectors. The one at the top has a kind of aureole of parallel lines around the face, the central one has the spectacles-spiral pendants, and the one at the bottom has a pubic triangle. On both sides some lines may indicate the arms of the anthropomorphic body.

lows a period in which the dominant theme is weapons and objects presumably with miraculous powers. In a process of sublimation, the attributes evolved into the dominant subject and the cosmological entity became the lord of weapons, a mythical blacksmith. It is likely that some of the Germanic mythology derives from concepts born in the Bronze Age. Attributes became subjects. The objects and weapons, which extolled the qualities of the cosmological entities represented by the menhir statues, acquired autonomous faculties. Weapons and manmade objects acquired independent powers. The mystical “sword on the rock” or the divine axe of command became mythicized magic powerful tools. Man tends to deify his own creations.

Since then the trend of attributing miraculous abilities to human inventions has never been abandoned by human ambition. The manmade machine which became the lord of its maker is, strangely enough, a human ambition. This Bronze Age inclination still survives. Cult phenomena, real or virtual, still include invincible weapons that are replaced and surpassed almost every day. The first metal axes or daggers represented in rock art were invincible compared with previous similar stone tools, but then the efficiency of copper weapons was surpassed by those in bronze, which in turn, later, were overtaken by those in iron, which in turn were overcome by steel ones, which in turn were overcome by new alloys. And each stage of the innovations is presented as miraculous. The concepts concerning miraculous objects are still widely evident in modern advertising and promotion as miraculous knives, miraculous medicines, miraculous mechanical masseuses and even miraculous kitchen or gardening tools. This trend is probably a vice that we carry with us at least since the Bronze Age.

In the Bronze Age, with the development of metalwork, trade relations further expanded. The Alpine mines produced metals and other raw materials, artisans and merchants made up the rest. Exotic forms of weapons appearing in rock engravings had wide-ranging similarities, from Greece and the Mediterranean world to the Scandinavian countries. In the same period, precious amber from the Baltic is found in archaeological excavations in Greece; most of it had to cross the Alps. The trade left its traces in the Alpine valleys and introduced exotic goods and ideas.



Fig. 13. Luine, r. 38, Darfo Boario Terme. Composition of weapons that form a vaguely anthropomorphic image. At the centre, three axes are arranged to form two eyebrows and a nose. On the left hand side, a lance, a small dagger and a scutiform appear as the weapons or the attributes on the entity that emerges from the rock surface, a mythic hero with his image made of weapons.

The Iron Age

In the Late Bronze Age, the rock art of Valcamonica includes images similar to those on the pottery and bronze objects of the Urnfield culture of Central Europe. Shortly after, in the Iron age, Italic elements display the extent of relations with peninsular cultures, along with the persistence of relations with the other side of the Alps. Trade is likely to be the main cause for cultural diffusion. In the Late Bronze Age, it was focused mainly on Central Europe. In the Iron Age there is an increase of contact with Villanovan and Venetian regional areas of Italy. This may well indicate a trend of new vigor and expansionist tendencies of North Italic cultural entities, perhaps also new trends in their stronger sociopolitical structure. New ideologies are expressed by thematic changes in

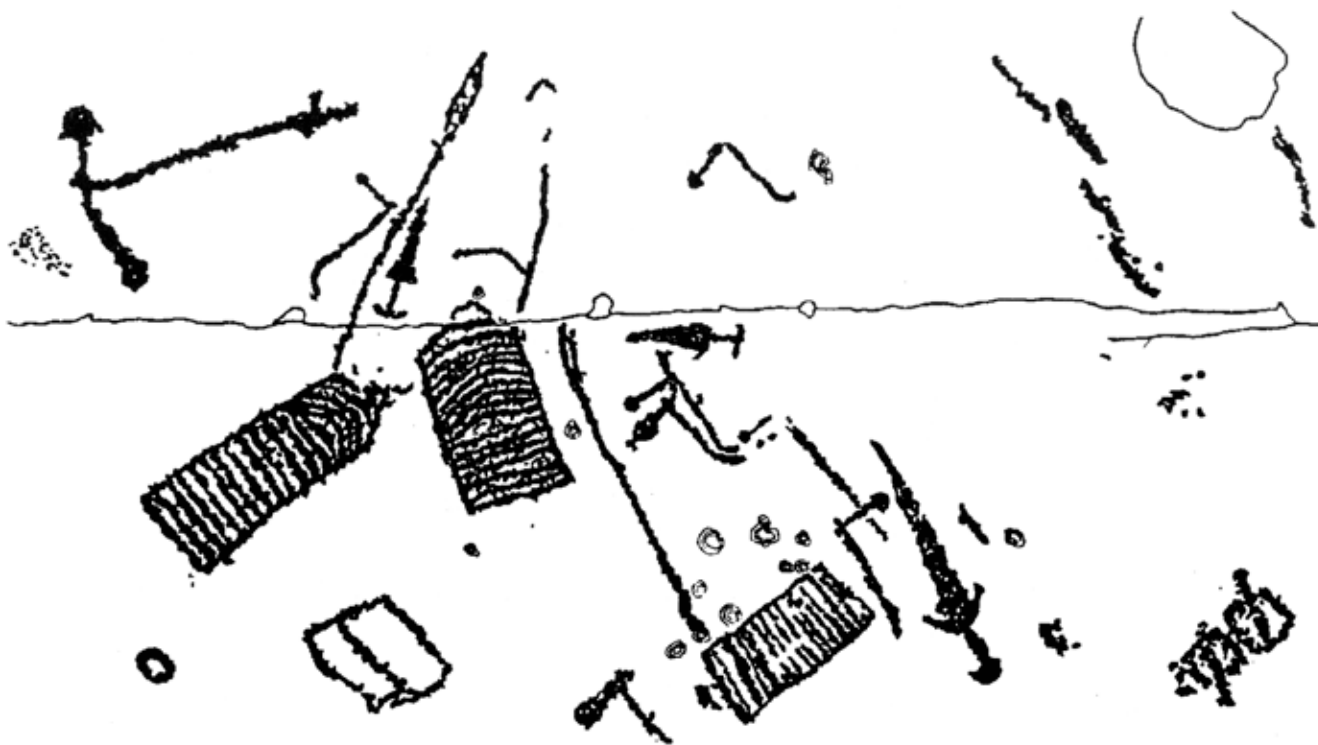


Fig. 14. Luine, r. 34, Darfo Boario Terme. Large composition of scutiforms and arms: battle axes, spears and daggers. Period III B-C. Dimension: 1.80 x 0.90 m.

the rock art. The images illustrate new concepts and interests and become much more diversified. The horse becomes a symbol of prestige. Fighting scenes become a dominant theme. Some may reflect actual warfare, others appear to be fighting games or ceremonial performances. In any case they represent a new trend of thought and concern. Ceremonies include processions and the presence of ritual wheeled wagons drawn by horses. Some scenes seem to depict sorcery and witchcraft, a new theme that appears in rock art. Also, erotic scenes introduce a new kind of society. The rock art illustrates a consistent cultural renovation, probably due, at least in part, to contacts and influences from both sides of the Alps. Gods are replacing ancestors and spirits: imported beliefs are producing new religious tendencies, from ancestral worship to the introduction of gods and polytheism. The typology of the subject matter of rock art becomes much more varied. On the whole, we note clear laicization. Religion is no longer the dominant theme.

Changes in the typology of rock art imply social evolution. The cult of ancestral spirits is a vision of the natural and the supernatural in tribal societies where

authority relies on the elders. The divinities, kings and princes of the earth and the sky imply the existence of kings and princes in the reality of society, thus a society having concepts of leadership. The size and structure of society may have undergone a significant change.

The divinities imported from the proto-Celtic world and concepts from the Italic Villanovan and Venetian cultures, drastically modified the ideologies of the Alpine tribes. This sort of cultural revolution is related to broad social changes. The commercial expansionism of the Italic tribal societies is probably related to the development of some sort of chiefdoms which evolved into small kingdoms. Manpower became easily available to the new aristocracy. Trade became a major economic source. Alpine metal ores and blacksmiths benefitted from the trend.

In this context the influence of Etruscan culture reached the Alps. The Valcamonica rock art displays the strong influence of Etruscan trade and culture. Etruscan tools and weapons, shields, costumes and garments represented in the rock art are the expression of some sort of economic colonization.

Etruscans appear to be responsible for the intro-

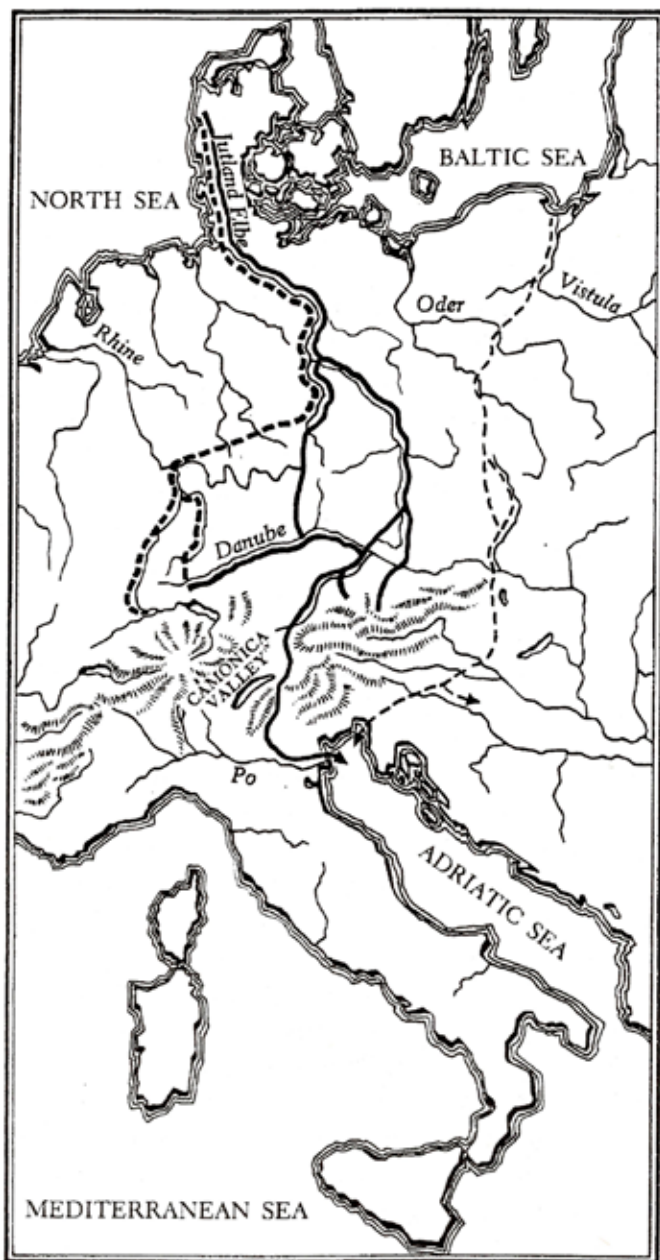


Fig. 15. The 'Amber Road'. The continuous line indicates the route during the Early Bronze Age; the heavy broken line, that of the Middle Bronze; and the fine broken line shows the route of merchants during the Iron Age. These ancient roads have been reconstructed on the basis of finds of Baltic amber in archaeological strata.

duction of writing. Over 100 items of writing in the Etruscan alphabet are recorded in Valcamonica rock art and pottery, and a good number also in Valtellina rock art, where Etruscan letters are applied to the local language or dialect. Celtic, Raetic, Venetic and other cultural elements made the Alpine area a melting pot. Metal ores and metalwork were the main causes of the development of trade. The process of cultural inputs

from different sources may be responsible for the fact that fighting and warfare became the main themes both in rock art and daily life. Intertribal fights and local disputes became the main interest of the rock art makers. The worship of heroes and their deeds is illustrated by numerous images.

In the Late Iron Age, the Alpine valleys were no longer peripheral or marginal areas but had become thoroughfares for the trade and industry that would form the destiny of Europe. The industrial revolution probably started 2,000 years before traditionally established dates.

In the Iron Age the Alpine area appears as a kind of sponge absorbing different sorts of concepts. Rock art shows religious beliefs changing incrementally. The story the rock engravings tell us reveals an unexpected and surprising fact: the fickleness of worship. Apparently, religions changed as fast as politics. Markets traded both goods and ideas. Probably chiefs were also religious leaders, or religious leaders were also political chiefs.

The history of religions in an Alpine valley

The repertoire of beliefs revealed by rock art is a fundamental aspect of this story, which is revealed by pictographic recording. The animistic cults of hunters, the large animal figures from the Proto-Camunian period emerging from the rock surface were the icons of worship. Like among other hunting populations, hunters kept up a dialogue with the souls of the hunted animals. And these souls were believed to find their shelter inside the rocks. The rock was the body of the souls of dead people and dead animals. The preys, providers of food, were worshipped.

Changing resources and economies, incipient farmers and food gatherers practiced solar cults and ancestral rites. The sun was the generator of the life and growth of plants and all other living subjects. Then, toward the end of the Neolithic, large ethereal spirits, vaguely anthropomorphic figures bigger than humans, appear on the rock surface. The concept has not changed; the rock is still the receptacle of the souls of ancestors and spirits, but these spirits acquire new shapes and sizes. Then a new concept is reaching the area. In the Chalcolithic period, these large vaguely anthropomorphic images gain a three-dimensional shape. Individual boulders are completed by human hands to acquire their features. The menhir-statues have human attri-



Fig. 16. Foppe di Nadro, r. 24, Ceto. Partial tracing of a large cluster of huts. Each one having a different shape.

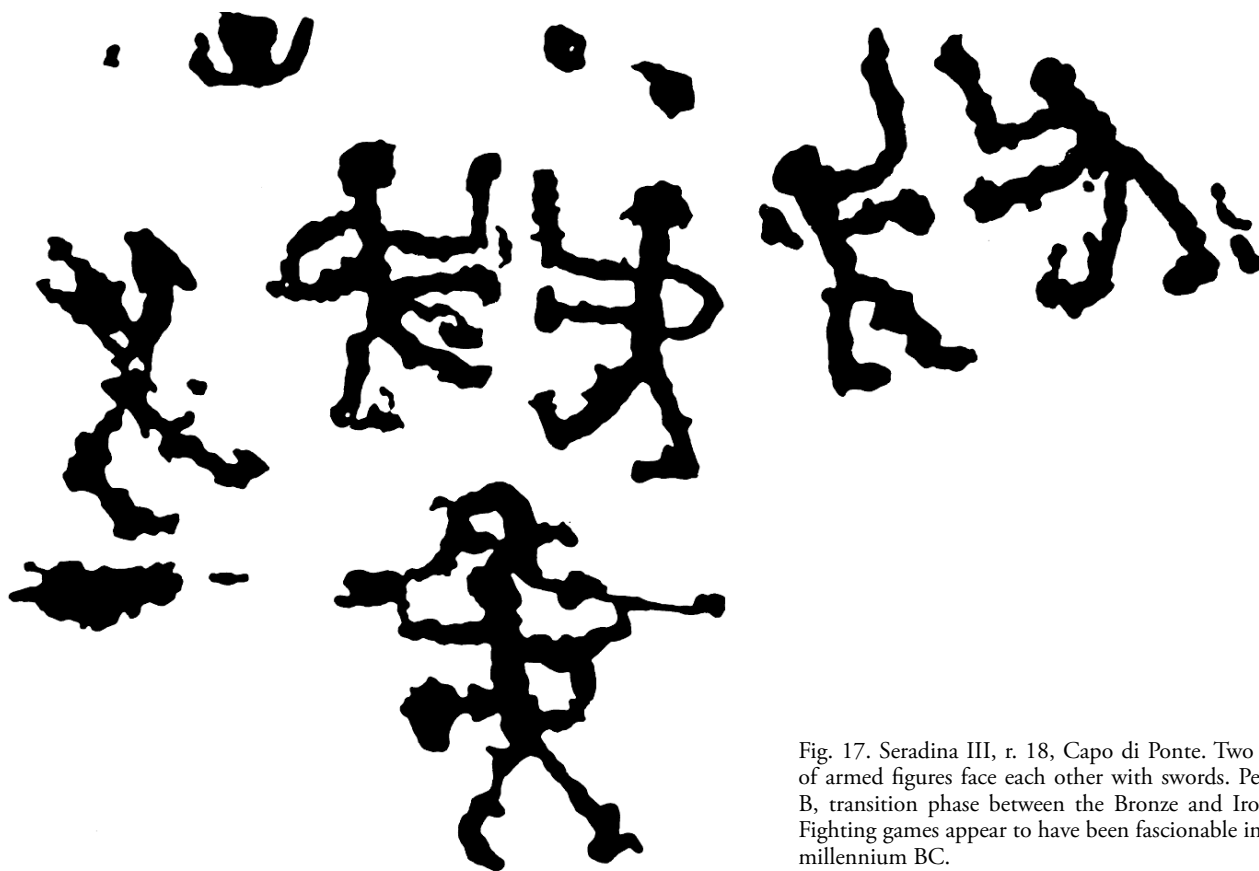
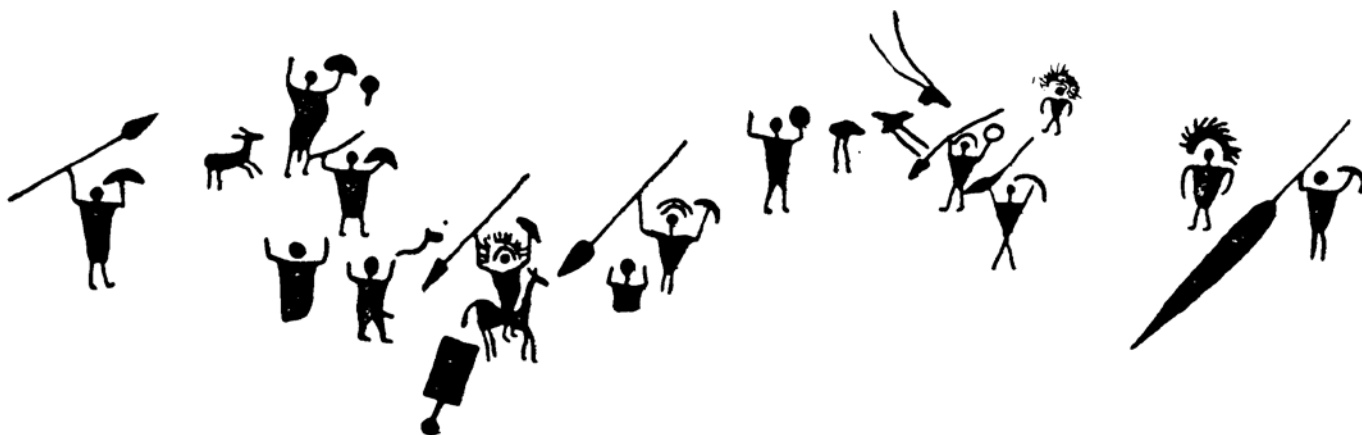


Fig. 17. Seradina III, r. 18, Capo di Ponte. Two couples of armed figures face each other with swords. Period IV B, transition phase between the Bronze and Iron Ages. Fighting games appear to have been fashionable in the 1st millennium BC.



Figs. 18. Naquane, r. 1, Capo di Ponte. Tracing of the scene called 'the procession'. The individual tentatively defined as the chief is the only one riding a horse, carrying warrior's weapons, and wearing the head piece of priests. At the bottom, the mysterious symbol of the paddle seems to indicate a magic or power attribute. The figures of bust without the lower part of the body in several cases are likely to represent protecting spirits.

butes but they are not human. They have stereotypical traits, male, female or androgynous, and the stone receptacle is decorated with figures of tools, objects, jewels and symbols metaphorically representing attributes. These menhir statues were positioned in sanctuaries, sacred assemblages of mythical ancestors.

A relevant event is the shift from the Neolithic binary view of nature to the tripartite concept of the universe of these icons, illustrating a revolutionary cosmological reli-

gion. It is likely that a theocratic oligarchic regime ruled in the Chalcolithic period and allowed the construction of numerous complex sanctuaries. Then, this religion and this regime dissolved. In the Bronze age there is a separation of the cosmological concept and related icons. The cult of weapons and their magic powers marks a new period, inspired by the rising success of metallurgy. Cult expressions developed in the Iron age worship of local deities and mythical heroes, evolving into polytheism,

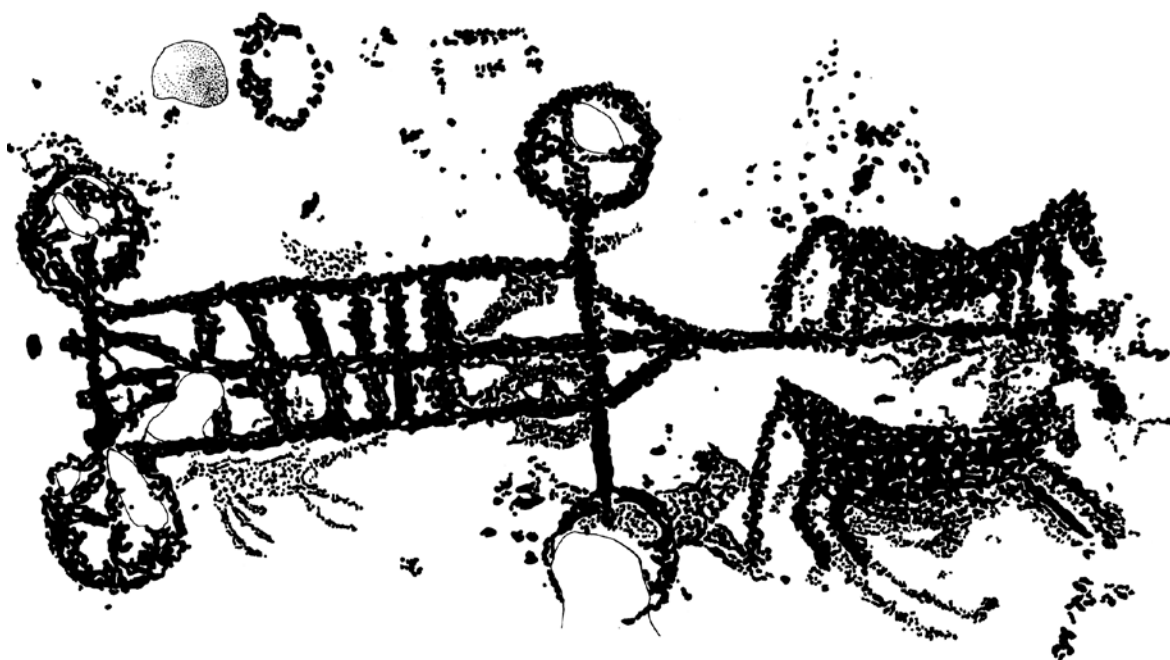


Fig. 19. Naquane, r. 23, Capo di Ponte. Tracing of a four-wheel wagon pulled by two horses; this figure is superimposed upon earlier animal figures. Period IV C (Early Iron Age).

probably favored by influences from other ethnic groups. And the heroes and divinities changed frequently, probably from generation to generation, emphasizing each time the most fashionable myths and heroic supermen. Rock art gives us 10,000 years of dynamic spiritual and intellectual adventures and beliefs in search of a never-attained knowledge of the forces that determine the life and destiny of men.

In 16 BC the Alps became part of the Roman empire. Culturally, the Iron Age persisted, despite the fact that history indicates the beginning of the Roman period. The Iron Age carried on in the minds of people, but the regime changed, new laws were imposed, the tribal period came to an end, and Roman divinities replaced the local gods.

The Romans defeated the Alpine gods and introduced

their own pantheon, accompanied by their beliefs and cults. As usual, religion reflects the pattern of society. Tribes had evolved into a small nation, and then the small nation became a small part of a province of the Roman empire. The rock art sites lost their function and the persistence of engraving on rocks became more folklore than cult. Only a few centuries afterwards the mighty Roman spiritual expressions were replaced by crosses and other symbols and figures revealing the next stage of monotheism with the spread of Christianity.

Religion seems always to have been an important element in Alpine culture, amply illustrated by the rock art, all the while beliefs and cults were constantly modified. The need to believe is always present but the object of belief is variable. This rule is not exclusively Alpine.

It reiterates a cultural principle relating to knowledge and belief: knowledge accumulates and grows, beliefs modify and change. The story of religions in Valcamonica is instructive.

Rock art also reveals issues that are amply discussed elsewhere: the evolution of technology with images of innovations, such as the bow and arrow, the plow, the wheel and the wheeled vehicle; the evolution of metallurgy with new weapons and tools represented in each period; new economic resources such as the introduction of domestic animals; the evolution of social differentiation with the emergence of categories of blacksmiths, warriors and merchants. It also tells us about social evolution, from the first clans of hunters to the tribes, till the formation of the Camunni nation that the Roman legions of Publius Silo met on their arrival, to a capital city of the Camunian nation that the Romans named Civitas Camunnorum.

Cultural diffusion and introversions

Rock art is a big comic book that tells us the story, not only of the Alpine area but, through it, of Europe. Through rock art the Alps and in par-



Fig. 20. Valcamonica rock art. Zurla, r. 70, Ceto. Tracing of the Celtic god Kernunnos, characterised by his deer horns, his torques, and his serpent. During the Late Iron Age, elements of the Celtic culture of La Tène penetrate into Valcamonica. Images of gods such as Kernunnos and Taranis are represented at Naquane, Campanine and Paspardo.



Fig. 21. Seradina S. Rocco, r. 1, Capo di Ponte. Rock art of the Iron Age reveals many aspects of mythology. In this tracing, two human figures, accompanied by their tutelary spirits, are fighting against two evil spirits.

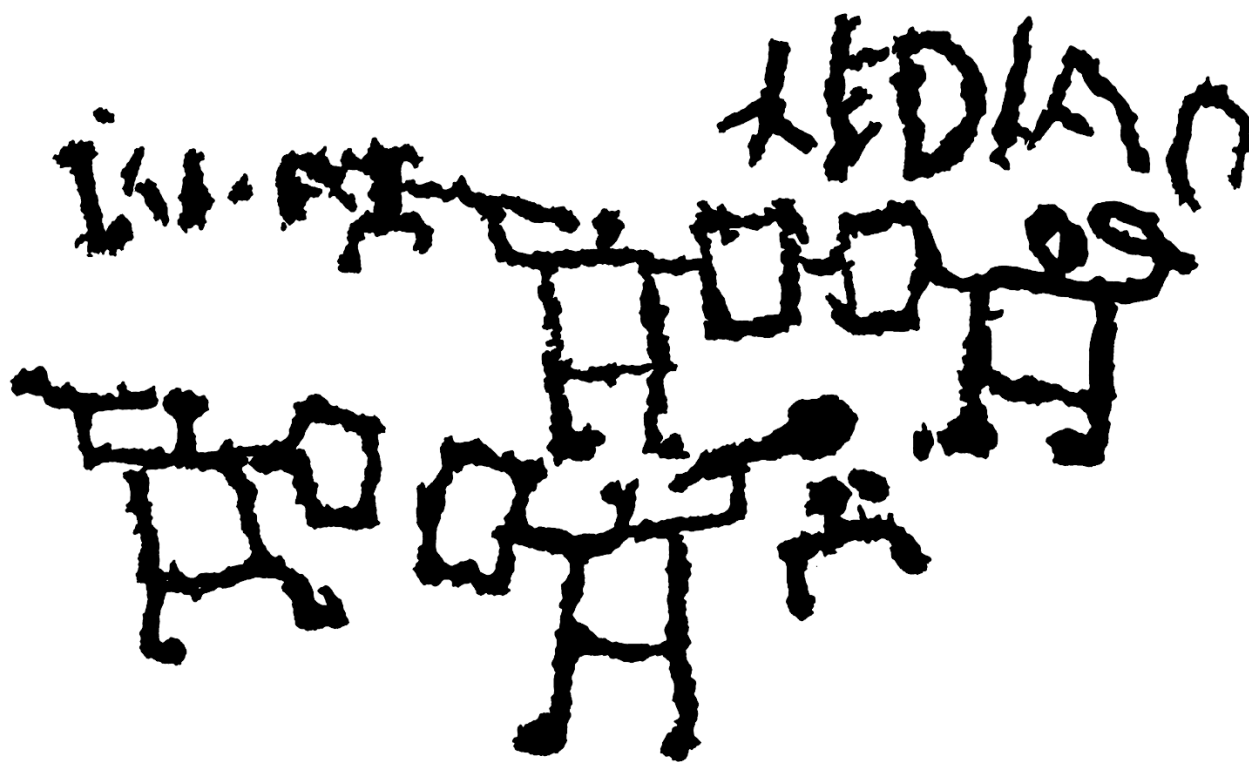


Fig. 22. Seradina I, r. 6, Capo di Ponte. Warriors with square body face each other and are accompanied by an inscription with Northern Etruscan letters, apparently copied backward by a Camunian artist who could not read it. Period IV F.



Fig. 23. Luine, r. 13-B, Darfo Boario Terme. Figure of horse and rider in a style that indicates an influence of the Roman period. Post-Camunian Period. Period IV F (Late Iron Age: after 400 BC).

ticular Valcamonica offer Europe the history of what until yesterday was prehistory. Cultural diffusion phenomena occurred in two directions: influences that came to the Alps from other regions, and Alpine roots of cultural innovations that spread to other regions. Inside the Alpine area, the various groups of rock art, from Mount Bego to Val d'Aosta, Valcamonica, Valtellina, the Adige Valley and beyond, had different pre-Roman local rock art styles and different ethnic identities, but to some extent a similar cultural and spiritual background. In most sites, the duration of the production of rock art was limited to specific periods. The entire sequence of periods and phases is so far limited to Valcamonica: a source for a new history of Europe 10,000 years long.

The advent of Rome and Romanization, and later still the diffusion of Christianity, merely confirm the traits of characters that emerge from previous episodes: the succession of external influence. There is an apparent contradiction between the repeated outwards recep-

tivity and the notorious closed and introverted attitude of the Alpine populations.

In later events there are historical documents, although not overly lavish in news, but confirming the acculturation processes. But for the periods before the influence of Rome, the vast majority of the information is provided by archaeology and rock art in particular. A peculiar fact emerges from the data available. We may assume that external influences and the resulting acculturations were essentially religious and conceptual. When the Romans came, the Camunni people together with their rock art shrines and their deities were neutralized, but the actual people did not change, there was no an ethnic cleansing. Christianity again did not change the population, but only deities and worship. Churches sprang up on the ruins of the ancient shrines.

Previously, in major events such as the introduction of the menhir statues or the phases of the Etruscans and Celtic influences, innovations were primarily concep-

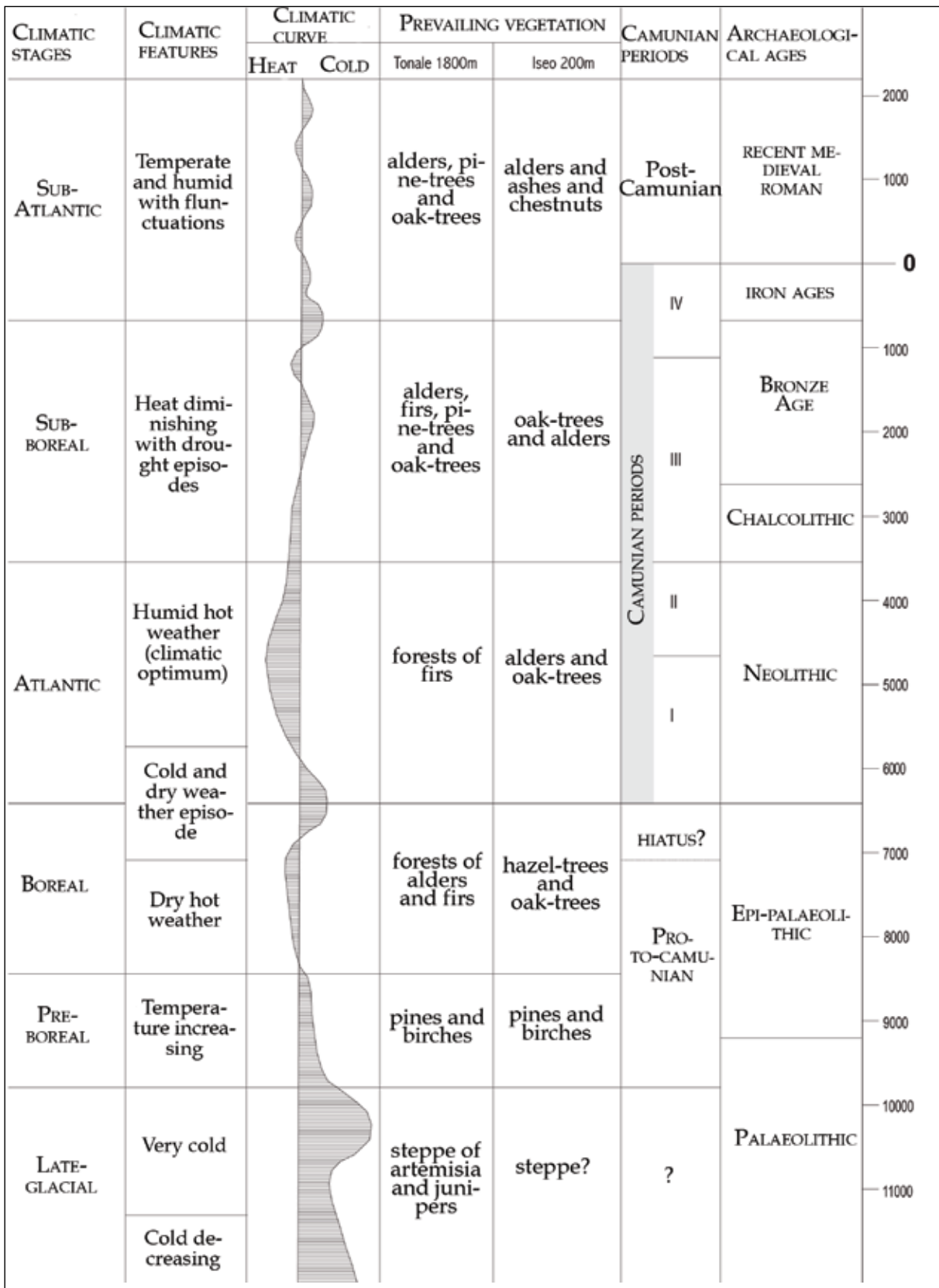


Fig. 24. Table of climatic variations that occurred over the last 12.000 years, as established by pollens, geological stratigraphy, and granulometric examinations (research carried out by A. Horowitz, 1974). Note: the chart was produced in 1974. The absolute datings of archaeological periods reflect the then standard view. Minor changes may have taken place since.

tual. Trade imported ideas. It seems that the impact of religious influence was paramount, while economic and social developments were more gradual, with conservative characteristics and maintenance of an introverted way of life, tribal, typically Alpine, although with frequent external influences that favored cultural innovation and trade.

The main changes were caused by new faiths: some had large-scale success, far beyond the Alpine region, as illustrated by the menhir statues. Their arrival in the Alps is a result of cultural diffusion. Their conceptual development in the Alps led to their becoming the first evidence of the tripartite concept that became the core of Indo-European ideology. Etruscan influence caused the development of trade, the introduction of writing, the acquisition of a new style of rock art, and new mythological concepts as illustrated by the rock art. The Celts introduced new divinities. The fast changes in style and subject matter in rock art seem to indicate that all spiritual adventures were fast developing. New aspects of faith likely reflected the search for truth, a search that continues to dominate the cultures of all times, a sign of the human spirit that never stops.

The big question is who are the people of the Alps. A unique population or different peoples? An aboriginal population there since the first arrival of human beings, or have ethnic changes taken place over thousands of years as a result of migration or the arrival of new human groups? It looks as if the ethnic story is more complex.

Yesterday as today people come and go. Major ethnic changes are likely to have taken place in at least two instances, as revealed by drastic changes in the iconography and in its conceptualism. One is the transition from the pre-Neolithic animal style to the Neolithic anthropomorphic style: If, as it seems, there was a hiatus between these two periods, an ethnic change is likely.

The other is the transformation of rock art style and subject matter at the transition from the Bronze Age to the Iron Age, from the worship of ancestral spirits to the birth of the gods, chieftains and tribal antagonisms as depicted by fighting scenes as the dominant theme. However, it is unlikely that a total ethnic change took place in this case, as no gap in the record is detected.

On the other hand, some traditions, such as that of

producing rock art, or the persistence of maintaining specific sacred areas for the production of rock art, seem to indicate a multimillennial continuity.

Alpine culture and even an alpine ethnicity are often spoken of. It is conceivable that the arrival or departure of individual people, families or even clans has been a slow process, and the purity of a local ethnic group or race is questionable. Surely, if one can speak of an alpine race for some cattle species, it does not seem realistic to do the same for humans.

Today the Alps are populated by many different ethnic groups, and people of Alpine origin are spread all over the world. Even in the diaspora, the Alpine populations keep their identity. They meet in Alpine and even Camunni clubs, maintain their preferred saints, their preferred food recipes and their traditional festivities, in Melbourne and Perth in Australia and Vancouver in Canada. Newcomers settle down in the Alpine valleys, both Europeans and non-Europeans. Messages in exotic languages concerning births, marriages and deaths are written on paper and bulletin boards, but not on rocks.

The Alpine populations have received a fundamental aspect of their character from the natural environment in which they live. The cultural geographical entities, today as yesterday, are the valleys. Every valley still has its identity and peculiarities. As in other mountain areas, cultural entities are the areas accessible in a day's march. Beyond the mountains there are different realities. Until 50 years ago, going to another valley, over the mountains, meant going abroad, even if remaining in the same provincial administration area. Each valley has its local social framework, within which the same dialect is spoken, most of the weddings and cultural exchanges take place, the traditions of everyday life are preserved, and the traditional festivals are now dedicated to patron saints, whereas yesterday they were dedicated to the local deities and before that to the ancestral spirits.

At least since the beginning of the metal ages trade in mineral mining products and other natural resources has pushed the Alpine valleys towards external contacts that determined economic development and the absorption of external cultural factors. In times of increased border closures due to climatic, ethnic or political reasons, yesterday as today, trade became smuggling. In recent centuries it has been considered



Fig. 25. Dos dell'Arca, Capo di Ponte. Inside a thick megalithic massive wall, a hill-fort includes some huts and a large space for farm animals. The structures with stone basements at the top of the hill belong to an Iron Age sanctuary, including a votive enclosure full of intentionally broken pottery. Plan of the prehistoric settlement with the indication of stone structures and bases of huts of the Bronze Age (light grey) and Iron Age (dark grey).

as such, but always, the interest for exotic products and for cheaper or more convenient markets, has led to the relationship between the two sides of the Alps, making the Alpine populations the protagonists of these trading traditions.

The various phenomena of cultural diffusion, made manifest by what people recorded in the form of rock art, such as the diffusion of menhir statues, or the waves of influence of the Urnfield, the Villanovan and Etruscan or Celtic cultures, are part of the dynamics of cultural evolution that led to developments – and sometimes even stagnations – of the Alpine cultures. Many factors interplayed, such as climatic variations, the environment, natural resources and the character of the various local people. Today Alpine populations speaking different languages and with different ethnic backgrounds are united by many common cultural and conceptual characteristics.

Hunting and gathering, the economic resources of the first clans arriving 14,000 years ago, still survive, pursuing stags, wild boars or other wild game, and gathering wild fruits, hazelnuts, chestnuts, edible roots, mushrooms and medical herbs, all of which remain important economic resources. Pastoralism, practiced during the last 7,000 years, is still a major activity. Mining and metalwork, introduced in the Chalcolithic period over 5,000 years ago, is still a traditional activity. Ethnic identification, land ownership, preserving local dialects, worshipping local saints, seasonal festivities and open-air markets continue to be strong elements of cultural cohesion. Side by side, cultural diffusion has introduced the internet and television, fast trains and autoroutes, while exotic fruits from South America and frozen fish from the Arctic are available in Alpine supermarkets.

Conclusions

Archaeological research in the Alps has made remarkable progress over the past 50 years. Several books have been published, and the Valcamonica rock art has become a site in the UNESCO World Cultural Heritage; the Camunian rose, a prehistoric symbol of rock art, has become the emblem and coat-of-arms of

Lombardy. Rock art has become a landmark of culture and identity; it is taught in textbooks and schools and it has become part of contemporary culture. Alpine rock art is the first and most relevant history book of Europe, a Bible engraved on the rocks.

Research has been progressing for over half a century, but it is just at the beginning. Alpine rock art sites are the safe of immense amounts of information waiting to become knowledge and history.

Some basic questions have to be answered. Who were the makers of this rock art: were they shamans, wizards, gurus, artists or just lazy shepherds, as someone suggested? In what context did they perform: special events or daily activities? In groups or alone? What events took place in the rock art sites? Meetings? Ceremonies? Initiation practices? Teaching? Many other questions remain open, including one essential: the motivation, what drove hundreds of generations to produce hundreds of thousands of rock engravings and paintings? And then, there is the basic issue: rock art was not produced just to beautify the rocky surfaces, it memorized and transmitted messages. To whom were they addressed? To other people? To classrooms for initiation? To the spirits that rest inside the rock? In any case not to you and me. Their function was actual: for the moment, not for future generations. Are we able to read these messages? Deciphering rock art is the main challenge of the investigation: that means bringing pieces of prehistoric history back to light.

The fate of research depends on its success. In the reality of our time, if rock art studies awake public interest there will be more researchers and research resources. Without this interest, society will not feel the need to encourage research. How then to awaken interest? It depends on the quality and the impact of the messages that research itself is able to enact.

The function of rock art in decoding cultural trends, local characters and patterns of diffusion may be immense. Figures and images mark both their time and the conceptual patterns of their society. As we have seen in this paper, some general outlines are available already. They form a preliminary base opening up the way to further progress in research.

E.A.

SACRED NUMBERS IN PLAINS AND WOODLAND INDIAN CULTURES AND COSMOLOGIES

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Introduction

For the American Indian people who lived in the upper Midwest and western Great Lakes area extending to the northern Plains of North America (fig. 1), two numbers prevailed as part of their cosmological base, four and seven. Both numbers occurred as a part of nature, cultural phenomena or were seen to come from the sky and, therefore, considered sacred (Powers 1977: 4, 47). The belief in numerical superiority permeated their lives and could even extend to song. As T.E. Mails (1972: 66) noted, "In rituals, the stanzas [of songs] were usually repeated in sets of fours and sevens, both of which were considered to be sacred." In most cases, though, the sacred numbers were defined by natural cycles observed in nature and the patterns of the stars above. Because the same stars are visible from similar latitudes, the ancient traditions that were developed incorporating their numerical, numinous qualities, sanctity and stellar locations in the night sky did not change when they migrated west from the eastern Woodland area.

Those who migrated west included the Sioux, Blackfoot and Cheyenne among other macro-Sioux- and Algonquin-speaking tribes associated with the Plains culture. Using dogs as beasts of burden, the people who transitioned from the Woodlands to the prairie on the Plains carried only the necessities of life. But memory being portable, the traditions and the ceremonies that incorporated the sacred numbers were transported with them. Once there, the people became nomads adapting to their new home on the Plains where they lived in hide-covered teepees, frequently moving as they followed the herds of bison. But no matter where they journeyed, their traditions, including the sacred numbers, always maintained an echo of their ancient origin and ethos in the east.¹ Moreover,

the tribes did borrow or adopt traditions from one another despite the differing language cores. In this regard, it appears that reverence for the numbers four and seven was ubiquitous and transcended language barriers to become an important and universal part of the macro-Plains Indian culture, a culture greatly influenced by the environment and monumental landmarks to which the numbers were eventually attached. Hence, these two numbers, their sum and product,² not only defined the sacred, but the renewal ceremonies, world view and universe for the nations and "the people" who, like almost all Native Americans, lived in a spirit-filled realm based on an animistic and phenomenological sense of all of nature where man was a part of, not apart from, it (Bender 2009, 2011: 145-147). In this world view of all of nature, the sacred numbers helped to define that 'sense' for the benefit of all, surviving in art and ceremony together with the people who have honored them into modern times.

The number four

Prominent in this phenomenological view of the world was the repeating, cyclic shift of the four seasons, bringing what could be the harsh extremes of weather that tested their very survival (Bender 2007). Along with the four seasons, the rhythmic movement of the sun along the horizon and stars in the night sky caused a natural and perceptible quartering of the earth (Bender 2004, 2008, 2017a: 103). The four cardinal directions and winds, i.e. north, south, east and west, were part of the natural quartering and also sacred with additional meanings for their associated color and human life paths (Cooper 1975: 18; Powers 1977: 48, 191-193; Stolzman 1986: 140). So profound was the natural quartering that the Ho-Chunk

1 As Powell (1969, I: 26) said: "The Cheyennes, then, adapted their earlier ceremonies to the new life ... out in the clear, dry air of the prairies. The people did what others have done before them; they carried their holy places with them." See also Taylor and Sturtevant (1996: 136).

2 Among the Cheyenne there were 44 $[(7 + 4) \times 4]$ chiefs in the Council of Chiefs or Council of 44 made up of four chiefs from each of the ten bands and four additional head chiefs (Grinnell 1972, I: 337). Ralph Redfox, a traditional Cheyenne elder, spoke of this council and the sacredness of the number (personal communication).

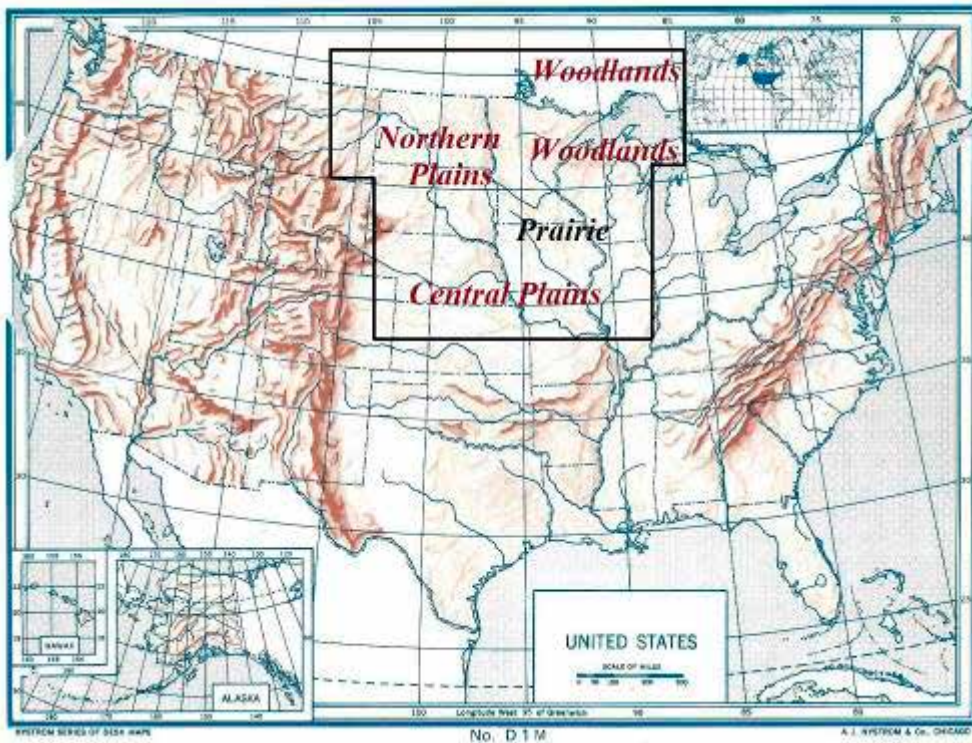


Figure 1. Map of the US and southern Canada with the Western Great Lakes Woodland and Northern Plains areas outlined. Also labeled are the prairie areas south of the Woodlands and the Central Plains.

(formerly known as the Winnebago) symbolized Earthmaker by a cross representative of the four cardinal points (Taylor and Sturtevant 2007: 476.). The cross-in-circle motif was the perfect symbol of the relationship between man and the world that surrounded him (figs 2a, b, c, d, e). It represented all of time and space with the sun (or man) at center, the whole

of the design acting as a mirror that perfectly reflects heaven and earth (Bowden 1981: 19; Hall 1979: 263; Stolzman 1986: 189-205; Versluis 1993: 128-131).³ Elements of the number four were also used in the design of dwellings such as the ubiquitous Plains Indian teepee (or tipi), earth lodges and ceremonial

3 As T. C. McLuhan (1971: 177) explains: "One of the symbols that expresses most completely the Plains Indian concept of the relationship between man and the world of nature surrounding him is a cross inscribed within a circle ... At the center of the circle, uniting within a point the cross of four directions of space and all the other quaternaries of the Universe, is man." The point of intersection can also represent the singularity of the space/time continuum with man at the center pinning the four directions and the above and below, i.e. the heavens above, earth where people live and deep earth where the herds of animals, especially the bison, are released for the hunt and benefit of people (Bender, 2008: 204-205; Bender, 2013: 43, 58). Goodman 1992: 32-33). These meanings of center are a core part of the Sun Dance, a world renewal ceremony seeking blessings from on high, where almost all personal enactments and facets of the ceremony are regulated by the number four and/or multiples of four, such as a ceremony eight days in length (Hoebel 1960: 11-16; Powers, 1977: 95-100, 139). In Cheyenne cosmology, the Sun Dance was introduced to the Cheyenne (via the Suhtai faction) by their second cultural hero, *Tomsivi* or Erect Horns (Hoebel 1960: 12). *Tomsivi* and The Hat (or *issiwinun*) have their roots in the four seasons and animal migrations, a part of the renewing power of nature (Bender 2013: 73). Unique to the Cheyenne was the Renewal of the four Sacred Arrows, another gift of their main cultural hero *Mutsoyef* (other times spelled *Motseyoef*) or Sweet Medicine, again placing man at the center (Powell 1969). Every aspect of the Sacred Arrow Renewal is connected to the mystic or sacred number four, including the number of days it is performed (Hoebel 1960: 6-12).



Figure 2a. A Cado water bottle from Hot Springs County, Arkansas dated c. 1500 AD with a swastika-like, cross-in-circle design surrounded by concentric circles (Herman Bender collection).



Figure 2b. A Lakota eagle feather bonnet with a beaded headband and a side medallion in a cross-in-circle four winds design (Pine Ridge Visitor Center, Kyle, South Dakota).



Figure 2c. A Lakota boy's beaded vest made c. 1870-1880 with a four winds cross and central diamond design surrounded by four stylized animals standing on their four legs in the four corners. Man is at the center within the four-sided lodge which represents the earth.



Figure 2d. A Lakota beaded pipe bag made c. 1870-1880 with a stylized four winds centered in a four-sided lodge (the world or earth) and four crosses which may be stars in the four corners.



Figure 2e. A Lakota beaded man's vest made c. 1870-1880 with four stylized wind spirits (with upraised hands) forming a cross above a geometric design with seven elements at the bottom.

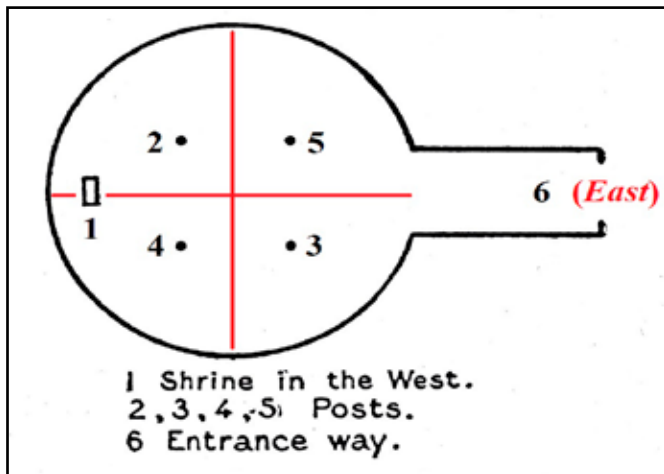


Figure 3. The Pawnee earth lodge design after Fletcher (1902: 35), showing the imposed alignment to the four cardinal directions, the four corner posts and quartering (of space) by the cross-in-circle and inherent in its design. The direction north is at top.

structures. They were, in fact, models of the cosmos metaphorically designed following the cross-in-circle motif. When erected, the structure was aligned to the cardinal directions with the opening always facing east (Bol 1998: 239-244; Goodman 1992: 17-19; Powers 1977: 96). The Pawnee earth lodge carried the reverent design quartering space a step further. Four support poles were set outward of the lodge center at the corners, i.e. the cross-cardinal directions. The cardinal directions intersecting the interior space would act as a cross-in square and the lodge edges formed a cross-in-circle (fig. 3).

Fletcher surmised that the four posts represented the four stars of the leading villages and that placement of the four villages suggested the four bowl stars of the Big Dipper or Ursa Major (Fletcher 1902: 35). However, Von Del Chamberlain (1982) suggested that, although the four posts did represent stars, they are far more important on a cosmic scale quartering space as the four pillars of the universe or world quarter stars' (Krupp 1983: 237; O'Brien 1986; Wedel 1977: 135-137; Williamson 1984: 311). In this scheme, the colors painted on the individual corner poles, i.e. red on the southeast, black on the northeast, yellow on the northwest and white on the southwest, matched four stars important in the Pawnee cosmology. The individual stars were Antares (red), Vega (black), Capella (yellow) and Sirius (white). In the mid-latitudes of North America, the four pillar stars would have been observed in their re-

spective corners of the night sky about the time of the vernal equinox c. 2000 BC (fig. 4).

The Pawnee were not alone in assigning cosmic significance to the number four. The Cheyenne count only four years or ages (beginning with the end of the Ice Age) in their existence as a people (Powell 1969: 19-20).⁴ The Ojibwa universe and world order consisted of four layers of both the earth and sky with man in between (Grim 1983: 77). For these reasons and others (McLuhan 1971: 177), the number four is a sacred number to most tribes on the northern Plains and Woodland areas including the Ojibwe (Grim 1983: 68, 77-81, 130; Warren 1984: 43-44, 77-81), Ho-Chunk/Winnebago (Radin 1970: 388), Lakota (Powers 1977: 47-51), Blackfeet (Kehoe 1992: 212), Cheyenne (Hoebel 1960: 7, 9-10, 13-15; Schlesier 1987: 5-7), Arikara (Parks 1996: 94-95, 157-158), Crow ((Nabokov 1967: 27, 171) and Wichita, along with the Osage and Pawnee on the central Plains (Hall 1979: 263; Lankford 2007: 64-65).

To be expected, there were similarities and some differences between the tribes and language cores, but a commonality did exist. For instance, in the Sioux tribal ethos and cosmos, each of the four winds, i.e. east, south, west and north (figs. 2b ,c, d, e), possessed *wakan* or spirit and could all be regarded as personal existences associated with a distinct season (Powers 1977: 48, 75, 190-193, 198-199). The four cardinal directions of north, south, east and west were also recognized as spirits by the Cheyenne and had personal names (Schlesier 1987: 92-93) or were identified with a sky deity (Lankford 2007: 64). In addition, the Cheyenne had personal spirit names for the cross-quarter (solstice) directions and considered them to be superior to almost all other *maiyn* or spirits,⁵ able to reveal themselves in human

⁴ A fact confirmed in casual conversation with Ralph Redfox, a traditional Cheyenne healer, elder and grandson raised by the last Massaum priest of the Northern Cheyenne Nation (personal communication; see also Bender 2008: 200).

⁵ The four cross-quarter or solstice directions are said to be not only superior, but more ancient than the cardinal directions (Parks 1996: 94). This was also orally communicated to me by a delegation of visiting Northern and Southern Cheyenne religious leaders in 1998 and the direction of the four poles of the wolf lodge frame (Schlesier 1987: 91). See also Bender (2008) for a sun circle that incorporated the solstice or cross-quarter directions as the major orientation together with the cardinal directions, the purpose of the design to place man at the center (of the universe).

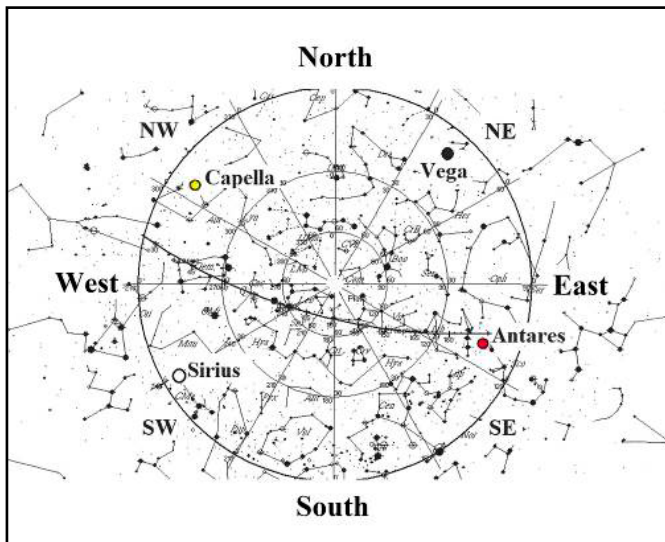


Figure 4. The four pillars or corners of the universe seen in the night sky after sunset about the time of the spring equinox c. 2000 BC.

form (Schlesier 1987: 7-9).

The number four is also found in the seven brightest stars of Ursa Major, i.e. the Great Bear, in the familiar bowl stars of the Big Dipper as it is known in North America. This asterism was important because it contains both the four stars in the ‘bowl’ and seven stars in total (fig. 4). The four bowl stars were seen by some Plains tribes, especially Lakota groups, as the Blue Woman’s realm (Goodman 1992: 38; Rice 1984: 332), the place where formerly there was a star at the center, but now a hole (fig. 5a).

The soul is said to have four parts.⁶ After death, one part of the soul (Nagi or Wanagi) travels through this hole on its way to the Milky Way where the Blue Woman directs it to begin the journey either back to earth as a new soul or to the afterlife. In this role, the four bowl stars were then seen as a bier and received the name carrier (stars) to differentiate them from the handle stars which would be seen as mourners (Goodman 1992: 22, 37-38). In this way, the sanctity of the number four was preserved in the familiar asterism and stars above. It was here that the number four could also be seen in combination with, or become, the sacred number seven (Goodman 1992: 32-33) and identified with the north direction (Lankford 2007: 64, 128-138).

6 The soul can be referred to as the *nagi* (smoke) from a flame and not easily defined, as there are four aspects to the soul. The other three include the *niya* (flame), *nagila* or *tun* (tinder), and *sicun* (spark) (Martinez 2004: 88, 102; Rice 1984: 336).

The number seven

Unlike in the western world, there is no evidence that the Indian people of North America’s northern Plains and Woodlands kept track of the movement of the five visible planets, formed a seven-day week or held the number sacred based on the five planets together with the sun and moon. The number seven did come from the sky, however, but in a different manner and context. The Cheyenne, for instance, assign seven regions of the universe in their cosmology (Schlesier 1987: 4-14, 92).⁷ Significantly, the seven stars of the Big Dipper, Pleiades, Corona Borealis and perhaps even the Hyades may all equally represent the number seven’s numinous origin (Allen 1963: 387; Bende, 2017a, 2017b; Cooper 1975: 18; Krupp 1991: 1-16; Lankford 2007: 148).

Along with the ideal of transformation (Bender 2017b: 74, 80, 83), the number seven could be used in a combination of meanings together with or as a separate part of its astronomical association. Ursa Major (fig. 5) is an example of what can be a multiple, cultural view. When seen together with the three bright stars in its handle, the asterism we call the Big Dipper, or the Ladle as it was known by the Lakota at certain times of the year (Goodman 1992: 7), could express the Seven Sacred Rites (Powers 1977: 50); the Seven Council Fires from which the Lakota took their name (Powers 1977: 3-6), and the seven stages of “the Lakota way of life”, i.e. the seven stages of “the woman’s way” and “the man’s life path” (Goodman 1992: 58). During the spring of the year it was recognized as the Pipe in context with the tobacco or dried willow constellation seen in parts of Aries and Triangulum (Goodman 1992: 6-7, 56).⁸

The Crow were another northern Plains tribe who identified the familiar Dipper as a Pipe, calling it the pipe pointer star. At a designated time of year during their bear dance (likely in the winter), seven men and boys circled a center pole in a counter-clockwise direction, almost certainly an indication of the seven stars in the Pipe (Big Dipper) as it revolved in a coun-

7 The Cheyenne cosmic tree has seven branches and seven indentations on the cosmic pole (Schlesier 1987: 20, 90, 92).

8 A fourth Lakota manifestation/association of the familiar asterism is the Hairy Elephant (Deloria 1995: 143; Leola One Feather, Pine Ridge Reservation, personal communication). In this way, the numbers four and seven are again honored.

ter-clockwise direction about the pole star (Nabokov 1967: 24, 96). To be expected, there were other associations with the number seven and the Big Dipper. Face paint consisting of seven dots to offer protection in battle also represented the Big Dipper (Nabokov 1967: 124) or were applied to acquire personal medicine and powers (fig. 5b).

During vision quest ceremonies a whistle would be blown seven times (Nabokov 1967: 153) and seven songs were sung (Nabokov 1967: 147). When constructing a sweat lodge, seven eagle feathers were tied to a hoop and offered to the Great Above Person (Nabokov 1967: 171), another name for the deity attached to the familiar asterism. Furthermore, seven stones were brought to the lodge and seven buffalo chips, and seven medicine men were invited because the number represented the Dipper (Nabokov 1967: 145).

Even though Ursa Major was almost universally accepted by Plains people as embodying a sacred tradition based on the number seven, it could sometimes be confused with the stars of the Pleiades (Lankford 2007: 28, 178; Sundstrom 1996: 179), or sometimes both asterisms consisting of seven stars simply grouped together along with the bear stars as embodying the sacred (Cooper 1975: 18). Moreover, it was not seen as a bear by most of the tribes inhabiting the western Great



Figure 5b. A mannequin of the Blackfeet shaman Bull Child (died 1908) on display in the American Museum of Natural History (New York City). It was erected in his honor by Clark Wissler (who had purchased all of Bull Child's objects in 1904) as a tribute to his close friend. Bull Child had the supernatural ability to control weather through the objects and instructions that were acquired in a vision. His headdress is otter skin, the shell necklace given by the sun. The seven blue spots painted on his face are stars and, almost certainly, represent the seven stars of the Big Dipper (Fig 5a). The crescents symbolize the moon (Krupp 1987: 3; LaPier 2017: 97-98).

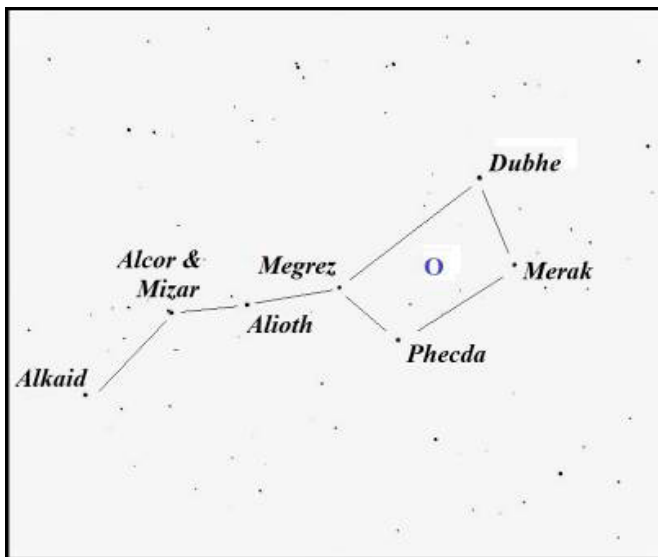


Figure 5a. The four bowl stars of the conventional Big Dipper with a hole (O) where a star had formerly been and the Blue Woman is said to reside. When added together with the three handle stars, the Dipper represents the number seven. Some myths and stories do account for Alcor, but it is usually not counted as one of the (seven) primary stars.

Lakes and Plains although other stars in the same area of the northern sky could be identified or affiliated with the bear (Bender 2017a, 2017b). The ferocious nature of the bear, however, was not lost on Woodland and Plains Indian people. Women were prevalent in stories of transformation where they either were first encountered as a bear or had the ability to transform into a bear. Often the she-bear married a man or pursued a group of seven people (usually children) who escaped

9 See Berman (1995: 251-256) for a lively explanation on the history and average number of stars visible in the Pleiades. Cornelius (1997: 108) also provides insights into the number count.

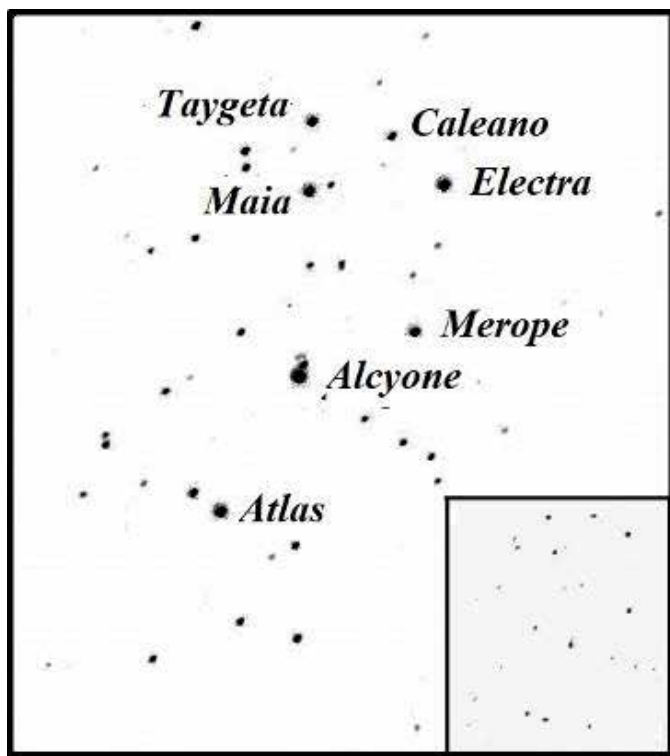


Figure 6. The Pleiades or so-called Seven Sisters. Although a field of many stars is visible in this image, the usual number of the brightest counted is six with seven being the convention dating from antiquity. The seven brightest stars are labeled.⁹

by ascending into the sky. It is in these stories that the number seven rose to prominence as a sacred number, sometimes represented by the seven brightest stars of Ursa Major (Wissler and Duvall, 1995: 69-70), i.e. the Great Bear, but more often, the Pleiades (fig. 6).¹⁰

The prevalent number in all versions of similar Cheyenne stories of a bear chasing children is always seven and identified with a high point, sometimes a hill or a tree that rapidly grew upwards carrying the seven children to safety in the heavens (Lankford 2007: 148-152). Of interest, the resemblance of the Devil's Tower in Wyoming (fig. 7) to a giant tree trunk may have been a visual factor influencing the Cheyenne's adaptation (or co-opting) of this particular landmark with the old (eastern) stories of a tree and the Pleiades (Bender 2011: 171-172; Schlesier 1987: 5-51; Sundstrom 1995: 186).¹¹

10 Blackfoot mythology differentiates between the seven stars of the Big Dipper or Ursa Major (as six boys and their sister) and the Pleiades as the bunched stars representing the number six (boys).

11 The Arapahos were closely aligned with the Cheyenne and almost certainly shared the same beliefs about the Black Hills' cultural landscape. Their seven sacred Medicine Bags were likely acquired at Bear Butte near Sturgis, South Dakota and given to the seven most honored

Although the Kiowa also associated the Devil's Tower with the number seven and children escaping a bear, the association was chiefly with the seven stars of Ursa Major (Bender 2011: 172-173; Lankford 2007: 149; Sundstrom 1995: 183). The landmark that the Lakota equated the Pleiades (as little girls) and number seven with was another flat-topped monument, Harney Peak (fig. 8).¹² At 2,268 m (7,442 ft) above sea level, it is not only the highest peak in the Black Hills, but the greatest elevation between the Rocky Mountains in North America and the Alps (Bender 2011: 173; Goodman 1992: 1, 2, 29, 56).

To the Lakota, the seven stars of the Pleiades also occur as the head of the celestial bison known as *Tayamni*, the first born of three relations (fig. 9a).

Tayamni is seen emerging or being born out of the Lakota hoop of stars (Bender 2013: 72; Goodman, 1992: 6, 8, 56) and is composed of seven elements; six individual stars and the (seven) stars of the Pleiades. Five of the individual stars are part of the (western) constellation Orion with Rigel and Betelgeuse forming the ribs, the three belt stars the backbone, the bright star Sirius the tail and the Pleiades its head (figs. 9b, 9c, 9d). It is generally perceived by the Lakota or Sicangu women's midwives' society as a bison on its haunches in a berthing posture (Leola One Feather, personal communication).

As mentioned earlier, often there was some confusion between Ursa Major and the Pleiades because both asterisms could be (and were) identified with the number seven (Krupp 1987: 16). There was, however, no confusion in the more eastern tribe's sweat lodge. The Ojibwe (Chippewa) called the Pleiades *Madodisson* or the sweating stones. In the lodge, the red-hot stones were arranged in a circle more or less in the shape of the Pleiades (Kohl 1985: 119). First three glowing rocks were brought in to the lodge and then four, to symbolically indicate seven stars (Densmore 1979: 94). It should also be noted that in Woodland tradition the crescent shape of the bear's den is visually constructed from the arc of the seven brightest stars in Corona Borealis (fig. 10).

men in the tribe (Sundstrom 1995: 182; Trenholm 1970: 80).

12 Harney Peak is renowned as the place the Oglala Sioux Holy Man Black Elk went to pray and fast for four days during his vision quest. In his vision he was visited by six grandfathers (Neihardt 1979: 271-274). Black Elk was, therefore, the seventh presence or being.

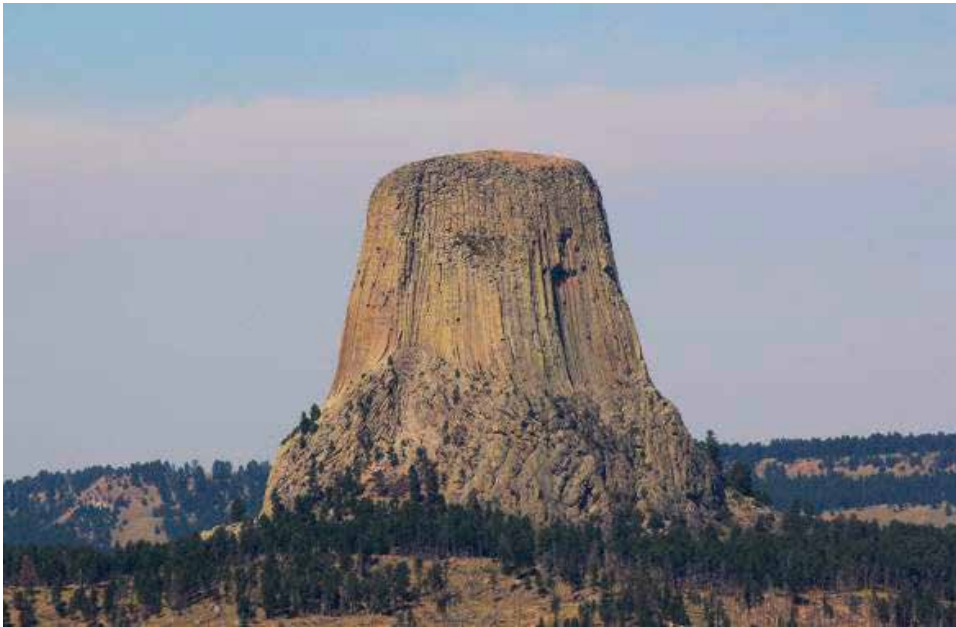


Figure 7. The Devil's Tower near Moorcroft in northeastern Wyoming. The Kiowa name for this columnar basalt monument was/is *Tso' ai*, meaning Tree (or Monument) Rock (Sundstrom 1995: 183).

The number 28

The number 28, a product of the sacred numbers four and seven, is also sacred (Kehoe 1992: 212; Nabokov 1967: 24, 27; Powers 1997: 4, 47, 50-51). It can also be considered to be female. The moon cycle is 27-29 days (or 28 days average), and women's moon time is 28 days (Bender 2008: 201; Eddy 1977: 152; Hall 1985: 90; Livio 2003: 33; Powers 1977: 50-51). Schlesier (1987: 85-87, 91) sees the Big Horn Medicine Wheel with its 28 spokes as a flattened version of a Massaum wolf lodge built on a 28-pole frame. Of a profound nature

and related in importance, bison and buffalo, which are ontologically female, have 28 ribs (Brown 1992: 124-125). The Cheyenne honored the number 28 through the Massaum which also incorporated the numbers four and seven as a ritual part of the ceremony (Hoebel 1960: 16-17; Schlesier 1987: 88-109).

The Massaum, a world renewal ceremony and timed ritual bison hunt, originated with the Cheyenne cultural hero and prophet *Motseyoef*, better known as Sweet Medicine (Grinnell 1972 II: 285-336; Hoebel 1960: 7, 16-17; Powell 1969: 26; Schlesier 1987: 78). Ancient



Figure 8. The flat-topped Harney Peak, the highest elevation in the Black Hills of South Dakota and landmark the Lakota associate with the Pleiades. View is looking west.



Figure 9a. The seven stars of the Pleiades painted on a teepee erected at Frank Fools Crow (former) Sun Dance grounds near Kyle, South Dakota. Because it represents the head of the celestial bison *Tayamni*, bison are also painted below it.

by all accounts, Mails (1973: 26) stated that the rituals for the Massaum were given to the Cheyenne by Sweet Medicine in about 1000 BCE, a date which closely supports the corroborating astronomical, artifact and rock art dates (Bender 2017a: 89-94). It greatly predates the so-called medicine wheels and Sun Dance (Hoebel 1960: 11-17; Schlesier 1987: 52, 87, 91) and was viewed as a giving ceremony where the primary spirits first released and then granted permission for Sweet Medicine (and the Tsistsistas) to hunt the bison. Sweet

Medicine was not alone in the sacred mountain during the giving; there were three spirits with him, thus making a total of four beings.

The primary spirits or *maiyun* Sweet Medicine and a companion met in the Wolf Lodge (i.e. in a sacred mountain), where the Massaum ceremony originated: these were Nonoma and his wife Eschewan. Nonoma is thunder and the red wolf represented by the red star Aldebaran (although in more ancient times, the red wolf star was likely Betelgeuse). Eschewan, our grandmother, is the deep earth represented by the white wolf and bright star Sirius (Schlesier 1987: 8, 15, 84). Nonoma and Eschewan had a daughter, Ehyophstah or yellow-haired woman, who is a buffalo spirit in human form and was given as wife to the companion of Sweet Medicine (Schlesier 1987: 78). This giving was the origin of the Massaum, the Cheyenne renewal ceremony which is a giving of the earth in all four directions and the establishing of a sacred relationship with animals (Schlesier 1987: 78). Ehyophstah represented Voh'kis the blue kit fox in the Massaum (Schlesier 1987: 84), known to us as the blue-white star Rigel (fig. 11).

To the Tsistsistas, as the Cheyenne call themselves, the Massaum proper consisted of 56 days (28 x 2) and incorporated the anticipated summer solstice sunrise heliacal rise of the bright red star/wolf Betelgeuse (a red star eventually replaced by Aldebaran due to precession). In stellar and numerical sequence, Rigel rose 28 days later followed by Sirius rising 28 days after Rigel (Schlesier 1987: 83-84). This incremental 28-day timing of events was a core element of the Massaum (Hoebel 1960: 16-17; Schlesier, 1987: 87).

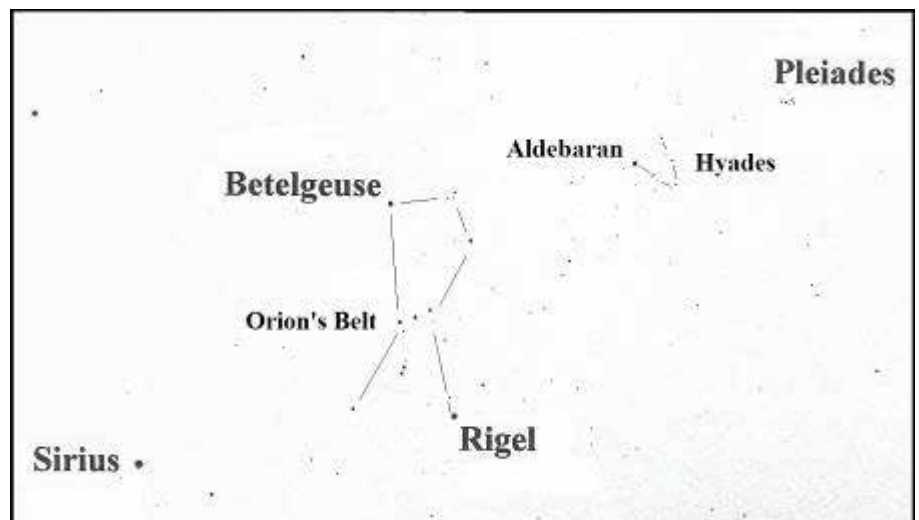


Figure 9b. A star map of a familiar part of the winter night sky showing where *Tayamni* dwells.

The Starman, Massaum and the sacred numbers

All these particular stars, the sacred numbers and timing appear to have been an integral part of the Starman site discovered in southeastern Wisconsin (fig. 12), an ancient embodiment of sacred numbers incorporated into a model of the cosmos (Bender 2017a).

Laid out in stone as a petroform (Bender 2007), it is an ancient world renewal site that would have been regulated by the ancient Cheyenne ritual and concept of the time/space continuum (Bender 2017a; Hoebel 1960: 83). At the Starman site, the best fit timing strongly suggests that the stellar incremental day count leading up to the Massaum began approximately 84 days ($28 \text{ days} \times 3$) before the summer solstice (sunrise) with the heliacal rise of Capella and apparent equinox sunrise. It was then followed by the Pleiades which rose at the halfway point 42 days later ($28 \text{ days} \times 1.5$). Aldebaran rose heliacally 14 days ($28 \text{ days} \times 0.5$) after the Pleiades

(and 56 days after Capella). Then, 28 days after Aldebaran rose, Betelgeuse (the red wolf at the time) rose heliacally in the dawn sky on the day of the summer solstice sunrise, signaling the start of the Massaum ceremony and ritual hunt. Rigel (the blue kit fox) rose 28 days after the summer solstice sunrise followed 28 days later by Sirius (the white wolf), signaling the end of the ritual hunt.



Figure 9d. The teepee seen in Figure 8a showing the full seven parts, star design of *Tayamni* in the blue (sky) zone with Sirius (tail) at left, the three stars (backbone), together with Rigel and Betelgeuse (ribs) at center, and Pleiades (head) at right.

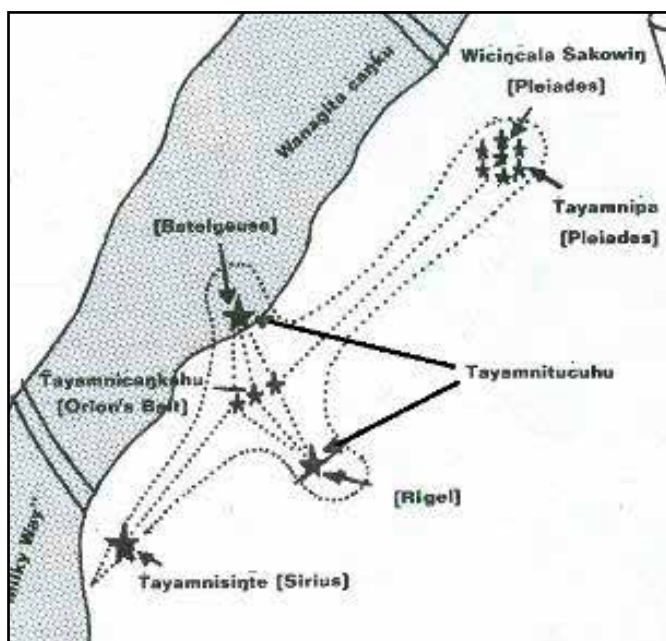


Figure 9c. Illustrated star map with the seven connected parts of *Tayamni*. The gray band is the Milky Way or *Wanagi Ta Canku*, the road of spirits.

By design, the number seven, an important part of the Massaum,¹³ also occurs in the Pleiades and Hyades asterisms, both laid out in detail at the Starman site (figs. 12 and 13).¹⁴ There is another corollary linked to the number seven that may well be more profound and universal in scale.

At the time of the summer solstice sunrise (fig. 14), when standing on the hilltop in the center of what was a north-south, east-west cross-in-circle representing

13 In the modern Massaum ceremony, seven contraries took part; there were seven branches on the Massaum tree and seven Young Wolves (Schlesier 1987: 84, 90, 101-109).

14 Note that at the Starman site, only two red-colored rocks were incorporated in to its design, the headstone which represents a bison and the sun, and the red-colored rock of the left (front) foot indicating the red-colored star Aldebaran.

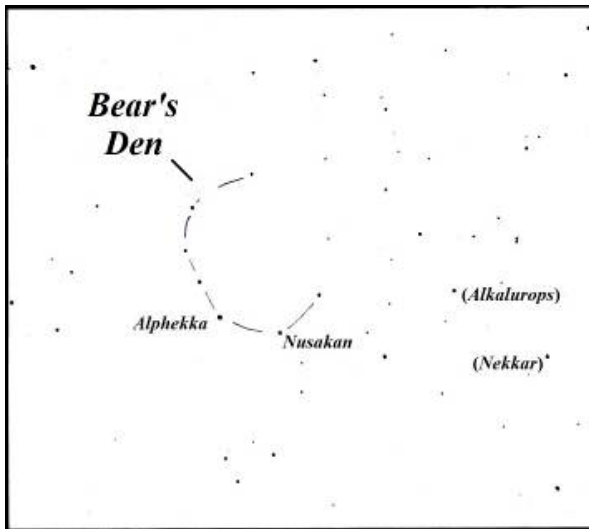


Figure 10. A negative or inverted color image with the seven brightest stars in Corona Borealis or the Bear's Den (from Bender 2017b: Figure 6a).

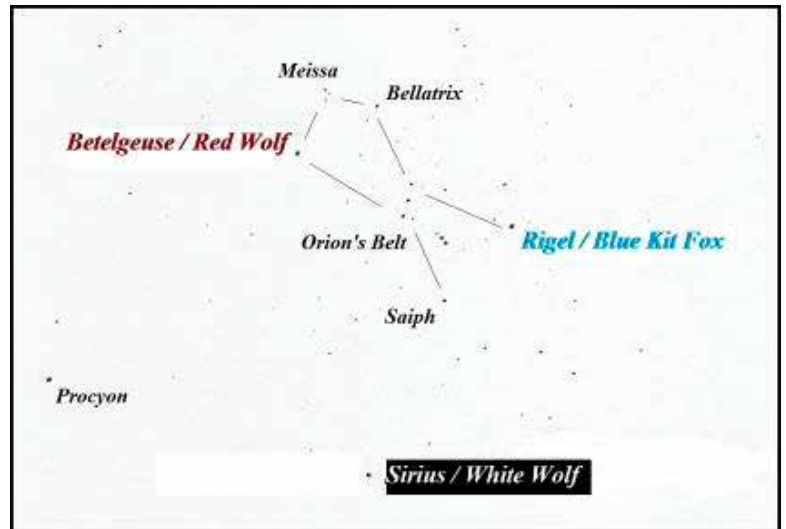


Figure 11. The familiar constellation of Orion with Sirius rising. The Cheyenne did not recognize its shape or form in the western convention and instead saw the wolves of heaven with Betelgeuse as the red wolf (c. 1500-1000 BC), Rigel as the blue kit fox and Sirius as the white wolf, the three stars rising on sequential, 28-day intervals.

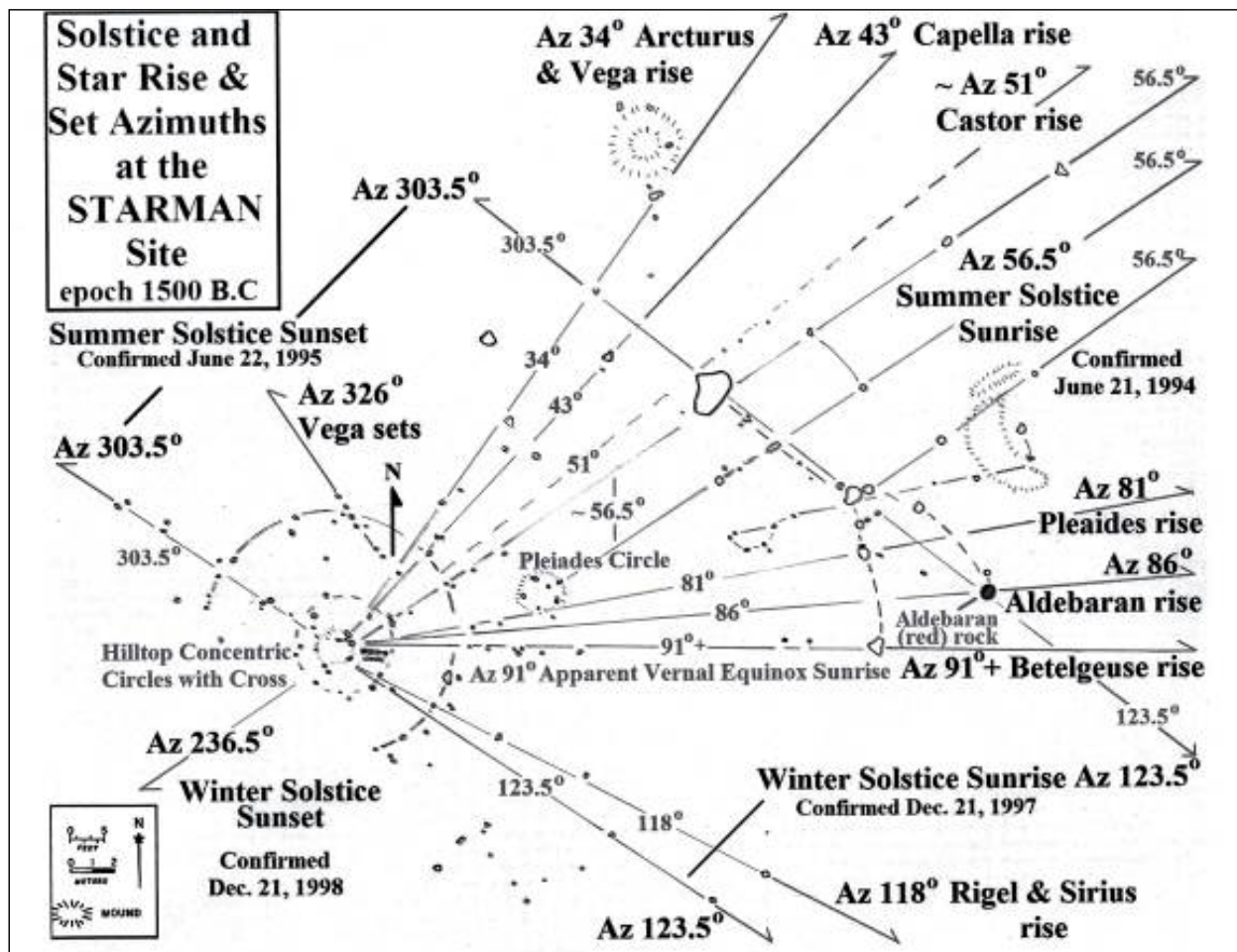


Figure 12. Map of the Starman site discovered in 1994 (Bender 2017a: 77-96). The seasonal and ceremonial heliacal star rises incorporated the seven bright stars Arcturus, Vega, Capella, Aldebaran, Betelgeuse, Rigel and Sirius (in sequence) at 28-day intervals or multiples of the number 28.

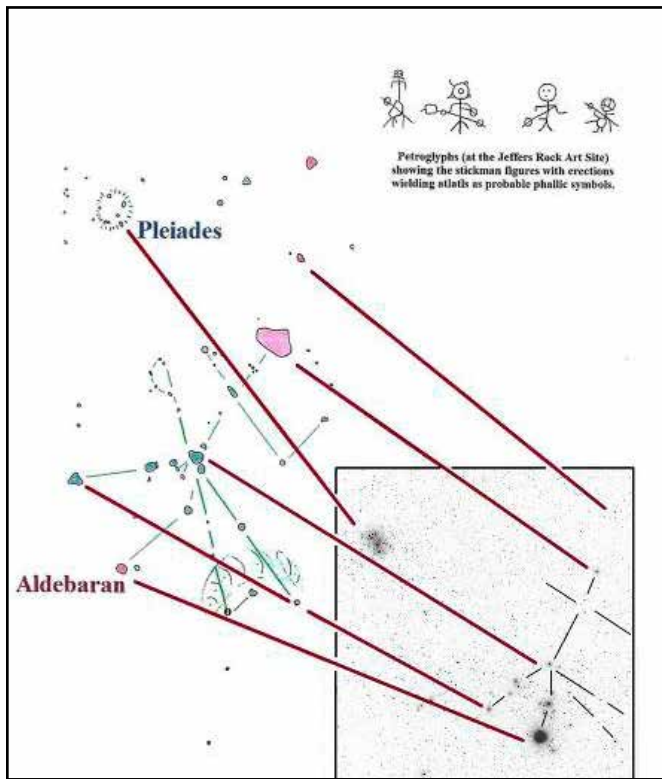


Figure 13. Photo inset of the Pleiades and Hyades juxtaposed with a (partial) map of the Starman site showing the direct relationship between the two asterisms and the petroform.

the number four and the quartering all of space,¹⁵ one physically pinned the up and down becoming direction numbers five and six. At its first gleam as the solstice sun rose, the sunlight shining within the observer became the seventh direction and, more profoundly, the singularity or the totality before time from which the universe was born. It was at this moment the person becomes a symbolic witness to the actual first moment of creation, the Big Bang and overall the presence of the Creator (Bender 2008: 204; Schlesier 1987: 91).

Conclusion

Due to the limited geographic area and constraints, this article has chosen the central interior of North America as its focus, but it is not all inclusive of American Indian sacred number traditions across the continent, nor is it meant to be. Yet the area does include a broad geographic territory, considering the size of the US and southern Canada, the area through which many of the former Woodland tribes

migrated west carrying their traditions with them. Whether the people came from the eastern Woodlands, western Great Lakes or the Woodland/Prairie border areas of the north central interior, the traditions they carried with them over the long migrations were transplanted into their new homelands out on the western Plains. Prominent among those traditions were the ritual use and function of the sacred numbers four and seven.

The importance of the sacred numbers and their product may escape those in the western (and scientific) world, but to the Cheyenne, Lakota, Blackfeet and others, honoring their cosmic importance through ritual is critical for guaranteeing the survival of all mankind. According to the Cheyenne informants and members of the ancient Wolf Lodge who visited over the years, the Starman site was not only the earliest form of a ritual Massaum site, but represented the ability of mankind to directly interact with the universe through the sequence of complex numerology, and star and sun rises. The Cheyenne view this as the fine tuning of the space/time continuum to help maintain cosmic order, a ceremony and act the Cheyenne say they do on behalf of all mankind (Hoebel 1960: 45, 83). Much like the sacred numbers four, seven, their product (28) and multiples incorporated into its design, ritual use and function, it is said to be a gift to mankind, one whose inspiration (like the mystic numbers) comes from the cosmos and nature via the Creator. In common with all world renewal ceremonies, the dictates were universal, life-giving forces timed to the summer solstice in order to maximize their fullest strength where all, when enacted, was ritually conducted by the numbers in order to receive blessings for the people from the Creator.

Acknowledgements

This article is dedicated to Alice Kehoe whose insights and valuable advice are always welcome, the memory of Jack Steinbring whose advice and guidance will never be forgotten and to Enrico Comba, a dear friend and scholar who recently passed away from the COVID-19 pandemic. I also wish to thank Leola One Feather, the Sicangu women and the late Ralph Redfox for sharing their traditions and stories in an effort to preserve their star traditions for the sake of future generations and the good of mankind.

¹⁵ This circle of stones was destroyed by plowing in the late fall of 1996.

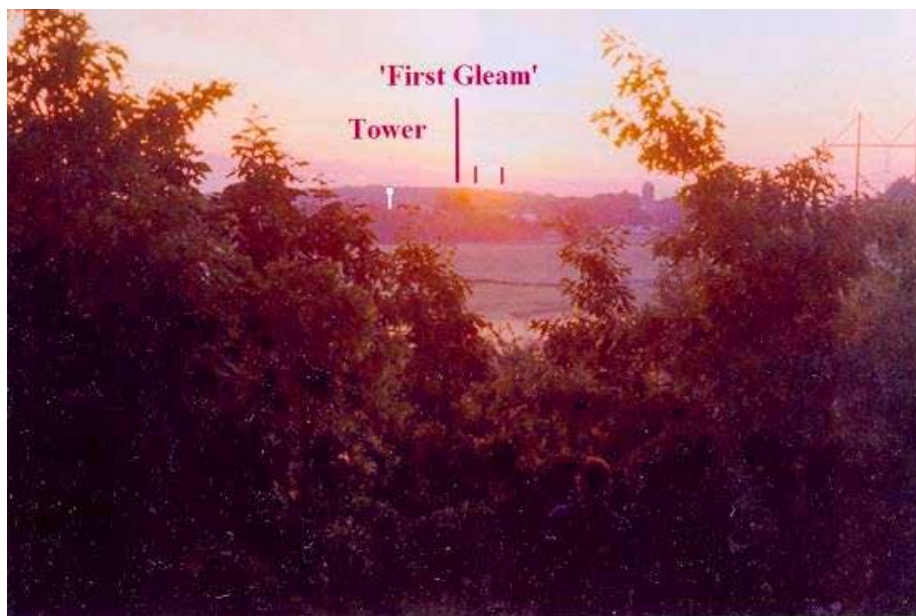


Figure 14. Photograph of the summer solstice sunrise viewed from the hilltop circle at the Starman site (see Fig. 12). Note the extreme shift south (right) from the center of the hill marked by a tower and white line, a consequence of the shift of the obliquity of the ecliptic c. 2000–1500 BC (or earlier). Three parallel summer solstice alignments at the Starman site (fig. 10) point to the direct center of the hill, which is approximately 3 km from the Starman site and hill. The two parallel lines bracket the full disk of the sun rising after its first gleam in 1994.

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HIATUS OR CONTINUITY IN PREHISTORIC MALTA? FROM EARLY NEOLITHIC TO TEMPLE PERIOD

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This paper was inspired by the recent online publication of a 2015 Master's dissertation at a British university in which claims were made that first, the first human settlement on the Maltese islands goes back to 5500 BCE, and second, certain cultural aspects of the temple culture were inherited from the previous Neolithic culture (Dorsey 2015: i, 1-3). The following is a critique of these two claims in light of long-established chronological parameters for Maltese prehistory (Renfrew 1972; 1973: 151-2), and of recent findings resulting from a multidisciplinary research programme concluded in 2018, some results of which have already made it to the public domain (Barratt et al. 2019).

NEOLITHIC		PHASE	DATE
		GHAR DALAM	5200-4500 BCE
		GREY SKORBA	4500-4400 BCE
		RED SKORBA	4400-4100 BCE
TEMPLE PERIOD			
	ŻEBBUĠ	BCE 4100-3800	
	MĠARR	BCE 3800-3600	
	ĠGANTIJA	BCE 3600-3000	
	SAFLIENI	BCE 3300-3000	
	TARXIEN	BCE 3000-2500	

Table 1. The chronological sequence of the first two periods of Maltese prehistory at the start of the present century (after Pace 2004: 18; Bonanno 2017: 2).

The current chronological sequence (Table 1) was firmly established with the earliest extensive application of radiocarbon chronometry to Maltese prehistory after the momentous excavations conducted by David Trump on the multi-period site of Skorba in

1961-1963 (Trump 1966, in particular Table I). The respective absolute dates for each period and their sub-phases, however, were widely adjusted and pushed back by several centuries on the basis of dendrochronology calibration by Colin Renfrew in 1972 and 1973 (see above). An overhaul of the sequence was suggested by Emmanuel Anati in 1987, but it was never taken up by the Anglophone archaeological literature (Anati 1988: 17). Many more radiocarbon determinations have been produced in the meantime, mainly from the excavation of an extensive underground cave cemetery at Xagħra in Gozo (1987-1994) which shed extensive and fundamentally important new light on funerary rituals and other aspects of the temple people, but they did not alter in any way the chronological sequence and its respective dates. It seems that only with the FRAGSUS research project (2013-2018) have both of these been in some respects challenged.¹ The generally accepted date for the earliest evidence of human presence on the Maltese islands was the rounded figure of 5000 BCE. Modest attempts were made along the years to raise the date to 5200 (Pace 2004: 18, 22; Dorsey 2015: 4, contradicting her date given on p. 1), 5500 BCE (Robb 2001: 177), and even to 6000 BCE (Anati 1988: 17). In their 2019 paper, a number of members of the FRAGSUS research team raised the official figure to c. 5800 BCE on the basis of a selection of as many as 400 new ASM radiocarbon determinations derived from the project (Barratt et al. 2019: 17).² That date, howev-

1 FRAGSUS (for *Fragility and sustainability in restricted island environments: Adaptation, cultural change and collapse in prehistory*) is a European Research Council funded project involving archaeologists and scientists from various universities, including Queen's University, Belfast and the universities of Malta, Cambridge and Liverpool, and other institutions, such as Heritage Malta and the Superintendence of Cultural Heritage of Malta. Its results are in preparation for publication.

2 These new determinations were made on samples extracted mainly from excavation expeditions of a few weeks on three previously explored sites: Tač-Čawla, a domestic settlement in central Gozo; Kordin III, the only surviving remains of a temple building from a group of three located on a broad promontory projecting into the Grand Harbour of



Fig. 1a. The Ġgantija temples, Gozo, constructed during the Ġgantija phase (3600-3000 BCE).

Fig. 1b. The exceptionally well-preserved façade of the Ġgantija temples. (source: the author)

er, was from cereal pollen analysis, that is, reflecting agricultural activity. The first cultural evidence is said to date to c. 5500 BCE and, therefore, the actual date of the earliest human settlement still requires further study. This recalls a suggestion made by Francesco Fedele in 1988. Fedele suggested ephemeral seasonal visits by scouting groups from the Stentinello culture

Malta; Santa Verna, on the Xaghra plateau in Gozo, known as a temple site from the still visible group of standing megaliths but now revealing also an earlier domestic occupation. Besides, other samples were extracted from small sondages cut in various strategic locations, such as those in the immediate vicinity of the Ġgantija temples, and from cores drilled in various flood plains and alluvial valleys.

in Sicily in a pre-colonial process lasting as long as a millennium (from 6000 BCE), followed by a fully-fledged occupation or, rather, settlement (Fedele 1988). After all, the cave dwelling at Għar Dalam and, for that matter that of Il-Mixta, did not involve any investment of time and effort, whereas settlement in open-air villages like that of Skorba did. To the latter we can now add the sites of Santa Verna and Taċ-Ċawla, both on the smaller island of Gozo (Barratt et al. 2019: 20-25).

The colonization and settlement processes of the Maltese islands by the early Neolithic farmers from



Fig. 2. The Main Hall in the Hal Saflieni Hypogeum, Malta, mimicking the contemporary megalithic architecture of the temples above ground.

Sicily, and their sustained interrelations with their neighbours in Sicily and the obsidian-producing islands beyond it, were dealt with in an earlier paper in this journal (Bonanno 2016). A break from continuity of the first Neolithic culture to the second (or Late) Neolithic one around 4100 BCE was marked by the complete replacement of the pottery repertoire of the last phase of the former (the Red Skorba phase) by a completely different one of the new phase (the Żebbuġ phase), itself inspired by, or an offshoot of, the San Cono/Piano Notaro culture of eastern Sicily. After introducing its imported Sicilian cultural baggage to Maltese soil, this new people started to alienate itself from foreign influence and rely more and more on autochthonous cultural resources. Their descendants, after almost half a millennium, embarked on a new cultural adventure, that of the well-known megalithic temples (fig. 1) and their underground funerary counterpart (the Hypogeum) (fig. 2), as well as the plastic art emanating from them (fig. 3), apparently without inspiration from overseas.

This whole chronological scenario appeared very neatly set and confirmed by a perfectly explained and ordered pottery sequence, without any of the aberrations that normally bedevil other prehistoric sequences.³ Everything fitted orderly in place, mostly resulting from the careful excavations of David

Trump, especially at Skorba. It seems that that is no longer the case, because, apart from extending the Maltese Neolithic further back by half a millennium, the FRAGSUS project has revealed a hiatus of almost a millennium, from 4800 to 3900 BCE, during which the islands were progressively depopulated. Then they received a new population again from Sicily whose DNA was different from that of the Early Neolithic (Barratt et al. 2019: 16-17). This obviously disrupts the previous narrative and chronological sequence and, understandably, requires a good, plausible explanation or, even better, some further research to confirm or refute it. In the first instance, one needs to see how the new dates for this second repopulation, which is equivalent to the one previously assigned to the Żebbuġ phase (4100-3800 BCE), fit with the newly established chronology of the parent San Cono/Piano Notaro culture of neighbouring Sicily (Speciale 2011). Although the new date of 3700 BCE for the rise to the Żebbuġ phase, with its characteristic pottery, seems to fit better with that of the San Cono/Piano Notaro culture, we still need to somehow reconcile this new hiatus of c. 900 years with the Grey and Red Skorba phases, both of which have their sources of inspiration beyond the Sicilian channel, reaching Malta via Sicily: Grey Skorba from the Serra d'Alto culture originating in southern Italy; Red Skorba from the Diana culture in Lipari.

Whatever the scenarios produced by the apparently conflicting dates, the break between the Early

3 Except one outlier, the so-called 'Thermi Ware' which straddled over the Late Neolithic and the Bronze Age, but this matter will be discussed at length on some other occasion.



Fig. 3. A selection (not to scale) of the varied anthropomorphic representations (statues, statuettes, clay figurines) of the Maltese temple culture (3000-2500 BCE).

Neolithic and the Temple Period is now firmly established, irrespective of the length of the intervening hiatus. This is further confirmed by the absence of any degree of continuity of the figurative legacy



Fig. 4. Front and back views of a small female figurine (reconstructed from various fragments) from the so-called Red Skorba Shrine.

of the first period, characterized by the three zoomorphic ceramic handles of the Għar Dalam phase and the set of stylized female figurines from the Red Skorba shrine (fig. 4). In contrast with the as yet total absence of evidence relating to funerary rituals in the first period of Maltese prehistory (the Early Neolithic), the first two phases of the second period provide substantial evidence of underground funerary structures even before the emergence of the striking megalithic temples above ground. These rock-cut tombs have produced anthropomorphic representations which have absolutely no relation to those of the earlier period. They consist mainly of the heads of two anthropomorphic stone stelae (commonly known as statue-menhirs from their similarity to the Sardinian, Corsican and Breton ones) found in two separate tombs, the first one in Malta, the second in Gozo (fig. 5). In the same context of the second tomb a set of amulets carved on animal bone seem to hint at a very minimalist human form, for which there are



Fig. 5. Limestone heads of stelae (or statue-menhirs): left, from a rock-cut tomb in Malta; right, from a two-chamber rock inside the Xaghra Circle, Gozo.

no precedents, neither within Malta nor outside it (fig. 6). What is even more surprising is the discontinuation of both of these figurative expressions in the following phases that saw the efflorescence of the megalithic civilization, in spite of a degree of continuity in the evolution of the ceramic repertoire.

Even the figurative art of the latter seems to emerge from nowhere. It emerges as a fully consummate artistic expression in the final phase of the Temple Period, the Tarxien phase (3000-2500 BCE) without any hint of an embryonic origin and evolutionary process in previous phases, almost like the cave art of the late Palaeolithic in Europe. Attempts have been made to identify outside sources of inspiration for the architecture of the megalithic structures that hosted that art but, ultimately, even these seem to be a purely autochthonous phenomenon, even if the idea of the use of large stone building blocks might have originated elsewhere beyond the Maltese shores and passed on to the other members of the insular community by a privileged group that travelled abroad in search of imported lithic raw materials (Robb 2001), rather than by itinerant proselyte missionaries spreading the seed of a megalithic religious ideology from east to west, as assumed by prehistorians of the first half

of the 20th century (e.g. Elliot Smith 1929).⁴

The group of freestanding statues and statuettes that have presented a special fascination to most scholars was that representing a corpulent but genderless body, almost always without its head, which was intended to be inserted in place when required (fig. 7). Most of them were found among the temple ruins above ground (like Ħaġar Qim and Tarxien) but one was also retrieved from a rock-cut pit in the upper, open-air level of the contemporary Ħal Saflieni subterranean cemetery, better known as the Hypogeum (fig. 8). Ironically, in the same pit two heads were found of similar proportions, one of which was found to fit perfectly inside the hollowed neck of the statuette. For decades these statuettes were thought to represent mother goddesses, in the same category as the contemporary corpulent, but overtly female, figurines from eastern Europe and the Near East and connected with a universal worship of a mother goddess or goddess of fertility, a personification of the mother earth of ancient Mediterranean civilizations.

⁴ Even V. G. Childe (1950), though to a watered-down degree, was an exponent of the movement. An unsuccessful attempt to revive the *ex oriente* diffusionist idea, taking into consideration the new dates provided by radiocarbon archaeometry, was made by Euan MacKie (1977).



Fig. 7. The seven statuettes of a corpulent being found beyond the main entrance of the main temple of Ħaġar Qim in 1839.

The epitome of this attribution was reached with Marija Gimbutas in her richly documented publications (1982; 1989; 1991). Since then some more statuettes, equally genderless and volumetric, though markedly different in their iconography, have stolen the scene and made it to the archaeological limelight. They come mostly from burial and domestic contexts that belong to the Bonu Ighinu/San Ciriaco cultures of Sardinia (Lugliè 2018: 52-69), which date to considerably earlier (5th-4th millennium) than the Mal-



Fig. 6. A selection of amulets, probably anthropomorphic, from the Żebbuġ phase tomb at the Xagħra Circle, Gozo.

tese ones. The spiral motives of the Aegean Bronze Age have long been dismissed as the prototypes for the spiral relief decorations so abundantly present in the Tarxien temples, since they are considerably later than the Maltese ones. There are admittedly some intriguing similar patterns in the colour decoration of the *domus de janas* of Thiesi-Mandra Antine III in Sardinia (Tanda 2015: 199) (fig. 9) and the red ochre drawings of the so-called Oracle Room in the Ħal Saflieni hypogeum (fig. 10). Does this similarity make them related in any way, one inspiring the other, or both being inspired from an as yet unknown prototype somewhere else in the Mediterranean?

With the recently proposed reversal of the outdated diffusionist view of the movement of megalithism from the east to another one, equally diffusionist, which sees megalithism originating in northwest Europe, from northwest France to Atlantic Iberia, Ireland and Britain and Scandinavia, and finally to the western and central Mediterranean via a maritime route (Schulz Paulsson 2019) (fig. 11),⁵

⁵ It should be noted, however, that the calibrated radiocarbon date for the Maltese megalithic culture in this article is outdated and far too low (see contra Renfrew 1972; 1973; Barratt et al. 2019). The text of the article omits Malta even in the last episode of the Mediterranean spread of megaliths. It also ignores the fact that the Maltese monuments, like the British henges (including Stonehenge which is also left out) are not funerary.



Fig. 8. Front and back views of a statuette representing an unclothed corpulent being from the Hypogeum. The two heads which fitted were found in the same pit.

the temptation now could be to see such sculptural iconography (as highlighted above) radiating from Neolithic Sardinia, with its impressive rock-cut tombs known as *domus de janas*, to the Maltese archipelago. Although the funerary rituals of the slightly later Tarxien phase is equally subterranean and rock-cut, there are substantial differences between the two: whereas the *domus de janas* are inspired mainly by domestic architecture and one can refer to them as houses of the dead the Ħal Saffieni hypogeum is essentially a replica of the architectural decoration of the contemporary megalithic architecture above ground.

The lesson that we have learned from past experience

and from the history of prehistoric studies is that we should not rush to assume any movement of ideas in one direction or another, until more stringent archaeological or other scientific evidence, like DNA and stable isotope analysis, as the FRAGSUS project seems to be hinting to provide, are available (Barratt et al. 2019). Till then, it would be safer to stick to the inquisitive but prudent stance of contemporary archaeology with its interdisciplinary and collaborative studies. Let us make our own the lesson provided to us by the historical record of archaeology as an essentially humanistic discipline, but one that also relies wholeheartedly on contributions from the empirical sciences.



Fig. 9. Colour-painted decoration of the *domus de janas* of Thiesi-Mandra Antine III, Sardinia (source: Tanda 2015: 199)



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Fig. 10. View of a limited area of the red ochre pattern decorating the so-called Oracle Room of the Hal Saflieni hypogeum (photo: courtesy of Heritage Malta).

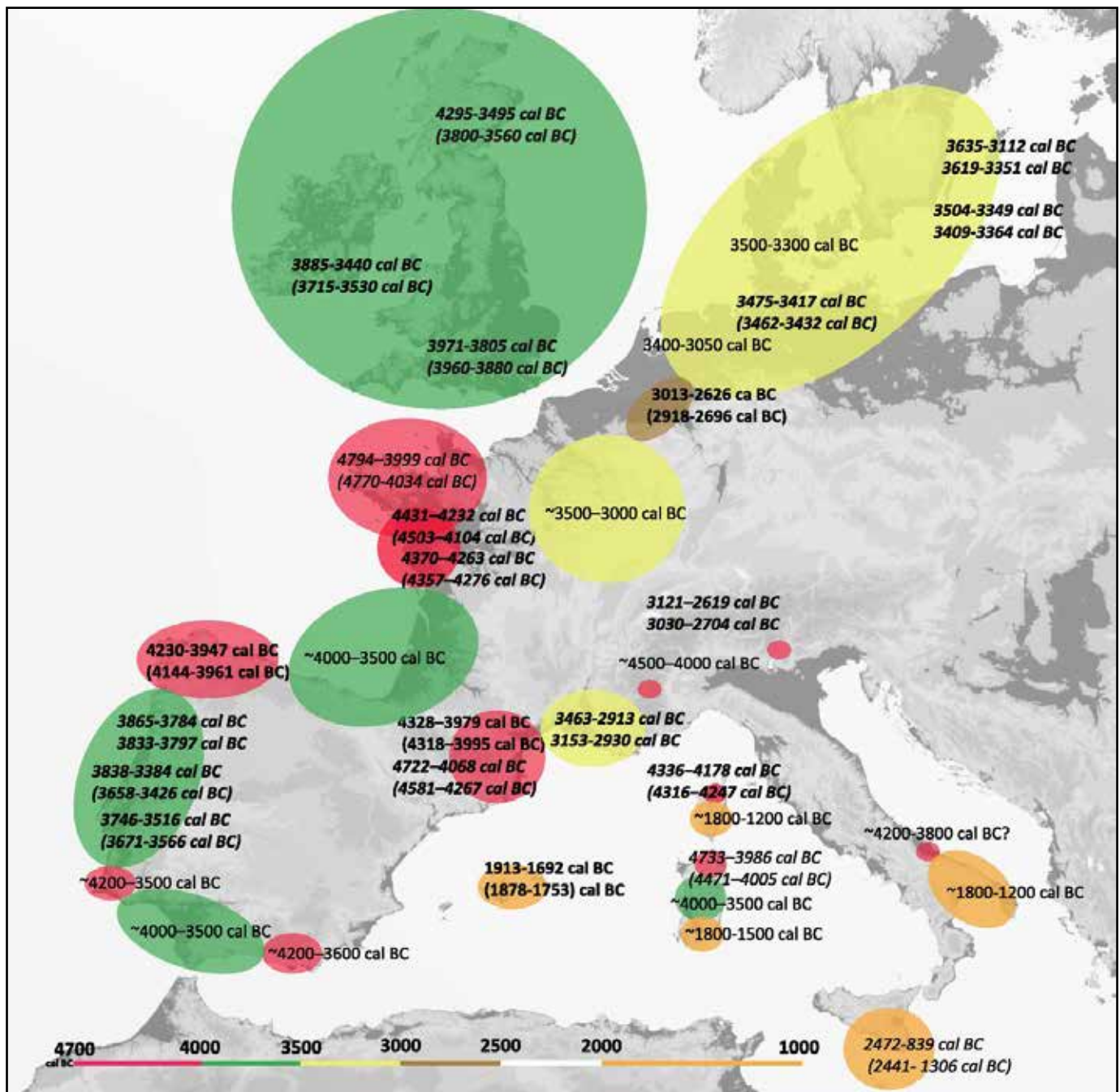


Fig. 11. Map showing estimated dates for the earliest megaliths in European and western Mediterranean regions. Colors show the hypothetical route of the megalithic expansion in three main phases (red–green–yellow), followed by an episode of megalithic Mediterranean revival (orange) in the second millennium BCE. Estimates carry 95% probability (68% probability in brackets) (Schulz Paulsson 2019).

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DEPICTIONS OF FELIDAE IN THE ROCK ART OF KYRGYZSTAN AND SOUTHEASTERN KAZAKHSTAN

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Introduction

After the independence of Kazakhstan and Kyrgyzstan, the snow leopard became a common symbol in the public space to define their national identities: the feline is present on coins, stamps, banknotes and as sculptures, but also on the official seal of Almaty and on the coat of arms of Astana. Other felines such as tigers and lions are important in the collective imagination. This has been the case since in the Iron Age: pieces of jewelry with these predators have been found for example in the kurgans Issyk and Taldy II in Kazakhstan (exhibited in the National Museum of Kazakhstan in Astana). This paper presents an inventory of rock engravings of Felidae in southeastern Kazakhstan and Kyrgyzstan, and tries to understand whether former societies depicted felines as part of their natural world or as a symbol of an imaginary world.

The prospected region corresponds to the country of Kyrgyzstan and to the provinces of Almaty and Zhambyl in Kazakhstan. But the sites located in the Karatau Mountains in the Zhambyl province (e.g. Arpa-Uzen and Sauyskandyk) are not accounted for in this research. In order to analyze the petroglyphs in their global context, we used a statistics-based methodology. Unfortunately, many sites in both countries are unpublished or only partially published. This inventory is based on our own field prospections and documentations, and also in a few cases on some publications of sites in Kazakhstan.

Petroglyphs were also attributed to a chronological period in order to see if they are tied to a peculiar culture and civilization. The chronological attribution is a kind of interpretation, but based on a chronology of the rock art of this region as (well-)established by many Russian and Kazakh archaeologists (Baipakov et al. 2005; Beisenov and Maryashev 2014; Kasanov et al. 2017; Rogo-

zhinskii et al. 2004; Rogozhinskii 2011; Samashev 2012; Sher 1980; Shvets 2012).

The main challenge of compiling this inventory was to determine how felines are depicted in the rock art in comparison with other animals. This determination was done by a zoologist specializing in felids and canids. Felids are differentiated from canids by their long-curved tails and their rather round ears, but in many cases, the animals' features do not allow differentiation from wolves. Some animals have features of both species or depict a fantastic or a mythological beast. Petroglyphs are submitted to stylistic conventions, including the formation of features, in order to correspond to the imaginary world of the society in which the engraving was created. The depicted world is a recreation based on the collective imagination of a society, and it is sometimes no longer possible to understand which animal people wanted to represent. The difficulty of differentiating wolves and felines perhaps means that they depicted predators in general and not a species in particular. However, 162 felines could be determined, and among them some specific species were also differentiated.

Location of the sites with depictions of Felidae

The presence of Felidae among rock engravings in central Asia is very unusual. Usually, in Kyrgyzstan and in southeastern Kazakhstan, 65–75% of Bronze Age drawings are depictions of animals (Hermann 2017: 232), mainly goats, wolves and dogs, as well as bulls. Until now, we have documented more than 14,000 Bronze Age petroglyphs, but also more than 25,000 engravings from the Iron Age and about 4,000 from the Turkic medieval period (8th–12th centuries) in both countries. However, only 42 panels with 58 felines at 11 sites in southeastern Kazakhstan and 69 panels with 104 Felidae at 11 sites in Kyrgyzstan were inventoried.



Fig. 1. Main sites; in Kazakhstan: 1. Karasay; 2. Kulzhabasy; 3. Akkainar; 4. Gabayevka and Maimak; 5. Sarabastau; 6. Tamgaly and Ayuke; 7. Eshkiolmes; 8. Bayan Zhurek; in Kyrgyzstan: 9. Kenkol Valley (Tchatchikei, Dzhosha, Tchatchke...); 10. Saimaluu-Tash 1 and 2; 11. North shore of Issyk-Kul Lake (Ornok and Tcholon-Ata); 12. Zhaltyrak-Tash; 13. Suuk-Döbö.

1. Southeastern Kazakhstan (fig.1)

1a. Akkainar is a hilly region situated in the Kazakh steppe near Otar at 750–950 m a.s.l., 130 km northwest of Almaty, but also 25 km southwest of Tamgaly and about 20 km east of Kulzhabasy. More than 6,100 rock engravings were documented (Hermann 2016), but only 13 Felidae on nine panels could be identified: one undetermined, four lions, five leopards, one tiger and two cheetahs.

1b. Akterek is located at the entrance of a valley in a mountainous zone, close to the Kazakh steppe, at a height of 1,200 m. The site is 110 km west of Almaty at the Kyrgyz border. Only one lynx was documented among the 577 Bronze Age petroglyphs (Hermann and Zheleznyakov 2016).

1c. Ayuke is in the Kazakh steppe, about 30 km east of Tamgaly and 100 km northwest of Almaty, at a height of c. 800 m. The site remains mainly unprospected, but a panel with four lions from the Iron Age is known (Beisenov and Maryashev 2014: pictures 67 and 68).

1d. Bayan Zhurek is located in a pre-mountainous region at the border of the Kazakh steppe, at an al-

titude of 1,800 m, 15 km east of Kapal and 180 km northeast of Almaty. About 3,000 petroglyphs were inventoried, from the Bronze Age to the Turkic period (Samashev 2012), but we only found two Felidae (one lion and one leopard) on the same panel from the Turkic period.

1e. Eshkiolmes is located 220 km northeast of Almaty and 75 km southwest of Bayan-Zhurek. It is a complex of valleys at an altitude of 800 m along the Koksus River. More than 4,000 petroglyphs were counted (Baipakov et al. 2005), but we could only find eight panels with 12 engravings of Felidae: nine undetermined, two lions and one tiger. There are probably more Felidae petroglyphs due to the fact that some valleys still remain under-documented.

1f. Gabayevka is 40 km southwest of Taraz in the province of Zhambyl, at an altitude of c. 1,000 m. The site mainly remains unpublished, but five Bronze Age engravings of felines on three panels are known (Beisenov and Maryashev 2014: pictures 82–83 and 90a): three undetermined, one lion and one leopard.

1g. Karasay is located 15 km east of Taraz in the province of Zhambyl at the Kyrgyz border, at a height of 900–1,000 m. The Kenkol Valley in Kyrgyzstan is 70 km southeast of this site which mainly remains unprospected, even if two Bronze Age panels with two engravings of Felidae are known (Beisenov and Maryashev 2014: pictures 87-88): one undetermined and one lion.

1h. Kulzhabasy is a range of small mountains at 900–1,100 m, and located c. 160 km northwest of Almaty, in the province of Zhambyl. The site is divided into 24 main valleys and the total amount of petroglyphs still remains unknown, but is c. 6,000 (Hermann et al. 2016). Among them, only 12 Felidae on 12 panels were identified: four undetermined, two lions, five cheetahs and one caracal. Twelve other drawings were excluded, because their interpretation is too ambiguous.

1i. Maimak is near the Kyrgyz border in the province of Zhambyl, c. 25 km southwest of Taraz, at a height of c. 900 m. This site is 14 km east of Gabayevka, and is also located only 100 km northwest of the Kenkol Valley in Kyrgyzstan. The site remains unpublished, but one Bronze Age engraving of a leopard is documented (Beisenov and Maryashev 2014: picture 90).

1j. Sarabastau is a small site with c. 100 Iron Age engravings (Hermann 2011) in the Usek Valley close to the Chinese border, 30 km north of Zharkent. Its altitude is c. 1,400 m a.s.l. One Iron Age drawing is interpreted as a lion, even if it has some features of a fantastic animal.

1k. Tamgaly, recognized in 2004 as a World Heritage site by UNESCO, is located 125 km northwest of Almaty in the Kazakh steppe at an altitude of 890 m (Hermann, 2012). Only five Felidae on three panels (one undetermined and four leopards) were numbered among more than 5,000 engravings.

2. Kyrgyzstan (fig. 1)

2a. Chiim-Tash is located in the Ur-Maral region in the province of Talas at an altitude of 3,100 m at the foot of a pass at 3,600 m connecting the Talas and the Fergana valleys. The site has been known since the 19th century, but was never fully documented until

2016 (Hermann, 2018b). There is a depiction of a lion among the 764 Iron Age petroglyphs.

2b. Issyk-Kul is a lake at an altitude of 1,607 m located 150 km east of Bishkek. Seven sites are on its north shore, between Tamchi and Tcholon-Ata (Hermann 2017). Petroglyphs with Felidae were found in Ornok (19 depictions on 12 panels: six undetermined, six tigers, five leopards and two cheetahs) and in Tcholon-Ata (six Iron Age engravings on three panels: four lions, one leopard and one undetermined).

2c. The Kenkol Valley is located in the province of Talas, 15 km northeast of the city of Talas and only 65 km northeast of Chiim-Tash, at an altitude of c. 1,600 m a.s.l. (Hermann, 2018a). There are eight tributary streams to the Kenkol River, each of them in a north-south oriented valley in which rock art was found. In four of these valleys, seven depictions of Felidae were inventoried: one leopard in Dzhosha and in Tchon Tchatchoi; four Felidae on four panels in Kitchi Tchatchikei (two undetermined, one lion and one tiger) as well as one lion in Tchatchke.

2d. Saimaluu-Tash 1 and 2 are located at 3,100–3,300 m a.s.l. on the eastern slope of the Fergana range, about 40 km south of Kazarman in central Kyrgyzstan. There is no complete documentation of either site and not many publications (Tashbaeva et al., 2001: 20-52). During our prospections between 2013 and 2017, we documented 49 Felidae on 33 panels in Saimaluu-Tash 1 among more than 15,000 petroglyphs, and 19 Felidae on 11 panels in Saimaluu-Tash 2 among some 4,000 petroglyphs. In Saimaluu-Tash 1, the count of Felidae is as follows: 15 undetermined, 14 (snow) leopards, six lions, seven tigers, five lynxes and two cheetahs. In Saimaluu-Tash 2, there are 12 (snow) leopards, one lion and one cheetah and five undetermined. Seventeen more animals in Saimaluu-Tash 1 and eight in Saimaluu-Tash 2 were not taken into account in this repertory due to the uncertainty of the determination.

2e. Suuk-Döbö is located in the province of Osh, about 40 km east of Uzgen, at 3,100 m a.s.l. On this unpublished site (with the exception of a mention to evoke it and its repertory (Amanbaeva et al. 2011: 54-

56)), c. 1,400 engravings were counted, but only two (snow) leopards on the same Bronze Age panel.

2f. Zhaltyrak-Tash is located in the Ur-Maral region in the province of Talas, about 45 km southwest of Talas, at a height of 2,570 m. The presence of Felidae is mentioned ("snow leopards, panthers, tigers" in Tashbaeva and Francfort 2005: 17), but our research did not allow us to find them or to identify them as such. Some Iron Age animals published in an older publication and interpreted as panthers are in fact bears, with the exception of one accompanying drawing (Sher et al. 1987: 74).

A statistical overview of Felidae depictions

Only 162 Felidae were identified among the petroglyphs from the Bronze Age to the Turkic period. This scarcity is particularly evident by comparison with canids, even if dogs are domesticated and only wolves can be considered as predators. Nevertheless, for the site of Akkainar, which has complete statistic documentation, we observe:

- in the Bronze Age, among 768 animals, there are 160 canids (20.83%), but only four felines (0.52%).

- in the Iron Age, among 3,929 animals, there are 348 canids (8.86%), but only three felines (0.08%).

- in the Turkic period, among 702 animals, there are 93 canids (13.24%), but only six felines (0.85%).

The same is observed in Kulzhabasy. In Valley 3, among 451 Bronze Age animals, there are 103 canids (22.83%), but only four felines (0.89%).

Other predators such as bears, boars, foxes and birds of prey are also scarcely depicted and each of them constitutes less than 1% of the engravings of animals. In light of this, we should perhaps consider that the exception is not the scarcity of felines, but the important presence of canids in rock art. It is perhaps due to the fact that some canids were domesticated and followed the hunters, but also because wolves are sociable and hunt in packs.

Among the 162 Felidae, we observe that about 30% (48) are unfortunately not further determined due to the fact that their features do not allow a precise differentiation between species. The main identified species are the leopard with 49 depictions (30.2%), the lion with 30 petroglyphs (18.5%) and the Caspian tiger with 16 engravings (9.9%). Furthermore,

there are 12 cheetahs (7.4%), six lynxes and one caracal.

These statistics probably reflect the relationship between humans and animals. In a pastoral society, wolves were perhaps considered more destructive to livestock than felines. And among Felidae, the snow leopard was the main predator for shepherds living in the *jailoo*, the summer pastures in high mountains, which would explain why it is the most depicted feline, mostly at Kyrgyz sites (37 among the 49 engravings of leopards). In the steppes, if the wolf continued to be the main predator not only for livestock but also for humans, lions and tigers were also potentially dangerous. Cheetahs are depicted at only two Kazakh sites and two Kyrgyz sites, probably because this species was already restricted to small areas. The scarcity of lynx and caracal is probably due to the fact that these animals were not considered a potential danger either for livestock or for humans. Some nocturnal attacks by lynxes could also have been due to wolves.

Analysis of the depictions of Felidae

1. Undetermined Felidae (figs. 2-3)

Forty-eight engravings of Felidae on 34 panels could not be further determined, even if it is assumed that two animals in Kitchi Tchatchikei and in Saimaluu-Tash 1 are leopards; another one in Eshkiolmes could be a lynx, whereas three others in Gabayevka seem to be tigers. The spatial distribution of these undetermined felines is as follows:

Kazakhstan: 19 engravings on 14 panels:

- Akkainar: 1
- Eshkiolmes: 9 on 6 panels
- Gabayevka: 3 on 1 panel
- Karasay: 1
- Kulzhabasy: 4 on 4 panels
- Tamgaly: 1

Kyrgyzstan: 29 engravings on 20 panels:

- Kitchi Tchatchikei: 2 on 2 panels
- Ornok: 6 on 4 panels
- Saimaluu-Tash 1: 15 on 10 panels
- Saimaluu-Tash 2: 5 on three panels
- Tcholon-Ata: 1

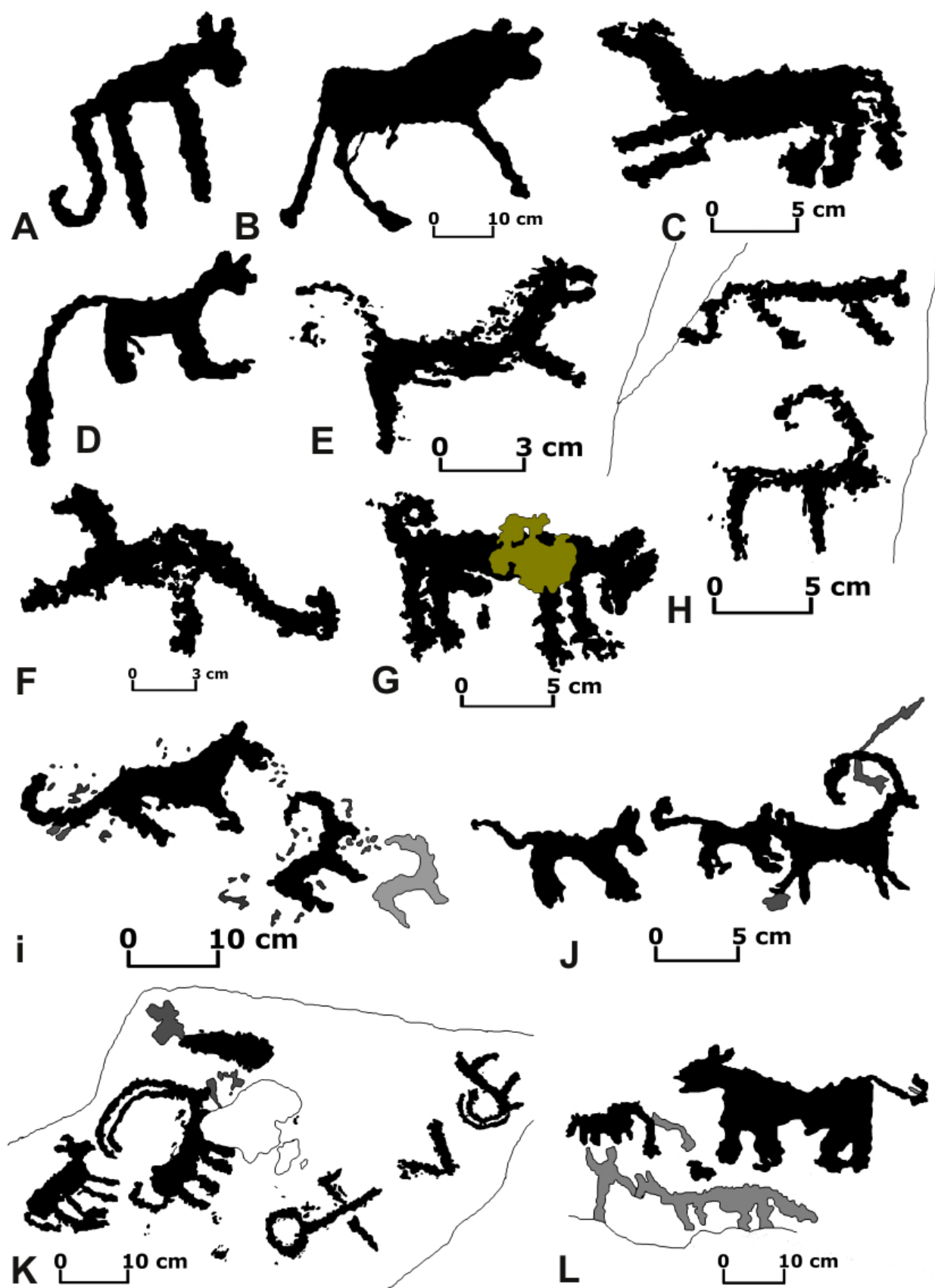


Fig. 2. Undetermined Felidae: A-D: Kulzhabasy; E: Akkainar; F: Tcholpon-Ata; G-H: Kitchi Tchatchikei; I: Ornok; J-L: Saimaluu-Tash 1.

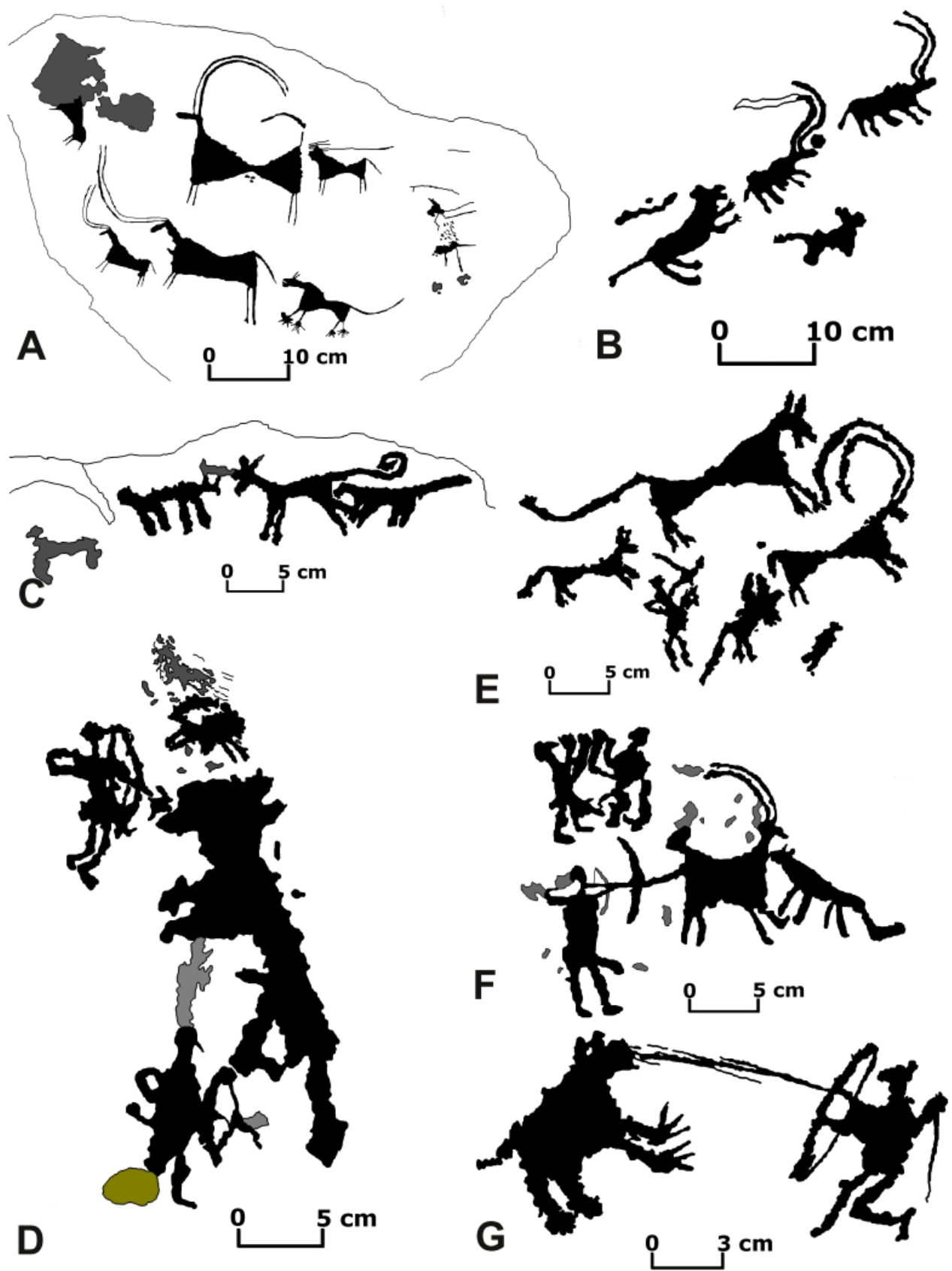


Fig. 3. Undetermined Felidae: A-C: Saimaluu-Tash 1 and 2; Snow leopards: D: Dzhosha; E-G: Saimaluu-Tash 1



Fig. 4. Eshkiolmes, hunting scene; Turkic period.

Seventeen of the panels are from the Bronze Age, 10 are from the Iron Age and seven from the Turkic period.

Fourteen felines are isolated without any other depiction on 11 panels (six from the Bronze Age, five from the Iron Age and three from the Turkic period). Furthermore, an Iron Age panel in Ornok and a Turkic panel in Saimaluu-Tash 2 depict a feline with three wolves. In Ornok, the wolves predate a goat, whereas the feline is depicted above the canids without performing any action. In Gabayevka, two worshippers are behind three Felidae (probably tigers) on a Bronze Age panel.

Twenty felines on 14 panels are depicted which predate an animal. On nine panels, 13 Felidae are preying on *caprae*, particularly *capra aegagrus* (five times) and one *capra ibex* (in Saimaluu-Tash 1), when it was possible to determine the species. Eight panels are from the Bronze Age (seven in Saimaluu-Tash 1 and one in Saimaluu-Tash 2), four panels (in Ornok and in

Eshkiolmes) are from the Iron Age and two panels are from the Turkic period in Tamgaly; and one feline in Saimaluu-Tash 2 was added in the Turkic period on a Bronze Age panel. Two Bronze Age panels each depict a predating scene against two bulls in Saimaluu-Tash 1. Two other panels show a predating scene against a deer, in Ornok (from the Iron Age) and in Tamgaly (from the Turkic period). A Bronze Age predating scene of *capra* in Saimaluu-Tash 1 is associated with worshippers. There is also an Iron Age panel in Eshkiolmes showing a feline (perhaps a lynx) attacking a tiger (see D.4. below).

On four panels, the feline is with another animal and not preying upon it (in Kitchi T'chatchikei with goats, in Ornok and in Saimaluu-Tash 2 with canids and in Akkainar with an undetermined species).

Only three panels with four felines show the animal being hunted by humans with a bow. In Kulzhabasy, the panel is from the Bronze Age, while both other panels in Eshkiolmes (fig. 4) and Tamgaly are from the

Turkic period. However, in Tamgaly, the panel with a feline predating a deer shows a hunter with a bow behind the prey, but the arrows are targeting the deer and not the predator (an arrow is already in the back of the deer) (fig. 5).

2. Lions (*Panthera leo*) (figs. 6 and 7)

Lions can be recognized by their massive size, a large head (which suggests a mane for the male), and fur at the end of their tails. Lions usually predate in groups. Thirty depictions of lions were identified on 20 panels: 16 on 11 panels at eight sites in Kazakhstan and 14 engravings on nine panels at six sites in Kyrgyzstan. In Kazakhstan, they are mainly concentrated at two sites (four depictions in Akkainar, but also in Ayuke on one panel), whereas there are isolated depictions on a few other sites: two in Kulzhabasy as well as in Es-hkiolmes, one in Bayan Zhurek, Gabayevka, Karasay and Sarabastau. In Kyrgyzstan, they are mainly concentrated in Saimaluu-Tash (six in Saimaluu-Tash 1

and one in Saimaluu-Tash 2), but isolated engravings were also found in Chiim-Tash, Kitchi Tchatchikei and Tchatchke. Furthermore, in Tcholpon-Ata, one panel depicts four lions predating goats (probably *capra aegagrus aegagrus*) (fig. 8).

Eight petroglyphs depict a single animal, without any other engraving on the same panel (in Kazakhstan, Akkainar, Gabayevka, Sarabastau and twice in Kulzhabasy; in Kyrgyzstan, Kitchi Tchatchikei and twice in Saimaluu-Tash 1). One of the lions in Kulzhabasy is turning as if licking itself (fig. 6F). In five other cases, the animal is above or in front of another animal (a bull in Saimaluu-Tash 1, a deer in Saimaluu-Tash 2, goats in Chiim-Tash, Tchatchke and Karasay) without any hostile movement. The same situation is shown in Ayuke: a group of four lions is depicted with some goats without constituting a threat for them. In Akkainar, a group of three lions was also depicted without any association with another animal. In Saimaluu-Tash 2, a lion was on a panel with two others unde-



Fig. 5. Tamgaly, hunting scene; Turkic period.

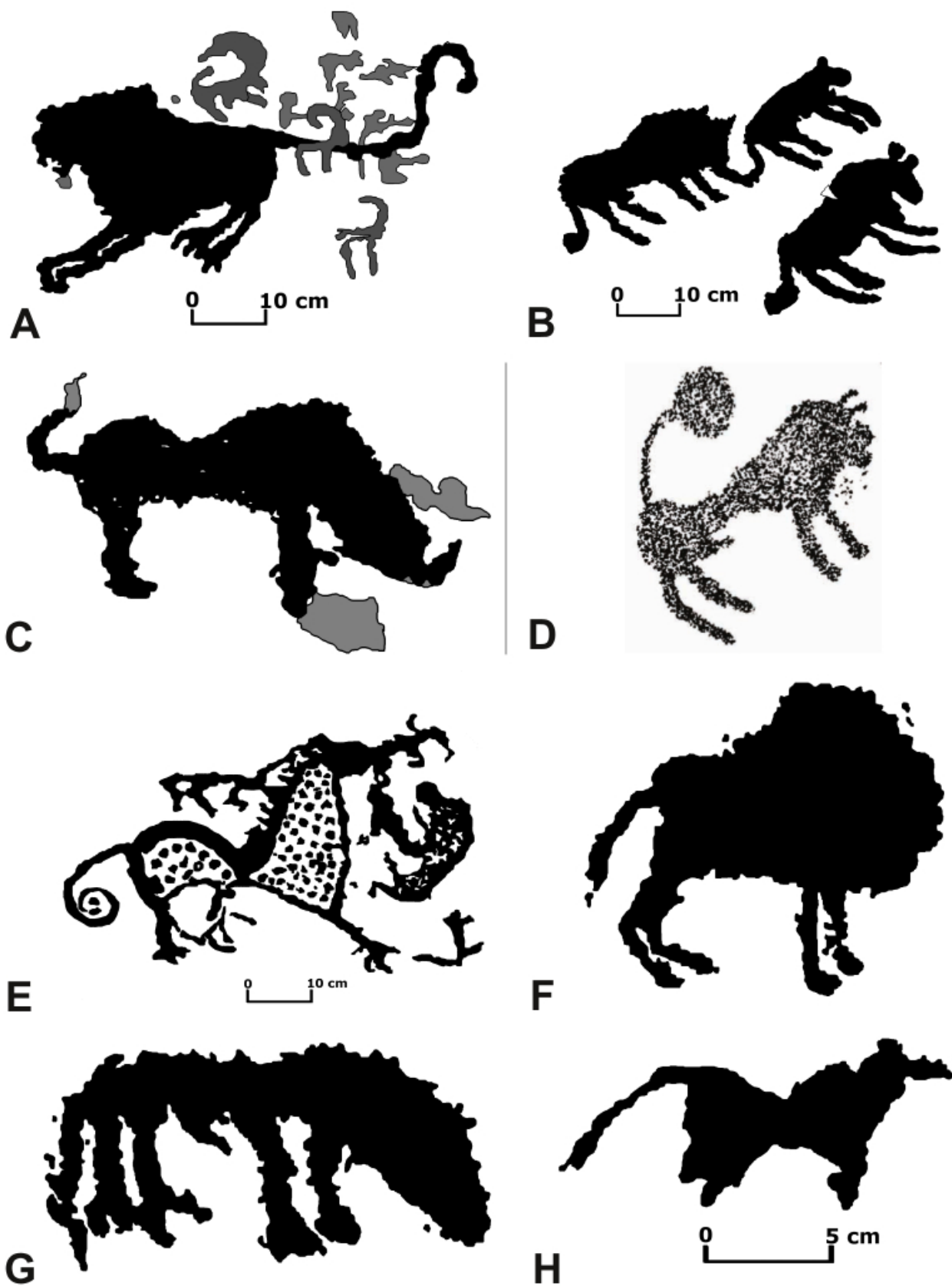


Fig. 6. Lions: A-B: Akkainar; C: Chiim-Tash; D: Gabayevka (after Beisenov and Maryashev 2014: 150); E: Sarabastau; F-G: Kulzhabasy; H: Tchatchke.

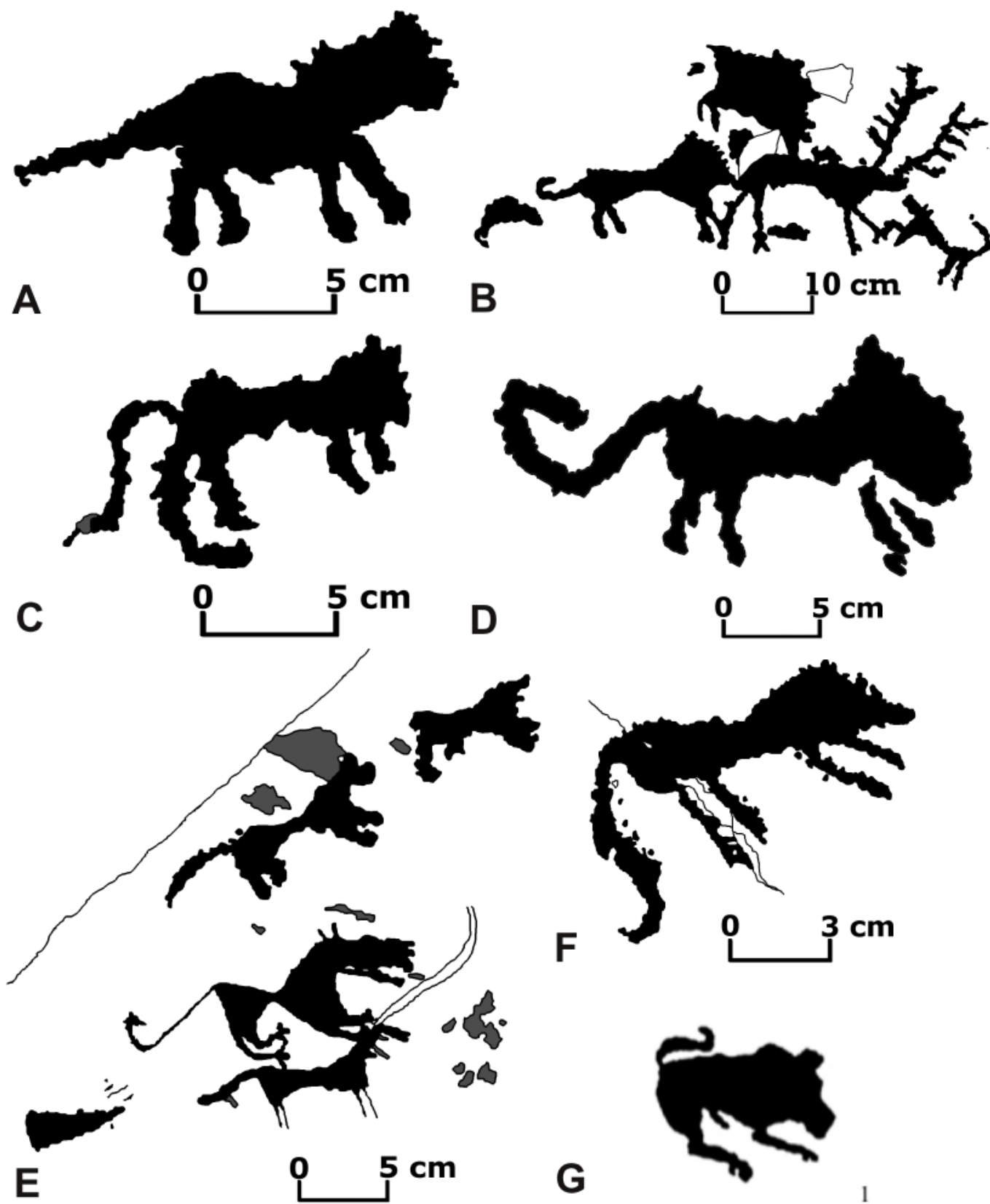


Fig. 7. Lions: A: Kitchi Tchatchikei; B-F: Saimaluu-Tash; G: Eshkiolmes (after Shvets 2012: Tafel 65).

terminated Felidae which predate a *capra aegagrus aegagrus*. However, their style is different, and it seems that this predating scene was depicted later. Altogether, ten panels depict a lion alone or in a group, without the presence of other animals, and five other panels show a lion or a group of them with other animals, without any appearance of preying.

Only one Bronze Age panel in Saimaluu-Tash 1 and the Iron Age panel of Tcholpon-Ata already mentioned above depict predating scenes. In Saimaluu-Tash, the prey is a deer, whereas in Tcholpon-Ata it is probably a *capra aegagrus aegagrus*. In Tcholpon-Ata, small anthropomorphs with a bow are shooting, but it is not clear if they are hunting the three lions or the goats. Because the anthropomorphs are above the goats and at the same level as the lions, we can assume their arrows are meant for the felines (fig. 8).

Only one panel of the Turkic period clearly shows a hunting scene: a rider with a bow hunting a lion. The

animal's proportions are oversized in comparison with the rider's (fig. 9).

In Sarabastau, an Iron Age lion has fantastic features with big claws, but also with some elements of the morphology of a horse (fig. 6E).

Twelve panels are from the Bronze Age, six panels date from the Iron Age and two panels are from the Turkic period.

For two Iron Age panels of Eshkiolmes, the drawings of the lions in the publication only show the animal without contextualization.

3. Snow leopards (*Panthera uncia*) and leopards (*Panthera pardus*) (figs. 3, 10-11)

Leopards have short legs, round ears, a long curved tail and a long body of medium size. It is not possible to differentiate *panthera uncia* and *panthera pardus*. *Panthera pardus* is not known at this latitude and due to the biotope, the depictions should be of snow leopards, but



Fig. 8. Tcholpon-Ata; three lions predating a *capra aegagrus aegagrus* (detail); Iron Age.



Fig. 9. Bayan Zhurek; leopard, hunter and lion; Turkic period.

it seems that a *panthera pardus* was killed in south Kazakhstan in the region of Taraz in 1856 (see <http://www.wildnature-kz.narod.ru/english/Therecordofleopard.htm>). Leopard is the primary species depicted among the felines with 49 engravings on 34 panels: 12 on nine panels at five sites in Kazakhstan and 37 on 25 panels at eight sites in Kyrgyzstan. However, these petroglyphs are mainly located in Kyrgyzstan and concentrated at a few sites: in Akkainar in Kazakhstan with five drawings, but also in Tamgaly with four engravings (also near Akkainar, about 25 km away); in Kyrgyzstan, in Saimaluu-Tash 1 and 2 (respectively with 14 and 12 engravings), but also in Ornok (five depictions). Other engravings were found in Bayan-Zhurek, Gabayevka and in Maimak in Kazakhstan (one at each site), and in Kyrgyzstan in Suuk-Döbö (twice), as well as in Dzhosha, Tcholpon-Ata Tchon Tchatchoi and Zhaltyrak-Tash (one depiction at each site). Even if we assume that some undetermined felines de-

pict (snow) leopards, the general overview shows that these engravings are concentrated in only a few regions: in the region of Akkainar-Tamgaly in Kazakhstan (nine of 12 engravings for this country), in Kyrgyzstan in the region of Saimaluu-Tash (26 depictions of 37 engravings) and on the northern shore of Issyk-Kul (six engravings). If both Kyrgyz regions correspond to the natural environment of *panthera uncia*, this is not the case for the Kazakh region of Akkainar-Tamgaly which is located in the steppe, even if it is a hilly region with an altitude of 900–1,100 m. Might this be an indication of the presence of *panthera pardus*?

Furthermore, petroglyphs of leopards are very scarce or completely absent at the sites in the mountainous region of Bayan-Zhurek-Eshkiolmes-Usek in Kazakhstan, which should constitute an ideal biotope for the snow leopard.

Six panthers are isolated on a panel without any other drawings (in Kazakhstan, one from the Bronze Age

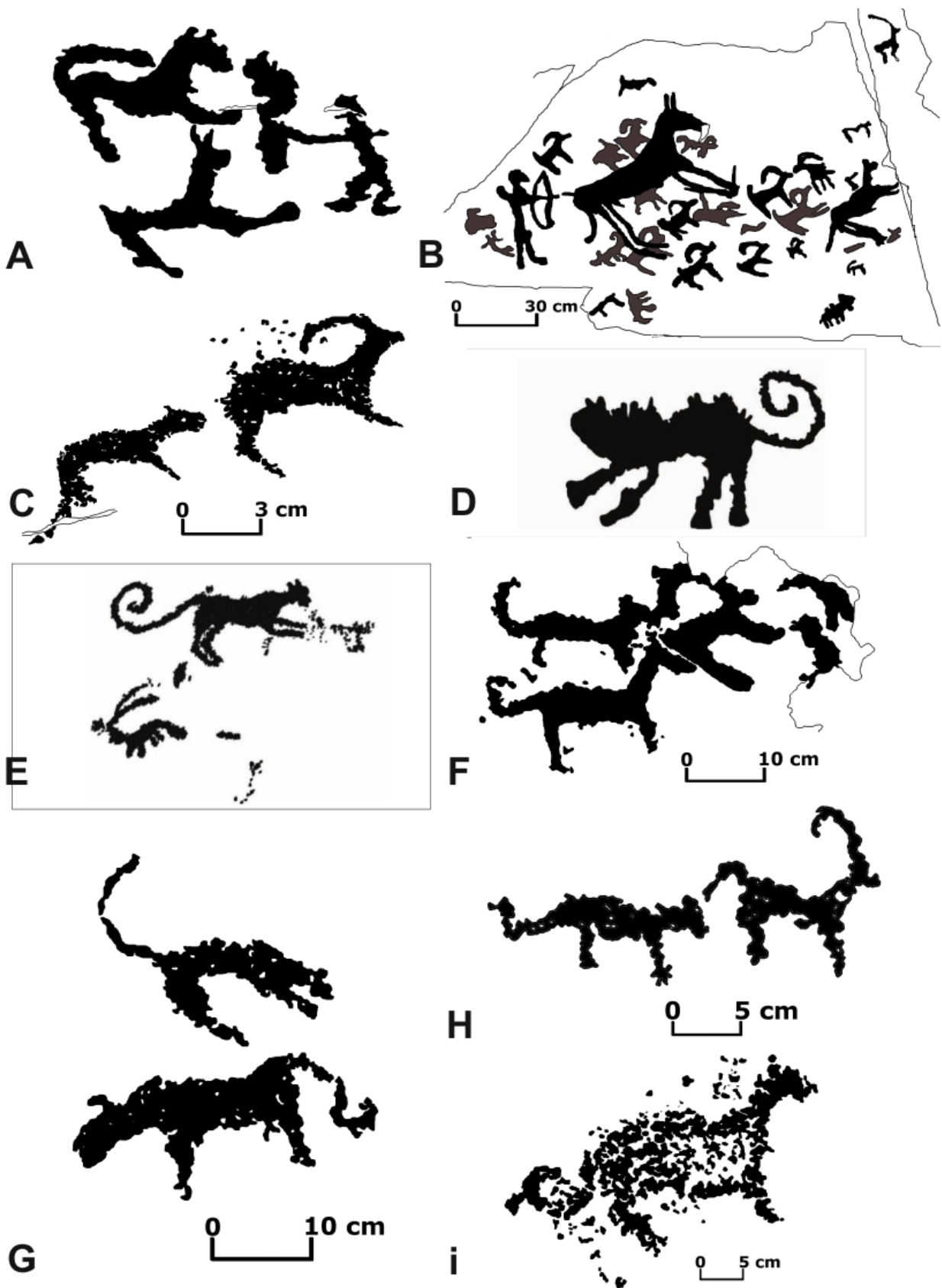


Fig. 10. Leopards: A-C: Akkainar; D: Gabayevka (after Beisenov and Maryashev 2014: 122); E: Maimak (after Beisenov and Maryashev 2014: 129); F-H: Ornok; I: Tcholpon-Ata.

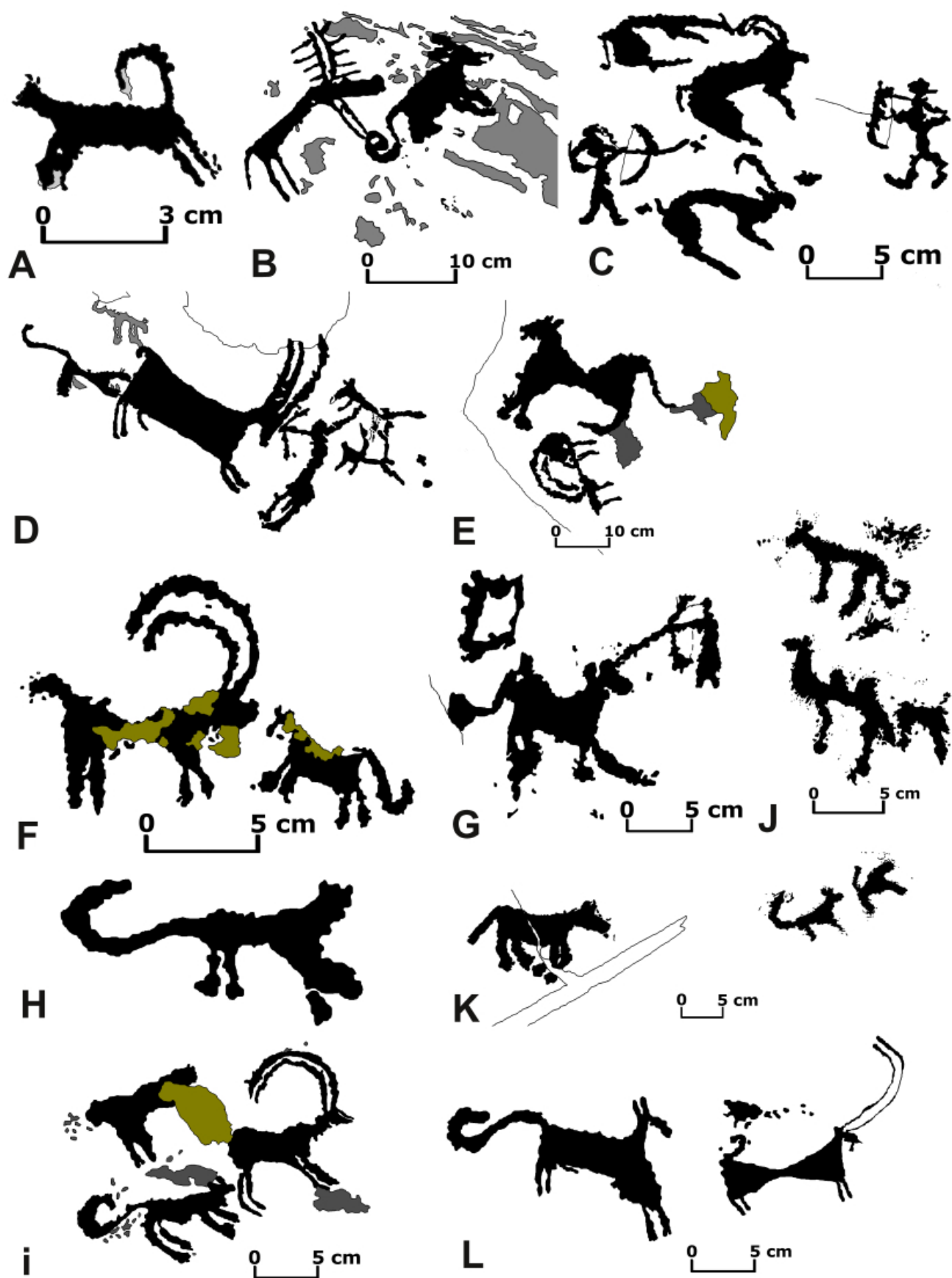


Fig. 11. Leopards: A: Tchon Tchatchoi; B-G, L: Saimaluu-Tash 2; H-I: Suuk-Döbö; J-K: Tamgaly.

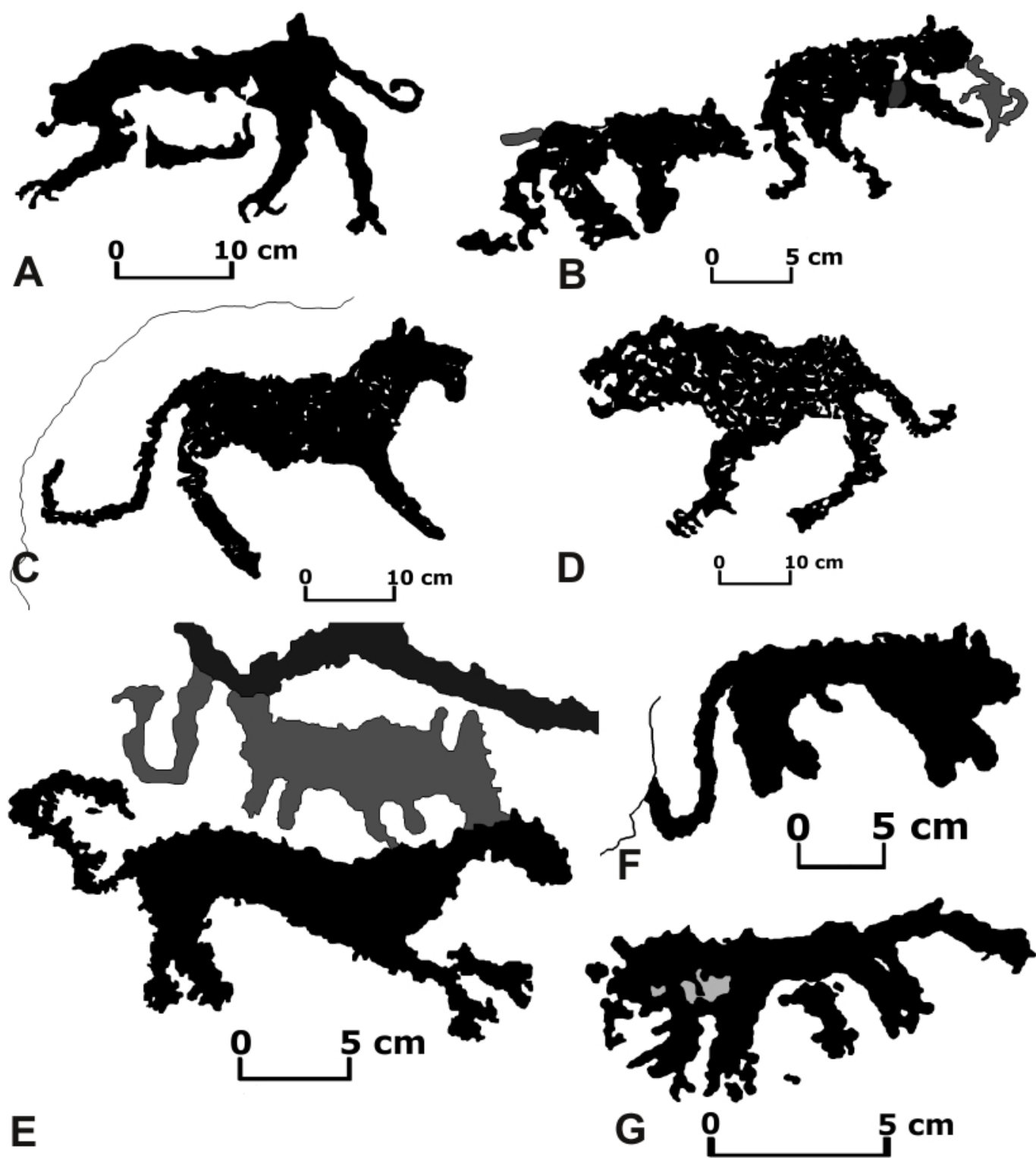


Fig. 12. Tigers: A: Akkainar; B-D: Ornok; E-F: Saimaluu-Tash 1; G: Kitchi Tchatchikei.



Fig. 13. Eshkiolmes; Lynx (?) and tiger fighting; Iron Age.

in Gabayevka; in Kyrgyzstan, four from the Bronze Age in Saimaluu-Tash and one from the Iron Age in Tcholpon-Ata). Furthermore, a Bronze Age panel in Akkainar depicts a group of three, without any other drawings, and there is also a copy from the Iron Age and another copy from the Turkic period of a Bronze Age leopard in Tamgaly. In Ornok, two panthers are on an Iron Age panel without any other animal.

On eight other panels, however, a panther appears with another animal without showing any sign of predating (once with a boar, twice with a bull and once with a deer in Saimaluu-Tash; once with a camel in Tamgaly and three times with goats in Akkainar, Maimak and Tchon Tchatchoi).

23 (snow) leopards on 14 panels are depicted predating some animals: 13 panels with goats (*capra siberica*, *capra ibex* or *aegagrus*) and one with *ovis ammon polii*. Nine of these panels are from the Bronze Age (one in Dzhosha and Suuk-Döbö, seven in Saimaluu-Tash);

four panels are from the Iron Age (one in Saimaluu-Tash 2; two in Ornok and one in Akkainar) and only one panel is from the Turkic period (in Akkainar).

Only seven panels depict a panther hunted by anthropomorphs: five are from the Bronze Age (four in Saimaluu-Tash and one in Dzhosha), and two scenes are from the Iron Age (in Akkainar and Saimaluu-Tash 2). Only one panel in Akkainar depicts a hunting scene without a simultaneous predating scene of the feline. In four cases, the feline attacks some goats, while the human beings are shooting arrows. In three cases in Saimaluu-Tash, it is not perfectly clear whether the hunters are trying to kill the panthers or the goats, e.g. in Saimaluu-Tash 1, the hunter is behind the *capra ibex* and the panther is in front of the prey. An arrow touches the ibex and not the feline. Furthermore, on this panel, two worshippers are above the hunter.

A Turkic panel in Bayan Zhurek shows a rider hunting a lion, and also a panther behind the horse (fig.9).

4. Caspian tigers (*Panthera tigris virgate*) (fig. 12)

Tigers have a sort of fur collar round their necks and are a massive size. Welts were not observed due to the stylistic characteristics of petroglyphs from this region, which are generally fully pecked, including inside the body of the animal.

Sixteen Caspian tigers were documented: two at two Kazakh sites (Akkainar and Eshkiolmes) and 14 at three Kyrgyz sites (one in Kitchi Tchatchikei; six depictions on three panels in Ornok and seven on four panels in Saimaluu-Tash 1).

Five panels are from the Bronze Age (four in Saimaluu-Tash 1 and one in Kitchi Tchatchikei), four panels are from the Iron Age (three in Ornok and one in Eshkiolmes) and the panel in Akkainar is from the Turkic period. In two cases, the tiger was isolated on its panel without any other drawings (Kitchi Tchatchikei and Ornok). In Ornok, a second panel also shows two iso-

lated tigers. However, both of these Iron Age panels from Ornok could be understood differently. For each of them, the next rock shows a goat as if the tigers were ready to predate it. In two cases, the tiger is with another animal (a camel in Akkainar and a goat in Saimaluu-Tash), but does not show any hostile movement against its potential prey.

In Eshkiolmes, an Iron Age panel depicts a tiger fighting another undetermined animal (perhaps a lynx due to its small tail) with a goat behind the tiger (fig. 13). It is perhaps a fight between two predators for hunting territory. Three predating scenes were also depicted: one from the Iron Age in Ornok with an *ovis ammon polii*, and two from the Bronze Age in Saimaluu-Tash 1 with a *capra*. In these scenes from Saimaluu-Tash, in one case, a man is behind the feline which is in the company of a wolf, and the second panel shows three archers shooting at the predator attacking the goat (fig. 14).



Fig. 14. Saimaluu-Tash 1; three archers hunting a tiger predating a goat; Bronze Age.

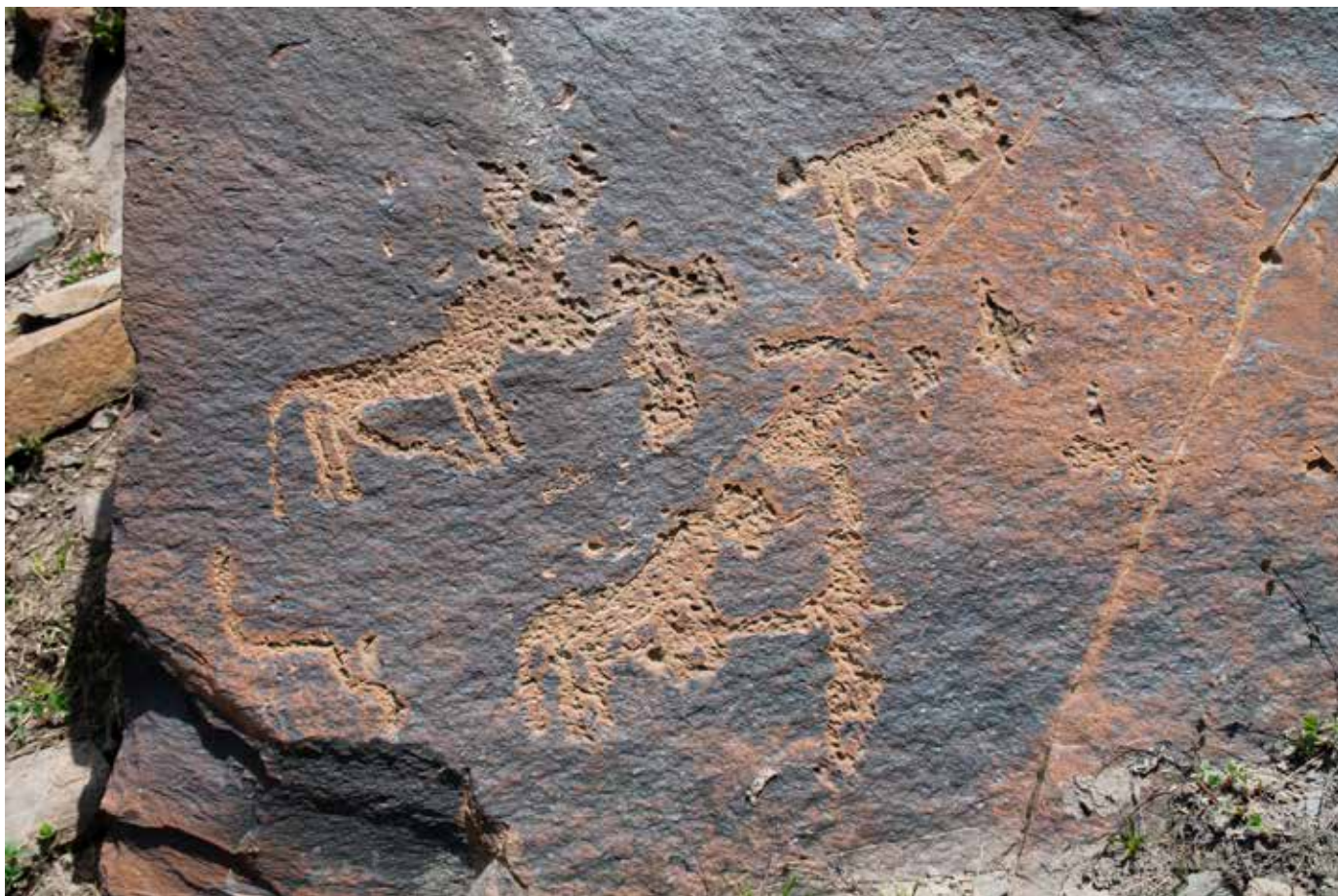


Fig. 15. Saimaluu-Tash 1; humans and tigers; Bronze Age.

A Bronze Age panel from Saimaluu-Tash 1 shows two humans in front of two tigers, but it is not clear whether one or the other are hunting or being hunted. The position of the animals is not hostile and the anthropomorphs have no bows or any other weapon. One human is raising his arm to the paws of one tiger, while the second human has his arm going to the mouth of the second animal as if trying to control them (fig. 15).

5. Cheetah (*Acinonyx jubatus venaticus*) (fig. 16)

Cheetahs are identified by their slender body, small rounded head, long thin legs and a long spotted tail. Twelve cheetahs were documented: seven on six panels in Kazakhstan and five on four panels in Kyrgyzstan. In Kazakhstan, cheetahs were found in Akkainar (two engravings on one panel) and in Kulzhabasy (five petroglyphs on five panels); in Kyrgyzstan, in Ornok (twice) and in Saimaluu-Tash (twice on one panel in Saimaluu-Tash 1 and one drawing in Saimaluu-Tash 2). Four panels date from the Bronze Age (once in

Saimaluu-Tash 2 and three times in Kulzhabasy), three others are from the Iron Age (two in Kulzhabasy and one in Ornok), whereas three panels are from the Turkic period (in Akkainar, Ornok and Saimaluu-Tash 1). In Kazakhstan, cheetahs are located in the same region: Kulzhabasy and Akkainar are only 20 km distant from each other and both sites offer the same environmental landscape (a hilly region in the Kazakh steppe). In Kyrgyzstan, they are in two different regions: on the north shore of the Issyk-Kul Lake (Ornok) and in central Kyrgyzstan in Saimaluu-Tash. If north of Issyk-Kul represents the natural area of the cheetah, it is not the case with Saimaluu-Tash, which is a high mountainous site. However, we can assume that the three depictions are a recollection of what was seen in the valleys near the site, most probably in the Fergana Valley (less than 70 km distant) or in the region of Kazarman (c. 25 km).

One Bronze Age and both Iron Age depictions as well as the Turkic engraving in Akkainar show an isolated

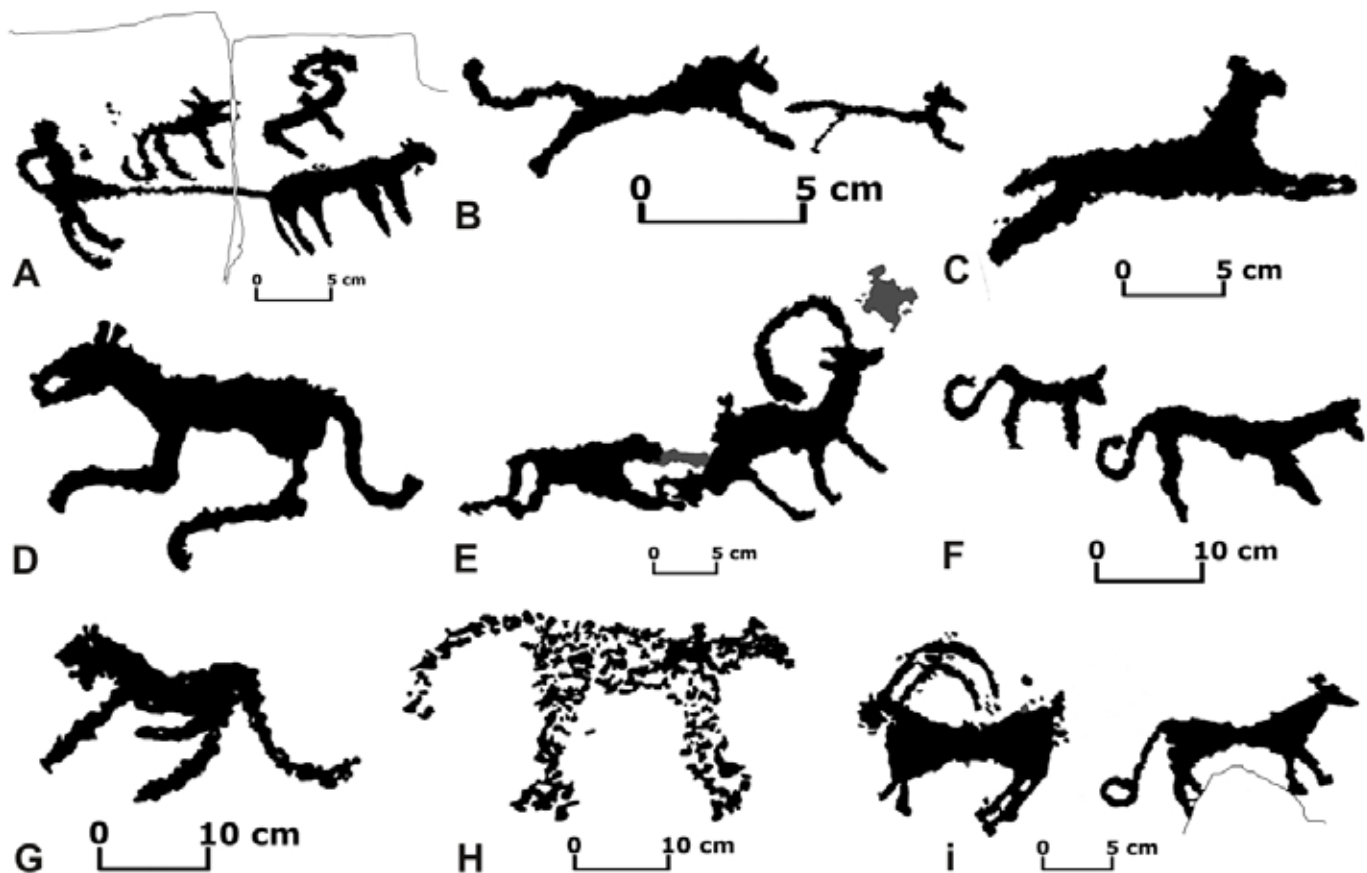


Fig. 16. Cheetahs; A-E: Kulzhabasy; F: Akkainar; G-H: Ornok; I: Saimaluu-Tash 2.

animal. In two cases, the cheetahs predate: a goat on the Bronze Age panel and a fox on the Iron Age panel, both in Kulzhabasy. In Saimaluu-Tash 2, the Bronze Age cheetah is on the same panel as a *capra aegagrus aegagrus* but the animals are back to back. A Turkic panel in Saimaluu-Tash 1 depicts an adult with its offspring (fig. 17), whereas on the Turkic panel in Ornok the feline is under two riders.

A Bronze Age panel in Kulzhabasy is more ambiguous. A man is tied to the cheetah by its phallus as if having sexual intercourse with it. A wolf is also on this panel. These depictions mostly give zoological information about the historical presence and the territorial range of the cheetah. Their scarcity and their division into three different periods do not permit any archaeological clues about the evolution of the humans' conceptual world.

6. Caracal (*Caracal caracal*) and Eurasian lynx (*lynx lynx*) (fig. 3G)

Caracals are identified by their robust morphology,

and long legs, short face, small tail and long tufted ears. Lynx have very sharp ears, a very short tail and are rather small.

Only one caracal in Kulzhabasy and six lynxes have been identified. The engravings of the caracal and of the lynxes are from the Bronze Age, but one lynx is from the Iron Age. In Kulzhabasy, the caracal is depicted in its natural environment (the steppe), whereas five depictions of lynxes are in Saimaluu-Tash 1 at a high-mountainous site without forests in the direct vicinity. Only one petroglyph of lynx found in Akterek corresponds to its natural area.

The caracal is isolated without any association, as well as one lynx. Four panels show a predating scene: twice of a deer (at Akterek and Saimaluu-Tash 1) and twice of an ibex. The lynxes are behind the prey, but still not attacking it. Another panel depicts a lynx hunted by a man with a bow. On this same panel, a group of three wolves attacks two bulls. A worshipper is also present on this panel over the canids.

Depictions of Felidae by chronological periods

In both countries, rock art is a phenomenon which mainly took place during three periods, the Bronze Age, the Iron Age and the Turkic period, that is, medieval times. However, the number of drawings largely differs between these periods, and sometimes between sites: during the Bronze Age, the themes are many (a diversity of fauna, chariots, hunting scenes, war and erotic panels), and the number of petroglyphs is important; the Iron Age saw a huge production of petroglyphs, but with limited themes (goats and wolves, hunting scenes); the Turkic period offers a smaller repertory (clan signs, riders with banners, a few animals) and a smaller number of engravings. Furthermore, the tradition of engraving rocks never really disappeared. A revival of this tradition has been observed since the 19th century, even if the number of drawings for this time is extremely scarce. The chronological attribution is based on a chronology established by many Russian and Kazakh archaeologists (Baipakov et al. 2005; Beisenov and Maryashev 2014; Kasanov et al. 2017; Rogozhinskii et al. 2004; Rogozhinskii 2011; Samashev 2012; Sher 1980; Shvets 2012).

Four examples below show the chronological division between petroglyphs.

	Bronze Age	Iron Age	Turkic period
Akkainar	(18%) 1,101	(69%) 4,198	(13%) 828
Akterek	(23%) 577	(71%) 1,741	(6%) 148
Kara-Too	(37%) 1,279	(43%) 1,502	(20%) 716
Tchatchikei	(60%) 3,698	(34%) 2,106	(6%) 365

From this perspective, we observe that the chronological count for Felidae is as follows: 88 engravings from the Bronze Age (54.3%); 53 from the Iron Age (32.7%) and 21 from the Turkic period (13%). In comparison with the average of petroglyphs for each period, the engravings of felines are overrepresented during the Bronze Age, but underrepresented during the Iron Age. In the Turkic period, the number of felines approximately corresponds to the average. The count for Felidae by period is as follows:

	Bronze Age	Iron Age	Turkic period
Undetermined	25	13	10
Lion	16	12	2
Panther	29	17	3

Tiger	8	7	1
Cheetah	4	3	5
Lynx	5	1	0
Caracal	1	0	0

The thematic count of panels is as follows, with the note that some panels are both in the predating and in the hunted categories, because some felines predating animals are simultaneously being hunted by anthropomorphs:

	Bronze Age	Iron Age	Turkic period
Isolated or in a group	23	11	5
With other animals without predating	13	5	3
Predating	24	11	3
Hunted	9	2	3
Others	3	0	2

1. Bronze Age

Eighty-eight Felidae are from the Bronze Age, 23 in Kazakhstan and 65 in Kyrgyzstan. The overrepresentation in Kyrgyzstan is mainly due to the site of Saimaluu-Tash in which the number of petroglyphs is almost equivalent to the other Kyrgyz sites all together.

The leopard is the main depicted species in the Bronze Age (31.8%), followed by the undetermined (29.6%), the lion (19.3%) and the tiger (11.4%). In contrary, cheetah and lynx are very rare (4.5%). These results correspond to the general trend of depictions of felines. Four or five lynxes and one caracal were found during this period. It should probably be understood in the general thematic context between the Bronze Age and the Turkic period: less thematic diversity from one period to the next. But the scarcity of depictions of both animals during the Bronze Age probably reflects that these animals were not symbolically perceived as important, contrary to snow leopards or to potential human predators like lions and tigers. We note that the tiger was only depicted in Kyrgyzstan in the Bronze Age.

Thematically, the felines are mainly isolated on a panel (32%), and sometimes depicted with other animals, but without predating them (18%). The predating corresponds to 33.3% of the panels, whereas panels with felines hunted by anthropomorphs only consti-

tute 12.5%. Among the peculiarities of this period, there is a depiction of an erotic scene between a man and a cheetah. Furthermore, on four panels (one in Gabayevka and three in Saimaluu-Tash 1), worshippers are associated with felines: in Gabayevka, perhaps three tigers; in Saimaluu-Tash 1, one panel shows an undetermined feline, whereas a second panel has a lynx and the third one depicts a leopard.

2. Iron Age

Fifty-three drawings of felines date to the Iron Age. Twenty of them are located in Kazakhstan and 33 in Kyrgyzstan. The leopard (32%), the lion (22.6%) and the tiger (13.2%) are the three main depicted species. Cheetah is very rare but has approximately the same percentage as in the previous period (5.7%), whereas only one lynx was depicted. Panthers, lions and tigers have around the same average as in the Bronze Age. Thematically, predating scenes and isolated felines are equivalent (both 38%). Felidae with other animals with-

out predating them constitute 17.2% of the panels, whereas felines hunted by anthropomorphs are rare (6.9%).

3. Turkic (medieval) period

Twenty-one engravings of felines are attributed to the Turkic period: 15 in Kazakhstan and only six drawings in Kyrgyzstan. Due to the small amount of depictions, it is difficult to draw conclusions, but we observe that the most depicted species for this time is the cheetah, in contrast to the previous periods. However, ten Felidae are undetermined. Drawings with lions and tigers almost disappear. It could be explained by a different conceptual world in rock art or by the historical disappearance of these species due to hunting in previous periods or due to a reduction of favorable biotopes. Surprisingly, all drawings of leopards for this period are found in Kazakhstan. It is also difficult to draw conclusions about the themes of this period, but we observe that panels with isolated animals are found more often than predating scenes or hunted felines.



Fig. 17. Saimaluu-Tash 1; adult cheetah with its offspring; Turkic period.

4. Modern periods

After medieval times, the depiction of felines completely disappears. In the 19th and 20th centuries, there is a revival of rock art by the shepherds, but the main subjects are portraits (of themselves or of Lenin), horses and goats, mountains and, later, weapons, airplanes and cars. Sometimes, a dog is present, but wolves and felines are absent. This probably reflects their disappearance or extinction in the valleys and the summer pastures due to more frequent or efficient hunting. It is also perhaps the result that due to firearms these animals do not provoke fear any more. However, a last depiction of a feline, viz. of a domestic cat, was found among petroglyphs of the second half of the 20th century in Akterek.

Felidae in rock art: naturalistic or symbolic depictions?

24.7% of the felines are depicted alone, or in a group of felines without another drawing. They are neither associated with other animals nor with anthropomorphs. Twenty-nine felines are totally isolated on their panels and 21 others are in ten groups, viz. 39 panels in total (35% of the panels). Among these ten groups, one panel in Saimaluu-Tash 1 shows an adult cheetah with its offspring. If this depiction reflects a naturalistic observation, it is, however, pertinent to consider that isolated felines (also in groups) are more symbolic than naturalistic ones. The animals are isolated on the panel as a kind of totem. There is the willingness to depict them alone, excluded from their natural context. The predator has *per se* its own significance and does not need any other animal in order to exist. By depicting the feline alone, the human of former societies gave them a symbolic status we can perceive nowadays but not understand. Is the depiction of power and strength, of agility, of fear or threat being symbolized here?

37% of the felines are also depicted predating other animals. These 60 depictions are found on 38 panels (34% of the panels). These predating scenes are mainly naturalistic, but the felines are sometimes oversized in comparison with the prey. Even if these panels are based on natural observations, the predators become symbolic by their dimensions. Furthermore, the intention is to depict felines as a threat for livestock and other wild animals.

Twenty-one other panels (19%) depict felines with other animals, but without predating them. In these cases, we could consider that the felines have almost the same status as on isolated panels: the animal as a symbol, perhaps a threat to other living beings. However, these panels are mainly unclear in their intentions and it is hazardous to interpret them with certainty.

Only 14.8% of the felines are with humans in a hunting context. These 24 engravings are on 14 panels (12.6% of the panels), but on four panels, depicting eight animals, it is not clear if the felines are the target of the hunters. In some cases, the anthropomorphs' arrows touch the prey of the feline and not the predator. This signifies that only 16 Felidae on ten panels (9% of the depictions and of the panels) are clearly hunted by anthropomorphs. In the other cases, felines and anthropomorphs are in competition for the same prey. Altogether, these hunting scenes are very scarce compared with isolated animals or predating scenes. This scarcity raises questions: if they seem naturalistic, they are also symbolic. Is it the will to show human power over nature or that the anthropomorphs have the felines' strength? There is also no depiction of a human being killed or attacked by felines, as if the engraving should depict the control of nature by human society rather than the submission of the human to natural elements.

Conclusions

Even if some determinations of species can always be criticized, the overall results show that depictions of felines are near their biotopes, but some of them are also found outside their natural environment. In this case, the symbolic aspect of the predator is more important than the natural reality of the animal. It also explains why some petroglyphs of felines are characterized by their oversized dimensions in comparison with the goats and anthropomorphs on the same panels: the emphasis on their dimensions symbolizes the power they represented as a kind of hierarchical proportion. Furthermore, it also explains why many petroglyphs were not considered in this repertory because the animal has features of both wolves and felines. Wolves and felines are mixed in the same conceptual world as predators symbolizing a threat to livestock or as strength and power.

Petroglyphs with felines mainly depict an isolated an-

imal on a panel without any other drawings. It is a kind of icon, a symbol by itself. Predating scenes reveal the same concept: the feline is a predator shown in its strength and its ability to kill other animals. It is a threat to livestock. The predating scenes are more important in the Iron Age, whereas the isolated animals are more present in the Bronze Age. Because the results are quite similar, it could reflect a different perception of the animal, but could also only be our biased perception due to the database.

There are few depictions of hunted felines by anthropomorphs, which mainly date from the Bronze Age. These petroglyphs are mostly located in Saimaluu-Tash (with a few exceptions in Kulzhabasy and Eshkiolmes) and the hunted feline is almost always a (snow) leopard when the species can be determined. Is this a peculiar theme tied to a specific site and to a specific species or does it reflect a change of conception between the Bronze Age and the following periods? We observe that some panels show anthropomorphs and felines in rivalry for the same prey, but also that worshippers are present on few panels with felines predating animals and/or hunted by anthropomorphs. Humans and felines have the same prey, but felines also kill domesticated animals. Another panel in Kulzhabasy shows a man having sexual intercourse with a cheetah. Should we not consider these petroglyphs as reflecting a symbolic competition between humans and felines for the domination of nature?

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RAIN AND ROCK ART IN THE SAHARA: A POSSIBLE INTERPRETATION

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Introduction

The Saharan mountains of the Tassili and Tadrart in Algeria and the Acacus in Libya (fig. 1) are rich in prehistoric paintings and petroglyphs. During the wet period, from about 10,000 BP, these mountains were frequented by hunter-gatherers; around 7,500 BP pastoral populations with their domesticated cattle appeared (Di Lernia 1996; Dunne et al. 2012). With the onset of desert conditions at around 4,000 BP the majority of the population abandoned the Central Sahara. The main route of the migration was to the south because the rivers were still flowing, at least seasonally, towards the Chad basin and river Niger (Gasse 2006). Around 4,000 BP long-standing sites in northern Niger ceased to function as settlements and burials, and for the first time, human occupation is documented well into the Sahel. At the same time, the appearance

in the Sahel of ceramics of Saharan inspiration confirms southwards population movements (Paris 1996; Breunig and Neumann 2002; Haour 2003).

Central Saharan rock art research has traditionally concentrated on description of the figures, determining the styles and the chronology. Very little has been done in terms of the interpretation because of the lack of direct ethnographic records. This paper proposes an interpretative framework for numerous Saharan prehistoric sites, considering the movement of the prehistoric Saharan population towards the Sahel, together with the great antiquity of cultural/religious phenomena related to water,

Spiritual importance of rain

Many African societies associate God with the sky; the same word is often used for God, rain and sky (Mbiti 1969; Haruna 1997). When it rains, the Masa people



Fig. 1. The region of the Tassili, Tadrart and Acacus (Google maps), seen in the circle.



Fig. 2. Wadi Moulenaga shelter (Algerian Tadrart): red lines mark channels carved on the floor.

living near Lake Chad say “God is falling.” The clouds are God’s body and when it starts to rain the Masa and Nuer in southern Sudan and Ethiopia say “God copulates with Earth” or “God gave birth” (Melis 2002). Whereas rain is sacred as a direct manifestation of God, or sometimes even a personification of God, water bodies such as lakes or rivers are entities dominated by water spirits. Water was the main component of ancient rituals: in Egypt the first rite performed at the king’s accession was his symbolic purification with the water of life (Lurker 1980).

In African belief, rain may be invoked by prayers. Rainmaking rituals, both private and public, are reported in all parts of the African continent. River banks, waterfalls, groves, caves or mountains may be used as places of rain rituals. Rainmakers occupy a position of great influence in the community. They not only make rain but also stop it when too much comes or when it is not welcome at a given moment (Mbiti 1969). There are some societies in eastern and southern Africa, which have sufficient rainfall, but where rainmaking is a lucrative and prestigious profession. Offerings or sacrifices often accompany rainmaking rituals. In the Kitui region of Kenya, a girl and a boy drive a goat or a bull around

a hill seven times. Then the animal is slaughtered by old men and some of the blood is poured into a sacred place (Akong’a 1987). A similar concept of a sacrificed animal is known from the ethnography of the San people in South Africa (Lewis-Williams 1981; Dowson 1998). However, San rainmakers do not sacrifice a real animal. They catch a rain animal during altered states of consciousness, and lead it through the sky to the place where the rain is needed, or to the top of a nearby hill. There the animal is killed so that its blood would fall as rain (Lewis-Williams 2004).

Rain rituals are frequently associated with mountains and stones. Although trees are places for prayers, rock is more powerful. During slight droughts, tribes of northern Nigeria offer prayers under a baobab tree, but during severe droughts prayers for rain are offered on top of a rock; rather than beating drums, the priests carry two stones which they hit against each other because the stones symbolize extra power which brings rain (Haruna 1997). Despite the spread of the Islamic and Christian religions, there is still a strong belief that the rock is a source of rain. In the Ethio-Sudanese borderlands when the rainy season fails to come, people pray under a particular rock decorated with ancient



Fig. 3. Kettles with channels (Wadi Moulenaga, Algerian Tadrart).

paintings believed to have magical powers (Fernández 2011). Rain rituals are reported from the Tassili mountains in Algeria. Milk and oil are poured in the Tin Tekelt shelter presenting prehistoric rock art, suggesting that it has been used as a ritual place for several thousand years (Soukopova 2016).

Some of the mythological themes circulating in Africa today seem to be thousands of years old (Le Quellec 2015). In the field of religion people are extremely conservative and although various peoples in Africa are separated by great distances, their philosophical systems are fundamentally similar (Jahn 1961). Very little has changed from time immemorial in rainmaking rituals in northern Nigeria (Haruna 1997) and in South Africa some sites may have been used for rainmaking rites for thousands of years (Murimbika 2006).

Rock art and rain in the Sahara

Among the earliest forms of Saharan rock art are kettles and cupules (Tauveron 1999; Mori 2000; Soukopova 2017). Anthropogenic sediments inside kettles at Wadi Afar Cave in the Acacus were dated to 8,400 years BP (Cremaschi and Di Lernia 1998). Kettles and cupules were frequently connected to rain water. Whereas large kettles carved on horizontal floors could have served as water containers, small cupules had unlikely practical purposes. Channels leading to/from kettles are common and their connection to rain water is often evident (figs. 2, 3). Cupules and kettles also appear on isolated boulders. Standardized items in the Central

Sahara represent boulders with a single kettle, as they present the same characteristics and the same patterns of manufacture: boulders circa 150 cm x 150 cm were located in front of a shelter facing an open space, and thus usually visible from far away. For example, at In Taborak a boulder with a single kettle was placed under a water cascade (fig. 4). The floor under the boulder was prepared by locating flat blocks as a support. Although during rains water fell into the kettle, it was not a container. The scope was only to let water pass through the kettle because one edge is significantly lower. Moreover, this site is next to an ancient river, so there was no necessity to store water. The kettle is surrounded by 16 deep cupules and several grooves. More than 40 parallel vertical grooves were carved on the wall above the kettle where the rain water flowed down.

At nearby Wadi Bohedien, another boulder with a single kettle surrounded by eight deep cupules was arranged in front of a shelter facing a large space (figs.

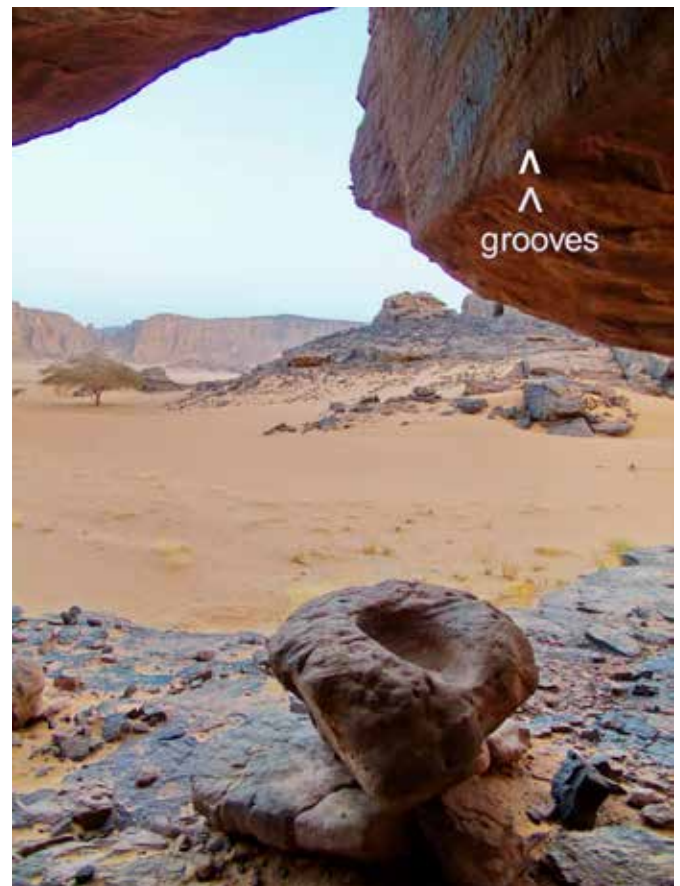


Fig. 4. In Taborak boulder with single kettle surrounded by cupules. The boulder was located on flat blocks under a rain cascade (Algerian Tadrart).



Fig. 5. Wadi Bohedien boulder is located in front of a shelter and facing an open space. The boulder is inclined so that the kettle is visible from faraway (Algerian Tadrart).

5, 6). Even though the boulder is not under a rain cascade, the shelter's wall is decorated with long vertical lines, very similar to the grooves in the previous site, but here they are painted and they exit from an oval form (fig. 7). This painting belongs to the Round Head style which is considered to be at least 8,500 years old (Soukopova 2011). The oval form is interpretable as a cloud and this interpretation has been proposed for eastern and southern Africa where ver-



Fig. 6. Wadi Bohedien boulder with single kettle surrounded by cupules (Algerian Tadrart).

tical lines and dotted stripes have been seen as representing rain falling from clouds, and they were probably connected with rainmaking and fertility rites (Prins and Hall 1994; Smith 1997). The location of the Saharan boulders in an open area, and thus visible from far away, with other forms of rock art in the same place, suggests that these were places designated for public rituals. A general – though exclusively subjective – impression of the decorated boulders is that they represent objects of cult, perhaps ancient altars. Coupled kettles are frequent in the Saharan. They are found on shelters' floors and on boulders. An example of what may have been an important object of cult is the In Tehaq boulder (fig. 8). Two kettles were carved on the edge of the block where rain water fell. Channels leading from kettles suggest that they were not containers. The hypothesis of a ritual function of the boulder is supported by around 200 cupules around the kettles and covering the inclined surface of the block on which three long steps were carved as a support for rows of cupules. The importance of this boulder is testified by the fact that it was reconstituted when in the past it split in two pieces; an attempt to repair the blocks by pushing them together was made but the two pieces do not fit well as the upper part partly covers one of the kettles. Furthermore, the boulder was actively used. Its surface is smooth and



Fig. 7. Wadi Bohedien: Round Head painting representing an oval form with vertical lines. Photo enhanced with DStretch.

polished in the area that has cupules and kettles, but the surface without carvings is rough. The smoothness must have been caused by frequent touching or by staying on the decorated surface and not by running water as the area outside cupules, also exposed to rain, remained rough. In the Central Sahara there are numerous examples of polished surfaces of decorated boulders, which demonstrate frequent physical contact with the rock.

Grooves were also connected to rain. Numerous shelters present carved lines under rain water cascades (figs. 9, 10). These grooves are only several millimetres deep so that their function was not to drain water. They rather seem to symbolically help water go down the wall. In the Central Sahara grooves were certainly created in various periods, but the earliest examples predate the Round Head paintings (Soukopova 2018). Several sites appear as engraved complexes related to rain water. An example is Wadi In Djaren in the Algerian Tadrart, an important ancient water course and the main communication route. Although the river was present here even during dry periods, as still indicated today by kilometres of green vegetation, numerous rock art sites seem to have been created in relation to rain. At the eastern edge of In Djaren a river-facing rock where

rain water used to fall in a large cascade, appears as a decorated unit in which the engraved elements are all related to falling water (fig. 11). Three small kettles at the bottom of the cascade were carved following the same pattern as in previous sites, i.e. water had only to pass through them since their external edge is very low. Next to the kettles there is a cluster of cupules, and on the vertical wall above them there are two paired holes (fig. 12). The same holes are found in the Libyan Acacus more than 90 km away (Mori 2000). On both sides of the cascade there are other cupules, engravings of a bovid, an elephant, and a feline-like creature and cupules mixed with grooves (fig. 13).

A common trait of the examples presented here is that they are located in sites near ancient water courses or they are directly facing ancient rivers. The relationship between the rock art, rain water and the river appears probable and the ritual function of these places is plausible.

Rain animals

The existence of rain animals is attested to in southern African rock art (Solomon 1992; Dowson 1998; Lewis-Williams 2004; Challis 2005). They are often rounded, fat, hippopotamus-like creatures which bear little



Fig. 8. In Tehaq boulder with paired kettles and around 200 cupules. It was reconstituted after it split in two pieces (Algerian Tadrart).

resemblance to known species. Although there are clear likenesses between depictions, no two rain creatures are identical because the image was a manifestation of the rain man's particular animal, caught and killed by him in the trance. Rain animals are depicted in a head-down position, as a sign of submission and of its impending death (Lewis-Williams and Pearce 2004).

The same phenomenon has been identified in the

Central Saharan Round Head art attributed to hunters living in the region from 10,000 BP (Soukopova 2011). There are unidentifiable quadrupeds which bear striking similarities to the southern African rain animals: they are bulky, hippopotamus-like and head-down (fig. 14). Sometimes their bodies are filled with decorative elements interpretable as rain, such as dots or dotted stripes (fig. 15) and parallel lines exiting down from their bodies. The back of these animals is often made of two parallel lines, which is probably a later repainting: if it was indeed a rain animal in a rainmaking place, with each ritual it was simply repainted instead of making a new one. In several cases a double contour is an entire animal, i.e. a larger animal incorporates a smaller animal of the same or similar shape (fig. 14). Their multiple repainting may indicate places of rainmaking rituals.

Human figures and recognisable animals were also connected to rain water. They were deliberately painted under an ancient rain water cascade, so that water crossed vertically their body (figs. 16, 17). The intentional connection to water is evident, especially in those cases where the figures are accumulated next to or under the water cascade, whereas the remaining rock wall is empty.



Fig. 9. Grooves under an ancient rain flow (Wadi In Djaren, Algerian Tadrart).



Fig. 10. Shallow grooves on the rock surface under an ancient rain cascade (Wadi In Djaren, Algerian Tadrart).

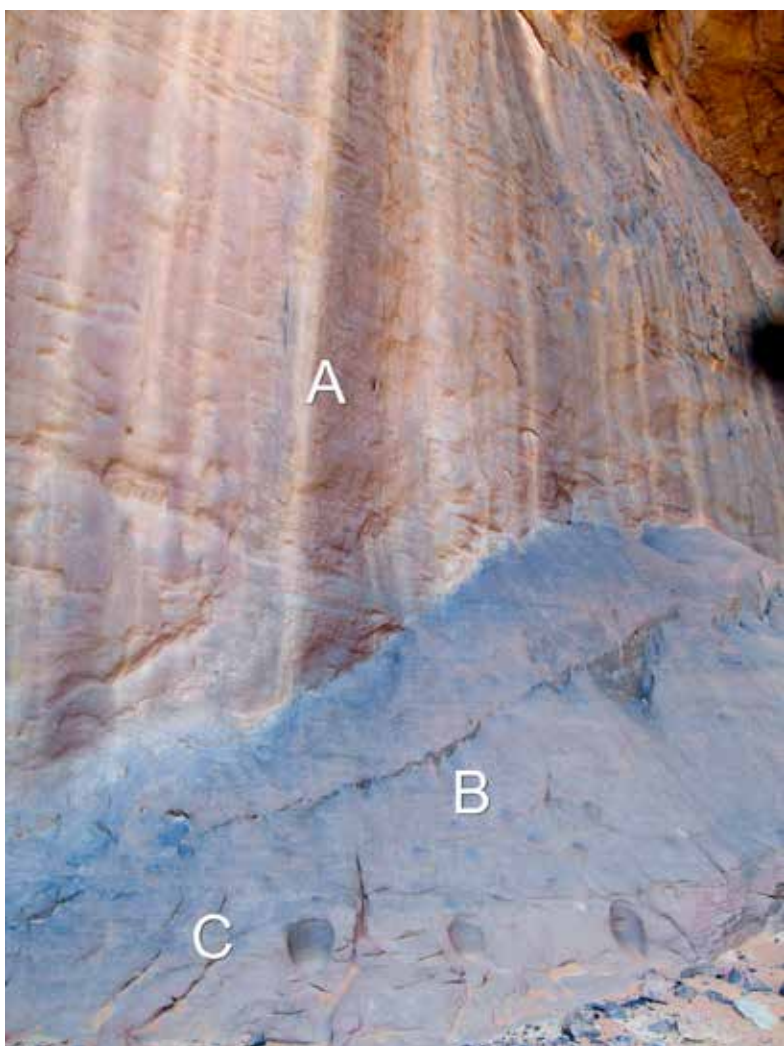


Fig. 11. Engravings under a large cascade: A) double holes; B) cupules; C) three kettles (Wadi In Djaren, Algerian Tadrart).



Fig. 12. Double holes carved under water cascade (Wadi In Djaren, Algerian Tadrart).



Fig. 13. Cupules and grooves on vertical wall next to the large cascade (Wadi In Djaren, Algerian Tadrart).



Fig. 14 Bulky quadruped head down, with characteristic double back line is interpreted as rain animal (Uan Bender site, Tassili Plateau). Photo enhanced with DStretch.



Fig. 15. Bulky quadruped, head down, with internal decoration made of dotted stripes is interpreted as a rain animal (Tin Barsaoula/Afa site, Libyan Acacus). Photo enhanced with DStretch.

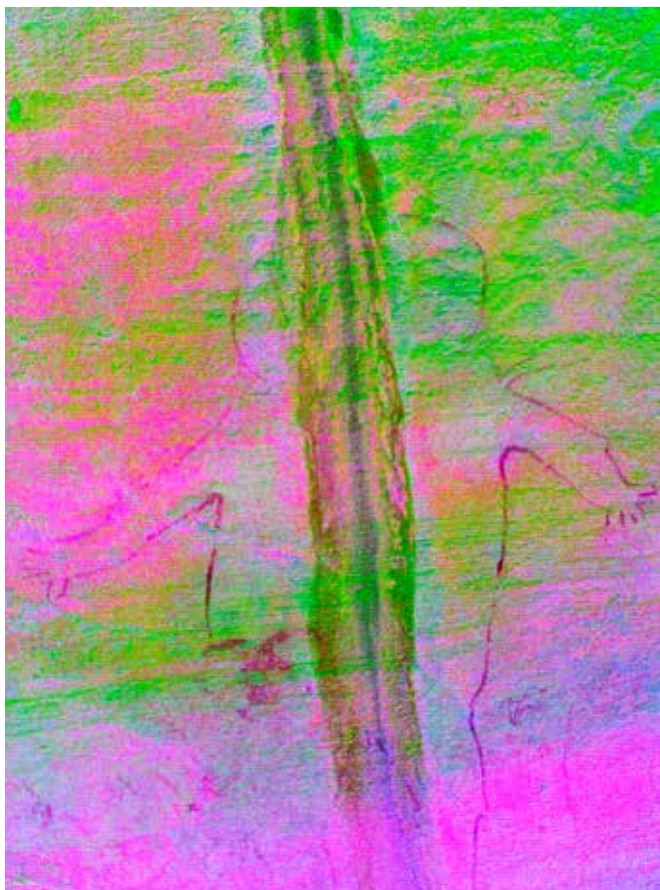


Fig. 16. Round Head male figure painted under an ancient rain water cascade. A half-moon-like object on his left shoulder suggests the ritual character of the painting (Uan Assakamar site, Tassili Plateau). Photo enhanced with DStretch.



Fig. 17. Round Head animal figure painted under an ancient rain water cascade (Uan Bender site, Tassili Plateau). Photo enhanced with DStretch.

Conclusion

Since water has always played a fundamental role in the spiritual life of African societies, this paper postulates a link between prehistoric rock art and rain. Whereas this link is materially visible from numerous engravings and paintings made under rain water cascades, any further interpretations are hypotheses still to be tested. The criteria chosen in this study was the presence of rain water in the sites and its relation with the rock art. The frequent connection of rock art with water cascades was clearly intentional, and the importance given to rain fits with the great importance of rain documented in the ethnography. Obviously, not every rock painting or engraving in the Sahara was connected to water; the rock art had certainly also other purposes. Various criteria should be identified and tested in future research, assuming that researchers are willing to take the risk and abandon the comfort zone of merely recording. Like southern African rock art, where the interpretation has been successfully discussed for nearly 40 years, the Central Saharan rock art study should also make a step forward and open a new, exciting chapter of African prehistory.

Acknowledgements

I thank Prof. Jeremy Keenan, Dr Alistair Pike and Dr George Nash for their help with the first stages of my research. The University of Bristol, the AHRC and CompuNet S.r.o. are thanked for the funding. I would like to express my deepest gratitude to my colleagues who shared with me their knowledge, information, and photographic documentation: Brigitte and Ulrich Hallier, Bernard Fouilleux, and András Zboray. I thank the guide Aissa Machar.

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NOTES AND NEWS

ATELIER, RESEARCH CENTER FOR CONCEPTUAL ANTHROPOLOGY

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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

Understanding cultural trends means opening up a window on the landscape of human minds. Insight into the past gives a sense to the present. Visual arts, music, dance, rituals, myths, other traditions and other aspects of the conceptual expressions reveal the particularities of each society and, at the same time, the common intellectual and spiritual heritage that unites humanity: this is the field of CISENP and of conceptual anthropology. CISENP unites people from different disciplines to share their experiences, ideas and scientific approaches for a better understanding of creativity and behavior and for a broadminded study of what forms the roots of the present.

Conceptual anthropology is a new academic discipline aimed at building up a solid future for the study of man. Archaeology, both prehistoric and historic, needs a constant and open dialogue with other disciplines. The study of man includes anthropology, sociology, psychology, human geography, semiotics, art history and other disciplines uniting their efforts. Interdisciplinary cooperation in research is an aim and a habit of both conceptual anthropology and CISENP.

Why? is one of the first words used by children and is a word that accompanies us from birth to death. The next step of archeology and prehistory is moving from “What?” to “Why?”. Beyond findings there should be discoveries, findings produce the physical raw material, discoveries are their conceptual understanding. The goal of CISENP is looking for meanings in terms of motivations and human behavioral trends. This orientation opens up new landscapes of research in the humanities and also awakens vast public interest, by making accessible to the public notions and wisdom accumulated by generations of scholars

in the study of the roots of human societies. Understanding the past is essential for building up a future. And not only for that: it is also necessary for understanding the present, our present. Knowing one's roots is the elementary base of understanding history, mythology, your own beliefs and habits, and other cultural traditions upon which to build the future. We have to recover the past to discover the present and to think of the future.

Humanity was not born yesterday. Our reality today is the effect of millions of years of trials and experiences that led to progress and innovations. Culture is the union of an immense mosaic of different cultures, different identities, revealed by art, traditions, beliefs and other conceptual outputs of human behavior. In the tribal world, young people have been and still are initiated into the knowledge of their past. Urban societies consider as myths what tribal societies consider to be history. Even for the history of urban societies, doubts exist on what is history and what is myth. In any case every society has its own history. It is the source of identity. The new generation, going through initiation rites, have to know the story, the past, to become adult members of society. Understanding means initiation. Initiation about our past is the source of consciousness of the present reality. It is a source of awareness and passion: there is nothing more fascinating than discovering the roots of our behavior, the emotions and passions that have caused intellectual and spiritual adventures. The understanding of our past and our present is the goal of CISENP. Members from all over the world meet at the CISENP sessions which take place at the UISPP congresses and in other occasions of themed conferences. But the communication means of today allows a practically permanent meeting, transmission of information, new findings and new discoveries, new ideas and new debates.

The official organ of communication is **EXPRESSION** quarterly journal, edited and produced by Atelier-edit. This journal is distributed to subscribers; members of CISENP receive this journal for free.

HOW TO BE A MEMBER OF CISENP

Membership is a free choice. Be active and you are a member. Express your ideas, participate in debates, and develop dialogues with other members orally, by email, or through the pages of **EXPRESSION** journal. Contributing articles or notes that are accepted and published in **EXPRESSION**, voluntary work and contributing in other ways are the main confirmation of active presence. Authors having published articles in **EXPRESSION** quarterly journal are members if they confirm their wish to be. Membership of CISENP is free of material charges; no fees are requested, no formalities; it just implies your active presence. Membership is not exclusive to prehistorians and anthropologists; it is open to all human and social scientists and students. It is advisable, but not compulsory, for prehistorians to be members of UISPP. CISENP is a free association, and is free also from bureaucratic procedures. You become a member if you decide to be and ask <atelier.etno@gmail.com> to be included in the list of members. Members receive **EXPRESSION** quarterly journal free. Membership ceases by being inactive for two years.

HOW TO BECOME A MEMBER OF THE UISPP

EXPRESSION quarterly e-journal, is produced by ATELIER Research Center for Conceptual Anthropology, in cooperation with the UISPP-CISENP (International Scientific Committee on the Intellectual and Spiritual Expressions of Non-literate Societies), an organ of the UISPP (International Union of Prehistoric and Protohistoric Sciences). UISPP also offers other facilities, including participation in its World Congress. Membership of the UISPP will ensure the status of UISPP Active Member of CISENP. If you are a member of UISPP, please confirm your status to <atelier.etno@gmail.com>. If you are not yet a member, and wish to attend the World Congress, you should become a member of the UISPP. For further information contact the office of the General Secretary at: <loost@ipt.pt>.

POSITION OF ASSISTANT CURATOR OF ETHNOGRAPHY

Graduate students in anthropology and ethnography are given the opportunity to train as a curator of ethnography. The engagement consists in classifying old ethnographic collections of art objects from Oceania and Africa. The expected result is the compilation of databases or catalogues of collections, eventually to be published under the name of the compiler. Besides the skill acquired by practical work, the successful experience gives the apprentice two important additions to his/her curriculum:

the publication of a scientific work and the position of Assistant Curator of Ethnography for the period of time of his/her engagement. The experience takes place in the Camonica Valley (Valcamonica), northern Italy, and is expected to last a minimum of three months. Candidates should have a perfect knowledge of the English language and possess a university degree in human sciences. During their active presence, the accepted candidates have access to self-catering accommodation on campus at a student fee. Applications should include a letter expressing motivation, a record of studies, a copy of an identity document, and any other document worthy of consideration. Applications should be addressed by email to: atelier.etno@gmail.com.

HOW TO CONCEIVE YOUR PAPER

If you are considering submitting an article for publication in **EXPRESSION** quarterly journal, please realize that **EXPRESSION** is addressed to people of culture, and reaches readers from various disciplines of the human and social sciences in most countries of five continents. It is addressed to a vast spectrum of readers, besides professional anthropologists and archaeologists. Try to arise their interest and curiosity: your paper should appeal to all of them. Make things clear to people that may not be specialized in the same field as yours. If you wish people to enjoy your writing you should enjoy what you are writing. Be simple and express clear ideas. Awaken queries. The publishing language is English (American spelling). Authors are recommended to present papers which are reliable, innovative and also pleasant to read, avoiding dry technical reports or inventories. We do not publish descriptive chronicles and we try to avoid theoretical general disquisitions. Be supported by reliable documentation. Articles should have a specific topic, understandable from the title, and should be conceived for the audience to which they are addressed. The recommended average length of each paper is 1,500–4,000 words. Articles counting less than 1,500 words may be considered for the *Notes and News* or the “Discussion Forum”. Illustrations should be pertinent to the content. They should be calibrated to the resolution of 300 dpi, with a base of 14 cm. Each illustration should have a pertinent, explanatory caption, including its source when relevant. Illustrations should be presented separately from the text. All the material presented, text and illustrations, should be free from copyright and any other obligation, and possibly not yet published elsewhere. Authors are fully responsible for the submitted text and illustrations.

HOW TO RECEIVE THE LAST ISSUE OF **EXPRESSION** JOURNAL FREE OF CHARGE

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 of charge to any individual person asking for it.

SPECIAL OFFER TO SUBSCRIBERS OF **EXPRESSION**

How can you receive **EXPRESSION** e-journal regularly? You may benefit from the special offer and receive the four annual issues at your address when they come out. The current annual subscription for 2020 for **EXPRESSION** is €20.- (c. US\$22) for individual subscribers and €40.- (c. US\$44) for institutions. Each annual subscription includes four issues. The cost of each back issue is €10.-. Subscribers for 2020 will benefit from a special offer. Private readers subscribe at € 20.-. They can receive all the 26 back issues of **EXPRESSION** for the additional cost of only €40.-. They may further extend their subscription for 2021 at the additional cost of €20.-. This offer is restricted to individual subscribers for 2020. It does not apply to institutions. (*You will receive all the 26 back issues and four more for 2020: total 30 issues for just € 60.*) Furthermore, if you wish, you may receive the 2021 issues as they come out: total 34 issues, the complete collection, for only €80.- (c. US\$88). Please send your request to <atelier.etno@gmail.com>, adding receipt of your payment. Specify your full name and full mailing address, including country.

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INTRODUCING CONCEPTUAL ANTHROPOLOGY A NEW DISCIPLINE OF HUMAN SCIENCES

PREMISE

What is conceptual anthropology? It is an emerging discipline dedicated to the spirit of culture, dealing with the expressions of the cognitive system, arts, beliefs, traditions, and other intellectual and spiritual expressions. It is the subject of **EXPRESSION**, a quarterly journal published in English,

and of several series of books issued by Atelier-edit, the publishing sector of ATELIER, Research Center for Conceptual Anthropology. ATELIER is an experimental laboratory dedicated to the new discipline, created and directed by Prof. Emmanuel Anati. The headquarters of this center are in the village of Capodiponte, Camonica Valley, Italy, a major center of prehistoric rock art in the UNESCO list of the cultural world heritage 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 incubator for the study of art, religion, social relations, and other intellectual, emotional and spiritual aspects of human culture had a long gestation. It took a first formal step during the International Congress of Prehistory of 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 the spirit and the context that produced them. But... was it easier to change the orientation of a traditionally well-established discipline or to create a new discipline? Within the fields of prehistoric, archeological and anthropological studies, the presence of different orientations is a healthy factor to be preserved. Within this frame, a new orientation, a new sub-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 for conceptual anthropology started operating, publishing **EXPRESSION** quarterly magazine. To date, over 200 authors from 43 countries on five continents have published their articles in **EXPRESSION**. In seven years, the Atelier publishing sector has published over 50 books that form the basis of the new discipline. The global interest shows that conceptual anthropology is filling a gap: it appears to be a positive step in the evolution of human sciences.

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 developments, and predictable and unpredictable events. It combines the experiences and methodologies of different disciplines, from psychology to history, from archaeology and anthropology to sociology, art history, and the history of religions. These are all aspects of culture intimately connected to

each other, expressions of the human spirit that lead to the discovery of the mind that produced culture: motivations, influences, emotions, and causes of what remains as effect. It adds a fourth dimension to traditional archaeology. Each discipline of the humanities is a source of conceptual enrichment for the others. The multidisciplinary comparative research is proving to be a source of thought and 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, which is already being noted in recent books from Atelier.

THE CONCEPT OF CONCEPTUAL ANTHROPOLOGY

Conceptual anthropology studies the concepts and motivations of cultural expression and human performance brought to light by archaeology, anthropology, ethnography, history, customs, and popular traditions, the sociological reality of human behavior and other areas of the humanities. From this vast emporium of spiritual and conceptual expression there emerge the tendencies of man and society; the aim is to understand trends and become sources of scientific research, education, vocational training, and new guidelines of rational thought. Every event and every detail express part of a larger reality. Humanity is the set of individuals that form it, culture is the set of cultures. Conceptual anthropology opens up vast landscapes in the dynamic vision of culture that is evolving and changing, but always remains the core identity of the human species. Knowing the processes of change in culture, in its various aspects, art, religion, behavioral tendencies, and social processes, opens up perspectives for understanding evident and also less evident tendencies in society and a new type of social consciousness. 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 that are not provided by technical databases. Every discipline and every expression of culture, like every being, focusses on certain aspects of memory and neglects others. The memory of the 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 new areas of analysis and comparison, avoiding myopia and sectarianism. This new trend promotes joint commit-

ments to multidisciplinary research. From anthropologists and archaeologists to psychoanalysts, educators, semiologists, sociologists, philosophers, and historians, there is a need for everyone to answer questions that joint effort can help clarify. 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 knowledge opens wide horizons and promotes a panoramic cultural conception in order to understand the spirit of man in its conceptual and decision-making expressions, its emotional aspects, human imagination, feelings of love and hate, friendship and animosity, relations with others and with oneself, psychological attitudes, cultural conditioning, and insights. The function is to understand, to acquire existential consciousness and use it to find new horizons of research, to understand the events and the guidelines at the roots of human behavior from the distant past to the present.

Knowledge is the antechamber of understanding. The broader knowledge is, the wider is the understanding. The orientation of conceptual anthropology is towards specialization in a widely cultural vision and overview, intelligent, open, and not limited by sectoral indoctrination.

EDUCATIONAL TOOLS

1- Specialized publications as educational means

EXPRESSION journal comes out every three months. In 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 currently available to conceptual anthropology. Over 200 authors from five continents and from various disciplines of the humanities make it an educational means, and also a spontaneous and natural encyclopedia that is enriched with each number: it produces culture, collaboration, dialogue, and intellectual progress, connecting 80 countries.

Other ATELIER publications are expressions of this new discipline that involves students, scholars, and others, 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: reading. The traditional lecture in a classroom affects at most a few dozen students; education through publi-

cations, both printed and online, can reach multitudes and be accessible everywhere in the world. Surely there are many thousands of potential acolytes. An important target is reaching them and let them discover that we exist. The publications, in English and Italian, are designed for the level of university students, but they are deliberately easy to read for everyone. For conceptual anthropology, all of us, members of the human species, are potential students. 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. Being aimed at the conceptual aspects of anthropology, this publishing, which comes at a time of a publishing crisis, proposes new horizons of teaching and 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 classroom of university 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. Being a new discipline, there are no teachers for now except for its inventor, Prof. Emmanuel Anati. Today's students are the teachers of tomorrow. Since there are no faculty or university courses in conceptual anthropology, the training is based on the individual practical work of each candidate. Graduate students in anthropology, archaeology and other disciplines of the humanities are the preferred type of candidate. In addition to the individual practical training, there can also be group activities: seminars, conferences, and joint research projects.

3 - Seminars

Specific issues 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, local artistic expressions like rock art or local social and cultural issues, are used as experimental topics for both research and teaching. The protagonists, students, researchers, and authors come from five continents. It is necessary to bring them together even without the appropriate travel and reception resources. Despite the absence of such support, meetings and video-seminars are held to stimulate debate on specific issues. But 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 without frontiers.

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 archaeology and anthropology, that bring together participants from the entire world, where topics of world interest and innovative studies may be presented and discussed. World congresses on conceptual anthropology might soon become actual.

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

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 archaeology unite in common effort different disciplines of the humanities as well as graphic designers, architects, artists, educators, communications experts, to provide a deep conceptual penetration for the public.

ATELIER, the international center for conceptual anthropology, has until now been geared towards an autonomous identity, in a constant confrontation between academia and anti-academia, aimed at the renewal of research, 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 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 the academic cellars. They reach institutions and researchers in five continents and produce culture. Several themes are of world cultural relevance.

Some multidisciplinary research projects in progress:

-Making history of prehistory

-Decoding prehistoric art

-The role of women in prehistoric and tribal societies -Analysis of the conceptual processes in cultural changes

Some of the 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 periods 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

Some of the research projects are quickly concluded, others can last longer, others again may awaken rethinking and become actual once more. In any case dialogues and debates are kept alive and produce culture. The research results, often considered as in progress, 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 on prehistoric times: making history of prehistory. The method is a new system of analyzing prehistoric art to decode the intents of the early artists behind their depictions. The new method is producing surprising results. And the outcomes promote discussion and produce written texts. It is a dynamic system that combines research and teaching and leads to concrete results, publishable, diffusible and accessible to the public. In this line, various effects of research are already available. A conceptual analysis of Australian Aboriginal art has led to the reconstruction of the cultural evolution processes, events, migrations, the arrival of new populations, changes in cultural and historical influences in millennia previous to the Australians' rediscovery by Europeans. The results, though so far partial, are presented in the book *Australian Rock Art: A Study in Conceptual Anthropology* (Atelier.Edit, 2019, 234 pp.) (actually available in the Italian edition only). 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 reconstruction of 10,000 years of European history. Each rock engraving has behind it a *raison d'être*, a motivation, a purpose and therefore also different depths of reading. The new framework is decoding. For ten millennia the Camunni peoples recorded their history through rock art: what did they want 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 archaeological findings into historical documents, to reconstruct the history of what until now had been prehistory. Valcamonica offers Europe 10,000 years of new-found history, through the conceptual decoding and reading of rock art. Today's research becomes tomorrow's culture and enters textbooks across Europe. 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 for over a century. The methods of conceptual anthropology permitted the decoding, deciphering, and reading of what had been considered mute beauties. This research led to a result of exceptional importance by decoding certain paintings and engravings that contained messages in a pictographic writing system 30,000 years before the invention of the alphabet. They are documents that open up new light on ages in which no one imagined 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 great interest and disruptive information capacity of these innovations, they open up new chapters of history of many millennia before what was previously considered the beginning of history and writing. The first attempts at writing are 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.Edit, 2015).

Conceptual anthropology concretely begins to give its first tangible results as well as awakening considerable interest and provoking far reaching innovation. The resulting publications clarify the discovery of new aspects of human conceptual evolution and of human mental processes.

THE SETTING AND THE FORECASTS

How to encourage and facilitate this scientific and intellectual enterprise of vast proportions and predictable resonances? Conceptual anthropology has been born and now grows. So far, activities have been held as private enterprises with no public participation. Institutional intervention could be justified if deemed in the public interest. Certainly, this research brings conceptual values and a new dimension to historical research. It is also a source of prestigious innovation, international relations and cultural development. An important operation would consist of the diffusion of information, making the publications available in research centers, and in public and university libraries.

No less important is the availability of scholarships for apprentices and students to repopulate the gap due to the brain drain and attract new recruits from different backgrounds. This is, however, an initiative requiring planning. The operators in the new discipline should have the possibility of jobs by applying what they are learning. Tools and research facilities need to be updated. The present base of Capodiponte is particularly favorable thanks to the remarkable concentration of rock art of world renown which is not only a cultural patrimony, but also a cultural laboratory. A well-equipped library, specializing in prehistoric and tribal art, is probably the most complete in Italy. A major issue concerns the updating of the databank, a basic resource, which for lack of staff cannot keep up with worldwide information and the daily flow of data and documents. The Atelier database can be a reference tool and contain very important information if constantly updated. It could also become a source of income, providing documentation, information, photographs, and analyses. The delays in the updating of the database curb the use by the public but does not cause delays in research, since the discoveries and innovations are constantly and globally followed, despite the delays in processing them in a database accessible to the public. Private initiative has worked so far, and can continue to operate. But it does not rule out the participation of public or private bodies, and the ability to give birth to an experimental academic sector based on new criteria that adhere to the conceptual notions of anthropology. For further information: <atelier.etno@gmail.com>

APPRENTICESHIP IN CONCEPTUAL ANTHROPOLOGY

Atelier Research Center for Conceptual Anthropology is a workshop for research, experiment and debates on the intellectual and spiritual expressions of cultures. It is a meeting place for the arts and sciences. The apprenticeship in conceptual anthropology under the guidance of

Prof. Emmanuel Anati, the founder of conceptual anthropology, may last from a minimum of two months to a maximum of one year. It grants the apprentice the title of **Research Assistant in Conceptual Anthropology**. The apprenticeship is oriented to the acquisition of practical operational abilities and conceptual formation; it includes participation in research, editorial activities, compilation, organization and layout of exhibitions and publications, the arrangement and cataloguing of ethnological collections, and the planning of cultural and scientific projects. It is a way to be involved with the practical work of producing culture with your hands and your mind. Traditional learning as an accumulation of descriptions, dates and theories is enhanced by applying the theories to practical activities, learning to do by doing. During their stay in the Camonica Valley, the student has access to self-catering accommodation on campus, at a student fee. Preference is given to graduates and other seriously motivated young people with knowledge of the English language and operational abilities on a database. Application in an informal letter should specify the motivations and skills of the candidate, and be accompanied by a curriculum vitae, a copy of a record of studies, a copy of an identity card or passport, a recent passport-standard photo; and a letter of presentation or recommendation from a university professor or a previous employer. Applications should be addressed by email to: <atelier.etno@gmail.com>.

LEARNING TO BE AN EDITOR

Post-graduate students interested in learning editorial work may apply for editorial training. Skills required: perfect knowledge of the English language; ability to manage various relevant computer programs; ability in public relations; and a special interest in anthropology and archaeology. For applications or further information, please address a letter expressing your interest and motivation, including a copy of an identity document, to: <atelier.etno@gmail.com>.

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218 AUTHORS from 41 COUNTRIES

COUNTRY	NUMBER OF AUTHORS	COUNTRY	NUMBER OF AUTHORS
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Armenia	3	Malta	1
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
India	11	Tunisia	1
Italy	14	UK	10
Japan	1	Ukraine	4
Jordan	1	USA	17
		Zimbabwe	1

EXPRESSION

N°28 June 2020



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Annual Subscription (4 issues)
Individual subscribers € 20
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EXPRESSION is published
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cooperation with UISPP -
CISENP.
News and texts should be
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atelier.etno@gmail.com

*Atelier Research Centre
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Maori chief with moko, Captain Cook expedition.

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Saw Rock Art (South Africa)

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

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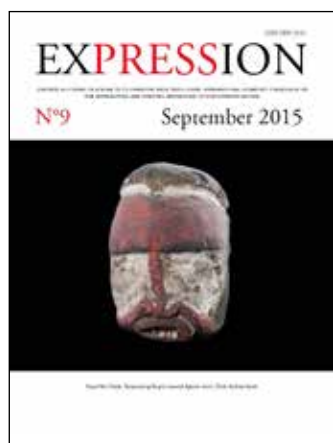


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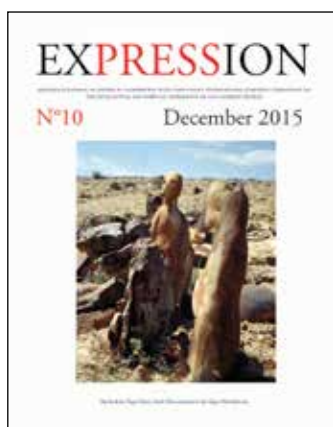
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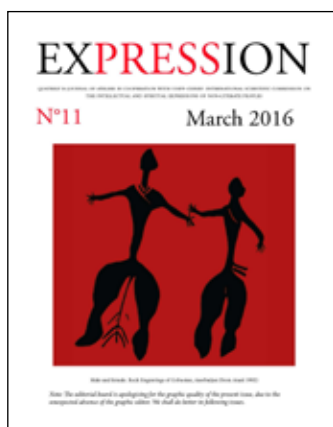


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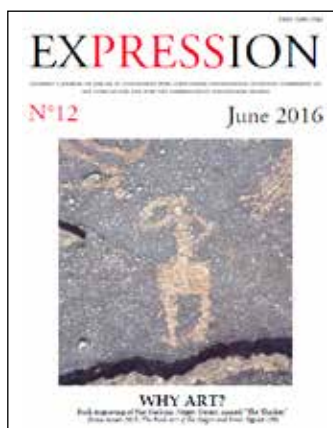


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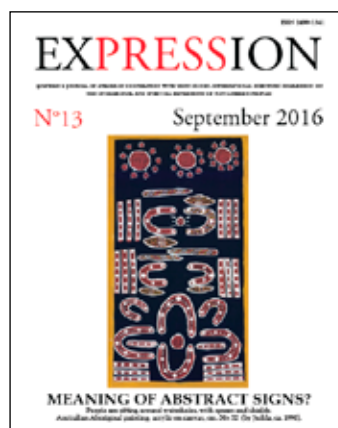


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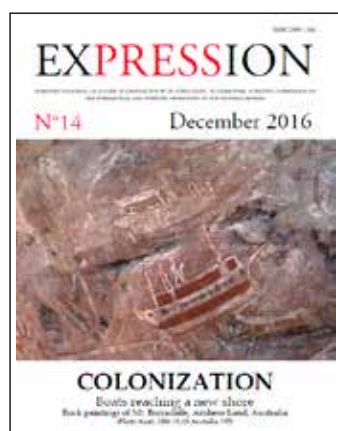


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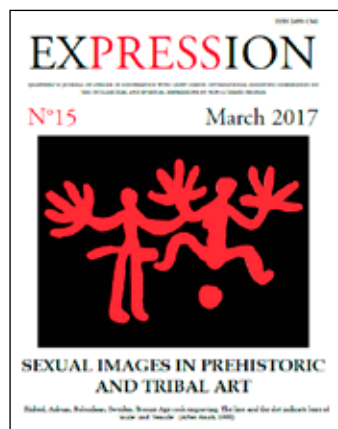


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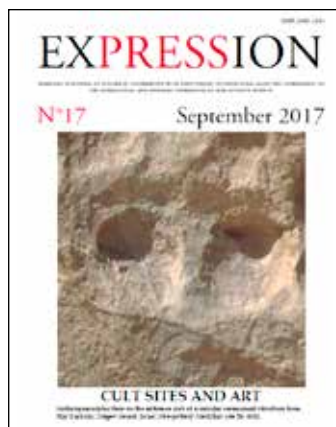


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June 2017

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).

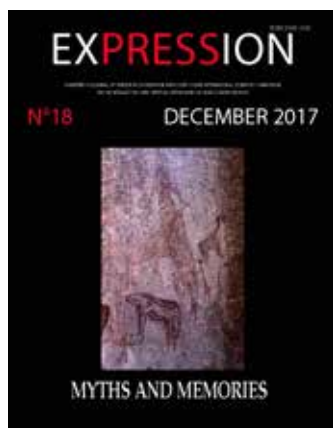


Expression 17

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).

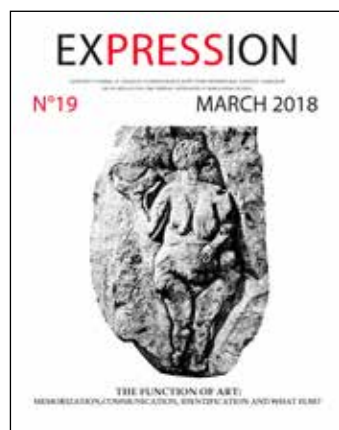


Expression 18

December 2017

Myths and Memories: Stories Told by Pictures

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



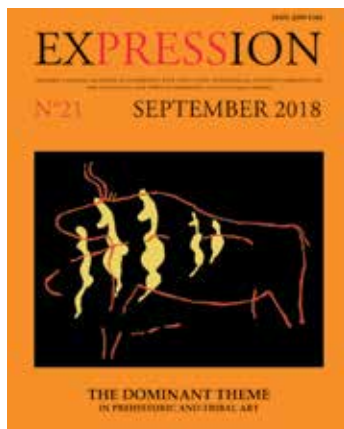
Expression 20

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).

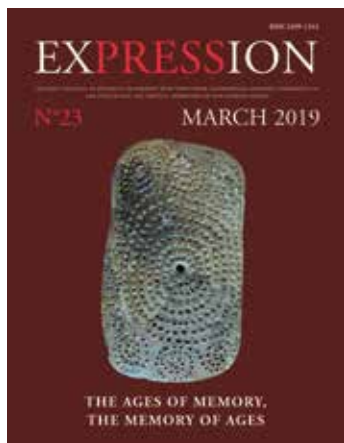


Expression 22

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)

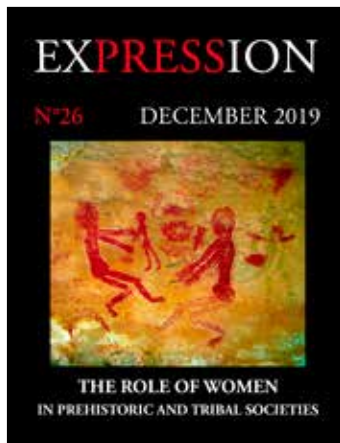


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September 2019

Cultural Changes - Part II

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

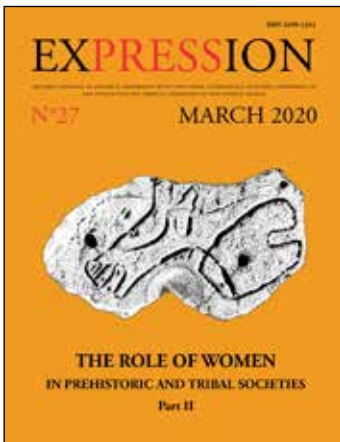


Expression 26

December 2019

The Role of Women in Prehistoric and Tribal Societies

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

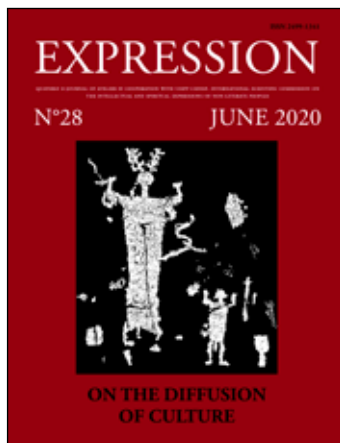


Expression 27

March 2020

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

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



Expression 28

June 2020

On the Diffusion of Culture

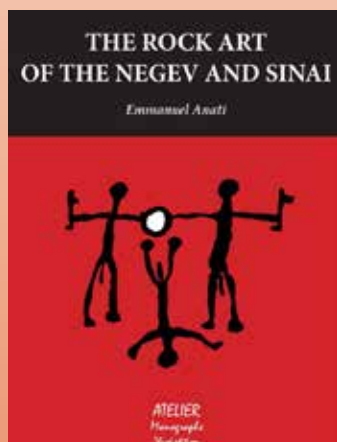
With articles by: Emmanuel Anati (Italy), Herman Bender (USA), Anthony Bonanno (Malta), Luc Hermann (Belgium), Annik Schnitzler (France), Jitka Soukopova (UK)

ARCHAEOLOGY AND THE BIBLE

Atelier is pleased to present

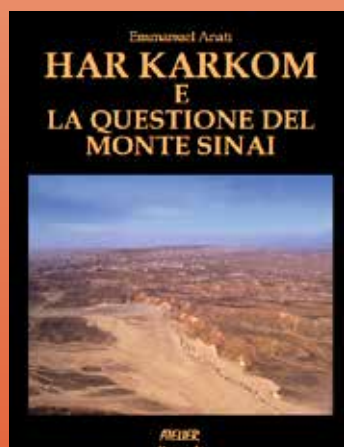
ARCHAEOLOGY IN THE DESERT EXODUS: NEW DISCOVERIES RELATED TO BIBLICAL ARCHEOLOGY

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

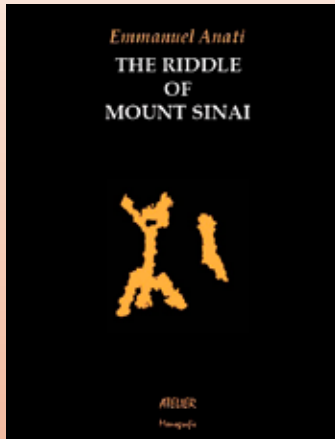
Capodiponte (Atelier), pp 220; 138 ill., €30,00

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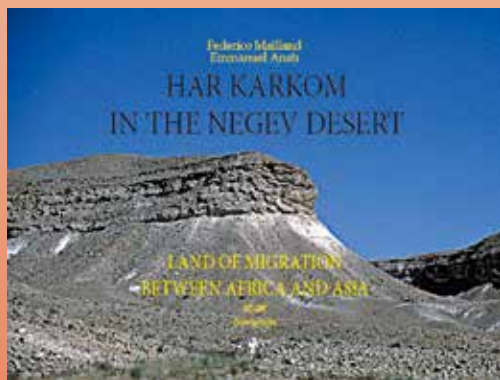
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Anati, E. 2017, *The Riddle of Mount Sinai*, Second English Edition

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

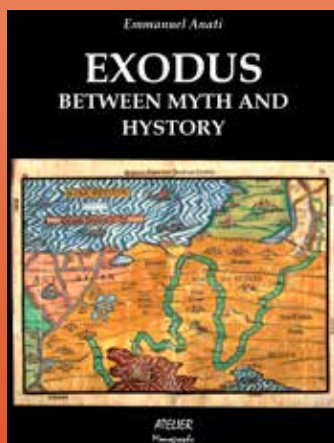
What is the true story behind the biblical narration of Exodus? The discoveries of the Italian archaeological expedition at Har Karkom, in the Negev Desert, tell the hitherto unknown story of the sacred mountain in the heart of the desert of Exodus, reflecting surprising similarities to the events and 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.; Mailland F., 2018, *Har Karkom in the Negev Desert. Raw Material for a Museum on Two Million Years of Human Presence*

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

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



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

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

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

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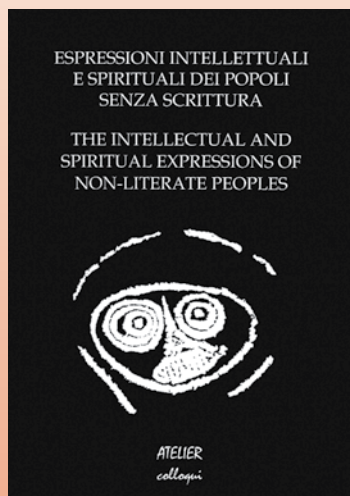
ATELIER' PUBLICATIONS

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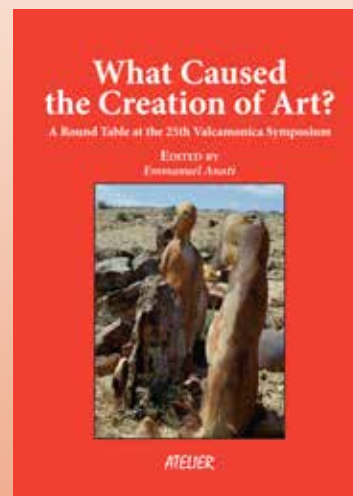
Il segni originari dell'arte (In Italian)

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.



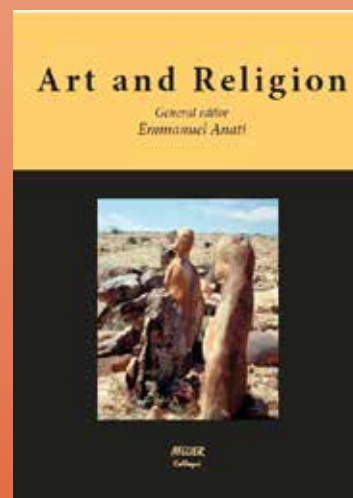
Sogno e memoria: Per una psicoanalisi della Preistoria (In Italian)

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



Semiotica dell'arte preistorica (In Italian)

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



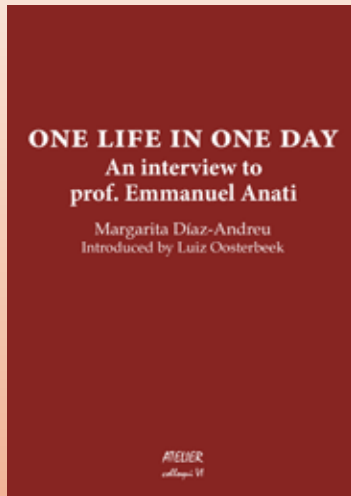
Art and Religion

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

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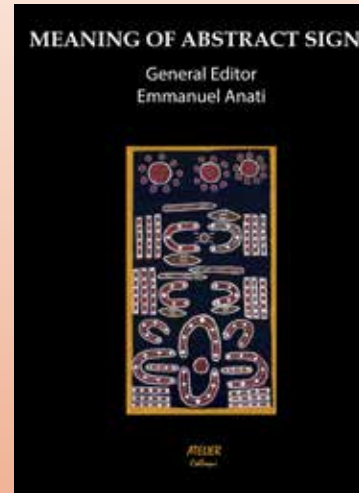
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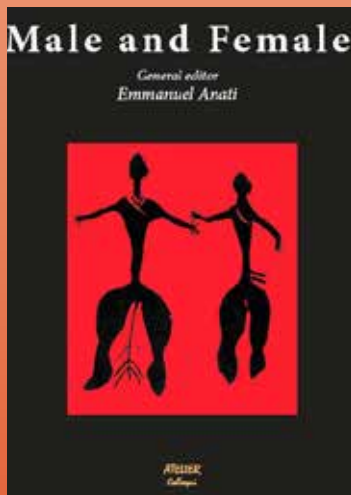
One Life in One Day. An interview to prof. Emmanuel Anati

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.



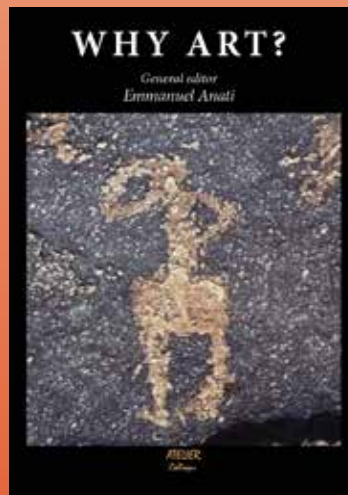
Meaning of Abstract Signs

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.



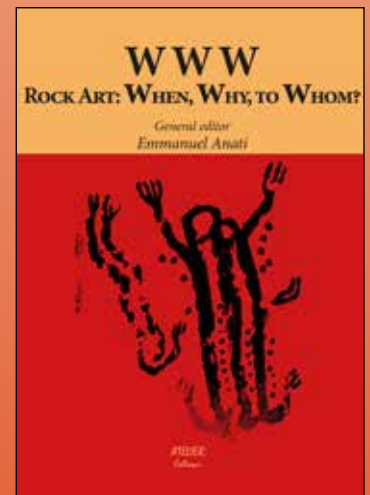
Male and Female

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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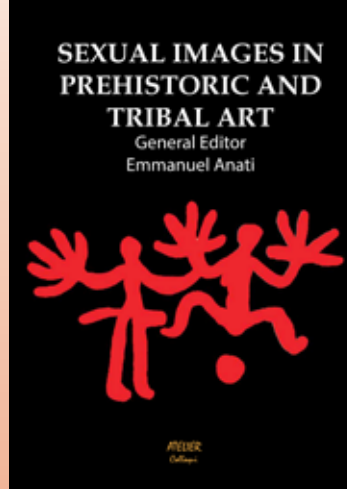
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Colloqui



Colonization

From an original land of origins, likely to have been in Africa, the ancestors of human-kind 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.

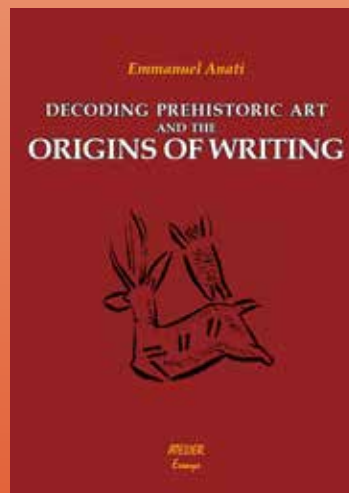
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Essays



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.



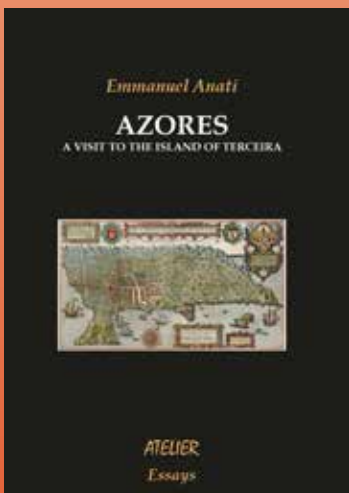
Iniziazione e riti di passaggio (in Italian)

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?



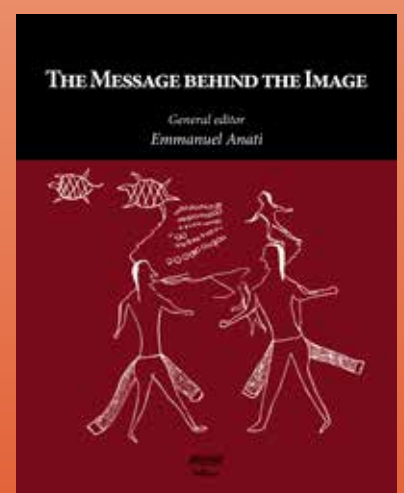
Azores: a Visit to the Island of Terceira

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.



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.

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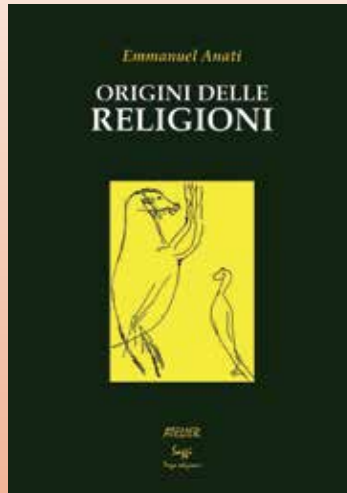
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Essays



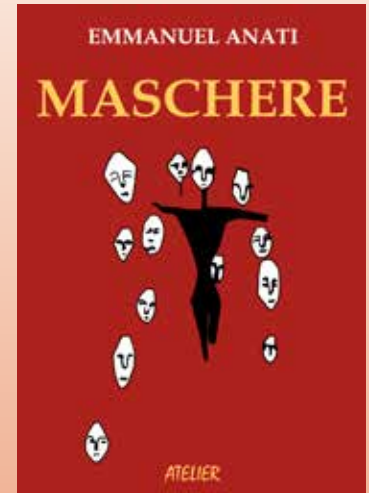
Mito tra utopia e verità (in Italian)

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.



Origini delle religioni (in Italian)

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.



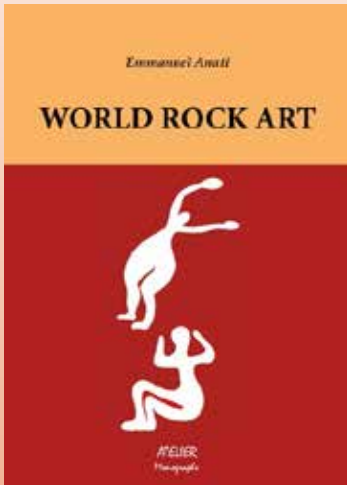
Amore e sessualità (In Italian)

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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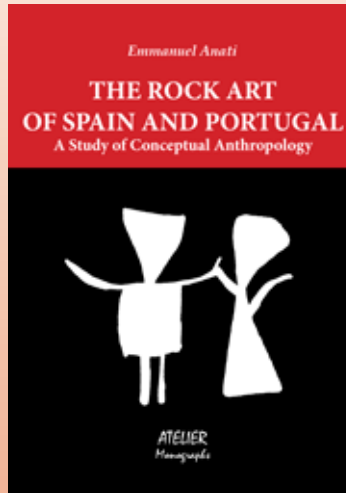
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Monographs



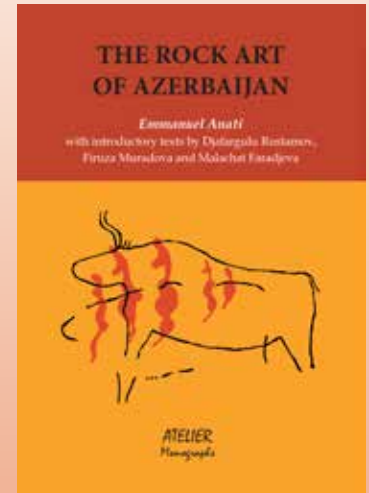
World Rock Art

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

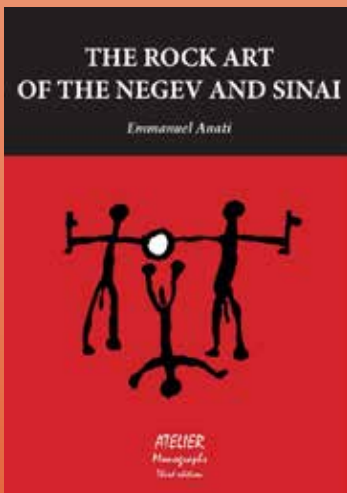
An analytical synthesis of the rock art in the Iberian peninsula from the conceptual anthropology approach. The major concentrations of rock art are considered as expressions of their different cultural and social patterns.



The Rock art of Azerbaijan

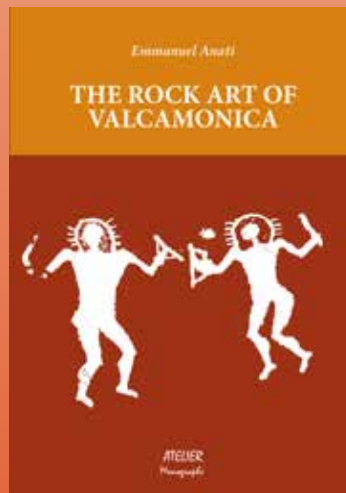
Over the course of centuries, Azerbaijan, was a great centre of rock art.

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

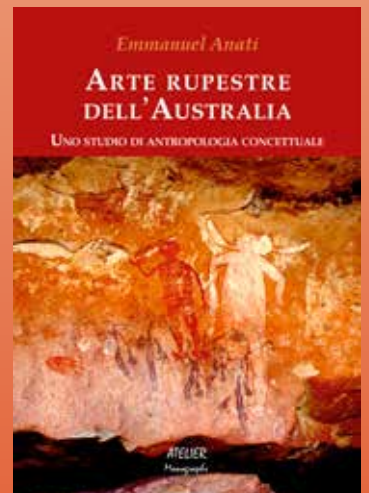
The present volume is concerned with a new theme of archeology and anthropology: the rock art of the Negev and Sinai, which never had before a general analysis in English. It elaborates on articles and a book written in the last 60 years, to produce a synthesis and an overview.



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.



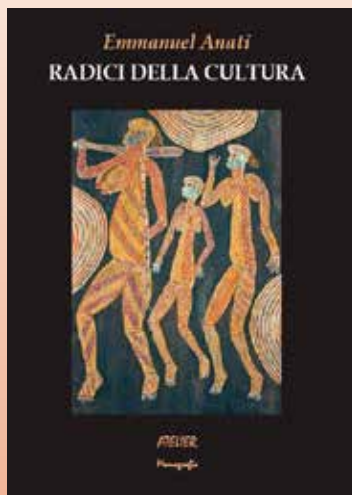
Arte rupestre dell'Australia (in Italian)

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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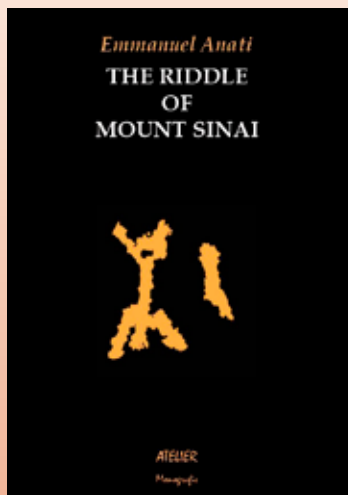
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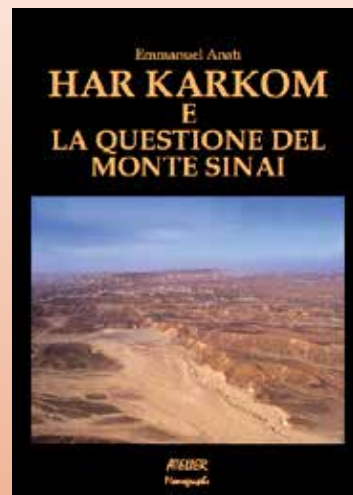
Radici della cultura (in Italian)

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.



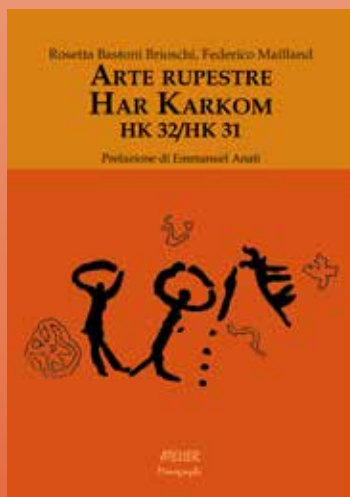
The Riddle of Mount Sinai

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.



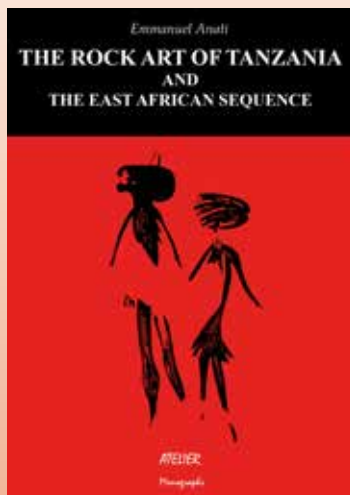
L'arte delle tapa. Sacre stoffe dell'Oceania (in Italian)

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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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.

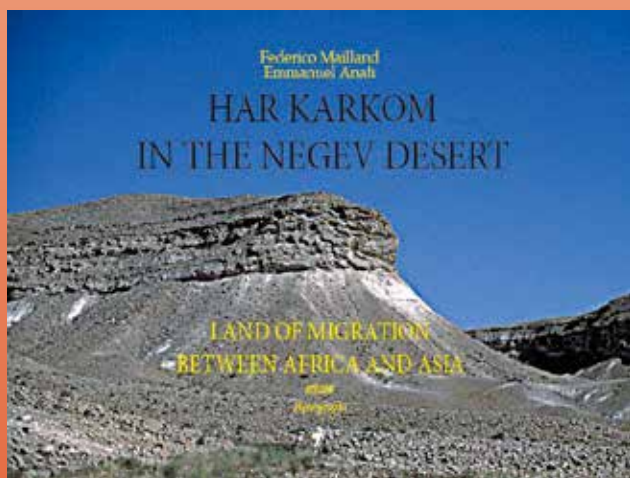
Stylistic phases and periods are covering millennia.



Exodus

Between Myth and History

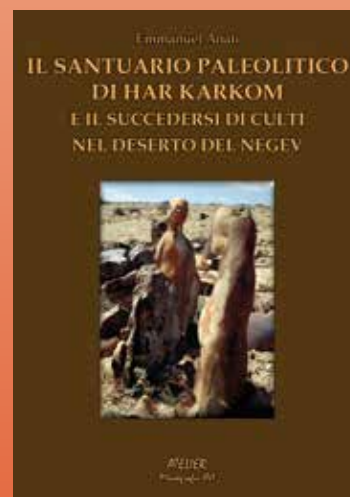
The epic of Moses: is it myth or history? The Biblical narrative of the exodus and the revelation of Mount Sinai are a monumental literary work that has been passed down for well over two millennia, after being transmitted orally for centuries. What would have really happened during the Exodus? How did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



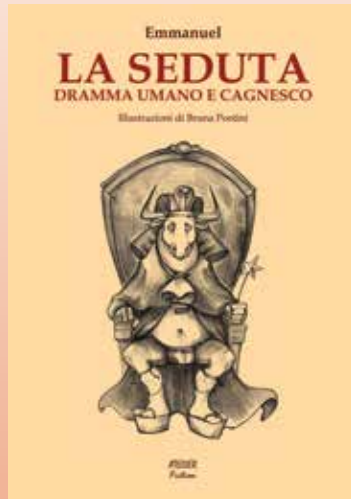
Il santuario paleolitico di Har Karkom (in italian)

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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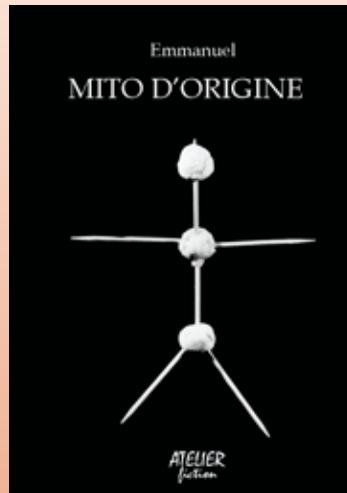
Fiction



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.

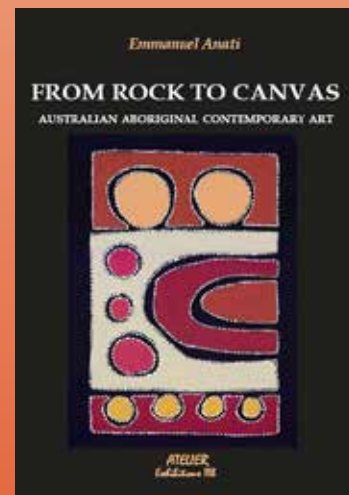


Exhibitions



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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