



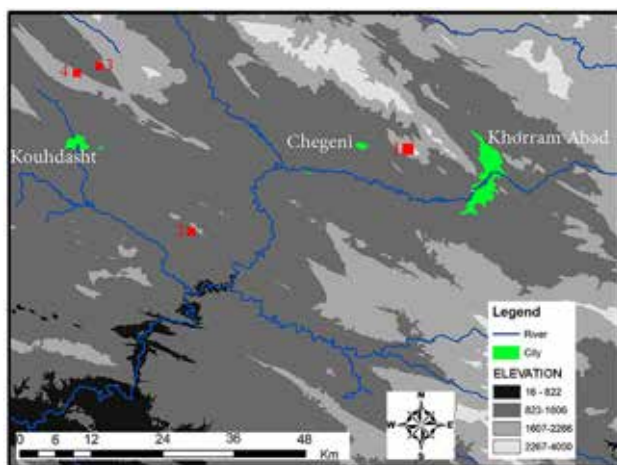
## BRIEF REPORTS

### *Nargeseh: newly found rock art in Lorestan Province, western Iran*

MOHAMAD BAHRAMI and MOUSA SABZI

Lorestan Province is a mountainous part of western Iran. This province is one of the most important archaeological regions of Iran, with significant evidence from the Palaeolithic to the contemporary period. The town of Chegeni is located west of Khorramabad, and south of Sefidkouh mountain. Pictograms of Mirmalas and Homian Caves in Kouhdasht and Dosha in Chegeni were the first reported rock art sites in Iran (Izadpanah 1969; McBurney 1969; Otte et al. 2003; Remacle et al. 2006). Today, these studies have been expanded and more evidence of pictograms (Vahdati 2010; Ghasimi et al. 2014; Karimi 2014) and petroglyphs (Ghasimi 2007; Hemati et al. 2015; Sabzi and Hemati 2017) have been identified in various parts of Iran.

In 2016, archaeological surveys at Chegeni identified a series of pictograms and petroglyphs (Bahrami 2016). Nargeseh is the name of a village located 5 km east of Chegeni and 26 km north-west of Khorramabad. This rockshelter is located 19 km north-east of Dosha Cave and about 65 km east of Homian and Mirmalas Caves (Figs 1 and 2). This area is geologically located in the Asmari Formation, a limestone found in much of the



**Figure 1.** Locations of Nargeseh (1), Dosha (2), Homian (3) and Mirmalas (4) in Lorestan Province, western Iran.

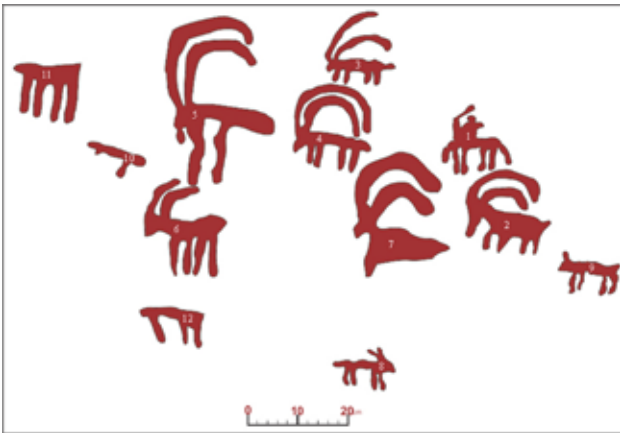
Zagros Mountains that formed in the Oligo-Miocene (Darvishzadeh 1982). The assemblage consists of a total of 58 motifs, comprising both pictograms and petroglyphs. Pictograms in the region have sometimes been made with charcoal, as in Dosha Cave, and occasionally with ochre, as in Mirmalas and Homian Caves. In the Nargeseh shelter, pictograms were placed inside it in order not to be exposed to rain.

*Ochre pigments:* unfortunately, a number of the motifs have disappeared due to natural and human factors, with only traces remaining. Out of a total of 17 recognisable motifs, only nine motifs can still be seen, and eight others show body parts such as legs or horns. One anthropomorph seems to be a rider; other motifs are horned zoomorphs. In this collection, apart from one animal that is depicted looking right, all the other motifs have been depicted looking left. The motifs are shown in side view and all four legs and two horns are depicted. In size they range from 12–26 cm. The largest motif, No. 5, is 26 cm high and 25 cm long. The smallest, motif No. 8, is drawn from the left to the right down the panel and is without a horn. It is 12 cm long and 11 cm high (Fig. 3). Most likely, the ochre soil near the shelter was used to make these pictograms. The dimensions of the horns have been exaggerated and in some of these motifs the horn size is shown larger than the body of the animal. On the left and bottom of the panel, there are indications of the presence of other quadrupeds.

*Black colour:* motifs that have been executed in a



**Figure 2.** Locations of rockshelter and open air rock art north of Nargeseh village.



**Figure 3.** Recording of ochre pictograms on the wall of the Nargeseh shelter.

black colour on the internal wall of the rockshelter and the surrounding rocks were created as single motifs and without any apparent connection between them. The total number of these motifs is 16, including 14 horned zoomorphs and two anthropomorphs. In some of these motifs, the body is filled in with pigment, and in other motifs it is filled with lines. Their sizes are between 10 and 20 cm. The two anthropomorphs are depicted standing.

*Petroglyphs:* the Nargeseh petroglyphs are divided into two panels and single motifs. One panel is located on a rock at the northern side of Nargeseh village. There are 12 motifs in this panel, including two horned zoomorphs, two apparent riders, two anthropomorphs on foot, four zoomorphs without horns and an apparent vegetal motif (Fig. 4). About 7 m east of this



**Figure 4.** Panel of petroglyphs near the Nargeseh shelter.



**Figure 5.** A second panel of petroglyphs at Nargeseh.

rock, another panel includes an anthropomorph, a horned zoomorph, and a zoomorph lacking horns. Two animals have been depicted facing right. An anthropomorph with open hands stands facing them, apparently holding an object. In this panel, as in the previous, the images have been depicted very close and attached to each other (Fig. 5). The style of these motifs is uniform and they are likely to have been created in a single period. Single petroglyph motifs have been made by scratching, totalling 12 horned zoomorphs and two anthropomorphs. These motifs have been drawn individually and without any apparent thematic connection between them.

Due to having high mountains, inter-mountain fertile valleys and an annual precipitation of about 500 mm, Lorestan is considered as an environmentally rich region. The ibex is the most abundant wild animal in Lorestan. Sefidkouh Mountain to the north of

Nargeseh (Fig. 2) is a natural habitat of this animal. The people of Lorestan have had a nomadic and animal husbandry lifestyle. They spent the autumn and winter in the south-western lowland regions of Iran (Susiana Plain) and during the spring and summer they lived in the Lorestan heights, deriving part of their diet from wild animals. The pictograms in Nargeseh are comparable to the rock arts of Mirmalas, Homian and Dosha Caves to the west, and petroglyphs are comparable to the rock art of Borujerd sites in the east of Lorestan. Some regard ibex as the god of water (Schmandt-Besserat 1997). The ibex, in fact, has long been a conspicuous symbol for prosperity and abundance in ancient Iranian myths, bearing a strong association with water



that is generally regarded as the source of prosperity (Samadi 1988). Detailed research on the chronology of pictograms and petroglyphs has not been carried out in Iran, so we cannot suggest any date for the newly found rock art in Nargeseh.

Mohamad Bahrami

Department of Archaeology, Lorestan University  
m\_bahrami79@yahoo.com

Mousa Sabzi

Department of Archaeology, Lorestan University  
sabzi.m@lu.ac.ir

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RAR 36-1283

## An occurrence of appliqué in Wardaman rock art

By R. G. GUNN, D. M. LEE and L. C. DOUGLAS

The traditional lands of the Wardaman lie to the west of Katherine in the Northern Territory (Fig. 1). The region is recognised as a major rock art province. Initial documentation tended to focus on the art at the dramatic 'Lightning Brothers' site (Davidson 1936; Arndt 1962; Chaloupka 1978) and sites around the Ingaladdi waterhole (Mulvaney 1969). Subsequently, extensive studies were undertaken by the Earthwatch Lightning Brothers Project (David et al. 1990a, 1990b, 1994, 1995, 1999; Flood and David 1994; Flood et al. 1992; Watchman et al. 2004) and the more recent detailed recordings of Lee and Anderson across Wardaman Country (Harney et al. 2007; Lee and Harney 2009; Lee 2013). None of these studies, however, mention the use of the appliqué technique: affixing substances such as beeswax or spinifex resin by pressing onto the rock surface, either as individual images or as embellishments to images produced using other techniques (cf. Chaloupka 1993: 56–161). Beeswax images are well-known throughout western Arnhem Land (Brandl 1968; Nelson 2000), the Tolmer Sandstones to the north (Gunn 1992; Chippindale et al. 2000), and in the Kimberley region to the far west (Welch 1995). To date, there has been no report of the use of beeswax in rock art from the Victoria River region immediately to the west of Wardaman country (cf. Lewis and Rose 1988; McNickle 1991).



Figure 1. Location of the traditional lands of the Wardaman people (after Horton 1994: 369).



**Figure 2.** Panel A containing the decorated dingo, with panel B to the right.

With the permission of Wardaman elders, we visited a decorated rockshelter in the *Gawiyān-ya* (*Possum Dreaming*) complex within the Jigaigarn Clan Estate, in the cen-



**Figure 4.** Detail of the appliqué eyes and nose.



**Figure 3.** The decorated dingo.

tre of Wardaman Country. The large and open shelter contains an array of paintings, drawings and stencils (in red, yellow, white and some black), unpatinated scratchings, and a large number of abraded grooves and tracks.

At the northern end of the shelter, an inconspicuous painting of a dingo in white (1) was noted to have four pellets of an unknown dark substance carefully positioned onto the image: at the nose, eyes and anus (Figs 2–5). No other images in the shelter are so decorated.

The rear feet of the dingo motif are in the form of paw tracks, while those on its front feet appear to depict claws (Fig. 6). Its tail is curved up and over its back. The image is 17 × 18 cm in size and aligned vertically rather than horizontally. It has an outline form with a horizontal striped infill and is positioned centrally over an earlier, large red anthropomorph with pink striped infill. By its lower foot there is a squatting anthropomorph with rayed head-dress, also in white, which, although less well preserved, appears contemporaneous with the dingo image. The small panel on which these designs occur (here termed panel A; Fig. 2) is a flat vertical surface that has been broken at some time after the red underlying anthropomorph was painted, removing part of the left arm and foot. Panel A has 12 other motifs (4 white, 5 yellow and 3 red) and a superimposition sequence of white over yellow over red. The white pigment images on this panel are not all contemporaneous, with a hand stencil at the base of the panel being the most recent (on the basis of pigment intensity and superimpositioning). This hand stencil was positioned over the head of an earlier red dingo image painted in red (2) and to the left of a second white anthropomorph placed centrally over the body of the red dingo. This white anthropomorph is also more recent than the white dingo motif. The association of dingo (1) with a squatting anthropomorph on this panel is repeated on a second but larger panel immediately to the right (panel B). The anthropomorph on panel B, in contrast to that on panel A, has two eyes and a mouth in a black pigment (probably charcoal). This design gives the head a notable form found at several sites throughout Wardaman Country, such as on the well-publicised *buwarraja* (*Dreaming*) beings *lirringinings* (or *yirmi-nyonong*, Little Lightnings) at the important Wardaman





Figure 5. Detail of the appliqué anus.

site of Garnawarla to the north (Attenbrow et al. 1994; Drew and Harney 2004: 93; Lee 2013: 1245). Panel B also contains two representations of white macropods considered to be contemporaneous with the dingo and anthropomorph on this panel, and these four paintings seem to constitute a unified composition (Fig. 2).

According to the central Wardaman creation story, the creation dog Mardborronggo changed into a dingo (*ngarrajanangu*) and became part of the country when the Dreamtime world was turned into the present world. Senior Wardaman elder *Yidumduma* Bill Harney has expressed the belief that dingos (and other dogs) carry their 'power' in their tails, and there are paintings of them found within Wardaman Country that have white dots depicted on the tip of the tail (Fig. 7). Bill also suggested that the anthropomorph adjacent to the dingo was Merrerrebeena, the Old Doctor Woman.

The black pellets added to the white dingo (1) painting are all very small; around 3–4 mm in diameter. In contrast, pellets used as embellishments on paintings in Arnhem Land, where beeswax appliqué is common,



Figure 7. The dingo depicted at another Wardaman site carrying 'power' in his tail.



Figure 6. Photo-tracing of the dingo feet.

are usually around 10 mm diameter (Nelson 2000). The two eye pellets (one of which has partially detached; Fig. 3) are black in colour, that on the nose is dark grey, while that on the anus is a mid-grey (Figs 4–5). The differences in colour are likely to result from differential weathering rather differences in age (cf. Nelson et al. 2000: 33). This is most likely due to the pattern of water-wash exhibited in the variation in pigment loss over the panel (Fig. 2). Although most probably beeswax, the material from which they are made is unknown. (As 'contact' motifs are not uncommon within Wardaman lands it is possible that the pellets are of a non-traditional material.) *Yidumduma* Bill Harney suggested that they were probably made from *malarr.gin*, the hard beeswax that encases the beehive (in contrast to *benegin*, soft beeswax that the comb is made from). *Malarr.gin* was used to haft stone points to spears and also to fix stone axe hafting.

Sampling for analysis would be difficult given the small size of the pellets, as this would doubtless adversely impact the pictorial quality of the image. The use of a portable XRF may prove invaluable to identifying the material's composition (cf. Huntley 2012).

This first recording of the use of appliqué (beeswax?) in Wardaman rock art, suggests that further, as yet unidentified, examples will doubtless be located with closer examination of the rock art.

#### Acknowledgments

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Dr R. G. Gunn  
Monash Indigenous Studies Centre  
Monash University  
Melbourne  
Australia  
[gunnb@activ8.net.au](mailto:gunnb@activ8.net.au)

D. M. Lee  
[western.rockart@gmail.com](mailto:western.rockart@gmail.com)

L. C. Douglas  
[leighcd49@gmail.com](mailto:leighcd49@gmail.com)

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RAR 35-1284

## Cupules discovered in Niah Cave, Sarawak, Malaysia

By ZHANG JIAXIN

Niah National Park is located within Miri Division, Sarawak, Malaysia. The Niah Caves are situated 96 km by road from Miri, near the northern coast of Borneo. They have been nominated for World Heritage status in 2010. Recently, during an investigation of the Niah Caves, a large number of cupules were discovered in the Black Cloth Cave, one of the main caves.

During the 1950s and 1960s, Barbara and Tom Harrisson explored the caves and conducted excavations (Harrisson 1957), which eventually resulted in

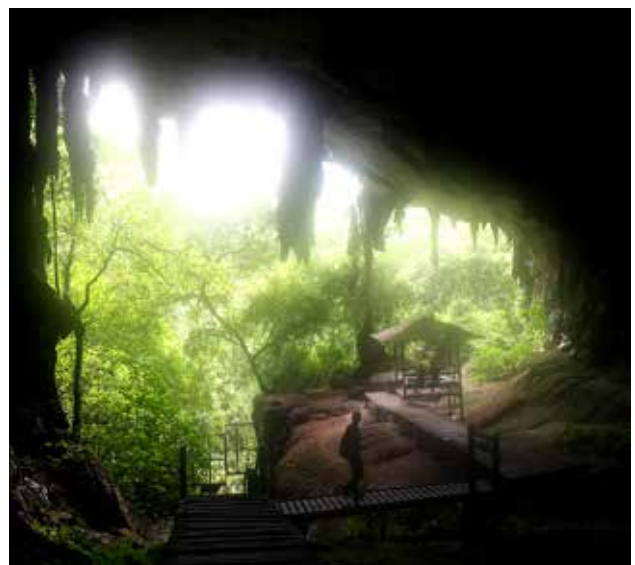


Figure 1. Niah Cave entrance (all photos by ZJ).





Figure 2. Cupule in Niah Cave, Malaysia.



Figure 3. Set of cupules, Niah Cave.

the discovery of the Deep Skull in 1958. Found in the West Mouth of the Big Cave, this is one of the most important hominin finds of South East Asia. The skull is now believed to be between 46 000 and 34 000 years old (Barker et al. 2007), demonstrating the great antiquity of human activities in these caves.

The mountains where Niah Caves are located, 170 km in length and 354 m in height, are covered by dense tropical rainforest with a diversity of animals and plants. They are famous as the habitat of swiftlets and for an abundance of bird's nests which are harvested biannually. The Niah Caves comprise three large caves, Traders Cave, Great Cave and Painted Cave. There is also a cave between Great Cave and Painted Cave that is called Black Cloth Cave by the local people. This cave is barely illuminated by daylight so it is only possible to pass through with portable lighting and the local government has built a wooden trestle track for passing. There are hundreds of cupules on the horizontal rock surfaces of Big Stone on both sides of the wooden walkway, including some occurring individually and others forming groups. The inner walls of these roughly hemispherical cupules are smooth and heavily weathered, while the cupules differ in size. Some large specimens are about 15 cm in diameter and 10 cm in depth, while the smaller specimens are about 4 cm in diameter and depth. I estimate the number of cupules I have seen without leaving the track to be over 200.

Limited by the conditions of the investigation, only the cupules on both sides of the wooden walkway could be examined while there may be more cupules in the cave interior far away from the tracks. Since the British scholar Tom Harrison excavated and researched Santubong River Delta and Niah Cave from 1957 to 1967, there have not been any reports or research on these cupules, which may result from an insufficient understanding of the cupules and their significance. They are often remains of early people (Bednarik 2007). The oldest rock art we know about in every continent

tend to be linear grooves and cupules, especially the latter. They can date from Middle and even Lower Palaeolithic times in the three Old World continents (Bednarik 2008). Niah Caves site was settled by humans as early as 40 000 years ago, and features one of the world's largest cave entrances, as well as Palaeolithic



Figure 4. Close-up of cupules indicating their extensively weathered condition.



Figure 5. Distinctive grouping of cupules in Niah Cave.

and Neolithic burial sites and Iron Age cave paintings. The Deep Skull was the oldest modern human fossil known at the time of its discovery, anywhere in the world, and is an Australoid type. As the space inside caves is relatively closed without wind and rain erosion, weathering processes are significantly slower than in the open and there are few man-made damages. The Niah cupules are clearly older than the cave paintings in the cave, as indicated by several factors, and may be the work of earlier human beings who lived there.

The discovery of the Niah cupules indicates that, during the time span from the production of cupules to that of the final paintings, there may have existed a tradition of producing rock paintings in the Niah area which might have lasted for thousands of years. Niah site is adjacent to South China Sea, so it is an important constituent part in the study of the Austronesian language family, which is of certain significance for further research on the spreading of Austronesian rock painting traditions and the relationship between rock paintings in southern China and those in Australia and Southeast Asia.

Zhang Jiaxin  
Post-PhD  
School of Ethnology and Sociology  
Minzu University of China  
2081514899@qq.com

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RAR 36-1285

## About the discovery of Al Jawf ‘camel figures’ in Saudi Arabia

By MAJEED KHAN

Numerous newspapers and magazines around the world have reported the discovery of huge camel sculptures by a French–Saudi team in the area of Al Jawf, in the north of the Kingdom of Saudi Arabia (Fig. 1). As a rock art specialist I would like to correct the news and emphasise that it is not a recent discovery. The site was already documented and studied by me in February 2011.

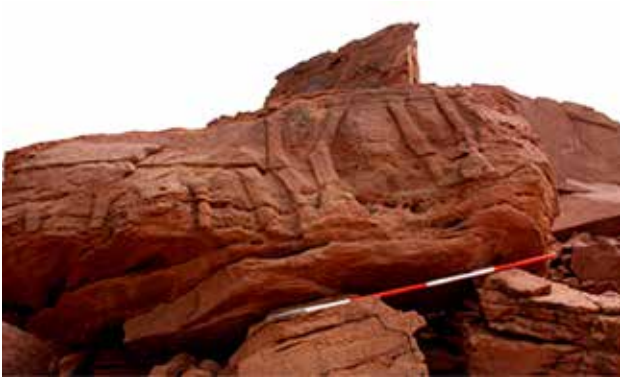
Over 4000 archaeological and 1500 rock art sites have been documented by the Saudi and foreign teams from all over the country (Khan 2018). It is not possible to publish each site, but these records are preserved in our archive of the present Saudi Commission for Tourism and National Heritage. The claim by Guillaume Charloux and a French–Saudi team that this is a new discovery is not correct (Charloux et al. 2018); I first visited the site in 2011. None of the members of the French–Saudi team are specialists in geology or Saudi Arabian rock art. There is no doubt that the ‘sculptures’ resemble camel images, but according to my view these are just natural formations, an ‘artwork’ of nature and not man made. There are no signs of cutting, engraving, pecking or chiselling the rock. Charloux et al. did not publish the full picture of the outcrop as can be seen in the pictures taken by me in 2011 (Fig. 2). To associate the camel images with the goddess Al-Lat is also erroneous as there is not a single figure of Al-Lat found near or around the site or in the entire Al Jawf area. The camel was never worshiped but it was sacrificed as offering to deities and gods on special religious events (Khan 2017).

It takes several thousand years to erode, disintegrate or reshape the rocks. It cannot occur in 2000 years, yet Charloux associated the features with goddess Al-Lat, worshipped 2000 years ago in Arabia). We have in



Figure 1. Image of Al Jawf formations published by Guillaume Charloux in 2018.





**Figure 2.** Complete perspective of the rock with several leg-like features, lacking bodies and heads. Image by M. Khan, February 2011.

Saudi Arabia hundreds of petroglyphs of camel figures dated to more than 3000 years but very well preserved (see Khan 2017). The sites of Shuwaymis and Jubbah, recently registered on the UNESCO World Heritage List, date to the Neolithic period (Bednarik and Khan 2005), thus Charloux's claim that the supposedly 2000-years-old Al Jawf 'camel figures' played any role in the evolution of Arabian rock art is also wrong.

It is common to find such natural sculptures in many parts of the Kingdom of Saudi Arabia, such as the 'elephant', 'dinosaur' and 'standing girl' (Fig. 3). This is the 'art' of nature, natural beauty in the deserts of Arabia, not man made at all.

In other parts of the world, naturally created 'images' are also commonly found. I provide a good example resembling a human figure in 'standing posture' located in Baluchistan province of Pakistan (Fig. 4), and another spectacular example was recently provided by Valle et al. from Peru (2018).

Dr Majeed Khan  
majeedkhan1942@yahoo.com

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**Figure 3.** Naturally sculpted sandstone formations of Saudi Arabia, respectively called 'standing girl', 'dinosaur' and 'elephant'.



**Figure 4.** Natural rock column in Baluchistan, Pakistan.

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## RAR REVIEW

*Palaeoart of the Ice Age*, by ROBERT G. BEDNARIK. 2017. Cambridge Scholars Publishing, Newcastle upon Tyne, 248 pages, 76 monochrome figures, extensive bibliography, hardcover, ISBN 978-1-4438-9517-0.

Initially the reader will think this book is a comprehensive survey of Pleistocene rock art around the world. Indeed, it is that, being one of the only books to examine early rock art production on a global scale. Beginning with Africa, the continent on which the earliest human remains have been found, the author proceeds to describe the rock art of Asia, the Americas, Australia and Europe. However, the book is much more than a study as I hope this review will demonstrate. The book is 248 pages long, has 7 chapters and 76 black and white photographs and drawings. I find it amazing that Bednarik could pack so much information into such a succinct package. Indeed, even the deletion of a single word from a sentence would change the meaning of many paragraphs. Such brevity is a sign of a discipline that most authors cannot claim. Presenting this panoply of rock art so that others can learn about its profound beauty and deep meaning is certainly one of the major goals of this book.

Chapter 1 is a preview of coming attractions, but it also contains some interesting discussions and introduces the work of Merlin Donald which is a subject we will return to shortly. Chapter 2 summarises the rock art of Africa, and Bednarik introduces us to the systematic procedure he will utilise to explicate Palaeolithic rock art across continents. He also outlines a taxonomy of technocomplexes consisting of four stages. Stage 1, i.e. Mode 1, is characterised by archaic stone tools with no bifaces as exemplified by Oldowan tool traditions. Mode 2 is characterised by handaxes and cleavers. These two modes stretch across the entire Lower Palaeolithic, also referred to as the Earlier Stone Age. Mode 3 is characterised by lithics of the Middle Stone Age or Middle Palaeolithic. Mode 4 is characterised by lithics across the Later Stone Age and the Upper Palaeolithic.

Chapter 2 continues with a discussion of the oldest manuport in Africa, followed by a discussion of the 'art' of the Early Middle Stone Age, the Middle Stone Age and the Later Stone Age. The oldest manuport in Africa was found in the australopithecine deposits of the dolomite cave of Makapansgat in northern South Africa. A manuport in archaeology is a natural object

such as a rock which is picked up and carried for a time before being deposited at some new site. The Makapansgat cobble was dated to the Pliocene and the familiar face comprising the cobble is easy to perceive on its surface. The cobble comes from a layer of soil dating to approximately 2.4–2.9 million years of age. This jaspilite cobble was carried from an area at least 11 km distant from the deposit site. Its striking red colour and the fact that it resembled a face to the primate who found it indicates that its pareidolic properties were recognised by its transporter, because such recognition presupposes apperceptive capabilities. I detail this particular piece of palaeoart because it is a good example of the sort of information Bednarik provides throughout this book. It is augmented by a black and white photograph of the cobble's familiar face.

Bednarik believes that self-awareness and theory of mind must have been developed in the animal, whether it was an australopithecine or an as yet unknown early member of a *Homo* species. He further states 'A conscious awareness of one's own appearance or that of one's conspecifics is all that is required to detect meaning in what is merely a chance product of nature.' Obviously, this exogram was imbued with meaning and suggests to Bednarik that exograms may have originated in Africa. Bednarik points out that in Africa Pleistocene palaeoart seems to begin with objects such as beads, proto-sculptures and extensive evidence of pigment use of the Acheulian, Mode 2.

The Middle Stone Age in Africa is characterised by the absence of bifaces. It is quite fascinating to learn that there is suggestive evidence that an ochre processing workshop existed about 100 000 years ago in the Middle Stone Age of Africa. This veritable assembly line arrangement was produced by hominins that long ago. Clearly, we now know of an antecedent to Henry Ford's automobile assembly line which was built in 1913.

A similar organising data device as described above is followed in the remaining Chapters with the exception of Chapter 5 which discusses the rock art of Australia. This rock art has many dating issues which Bednarik cogently describes. In my view it would have been imprudent to include all that dating confusion in this otherwise incisive text.

In addition to providing a comprehensive survey of global rock art production in the Palaeolithic, as the reader advances through the book it becomes ob-



vious that Bednarik has an encyclopaedic knowledge of not only the world-wide distribution but also the character of rock art, which is one of the earliest, if not the only, manifestations of the powerful organ of cognition possessed by Neanderthal and early *Homo sapiens*. Bednarik is acutely aware of the importance of Ice Age art in informing us about the nature of the brain/mind in these, our early ancestors. For example, he states that 'the main significance of palaeoart is that it represents practically all surviving exograms of early human history' (Bednarik 2012).

The second goal of this book is to explicate the cognitive aspect of rock art and speculate about the differing cognitive capacities of early hominins. The neuropsychologist Merlin Donald (1991, 2001) postulates that the enhancement of human biological memory is guided by what he refers to as 'the exographic revolution' in human cultural and cognitive development. In fact, the cognitive abilities of early *Australopithecus*, *Homo habilis*, *Homo erectus*, *Homo neanderthalensis* and *Homo sapiens* have become a popular new topic in archaeology. Indeed, I recently published a paper examining the importance of frontal lobe inhibition for the elaboration and development of culture in hominins (Helvenston 2016). The skills that frontal lobe development conferred on *Homo sapiens*, Neanderthals and other closely related species represent the highest cognitive abilities these creatures possess.

Throughout this book, Bednarik discusses the implications of rock art production as it reflects a certain level of cognitive development. I know of no other archaeologist who does this with such facility. Bednarik is obviously familiar with Donald's work and his belief that evolutionary forces have shaped the cognition and symbolisation abilities of hominins. I will be discussing some of Donald's ideas in detail as they provide an insight into much of Bednarik's thinking also, as I see it.

Donald has been described as a Canadian neuroanthropologist and cognitive neuroscientist. In fact, he is a neuroscientist who became interested in and familiar with much archaeological data, such that he is now referred to as a neuroanthropologist. He is famous for his argument that the evolutionary process must be considered in crafting any model of the development of brain/mind and the development of symbolic and language capabilities. For example, he has said that specific algorithmic processes (i.e. the computational Theory of Mind) may be inadequate to determining how the mind works (Donald 1991, 2001). When he suggested evolution as opposed to computer models of computational skills it was considered radical but at that time models virtually completely divorced from any consideration of evolutionary processes as determining cognitive evolution were dominant in the social sciences, especially much of psychology.

In the past, Neanderthals and *Homo sapiens* were viewed as two different species, i.e., *Homo sapiens* and *H. neanderthalensis*, and that is still a predominant view point. However, some archaeologists postulate that

the cave paintings of Chauvet Cave in France were produced by Neanderthals. It is being suggested by increasing numbers of archaeologists that both are actually of the same species, but constitute different subspecies. Thus they suggest that modern humans should be classified as *Homo sapiens sapiens* and Neanderthals should be classified as *Homo sapiens neanderthalensis*.

Donald (2010) explains how the storage capacity of biological memory systems became enhanced throughout human cultural evolution. 'Engrams' are mental impressions caused by memory traces in the human mind, which are the residual trace of an adaptation made by a response to a stimulus. 'Exograms' are defined as external symbolic storage devices as linked to the present context of remembering that allows us to extend and enhance our biomemory systems. Donald continues by postulating that 'exograms' enable human beings to manipulate complex representations by significantly augmenting the working memory capacity. The complex representations refer to symbol development in counting, which, if Denise Schmandt-Besserat is correct, led to the development of the cuneiform alphabet (we will return to this shortly). In this way, non-biological memory storage (e.g. electronic media), together with the biomemory systems, create the conditions for the emergence of distributed hybrid networks formed by the interwoven neural capacities and external memory devices.

These external memory devices in this context refer to symbols for numbers and eventually to cuneiform scripts and alphabets in Mesopotamia circa 3200 BCE. The numbers were used in a very practical way to label how many containers of grain, wheat, barley, lentils, legumes, melons, grapes and other produce were being donated to the king and the enormous temple complexes. Schmandt-Besserat has proposed what is considered a radical theory that script symbolisation developed from numerical symbols which she presents in a two-volume set entitled *Before writing* (1992a). She has also published a condensation of her findings for a lay audience entitled *How writing came about* (1992b).

Donald maintains that due to brain plasticity, the *interanimation* of exograms and engrams leads to a continuous reformatting of distributed hybrid memory networks that trigger the updating and rewiring of the neural apparatus. In his view, this successive series of rewirings may have underpinned the emergence of literary practices in human societies. He affirms that the central nervous system is still the creative driver and thus places the brain at the centre of the embodied-extended cognitive engine.

As I was writing this review, I kept thinking of a radio and T.V. series, *Dragnet*, that ran from 1949–57 on NBC radio and 1952–59 on NBC TV. The star of the show, Jack Webb, played a police sergeant named Joe Friday who became famous for telling witnesses that all he wanted to hear from them was 'just the facts, mam, just the facts'. Just the facts is what Bednarik gives us in this comprehensive yet pithy survey of Ice

Age palaeoart. I think this is an indication of the unbiased and objective outlook Bednarik demonstrates throughout this text.

The third major goal of the book is to correct a bias in archaeology favouring the interest in European rock art to the detriment of rock art on other continents. Bednarik chose to include the rock art of Africa, the Americas, Asia, and Australia in order to begin what he hopes will become a trend for other authors to consider a perspective that is more global. One method of doing this is to examine the rock art of other major continents and islands to provide a more balanced consideration of the global rock art of the Palaeolithic such as Bednarik has pioneered in this book.

The only suggestion I would make to improve an already excellent text is that when it is reprinted, which I think will certainly happen, it should include a glossary of technical terms for the interested lay reader. This addition would make the text 'practically perfect in every way' as Mary Poppins often said.

Students in the entire field of psychology, including neuropsychology, should be required to read this book when studying the evolution of the central nervous system and its component nuclei and fibre tracts in graduate school. Persons with a deep interest in the evolution of the human brain and nervous system will be very interested in this book which a glossary will only enhance. Professional archaeologists would find this book highly useful as it would provide a constantly updating text that presents an overview of archaeology and rock art of the Ice Age to professionals whose field of archaeology does not focus on rock art of that antiquity.

In conclusion, and following in the footsteps of Roger Ebert, who made movie reviews essential with a 4\* rating system, a 4\* being the highest rating. I give this book 3.8\* which I believe to be a high rating. I make this recommendation as a professional neuropsychologist. I have had an interest in archaeology since I was eight years old and my parents took me to Mesa Verde (dated circa 1190s) to see the ancient Pueblo Indian cliff ruins which I was told were hundreds of years old. These cliff ruins and a fascination with dinosaurs of millions of years ago stirred my imagination and shaped my intellect but in the last analysis I chose a career in neuropsychology and I am not a professional archaeologist.

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## Dr Patricia A. Helvenston

Diplomate, American Board of Professional Neuropsychology, U.S.A.

*patscholar77@gmail.com*

RAR 35-1287

*The archaeology of rock art in western Arnhem Land, Australia*, edited by BRUNO DAVID, PAUL S. C. TAÇON, JEAN-JACQUES DELANNOY and JEAN-MICHEL GENESTE. 2017. Series Terra Australis 47, Australian National University Press, Canberra, 499 pages, 13 maps, 290 photographs, 92 tables, in excess of 200 figures, bibliographies, ISBN paperback 978-1760461614 and ebook 978-1760461621.

This book is offered on the ANU website as a free download (at [press.anu.edu.au](http://press.anu.edu.au)), or \$A95.00 for a printed copy. For this review I purchased a printed version, which is softcover, and read the book from cover to cover.

Overall, this publication is an excellent presentation of archaeological and rock art research conducted in the region within the past decade. It contains comprehensive lists of references in connection with environmental changes that have taken place on the floodplains, the presence of actual megafauna in Australia, and previous rock art studies.

The book is a compilation of fifteen chapters written by forty contributors, and is an academic publication, not aimed at general readership. The common threads for the book are the site locations and the connections between archaeological dating and the rock art on shelter walls and ceilings. Each chapter is written as a stand-alone research paper with its own references at the back, and there is no general index. The print quality is first-rate with clear and bright photographs and figures. The book is divided into two parts.

Part A describes recent research conducted in north-western Arnhem Land at rock art sites adjacent to the floodplains of the East Alligator River region, beside Wulk (Red Lily) Lagoon and at Ingaanjalwurr near Inagurdurwil on the east side of the river, and at Madjedbebe (Malakunanja II) on the west side, beside the Magella floodplain. Part A also examines images of long-necked spearthrowers, dynamic figures, possible megafauna depictions, and assesses the age of x-ray



rock art.

Part B describes recent research in the central-western Arnhem Land Plateau, at Nawala Gabarnmang, Dalakngalarr I, the site with a large bird described as a possible *Genyornis*, and another small site, all in Jawoyn Country. A summary, chapter by chapter, follows:

Chapter One is introductory. The contributors to Chapter Two recorded 77 rock art sites within 3.5 kilometres of Wulk lagoon, and report that images of fish and human-like figures, particularly males with spears, are common, mostly painted during the Holocene. At Ingaanjalwurr, the contributors to Chapter Three recorded 45 examples of beeswax art and provide Aboriginal accounts helping to explain its production. Sorcery art is also discussed. Chapter Four provides numerous examples of painted spearthrower types in the rock art, and concludes that depictions of the broad spearthrower may be an artistic contrivance rather than a real object. (I believe they were made for ceremonial use and *do* represent real objects.)

Chapter Five describes rock art at Madjedbebe (Malakunanja II), the oldest dated archaeological site in Australia (65000 BP), but unfortunately the surviving rock art does not match this age, being mainly from Chaloupka's 'freshwater' and 'contact' periods, the latter including paintings of firearms, knives and white people with their hands on their hips. Of the 1068 paintings, stencils and beeswax figures recorded here, photographs of five are presented.

Chapter Six debunks Chaloupka's notion of four phases within the period of dynamic figures, and Chapter Seven describes a novel method of obtaining two radiocarbon dates from single samples of calcium oxalate crusts. A special preparation separates the *calcium oxalate mineral* from the *mineral crust residue* (inert solids including charcoal and non-reactive organic matter) and this was applied over an early x-ray painting of a 'snake', producing an age of about 5900 years.

Chapter Eight discusses possible megafauna in the art, including the alleged *Palorchestes* (which I believe is a combined human-marsupial-gecko being) and a thylacine-like figure presented as a possible thylacoleo. An ancient-looking macropod painted to the left of the Main Gallery at Ubirr is said to have a short face and single toes consistent with extinct megafauna. (I find this problematic because these sections of the painting have partially weathered away.)

Chapter Nine describes rock art research carried out over a number of years on the Arnhem Land Plateau in Jawoyn country, where 1079 rock art sites from 127 site complexes were recorded. The archaeological and rock art evidence reveals that Aboriginal people were visiting sites and actively engaged in the production of rock art on the Arnhem Land Plateau during the early European contact period.

Chapters Ten, Eleven and Twelve describe the art and archaeology of Nawarla Gabarnmang, a remarkable 32 × 23 metre rockshelter in Jawoyn country on the central-western Arnhem Land Plateau, located central-

ly at the headwaters of several major river systems. The chapters reveal that Aboriginal people have inhabited this site from about 50 000 years ago to the early 1900s. In the shelter floor, the researchers were able to date paint droplets, small pieces of ochre and fallen rock fragments bearing paintings. The oldest of these was a rock fragment bearing a charcoal line which had fallen from the ceiling about 27 000 years ago. Amazingly, from about 35 000 to 11 000 years ago, people knocked out many internal pillars and removed rocks at this site, placing them to the sides of the shelter, and enlarging the habitable space below the ceiling, now covered with colourful paintings. These chapters are the most detailed in the book and are a 'must' read for northern Australian rock art researchers, because they enlighten us as to the way in which early Australians modified the rock art shelters.

Chapters Thirteen and Fourteen examine the art and archaeology of two more Jawoyn plateau sites, and Chapter Fifteen, the final chapter, examines the site containing the alleged *Genyornis* painting, concluding that the figure cannot be older than about 14 000 years. This supports the notion that the painting is not that of *Genyornis*, believed to have become extinct by about 50 000 years ago.

The strengths of the book lie in the diversity of material presented, and the thoroughness of the contributors in dealing with each of their subjects, with detailed presentations of the archaeology and rock art imagery at the sites. Highlights of the book are the chapters on Nawarla Gabarnmang in Part B.

Considering the enormous volume of rock art at these sites, I would have liked to have seen more rock art images in chapters Two, Three and Five, but these authors have presented excellent summaries of previous research in their respective areas and have kept their chapters brief. In the printed version of the book, there are fourteen completely blank pages and six half-page blanks, while some highly-detailed drawings of large rock panels, worthy of full pages, are each assigned to one-sixth of a page. However, this has probably been necessary because the book is also available chapter by chapter in downloadable form. In summary, an excellent book and a useful reference.

**Dr David M. Welch**

Darwin, Australia

[welch.mob5@bigpond.com](mailto:welch.mob5@bigpond.com)

RAR 35-1288

*Talking stone: rock art of the Cosos*, by PAUL GOLDSMITH. 2017. The University of Utah Press, Salt Lake City, 106 pages, colour and monochrome photos, bibliography, softcover US\$19.95, ISBN 978-1-60781-557-0.

Published in 2017, *Talking Stone Rock Art of the Cosos*

was written with a popular audience in mind, keeping text to a minimum with an emphasis on the beautifully recorded images. The author, Paul Goldsmith, is a director of photography for feature films, television, commercials, music videos and documentaries. It is clear that his photographic skills have been put to great use in the creation of this visually striking work.

Despite adopting a style with minimal textual content, the author casts widely in presenting views from a number of contributors including an archaeologist, anthropologist, psychologist, artist and indigenous representatives. This results in information pertinent to the subject, but which does not detract from the graphic appeal and wonder of the petroglyphs. The book offers something for the interested amateur and scholar alike. In the latter case, key motifs of this vast corpus have been recorded in a professional manner, enabling easy recognition of key details which might be valuable for analytical purposes of various kinds, for example.

Following a brief introduction to the site, the author sets the scene with the important question vexing all rock art researchers — that of affiliation (section ‘Who made these images?’). As with many ancient sites, what remains often leads to distorted perceptions of what really took place in the past. Thus, the multiplicity of motifs seems to speak for a large local population in the past who produced the images. Studies of available resources in the area indicate otherwise and it is thought that only a small community ever inhabited the area.

A short overview is provided of the ‘Coso’ culture, the China Lake Military range in the Mojave Desert. We are enticed by the intriguing question of why it is that the site comprises over 20000 bighorn sheep motifs but was only ever able to support no more than 500 individuals at any time.

We are then led by the author into the site, introducing the resident archaeologist. He draws attention to an irony that in this place, where modern weapons are trialled, we also have depictions of weapons of the hunt, some dating back as far as ten thousand years. The depictions were produced through the pecking off of the varnish on the local rock which can be challenging for the photographer. Goldsmith uses a number of techniques to capture the art, some are even photographed at dusk with a flash to maximise their clarity.

The author, with the help of archaeologist Alan Gold, describes how small bands of Coso hunter-gatherers were responsible for the rock art production here, moving with the seasons and occupying only temporary campsites. The few remains of campsites and lithics in the area are assumed to be of the same material culture as the rock art.

The great antiquity of some hunting scenes is evident in clear depictions of spear throwers (‘atlatl’) which preceded the bow and arrow and have also been recovered from archaeological contexts. The atlatl was deployed in hunts for bighorn sheep, an apparent staple of the Coso. Its prominence has even led Gold

to speculate that the Coso included it into their cult beliefs.

A place described by the author as a ‘woman’s site’ features abstract rock art attributed to much more recent times. There are frequent occurrences of deep and large cupules, along with a preponderance of much smaller ones. The site archaeologist, Mike Baskerville, identifies the larger cupules as mortars used for food processing by women. This interpretation seemed to me to be highly speculative — particularly due to the presence of the many smaller, obviously non-functional cupules all around. Gold believes the smaller cupules were used to extract material to promote female fertility.

The author describes the enormous cache of possible Coso artefacts retrieved from the Newbery Cave and held in the San Bernadino County Museum in Redland, California. Among these, he describes a bighorn dropping wrapped in sinew — possibly once carried around the neck and highlighting the symbolic significance of the animal in ways other than through just the rock art (see *RAR* 33: 193–208).

As part of the consultation of a broad range of experts, the author puts the riddle of the abstract images to an artist (Tony Berlant) who has a background in Indigenous American art. His suggestion is one commonly heard for rock art in this region — that there were possibly trance states or hallucinogens involved in their production and that the images are not captured from the external world but from within.

A unique class of motif are the ‘pattern body anthropomorphs’ (PBAs) featuring a simple anthropoid outline, body-infill of various forms and at times dramatic or elaborate embellishments on their heads. The suggestion is that they represent shamans or shamanic visions. Their fearsome appearance is explained by a clinical psychologist (Dr Beth Kalish Weiss) to be an externalisation of the Coso’s deepest fears and a means of controlling them. Alan Gold believes the PBAs to be representations of an ‘animal master’ who recalls the hunted animals each season. Parallels are drawn by the author to beliefs and rituals of more recent cultures including the ongoing rebirth of animals and the use of big horn sheep headdresses, with suggestions of parallels with the ‘headdresses’ of the PBAs.

An indigenous American is interviewed — a man who still regards the Coso site as a sacred place. Though expressing a connection to the rock art, he is frank in his admission that he does not know its meaning.

There is a short discussion on chronology where atlatl spear points are depicted on rock art which would put it in the vicinity of 3500 to 1500 years ago. Clear superimpositions are also used as a guide to relative age.

Returning to the apparent paradox of the great density of petroglyphs in an area once so sparsely populated, Alan Gold provides some insights. Advances in weapons technology, the introduction of the dog and climatic changes could have severely depleted bighorn



numbers leading to its status as a prestigious trophy. He sees the many petroglyphs as a prayer seeking to bring back the bighorn.

As rock researchers, we forever hope that sites around the world are in safe hands. We see that the Coso art on the China Lake weapons range is not only protected, but that the facility's commanding officer has a great passion for it, to the extent that he aspires to lead tours through the site.

The book is an outgrowth of a documentary film (also entitled *Talking stone*) produced by Goldsmith. As part of this review I took the opportunity to view it (it is available on the Bradshaw Foundation's website <http://www.bradshawfoundation.com>). It is a wonderful complement to the book and takes the viewer on a personal journey through the canyons while also bringing to life the specialists and custodians he interviewed for the book.

Finally, we are left with a work which is both visually appealing and which draws attention to the significance and wider implications of this important corpus in the North American Mojave Desert. There is no pretence to this being an academic work; the author himself acknowledging that the text was kept intentionally brief. There will always be academic readers who expect more detail, references and rigour — an expectation which would be unfair if the book is to be judged within its genre. The author has sought input from a number of professional and knowledgeable contributors. He provides summaries of the salient points of their contribution — thus maintaining the interest of the non-academic reader while also retaining the integrity of the theories of interpretation provided. What the book achieves is exposure of the material to a broad audience — exposure which is ultimately important for the ongoing preservation and protection of this precious resource of a little known, ancient North American culture, the Coso.

### Dr Fritz E. G. Hardtke

Macquarie University, Sydney Australia

[frederick.hardtke@mq.edu.au](mailto:frederick.hardtke@mq.edu.au)

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## RECENT ROCK ART JOURNALS

*International Newsletter of Rock Art*. Newsletter of the Association pour Rayonnement de l'Art Pariétal Européen (ARAPE). Edited by JEAN CLOTTES. Bilingual newsletter (French and English). Recent issues include these research articles:

Number 80 (2018):

GUTHERZ, X. and R. JOUSSAUME: The Laas Geel rock shelters and Holocene rock art in Somaliland.

GARATE, D., O. RIVERO, J. RIOS-GARAIZAR and F. UGARTE ELKARTEA: New finds at Aitzbitarte (Basque Country): the clay bison alcove.

ONTAÑÓN, R., R. MONTES, J. M. MORLOTE and E. MUÑOZ: Cueva Auria (Peñarrubia, Cantabria, Spain): a new cave with Palaeolithic rock art in northern Spain.

GONZÁLEZ SAINZ, C. and J. C. LÓPEZ QUINTANA: Cueva de Arminxe, a new Magdalenian parietal art ensemble near the mouth of the Rio Lea (Lekeitio, Basque Country, Spain).

HERMANN, L.: The rock art of the Kenkol Valley (Talas Oblast) in Kirghizstan.

Number 81 (2018):  
AULANIER, M., A. LAFARGE, V. DELVIGNE, R. LI-ABEUF, J. VIRMONT and J.-P. RAYNAL: Discovery of Magdalenian parietal art on blocks in the heart of the basalt Massif Central (Haute-Loire, France).

DUBEY-PATHAK, M. and J. CLOTTES: Urden rock art (Madhya Pradesh, India).

HERMANN, L.: New rock art discovery at Imaoun (Akka, Anti-Atlas) in Morocco.

COSTA, P. and É. GELLIOT: Volcanic eruption deposits and dating of rock art sites in El Salvador.

Number 82 (2018):  
BEDNARIK, R. G. and M. KHAN: 'Living' rock art traditions in Saudi Arabia.

HERMANN, L.: Nyldy Valley rock art (Talas Oblast) in Kirghizstan.

HERMANN, L.: The site of Chiim-Tash in the region of Ur-Maral (Talas Oblast) in Kirghizstan.

BOURGUET, N. and M. BOURGUET: The Ellenberger family and Lesotho rock art.

MAZEL, A. and M. GIESEN: Mobile app developed to support the protection of UK and Irish rock art.

BEDNARIK, R. G.: About woolly rhinos in rock art.

*Almogaren*. Journal of the Institutum Canarium. Edited by HANS-JOACHIM ULBRICH. The most recent issue includes these articles:

Volume 48–49 (2017–2018):

ULBRICH, H.-J.: Phalli and vulvae as apotropaic geoglyphs in a sacred plain south of Albacete (Spain).

SÁENZ DE BURUAGA, A.: Notas y reflexiones acerca del proceso de la investigación arqueológica en el Sahara Occidental.

HORLEY, P. and H.-E. STEINER: Face petroglyphs in Easter Island caves as a possible sign of their special status.

STEINER, H.-E.: Ana Mata – eine Höhle mit Make Make-Petroglyphen beim Nordkap der Osterinsel / Rapa Nui, Polynesien.

*SIARB Boletín*. Journal of the Sociedad de Investigación del Arte Rupestre de Bolivia (SIARB). Edited by MATTHIAS STRECKER. The most recent issue includes the following papers:

Volume 32 (2018):

MENA, F., C. MUÑOZ, D. ARTIGAS, R. CORDERO and N. CALDERÓN: Primer registro de grabados en

Aisén (Patagonia central, Chile).  
 JUSZCZYK, K., J. Z. WOLOSZYB and A. ROZWADOWSKI: Documentando Toro Muerto (Arequipa, Perú). Informe de las temporadas.  
 STRECKER, M., R. CORDERO and M. TORRICO: Las pinturas rupestres de Umantiji comunidad Chirini Tiquimani (Umopalca, Zongo, La Paz).  
 HOSTNIG, R.: Caracterización del arte Rupestre temprano de Espinar, Cusco.

*American Indian Rock Art*. Monograph series of the American Rock Art Research Association (ARARA). Edited by DAVID A. KAISER and JAMES D. KEYSER. The most recent issue features these papers:

Volume 44 (2018):

LEFAVE, J.: Vies and points of view: examining the global tradition of rock art from a landscape and environmental perspective.

BERRIER, M.: Looking at an old dog with new tricks: review and documentation of Jaguar Cave, a unique painted shelter in west Texas.

LEEN, D.: The Quilcene petroglyph: a contact era site on the southern northwest coast.

MINICK, D. L. and J. D. KEYSER: Seeing is finding: the value of DStretch for recording Columbia River rock art at Spedis Creek and Harris Canyon.

KAISER, D. A. and J. D. KEYSER: A tale of two cities: comparing two Columbia Plateau pictograph sites.

MERRELL, C.: Exploring the use of an Idaho cave by an antelope charmer.

RITTER, E. W., J. HARMAN, J. ROVANPERA, D. SNYDER, E. CORREA and S. HARMAN: Investigating the co-occurrence of petroglyphs and pictographs on the volcanic tablelands of northeastern California.

HILBISH, J. F.: Dating western message petroglyphs with Aztec and Maya glyphs.

HERNBRODE, J. and P. BOYLE: Becoming human: rock art depictions of transformation in landscapes of emergence.

HYDER, W. D. and D. BOHNTINSKY: Ritual and rock art in Basketmaker ceremonies from Butler Wash to Atlatl Rock.

CONTI, K., J. D. KEYSER, D. A. KAISER and D. L. MINICK: Pipe Spring: Fremont-Anasazi interaction in southeastern Utah.

KEYSER, J. D., K. CONTI and D. A. KAISER: Finding faded Fremont: shorthand anthropomorphs and fugitive pigment at Pipe Spring, Utah.

LOENDORF, L. and D. A. KAISER: Tobacco-related rock art and vertical series rock art in Montana and Wyoming.

ANICK, P.: Another look at the rock art of southeastern New England.

FOSSATI, A. E.: Rock art in 'the Land of Fire' (Azerbaijan): Discovering the Gobustan Rock Art Cultural Landscape (UNESCO World Heritage List).

## RECENT BOOKS OF INTEREST

*Powerful images: Chhattisgarh rock art & tribal art*, by MEENAKSHI DUBEY-PATHAK and JEAN CLOTTE. 2017. Bloomsbury Publishing India Pvt. Ltd, New Delhi, 270 pages, profusely illustrated in colour, bibliography, landscape format, hardcover, ISBN 978-93-87146-14-3.

*Transforming the landscape: rock art and the Mississippian Cosmos*, edited by CAROL DIAZ-GRANDOS, JAN SIMEK, GEORGE SABO III and MARK WAGNER. 2018. American Landscapes, Oxbow Books, Oxford, 272 pages, illustrated in colour and monochrome, 15 contributors, bibliography, softcover, ISBN 978-1-78570-628-9.

*Whatever happened to the people? Humans and anthropomorphs in the rock art of northern Africa*, edited by D. HUYGE and F. VAN NOTEN. 2018. Royal Academy for Overseas Sciences and Royal Museums of Art and History, Brussels, 552 pages, illustrated profusely, mostly in colour, with numerous contributors, softcover, ISBN 978-90-7565-260-4.

*Signos del culto al hombre pajarero de la Isla de Pascua en las Cuevas de Motu Nui. Rapa Nui/Polinesia*, by HARTWIG-E. STEINER. 2018. Institutum Canarium, 64 pages, extensively illustrated in colour, bibliography, softcover, ISBN 978-3-927169-20-3.

## RECENT PAPERS OF INTEREST

*Horse and bull petroglyphs of Europe*, by ROBERT G. BEDNARIK. 2015. *Bolletino del Centro Camuno di Studi Preistorici*, Volume 40, pp. 7–30.

*Making sense of pictures*, by LIVIO DOBREZ. 2015. *Bolletino del Centro Camuno di Studi Preistorici*, Volume 40, pp. 31–48.

*The abbot of Baçal and rock art studies in Portugal*, by MILA SIMÕES DE ABREU. 2015. *Bolletino del Centro Camuno di Studi Preistorici*, Volume 40, pp. 49–62.

*Carl Georg Brunius and a possible / non possible relation between Scandinavian rock art and hieroglyphs*, by JARL NORDBLADH. 2015. *Bolletino del Centro Camuno di Studi Preistorici*, Volume 40, pp. 63–72.

*Capo di Ponte, Corno di Seradina, roccia 12. Una breve storia delle ricerche e un'intervista*, by ANGELO E. FOSSATI. 2015. *Bolletino del Centro Camuno di Studi Preistorici*, Volume 40, pp. 90–113.

*Equine petroglyphs in Europe*, by ROBERT G. BEDNARIK. 2017. *Journal of Archaeological Science: Reports*, Volume 13, pp. 222–228.



# IFRAO Report No. 60



## Minutes of the 2018 IFRAO Business Meeting

Valcamonica, Italy, 2 September 2018

Represented were the Asociación Cultural 'Colectivo Barbaón' (ACCB, Spain); the Asociación Cultural Instituto de Estudios Prehistóricos (ACINEP, Spain); the Associação Portuguesa de Arte e Arqueologia Rupestre (APAAR, Portugal); the Association pour le Rayonnement de L'Art Pariétal Européen (ARAPE), France); the Australian Rock Art Research Association (AURA, Australia); the Cave Art Research Association (CARA, Australia); the Centro Europeu de Investigação de Pré-História do Alto Ribatejo (CEIPHAR, Portugal, by proxy); the Centro Camuno di Studi Preistorici (CCSP, Italy); the Centro Studi e Museo d'Arte Preistorica (CeSMAP, Italy, by proxy); the Rock Art Society of India (RASI, India), the Società Cooperativa Archeologica Le Orme dell'Uomo (Italy); the Société Préhistorique Ariège-Pyrénées (France); and the Welsh Rock Art Organisation (WRAO, United Kingdom, by proxy).

The meeting was held at the Centro Congresso of Darfo Boario Terme, Valcamonica, Italy, on 2 September 2018, and it commenced at 18:45 hours. It was chaired by the President of IFRAO, Hipólito Collado Giraldo. The minutes were recorded by the Convener of IFRAO.

1. *Apologies and declaration of proxies.* AURA declares proxies for CEIPHAR, WRAO and CeSMAP. There were no apologies.
2. *Confirmation of previous minutes.* The minutes of the previous IFRAO Business Meeting (Cáceres, Spain, 4 September 2015) have been published in *Rock Art Research* 33: 120–121. They were confirmed unanimously.
3. *Matters arising from these minutes.* No new matters have arisen from these minutes.
4. *Report by the IFRAO President.* The IFRAO President suggests that *RAR* should increase the content of European papers and rather than only in English, it should publish in four more European languages and engage more European reviewers. The Editor responds by stating that *RAR* reviewers are drawn evenly from all continents and that papers from all continents are being published in the journal. Discussion reveals that in many non-English-speaking countries, papers in international English-language journals are consistently ranked much higher than those in local languages. *RAR* is ranked in the uppermost 3% of all academic journals (Scopus) and this ranking, by far the highest in the discipline, should not be risked. Moreover, rather than adding European languages, it would be more appropriate to add languages such as Arabic or especially Chinese. However, additional costs and complexities are not warranted and the majority of delegates oppose this proposal.
5. *Report by the IFRAO-UNESCO Liaison Officer.* No report has been received. Several delegates propose that the term of office of the Liaison Officer be limited to a given number of years. After debate the Convener is instructed to conduct a postal ballot of the membership calling for nominations for the position.
6. *Report by the IFRAO Convener.*
  - 6a. The Convener reports on the ongoing issues of rock art protection globally. There have been great improvements over the past two decades, but further vigilance and action are required in several countries.
  - 6b. Representatives of IFRAO (ARAPE and AURA) have negotiated with the cultural heritage branch of UNESCO conditions of better acceptance of rock art properties on the World Heritage List. These interventions have led to improved prospects for the listing of rock art sites. Several have recently been inscribed, are currently being submitted or are being considered for submission.
  - 6c. Current developments in the discipline: the Convener emphasises the phenomenal surge of rock art research and rock art appreciation in several regions, most especially in China, but also in Southeast Asia, Saudi Arabia and some South American countries.
7. *Daraki-Chattan Cave* in India is one of the oldest rock art sites known in the world. It remains unprotected. RASI and AURA propose that IFRAO and individual IFRAO members petition the Prime Minister of India to direct the Departments of Forests and Archaeology to provide effective physical protection of this site. The proposal is accepted and RASI will provide relevant information needed to facilitate the petitions of IFRAO members.

8. *ABAR (Brazil) statement on indigenous issues.* In a historical development, the Associação Brasileira de Arte Rupestre (ABAR) has decided to support the struggle of indigenous Brazilians to preserve their rock art and to adopt the Cochabamba Manifest (RAR 32: 252-252). Amazonian indigenous leaders have been given the status of honorary associates and ABAR repudiates the destruction of rock art sites, in particular in the course of the construction of mega-dams and as a consequence of mining operations. It is proposed that a relevant document be published and that IFRAO is to send a message to the President of Brazil. The motion is passed unanimously.
9. *Proposals for future IFRAO congresses.*
- 9a. The Asociación Mexicana de Arte Rupestre, AC (AMARAC), which has recently been formed at the National University of Mexico in Morelia, wishes to conduct an IFRAO Congress in Morelia in 2021. Their three representatives provide details of their venue and their proposal. They are encouraged to pursue affiliation with IFRAO, after which they may present their proposal formally. Their membership will be decided by postal ballot.
- 9b. The Scandinavian countries are also interested in holding an IFRAO Congress, and there are endeavours to establish a Scandinavian rock art organisation. Their representative is advised that a proposal could be considered after the new association has been formed and become affiliated with IFRAO.
10. *Reports of IFRAO Representatives wishing to outline their organisation's work.*
- 10a. APAAR reports working a lot with students. Its working relationship with government agencies has improved but rock art continues to be destroyed in Portugal, and classified monuments are being de-classified.
- 10b. Società Cooperativa Archeologica Le Orme dell'Uomo reports similar patterns from Italy, and that work concerning rock art is not being published. The Valcamonica School is ongoing.
- 10c. ACINEP also notes similar issues in Spain, and reports that its work with schematic rock art in that country is continuing.
- 10d. AURA reports significant improvements in rock art protection in Australia, thanks to IFRAO's efforts. Research by Australian rock art researchers continues in their home country and many other countries, as does AURA's extensive publishing program.
11. *Any further matters raised by delegates.*
- 11a. A campaign against the 2018 IFRAO Congress by one member association's representative is reported. The Convener is requested to write to this member to clarify whether the action was taken on behalf of the member or as a personal action.
- 11b. An application has been received from a new rock art organisation in Peru to become a member of IFRAO. The matter will be decided by postal ballot.
- 11c. A prominent case of limiting the freedom of research of a distinguished retired rock art researcher in France is highlighted, a generic issue apparent in various European countries. The Convener is instructed to write to the relevant French agencies and encourage freedom of research and that researchers should be given access to sites and archived collections.
12. *General matters, discussion and resolutions.* No general matters are raised.
13. *Declaration of new IFRAO President.* Angelo E. Fossati, the IFRAO Representative of the Società Cooperativa Archeologica Le Orme dell'Uomo, is elected unopposed as the new President of IFRAO.
14. *Adjournment.* The meeting is adjourned at 20:45 hours.

## Report of the 20th International Rock Art Congress, IFRAO2018, 'Standing on the Shoulders of Giants'

By ANGELO E. FOSSATI  
(IFRAO2018 General Secretary)

The 20th International Rock Art Congress, IFRAO 2018, 'Standing on the Shoulders of Giants' (the title is a quote from the 11th century philosopher Bernard of Chartres), has been held in Darfo Boario Terme, Valcamonica, Italy, from the 29th August to the 2nd of September 2018. It has been one of the largest international rock art congresses ever organised, with around 800 people taking part in the congress, including speakers and attendees. There were 530 scientific papers distributed over 36 sessions using several rooms of the Congress Centre in Darfo Boario Terme and the nearby Consolata-Centro Formativo Provinciale G. Zanardelli School.

The organisation of a congress of this size cannot be improvised. Three years earlier, as soon as our candidacy had been accepted during the IFRAO meeting at the 2015 Congress in Cáceres, we started working on several fronts. An International Scientific Committee was immediately created which included active professional rock art scholars from different continents. The permanent organising committee (composed of the Società Cooperativa Archeologica Le Orme dell'Uomo and of the Centro Camuno di Studi Preistorici, the organisers of the Congress), upon receiving the international scientific committee's choice of 36 sessions, had meetings practically every week. The positive response for participation exceeded our expectations and was due in part to the constant communication over several social and



*Figure 1. Opening ceremony of the IFRAO2018 Congress in Valcamonica (all photos by Marisa D. Giorgi).*

academic platforms, including international conferences, over the last three years. The reputation of Valcamonica's rock art within academic circles also played an important part in the popularity of the conference. This is reinforced by the field schools that have attracted thousands of scholars and students over the years who have come to the valley to study our research methods. Furthermore, the high standard of the international scientific committee, the interesting session topics and the diligent work of the session coordinators did the rest. However, people also came to see the rock art of Valcamonica, and this was evident in the number of people who attended the organised visits and by the number of independent visits to sites. The success of the Congress is also due to the excellent organisational direction of Tiziana Cittadini and the participation of dozens of volunteers from two local high schools (the *Istituto Scolastico Santa Dorotea Cocchetti di Cemmo* in Capo di Ponte and the *Liceo Golgi* in Breno) who provided constant assistance to the lecture rooms during the presentations. The congress attracted interest and surprise among the inhabitants



*Figure 2. Coffee break at the Congress.*

of Valcamonica, due to the very high number of participants and the renown of the speakers. The hotels in Boario were all full, and many even outside Boario. The congress assisted in elevating the community's perception of the heritage value of the rock art as well as its economic value.

The 36 sessions covered various topics. There were 'geographical' themed sessions, concerning rock art in different areas (North America, Scandinavia, the Alps, peninsular Italy, Mediterranean area, eastern Sahara, Middle East, Australia and desert landscapes), and 'chronological sessions' concerning specific periods (Palaeolithic, post-Palaeolithic and Historical periods). There was also an ample number of interpretative sessions (e.g. *Mens simbolica*, Symbolism of death, Modern reuses), and those that compared the objects depicted in rock art with real ones (Weaponry and tools in rock art) or information obtained from peoples living ethnographically with rock art (Rock art and ethnography, Colonisation rock art). Some sessions dealt with individual themes (Anthropomorphic images, Archaeo-acoustics, Statue-stele, Inscriptions in rock art, Pastoral graffiti, and Sex, drugs and rock and roll). There were also a number of 'scientific' sessions, i.e. those where advances in methods and techniques in the research of rock art were presented (Ruprestrian archeology, Rock art science, Digital age, Pigments, 3D methodologies). Some sessions have been dedicated to conservation, enhancement and protection of sites with rock art and the various associated management challenges (Public policies, Managing sustainable rock art sites, Rock art and World Heritage). A session with numerous presentations was the History of rock art research, a prelude to two other meetings / workshops: one dedicated to the memory of the Australian researcher John Clegg and one in honour of Emmanuel Anati. In summing up the history of research themes





**Figure 3.** Plenary lecture by Jean Clottes.

at the congress I must also mention the masterly lesson on *Cave art in Europe* delivered by Jean Clottes, the best-known scholar of Palaeolithic caves in France, presented as the plenary lecture (Fig. 3).

It would be implausible to list all the news that arose from the 36 sessions, given the 530 presentations. It should, however, be emphasised that all the sessions were very well attended: it was often difficult to find a place to sit down. Regarding the rock art from Valcamonica it is worth noting that the archaeological research in Valcamonica has been well represented by 40 presentations, spread over several sessions. For the most part these represented research on individual themes such as single rocks, on statues-steles, on inscriptions in the Camunian alphabet, on the management of sites, or on Historical rock art, just to name a few. There was also a round table on the chronology of rock art in Valcamonica: this was a real innovation and certainly one of the most important results of the entire IFRAO2018 congress. For the first time in 21 years, researchers from the two major schools of research on Valcamonica rock art (the *Cooperativa Archeologica Le Orme dell'Uomo* and the *Centro Camuno di Studi Preistorici*, which had their respective mentors in Emmanuel Anati and Raffaele de Marinis) gathered and discussed how to use common terminology to define the different phases in which petroglyphs appear. After a round table discussion that took place on the evening of the 29th of August we decided that, beginning with the next publications, we will all use a chronological serialisation that uses a shared terminology. A great result for the progress of rock art studies in Valcamonica.

There were several additional, associated events, all of which were very well attended: guided tours, both during the day and at night, to various rock art sites (Naquane, Luine, Foppe di Nadro, Seradina, Bedolina, In Valle, Dos Sotto-lajolo; Fig. 4), concerts (event organised by the Distretto Culturale di

Vallecamonica), slide shows of photographs (*Places of peace and power*), a film screened at the headquarters (*The origins*) and off-site (*Alps*, screened at Edolo). Five exhibitions were held at the Congress venue (Fig. 5): *Stone images. Rock art the first global expression*, a photographic exhibition dedicated to world rock art; *Symbols. Valcamonica rock art images within the casts of Battista Maffessoli*, an exhibition of some plaster casts made in the second half of the 20th century by the famous carpenter-artist Battista Maffessoli; *Visions on stone. Rock art of the Columbia Plateau, U.S.A.*, by the Oregon Archaeological Society, about the rock art of Native Americans living on the Columbia River in north-western United States; *Mont Bego: casts of the rock engravings*, an exhibition with casts and photographs of the petroglyphs of Mount Bego organised by the Departmental Museum of Tende (France). Finally, the exhibition *Contemporary rock art* by Yang Cai, an artist-scientist, professor at the Carnegie Mellon University in Pittsburgh (Pennsylvania, U.S.A.).

At the end of the Congress there were two official meetings: the ICOMOS-CAR (International Council on Monuments and Sites - Rock Art Committee) and the IFRAO Business Meeting where the representatives of some member associations attending the Congress participated (see minutes on previous pages 124–125). At the end of the latter meeting I have been appointed as the next IFRAO President. There are several points that I raised in my speech at the inauguration ceremony for the Congress, a type of agenda that I would like to



**Figure 4.** Fieldtrip to Paspardo petroglyph site.



Figure 5. One of the five exhibitions at the Congress.

follow. I think one of the most important points will be the focus on schools. I would like to circulate, to all the IFRAO association members, a document with a number of suggestions for directions associated with schools: i.e. improve the visibility of rock art in textbooks; organise student groups to visit public rock art sites; establish conferences and rock art exhibits especially dedicated to school students. This will not only assist in improving the understanding of rock art but also its conservation as well as highlighting its importance as heritage. I think that more effort needs to be directed to popularising rock art within the associated communities and improving the accessibility and communication of scientific rock art research.

A few words of thanks to:

Scientific Coordinators: Mila Simões de Abreu and Andrea Arcà;

General Coordinator: Tiziana Cittadini;

Immediate-Past IFRAO President: Hipólito Collado Giraldo;

IFRAO Convener: Robert G. Bednarik;

Members of the scientific commission: André Prous, Andrea Arcà, Angelo E. Fossati, Bansi Lal Malla, Claire Smith, Fidelis Masao, Guillermo Munoz, James D. Keyser, Jean Clottes, Jean-Löic Le Quellec, Jo McDonald, José Julio Garcia Arranz, Maria Giuseppina Ruggiero, Mila Simões de Abreu, Paul Taçon, Valerie Feruglio;

Secretary: Nives Pezzoni;

Editing: Valeria Damioli, Marisa D. Giorgi, Ludwig Jaffe;

Logistic and reception: Paolo Medici, DMO;

Ceremonial, communication and relations with the international organisations: Roberta Alberotanza;

Communication: Valeria Damioli with the support of Explora.

We also wish to thank these relevant organisations that gave support to the IFRAO2018 Congress: Finanziaria di Vallecamonica SPA, Fondazione CARIPLO, UBI BANCA, Forge Fedriga, Fondazione ASM.

The IFRAO2018 Congress was held under the

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A big thank you to the staff members of both the Centro Camuno di Studi Preistorici and the Cooperativa Archeologica Le Orme dell'Uomo, whose names would be too many to list here, for all the help provided during the five days of the Congress.

**Angelo Eugenio Fossati**

Società Cooperativa Archeologica Le Orme dell'Uomo

President of IFRAO

RAR 36-1290

### **Regional chapter of the Peruvian Rock Art Association (APAR) established in Cusco**

In a meeting held on 27 October 2018, the Cusco regional headquarters of the Peruvian Rock Art Association (APAR) was founded, with the aim of promoting research of the *quilcas* or rock art of the region, and to contribute to the conservation of this valuable archaeological testimony. With the intention of enriching the academic knowledge of the *quilcas* in Cusco, this regional headquarters is planning to carry out workshops, seminars, conferences, field visits and specialised publications.

At this meeting, archaeologist Carlos Rodríguez Béjar was elected as the first regional coordinator, whose directorate is composed of young archaeologists and curators from the Cusco region. Supported by the President of the Peruvian Rock Art Association, Lic. Gori-Tumi Echevarría López, these researchers committed themselves to comply firmly with the study, conservation and awareness of the *quilcas* of Cusco, always following the legal parameters that govern national archaeology and its scientific research. With its incorporation, APAR-Cusco is formally included within the International Federation of Rock Art Organisations (IFRAO).

A witness of exception for this event is the archaeologist Víctor David Corcuera Cueva, of the National University of Trujillo, an original founder of APAR-Perú, who gave each participant a millenary Moche bean, which symbolically sealed this event. APAR-Cusco is now also part of the Moche beans network, which seeks the conservation of this native plant.

APAR-Cusco