



BRIEF REPORTS

Possible artistico-political ramifications of Neolithic and later cultural changes in human subsistence and settlement

By JASON RANDALL THOMPSON

Introduction

We search in vain for evidence of recognisable iconography in the Palaeolithic, Mesolithic, and don't find it until the Late Neolithic or later. For the earliest examples of palaeoart, we are often reduced to guessing at what it 'meant' to those who made it, what purposes it served etc. Herein is expressed the beginnings of a possibly productive research theme, in which the human organism evinced artistic proxies related culturally to the transition from a hunting-gathering social model to one closely related to the husbandry of sedentary agricultural 'herds'. Not only plants and herds of animals were domesticated in the Neolithic. The Neolithic and later 'urban revolution' of Childe might pertain also to the biocultural impact of elite reproductive interference on unprecedented masses (herds) of human domesticates. The question of why we don't find evidence of particularly 'understandable' iconography in art until after the Neolithic could be more answerable if we understand that it was only then and later that huge masses of people necessary for labour had been economically subordinated and integrated into the same ultimately agricultural surplus production schemes by which we have previously identified the Neolithic. In other words, the breeding of large human labour pools is itself a biological and cultural filter of altered subsistence and settlement realities, and bringing and keeping the masses organised required the development of symbolism suggestive of hierarchy, subordination, and the other themes familiar from much post-Neolithic iconography. For iconographic art to 'work', its audience has to be able to appreciate its symbolic content. Prior to the Neolithic the human experience was materially, socially and ideationally very different. This is perhaps at least partially why pre-Neolithic art defies iconographic or subjective interpretation.

From the earliest anthropological discussions on the evolution of human societies, much ink was spilled describing and attempting to explain the numerous material-cultural changes in the archaeological re-

cord indicative of, and evidenced by, the Neolithic. Numerous writers have treated the Neolithic as a filter, through which human society passed and emerged, beyond which the archaeological record was forever changed. One explanation for this phenomenon has been to invoke decreased residential mobility, in which human groups settled preferentially in particular *places* as opposed to ranging seasonally across *spaces*. Accordingly, as humans became more locally familiar and place-situated, the development of individual local toolkit styles assumed a self-reinforcing trend in which material came to contain 'social information' indicative of kinship and wider clan- or tribe-based symbolic content. We can see this in many regions of the Middle Palaeolithic and especially the Upper Palaeolithic, although equations between spaces and places really began in earnest during the Neolithic. Concepts of 'me' and 'mine' and/or 'ours' are quite recognisable in the transition of circular or semicircular towns and villages with indistinct boundaries into more rectilinear structures with clear boundaries, from agricultural fields, to houses and gridded street plans.

Related to the permanent occupation of distinct and finite places in traditional archaeological parlance was the evolution of the Neolithic subsistence strategy itself, the wholesale conversion of human economies from passive hunting-gathering into actively *productive* entities. In essence, the subsistence posture of human groups herewith underwent cumulative transitions from more passive to more active kinds of economic production (Childe 1950). Childe, along with untold other writers, applied himself to the establishment of a material basis for *Verstehen*, or understanding, of the cumulative evolution of Neolithic surpluses into the localised bastions, or 'markets', which themselves stimulated further speculative developments in other regions. As for example the Mesopotamian economy expanded, it secondarily stimulated the development of markets elsewhere to serve its elite demands.

One of the operant assumptions into which nearly all writers have thereby fallen is to postulate first a widespread 'societal' or meta-tribal, collective 'need' for the evolution of some centralised authority and its crude instruments of power based upon disposition and distribution of surplus commodities. It is rare indeed for anyone to postulate that self-interested centralised elites themselves instigated many of the material and ideational effects we have assumed to be their

proximate causes or that we can make material sense of this, including their sensible effects upon art styles and iconography. In other words, without exploring a digression, perhaps we have been investigating the tail instead of the dog in stressing things that we have previously preconceived as being the material causes of elite activity instead of their very material footprints.

Instead of recognising that the elites existed prior to the archaeological visibility of their 'recognisable' art and material culture, we have focused instead upon finding evidence of their materials and art, representative of a sort of taxonomic cultural 'toolkit'. Instead of seeing the Neolithic and its tremendous reworking of human subsistence as intentional activities pursued aforethought, the literature has sought to justify the elites on the basis of small cumulative changes that necessitated their emergence. This has the effect of making the Neolithic a figurative chicken and coercive elites the resulting eggs.

It may have been the active intention of elites to pursue the Neolithic and urban intensifications for their own interests, dragging, cajoling, threatening and otherwise manipulating the rest of entire societies into participation because they were completely aware of what they were doing and benefitted handsomely from it. What if our traditional views on such matters have been partially or wholly wrong? We have, for instance, recently established conclusively that traditional explanations of the Middle to Upper Palaeolithic transition, the origins of human language and art, indeed human sense of being, premised upon a species-level distinction between anatomical modern and archaic human 'species' account for modern human origins were simply wrong. We now know that moderns and archaics interbred, removing the simple explanatory device of invoking our own taxonomic heuristic constructs as self-evident 'evidence' and explanation for our origins. We are thereby forced in the present to construct alternate origins models for the biological evolution of the human organism. It is likely we have been equally wrong in regards to the *cognitive* and *ideational* makeup of our species, especially as it relates to palaeoart of all types. 'We' inhabit agricultural nation-states on the cusp of integration into a global technological planetary polity. Our cultures still maintain enough common ideational currency in relation to the art and thematic iconography produced by similar sociopolitical structures, including Neolithic and later examples. Palaeolithic or pre-Neolithic humans inhabited nothing remotely similar, and the cognitive distance between them and us is indeed vast because the underlying human realities are at least as different as Neanderthals and modern humans are morphologically.

Authority as causal mechanism?

Acton remarked that as power corrupts absolute power corrupts absolutely. Orwell (1949), in 1984, likewise suggested that power and authority are ulti-

mately their own ends and require no explanatory justifications. If those and similar themes are accurate, then how might we see them in the archaeological record? We might look for material or environmental 'explanations' for the evolution of human elites; we might search for the archaeological visibility of elites through their effect upon art. Material indices of human inequality have been evident in the record since at least the Upper Palaeolithic, mainly consisting of differential burial goods and especially the association of infant burials with artefacts they could not possibly have earned or used during their brief lifetimes. Such 'ascribed' status has been heretofore used as indicative of 'tribal' chiefdoms, to invoke another of our useful heuristics. Regardless of how 'tribal' or 'chiefly' such putative big-men may have been, we have accommodated the archaeological visibility of differential material goods associated with particular dead people to our own notions of political taxonomy. We take the one as evidence of the other.

And yet we lack clearly artistic evidence of Upper Palaeolithic elites, according to the traditional views. Since we have received by our scholarly tradition the notion that Palaeolithic societies were egalitarian ones, in which each member possessed most of the general abilities and knowledge to subsist Stone Age-style, we hardly question other possibilities. Sure, some knappers were better than others, and by such astute observations sweeping claims have been made to 'explain' the distributions of Solutrean bifaces and 'high quality' siliceous materials alike, enormous Magdalenian blades at Etiolles, and their patterned absence nearly everywhere else. Recently, Bednarik (2014) took up the theme of the absence of North American Palaeo-Indian 'art'. One response to that interesting work was that for North America during the Palaeo-Indian period the social context for it, i.e., a 'market', was simply lacking (Thompson 2015).

How can we recognise elites in artistic terms? Elites generally restrict access to prestige materials, concepts, writing, symbols of power and dominance. We might locate them in differential wealth as expressed in variable grave goods, especially when buried infants and children are found with materials they could not possibly have used or earned themselves (Childe 1950).

We may lack palaeoartistic evidence of elites unless we take engravings, petroglyphs, paintings and other examples of prey species-based, theriomorphic or exaggerated female objects in palaeoart to be the thematic expression of some type of elite, meta-tribal or other group consciousness in art. Perhaps it has been staring us in the faces for a long time. The traditional view has been to assume that cave art of painted horses or bison should be equated with 'horse or bison tribes', totemic evidence of clan-based guilds or androcentric symbolic themes of hunting and martiality or even sympathetic magic. Men hunted and celebrated and fought, and painted/engraved (really important stuff),

women birthed babies, gathered and processed foods (those small considerations), and babysat, and children followed along.

In one sense this is a very strange notion if we consider that floral dietary contributions have comprised the vast majority of human food items, and that women and children are alleged to have provided most of those through our foraging tenure on the planet. It has also contributed to the virtual material invisibility of women and children from the majority of the archaeological record, unless we assume, as many do, that lithics lacking strict conformity to taxonomic patterns expressed in terms of familiar dimensions and symmetrical shapes, were perhaps female or juvenile attempts at making 'man-tools'. Obviously at least some males made Palaeolithic art, for it is their allegedly favourite subjects (hunting, prey animals and women) that provided inspiration for the few themes we can recognise.

If elites, and the 'markets' they controlled, had certain artistic 'demands' which stimulated the development of artisanal groups to serve them, would we see specific material evidence of these in a restricted range of subject material portrayed graphically? Would that constrained range of artistic variation tend to represent the things and events that pertained most directly to market demands, and which thereby also contributed socially to the reinvigoration and reinforcement of the elite's position? Can agriculturalists and the legions of dietarily unproductive social parasites they support 'understand' palaeoart produced by consciousness from not just another time-period but an alternate adaptational, socio-political and technological niche? What would form the basis, the reference frame, for a common point of analysis?

One reason we lack 'recognisable' pre-Neolithic indices of later organised religious and political iconography, which are forms of art for the masses, was the absence of a need to communicate to human masses. Massed human populations did not exist until the Neolithic. The elite themes of force, symbols of power, aggression, domination and subjugation intended to portray status and overtly demonstrate hierarchy were absent during the Palaeolithic because highly organised hereditary elites premised upon the disposition of agricultural and other commodities were absent. Palaeolithic art, especially cave art, might represent an artistic expression of elite purview, or communication between successive elites in a symbolic manner, transmitting information through symbols as elites do *premised upon very different material and ideational bases*. The very restricted range of artistic subjects — hands, Pleistocene megafauna, prey species etc. — may not have been salient for the entire human cohort of Palaeolithic bands, let alone for us. The themes were perhaps focused on male social subsets, perhaps not 'hunting elites' but possibly socioeconomic quasi-elites devoted to passing on information or denoting items and/or perhaps even symbolic concepts of interest

to them. The specific symbolic content we can probably never know.

It is possible that Palaeolithic art could also indicate quasi-elite self-expression and self-identification in themes germane to their lives and purposes in regards to things over which they could exert some kind of control. Control over hunting products, performance, and distribution of materials necessary for it and animal prey procured by it. Such art is not indicative of overt domination as much as it was perhaps an expression of economic prerogatives and elite formation at its very inception. It is highly interesting that flora are almost never featured as palaeoart subjects.

The pervasive revision of basic human subsistence, combined with restricted mobility, even sedentary behaviour, and the conversion of societal structures that took place during and after the Neolithic have profoundly affected human cognition, even of contemporary populations. For we are essentially agricultural-technological societies with a few members who attempt to 'translate' palaeoart fabricated by humans who lived their entire lives inside a very different spatio-temporal reality than we inhabit. It is not that elites only suddenly evolved prior to the Neolithic; far from it, they appear to have existed during the Palaeolithic. It is rather that the markets, and the ideational currency, for understanding the themes presented in palaeoart are materially, socially and ideationally dependent upon the socioeconomic systems that generate it. Since the majority of humans have not subsisted as hunter-gatherers for more than ten thousand years now, and most of us (some 4 to 5 billion) inhabit rectilinear time frames imposed by the three Near Eastern monotheisms, the basis for 'understanding' the referents present in palaeoart are basically gone. We are adapted (perhaps preadapted) to consume and translate artistic themes generated from within our own cultural systems, or from within those very much like ours. Bednarik has on too many occasions to enumerate suggested that we cannot expect to 'translate' palaeoart. This brief essay has attempted to construct some possible research frames for why this is the case.

As a final illustration, consider two Neolithic or later examples from Eurasia with well-preserved art but lacking any linguistic access: Minoan Crete and Chatal Huyuk (CH). In both of those cases we find wide varieties of artistic subjects portrayed in absence of any index of local translated languages. In the Minoan example, we have access to many vibrant artistic themes along with the as yet indecipherable Linear A script (what, for example, did the Minoans call themselves or their language?). We therefore lack local linguistic cues to assist us in translating the Cretan art. And yet, much of the art is itself accessible and recognisable across a range of human activities, from dancing to boxing, to gathering flowers, to nautical craft (Biers 1996). While we have the myths relating to Minos and his taurine offspring, the Minotaur, filtered through Mycenaean and subsequent later Greek filters,

the only Cretan artistic theme remotely connected to Theseus' labyrinthine exploits would probably be the 'bull-jumping' scenes, if such jumping is what was portrayed. Obviously the people we call the Minoans were economically dependent upon bovids, as were many peoples, including the Greeks, so despite not knowing the precise acrobatic specifics of this early Cretan bullfighting imagery, we can still identify the people and bulls as humans and bovids, collocated in activities that appear to be ceremonial in nature or at least not daily routines. So, despite all we do know about post-Neolithic Minoan art, we have little ethnographic data on what one of the most iconic Cretan artistic examples actually represents, besides intangible and diffuse mythic echoes. Despite the cultural and historic connections contemporary Mediterranean and European societies maintain with the Minoans, much of the context has been lost.

In the much earlier Anatolian Neolithic case, we have another wide variety of artistic themes with good states of physical preservation associated with utterly no linguistic cues whatsoever. In one 'shrine' at CH is preserved a large representation of a morbidly obese female human in the act of giving birth to a human child, flanked on either of her sides by, and resting her hands upon, quadrupedal figures that might be lionesses (Mellaart 1966: 180–182). In another 'shrine' at CH, we find a rather disturbing set of clearly avian winged creatures associated with headless human figures (Mellaart 1964: 64). Some Eurasian mythic themes seem to have distant echoes of 'mother goddesses', perhaps accompanied by lionesses or other wild animals, giving birth to various divine and human children (Puhvel 1987). Yet, so far as one is able to determine we lack any mythic theme relating to giant birds and decapitated humans in Neolithic Anatolia. Yet, we can recognise clearly cultic art at CH within the context of ritual spaces of some sort, whether or not these were actually 'shrines' as we might recognise ethnographically. Why should this be the case?

One suspects that as prehistorians evaluate palaeo-art, they will continually run into the Neolithic 'cultural filter', in which many earlier iterations of art are basically insensible while Late Neolithic and post-Neolithic art becomes progressively more thematically sensible diachronically. Perhaps the reason for this discrepancy is that the thematic content of Late Neolithic and post-Neolithic art often includes content that we can recognise due to shared or similar prerogatives and some common *social* and *cultural* agencies. Despite the fact that contemporary societies are chronologically, genetically, socially and otherwise very different from Neolithic and post-Neolithic examples, enough common features still exist today to allow interpretation of many common artistic themes present within them. We are also becoming much more tightly integrated economically on a global basis and feature abilities to travel and communicate with one another in ways simply unavailable to past humans. Contemporary

societies have almost nothing materially or ideationally in common with foraging cultures, even remaining examples, and especially Palaeolithic and Mesolithic ones, including American Palaeo-Indian and Archaic societies. If the above are accurate generalisations, this might also partially explain why post-Neolithic art from nearly all world regions becomes successively and thematically more sensible to prehistorians the nearer art products approach contemporary observers in time. At any rate, one proposes that this might be a productive premise for future research and hopefully a collaborative one at that.

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RAR 33-1211

A rare 'Wanjina' cloud?

By DARRELL LEWIS

The connection between clouds and Wanjinas has long been known to anthropologists and rock art researchers. Kim Akerman's (2016) comprehensive account of Wanjina research draws together the numerous references to this topic, including W. Arndt's 1964 paper in which he drew attention to the similarity of form between Wanjina figures and the shape of cumulo-nimbus clouds. However, there is another type of cloud that must have been seen on occasion by Kimberley Aborigines, and which undoubtedly would have been regarded by them as manifestations of Wanjina beings. This is the type known as a 'horseshoe-vortex cloud', a very rare cloud formation originating from within regions of rotating air caused



Figure 1. Two Wanjina-like horseshoe vortex clouds seen from the Hann River Crossing, central Kimberley, July 2015.

by a swift updraft coming in contact with horizontal winds. When this happens a horizontal vortex is formed, sometimes leading to a short-lived horseshoe-shaped cloud or clouds, as seen here. In July 2015, half an hour after visiting a gallery of Wanjina figures, I was fortunate to see and photograph two horseshoe vortex clouds in the sky above the central Kimberley. They lasted only a minute or two from the time they were first noticed and their resemblance to the classic Wanjina face is unmistakable and remarkable.

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RAR 33-1212

Cave pictograms in the southern Zagros Mountains, Fars, Iran

MAJID MANSOURI and KAMAL LOTFINASAB

Introduction

Documented rock art in Iran is much dispersed. Caves, rockshelters and open areas with pictograms and petroglyphs have been reported from many regions in Iran (Izadpanah 1969a, 1969b; McBurney 1969; Goff 1970; Bewley 1984; Otte and et al. 2003; Lahafian 2004, 2013, 2015; Remacle et al. 2006, 2007; Hassanvand and Niromand 2014). These sites contain geometric, zoomorphic and anthropomorphic figures, claimed to date from pre-Historic to Historic periods. Most of the reported sites have only petroglyphs, and sites with pictograms were identified from fifteen locations to date (Adeli et al. 2001; Asadi 2007; Biglari et al. 2007; Vahdati Nasab et al. 2008; Ghasimi et al. 2010; Vahdati 2010; Fazel and Alibaigi 2012; Sarhaddi 2013; Karimi 2014 and Hemati et al. 2015) (Fig. 1). The first pictograms were reported from Mir Malas and Dosheh Caves, located in Kuhdasht, Lorestan (Izadpanah 1969a, 1969b). Recent surveys have indicated that most of the sites with painted motifs are located in the central and southern Zagros mountains, with only two sites reported from north-east and south-east Iran (Vahdati 2010; Sarhaddi 2013). All of the reported pictograms were painted in red and black. So far, no analytical examination has been carried out on the pigments of these coloured motifs, and dating of these paintings remains very ambiguous. In this paper, however, the authors will introduce other cave paintings and consider their relationship with previously reported sites.

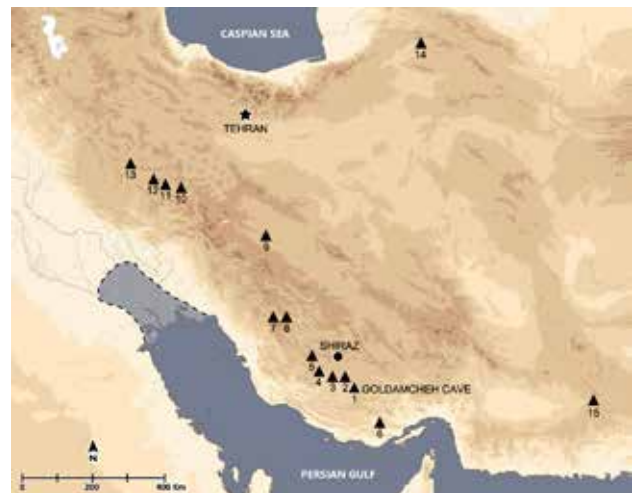


Figure 1. Map of Iran; distribution of caves and rockshelters with pictograms: 1. Goldamcheh, 2. Tang-e Tadavan, 3. Tang-e Tayhooee, 4. Abdozou, 5. Helak, 6. Eshkaft-e Ahoo, 7. Shmsali, 8. Gorgali, 9. Kuh-e Donbeh, 10. Dosheh, 11. Mir Malas, 12. Houmian, 13. Cheshmeh Sohrab, 14. Takeh Bash Mahaleh Zineh Kanloo, 15. Pir-e Gooran (Nahook).



Figure 2. Goldamcheh Cave 2; view from south-east.

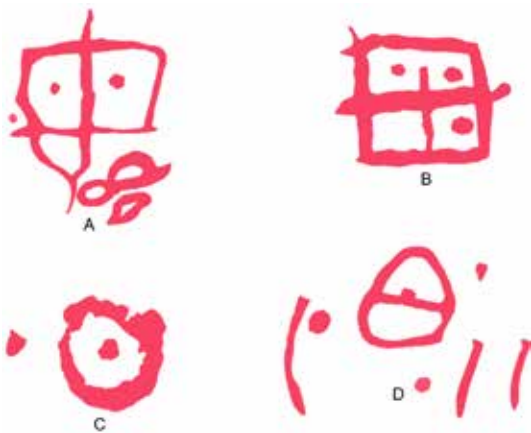


Figure 4. Drawings of geometric motifs found in Goldamcheh Cave 2.

Goldamcheh Cave 2

The cave site of Goldamcheh 2 (1071 m a.s.l.) is located in the Kordian district, north of the Goldamcheh village and west of Qotbabad City, Jahrom, Iran. The cave is 15 m deep, 19 m wide and maximal 5 m high (Fig. 2). Today it is used by hunters and shepherds for resting and storing their equipment such as bags, sugar, salt and matches, which can be seen in the corners of the cave. Goldamcheh Cave 2 possesses a line of pictograms, all created with red pigment. These can be divided into three general groups: (1) geometric motifs, (2) zoomorphic motifs and (3) anthropomorphic motifs.

Most of the Goldamcheh Cave motifs belong to the geometric group, including small scattered dots, small grouped dots, squares divided into two or four parts by internal lines and a dot inside of each part, vertical and wavy lines, large solid circles and large circles with a dot in the centre. The most common motifs are dots. Sporadic dot figures seem to be painted with fingertips (Fig. 3) and are reminiscent of those in Tange Tadavan rockshelter, which Fazel and Alibaigi (2012) suggested might depict a hunting scene.

Among the geometric motifs is an interesting six-pointed star-like motif surrounded by dots and wavy



Figure 3. Drawings of dot motifs found in Goldamcheh Cave 2.



Figure 5. Geometric pictograph in Goldamcheh Cave 2.

lines (Fig. 3). There are some geometric shapes divided into two or four parts by internal lines. In three cases, these motifs bear dots inside (Figs 4 and 5). Such motifs have also been documented in Tang-e Teyhooee cave (Fazel and Alibaigi 2012), located in Simakan district and Soren in Kousalan, Kurdistan (Lahafian 2013). It should be noted that geometric quartered motifs in Tang-e Teyhooee are surrounded by 'rays'. Understanding the meaning of all these motifs is not feasible.

Given that most of the motifs were depicted schematically, interpreting the zoomorphic figures is also very difficult. Among them are two stylised motifs we assume to be zoomorphs (Fig. 6). There are also two motifs that could be interpreted as stylised human faces (Fig. 7). They are depicted by a circle and some internal lines and dots. Such motifs have not been reported from other Iranian sites until now. There is also an anchor-like shape which might be an unfinished human face figure (Fig. 8). Another anthropomorphic motif is a presumed horse rider (Fig. 6).

Conclusion

The Goldamcheh Cave 2 pictograms comprise mostly geometric and a few anthropomorphic and zoomorphic figures. Geometric motifs include small

scattered dots, small grouped dots, squares divided into two or four parts by internal lines with a dot inside of each part, vertical and wavy lines, large solid circles and large circles with a dot in the centre. Two zoomorphic and three anthropomorphic motifs were also depicted on the west wall. No diagnostic material to help with the dating of the site's rock art was found during the survey. Therefore, the time of the occupation of the cave is not clear, but based on the site's close proximity to a perennial spring we assume that this cave has been used by pot hunters from Historical (especially Sassanid) periods to the present.



Figure 6. Anthropomorphic ('horse-rider') and zoomorphic motifs in Goldamche Cave 2.

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Figure 7. Anthropomorphic pictographs depicted in Goldamcheh Cave 2.

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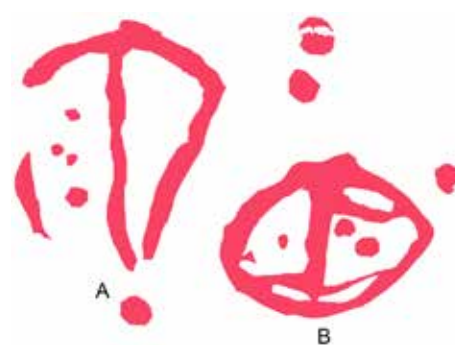


Figure 8. Drawings of anthropomorphic motifs found in Goldamcheh Cave 2.

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RAR 33-1213

Enhancing faint pictograms in the field

By JON HARMAN

1. DStretch

I developed DStretch in 2005. It is a computer program that enhances digital photos of rock art using a JPL algorithm called decorrelation stretch. The original algorithm does not work well on rock art, but I soon learned how to modify it to improve performance at rock art sites. It proved very quickly to be of great utility

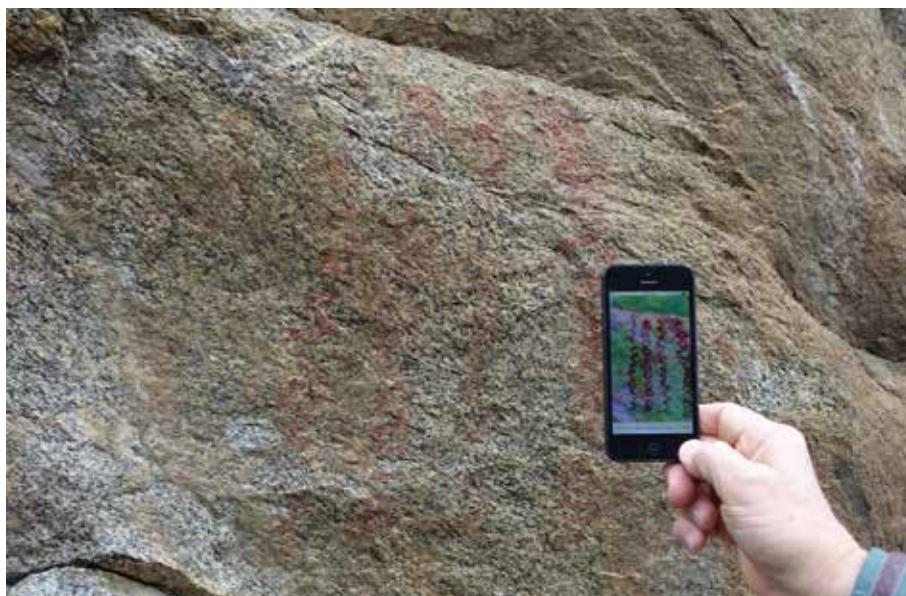


Figure 1. iPhone 5 running iDStretch at site in California.

to rock art researchers and enthusiasts. At some painted sites the effect is amazing. Details of the paintings become visible for the first time. The meaning of pictogram sites may have been lost, but due to DStretch the artistic skill of the painters can now be appreciated. This was very exciting, but there was a problem: to see the amazing results you had to bring your photos back to the computer to see the enhancements. Having the enhancements available at the site has proved to be very important. It allows for photographs that correctly frame the pictograms. Often part of a pictogram was missed in a photo simply because it could not be seen. More importantly, often a site which seemed to be just a collection of faint stains would turn out to be a complex painting. Interpretation remains difficult, but patterns and motifs can now be recognised. Doing this at the site can lead to better comprehension of the painter's intentions (Fig. 1).

2. In the field

In this article I will document the efforts I have made to use DStretch to view enhancements while at a rock art site.

Putting DStretch onto a laptop is one solution to this problem, but there are issues with this. Laptops typically do not have screens that are easily visible in full sun. It is clumsy to move the images from camera to laptop. ImageJ (the host program for DStretch) does not have sophisticated image browsing capabilities. Despite this, laptops have been used by me and other researchers to make enhancements in the field, but I wanted a better solution.

By 2008 a new visualisation mode appeared. A group of enthusiasts called CHDK (Canon Hack Development Kit) determined a way to install their own software in certain Canon cameras. I was able to modify their software to display DStretch enhancements in the LCD display after a button press. The enhancements were not the same as the computer DStretch, but were good enough for the field. One drawback is they can not be saved. At first the cameras to which DStretch could be ported were point and shoot with only medium image quality. Nevertheless, they proved to be extremely useful, notably on a trip to Tanzania I made in 2009. I encountered sites with beautiful, complex paintings done in red. Figure 2 shows the Canon PowerShot A720 point and shoot camera I used on that trip at the site Masange A13. The photo in Figure 2 was made with a separate Sony camera that I used for high quality photos. Figure 3 shows a DStretch YRE enhancement

of the Sony photograph typical of what was revealed in the A720 LCD.

In 2012 CHDK for the Canon G1X camera became available. This camera has excellent image quality, and it has RAW mode. RAW mode is very useful since jpeg compression can destroy the colour information used by DStretch. Finally I had a DStretch camera that I could use to both view enhancements in the field and take high quality photos.

Unfortunately, as time went on it became more and more difficult for me (and for CHDK) to keep up with new cameras. I stopped development of DStretch cameras. In time the only cameras for which DStretch was available had been off the store shelves for years, although they could be bought on eBay. Something new was needed.

3. New developments

This year there is a new possibility: iOS and Android versions of DStretch that can run on phones and tablets (see Fig. 1). Based on my experience with cameras I was able to create apps with a simple interface that works well on these devices. The big advantage that the new devices have is their screens. In newer iPads and Android tablets the screens are large, high resolution, can be viewed in bright light, and zooming is easy. Enhancements can be saved. In the often difficult environment at rock art sites there is no time for fiddling with settings. These apps allow the camera to be used from inside the app with a default enhancement automatically applied to the photo. The enhancement can be easily zoomed and panned. Different enhancements are tested by pressing a button. The tablets are superb devices for browsing and enhancing photos. I have taken to loading images from a site onto my tablet in order to browse the images and enhancements.

The downside to these devices is their cameras. Recent Android phones and iPhones can have excellent cameras (for phones), but the iPads and Android tablets do not. The phones have a weak LED flash. The pads have no flash. There is no optical zoom and the cameras do not have a wide angle lens. The excellent panorama



Figure 2. DStretch A720 camera at Masange A13 in Tanzania.



Figure 3. DStretch YRE enhancement of Figure 2.

mode available on iPhones can make up for this lack of wide angle lens. In low light the manufacturers often 'improve' the image quality by smoothing the colours, which is exactly the wrong thing to do for DStretch. Thus iPhone and Android phones may work well in good light, but (and this is especially true for some Android phones I have tried) they can work poorly in the low light that often occurs in rockshelters. There is a way around this. Cameras today commonly include Wi-Fi connections that can be used to send images to a nearby phone or tablet. This can work well, allowing the use of an excellent camera with good flash to take the picture and then using a phone or tablet to display the enhancements.

Another possibility is an Android camera. So far several cameras have been released (by Nikon, Samsung

and Panasonic) that run the Android operating system. I have tested the Panasonic model DMC-CM1. It has excellent image quality and the DStretch Android app works well in it.

The apps are available on Apple App Store (iDStretch) and the Google Play Store (AndroidDStretch). For more information see the DStretch Web Site: <http://www.dstretch.com/Apps>

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RAR 33-1214

Report on the UNESCO conference on rock art, Ulaanbaatar, Mongolia, 30th and 31st May 2016

By GEORGE NASH

A selected group of international scholars from across the world, along with scholars from Mongolia were invited to participate in a conference on rock art, with a particular focus on *History, memory and dialogue*. This international conference was under the auspices of the President's Office and UNESCO. It was revealed in the President Tsakhiagiin Elbegdorj's opening speech

(Fig. 1) that he had a genuine interest in rock art (a rare admission from a politician). The conference was held at Tuushin Hotel in the Mongolian capital Ulaanbaatar and was chaired by Dr Puntsag Tsagaan, who has undertaken extensive research into Mongolia's pre-History.

The fourteen international experts from Australia, Azerbaijan, China, Japan, Senegal, South Korea, Spain, Russia, the United Kingdom and U.S.A. and up to forty home-based researchers from various Mongolian research institutes and universities and representatives of UNESCO, CIPSH and IFRAO positively contributed to a well-organised and intellectually-stimulating conference.

Although delegates presented various research themes, the focus was on rock art within Mongolia's own border, in particular, the rich assemblage of petroglyphs that are found within the Altai Mountains in the far west of the country – which incidentally represents one of three areas in Mongolia inscribed on the UNESCO World Cultural Heritage List.

Three members of the international delegation have, for a number of years, been heavily involved in geo-prospection and research. During the conference, one of these scholars, Professor Esther Jacobson-Tepfer, was awarded the highest civil honour from the Mongolian Academy of Sciences, the Khubilai Khan medal for her significant contributions for rock art studies in Mongolia. Other delegates working within the same area – Professors Richard Kortum and William Fitzhugh were also acknowledged for their important fieldwork contributions. Other contributions were varied and diverse, ranging from a study of the earliest pre-Historic art (by IFRAO President Professor Hipólito Collado), the role of science applications in rock art studies (Professor Robert G. Bednarik) to Chilean graffiti art which dates from 1993!

The overriding theme from these and from other presentations was how the rock art community can take responsibility to promote a sustainable approach to conservation, but at the same time accept that this assemblage is also located in a working landscape.

Following the conference, delegates were invited to a number of cultural events that included a visit to the National Museum (Fig. 2) and the Khustain Nuruu National Park, where a unique breeding program is in operation involv-



Figure 1. The President of Mongolia, H. E. Tsakhiagiin Elbegdorj, is perhaps the world's most rock art-aware state leader (all photographs by G. Nash).



Figure 2. Conference participants at rock art exhibition in the National Museum of Mongolia. They include the IFRAO Representatives of Australia, China, Russia, Spain and United Kingdom.

ing the Przewalski horse, an endangered subspecies of *Equus ferus* that was successfully brought back from the brink of extinction during the early 1970s. This specific breed is considered to have also been portrayed on the cave walls of Upper Palaeolithic western Europe (Fig. 3).

The final part of the conference was a roundtable session which involved both international delegates and Mongolian researchers. The roundtable discussion was headed by UNESCO's Dr Dendev Badarch and centred upon the recent inclusion of the *Petroglyphic complexes of the Mongolian Altai* onto the World Heritage Site list (inscribed in 2011). The focus of the roundtable was concerned with the future of this significant rock art assemblage; the outcomes included:

- Reinforcement of rock art research and awareness-raising of rock art sites in Mongolia;
- Preservation and documentation of rock art.
- Acceleration of international co-operation in the field of rock art.
- The conservation and promotion of this assemblage and the education about it.

It was agreed that dialogue should continue and a team update should take place in Liège, Belgium, in 2017.

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RAR 33-1215



Figure 3. Przewalski horses in Khustain Nuruu National Park, south-west of Ulaanbaatar, Mongolia. Conference delegates saw about fifty of these rare animals in the wild.



RAR REVIEW

Religion on the rocks: Hohokam rock art, ritual practice, and social transformation, by AARON M. WRIGHT. 2014. The University of Utah Press, Salt Lake City, 306 pages, monochrome illustrations, bibliography, hardcover, US\$65.00, ISBN 978-1-60781-364-4.

Rock art research has, over time, been beset by issues of acceptance by the other disciplines of past cultures, the issue of chronology being a primary concern. *Religion on the rocks* is an impressive and timely piece of work, concerned mainly with the reasons for rock art production by the American Southwestern Hohokam culture. It applies a broad, multi-disciplinary treatment to the petroglyphs, and thereby also succeeds in revealing much about Hohokam culture and society generally, particularly with regard to its cult practices. One of the success factors of the book is its consideration of a rock art corpus within a well defined, relatively limited area of the South Mountains in Arizona. The other factors working in Wright's favour are that the Hohokam producers of the petroglyphs are well researched, and that these people left behind a material culture rich in imagery, including decorated pottery, enabling the rock art to be situated within a broader image making tradition. He quite rightly exploits this rich material cultural tradition and previous Hohokam scholarship, while subjecting the corpus to Alison Wylie's approach of 'cabling', tying the evidence of the rock art together with other archaeological and ethnographic threads. Indeed, despite the issues faced by rock art researchers vis-a-vis their archaeological and anthropological counterparts (as described by Wright himself in Chapter 1), he seems to be able to navigate seamlessly between the disciplines and writes on their respective contributions in a most harmonious manner. The result is a work unhampered by the divisions and is a testament to what can be done with an open mind and recognition of the strengths of each discipline, combined with good, solid research.

In Chapter 1 ('Introduction') Wright opens the topic with an overview of the history of Americanist and world rock art research, tracing it from colonial through to functionalist, structuralist and processual approaches, with some coverage on shamanism and neuropsychology, as well as landscape phenomenology. While these phases might be familiar to both the anthropologist and archaeologists, Wright is careful to

point out the divergence which took place between rock art and the other disciplines, most critically during the post-processual phase. He then brings us back to the matter at hand of the Hohokam, and sets the stage for the rest of the book — notably his contention that the petroglyphs were associated with ritual practice and relationships of power.

In Chapter 2 ('Ritual practice, religious knowledge and social reproduction') Wright provides early foundation stones for his later arguments. Namely, he covers the roles of structure, agency and power in ritual and religion. Ritual is thus 'religion in motion', conducted by individuals who are empowered by the possession of restricted religious knowledge. Other useful foundations are presented as we are introduced to methods for identifying rituals' defining features and how these might be present in the archaeological record.

An overview is provided of the main historical phases of the region in Chapter 3 ('Ritual, religion and society among the Hohokam'). An archaic phase is discussed, followed by the pioneer period which marks the arrival of the Hohokam and its distinctive material culture, social structure and monumental style, bearing some links to Meso-American traits. An important transitional point follows, which Wright draws upon later for the rock art — the colonial and sedentary periods, which are characterised by greater social stratification and the emergent prevalence of platform mounds over ball-courts for cult rituals. Analysis of Hohokam cult practice includes a review of various models postulated by previous scholars, including the Mesoamerican cosmological metastructure (MCM), Hohokam revitalisation movement (HRM) and flower world models. Noteworthy is that there seems to be no direct correlation between the visual arts of the Hohokam and what the models present. Ritual practice is a key theme of the book with ritual architecture given its proper due. Finally, ritual paraphernalia and iconography are summarised, with the latter aspect, directly relevant to rock art, considered through its four styles. Wright establishes a hypothesis whereby increasing social differentiation and the control of cult knowledge by select individuals in the community might have led to rock art serving as a way of accessing cult for dissenters, away from the public sphere. This is a notion which is heavily revised by the time the reader gets to the concluding chapters.

In Chapter 4 ('South Mountains archaeological landscape'), after providing an overview of the South Mountains Rock Art Project history and methodology, Wright presents a detailed account of the distribution of the petroglyphs around the site and the association with features such as ancient agricultural works, quarries, rockshelters, shrines and trails. He then discusses the distribution of ceramic and lithic assemblages across the site.

Wright tackles the issue of chronology in Chapter 5 ('Chronicling Hohokam rock art'). His approach to the chronology of the South Mountains rock art corpus follows the approach of 'cabling', first described by Alison Wylie in her 1989 paper referenced by him. Following the glib quote from Morwood, that the dating of rock art is a primary issue for its acceptance into archaeology, he gets on with the matter at hand and lays out his four threads for the relative dating of the rock art — proximity analysis, cross-media design correlation, patination and associated artefacts. It is to Wright's credit that he considers all possible dating methods as foundational threads in his chronological attributions, even those that are very weak in their own right. The use of associated artefacts as a dating criterion, for example, is difficult, as any number of artefacts from various periods may be deposited near rock art. Wright, however, adds a distance criterion of associated artefacts from the petroglyph panels, and is thereby able to establish statistical patterns for predominant types that are in proximity, versus other forms of ceramic ware. This evidence is then complemented by the other threads of investigation, to support an argument that the bulk of the rock art dates to the preclassical period of Hohokam culture.

In Chapter 6 ('Ritualisation of Hohokam rock art'), in order to establish the relationship of rock and ritual, Wright uses the 'five features of ritual form' (performance, encoded tradition, formalism, invariance and occult efficacy) in a model proposed by Rappaport in his paper of 1999. At the same time, he integrates the 'six characteristics of ritual-like activity' outlined by Bell in 1997 (invariance, rule-governance, performance, sacred symbolism, traditionalism and formalism). Wright further frames these features of ritual within the aspect of action, such as redundancy and repetition as well as material indicia of ritual form, such as specialised places and times. He then goes on to consider the ritual forms of the petroglyphs through space, stage, audience, time, performance and symbolism. An observation to be made here is that despite good use of contemporary anthropological theory, the large numbers of aspects, features, indicia as well as those elements added by Wright himself might leave some readers lost when reading the sections on the ritual forms of the petroglyphs. Moreover, while all aspects of ritual are considered in great detail, there are some which left me unconvinced. This struck me specifically with regard to petroglyph production, the presence of the producers in the area of production and their intentionality.

For instance, it was observed that South Mountains petroglyphs were at times found along trails, and that their lack of discernibility and relative invisibility ruled out any functional explanation and they are therefore to be associated with ritual (this, despite appearing in a subsection titled 'stage'). The aspect of 'time' described by Wright draws on Rappaport's notion of time being an important structure of ritual — particularly in its connection to calendrical or socially decreed events. Wright proposes a seasonal character to the Hohokam's agricultural and plant gathering activities, as well as to periodicity of flow in springs. Petroglyphs were previously described as proximal to these activities and hence related. As a supporting argument for rock art production being part of ritual, the time aspect is not convincing. The evidence simply shows that people were present at certain places, possibly at specific times of the year, engaged in activities and while they were there, also engaged in rock art production. This does not prove any periodic ritual intent.

Wright revisits Hohokam religion generally in Chapter 7 ('Hohokam rock art as religious knowledge'), to cover off on the fifth aspect of Rappaport's 1999 model of ritual — occult efficacy. Here, he revisits the special places inherent in Hohokam religion, in the areas beyond the communal confines of the villages. Reconsidering Hohokam religion, he lays the groundwork for his final thoughts in associating these with the rock art. According to him, the foremost features of the sacred landscape were mountains and springs, which were also related to the Hohokam's cultic roots in the MCM, where the former provided symbolic links to the sky and the latter to the underworld. Possible animistic elements to the preclassical Hohokam religion are proposed, whereby the rock art is seen as a medium for communication with the other-worldly. Wright proposes that the rock art itself, through its repetition of symbols, production techniques and stages of performance, underscores its canonical virtues and becomes the vehicle for transmission of religious knowledge.

In his final Chapter 8 ('Rock art and the transformation of the Hohokam world'), Wright draws together the historical circumstances of the transition from preclassical to the sedentary and classical periods as well as the politico-religious transformations which took place during this time. From the archaeological evidence, he describes how the transition is marked by decreasing access to cult ritual by members of the community. This is evidenced by the abandonment of the ball-court ritual centres in favour of mound-top sites in later periods, together with an attendant exclusivity regarding those who could participate. By the late classic period, the mound-top ritual sites were surrounded by enclosures as well, while ritual objects were no longer found in everyday households, further restricting religious knowledge and participation to a select few. Paralleling this series of events in Hohokam social practices, Wright describes how the motifs used in rock art also

underwent change, whereby identifiable life-form type motifs were dropped in favour of more abstract designs during the late sedentary and early classic periods, though this did not occur in all the visual arts. Overall, he believes that the preclassic Hohokam practised their rituals in the mountains, where the petroglyphs were produced, that this was open to religious leaders and less exalted members of the community, and that the transition to the sedentary and classic periods saw a move away from rock art ritualism. The religious leaders then practised the rituals in more exclusive settings on artificial mound-tops, which represented the mountains of earlier periods. The discontinuation of rock art production indicates that there was no obvious counter-reaction to the new religious authority and restriction (an alternative outcome might have been a continuation of personal observance through the rock art) — but this is not evident. Wright avoids providing any definitive conclusions as to why this transformation occurred at all, and indeed this is a higher order question which would be beyond the scope of this book. He does, however, summarise other scholarly opinion that the transformation could have come about through increasing water scarcity with a reorganisation of irrigation networks and a resultant reorganisation of the community.

Despite minor criticisms in instances where I felt data was presented to fit the anthropological models (such as the time aspect of ritual), this work stands out for me as a template of how any analysis of a rock art site should be conducted. Wright has maximally exploited all means available, to understand the rock art with a multiplicity of views, guided by contemporary scholarship in the related disciplines, but with a corpus in a limited, well defined context. Rather than criticising the methodology of related disciplines, we should all be embracing them and using the best that they have to offer. Wright has done an exemplary job of this.

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RAR 33-1216

Rock art of India, by GIRIRAJ KUMAR. 2015. Sharada Publishing House, Delhi; xxviii + 228 pages, 75 colour plates, 40 monochrome plates and drawings, appendix, bibliography, index, hardcover, ISBN 978-93-83221-06-6.

There have been a number of attempts to summarise the rock art of the subcontinent in a single volume, but the great wealth and still inadequate coverage of India's rock art render the production of an overarching synthesis of this massive corpus rather difficult. Wisely, Kumar has made no attempt to produce such a wide-ranging compendium, but has instead presented a representative cross-section and summary, situating it

in the greater picture of how Indian rock art research needs to relate to that of the rest of the world. He is uniquely qualified to attempt the task of delivering the Indian discipline from its insularity: he is well versed in the rock art research traditions of other world regions, such as China, Australia, Europe and South America, all of which he has visited; and he is the first Indian rock art researcher who has adopted fundamentally scientific principles, especially through his extensive replication work in rock art technology.

Consequently this volume differs from previous similar endeavours in various respects, for instance it includes the *Rock Art Glossary*, an attempt to normalise the terminology of world rock art studies. There is a brief review of the International Federation of Rock Art Organisations (IFRAO), and the IFRAO Code of Ethics is published in full. There is also an introduction and description of the IFRAO Standard Scale, another initiative to standardise rock art studies globally. These elements help considerably in situating the Indian discipline within that of the rest of the world, and their inclusion needs to be applauded.

The book's main chapters deal with the history of research, the chronology of the rock art, and the forms found in the main regions. Besides a list of the major concentrations of Indian rock art, the Introduction provides a useful listing of the major tribes, which at 843 000 people account for some 8.2% of the country's overall population. Many of these tribal people are still hunters and foragers (p. 17). The chapter describing the history of rock art studies in India is brief, but soon focuses on the recent developments in introducing scientific formats of investigation. This leads to the book's highlight, the consideration of chronology, antiquity and dating, in Chapter 3. A valuable and accessible account of the history of estimating the age of Indian rock art is provided, from the beginning of the 20th century to the present. Whereas the attribution of various painting styles to the Pleistocene remains controversial, Kumar does provide sound evidence for the Pleistocene antiquity of some of India's petroglyphs, including very early traditions dominated by cupules. This extends the duration of rock art production in this country by a substantial margin, rendering it unmatched in the rest of the world so far. On that score alone, this volume covers a great deal more ground than any other that has attempted to summarise Indian rock art. The project responsible for exploring the earliest petroglyph traditions of India is described in some detail, focusing on the author's own excavations at Daraki-Chattan and the microerosion analyses of petroglyphs at several sites in Madhya Pradesh and Rajasthan.

The Palaeolithic component, which extends beyond the beginning of the Acheulian at two sites, Auditorium Cave and Daraki-Chattan, leads to the rock art assumed to be of the Mesolithic — although so with limited justification. The subsequent period of cattle domestication is considered next, particularly in respect of central India. Much attention is given

to the appearance of zebu cattle (*Bos indicus*), which many Indian rock art commentators perceive as a chronological marker in the rock art. The humped cattle is said to have been used exclusively by the time of the Chalcolithic period, which began at different times in various regions, ranging from 3500 to 2000 years BCE (p. 63). There is no credible direct dating available from this vast corpus of Indian rock art, so the chronological model is largely based on iconographic or pareidolic interpretation of the imagery. Another time marker is the supposed introduction of chariots as interpreted in the rock art, but here the author concedes that the chronology is unresolved. Finally, the appearance of Brahmi inscriptions can be safely placed into the third century BCE.

Chapter 4 offers a well-illustrated quick tour of India's major rock art corpora, which illustrates the great diversity of the country's rock art. It also presents some of the global background of the Indian petroglyphs of the Lower Palaeolithic, showing that they are not entirely without a context in the world's palaeoart. There is also a brief discussion of a key element in Kumar's own work, his program of replicating cupules on very hard quartzite rock. Unfortunately the captions provided with most illustrations in this chapter attempt to tell the reader what is depicted in the image, which of course neither the author nor his reader can know with any degree of certainty. Also, the cultural attribution of most of these images should have been omitted; they are far from certain and detract from the value of the volume. Neither the meaning nor the age of the rock art is accessible to scientific attention as it currently stands — although the second variable may eventually become accessible to testing.

The next chapter explores the relationship of the people with their rock art sites and the possible use patterns of the landscape. It includes some valuable information about the ethnography of some rock art corpora. For instance Kumar mentions, only too briefly, that people of the Gond tribe at Dharul in Atnar taluka, Betul district of Madhya Pradesh still today produce rock art in their rockshelters, perform rituals and recite songs (p. 150). This, needless to say, is one of the world's very few examples of the continuing ethnographic use of rock art outside of Australia. It is a topic that needs to be much better explored in India before these surviving links are lost forever.

The concluding chapter defines the current paradigm shift in the study of rock art. 'Gone are the days when every researcher was after the interpretation of rock art according to his/her own imaginations. Now emphasis is on the scientific study by methods that can be tested and refuted by any one at any time' (p. 156). Kumar shows how rock art research is increasingly leaning towards scientific, multidisciplinary work, and that this trend needs to take root in India too. He pays tribute in this book to V. S. Wakankar, his teacher, as the 'founding father' of Indian rock art research, whilst he himself — Wakankar's pupil — has become the founder

of rock art science in India.

In conclusion, this book is a most worthwhile work as Indian rock art research finds itself at the crossroads, and in that sense it differs from every previous attempt to characterise the large body of Indian evidence. It currently seeks to break away from the traditional parochialism and pareidolic priorities of Indian rock art studies and adopt a more holistic genre of research; and it endeavours to situate Indian rock art research within the global discipline. These are laudable objectives and Professor Kumar is to be commended for them.

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RAR 33-1217

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 74 (2016):

LEGROS, B.: Rock art engravings at Banfora cliffs, Burkina Faso.

HERMANN, L., A. ZIYADENOVICH BEISENOV and G. ZHELEZNYAKOV: The rock art of Kulzhabasy, Kazakhstan (Otar, Djamboul Oblys).

HEMATI AZANDARYANI, E., M. R. NEZHAD, H. QOLAMI and M. SHAABANI: New petroglyphs at Ali-Abad and Arzanpoul (Arzanfoud) in the Hamadan Province, western Iran.

GROOM, K. M.: Fading imagery. A mixed method analysis of rock art deterioration in the Arkansan Ozarks.

D'HUY, J.: The headless serpents of Montespan and Tuc d'Audoubert.

Number 75 (2016):

GARATE, D., J. RIOS-GARAIZAR, O. Rivero and F. UGARTE ELKARTEA: Three new decorated caves at Aitzbitarte (Basque Country).

EWAGUE, A., M. M. BAIBBA, M. LHAMRO and A. LEMJIDI: Loghchiwat, new rock art site south of Es Smara (Moroccan Sahara).

EISENBERG-DEGEN, D.: First results of the Mount Kidod rock art survey, south-east Israel.

JUMÉNEZ-SERRANO, A. and G. GRAFF: New Pre-dynastic graffiti from Qubbet el-Hawa South, Aswan (Egypt).

CLOTTE, J.: Chauvet-Pont d'Arc Cave: choosing a location.

UBICK, S. and F. THACKERAY: An Epsonian interpretation of the Chauvet 'Venus-bison-lion'

collage.

GOMES, H., P. ROSINA, L. OOSTERBEEK and T. SOLOMON: Archaeometry in Gode Roriso rock-shelter in Ethiopia.

American Indian Rock Art. American Rock Art Research Association (ARARA). Edited by KEN HEDGES. The most recent edition comprises the following articles:

Volume 42 (2016):

BERGHAUSEN, C.: The writing on the walls: Neolithic rock art at the Ness of Brodgar.

MURRAY, W. B.: Marking the water: iconography and environment in northeast Mexican rock art.

KAISER, D. A.: Willamette Falls: rock art at the end of the Oregon Trail.

MERRELL, C.: A comparison of two significant vulviform sites in southern Idaho with similar sites elsewhere in the Great Basin.

FOX, D. and J. UHRINAK: Lynx paw petroform: a connection to Great Lynx and Underground/Underwater Panther American Indian traditions.

KEYSER, J. D.: Site 48SW85: a hunting magic petroglyph on the Green River.

JENKINSON, R.: DStretch at the Great Gallery.

MARYMOR, L. and A. MARYMOR: Western message petroglyphs: esoterica in the Wild West.

CHRISTIE, J. J.: Cultural landscapes and intangible heritage: the case of Blue Bull Cave in Canyon der Muerto.

HERNBRODE, J. and P. BOYLE: Petroglyphs and bell rocks at Cocoraque Butte: further evidence of the flower world belief among the Hohokam.

LOENDORF, K. STEELMAN, M. WILLIS and M. MILLER: Old painted zigzags in the Jornada Mogollon region.

ALSHERIF, A.: The debate around styles and chronology of Saharan rock art.

MURRAY, W. B.: Antlers and counting in northeast Mexican rock art.

Archaeology Southwest Magazine, Spring 2016 issue, Volume 30, Number 2, comprises a collection of short articles under the title 'New horizons for Southwestern rock art':

AARON M. WRIGHT: New horizons for Southwestern rock art.

AARON M. WRIGHT and POLLY SCHAAF-SMA: Reframing the past: rock art styles across the Southwest.

AARON M. WRIGHT: In brief: how did people make rock art?

HENRY D. WALLACE: The western Archaic Tradition in context.

AARON M. WRIGHT: In brief: but is it art?

RALPH HARTLEY: Landmarks and signalling: rock art of southeastern Utah's Colorado River region.

WESLEY BERNARDINI and LEE WAYNE LOMAYESTEWA: Ancestral Hopi rock art.

WILL G. RUSSELL: Cultural diversity and social identity atop Perry Mesa.

AARON M. WRIGHT: Rock art and mountain ritualism in the Hohokam world.

LINDSAY MONTGOMERY: Comanche aesthetics.

MARIT MUNSON: Rock art and accessibility: examples from northern New Mexico.

STEVEN J. WALLER: Soundscapes of rock art: cultural significance in the past and implications today.

CHRIS LOENDORF and LARRY LOENDORF: Portable x-ray fluorescence spectrometer analysis of pictographs.

ROBERT MARK and EVELYN BILLO: Pictograph at Quail Point.

TIM ROBERTS and WANDA OLSZEWSKI: Recent rock art conservation efforts at Hueco Tanks State Park and Historic Site.

POLLY SCHAAF-SMA: In defense of rock art.

PKATHERINE WELLS: Preservation spotlight: Mesa Prieta Petroglyph project.

WILLIAM H. DOELLE: Back sight.

RECENT BOOKS OF INTEREST

The genesis of creativity and the origin of the human mind, edited by BARBORA PŮTA and VÁCLAV SOUKUP (eds). 2015. Featuring contributions by 23 authors. Karolinum Press, Charles University, Prague, 326 pages, illustrated with numerous colour and monochrome plates, bibliographies, index, hardcover, ISBN 978-80-246-2677-2.

Petroglyphs of western Colorado and the Northern Ute Indian Reservation, as Interpreted by Clifford Duncan, by CAROL PATTERSON. 2016. Transactions of the American Philosophical Society, Volume 105, Part 5, 168 pages (12 front matter; 156 text), 51 colour photographs, US\$37.00, softcover, ISBN 978-1-60618-055-6. Please place orders at orders@dianepublishing.net or fulfillment@amphilisoc.org.

Glimpses of India-China rock art, by BANSI LAL MALLA. 2016. IGNCA Rock Art Series 14, Indira Gandhi National Centre for the Arts, New Delhi, 124 pages, numerous colour images, bibliography, hardcover, ISBN 978-93-8093-562-1.

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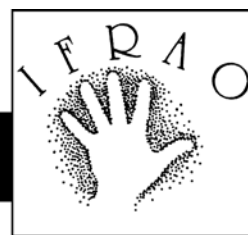
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IFRAO Report No. 56



XVIII CONGRESO INTERNACIONAL DE ARTE RUPESTRE IFRAO 2015: 'Símbolos en el paisaje: el arte rupestre y su contexto' 18th INTERNATIONAL ROCK ART CONFERENCE IFRAO 2015: 'Symbols in the landscape: rock art and its context'

CÁCERES (EXTREMADURA, SPAIN)

University Campus, Faculty of Philosophy and Humanities

31st of August to 4th of September 2015

Website: <http://led.unex.es/IFRAOCaceres2015/index.php?lang=es&op=2>

By HIPÓLITO COLLADO GIRALDO and JOSÉ JULIO GARCÍA ARRANZ

Preface

During the 16th IFRAO International Rock Art Congress, held at the end of May 2013 in Albuquerque (New Mexico, United States), the General Assembly of IFRAO (International Federation of Rock Art Organisations), after assessing different candidates, approved the proposal given by the University of Extremadura and the Institute of Prehistoric Studies by a wide margin, deciding that the 2015 Conference would be held in Cáceres. It would be the first time in the Federation's history that this event would be celebrated in Spain.

IFRAO is, as its name states, an organisation gathering all 56 of the world's associations aimed at research, preservation and management of rock art and is independent and (mostly) non-governmental, or works through the institutions, universities or research centres in the various countries. Besides numerous meetings, activities, publications and its commitment to defend and promote world rock art heritage through its well-known ethics policy, IFRAO has organised, since 1988, international meetings of great importance, always at the same time the General Assembly takes place. As a reference, in the last six years, IFRAO Congresses have been held in São Raimundo Nonato (Piauí, Brazil) in 2009, Ariège-Pyrénées (France) in 2010, La Paz (Bolivia) in 2012, Albuquerque (New Mexico, U.S.A.) in 2013 and Guiyang City (Guizhou, China) in July 2014.

The Cáceres congress: place, dates and organisers

The 18th IFRAO International Rock Art Congress 2015 was held in the Faculty of Philosophy and Humanities on the Cáceres Campus from the 31st of August to the 4th of September 2015 (see the conference website: <http://led.unex.es/IFRAOCaceres2015/index.php?lang=es&op=2>). The event was organised by teachers at the History of Art Department of the University of Extremadura, the Culture Foundation of Extremadura and researchers of the Institute of Prehistoric Studies (ACINEP). This last named organisation has been an IFRAO member for more than ten years and comprises researchers of the University and the Regional Government of Extremadura. The infrastructure and the services of the Faculty of Philosophy and Humanities, University of Extremadura were available for the activities. The Conference also counted on technical and academic support of the Research Groups of *Patrimonio&ARTE* (Heritage&ART) and CUPARQ (Culture, Heritage and Archaeology).

Participants

The conference was addressed to researchers, specialists, teachers, curators, cultural managers and cultural heritage professionals, as well as to all others interested in rock art. It gathered 518 researchers, scholars and delegates coming from 49 countries in six continents. They all followed a wide program defined by the work of 730 researchers who individually, and also as teams,

signed a total number of 450 presentations, organised in 32 sessions taking place at the IFRAO Conference 2015 (there were also up to 11 workshops at the same time). They were aimed at the study of diffusion, research and preservation of the world rock art. The aforementioned figures show that IFRAO 2015 has been the scientific conference with the highest international projection organised by the Faculty of Philosophy and Humanities, and probably by the whole University of Extremadura. It was developed in four official languages: English, French, Portuguese and Spanish. As proof of the international interest it generated, journalists from *National Geographic*, Mexican National Television and the Italian RAI were covering the event on site, and its national and international impact in press, radio and television during the days it took place was unprecedented for this kind of meeting. Articles about the conference in the main bulletins and rock art journals around the world are still getting published. They underline its success in terms of attendance and organisation.

Complementary activities

The conference schedule had numerous complementary cultural activities at the University of Extremadura and in the town of Cáceres. This was to enable its impact both on the town and the areas showing rock art in the provinces of Cáceres, Badajoz and Salamanca, and the Portuguese Alentejo. There were exhibitions and shows held simultaneously in different rooms led by the Provincial Deputation of Cáceres, the local government, the Regional Government of Extremadura and the University of Extremadura, such as the *Palacio de la Isla* building, *Pintores 10* room, the Museum of Cáceres and the Faculty of Philosophy and Humanities. All places were showing art or photography exhibitions related to rock art and pre-Historic aspects as follows.

Pintores 10 room: exhibition *Art in the caves* by the painter Maximina Espeso, with paintings reproducing different panels representing Palaeolithic and post-Palaeolithic rock art in the Iberian Peninsula, Europe and northern Africa. The techniques employed resulted in exhibits very close to the real representations.

Palacio de la Isla building: itinerant show *Planetarium trip: World Heritage rock art*, visual tour of rock art in the six continents which is on the UNESCO World Heritage List, using some panels or thematic sections and an audiovisual to show rock art from 40 sites around the world. This has been designed by the Museum of Altamira.

Exhibition *From one hand to the other*, by the Cantabrian artist Ludovico Rodríguez Liaño, with paintings representing panels of Iberian Palaeolithic and Post-Palaeolithic rock art, made with natural colorants very similar to those used by pre-Historic 'artists'. This very author also carried out rock art workshops for schoolchildren around the *Palacio de la Isla* building at the end of September, with an outstanding participation

of the schools in town.

Cáceres Museum (Palacio de Las Veletas building): photography exhibition on panels, *The art of light*, with pictures of petroglyphs of the sites of Siega Verde (Ciudad Rodrigo) and Foz Côa (Vila Nova de Foz Côa, Portugal). Itinerant installation organised by the Côa Parque Foundation and the Archaeological Centre and Interpretation Centre of Siega Verde (Villar de la Yegua, Salamanca).

Faculty of Philosophy and Humanities hall: three-dimensional representation of female idols from Palaeolithic until the Metal Ages, some of them originally from Extremadura, by the artist Jesús Vázquez, from Cáceres.

The desk of the General Direction of Tourism of the Extremadura Regional Government offering further tourist information about the region to all participants at the event.

A desk about the European Cultural Route '*Prehistoric Rock Art Trails*', currently established as the main tourist route with European rock art sites and recognised by the Council of Europe as 'European Cultural Route Prehistoric Rock Art Trails'.

Attendees were also given the chance to participate in different fieldtrips on Wednesday, 3rd September, the central day of the conference. These were organised to visit the main rock art sites on the south-west of the Iberian Peninsula, including the most relevant sites in Extremadura: Monfragüe National Park, area of Alcántara, Villuercas Ibores Jara Geopark, the mountains to the south of Mérida, La Serena and Tierra de Barros areas or the International Tagus, besides more sites nearby, in Portugal and Salamanca. These all achieved an important promotion platform. At the same time, these travels also included trips to other, non-rock art heritage sites, such as the Monastery of Guadalupe, the historic site of Trujillo, the Interpretation Centre of rock art painting in Torrejón el Rubio or the Alcántara Roman Bridge. Detailed routes were the following:

Trip 1: Siega Verde – Monfragüe – Torrejón el Rubio (Salamanca – Cáceres)

Collection of rock engravings from Siega Verde and Interpretation Centre (petroglyphs) – cave of the Monfragüe Castle and other decorated rockshelters (schematic paintings) near Rock Painting Interpretation Centre of the National Park of Monfragüe in Torrejón el Rubio.

Trip 2: Geoparque Villuercas – Guadalupe – Trujillo (Cáceres)

Decorated rockshelters of Risquillo de Paulino and Cueva Chiquita, in the Villuercas Ibores Jara Geopark (schematic paintings) – Monastery of Guadalupe (World Heritage Site) – visit to the historic site of Trujillo.

Trip 3: La Calderita – Alange – Mérida (Badajoz)

Decorated rockshelter of the Cornisa de La Calderita (schematic paintings) – Bronze Age granary of the Cerro



Professor Hipólito Collado Giraldo, the new President of IFRAO (on the right), during one of the congress fieldtrips.

de Alange – Roman thermal springs of Alange – visit to the archaeological site of Mérida (World Heritage Site).

Trip 4: Magacela – Campanario – La Zarza – Alange – Almendralejo (Badajoz)

Dolmen and decorated rockshelters of Magacela (schematic paintings and engravings) – petroglyphs from the Iron Age of Piedraescrita (Campanario) – decorated rockshelter of the Cornisa de La Calderita (schematic paintings) – Bronze Age granary of the Cerro de Alange – Tholos of Huerta Montero (Almendralejo).

Trip 5: Mação – Valencia de Alcántara – Santiago de Alcántara (Portugal – Cáceres)

Museum of Prehistoric Art of the Tagus Valley (Mação) and petroglyphs from the Presa de Fratel – decorated shelter of Puerto Roque (schematic paintings) – dolmens of Valencia de Alcántara – Buraco Cave (schematic paintings) – Dolmens and Interpretation Centre of Megalithism of the Dehesa Boyal of Santiago de Alcántara.

In the same way, participants had the chance to do trips organised by the travel agency Barceló Viajes, both before and after the congress. These consisted in visiting the main rock art sites in the Iberian Peninsula, with two main routes in the north and the south.

Finally, some international researchers were voluntarily in charge of workshops or complementary talks during the days of the conference. There were book launches about rock art in Mexico and Australia and a tribute to different people, including the one in memory of Eduardo Hernández-Pacheco, from Extremadura, because of his great work at the beginnings of research in rock art, in the first decades of the last century.

Official publications: session minutes

At the conference, participants were provided with

the minutes taken. These were in a printed book including 750 pages of summaries, and another digital one with the complete articles introduced at the meeting, in the four official languages of the event. This is a work of international scientific importance, comprising 2630 pages. The volume contains global level data that turns it into an essential reference in the international rock art research field. These minutes have been sent to main study centres of rock art in the world in the last few months, in many cases thanks to the participants.

Tributes

One of the most relevant events at IFRAO 2015 was the session and tribute to the Spanish researcher Alfonso Caballero Klink, one of the most important scholars in the study of Spanish schematic rock art, whose

huge scientific work was mainly developed in Castile-La Mancha. This homage was held in the main hall of the Faculty of Philosophy and Humanities and was conducted by Ramón Montes Barquín, technical director of the CARP International Association (Prehistoric Rock Art Trails). It had a massive attendance from the general public and the congress participants.

International projection

Taking these details into account it is obvious that the congress activity turned the city of Cáceres into the focus of the study of world rock art for a whole week. It subsequently was an excellent opportunity to show the richness of rock art in the province and also in the region of Extremadura to specialists coming from all over the planet, representing the main palaeoart cycles of pre-History and proto-History on the western Iberian Peninsula, from Palaeolithic to Iron Age. It is especially due to its outstanding wealth of schematic paintings (as shown in the conference, we managed to put Extremadura on the World rock art map). Nevertheless, besides the scientific dimension of the event, this was a very special occasion to welcome these visitors with the warm and kind character of the city and the identically named province of Cáceres that we all wished to show. This was by making available for them all means, activities and tourist values the region can offer, and by counting on the advantages given by the declaration of Cáceres as the Spanish Gastronomy Capital of 2015.

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