



## BRIEF REPORTS

### *The 'Ice Age art of Britain' examined*

By RICHARD WILSON

#### Introduction

In June 2003 an article in the journal *Antiquity* announced that Palaeolithic art had been discovered in a cave in Britain (Bahn et al. 2003). The authors identified two engraved images; an 'ibex' and two 'birds' suggested to be a 'bird of prey' and a 'crane' or 'swan'. An age estimate of 12 000 to 12 500 BP was provided, based on style and technique. If the age estimate was valid this would mean that the engravings were the northern-most Palaeolithic art discovered at that time.

The announcement and later dating claims have engendered criticism from some scholars (Bednarik 2005, 2012a; Montelle 2008). Key concerns that arose include: the hasty nature of the announcement, the impartiality of the peer review process, access to the site enabling independent investigation, pareidolic interpretations, stylistic age determinations, sparse empirical data and the dating method employed. The original paper had been accepted on the day that it had been received (25th April 2003) which caused some eyebrows to be raised and the veracity of the peer review process to be questioned. A single photograph published in the original article of one engraving was of poor quality and definition. The case made for the stylistic age determination was not detailed. Nor was it explained why the technique used (engraving) supported such a claim for antiquity; engraving has been used throughout the ages. The article appeared premature given the absence of empirical data — the conclusions were naïve and hasty. Subsequent publications (Bahn and Pettitt 2009) failed to fill the vacuum, generating more questions than they answered. This short report aims to clarify the current knowledge regarding the engravings of Creswell Crags.

#### Pareidolic interpretations and other discrepancies

The role of pareidolia in the field of rock art studies is readily apparent from the identification of over 100 images from natural features by Ripoll et al. (2004) who described Church Hole as the 'Sistine Chapel of the Ice Age', a claim later challenged by some members of the research team. In their joint report Bahn and Pettitt (2009) suggest that there are twenty-three engravings in Church Hole, one in Robin Hood Cave and another

in Mother Grundy's Parlour. However, the engravings listed as CH1–CH4 are at most two engravings on one small panel, unless Bahn and Pettitt contend that they are able to discriminate between independent motifs from a culture and in a graphic convention which they have no credible access to.

The engraving CH19 was first identified as an 'ibex', and on the basis of this pareidolic interpretation (Bednarik 2013), Bahn et al. (2003) proposed that it would be an unlikely choice for a modern forger. The same argument should therefore be applied vice-versa to the later identification of CH19 as a 'red deer stag'. A red deer could be a likely choice for a modern 'forger', and conversations with some local residents suggest that the engravings are indeed modern. Following the mistakes of Breuil and Sollas in Bacon Hole (Bahn and Pettitt 2009), this position should have formed the null hypothesis against which any subsequent claims were tested; the caves have been visited by humans throughout the ages. Before it was excavated by the Victorians, this particular cave was used as a cattle pen: remnants of the bricks used to seal the narrow section of the tunnel attest to this practice.

The identification of more recent engravings, including a date of 1948, may serve as a means for relative dating of the engravings, but they do so only as a *terminus ante quem*. The subjective appearance of any patina which has developed is of limited value in estimating the age of engravings. From the rapid disappearance of the graffiti evident in more recent photographs and macroscopic observations it is clear that considerable exfoliation is still occurring. Close examination and comparison with the published pictures (*ibid.*: 76) also reveals what appear to be attempts to erase the graffiti. The rate at which the patina develops is, of course, dependent on both the geomorphological properties of the rock face and weathering (Bednarik 2012b). These variables have not been determined and in any case are of limited value in this instance. The rock is a de-dolomitised dolomite (Bahn and Pettitt 2009) and its rapid deterioration rules out relative dating attempts from macroscopic observations of the patina. Indeed, the assertion that the patina of these U-shaped engravings (which is indistinguishable from the surrounding panel) demonstrates a great antiquity is not supported by the many Victorian-age engravings (including dates) at the site that show comparable, and in some instances greater, degrees of erosion and polish.

The claim that the style of CH19 suggests a Pleistocene date must also be challenged. This claim is contested not only on the basis that the age of Franco-Cantabrian rock art from the Pleistocene can be determined on the basis of etic archaeo-constructs is a falsity, but also on the basis that it is claimed to be simultaneously naturalistic (Bahn and Pettitt 2009). Style presupposes that graphic conventions are applied to aspects of the depiction rendering it other than naturalistic. Features such as the absence of 'hooves' and the length of the 'body', which contradict a naturalistic interpretation, are ignored and features which are proposed to support this interpretation dwelt upon. For instance, great importance is placed on the proportion of the 'dewlap' to support identification at species level, but the 'foreleg' ends in a point where the two engraved lines almost converge. This accommodating reasoning serves only to promote confirmation bias.

The plea that 'poor lighting' and 'the rapidity' of the first examination were responsible for the dramatic revisions in subsequent interpretations does not withstand a cursory observation of the engraving in sub-optimal conditions. The authors had a responsibility to report the find as accurately as possible, which may have necessitated patience and a more thorough examination, but this appears to have been substituted with haste and recklessness in a race to publicise the finding. Whereas three lines were originally taken to represent the two horns of an ibex in a 'twisted perspective' (Bahn et al. 2003), in their place just two lines are now suggested to represent the single antler of a 'red deer' (Bahn and Pettitt 2009). Ultimately further investigation led to the discovery of a possible 'tine' to the 'antler' rendering the interpretation of an 'ibex' refuted by self-correction.

Whilst Bahn proposes that CH19 is stylistically Magdalenian, this author would argue that the style of depiction is unlike the often refined expression observed in the palaeoart of the Magdalenian. Certainly the style is unlike that of the engraving on a rib of a partial 'horse' supposedly found directly across the gorge in Robin Hood Cave and purportedly also typical of the Magdalenian — an item which itself is under question since it may have been planted by the discoverer (Bahn and Pettitt 2009). More importantly, the dating of the nearby 'notches' (CH21) does not corroborate the interpretation of CH19 as 'Ice Age'. These engravings, although on the same panel, cannot be directly associated with the 'deer' image.

### Uranium-series disequilibrium dating

#### *Dating the 'notches': CH21*

There are several reasons to be sceptical about the dates provided for CH21, the most fundamental of which is that no nano-stratigraphic examination has been performed. The precise positioning of the 'notches' relative to that of the speleothem has not been determined. The speleothem *may* overlie the 'notches', but this has not been established. The 'notches' may also cut through the calcite formation, rendering the calculated

date irrelevant.

The main sample (CHC-2), from which the oldest date was obtained, is from an area under the panel and at least 15 cm away from the anthropogenic modifications. At this position it is possible that the calcite mass could have accumulated over a period that has no relevance to the imposition of the engraved lines on the edge of the panel.

The U-series dates, after correction, for samples CHC-B, CHC-C1, CHC-C2, CHC-C6 and CHC-C7 range from 0.85 to 8.33 ka (thousand years) ago. Pike et al. (Bahn and Pettitt 2009) noted that the thicker layers sampled gave younger dates, ascribing this to an increase in precipitation in the last few thousand years. Such a suggestion ultimately underscores the lack of precision when this technique is coarsely applied to samples without consideration for determining factors which cannot be reliably modelled but rather require more painstaking and detailed investigation of the flowstone. The thinner calcite deposits are subsequently suggested by the authors to be more reliable reference points. Whilst as a group the aforementioned samples cluster around 4 ka ago, the two corrected results from the thin layers CHC-C6 and CHC-2 are outliers at 8.33 and 14.12 ka ago respectively. Pike takes the younger value (including the error) of the oldest date to provide a minimum age and suggests the 'notches' are at least 12630 years old.

#### *Dating the 'females/birds': CH1–CH4*

The state of preservation of these engravings and a few others (CH7, CH9 and CH10) is better than almost all of the other engravings (CH11–23) as they are positioned deeper in the phreatic tunnel of the open cave of Church Hole. These engravings (CH1–4) are interpreted as 'birds' by Bahn and 'human figures' by Pettitt, the former apparently taking into account some natural features, the latter on the basis that certain sections resemble Gönnersdorf 'female figures'. Both sets of interpretation are unconvincing, ignore evidence that disconfirms their separate conclusions, and are, regardless, etic observations that have no scientific validity. Neither the suggestion that they are stylistically Magdalenian, or the comparison with similar designs from the period validates a Magdalenian or Pleistocene age for the engravings since comparable designs are found before and after this period, through to the Neolithic, and even to the present day.

Only three samples (CHC-E1, CHC-E2 and CHC-E3) were taken below the engravings CH1 and CH2, providing dates (after correction) of 14.40, 10.90 and 5.97 ka ago. Again, the sampled areas are some distance from the engravings, below and to the left of the engraved areas of the panels. There is an area that overlaps CH1 and had this been sampled it would have provided a greater degree of certainty for the old dates obtained. Given the spread of the calcite area across the panels it is probably not feasible to demonstrate that areas E1, E2 and E3 accumulated after the production of the

engravings and the authors have not attempted to do this. Additionally, if as suggested by Bahn and Pettitt, CH1–4 constitutes four separate engravings, then these dates can only possibly relate to CH1 and CH2 since no calcite overlies CH3 or CH4. Nevertheless, and despite these glaring caveats, the engravings CH1–4 are deemed by Pike and colleagues to be minimally 12800 years old.

*Dating the 'vulva' engraving in Robin Hood Cave: RHC1*

This is ostensibly the most reliably dated engraving at Creswell Crags. Here the calcite deposit sampled from areas F1 and F2 clearly overlie the three converging engraved lines. The corrected ages were 5.2 and 8.2 ka for F1 and F2 respectively, providing (according to the methodology of the authors) a minimal age for the engravings of 7320 years old. Thus, the 'vulva' design of Robin Hood Cave with a minimum age squarely in the Holocene cannot be proclaimed to be of the Pleistocene.

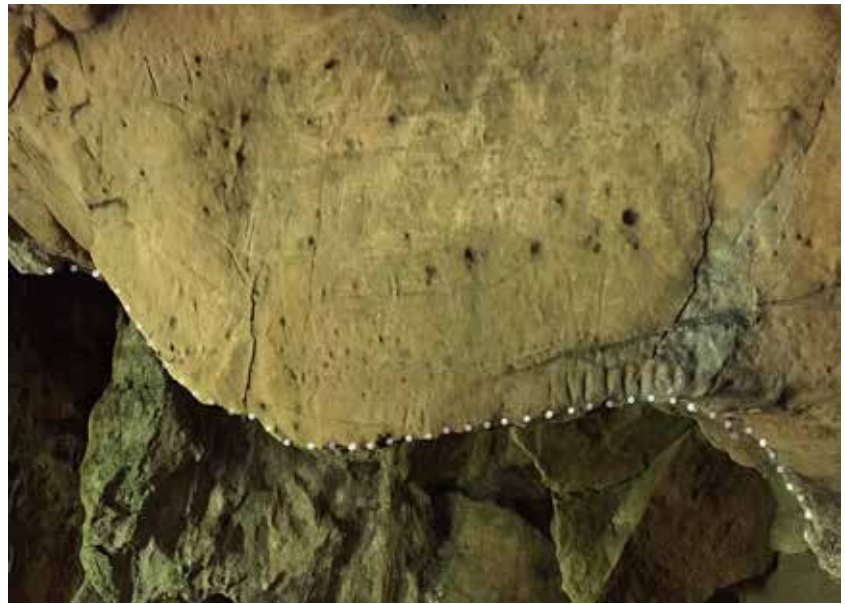
**The cave art of Creswell Crags**

*Choice of subject*

While the 'deer' image (CH19) appears to be composed from the starting point of a natural feature (a natural hole) representing the 'eye', there are many such similar features across this flat panel. Any one, or number of these holes, had the potential to be exploited as an 'eye', or 'eyes', for a myriad of possible zoomorphic forms. Following the suggestion of Hodgson (2003) that implicit or explicit cues may have primed rock art authors, it is noted that the boundary of the panel on which CH19 has been engraved, and the rock panel behind, closely resembles the characteristic cervico-dorsal contour of a deer or comparative animal (Fig. 1). In other words, it is hypothesised that the shape of the panel consciously or sub-consciously (in combination with the subsistence strategies dictated largely by the environment) influenced the choice of subject matter for the subsequent engraving made by the artist on this panel.

*Identifying context*

Bahn and Pettitt (2009) suggest that CH16 is the rear end of a quadruped. Careful examination of the rock surface, however, reveals that the ostensible reason why these engraved lines are placed on this ceiling panel, in this precise position, is because they serve to complete the image perceived in the natural form of the rock panel directly to the left. The engraved lines when considered in this context do not appear to correspond to two 'legs' from behind, but rather two front 'legs' (with



**Figure 1.** The boundary of the panel of CH19, in conjunction with the panel behind is highlighted by a series of white dots suggestive of the cervico-dorsal contour of a deer.

the added indications of a third rear 'leg' in perspective) seen from a frontal-view. The morphology of the rock (Fig. 2) clearly suggests a head, with ears, and long neck (cutting through the loop of the comparatively recent engraving of a J) in a grazing position. The engraving



**Figure 2.** The rock morphology resembles the neck and head of a horse. The extent of the weathered engraving is shown as a black line. The more recent engraving shows a distinct V-shaped profile. The dotted line highlights the natural feature of the rock which perhaps prompted the engraving.

has either substantially weathered since 2003 or the drawing provided (Bahn and Pettitt 2009: Fig. 4.27) is significantly inaccurate (the illustrated engraved line suggests a W-shape).

### More on natural features

#### *Context for CH11*

The chevron-like engraving (CH11) is proposed by Bahn and Pettitt (2009) to be 'very similar to that of "vulvae" which are relatively common in continental Late Magdalenian cave art'. Considering the positioning of this V-shape relative to the natural features of the panel may provide a context supporting the graphic basis of the interpretation: two natural lines which frame the engraving could readily be interpreted as representing the outermost edges of 'legs'. However, this contextualisation is no substitute for secure dating. The adjacent engraving (CH12), which is very faint, is not as Bahn and Pettitt claim, a V-shape but rather a reversed Z-shape rotated by 90 degrees clockwise. It is more accurately described as a zig-zag motif.

#### *The 'bison' (CH23)*

The authors claim that the 'horn' and 'ear' of engraving CH23 (the 'bison') 'seem to be human-made' (Bahn and Pettitt 2009). When examined macroscopically the 'front' of the 'face' including the suggested 'horn' and 'ear' appear to be natural features of the rock. The outline of the 'bison's' face is a natural crease in the rock face. It is likely that it was these natural features which prompted the production of this petroglyph.

This is indeed perhaps one of the most enigmatic of the engravings — but the 'style' is quite unlike that of CH19. Unlike many of the engravings identified by the authors, these engraved lines are wide and heavily weathered in most areas with the notable exception of the 'rear end' and 'tail' which are sharply defined, deep and noticeably narrower. This panel is often wet and has a thin layer of calcite over the right side, but not sufficiently thick to draw adequate samples from. Indeed, it appears to be a relatively recent formation. The drawing provided by Bahn and Pettitt (2009: Fig.

4.28) is somewhat misleading since it implies that the bold lines are representative of the path of engraved lines. However, in some places the illustrated lines do not appear to correspond with the photographs provided alongside or observations of the panel.

The 'double line' from the rear half toward the hump is far from being a continuous line as illustrated. Nor for that matter is it certain how many lines there are in places. A detailed examination of the 'ear' and 'horn' area in the photograph confirms that some features of the rock formation that are significant have been disregarded in the drawing, including the suggestion of another possible 'horn' further forward. In this context, the 'double line' could be identified as suggestions of another, or even multiple, figures behind the foremost figure.

#### *Figures of uncertainty*

Whilst many natural formations at Church Hole were mistakenly identified as cave art by Ripoll, and others such as the 'horse head', 'bear' and 'bison-head profile' are tentatively singled out for attention by Bahn and Pettitt (2009), perhaps the most obvious has not been remarked upon. Yet this formation is one of the most visually compelling in the cave and may have been modified in order to more closely resemble a face. The rock type precludes the preservation of detectable tool traces; however, it seems clear that several of the engravings were inspired or prompted by the rock features including CH11, CH16, CH17 (the 'ibis'), CH19 and CH23. Natural features suggestive of a 'face', including two 'eyes', two 'nostrils' and a 'mouth', are frequently identified by hominins (Fig. 3).

### Implications

The majority of the engravings (MGP1, CH3, CH4, CH5, CH6, CH7, CH8, CH9, CH10, CH11, CH12, CH15, CH16, CH17, CH19, CH20, CH22) have no overlying or underlying calcite deposits and therefore cannot be dated using uranium-series disequilibrium dating methods.

The speleothem covering the front half of the 'bison' (CH23) is very thin and not substantial enough to take a sufficiently sized sample adequate to meet current technologically constrained requirements. This thin deposit is probably also quite young (in the region of the past few hundred or perhaps thousands of years) and therefore unlikely, even in the future, to settle a debate concerning its attribution to the Pleistocene or Holocene.

The dating of CH21 remains unproven, fundamentally because the calcite has not been demonstrated (using nano-stratigraphy) to overlie the notches. The repeated practice of using the oldest date obtained from a collection of widely varying ages as a *terminus post quem* is questionable. Although, in this case, the date meets the desires of Bahn and Pettitt to find Palaeolithic rock art, re-affirms their subsequent deductions concerning the age of the art and the stylistic interpretations invent-



Figure 3. The anthropomorphic feature.

ed to 'prove' their Pleistocene age, it does not test their hypothesis, which is how rock art science should work. As has been argued, the position of the samples used to generate this Pleistocene date may bear no relevance to the chronology of the 'notches'.

The samples taken from *below* the engravings CH1 and CH2 suffer the same issue. Indeed, the close match between the two dates may simply reflect the result of climatic changes occurring near the end of the Ice Age triggering the accumulation of these two deposits of calcite from that period onward. The subsequent spread of calcite formations around these two areas is not uniform and accumulation here may not have been continuous. It should also be noted that the engraving CH23 has been rendered with an artistic stylisation which is dissimilar to that seen in the engravings CH1–4, and practically all others in the cave, including CH19 (the 'red deer'), but perhaps with the exception of CH17 (the 'ibis').

CH18 (the 'head' and 'neck' of an animal, possibly a 'bovine' or 'equine') may be amenable to uranium-series disequilibrium dating methods if the engraved lines extend beneath the calcite formation. So too, CH13 may be minimally dated if the engraved lines extend beneath the speleothem. This engraving, described as a 'headless horse' by Bahn and Pettitt (2009) more closely resembles the front half of a 'bovine'. The 'hoof' is well-defined (which is not illustrated in their Fig. 4.14), and appears, in relation to the body of the animal, too short to be a 'horse'. Additionally, and possibly complicating the precise dating of this engraving, the speleothem may have already been present at the time the engraving was made. The shape and 'visual effect' of the speleothem may have suggested the hairy head of a 'bison' and prompted the 'completion' of the image 'seen' by the artist. In this case, determining the age at which the engraving was made may be possible, but to do so and pay heed to the aforementioned possibility will likely disturb the engraving in the process and is not recommended. CH7 (described as a motif) is also not illustrated correctly (*ibid.*: Fig. 4.9). It closely resembles the outline of a 'bird', with the engraved lines on the adjacent panel (absent in the illustration) representing 'tail feathers'.

CH17 (the 'ibis') consists of several natural features including a natural burrow. The 'completion' of this image is testament to the role of pareidolia in the creation of rock art regardless of a Pleistocene or Holocene date. Here again, there is a thin layer of calcite overlying the engraved line along the top of the 'beak'. In this area the calcite is very thin and probably precludes being sampled effectively. However, CH14 (three converging lines), may be minimally dateable using uranium-series.

The documented occurrence of Middle Palaeolithic and Upper Palaeolithic activity and material artefacts at Creswell Crags do not confirm the age of the engravings on the walls and ceiling of the caves any more than the evidence for use during the Neolithic, Roman or subsequent periods confirms their age.

In summary, none of the apparently figurative images (CH7, CH13, CH16, CH17, CH18, CH19 and CH23) have been directly dated to the Pleistocene era. The dates provided from the areas near CH1, CH2 and CH22 may not be relevant to the timing of the production of these engraved lines. CH20–CH22 are aniconic, and CH1–4 are indeterminate: remaining wide open to speculation concerning their subject matter or, for that matter, their iconicity. Finally, and in contrast to the other uranium-series dates, RHC1 is reliably minimally dated, to the Holocene. Fourteen years on from the discovery, the 'Ice Age art of Britain' remains to be established as such.

Richard Wilson  
53 Welbeck Street  
Creswell  
Nottinghamshire  
England S80 4AY  
United Kingdom  
[richardwilson.palaeoart@gmail.com](mailto:richardwilson.palaeoart@gmail.com)

## REFERENCES

- BAHN, P. G., P. PETTITT and S. RIPOLL 2003. Discovery of Palaeolithic cave art in Britain. *Antiquity* 77(296): 227–231.
- BAHN, P. and P. PETTITT 2009. *Britain's oldest art. The Ice Age cave art of Creswell Crags*. English Heritage, Swindon, U.K.
- BEDNARIK, R. G. 2005. Church Hole: a controversial site. *International Newsletter on Rock Art* 42: 19–21.
- BEDNARIK, R. G. 2012a. U-Th analysis and rock art: a response to Pike et al. *Rock Art Research* 29(2): 244–246.
- BEDNARIK, R. G. 2012b. The use of weathering indices in rock art science and archaeology. *Rock Art Research* 29(1): 59–84.
- BEDNARIK, R. G. 2013. Myths about rock art. *Journal of Literature and Art Studies* 3(8): 482–500.
- HODGSON, D. 2003. Seeing the 'unseen': fragmented cues and the implicit in Palaeolithic art. *Cambridge Archaeological Journal* 13(1): 97–106.
- MONTELLE, Y.-P. 2008. Review of Mazel et al., 'Art as metaphor: the prehistoric rock-art of Britain'. *Rock Art Research* 25(2): 234–236.
- RIPOLL, S., F. MUÑOZ, P. PETTITT and P. BAHN 2004. New discoveries of cave art in Church Hole (Creswell Crags, England). *International Newsletter on Rock Art* 40: 1–6.

RAR 35-1252

## *Rock art puzzle? Variation on a line*

By JAN B. DERĘGOWSKI

A line may represent an optical discontinuity such as the border at which two planes differing in inclination meet or one solid overlaps another, or a boundary between areas on the same surface differing in hue, or some other manner. Alternatively, it may present a visual essence of a thin element as it does when it is used to represent legs of, say, flamingo or limbs of people.

Both these usages can prevail within the same rock art style. Thus, African San/Bushman pictures frequently show women whose rotundities are portrayed in the first mode by large uniform areas encompassed by curved boundaries boldly set against the background, but whose other members of much more pronounced linearity are depicted by lines.

When a line is used in two modes perceptually puzzling effects can arise. The most striking instance of this is the two-pronged trident (Fig. 1) which graces most introductory texts on perception. The figure (a) is puzzling because, as shown in Figure 1b the lines change their function as they progress from left to right. The lines which begin their journey in two sets of three (two lines within each set define the boundary between the prong and the background and the third marks the meeting of the two surfaces) and end it with three sets of two lines (both lines in each pair defining the boundary between the now round prong and the background).

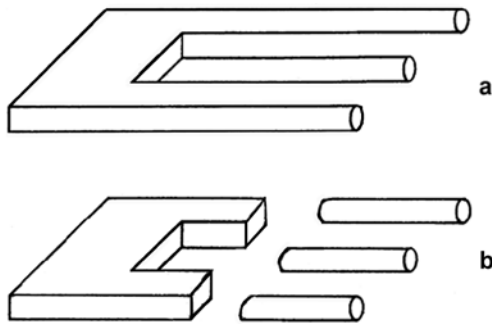


Figure 1.

Similarly puzzling effect is evoked by drawings of several animals found in the Aïr Massive in south Sahara and reported by Rodd (1938). This usage is illustrated here by a picture of a giraffe originating from Tin Wana (Face B2). Figure 2a shows the picture as it appears on the rock face. Figures 2b and 2c show how elimination of one of the two mutually contradictory elements resolves the ambiguity of the original.

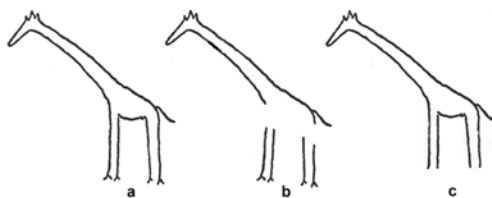


Figure 2.

The question of some interest to students of perception, which the original figure and similar pictures of other animals pose are: was this style of depiction chosen in order to play a perceptual game? It is a fundamental question. The unavoidable assumption that the visual systems of all rock artists did not differ among them, nor from that of modern man implies that all of them were perceptually capable of creating such a style; however, only a tiny minority appears to have done so.

Professor Jan B. Deręowski  
Department of Psychology  
University of Aberdeen  
Aberdeen, AB24 2UB  
Scotland, United Kingdom

## REFERENCE

RODD, F. 1938. Some rock drawings from Aïr in the southern Sahara. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 68: 99–111.

RAR 35-1253

## Qorveh rock art in western Iran

JAMAL LAHAFIAN and ALI BEHNIA

### Introduction

Rock art sites discovered in south-eastern Kurdistan contain elements which in terms of style and morphology are comparable to the petroglyphs of different regions of Iran and other areas of Kurdistan. Qorveh petroglyphs include cupules in different styles, anthropomorphs, some in combined forms such as 'horse and rider', various zoomorphs and apparently aniconic forms. Qorveh County covers 2430 km<sup>2</sup> and is located in south-eastern Kurdistan. The district under study is located 38 km north-east of Qorveh.

Qorveh province has been investigated archaeologically and considerable cultural works and data have been extracted from different ancient sites. Based on ceramics, this region has been occupied from middle Neolithic to Copper, Iron Age I to III, Parthian, Sassanid eras and Islamic era history until the Qajar era (about 100 years ago) (Azizi 1999; Karimi 2007; Behnia 2008).

### The petroglyphs of Kalfer

This site was identified in 2007 during a survey of the central district of Qorveh County by Zahed Karimi (Karimi 2007). In the same year and subsequently we explored this rock art site (Lahafian 2010, 2013). Here we introduce this site and other sites we have discovered during a survey conducted in 2015 in the north of Qorveh County. In this region of volcanic mountains rising to a height of 2230 m (Gharineh and Siah) several rock art sites have been identified. On vertical surface of boulders, anthropomorphic and zoomorphic petroglyphs occur together with other motifs. In several cases, petroglyphs of two or three different periods are superimposed, facilitating the identification of different phases of Qorveh rock art.

In Kalfer petroglyphs, the horns of 'ibex/antelope' motifs connect with the tail to form a round shape (Fig. 1) and a dot/cupule is located between the elongated horns and the back of the animal. Five examples of this style exist in Kalfer and Mamjogh sites and elsewhere



**Figure 1.** Kalfer site, recent motif interpreted as a stylised image of an ibex or antelope with horns connecting to the tail.



**Figure 2.** Presumed images of ibex/antelopes with horns connecting to tail ends.



**Figure 4.** Cupules and other petroglyphs, Kalfer valley to Garabalagh.



**Figure 3.** Petroglyphs in the valleys between Ghezeljeh Kand and Garabalagh.

in Kurdistan, including petroglyphs of Saral and Karaftu Cave. In Kalfer site, sometimes the animal's 'horn' has a lozenge or square form (Fig. 2).

On another rock of the Kalfer site are two rows of anthropomorphs. These groups resemble a form of dance that at the present time is performed in celebrations and weddings in Kurdistan, called Halparke. The image of an anthropomorph apparently standing on the back of an animal resembles a bronze figure discovered in the Ma'moolan district of Lorestan Province (Farzin 1993).

#### Valleys between the villages Ghezeljeh Kand and Garabalagh

Along the route between the villages Ghezeljeh Kand to Garabalagh occur on vertical surfaces of some boulders facing different directions anthropomorphs, zoomorphs and other petroglyphs. They include a 'deer' of 40 cm height and an 'ibex/antelope' 10 cm long, as well as a 'human holding bow and arrow' that seems to be hunting the 'deer' (Fig. 3). On the vertical surface of another boulder, facing east, four fully patinated cupules in a row occur with images of 'horned animals'. On the right side of the image, a much more

recent sign has been pounded (Fig. 4).

#### Mamajogh valley rock art

There are large boulders along both sides of Mamajogh valley, south of Garabalagh village, bearing images of 'animals' and 'humans', made by percussion and scratching.

On the vertical surface of one of these boulders, a great number of cupules have been pounded in rows. On the right side of the image, a partially preserved motif of concentric circles has been created (Fig. 5). These petroglyphs are all fully patinated.

#### Conclusion

According to the research we have conducted during the few past years in the north-east region of Qorveh, 140 boulders bearing hundreds of motifs deriving from different periods have been identified up to now. In this article, some of the salient motifs have been mentioned. Written graffiti by local people produced



Figure 5. Cupules and concentric circle petroglyphs, Mamjogh site, Qorveh County, Iran.

over the past two decades poses a significant danger to the Qorveh rock art, as do natural losses imposed by the passing of time.

#### Acknowledgments

We would like to thank Shojaa Naynava for translating this article from Persian to English. Many thanks also go to Dr Sajad Ali Beiki for his guidance for the text of the article. We would also like to thank Yadi Zamani and Iraaj Najmoddini for their support in the surveys and in transport.

Jamal Lahafian  
4-13, Bessat Town  
Sanandaj  
Iran  
jamal.lahafian@gmail.com

Ali Behnia  
alibehnia74@yahoo.com

#### REFERENCES

- AZIZI, E. 1999. Field surveys of Qorveh and Dehgolan Counties. Archive of the Cultural Heritage, Handicrafts and Tourism Organisation of Kurdistan (unpubl. report, in Persian).
- BEHNI, A. 2008. The archaeological study of Serishabad District. Archive of the Cultural Heritage, Handicrafts and Tourism Organisation of Kurdistan (unpubl. report, in Persian).
- FARZIN, A. 1993. *Lorestan in history passage*. Lorestan Cultural Heritage Organisation, Tehran.
- KARIMI, Z. 2007. Archaeological investigation of the central district. Archive of the Cultural Heritage, Handicrafts and Tourism Organisation of Kurdistan (unpubl. report, in Persian).
- LAHAFIAN, J. 2010. Cupules in Kurdistan rock art. *Rock Art Research* 27(2): 177–183.
- LAHAFIAN, J. 2013. Rock art in Kurdistan, Iran. *Arts, Special Issue on world rock art*, ed. R. G. Bednarik, 2: 328–349.

## Two artefacts with cupules from Early Pleistocene terraces of the Rhine, Germany

By CHRISTIAN HUMBURG

Within the urban area of Mainz, Germany, the T6 terrace of the river Rhein (Kandler 1970), overlain by the 'younger oldest middle terrace' of the Rheine (T4 according to Kandler), forms large planation areas. These gravels are frequently cut into by construction activities. In the early 1990s several large plots were for the first time covered with buildings. In the course of these works stone artefacts were found at different levels, made of siliceous limestone, mottled sandstone, quartzite, quartz, and less frequently basalt and granite. A crude pick on a cobble found at Göttelmannstrasse 2, Weisenau, is marked with a possibly non-utilitarian cupule near its butt (Figs 1, 2).

A second knapped cobble derives from the 200-

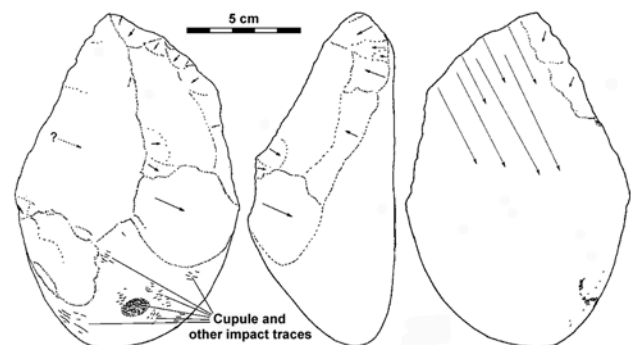


Figure 1. Quartz-chalcedonoolite artefact of the Early Pleistocene from Weisenau, Mainz, Germany. Drawing by Lutz Fiedler.





Figure 2. Early Pleistocene pick with cupule, from Weisenau, Mainz.

m terrace along the lower river Nahe and also bears a cupule. Located at Münster-Sarmsheim (Rheinland-Pfalz), this extensive planation surface has for decades yielded stone artefacts of the Acheulian. According to its palaeomagnetism the 217-m terrace at Werlau has been attributed to the Matuyama/ Brunhes transition (Fromm 1987). On this basis it has been assumed that the Acheulian of Münster-Sarmsheim dates from approximately 780 ka ago.

However, more recent and more detailed studies of the middle Rhine valley deposits, involving more than 750 geological core analyses, have resulted in a reassessment (Preuss et al. 2015). A total of 28 gravel terraces have been identified and were correlated with the marine isotope stages (MIS). By including also findings about the corresponding stages/complexes of north-western Europe (Cohen and Gibbard 2011) and pollen data (Zagwijn 1985, 1998) a new concept of the age estimates of the Rhine and Nahe terraces has emerged. Preuss et al. have credibly attributed the above-mentioned palaeomagnetic reversal in the

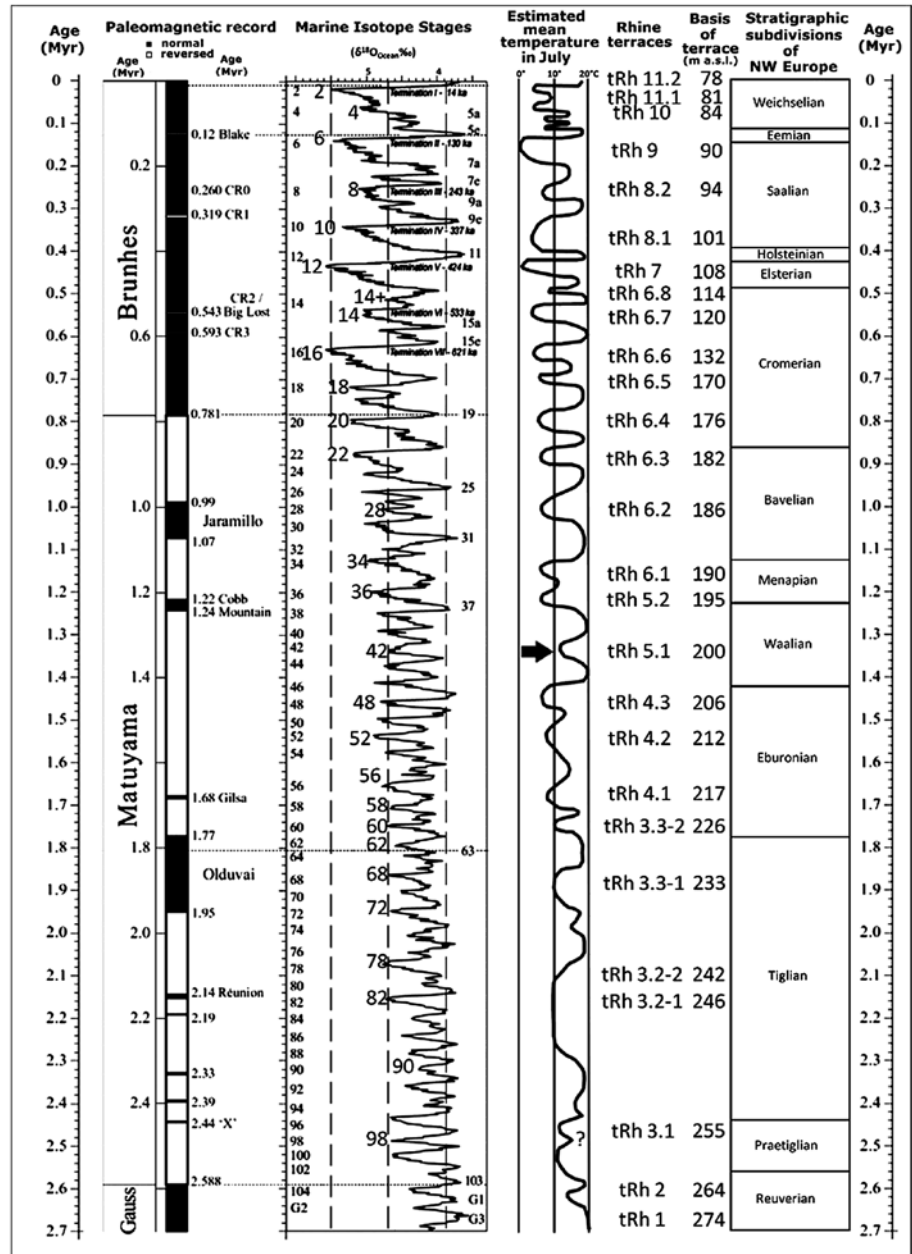


Figure 3. Correlation of the terrace sequences Bingen-Trechtingshausen with the MIS, the pollen-derived middle July temperatures and the NW Europe stages. After Preuss et al. 2015; Cohen and Gibbard 2011; Zanwin 1985, 1998; with permission of the Naturhistorisches Museum Mainz and the Rheinische Naturforschende Gesellschaft.

main terrace (tRh 4.1) to the Gilsa Event of 1.68 Ma ago. That places the 200 m terrace (tRh 5.1 after Preuss et al.) at 1.33 Ma, in MIS 42 (Fig. 3). This result still needs to be tested by radionuclide isotope determination.

The establishment of a gravel quarry in this 200-m terrace has facilitated the recovery of numerous stone artefacts, from both the sections and the floor of the pit. Some of these have been transported by water and rolled; others have remained pristine. A contamination by surface material can be safely excluded because the overlying deposits were removed before the quarry was opened.

Among these artefacts a 9 × 8 cm quartzite cobble was found, bearing a 19 × 19 mm cupule (Fig. 4a). A distinctive impact facet occurs at one end of the stone, measuring 32 × 21 mm (Fig. 4b). It appears to be the result of prolonged percussive action. The artefact was found in an undisturbed gravel bed.



**Figure 3.** (a) Dorsal view of the quartzite cobble with cupule found in the 200 m terrace on the lower Nahe, Germany. (b) Side view of the same artefact, showing the impact facet.

Dr Christian Humburg  
 Zeppelinstrasse 25  
 55131 Mainz  
 Germany  
 humburg.ch@gmail.com

#### REFERENCES

- COHEN, K. M. and P. GIBBARD 2011. Global chronostratigraphical correlation table for the last 2.7 million years. Subcommission on Quaternary Stratigraphy (International Commission on Stratigraphy). Cambridge, England. (<http://quaternary.stratigraphy.org/charts/>, accessed 2-4-2015).
- FROMM, K. 1987. Paläomagnetische Bestimmungen zur Korrelierung altpleistozäner Terrassen des Mittelrheins. *Mainzer Geowissenschaftliche Mitteilungen* 16: 7–29.
- KANDLER, O. 1970. Untersuchungen zur quartären Entwicklung des Rheintales zwischen Mainz/Wiesbaden und Bingen/Rüdesheim. *Mainzer Geographische Studien*, Heft 3, Mainz.
- PREUSS, J., D. BURGER and F. SIEGER 2015. Neue Ergebnisse zur Gliederung und zum Längsgefälle der Talbodenniveaus im Mittelrheintal und an der Unteren Nahe: Revision der Hypothese der Niveaunkonstanz, Berücksichtigung des Modells der aktuellen Höhenänderungen, Korrelation der Terrassensequenz mit Marinen Isotopen Stadien und den Terrassen der Maas. *Mainzer Naturwissenschaftliches Archiv* 52: 5–75. Mainz.
- ZAGWIJN, W. H. 1985. An outline of the Quaternary stratigraphy of the Netherlands. *Geologie en Mijnbouw* 64: 17–24. Utrecht.
- ZAGWIJN, W. H. 1998. Borders and boundaries: a century of stratigraphical research in the Tegelen-Reuver area of Limburg (The Netherlands), pp. 19–34. In T. Kolfschoten and P. L. van Gibbard (eds), *The dawn of the Quaternary: proceedings of the SEQS-EuroMam symposium 1996*. Mededelingen Nederlands Instituut voor Toegepaste Geowetenschappen, Haarlem/Delft.

RAR 35-1255

### *Artefacts and palaeoart: a reply to Humburg*

By R. G. BEDNARIK

We are grateful to Dr Humburg for bringing these two cupule-bearing artefacts to our attention. They can be safely regarded as anthropogenic, and their approximate dating seems to be well supported. More problematic is their status: can they be interpreted as 1.33-Ma-old palaeoart?

The earliest known cupules in Africa are found on the pecked phonolite cobble from Olduvai FLK North 1 in Bed 1, Tanzania, which is about 1.74 Ma old (Leakey 1971: 269). Therefore, the great age of the find from Münster-Sarmsheim in Germany reported here is not as much of an impediment as it may seem. Rather, the issue is that cupules can be purely utilitarian, at least those that occur on horizontal rock surfaces or on portable blocks — in which case they cannot be regarded as palaeoart or as exograms. Indeed, humans are not the only primates to produce cupules; chimpanzees do so processing nuts (McGrew 1992: 205, 1993), even bearded capuchin monkeys (*Cebus libidinosus*) at Boa Vista and several other sites in Brazil make such cupules (Ottoni and Izar 2008). Joulilian (1995: Fig. 5) presents a chimpanzee *percuteur* from Monogaga, Ivory Coast, that looks rather similar to Leakey's Olduvai specimen.

The two specimens Humburg presents are certainly artefacts, but they cannot be demonstrated to constitute palaeoart specimens. Perhaps they do, but this might be a proposition that is too difficult to test. Similar objects from archaeological occupation sites are common and are assumed to be utilitarian (Fig. 1).



**Figure 1.** Cupules on portable stones from occupation sites that are thought to be utilitarian: (a and b) from Werribee Gorge, Victoria, Australia; (c) from Mesana, Majes valley, Peru. Specimen (b) features a cupule also on the underside, as does Leakey's Olduvai cobble.

## REFERENCES

- JOULIAN, F. 1995. 'Human and non-human primates': des limites de genre bien problématiques en préhistoire. *Préhistoire Anthropologie Méditerranéennes* 4: 5–15.
- LEAKEY, M. D. 1971. *Olduvai Gorge. Vol. 3: excavations in Beds I and II, 1960–1963*. Cambridge University Press, Cambridge.
- MCGREW, W. C. 1992. *Chimpanzee material culture: implications for human evolution*. Cambridge University Press, Cambridge.
- MCGREW, W. C. 1993. Brain, hands, and minds: puzzling incongruities in ape tool use, In A. Berthelet and J. Chavaillon (eds), *The use of tools by human and non-human primates*, pp. 143–157. Clarendon Press, Oxford.
- OTTONI, E. B. and P. IZAR 2008. Capuchin monkey tool use: overview and implications. *Evolutionary Anthropology* 17: 171–178.

RAR 35-1256

## Leigh Marymor's Bibliographical Database of Rock Art Studies

*Rock art studies: a bibliographic database* is a compilation in progress that was begun in March 1993 and has recently been updated. The searchable database now contains over 35000 citations to the world's rock art literature, with an emphasis on English language and North American citations. More than 8650 citations are held in the compiler's personal library. Over 100 archives, Web portals, bibliographies, library catalogues and other sources are actively consulted. They are available on CDROM disk, and also on the Internet, as a project of the Bay Area Rock Art Research Association Archive, Bancroft Library, University of California, Berkeley.

The 'search page' allows searches by author's name, title of publication (article, book or periodical), place name, abstract, subject keyword or ISBN/ISSN. Complex searches are possible by entering search terms in multiple fields (search for 'hand' and 'Australia', for example). Enter the name of a journal in the title field and find (nearly) all of the rock art related articles published there.

This invaluable research tool, the world's largest bibliographical database on rock art, is available at

[https://musnaz.org/search\\_rock\\_art\\_studies\\_db/](https://musnaz.org/search_rock_art_studies_db/)



## RAR REVIEW

***Rock art of the Vindhya: an archaeological survey***, by AJAY PRATAP. 2016. Archaeopress, Oxford, 172+14 pages, 113 figures (both B/W and colour), 4 maps, 19 tables, size 17.5 × 24.5 cm, softcover, ISBN 978-1-78491-245-1.

The book under review deals with previously discovered rock art sites and some newly found ones, the documentation and the archaeological context of the rock art of the Upper Vindhya in Mirzapur district of Uttar Pradesh, India. It has been presented in nine chapters. Chapter (henceforth Ch.) 1 provides an archaeological and geographical overview of the region under study and sets up the background for discussing Vindhyan rock art. Ch. 2 presents the overview of the publications on the subject in the colonial and post-colonial periods and defines the survey strategies accordingly. Ch. 3 gives the detailed account of the documentation of rock art and associated archaeological artefacts. Ch. 4 presents the detailed descriptions and photographs of the rock art documented at six site complexes. Ch. 5 deals with the study of the post-depositional processes as observed in the field and tries to understand the chronology of the rock art, settlement, subsistence implications and their effect on the long-term survival of the rock art. Ch. 6 is devoted to establishing the chronology and antiquity of the rock art under study. In one case the U/Th method has provided a date of 14 095±487/-495 BP. However, we must keep it in mind that dates previously obtained by the U/Th method were 3 to 4 times higher than those of AMS <sup>14</sup>C analysis of the same samples, elsewhere in the world; hence such results need to be cross-checked. Ch. 7 deals with the stylistic classification of rock art of the Vindhyan region. Ch. 8 has been devoted to the interpretation of the functions of rock art and tries to establish the gender and ethnicity of the concerned groups. The last Ch. 9 seeks to establish the meaning of rock art as understood in the foregoing chapters, adding ethno-archaeological insights of the region.

The author's approach to rock art is as an expression of archaeological data. He studied the locations of six rock art site complexes in the Vindhyan region and tried to establish the relationship of the pre-Historic societies with the landscape. The review of the literature and documentation of rock art appear to be the main strengths of the book; however, it lacks consideration of recent developments in the scientific study of rock

art. On the basis of subsistence behaviour, settlement and technology the author reached the conclusion that a mainly hunter-forager subsistence system was succeeded by pastoral and agro-pastoral systems and that this occurred perhaps in a direct chronological sequence. However, no attempt has been made to bring out the various aspects of the socio-economic and cultural life in different periods. The study of the post-depositional processes in Ch. 5 is an important component of the book. It will help in the scientific study of the rock art of the region in the future, though this aspect has not been properly highlighted. Each chapter begins with an introduction to the subject to be dealt with and ends in a conclusion. This helps the reader to grasp the contents discussed. However, a comprehensive view of the study of rock art of the region is missing, which might have portrayed the overall understanding of the rock art under study and the cognitive and cultural development of its authors in different periods of its history.

The quality of publication is good and presentation of the subject is appreciable. In spite of the small lacunae the book is worth reading for its contents and study of rock art from archaeological perspectives and is recommended for libraries in various institutions and organisations.

### Giriraj Kumar

Professor in Rock Art Science and Indian Culture,  
Rock Art Society of India  
[girirajrasi.india@gmail.com](mailto:girirajrasi.india@gmail.com)

RAR 35-1257

## RECENT ROCK ART JOURNALS

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

Number 79 (2017):

BRAVIN, A.: Discovery of rock art sites of a previously unknown type in the central Jbilet region (Marrakech).  
GARATE, D., J. TAPIA, O. RIVERO et al.: Alkerdi 2, a decorated Gravettian cave in the western Pyrenees.

VIGIOLA-TOÑA, I., B. OCHOA, M. GARCÍA-DIEZ and d. GARRIDO: New Palaeolithic digital engravings in Ekain Cave (Deba, Gipuzkoa, Spain).  
 BEDNARIK, R. G.: Cultural roles of bears: response to Julien d'Huy.  
 FRITZ, C. and G. TOSELLO: Research in the decorated cave of Marsoulas (France).

*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 31 (2017):

TABOADA, F., C. RIVERA, P. LIMA and M. STRECKER: El simposio '30 años de investigación del arte rupestre de Bolivia'.  
 NIELSEN, A.: Arte rupestre en el Altiplano de Lipez (Potosí, Bolivia).  
 FAUCONNIER, F., M. STRECKER and L. METHFESSEL: Representaciones de objetos de metal en el arte rupestre del sur de Bolivia.  
 FIORE, D., A. ACEVEDO and N. V. FRANCO: Pintado en La Gruta. Variabilidad y recurrencias en al producción de arte rupestre en una localidad del extremo sur del Macizo del Deseado (Santa Cruz, Patagonia, Argentina).  
 HOSTNIG, R.: Intiyoq Rumi, un campo de petroglifos en la cuenca del río Santo Tomás, Prov. De Chumbivilcas, Cusco, Perú.

*Boletín APAR*. Quarterly newsletter of the Peruvian Rock Art Association (APAR). Edited by GORI TUMI ECHEVARRÍA LÓPEZ. Recent issues include these papers:

Volume 6, Number 22 (May 2015):

BARRENECHEA, R. P.: Quipu y quilca.  
 ECHEVARRÍA L., G.-T.: Un estado de la cuestión sobre las quilcas de Checta, Lima, Perú.  
 MONTELLE, Y.-P.: Aplicación de métodos forenses a la investigación del arte rupestre. Una propuesta.  
 TRUEL, L. R.: Sistemas astronómicos de campos de rayas en Lima, Perú.  
 ZHU L.: A brief review of chinese rock art research / Una breve revisión de la investigación rupestre China.  
 ECHEVARRÍA L., G.-T.: Las memorias del Dr. Eloy Linares Málaga.

Volume 7, Number 23 (November 2015):

ECHEVARRÍA L., G.-T.: Secuencia y cronología de las quilcas de Miculla, Tacna. El más grande yacimiento rupestre del Perú.  
 LAURENTE P., S. and J. R. HUAMANI D.: Pinturas rupestres en Qotamisa Pampa, puna de Huancapi, Victor Fajardo, Ayacucho.

PALACIOS D., M. A.: Arqueometría y arqueología del paisaje en un panel con pinturas rupestres. El caso de El Ocote, Aguascalientes, México.  
 SAMANIEGO R., L.: Los petroglifos de Pocós y Vinchamarca, Nepeña, Perú.  
 CAVAGNARO O., L.: Notas sobre el arte rupestre y la arqueología de Tacna.  
 VALCARCEL, L. E.: Los petroglifos del Cuzco.

Volume 7, Number 24 (May 2016):

BEDNARIK, R. G.: Metodología científica en los estudios de peleoarte / Scientific methodology in palaeoart Studies.  
 ECHEVARRÍA L., G.-T. and S. TIWARY: La importancia de las quilcas o el arte rupestre en las disciplinas científicas y humanistas.  
 BUENO, A.: Propuesta de un método para estudiar killqas andinas.  
 ZHU L.: Reconstruct China's rock art discipline by anthropological theory and approach.  
 CORCUERA C., V. D.: Zona Arqueológica Quebrada Santo Domingo, valle de Moche, La Libertad. 17 años de su defensa y protección.  
 THOMAS, A.: La Quebrada Santo Domingo ou l'hémorragie culturelle.

## RECENT BOOKS OF INTEREST

*La montagne sacrée du Bego*, by HENRY DE LUMLEY and ANNIE ECHASSOUX. 2011. CNRS Éditions, Paris, 364 pages, richly illustrated in colour and monochrome, bibliography, softcover, ISBN 978-2-271-06963-4.

*Four circles: customs that are law in an Aboriginal cosmoscape*, by HUGH CAIRNS and BILL IDUMDMA HARNEY. 2014. Excell Printing Group, Merimbula, New South Wales, 211 pages, illustrated in colour throughout, softcover, ISBN 978-0-9750908-1-7.

*Rimacc rumi: las antiguas quilcas de Lima*, BY GORI TUMI ECHEVARRÍA LÓPEZ. 2015. Universidad Nacional Mayor de San Marcos, Lima, 315 pages, monochrome illustrations, bibliography, softcover, ISBN 978-612-00-2142-2.

*Wer sprach das erste Wort? Die Entstehung von Sprache und Schrift*, by MARTIN KUCKENBURG. 2016. Theiss, Darmstadt, 272 pages, monochrome illustrations, glossary, bibliography, index, hardcover, ISBN 978-3-8062-3344-5.

*Reflexionen der Urzeit: Essays zur Entwicklungsgeschichte des Menschen*, by MARTIN KUCKENBURG. 2017. Paläolithikum-Edition, Norderstedt, 111 pages, softcover, ISBN 978-3744-86919-5.

on *Rock Art*, Volume 76, pp. 23–27.

## RECENT PAPERS OF INTEREST

**Elk hunting in northern Sweden during the Stone Age**, by OTTO BLEHR. 2014. *Fornvännen: Journal of Swedish Antiquarian Research*, Volume 109, pp. 233–242.

**An archaeological perspective on rock art from Vidarbha region of Maharashtra**, by KANTIJUMAR A. PAWAR. 2015. *Bulletin, Deccan College, Post-Graduate and Research Institute*, Volume 75, pp. 63–83.

**Proto-art: the origins of non-utilitarian symbolic thinking and artistic creativity**, by BARBARA PÜTO-VÁ. 2016. *Anthropologie*, Volume 54, Number 3, pp. 175–185.

**Nouvelle datation du ‘masque’ de La Roche-Cotard (Langeais, Indre-et-Loire, France)**, by JEAN-CLAUDE MARQUET, MICHEL LORBLANCHET, CHRISTINE OBERLIN, EDIT THAMO-BOZSO and THIERRY AUBRY.

**De la France vers la Saxe — Des galets peints du Mas d’Azil (Ariège, France dans collections archéologiques de la Saxe**, by JOHANN FRIEDRICH TOLKSDORF, HARALS FLOSS and INGO KRAFT. 2016. *Paleo*, Volume 27, pp. 297–305.

**La bison de La Grèze (Marquay, Dordogne, France) sous le microscope**, by LYDIA ZOTKINA. 2016. *Paleo*, Volume 27, pp. 307–320.

**The Gondershausen petroglyphs reconsidered**, by ROBERT G. BEDNARIK. 2016. *International Newsletter*

**The earliest known logboats of China**, by TANG HUISHENG, JIN ANNI and ROBERT G. BEDNARIK. 2016. *International Journal of Nautical Archaeology*, Volume 45, Number 2, pp. 441–466; doi: 10.1111/1095-9270.12186.

**History’s largest confrontation over rock art protection. Or how to save our archaeological heritage**, by ROBERT G. BEDNARIK. 2016. *The Digging Stick*, Volume 33, Number 3, pp. 21–24.

**Walter Battiss and South African rock art**, by DAVID G. PEARCE, LARA MALLEEN and CATHERINE NAMONO. 2017. *The Digging Stick*, Volume 34, Number 2, pp. 7–8.

**Semiosis in the Pleistocene**, by MARC KISSEL and AUGUSTÍN FUENTES. 2017. *Cambridge Archaeological Journal*, Volume 27, Number 3, pp. 397–412.

**Travelling through the rock to the Otherworld: the shamanic ‘grammar of mind’ within the rock art of Siberia**, by ANDRZEJ ROZWADOWSKI. 2017. *Cambridge Archaeological Journal*, Volume 27, Number 3, pp. 413–432.

**Aniconism and the origins of palaeoart**, by ROBERT G. BEDNARIK. 2017. *Religion*, Volume 47, Number 3, pp. 353–365; doi.org/10.1080/0048721X.2017.1288785.

**Pareidolia and rock art interpretation**, by ROBERT G. BEDNARIK. 2017. *Anthropologie*, Volume 55, Number 1–2, pp. 101–117.

A new Special Issue of the open access journal *Humanities* is dedicated to ‘Re-assessing human origins’ and edited by R. G. Bednarik. It can be accessed at

[http://www.mdpi.com/journal/humanities/special\\_issues/re-assessing\\_human\\_origins](http://www.mdpi.com/journal/humanities/special_issues/re-assessing_human_origins)

Submissions for this Special Issue are invited now.

The study of human origins is facing a phase of ‘revolutionary science’ unparalleled in its history: many of its most cherished tenets are severely challenged by recent developments of many kinds, among them the claim that hominins may originate in Europe rather than Africa; the claim that humans were in California 130 000 years ago; the claims concerning the Denisovans, Red Deer Cave people, ‘Hobbits’ and others; the demise of the influential ‘African Eve hypothesis’; the advent of the ‘auto-domestication hypothesis’; the evidence of seafaring one million years ago; the evidence of palaeoart extending back just as far; and many other developments that render a re-writing of the textbooks inevitable. The conservative sector of the discipline

has bravely held the line but at some point the conservative interpretation of the human past is likely to collapse under the growing weight of evidence that this past has been spectacularly misjudged. We have reached a breaking point at which a paradigm change seems inevitable. The purpose of this Special Issue of *Humanities* is to provide a forum for the conservative and progressive voices in the discipline, allowing this paradigm change to be debated and chronicled. In August 2018, a major international conference to be held in Turin, Italy, entitled *Is there palaeoart before modern humans?* will also explore these subjects, and this Special Issue will be closely aligned with that event.



## ORIENTATION

### *The Second International Rock Art and Ethnography Conference*

By ROBERT G. BEDNARIK

This event was held in the superb setting of the historical town of Cusco, Peru, from 14 to 18 August 2017. It followed the First International Rock Art and Ethnography Conference, which was held in Cochabamba, Bolivia, in September 2014. Both events are symptomatic of a growing interest among South American rock art researchers in ethnographic information about rock art. The objectives of the conference were defined thus:

- To gather native savants, persons and indigenes with traditional knowledge, and specialists in native cognition from different places to talk about rock art and sacred sites.
- To highlight the value of the ethnographic and ethnological studies in rock art research.
- To value the indigenous knowledge about the rock art in the Andes, Amazonia and from other parts of the world.
- To use the indigenous knowledge about rock art and sacred sites to improve the research and interpretation of this cultural phenomenon.

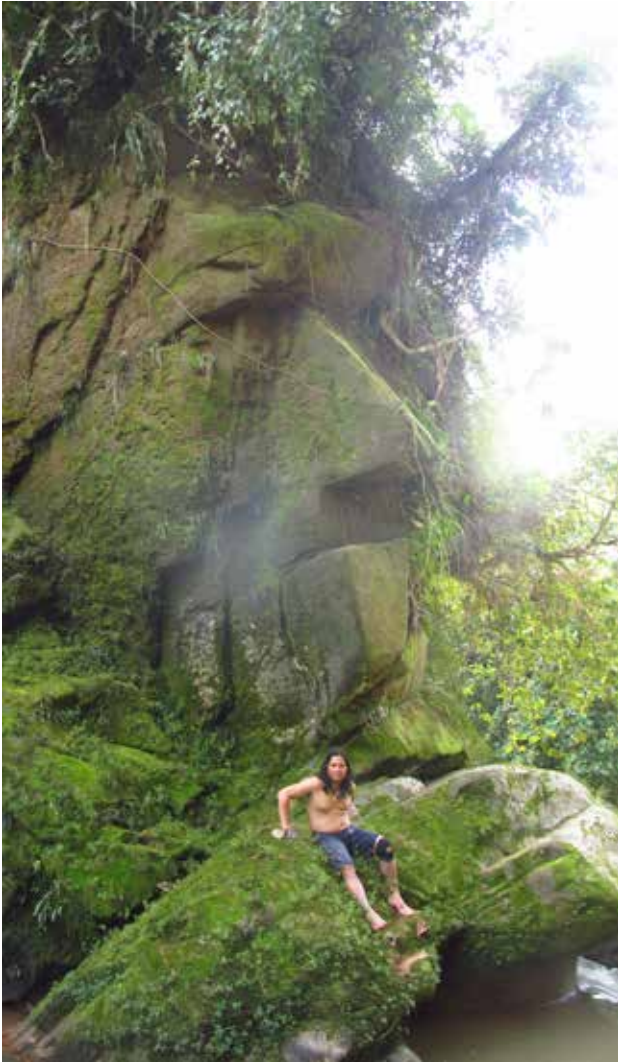
The event was organised by APAR (Asociación Peruana de Arte Rupestre) and chaired by its President and Editor, Gori Tumi Echevarría López. It attracted participants from various parts of the world, including a strong contingent from Australia (c. 10% of the participants, second only to Peru!), where rock art ethnography has long been well established. A surprise participant was Saudi Arabia, with three papers, where the continuation of rock art practices to the present time has only been established in 2017.

The event took place at three historical buildings in the centre of Cusco: Museo Inka overlooking the picturesque main square, the Paraninfo right at the main square, and Casa Garcilaso at the nearby Plaza Regocijo. It consisted of five sessions: (1) 'Ethnographic evidence of rock art production around the world'; (2) 'Research in ethnographic rock art around the world'; (3) 'Rock art sites as sacral spaces'; (4) 'Ceremonial use of rock art sites, past and present'; and (5) 'Traditional interpretations of sites with rock art'. The conference

was attended by around fifty participants, most of whom availed themselves of the opportunity to visit the Incan citadel Machupicchu. Echevarría's very recent surprise discovery of rock art at this World Heritage-listed site (Astete et al. 2017) made this visit almost obligatory for rock art researchers. Indeed, a series of both painting and petroglyph panels are now known to exist in this property that is visited by more than a million people annually. More will be discovered in due course.

Two aspects of the conference topic emerged during the proceedings. The first is the realisation during recent years that continuing use and production of rock art up to the present time is perhaps more common than previously thought. It may have been widely neglected as a resource of credible data about meaning, purpose, production and interpretation of rock art. The second point follows the first: that the impasse created by the hegemonic interpretation that has dominated rock art research for well over a century retards the discipline. It follows that much greater attention needs to be given to what ethno-scholars from traditional societies say about rock art. Often the rock art was produced by their own ancestors, and in some cases even by living indigenes themselves. What has been learned from knowledgeable people, particularly in Australia but increasingly in several other parts of the world, is that rock art meanings tend to be vastly more complex than the pareidolically inspired vibes of cultural outsiders might indicate. That very same finding is now gradually emerging also from such countries as Brazil, Bolivia and Peru. The realisation that the meaning of rock art cannot be determined by self-appointed experts of rock art very probably applies to all of the world's rock art.

The Cusco conference offered several very innovative and informative presentations, but its overall tenor was best expressed in the concluding papers of the last day. The tone was set by two presentations of two Melbournians, proposing two alternatives to Western orthodoxies in the interpretation of rock art. This was followed by a report of the conference chairman, presenting the account of Espíritu Bautista of the Yanesha nation in Amazonian Peru (Fig. 1). Echevarría related Bautista's explanations of contents of the Checta petroglyph site. The highlight of the entire event was saved for the last presentation, by ethno-scholar Poani Higinio Pimentel Tenório Tuyuka and Raoni Valle. In a



**Figure 1.** Harakbut intellectual LuisTayori at Harakbut Kog, Peruvian Amazon Basin. The rock formation is entirely natural. Photograph by Gori Tumi Echevarría López.

genuinely inspired performance, the authors offered an authoritative and vigorous account of the relationships among people, rocks, graphics and knowledge in an Amazonian region of Brazil. Focusing on the lower Negro River rock art and sacred sites, they delivered an enthralling effort of a theoretical dialogue between Tuyuka and archaeological perspectives of the area's rock art and some specific interpretations. Above all, they called for an effective *basoka niretirere padeore* ('culture of respect').

And that seems to encapsulate the very essence of an ethnography of rock art.

#### REFERENCE

ASTETE, F., G. T. ECHEVARRÍA LÓPEZ and J. BASTANTE ABUHAD-BA 2017. Quilcas or rock art at the historic sanctuary of Machupicchu, Cusco, Peru: discovery and perspectives. *Rock Art Research* 34(1): 25–39.

RAR 35-1258

## *The First National Meeting on Moroccan Rock Art*

By MOHAMED ABIQUI, LHASSAN M'BARKI, MOHAMMED BENSSAOU and MOHAMED DADES

Moroccan rock art extends, chronologically, from pre-Historic times to sub-traditional times. It essentially developed in two major phases: the art of hunters and that of the breeders-hunters. It reflects at least four cultural aspects: first, the pre-Neolithic style, probably the oldest, rare and poorly documented, represented by the petroglyphs of presumed wild cattle, especially in the Saguiet El Hamra and its tributaries in the Moroccan Sahara; then the Tazina style, by Neolithic hunters whose sites are spread over the whole territory south of the High Atlas; then the so-called Bovidian style of Neolithic and early Bronze Age breeders, spread over the territory of the High Atlas and all the Moroccan south; and Libyco-Amazigh breeders of the Bronze Age transhumant breeders and the later periods, distributed practically throughout Moroccan territory (cf. Simoneau 1967, 1969, 1975, 1976; Searight 2001, 2013).

Geographically the rock sites in Morocco can be divided into three major concentrations: the high Atlas plateau, along the Drâa valley and the banks of the dry rivers (wadis) of the Saharan provinces. The exceptional value of Moroccan rock art is reflected in its great diversity.

The more than 300 rock art sites known in Morocco consist of rocky escarpments often formed by river erosion, by confluences and tributaries of ancient watercourses in a semi-desert landscape, and in high altitude pastures (High Atlas) where hundreds of panels present thousands of zoomorphs, anthropomorphs, signs and other symbols. These engraved or painted figures unquestionably represent a most remarkable set of rock art in northern Africa. The Moroccan south offers the best illustration of pre- and protohistoric iconographic themes. It features some of the most eloquent expressions in north African rock art.

The First National Meeting on Moroccan Rock Art was held in Agadir, Morocco, on 16th and 17th May 2017. This important event was organised by the Souss-Massa Regional Council, Association Souss Massa for the Cultural Development, Ministry of Culture and Communication, Directorate for Cultural Heritage, National Centre for Rock Heritage (CNPR), Regional Conservation of Cultural Heritage in Agadir and Centre for Studies, National Forum for the Saharan Youth, Moroccan Union of Fine Artists and Centre for Studies and Research on the Moroccan Space, and it was supported by The National Human Rights Council of Morocco and Royal Institute of the Amazigh Culture.

The Meeting was an occasion of the celebrate five



researchers and personalities in the rock art research in Morocco:

1. Dr André Simoneau, a Moroccan researcher who studied for nearly fifteen years the petroglyphs of southern Morocco, developing a rare knowledge in this domain. His first research was carried out in the Drâa valley in 1934 and continued by many national and foreign specialists. From 1967 to 1977, his numerous publications reported his discoveries, culminating in his *Catalogue of the rock art sites of south-Morocco* published in Rabat in 1977 by the Ministry of State in charge of Cultural Affairs. The archives assembled by Simoneau were deposited by his heirs at the 'Funds Simoneau' at the University of Provence, Aix-Marseille I (France). Simoneau died in 1979 and has been felicitated for his lifetime contribution to the study of Moroccan rock art.
2. Dr Abdellah Alaoui, Director of Cultural Heritage at the Ministry of Culture and Communication, researcher with a series of publications including studies on the Moroccan rock art heritage. In 1990, he obtained a doctorate in prehistory at the University of Provence, France, addressing 'Research on Mousterian and Aterian in Morocco'.
3. Prof. Dr Abdelkhalek Lemjidi, one of the founders of the Moroccan Association of Rock Art (AMAR) and the creation of CNPR (1994) in Marrakech before transferring it to Agadir. He is a professor at INSAP (Rabat), researcher attached to CNPR (Agadir) and professor of archaeology at the Faculty of Humanities and Social Sciences (Agadir).
4. Dr Richard Wolff, one of the pillars of Moroccan rock art studies is a founding member of the Friends of Saharan Rock Art (AARS) in France.
5. Mohamed Mouloud Baibba, President of the MIRAN Association for the Protection of Rock Heritage in Smara, southern Morocco. His is one man's battle to save and document Moroccan rock art heritage, especially in the Saharan provinces.

The opening ceremony was chaired by Prof. Dr Hassan Benhalima (former Dean of the Faculty of Humanities and Social Sciences of Agadir, and President of Association Souss Massa for the Cultural Development), Ahmed Oumouss (CNPR, Agadir), Dr Abdelhadi Ewague (Centre for Studies and Research on the Moroccan Space, Agadir) and Prof. Dr Ahmed Belkadi (Dean of the Faculty of Humanities and Social Sciences, Ibn Zohr University, Agadir, Morocco). Afterwards the participants visited an exhibition that presented many aspects of Moroccan rock art, organised by Limam Djimi, plastic artist and member of the organising committee.

The meeting was attended by more than 50 national and international participants, PhD students, archaeologists and Quaternary geologists. It consisted of two thematic sessions: (i) inventorying and conservation techniques of rock art, and (ii) the challenges of valuation of the rock art in the local development and the Moroccan rock art heritage between richness

and conservation constraints. The workshop featured twelve oral presentations.

In their presentation, Ewague and Hoarau indicated the discovery of a new painted shelter at Boutekhfert in High Atlas Mountains (Morocco). These paintings represent 'human' figures, zoomorphs and dotted 'animals'. The colours used are red to bright red, yellow, white and purple.

Other discoveries were presented by Moumane et al., with a new Moroccan painted site complex at Oum Laâchar (Bani Mountain, Zagora). According to the authors, this site is composed of five shelters and presents zoomorphs, 'armed' anthropomorphs, 'horses', 'birds' and geometric forms.

El Boukaa et al. work on rock art of the Jbel Rat (Central High Atlas) which are very varied, both by chronology and by the themes represented. They are distinguished by the presence of subjects attributed to the Libyan-Amazigh period. Recent surveys conducted by the authors at Jbel Rat revealed Libyco-Amazigh inscriptions and large riders (1.5 m) that are unmatched in other rock art in Morocco.

Aouragh and Lemjidi contributed to the role of rock art in the province of Figuig (eastern Morocco) in its Maghreb context. It is an open-air museum with an exceptional archaeological and historical heritage. The petroglyphs and paintings of this area have clear affinities reflecting the roles played by topographical corridors and streams converging on the Figuig region.

Ben Harra and Amrih focused on the site of Jbel Azlag, located about 20 km northeast of Zagora and rich in petroglyphs. This site has been well identified and reported in the literature but has never been studied in detail. The petroglyphs were made on dark-green micaceous sandstone of Cambrian age that lends itself well to this kind of work. Over a distance of about 500 m, 27 engraved slabs were observed bearing more than 77 petroglyphs.

Graff presented the results of a Franco-Moroccan project on the petroglyph rock of Azrou Klane, 'a tattooed stone' on the margins of the Sahara (Province of Assa-Zag, Morocco). Azrou Klane is a slab of sub-horizontal brown sandstone, 140 m long by 20 wide, covered with hundreds of petroglyphs, the oldest of which are reminiscent to the so-called Bovidian style. Lhamri and Lemjidi have worked on the site of Birkate Asalwan in the region of Smara, Moroccan Sahara.

Oued Zag is a new major rock art station of the region of Assa-Zag in the south of Morocco, and was presented by Zdaidat et al. in this event. Kheng Lakhal, about 20 km east of the city of Assa, is a site introduced by Bentaleb et al. Its rock art is marked mainly by the dominance of representations of apparently Ethiopian fauna. The site also offers archaeological remains such as funerary monuments and ceramic shards.

In the framework of a doctoral thesis, Ikhizzi et al. contributed unpublished cave engravings of Adrar-n-Oummawoun (Taghijit, Moroccan-Presaharian). This site is located on the left bank of Wadi Eç-çayad, to the SE of the oasis of Taghijit and it includes Libyan in-

scriptions. Sadik's talk about the rock inscriptions and modern archaeological discoveries in desert margins addressed the example of the Wadi Eç-çayad. In the last contribution, Oulaich introduced new observations on the Taykout site in the Akka region.

During the discussions, the importance of the promotion of rock art and archaeology in Morocco was emphasised, stressing Morocco's huge archaeological potential. A debate was opened on the contribution of petroglyphs to the repertoire of cultural tourism, responsible and respectful of environmental standards. The participants agreed that the universities, research institutes and private companies must continue and intensify geoscientific research because it is vital for the sustainable development of Moroccan society in general, and in the Moroccan Saharan regions in particular.

In the end, Dr Abdellah Alaoui concluded the session with sincere thanks to the chairman of the concluding session, all the keynote speakers, session chairs, participants, invited guests, sponsors, and media. He also expressed his gratitude to the Scientific and Organising Committee of the Meeting. The Director of Cultural Heritage at the Ministry of Culture and Communication indicated that several projects are under implementation, including (a) an inventory and a map of these sites, (b) topographical studies to demarcate this archaeological heritage for inclusion in the National Register of Rock Art and (c) the announcement of a decree by the local authority for the preservation of these remains against all forms of looting and degradation, in addition to the creation of a regional centre for the conservation of this cultural wealth.

Finally, we hope that the meeting becomes a platform of inspiration for the younger generations, for future researchers with advanced geo-scientific aspirations, exchanging new ideas and recent research trends of the rock art on various topics. Morocco features engraved rocks in almost all regions of the country, its fans call it the 'paradise of archaeology and geology'.

#### Acknowledgments

Thanks are due to Prof. Paul S. C. Taçon who kindly improved the English text.

Mohamed Abioui

Association of Rupestral Heritage of Southern Morocco, B.P 45925 Centre de Tinzouline, Zagora, Morocco; Laboratory of Applied Geology and Geo-Environment, Geology Department, Faculty of Sciences, Ibn Zohr University, B.P 8106 Cité Dakhla, Agadir, Morocco; [abioui.gbs@gmail.com](mailto:abioui.gbs@gmail.com)

Lhassan M'Barki, Mohammed Benssaou, Mohamed Dades Geoheritage and Geo-environment Group, Geology Department, Faculty of Sciences, Ibn Zohr University, B.P 8106 Cité Dakhla, Agadir, Morocco

#### REFERENCES

SEARIGHT, S. 2001. The prehistoric rock art of Morocco: a study of its extension, environment and meaning. Unpubl. PhD

thesis, Bournemouth University.

SEARIGHT, S. 2013. Morocco's rock art: age and meaning. *Arts* 2: 35–43.

SIMENEAU, A. 1967. Les gravures du Haut Atlas de Marrakech. *Revue de Géographie du Maroc* 11: 67–76.

SIMENEAU, A. 1969. Les chasseurs-pasteurs du Drâa moyen et les problèmes de la néolithisation dans le Sud marocain. *Revue de Géographie du Maroc* 16: 97–116.

SIMENEAU, A. 1975. Documents rupestres du Sud Marocain. *Bulletino del Centro Camuno di Studio Preistorio* 12: 163–168.

SIMONEAU, A. 1976. Les rhinocéros dans les gravures rupestres du Dra-Bani. *Série d'Antiquités Africaines* 10: 7–31.

RAR 35-1259

## The First Saudi Archaeology Convention

By ROBERT G. BEDNARIK

Incredibly, this event of last year was the first archaeological conference ever held in Saudi Arabia, a country boasting such a spectacular archaeological heritage. This is certainly not a reflection of the amount of work conducted in the field: intensive programs of research, including into rock art, have been ongoing in Saudi Arabia for many decades, for example the work by the Rock Art and Epigraphic Survey of Saudi Arabia since the 1970s. Nor has there been a shortage of collaborative projects with archaeology departments abroad.

The first Saudi Archaeological Convention was held by the Saudi Commission for Tourism and National Heritage (SCTH) in Riyadh from 7 to 9 November 2017, under the patronage of HRH King Salman bin Abdul Aziz. It was attended by about 500 participants and comprised 25 lecture sessions held in three venues in parallel, in three magnificent lecture halls of the King Abdulaziz Library, Murabba. In all, 114 presentations were given, the majority (79) in Arabic. Impeccable simultaneous translation was provided in all three venues, in both Arabic and English. In addition to the well organised academic sessions, there were seven plenary addresses, including one by HRH Prince Sultan bin Salman bin Abdulaziz. The event was also attended by the Minister of Antiquities of Egypt, the Minister of Culture and Communications of Morocco, the Ministers of Tourism and Antiquities of both Jordan and Palastine, and the Minister of Culture of Yemen, each of whom presented a speech. Moreover, the convention included five workshops, twelve especially assembled exhibitions, and the launching of no less than eight publishing projects, just one of which is to involve 33 books. The workshops addressed topics such as the protection of antiquities (which is generally commendable in the Kingdom); the opportunities of studying archaeology abroad; renovation and modern technologies in archaeology; the importance of photography in documenting archaeology; and the future and job opportunities in cultural heritage.



**Figure 1.** One of the three parallel sessions of the academic program, First Saudi Archaeology Convention, 7 to 9 November 2017, Riyadh.

The exhibitions associated with the convention were held at the National Museum in Riyadh for 50 days from the date of their launch. They included: Saudi Antiquities Exhibition; Recovered Antiquities Exhibition; Latest Archaeological Discoveries Exhibition; Exhibition of Saudi Archaeological Pioneers' Works; Exhibition of Specialised Books in the Field of Antiquities; Historical Photo Gallery; Kingdom's Kings Caring for National Heritage Exhibition, which was held in collaboration with King Abdul Aziz Dara; Photo exhibition on the restoration of Al Hejaz Railways Station in Al Madinah, which was held in collaboration with Al Turath; Saudi Geological Survey Exhibition; Commemorative Stamp Exhibition; Fine Arts Exhibition; and the Saudi Handicraft Exhibition.

The event's major objective was to document and highlight the efforts exerted by the leadership of the country as well as government agencies and individuals in taking care of the Kingdom's antiquities throughout history; highlighting the Kingdom's historical and cultural depth nationally, regionally and internationally; and highlighting the contributions of the pioneering generation, whether individuals or organisations in the field of antiquities. The forum also aspired to raise national awareness of the country's cultural heritage, and bring about a paradigm shift in public perception. Indeed, there was a deliberate endeavour of presenting the issue of antiquities as a social responsibility.

What was certainly achieved by this conference was a significant gathering of most specialists engaged in the study of the Kingdom's incredible wealth of antiquities, among which its massive body of rock art is a key component. The event demonstrated the vitality of Saudi archaeology and its excellent collaborations with researchers and research agencies abroad. All

the international main players conducting archaeological work in Saudi Arabia seemed to be present, and many of the papers given offered very significant new material. Some memorable examples included a report by palaeontologist Iyad S. Zalmout of the sensational faunal remains from the Nafud desert. Dated by OSL to about 325 ka old, they include a 60% complete skeleton of a large male elephant (*Elaphus recki*), as well as hippo and horse finds. Of considerable importance to world archaeology is the discovery of Acheulian stone tools at sites near the coast of the Red Sea. They include specimens embedded in coral deposits at Wadi Dabsa that are c. 130 ka old. Older still are chert tools

found encased in a lava flow that occurred near Wadi Dhahaban c. 440 ka ago. Provided by Anthony Sinclair, this is welcome new data, in view of the very limited information available about the earliest hominin history of the Arabian Peninsula. It is well-appreciated that the Peninsula plays a pivotal role in understanding the initial dispersion of hominins. And yet, just as in India, the Lower Palaeolithic remains almost unexplored and certainly poorly understood in Saudi Arabia.

Many other such gems were made available at this conference. For instance, there was a very informative presentation by Mahmoud Alshanti about a subject not much considered, the speleology of Saudi Arabia. Michael McDonald gave an inspired paper on the Aramaic inscriptions at Tayma, and there were several other noteworthy presentations by epigraphers. The rock art papers, unfortunately, were not kept together in one session, but were spread over three sessions. They included only summaries of previous work, no new insights — at least none that have not been presented to the readers of this journal before. Noteworthy was the paper given by Majeed Khan who provided a summary of his life's work with the Kingdom's rock art.

RAR 35-1260

## ***Pampacolca Gold Medal awarded***

'In recognition of outstanding accomplishments, contributions and distinguished services in the field of rock art research', the Editor of RAR, Robert G. Bednarik, has been awarded a gold medal at Pampacolca, Peru, on 22 August 2017. The 17 g, 38.1 mm medal was designed by Jesús E. Cabreres and made of gold by An-



geles Jeweler in Huaraz, Peru. It features a dedication to the recipient on one side and on the other an image of part of painted stone tablet 5026, one of the thousands recorded near Pampacolca. These fascinating finds are the subject of an ongoing investigation, as their antiquity and purpose remain unknown (Cabrera 2012).

#### REFERENCE

CABRERA, J. E. 2012. *La cultural Antipampa: arqueología milenaria de Pamapacolca en el sur Andino del Perú*. Signature Book Printing, Chantilly, VA.

### *Forthcoming events*

#### **Is there palaeoart before modern humans? Did Neanderthals or other early humans create 'art'?**

This international conference is to be held at the University of Turin, Italy, from 22 to 26 August 2018. (Please disregard any other dates stated in previous announcements.) See <https://www.homoneanderthalensis.org/>. For details please contact [dario.seglie@alice.it](mailto:dario.seglie@alice.it).

#### **IFRAO 2018: Standing on the shoulders of giants.**

The IFRAO Congress is the largest and most significant academic event in the discipline of rock art studies. It will be held in Darfo Boario Terme in the Valcamonica of the Italian Alps from 29 August to 2 September 2018, almost immediately after the above event. See RAR

34(2): 229–239 for rationales of proposed sessions; or [http://www.ccsip.it/web/Ifrao2018/IFRAO2018\\_eng.html](http://www.ccsip.it/web/Ifrao2018/IFRAO2018_eng.html). For details please contact the secretariat at Tel. +39 0364 42091; or e-mail [ifrao2018@ccsp.it](mailto:ifrao2018@ccsp.it).

**24th Annual Meeting of the European Association of Archaeologists.** Barcelona, Spain, 5 to 8 September 2018. See <https://www.e-a-a.org/EAA2018> or contact [helpdesk@e-a-a.org](mailto:helpdesk@e-a-a.org).

### *Early issues of RAR*

Thanks to the diligent labour of AURA member Melissa Johnson, the first eleven volumes of *Rock Art Research* have been digitised and are now available. This includes Volume 1, Number 1 (May 1984) through to Volume 11, Number 2 (November 1994). Any number of these issues can be purchased from the AURA Secretary at the same rates as advertised for hard copies: \$A20.00 for single issues, \$A25.00 for annual volumes. A royalty of 50% of this income will be received by Melissa Johnson. Please order any early issue of RAR from [auraweb@hotmail.com](mailto:auraweb@hotmail.com).

### *Back issues*

Back issues of *Rock Art Research* are available, beginning with the November 1988 issue. For a full set of the journal the cost is \$A330.00, which includes postage within Australia, or US\$260.00 plus applicable postage anywhere else in the world. For international postage rates please contact AURA. These differ significantly between surface and air mail delivery, and surface mail service is not available to New Zealand and Asia Pacific.

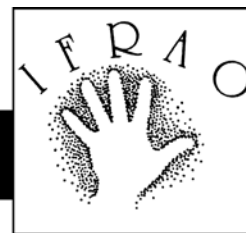
However, this same set of RAR, minus four issues that are almost out of print, is available for a limited period for just \$A200.00 within Australia (plus difference in postage costs elsewhere).

Individual copies or annual volumes are available at the current rates. Please order back issues from:

AURA  
P.O. Box 216  
Caulfield South, VIC 3162  
Australia

or [auraweb@hotmail.com](mailto:auraweb@hotmail.com). We accept Visa and MasterCard.

# IFRAO Report No. 59



## List of Business Meetings of IFRAO

Compiled by LUDWIG JAFFE

Abbreviations:

bm\_ifrao = Business Meeting of IFRAO

eh\_bm = Event Hosting Business Meeting

### IFRAO 1

Year: 1988

Place: Darwin

Country: Australia

bm\_ifrao\_date: 3-9-1988

bm\_ifrao\_minutes: RAR 5(2): 174-175

ifrao\_report: 1

First informal inaugural meeting of IFRAO

Held after First AURA Congress

### IFRAO 2

Year: 1991

Place: Cathedral Peak

Country: South Africa

bm\_ifrao\_date: 31-8-1991

bm\_ifrao\_minutes: RAR 9(2): 158-160

ifrao\_report: 9

eh\_bm\_subtitle: Rock Art — The Way Ahead

eh\_bm\_start: 25-8-1991

eh\_bm\_end: 31-8-1991

ifrao\_org: SARARA

### IFRAO 3

Year: 1992

Place: Cairns

Country: Australia

bm\_ifrao\_date: 3-9-1992

bm\_ifrao\_minutes: RAR 10(1): 78-79

ifrao\_report: 10

eh\_bm\_title: Second AURA Congress

eh\_bm\_start: 30-8-1992

eh\_bm\_end: 4-9-1992

ifrao\_org: AURA

### IFRAO 4

Year: 1993

Place: New Delhi

country: India

bm\_ifrao\_date: 1993-12-07

bm\_ifrao\_minutes: RAR 11(1): 74

ifrao\_report: 12

Informal IFRAO meeting

Host conference accepted by IFRAO representatives in Cairns

See Report 9, RAR 9(2): 161

eh\_bm\_title: Global Specialists Conference on Rock Art

eh\_bm\_start: 29-11-1993

eh\_bm\_end: 7-12-1993

ifrao\_org: RASI

### IFRAO 5

Year: 1994

Place: Flagstaff

Country: U.S.A.

bm\_ifrao\_date: missing information

bm\_ifrao\_minutes: not available (see comment)

ifrao\_report: see 16

See RAR 13(1): 77, points 2 and 3

eh\_bm\_title: International Rock Art Congress

eh\_bm\_start: 30-5-1994

eh\_bm\_end: 3-6-1994

ifrao\_org: ARARA

### IFRAO 6

Year: 1995

Place: Turin

Country: Italy

bm\_ifrao\_date: 1 and 2-9-1995

bm\_ifrao\_minutes: RAR 13(1): 77-78

ifrao\_report: 16

Minutes of 1994 meeting in Flagstaff were not available

See RAR 13(1): 77, points 2/3

eh\_bm\_title: International Rock Art Congress

eh\_bm\_subtitle: North East West South

eh\_bm\_start: 30-8-1995

eh\_bm\_end: 6-9-1995

ifrao\_org: CeSMAP

### IFRAO 7

Year: 1996

Place: Swakopmun

Country: Namibia

bm\_ifrao\_date: missing information

bm\_ifrao\_minutes: rejected

ifrao\_report: see 18

ARAPE requested the minutes be re-written

The minutes were rejected

See RAR 14(1): 72, points 2 and 3

eh\_bm\_title: International Rock Art Conference  
 eh\_bm\_subtitle: Rock Art Research — Moving into  
 the Twenty-First Century  
 eh\_bm\_start: 11-8-1996  
 eh\_bm\_end: 19-8-1996  
 ifrao\_org: SARARA, EARARA

**IFRAO 8**

Year: 1997  
 Place: Cochabamba  
 Country: Bolivia  
 bm\_ifrao\_date: 2-4-1997  
 bm\_ifrao\_minutes: RAR 14(1): 72–73  
 ifrao\_report: 18  
 eh\_bm\_title: International Rock Art Congress  
 eh\_bm\_start: 1-4-1997  
 eh\_bm\_end: 6-5-1997  
 ifrao\_org: SIARB

**IFRAO 9**

Year: 1998  
 Place: Vila Real  
 Country: Portugal  
 bm\_ifrao\_date: missing information  
 bm\_ifrao\_minutes: missing information  
 ifrao\_report: missing information  
 H. C. (Bert) Woodhouse took minutes but had to  
 leave. H. C. Woodhouse asked L. Jaffe to take  
 over the minutes. L. Jaffe had wanted to consult  
 H. C. Woodhouse about the minutes. L. Jaffe  
 cannot recall what then happened to the minutes  
 eh\_bm\_title: International Rock Art Congress  
 eh\_bm\_subtitle: Crossing Frontiers  
 eh\_bm\_start: 6-9-1998  
 eh\_bm\_end: 12-9-1998  
 ifrao\_org: APAAR

**IFRAO 10**

Year: 1999  
 Place: Ripon  
 Country: U.S.A.  
 bm\_ifrao\_date: 29-5-1999  
 bm\_ifrao\_minutes: not distributed  
 eh\_bm\_title: International Rock Art Congress  
 eh\_bm\_start: 23-5-1999  
 eh\_bm\_end: 31-5-1999  
 ifrao\_org: ARARA, MAGF

**IFRAO 11**

Year: 2000  
 Place: Alice Springs  
 Country: Australia  
 bm\_ifrao\_date: 14-7-2000  
 bm\_ifrao\_minutes: RAR 17(2): 159–160  
 ifrao\_report: 25  
 eh\_bm\_title: Third AURA Congress  
 eh\_bm\_subtitle: Millennium — a fresh start  
 eh\_bm\_start: 10-7-2000  
 eh\_bm\_end: 14-7-2000  
 ifrao\_org: AURA

**IFRAO 12**

Year: 2004  
 Place: Agra  
 Country: India  
 bm\_ifrao\_date: 30-11-2004  
 bm\_ifrao\_minutes: RAR 22(1): 104–105  
 ifrao\_report: 34  
 eh\_bm\_title: International Rock Art Congress  
 eh\_bm\_start: 28-11-2004  
 eh\_bm\_end: 2-12-2004  
 ifrao\_org: RASI

**IFRAO 13**

Year: 2006  
 Place: Lisbon  
 Country: Portugal  
 bm\_ifrao\_date: 8-9-2006  
 bm\_ifrao\_minutes: RAR 23(2): 286–288  
 ifrao\_report: 37  
 eh\_bm\_title: IFRAO Global State of the Art  
 eh\_bm\_subtitle: with the XV UISPP Congress  
 eh\_bm\_start: 4-9-2006  
 eh\_bm\_end: 9-9-2006  
 ifrao\_org: APAAR, ACCB, ARAPE

**IFRAO 14**

Year: 2009  
 Place: São Raimundo Nonato  
 Country: Brazil  
 bm\_ifrao\_date: 1-7-2009  
 bm\_ifrao\_minutes: RAR 26(2): 244–247  
 ifrao\_report: 43  
 eh\_bm\_title: International Rock Art Congress  
 eh\_bm\_subtitle: Global Rock Art  
 eh\_bm\_start: 29-6-2009  
 eh\_bm\_end: 3-7-2009  
 ifrao\_org: ABAR

**IFRAO 15**

Year: 2010  
 Place: Tarascon-sur-Ariège  
 Country: France  
 bm\_ifrao\_date: 9-9-2010  
 bm\_ifrao\_minutes: RAR 28(1): 139–140  
 ifrao\_report: 46  
 eh\_bm\_title: International IFRAO Congress  
 eh\_bm\_subtitle: Pleistocene Art of the World  
 eh\_bm\_start: 6-9-2010  
 eh\_bm\_end: 11-9-2010  
 ifrao\_org: ARAPE

**IFRAO 16**

Year: 2012  
 Place: La Paz  
 Country: Bolivia  
 bm\_ifrao\_date: 29-6-2012  
 bm\_ifrao\_minutes: RAR 29(2): 270–271  
 ifrao\_report: 49  
 eh\_bm\_title: International Congress — Archaeology

and Rock Art  
 eh\_bm\_start: 25-6-2012  
 eh\_bm\_end: 29-6-2012  
 ifrao\_org: SIARB

**IFRAO 17**

Year: 2013  
 Place: Albuquerque  
 Country: U.S.A.  
 bm\_ifrao\_date: 31-5-2013  
 bm\_ifrao\_minutes: RAR 31(1): 127-128  
 ifrao\_report: 52  
 eh\_bm\_title: International Rock Art Congress  
 eh\_bm\_start: 26-5-2013  
 eh\_bm\_end: 31-5-2013  
 ifrao\_org: ARARA

**IFRAO 18**

Year: 2014  
 Place: Guiyang  
 Country: China  
 bm\_ifrao\_date: 18-7-2014  
 bm\_ifrao\_minutes: RAR 32(1): 126-127  
 ifrao\_report: 53  
 eh\_bm\_title: IFRAO Guiyang Congress  
 eh\_bm\_subtitle: Rock Art, Man and Ecology  
 eh\_bm\_start: 15-7-2014  
 eh\_bm\_end: 18-7-2014  
 ifrao\_org: RARAC

**IFRAO 19**

Year: 2015  
 Place: Cáceres  
 Country: Spain  
 bm\_ifrao\_date: 4-9-2015  
 bm\_ifrao\_minutes: RAR 33(1): 120-121  
 ifrao\_report: 55  
 eh\_bm\_title: International Rock Art Conference  
 eh\_bm\_start: 31-8-2015  
 eh\_bm\_end: 4-9-2015  
 ifrao\_org: ACCB

**IFRAO 20**

Year: 2018  
 Place: Valcamonica  
 Country: Italy  
 bm\_ifrao\_date: no info. yet  
 bm\_ifrao\_minutes: no info. yet  
 ifrao\_report: no info. yet  
 eh\_bm\_title: International Rock Art Congress  
 eh\_bm\_subtitle: Standing on the shoulders of giants  
 eh\_bm\_start: 29-8-2018  
 eh\_bm\_end: 2-9-2018  
 frao\_org: Le Orme dell'Uomo, CCSP

Therefore nineteen IFRAO Congresses and IFRAO Business Meetings have been held. The Valcamonica event later this year will be the 20th IFRAO Congress, please visit [http://www.ccsf.it/web/Ifrao2018/IFRAO2018\\_eng.html](http://www.ccsf.it/web/Ifrao2018/IFRAO2018_eng.html) for details.

RAR 35-1261

**AURANET - <http://www.ifrao.com/>  
 (includes AURANET Library)**

*Rock Art Research* (journal) - <http://www.ifrao.com/rock-art-research-journal/>

IFRAO - <http://www.ifrao.com/ifrao/>

Rock art dating - <http://www.ifrao.com/rock-art-dating/>

Palaeoart epistemology - <http://www.ifrao.com/palaeoart-epistemology/>

Cognitive archaeology - <http://www.ifrao.com/cognitive-archaeology/>

Cave Art Research Association - <http://www.ifrao.com/cave-art-research-association-cara/>

Interpretation of rock art - <http://www.ifrao.com/interpretation-of-rock-art/>

Conservation of rock art - <http://www.ifrao.com/rock-art-conservation/>

Rock Art Glossary - <http://www.ifrao.com/rock-art-glossary/>

Save Dampier rock art - <http://www.ifrao.com/save-dampier-rock-art/>

Portable palaeoart of the Pleistocene - <http://www.ifrao.com/portable-palaeoart-of-the-pleistocene/>

The First Mariners Project - <http://www.ifrao.com/the-first-mariners-project/>