



## NORTHERN AUSTRALIAN ROCK ART, SOUTHERN AFRICAN ROCK ART – SO SIMILAR, SO DIFFERENT

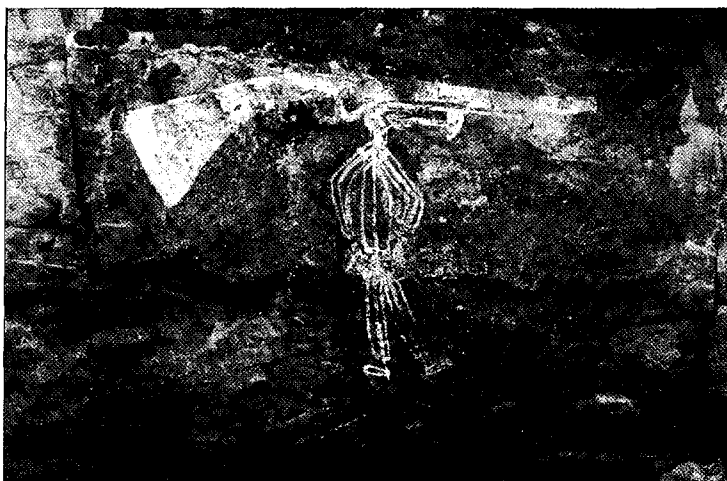
Christopher Chippindale

Perhaps it is in the nature of former colonies that – even decades later – they still look culturally towards motherlands. Each night, the jet flights leave South Africa for Europe, seven non-stop and direct to London alone, but eastwards towards Australia, some nights just two, some nights not one. The rock art and archaeology of these two great southern lands have so much in common; yet the only recent – perhaps the only ever – field collaboration has been that beginning a decade ago between Sven Ouzman (then of the National Museum in Bloemfontein) and Paul Taçon (then of the Australian Museum in Sydney). Based in Britain, I myself do field studies in Australia and teach annually at Wits in Johannesburg, and perhaps begin now to know sufficient about southern African rock art to hazard a few words of comparative comment.

Geographically, these two zones have much in common: southern land blocks at much the same latitude, with archaic geology and landforms, singular plants and animals, and a tendency to drought.

No wonder Australian eucalypts so enjoy flourishing in South Africa! Common to the story of their human settlement is the way in which hunter-gathering continued as the subsistence base until later than in many temperate and northern zones. Most, but not all, southern

African rock art culturally belongs to the hunter-gatherer tradition. All Australian rock art does, for Aboriginal Australians – in contrast with Papua New Guinea, with its gardening and pig farming – maintained their hunter-gatherer lifestyles until their land was overwhelmed by British settlement from 1788 onwards.



*Fig 1: European figures of the Australian Contact Period in characteristic stance: feet turned out, clothing with distinctive trousers and shirts, arms on hips or in pockets, pipes in mouth. Above, the rifle.*

The desert centre of Australia – the ‘outback’ – is tough land, usually dry but unpredictably so, like the Karoo. The Northern Territory, the province of Australia where I research archaeology, is the block in the middle at the top. At 1,35 million km<sup>2</sup> it is a little larger than all of South Africa. Its population of 210 000 is less than 1/200<sup>th</sup> of South Africa's; of this number about 50 000 are of Aboriginal rather than immigrant descent.

Especially rich in rock art is the northern part of the Northern Territory, which extends over 97 000 km<sup>2</sup>. This tropical strip Australians call the ‘Top End’ is more correctly known as Arnhem Land after the Dutch ship *Arnhem*, which ex-

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*Fig 2: Creator Beings on the main panel at Anbangbang, the most recently painted of the great Arnhem Land sites. On the left, Namandjolg, who later became Ginah, the saltwater crocodile. On the right, Namarrgon – the 'Lightning Man' – who wears the lightning as a round band linking his head with his arms and legs. He makes thunder by banging together the stone axes on his elbows and knees.*

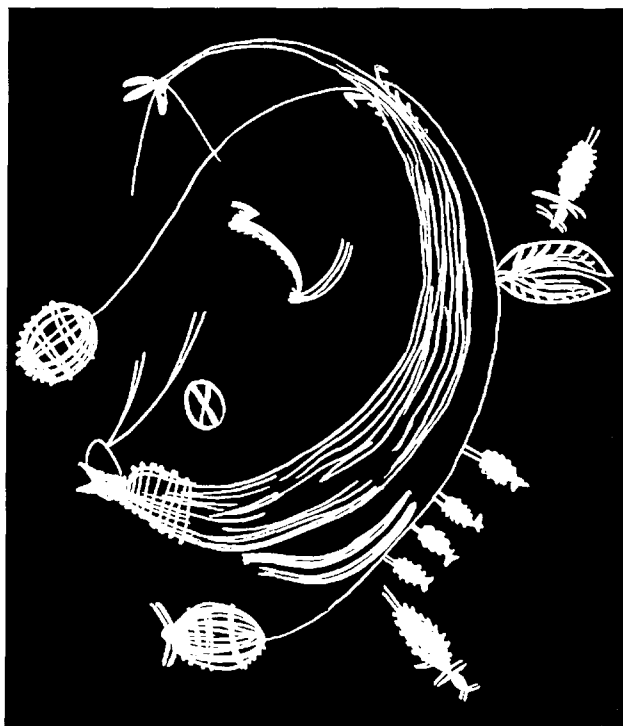
plored the coast in 1623. The rock-painting tradition in Arnhem Land continued well into modern times, with the last famous panel being painted in the early 1960s and some painting still being done today. So, as in Lesotho, the last phase in its well-defined sequence is 'Contact Period' art with European subjects (Fig 1) – horses, guns, men smoking pipes. Alongside their rock paintings, the Aborigines had a tradition of painting their wet-season shelters made of bark when they lived out on the plains. From that habit has developed a superb art tradition of painting on eucalyptus bark (or increasingly on fine-art papers) for both tourist and connoisseur markets. The colours, subjects and distinctive ways of painting, such as the 'X-ray' schemas in which the internal organs of creatures are shown, which are so striking on the rocks, continue to move forward in ever more elegant, stylish and technically skilled expressions.

Thanks to that continuity, and the continuing knowledge of the Arnhem people today, we are able to know many of the subjects in more recent paintings. Some are the great Creator Beings who made the world as it is (Fig 2).

Principal among the Creator Beings of Aboriginal knowledge today is the Rainbow Serpent who passed across the land, shaping its hills, making its creeks and billabongs, and setting its animals and people all in their proper place. Today the Rainbow Serpent is painted as a fat snake with a distinctive tail and the head of a powerful creature – now usually a crocodile, but sometimes a kangaroo or a feral water buffalo. On the rock

surfaces, ever-older Rainbows still survive, and we can see how the more archaic Rainbows have a characteristic form, with characteristic attachments and associations (Fig 3), which are not quite the same as those that Rainbows have today. Looking back, at a date we can place fairly close to 4 500 years ago, the Rainbows cease. Before that time there are snakes, some of them very large (one can compare the southern African images of serpents).

This break is matched by other shifts, both in subjects and in the way they are depicted. Thanks to our colleague George Chaloupka's imaginative insight, some of those shifts are now linked to and dated by the well-understood sequence of changes in the climate and natural environment of Arnhem Land. The big kangaroos of the interior dry lands give way to other creatures and to the fish of the freshwater swamps as the rising sea level over the millennia transforms the land and the food resources it offers. Simple spears, as hunting weapons, are joined by boomerangs; then simple hooked-stick spear-throwers arrive; next the boomerang disappears (in a wetter, more wooded Arnhem Land the boomerang becomes less fitting as a weapon?) and the spear-thrower develops to its



*Fig 3: Archaic Rainbow Serpent, with traits distinctive of its early form: a small wallaby or kangaroo head, a fattening body, a distinct sharp tail and long trailers hanging off its body. On one trailer there roost and fly fruit-bats – 'flying foxes'.*

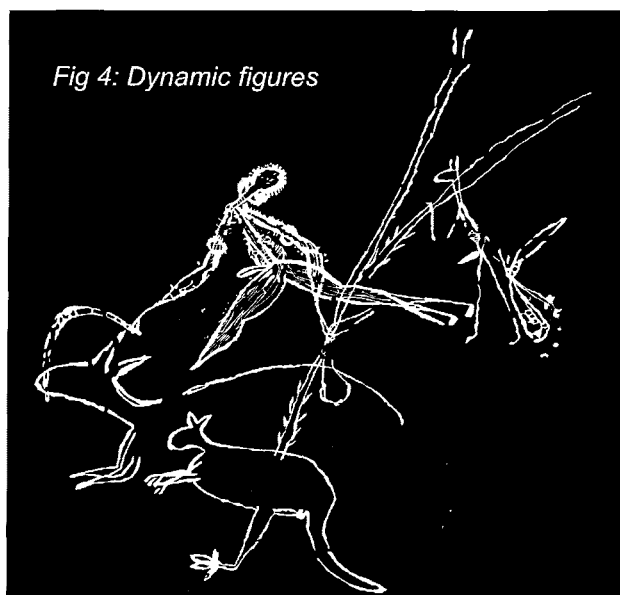
elaborated modern form.

The unique and special thing about rock art – the thing that makes rock art so thrilling a source of evidence about the past – is that it gives a direct and first-person account. The Dynamic figures shown in Fig 4, called 'Dynamic' because they so often run and tumble in energetic movement reminiscent of the lively figures in San rock art, are a record made *by* those Dynamic people of the world that they *themselves* knew and lived in. So, on the left we have a human figure, or one I read as being human, although it could equally be a spirit or other Being; the corollary of rock art being a direct record from former peoples is that they are not always here to explain and elucidate the images.

He (for he lacks the breasts by which some Dynamic figures are gendered) is wearing a large headdress and decoration around his body and arms. Above his legs are perhaps male genitals. He is running to the left, with legs raised before and behind. By his right feet are what look like another pair of legs and feet, perhaps fragments from another figure otherwise lost. He holds in his left hand a boomerang, clasped at the end ready to throw. In his right two long barbed spears and a dillybag. Around his arms and legs are some scattered dots. In front are two wallabies, the one on the left crouched down as if grazing, that on the right with raised head as if leaping. And behind is another figure, human in most of its form and with erect penis, holding in one hand a pair of barbed spears over his shoulder and in the other a bag and a boomerang clasped in the middle. His head is the head of an animal, a fruit bat rather than a wallaby, I think: see how wallabies have rounded chins rather than the foxy or doggy face of the flying fox. So here is another being in the Dynamic world combining an animal head with human characteristics and actions reminiscent of the therianthropes of southern African San art.

The distinctive feature, then, of the Arnhem Land rock-art sequence is change. We have a robust relative chronology of shifting and diagnostic subjects and manners of depiction. The Creator-Beings are prominent in the later world, absent from the earlier one. We have solid radiocarbon dates to peg down its last 4 000 or so years. We have hints of dates from beforehand, so we can guess that the whole sequence scans perhaps 12 000 or so years, and in all probability rather more.

Change in San rock art as I understand it is less clear, though it surely exists. There are regional differences – elephants in the Western Cape, formlings (now convincingly seen, through Siyakha Mguni's new work, as images of termite mounds), and so on. There are the late paintings with contact motifs. Rain-animals and serpents seem much more pronounced in contact times (based on super-positioning and relative weathering). The last 2 000 years seem to show increased individuality, even the eland occur in different contexts – big herds giving way to weird ones and single eland with humans interacting. In engravings, lighter patinated works have a marked increase in ostrich and human figures.



Research knowledge, like all understanding, results from dialogue between the viewer and the viewed. Is it the case that the San societies, whose painters left us this visual record of their own worlds as they experienced them, were fairly stable over many hundreds of generations? And that Aboriginal societies in Australia shifted so much? Or is it more that the Australian researchers, interested for whatever reason in change, have searched for and found it, while southern African researchers have chosen – profitably! – to pursue other interests? Time will tell us. I am not much good as a betting man, but as an honorary Australian in these matters I can guess which story will by degrees come rightly to prevail in each great region.

#### Acknowledgements

I thank the Arnhem Land communities in whose country I have been privileged to work, my long-term collaborator Paul Taçon, and Sven Ouzman. Photographs and drawings are by the author.

# CHEMICAL ANALYSES OF ORGANIC RESIDUES IN SAN AND SOUTH SOTHO PIPES

JF Thackeray and SMM Young

In 1975, NJ van der Merwe and LB Blank reported the presence of *Cannabis* (dagga) residues in 13<sup>th</sup> or 14<sup>th</sup> century clay pipes from Ethiopia. More recently, 17<sup>th</sup> century clay pipes from Stratford-upon-Avon in England were analysed, suggesting that contemporaries of Shakespeare, if not the author himself, were smoking dagga. Here we report on *Cannabis* from San and South Sotho pipes from collections curated by the National Cultural History Museum in Pretoria.

The San pipe is made from antelope horn and metal, whereas the South Sotho pipe is manufactured from soapstone. Contextual information for these pipes is lacking, but the style of the Sotho pipe is almost identical to that of 17<sup>th</sup> century clay pipes of the kind that were used by European colonists of the same era, including Englishmen and Dutchmen. The soapstone pipe is much more durable than European clay pipes with thin pipe stems, which were easily broken. The San pipe dates to the 20<sup>th</sup> century.

## Method of analysis

Sediments from the pipes were soaked in chloroform to extract organic compounds. Particulate matter was removed from the liquid after 24 or more hours. The chloroform was allowed to evaporate, leaving a distinct brown residue, which was redissolved in 1 ml of chloroform during vortex mixing. These samples were then analysed by coupled gas chromatography-mass spectrometry (GC-MS), using a Finnigan MAT GCQ system of chromatograph MS detector at the University of New Hampshire. A 30 m J&WDB-5 capillary column with an internal diameter of 0,25 mm separated the molecules. The carrier gas was helium. The injector temperature was a constant 250 °C. The evolution procedure for the oven was: 50 °C for 1 minute; increase 30 °C/min up to 110 °C; maintain 110 °C for 2 minutes; and ultimately increase 17 °C/min up to 280 °C, maintaining this for 10 minutes. The mass-to-charge ratios versus relative abundance were examined for each chromatograph peak and used to identify the compounds.

## Results and discussion

*Cannabis* was identified in both the San and Sotho pipes, confirming that this substance was used in recent centuries by indigenous peoples of South Africa. 'Dagga pipes' described by palaeontologist

van Hoepen have not yet been analysed, but it is worth noting that the pipe bowls of at least some of these specimens are decorated with geometric images. It would seem possible that such geometrics are representations of 'entoptics' perceived in altered states of consciousness.

## Acknowledgements

We thank Joann Fontaine and Suzanne Pearlman of the University of New Hampshire for assistance with the chemical analyses, and Johnny van Schalkwyk and the National Cultural History Museum for access to collections.

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# ROCK ART OF THE SAHARA\*

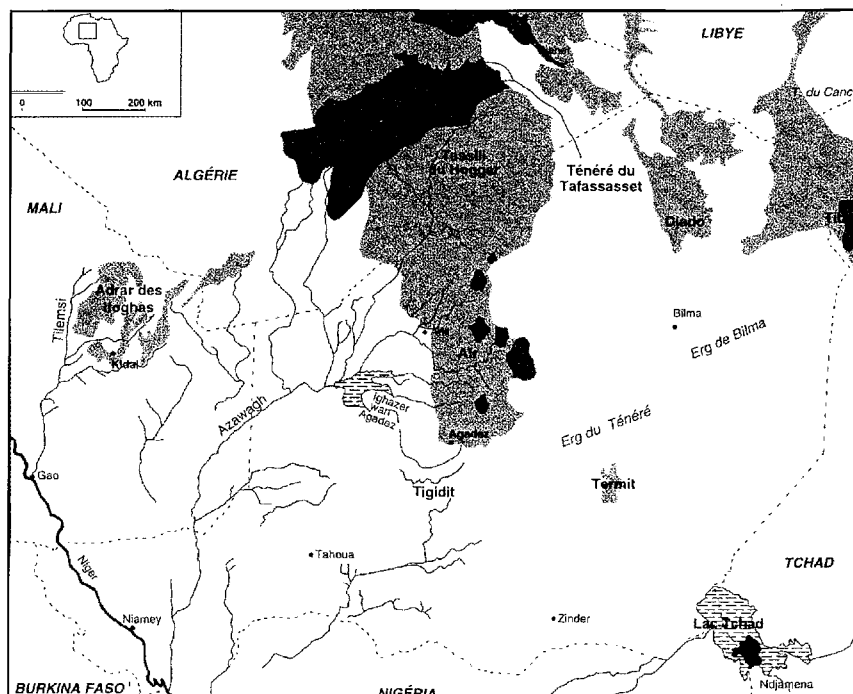
Andrew B Smith

South Africans are increasingly becoming aware of their significant rock art heritage, but are generally unaware of the equally impressive rock art that exists at the other end of the continent, in the Sahara. Unlike the popular image of the Sahara, even though it is a desert, it is not all sand seas with high dunes. In fact, mountainous and rocky regions comprise a larger part of the total area, and exposed rock surfaces in all parts of this huge desert have some traces of parietal art, either paintings or engravings. The Sahara thus hosts a huge variety of art forms and styles, and new discoveries are made every year, as reported in the journal *Sahara*.

The opening up of the Sahara to European eyes by French colonial interests in the 19<sup>th</sup> century resulted in a number of papers being published on its rock art, either by French military officers or by people in direct contact with the military. The earliest reference to the art was by Jacquot in 1847, in the southern province of Oran in Algeria. Heinrich Barth (1857-1859), one of the first explorers to travel across the Sahara in 1850, described engravings of therianthropes and cattle he saw in the Wadi Telisaghen in the Fezzan of southern Libya as follows: 'Some of these bulls are admirably executed, and with a fidelity which can scarcely be accounted for, unless we suppose the artist had before his eyes the animals which he chiselled. My sketch gives only a faint idea of the design, which is really beautiful' (Vol. I:178).

Barth shows considerable insight when he goes on to say: 'If we consider that the sculpture described is close to a watering place on the high

road to Central Africa, we are reduced to the conjecture that at that time cattle were not only common in this region, but even that they were the common beasts of burden instead of camels. Not only has the camel no place among these sculptures, but even among the rude outlines which at a much later period have been made on the blocks around, representing buffaloes, ostriches, and other kind of birds, there are no camels' (Vol. I:179).



The central Sahara – location of the rock art discussed in this article

A number of the earliest observers were concerned with inscriptions that became known as *hadjrat mektouba*, which was interpreted as being part of magical rites, particularly *tifinagh* (Berber script), a script used by the Tuareg today, but which is probably a direct descendent of the ancient Libyan script. In spite of Barth's comments quoted above, *tifinagh* is commonly associated with later art showing camels. Many of the commentators of the early 20<sup>th</sup> century only had access to the art on the southern slopes of the Atlas mountains and there was a strong belief that it was Berber art, influenced by the beliefs of ancient Egypt, especially Amon, and tied into rain-making rituals.

An important figure in Saharan rock-art research was the Abbé Henri Breuil, who in 1920 had

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\* This is a shortened version of a paper prepared as a homage to Alfred Muzzolini entitled 'Historical perspectives on the rock art of the Sahara and southern Africa.'

already worked on Spanish Levantine art and in 1926 began to make connections between rock art in Spain and the Sahara. In 1929 he was invited by Miles Burkitt to attend the joint British and South African Congress for the Advancement of Science held in various centres of South Africa, which allowed him the opportunity to visit South African rock-art sites to record the paintings, as well as to study collections of rock-art tracings. From this visit Breuil made sweeping statements about connections of the art throughout the continent, especially after he saw photographs of rock art from the Brandberg in what was then South West Africa, taken by Mrs Harper Kelley. These included 'The White Lady', which he was sure was the huntress Diana. In this he was supported by such luminaries as Van Riet Lowe, and later Willcox.



Fig 1: 'Pastoralist initiation', Tissoukai, Tassili n'Ajjer (after Hampaté Ba & Dieterlen 1961)

Breuil had great influence on Saharan rock art researchers, especially Henri Lhote, who had been a student at the Institut d'Ethnologie in 1932 and in 1944 wrote a thesis on Saharan rock art. In 1954, Breuil and Lhote published the large corpus of tracings by Lieutenant-Colonel Brenans from the Tassili n'Ajjer in southern Algeria (Breuil 1954). It was Lhote who was to carry on the Saharan research, with several expeditions to the Tassili over the next 20 years, from which he was able to create a chronology for the paintings (Lhote 1959). While this chronology has been refined since then (Muzzolini 1993), its basic sequence is still generally accepted (Table 1). Like its southern African counterpart, the age of the art is rough at best and usually framed with respect to the archaeology.

A crucial juncture in Saharan rock art studies occurred at the Burg Wartenstein Conference on the Rock Art of Western Mediterranean and the Sahara in 1960. There was great dissent among the delegates about the connections made between Spanish and Saharan rock art, and even Breuil had to concede that these were unwarranted. In fact, as the publication of the pro-

Table 1: Saharan rock-art chronology

Cameline Period	< 2 000 BP
Chariot Period	2 500-2 000 BP
Bovidian II ('white faces')	5 000-3 500 BP
Bovidian I ('black faces')	7 500-5 000 BP
'Round Heads'	9 500-7 500 BP
[Older engravings of extinct animals]	Probably Pleistocene

ceedings went to print, Breuil withdrew his contribution, so that pages 133-144 had to be omitted. At the conference, Lhote was one of the people denying a connection between European and African art, but he was still convinced of a link between the art of central Sahara and Egypt (Lhote 1964). So strong was his belief that when he found a painting which showed 'Egyptian' figures in the Tassili, he used it on the cover of his 1959 book. Unfortunately, this painting had been created as a joke by members of his expedition, a fact not admitted until several years later. After Lhote's death, this 'error' was used to demean the otherwise important work done by him (Keenan 2002).

In the early 1960s the respected Fulani elder, Amadou Hampaté Ba was shown some of the tracings from the Lhote expedition. Hampaté Ba thought he recognised some of the initiation rites he had gone through as a young man (Fig 1) and interpreted the paintings as reflecting Fulani pastoral life and belief (Hampaté Ba & Dieterlen 1961). This was the first time that ethnography was being brought to bear on the interpretation of central Saharan rock art, but it was not accepted by everyone. Vansina (1984) thought that the time depth of 4 000 years was too great to give credence to the associated interpretation, especially as there was no archaeology on the Fulani to support the idea.

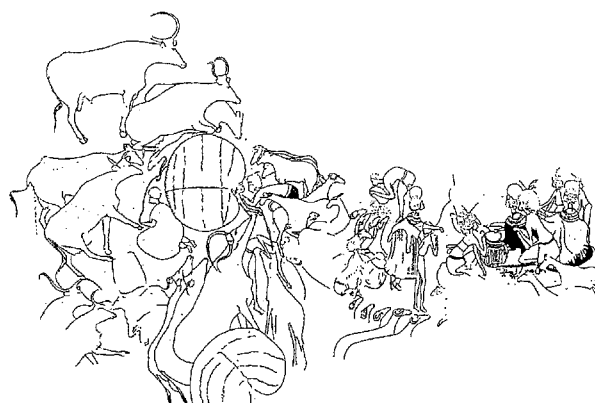


Fig 2: Bovidian II period 'pastoralist camp', Iheren, Tassili n'Ajjer, from Colombel (after Kuper 1978)

Between the 1960s and 1990s most Saharan rock art research was concerned with collecting as many images as possible and quantifying them. The theoretical framework never evolved beyond style or semiotics, even though an enormous amount of data was being processed. This resulted in Saharan rock art being somewhat sidelined within the wider world of rock-art research, as was all too apparent in the Sahara being ignored in Chippindale & Taçon's (1998) edited volume on world rock-art studies.

A change in research direction back to the ethnography has been offered by Holl (2004), where he tries to get away from the descriptive paradigm and uses the anthropology of pastoralism as a means to interpret the Tassili Bovidian II paintings from Iheren (Fig 2). He sees them as having been allegorical and used as pedagogic tools, with the imagery a form of 'morality play'. This interpretation is different from that suggested by Smith (2005), where a different belief system is suggested. The striped cattle found on a number of the Bovidian II paintings are equated with fire *djinn*s (spirits) (Fig 3), a belief that still exists among Saharan nomads: lower-caste blacksmiths who work with and control fire are feared for the considerable spiritual power they wield.

Other interesting work on Saharan rock art is that of di Lernia (1999) from Uan Afuda in Libya, where Barbary sheep paintings have been found on cave walls. In the excavation below the paintings, the vast majority of the bones in the faunal assemblage are of Barbary sheep, and a dung layer, which can only have come from the penning of the sheep, is mixed with plant material that is suggested as intentional animal feed. Included in this material is a poisonous plant that might have been used as a soporific to keep these skittish animals acquiescent. The interpretation is that these wild animals were being controlled, probably for use in rituals. This activity, which took place between 9 500 and 8 000 BP, predated the arrival of domestic sheep and goats in Africa from the Near East.

Regardless of which interpretive system is chosen, the spatial distribution of the rock art in the landscape should not be considered



Fig 3: 'Fire ritual', Uan Derbaouen, Tassili n'Ajjer, from Colombel (after Kuper 1978)

random. This is an area of research that needs to be studied, along with other potential ceremonial sites, such as human and animal inhumations to possibly create a phenomenological landscape (Tilley 1994).

The rock art of the central Sahara is being opened up to visitors with the creation of new national parks in the Tassili n'Ajjer (Algeria), the Air Mountains (Niger) (Fig 4) and the archaeological park of Acacus and Messak (Libya). With the burgeoning of petroleum research and exploitation in the Sahara, many archaeological sites (including rock art) have come under pressure from unrestricted access. To try to take some of this pressure off the art, Tuareg guides control access and take visitors around. There is, however, some question whether they actually identify with the rock art and see it as part of their cultural heritage.

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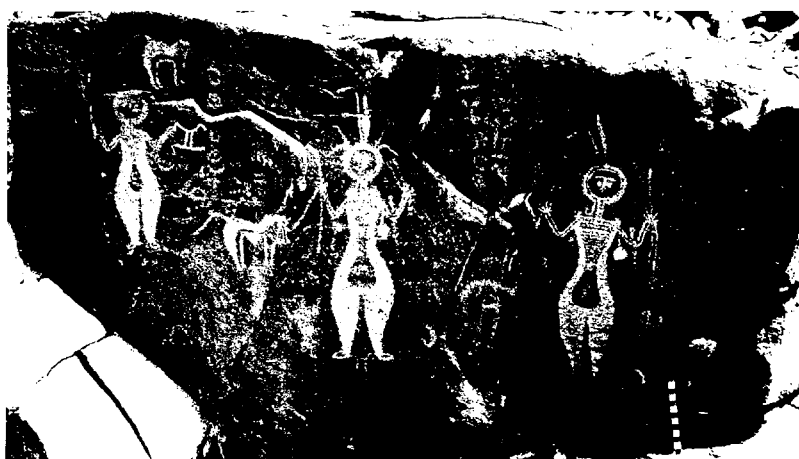
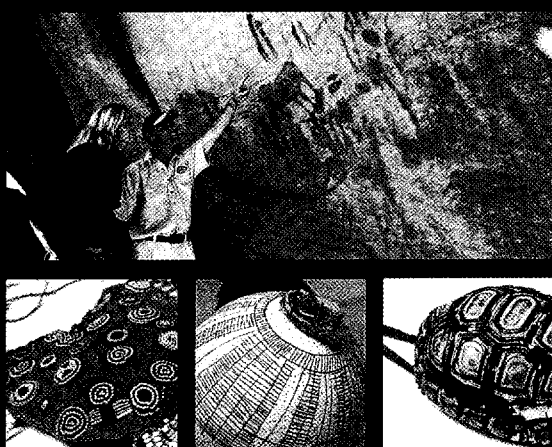


Fig 4: 'Warrior, with tame baboon' is the central feature of this panel near Zourika, Air Mountains, Niger. Several such engravings of human figures with baboons are found in the area. This is probably a late depiction (cameline?) (see Dupuy 1998 for detailed analysis).



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# THE MAKGABENG PLATEAU ROCK ART SURVEY — FIVE YEARS ON

Ed Eastwood and Jonas Tlouamma

A rock art survey of the Makgabeng Plateau in the Central Limpopo Basin began in May 2001 (see Eastwood, Van Schalkwyk & Smith 2002, *The Digging Stick*, Vol. 19) and is now nearing completion. In five years we have documented more than 670 sites in an area of about 22 000 ha, an exceedingly rich harvest for such a relatively small area.

We spent more than 300 days walking through this rugged and well-wooded plateau that consists mainly of sandstones formed by a two-billion-year-old fossilised Pre-Cambrian desert (Fig 1). Fieldwork was mainly conducted in the winter months and then resumed after the first rains of summer each year. Most of the plateau is inaccessible by vehicle, so we set up base camps in various places on the periphery of the plateau. It was also necessary to locate water in the central parts so that we could hike in from one of the bases and camp near water within easy reach of various concentrations of rock art sites. These field trips were not without incident, such as visitors to the project getting lost or contracting tick-bite fever, and some close encounters with hyenas, mambas and cobras.

Needless to say, the rock paintings are exceptional and consist of three co-occurring painting traditions. First, there are the mainly white, finger-daubed paintings made by the Northern Sotho, a tradition that Benjamin Smith & Johnny van Schalkwyk categorise as a colonial contact art comprising images of trains, wagons, soldiers and horsemen. In this period also falls the art of boys' initiation composed of human and animal imagery (Smith & van Schalkwyk 2002; van Schalkwyk & Smith 2004; Smith & Blundell 2004). In 2002 we discovered paintings of various geometric images and representations of female back and front aprons, which we thought might be linked to girls' initiation (Fig 2). Indeed, after an intensive study of the art and interviews with Northern Sotho women by Catherine

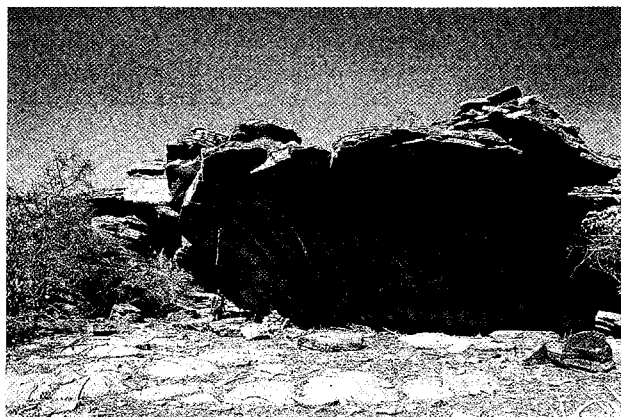


Fig 1: A typical large rock shelter in the Aeolian sandstones

Namono of the Rock Art Research Institute, our inferences were confirmed (Namono 2004; Namono & Eastwood 2005).

Second, there are the more carefully made handprints, finger dots and strokes, and finger paintings of geometric forms and women's aprons made by the Khoekhoen (Smith & Ouzman 2004). Over 100 sites with Khoekhoe paintings were located, often situated high up on cliff faces or on the tops of hills. Apart from such site preference, we were also able to correlate high concentrations of sites with areas of permanent water and good pasturage – mainly *Cynodon dactylon* grassland (Eastwood & Smith 2005). As time went by, we found that there seemed to be two phases of the art. An earlier phase of paint-

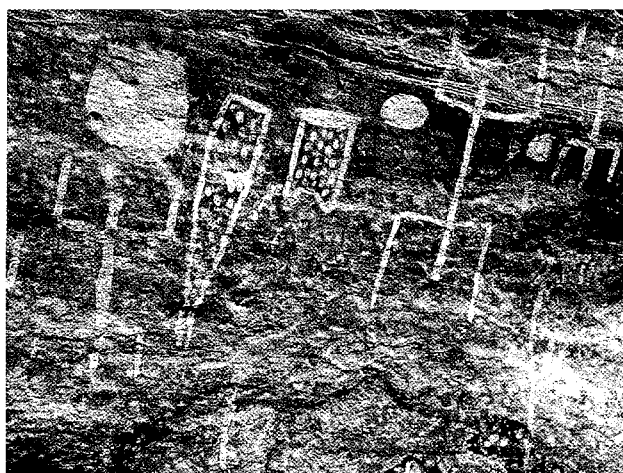


Fig. 2: The rock paintings of Northern Sotho girls' initiation

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ing, frequently underlying San art, is predominantly red and consists mainly of handprints, finger dots (Fig 3) and strokes, geometrics such as circles and a small component of depictions of women's aprons. A second and later phase of painting comprises mainly white finger dots and strokes, geometric forms and a larger proportion of apron representations (Fig 4). This phase overlies the earlier phase and both phases underlie and overlie San paintings, thus suggesting a long period of interaction between the two groups. These San and Khoekhoe paintings are in turn always overlain by the Northern Sotho paintings.

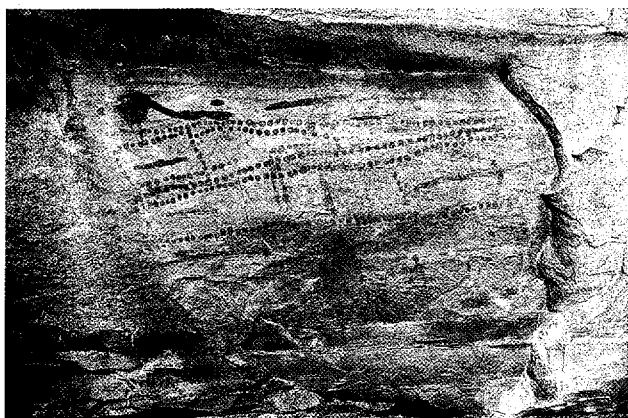


Fig. 3: Typical early phase Khoekhoe paintings

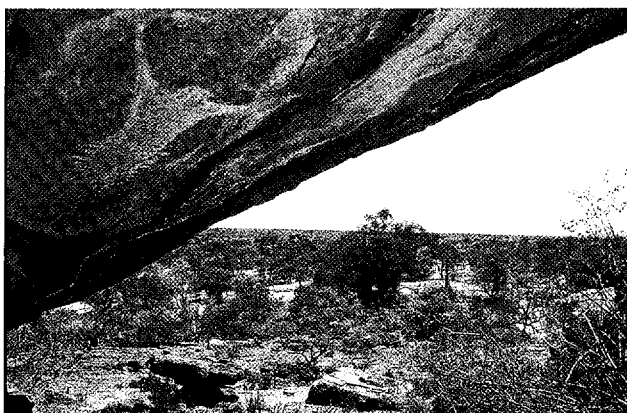


Fig. 4: A later phase Khoekhoe woman's apron with fringe

Intriguingly, the Khoekhoe geometric images resemble some of those painted by the Northern Sotho, though the depictions of aprons differ in detail. Northern Sotho front aprons, for example, are elongated without fringes and back aprons are triangular with a bifurcated tip. Khoekhoe aprons, by contrast, are generally fringed, square or rectangular, decorated with lines and dots, and probably represent women's front aprons, while animal-skin shapes may be depict-

ions of back aprons. This overlap in subject matter strongly suggests an exchange of ideas between Northern Sotho and Khoekhoe, who may have been in contact for some time (Eastwood & Smith 2005).

Third, there are the characteristic, fine-line and polychrome images made by the San. These paintings include animals such as aardvark, baboons, birds, canids, elephant, eland, fat-tailed sheep, felids, gemsbok, giraffe, hares, hartebeest, impala, kudu, monkeys, mountain reedbuck, rhinoceros, tsessebe and wildebeest. Interestingly, there are many depictions of the medicine dance and the spirit world. These include people in bending-forward postures, dancers holding sticks, people with arrows piercing their bodies, therianthropes, 'threads of light' with people climbing along them, types of 'formlings' we refer to as 'crenations' (Fig 5) and animals appearing to enter or exit cracks in the rock face.

In some instances, images of women's aprons occur in these contexts and are linked to the threads of light that meander over the rock face, appearing to enter and exit irregularities in the rock face (Fig 6). These contexts may say something about the supernatural potency of women's clothing (Eastwood 2003). Significantly, some paintings of aprons are associated with fine-line geometrics, designs that are also used to decorate San aprons. In addition, there are many paintings of processions of female figures that consist of women and girls and which may be explicit depictions of the dances performed at San girls' puberty rites (Eastwood 2005).

Although the data from the Makgabeng has not yet been analysed, preliminary assessments suggest that this exceptionally rich body of art has introduced new themes in each of the rock art traditions, data that will potentially provide research material for various individual rock art researchers and institutions for many years to come. Most importantly, the co-occurrence of the

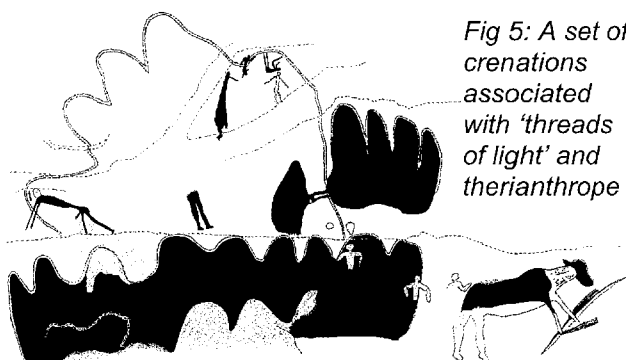


Fig 5: A set of crenations associated with 'threads of light' and therianthrope

three painting traditions and the cross-cultural imagery such as the geometrics and aprons made by Northern Sotho, Khoekhoen and San promises to provide insights into cultural contact, especially with respect to the ways in which women from different cultural groups interacted in the past. Importantly, the exceptionally well-preserved San art seems to focus not only on the medicine dance and experiences of shamans in the spirit world, but also emphasises the issues of women.

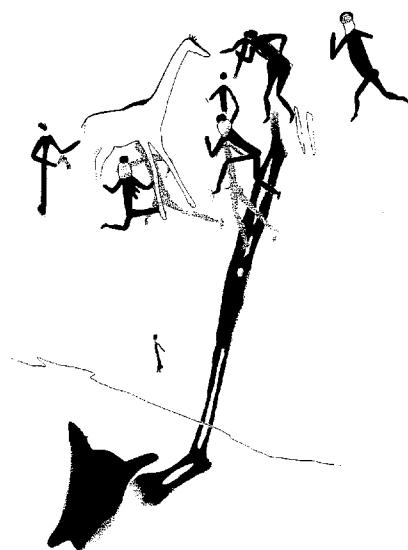


Fig 6: San woman's back apron associated with a medicine dance

Data from the Makgabeng rock art survey will also contribute to environmental impact surveys and conservation management plans that are required by law when such areas become earmarked for tourism development, as envisaged by local government authorities.

#### Acknowledgements

The Swan Fund, Anglo American Chairman's Fund, the South African Heritage Resources Agency and the Trans-Vaal Branch of the Archaeological Society supported this project financially. We are grateful to the Thompson and Murray families, Geoffrey Blundell, Penny Charteris, Cathelijne Eastwood, Avis Eaton, Jeremy Hollmann, Penny Ludwig, Siyakha Mguni, Catherine Namono, Sven Ouzman, Benjamin Smith, Johnny van Schalkwyk, Sarah Venter and many others who helped with field surveys and other tasks. We thank Kgoši Leraki Ben Leboho for permission to work on Hananwa ancestral land.

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## ARCHAEOLOGY IN BRIEF

**Egyptian 'tomb' was mummy workroom.** A chamber at the bottom of a 6 m shaft discovered in the Valley of the Kings in February was a room used by the ancient Egyptians for mummifying pharaohs buried in the area, rather than a tomb, Egypt's Zahi Hawass has said. The five sarcophagi found in the chamber contained remnants of pottery, shrouds and materials used in mummification. The American researchers from the University of Memphis who discovered the chamber had also opened 10 sealed jars found there to discover other materials used in mummification.

Reuters, 13 March 2006

**Elaborate cave paintings stun scientists.** Chilean and French researchers have discovered elaborate pre-Columbian cave paintings by indigenous Alacaluf people on an isolated island in Patagonia. More than 40 stunning paintings were located inside 'Pacific Cave' on Madre de Dios island, in Chile's far south, expedition head Bernard Tourte of France said. The Alacaluf, a nomadic and seafaring people indigenous to the area, were not previously known to have produced such art. The paintings, mostly in black and ochre colours, have a range of subject matter and varied techniques.

Sapa-AFP, 8 March 2006

**French caver finds oldest art.** Gerard Jourdy has discovered prehistoric cave art believed to date back 27 000 years – older than the famous Lascaux paintings. He found human and animal remains in the chamber in the Vilhonneur forest, in caves once used to dispose of animal carcasses. The paintings include a hand in cobalt blue. The French culture ministry has confirmed the findings, but said that although the discovery was of interest, the paintings were not as spectacular as those in the Cosquer and Chauvet caves in the Ardeche.

## ARCHSOC TRANS-VAAL BRANCH CALL FOR 2007 FUNDING PROPOSALS

The Trans-Vaal Branch of the South African Archaeological Society invites applications for funding by researchers and educators in the field of archaeology in 2007. Archaeological research projects in South Africa and educational programmes that promote knowledge about and an understanding of archaeology, particularly among the youth, will be considered. The deadline for applications is 31 August 2006.

Approximately R25 000 will be made available for grants. Funding may be split over more than one project and the branch committee's award decisions will be final. The following information should be provided in the application:

1. The proposal, proposed implementation schedule, total budget estimate, grant applied for and anticipated results or benefits.
2. If the project for which funding is requested forms part of a larger programme, information on how the project relates to the whole.
3. Resources and facilities available for implementation of the project or programme.
4. The grant being applied for must be broken down into discrete expense categories to permit awards being made for specific expenses.
5. Biographical details of the applicant(s), including academic qualifications, experience, professional

affiliations and publications.

6. Two references who can attest to the quality of previous archaeological work undertaken.
7. Proposals for the publication of research results.

Successful applicants will be required to report progress and results to the Trans-Vaal Branch committee at six-monthly intervals and may be requested to prepare an article for *The Digging Stick*.

Applications should be forwarded to the Secretary, Trans-Vaal Branch, South African Archaeological Society, PO Box 41050, Craighall, 2024. E-mail: [secretary@archaeology.org.za](mailto:secretary@archaeology.org.za). Enquiries: Mrs Jo Earle, Tel: 011 706 6905.

### ROCK ART BOOKS FOR SALE

I have the following books for sale:

- ☐ *Believing and Seeing*, by JD Lewis-Williams. Good condition. Price: R2 400
- ☐ *People of the Eland*, by P Vinnicombe. Good condition. Price: R4 600

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## THE CAPE GALLERY



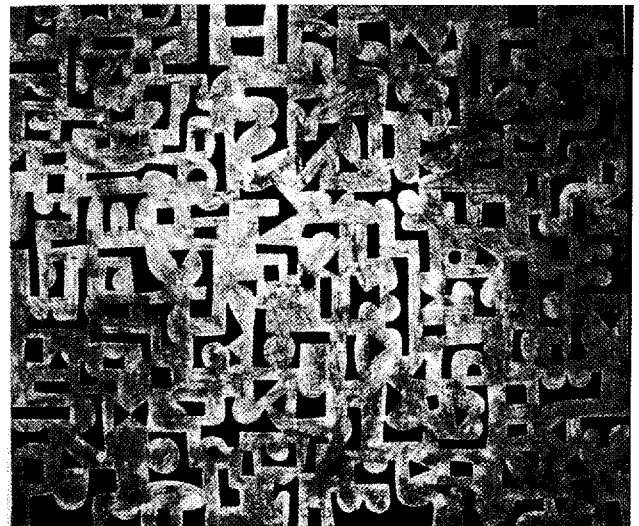
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*"Spirits of the Forest" by Derek Drake.  
In this work – which is oil on canvas, 170 cm  
x 142 cm – Derek is giving expression to the  
interconnections in a holistic world.*



*The Cape Gallery deals in fine art work by SA  
artists and stocks a selection of paintings depicting  
South African rock art.*

## A HOMECOMING OF ROCK ART

### Harald Pager's work returns to Namibia

Beatrice Sandelowsky

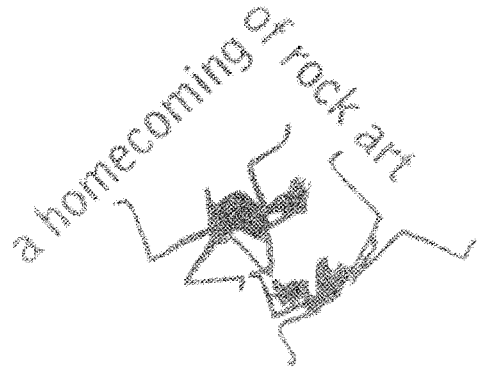
Shirley-Ann called them the tree trunks, because that is what they looked like: rolls of plastic foil that her husband, Harald Pager, used for copying rock paintings. He traced all the paintings found at 879 sites in the large Brandberg massif, a part of Namibia's western escarpment. Harald and his two assistants rediscovered many of these sites during the eight years it took to complete the enormous task given to him by Prof. Schwabedissen of the University of Cologne in Germany in the mid-seventies.

The 'tree trunks' contain 6 000 m of plastic sheeting reflecting 43 000 individual figures. A week after Harald Pager died in Windhoek on 1 July 1985, Rudolf Kuper of the Heinrich Barth Institut and representatives from the University of Cologne came to fetch the work he had done for the Deutsche Forschungsgemeinschaft (DFG). The copies of the rock art, together with the accompanying meticulous notes and reports, provided invaluable data that formed the basis of an impressive series of scholarly publications by the Heinrich Barth Institute. This record of rock art in the Brandberg is acclaimed as the best documentation of a site of this kind worldwide.

An international conference named 'A Homecoming of Rock Art' marked the return of this body of data to its rightful abode in the National Archives of Namibia in Windhoek. Invitations were issued to African and particularly SADC countries, as well as to associates and friends far and wide. Some 50 persons besides several local, casual visitors honoured the invitation and met in Windhoek from 11 to 17 April 2005. Shirley-Ann Pager and Harald's daughter, Cara, were conspicuously absent from the event. They would have been the two people to whom this commemoration of Harald's work would have meant more than to any other person in the world. Living in Scotland and in the USA, they had not been informed of the conference dates.

The Owela Museum in Windhoek held a special photo exhibition entitled 'From the Oshana to the Daureb: Namibians contributing to H Pager's rock art research.' At a reception on the first evening of the conference, here too tribute was paid to Harald Pager. On the third and last day of the conference participants paid a visit to the newly-established Pager Archive at the impressive post-independence building of the National Archives in Robert Mugabe Avenue.

The Honourable John Mutorwa, Minister of Youth,



National Youth Services, Sport and Culture, officially accepted the Brandberg Rock Art documentation from Ute König, Chargé d'Affaires of the German Embassy. In his keynote address the Minister stressed the importance of researching our history and went as far as recommending that more information about Namibia's prehistory be included in the school syllabus. He felt entitled to say this since he was no longer Minister of Basic Education, he quipped. Mr Mutorwa also warmly thanked all the guests from abroad for their interest in Namibia's history and archaeology and for their valuable contributions towards these subjects. This, he felt, was particularly significant owing to the fact that there was no expertise available locally. Unfortunately the Minister had to leave immediately after his speech and could therefore not witness how no fewer than 10 Namibians actively participated in the conference as presenters, speakers and debaters.

Goodman Gwasira, a student of mine and now an archaeologist at the University of Namibia, was the local counterpart of Dr Tilman Lensen-Erz, who organised the conference on behalf of the University of Cologne and the DFG. Mr Karl Aribeb, Director of the National Heritage Council, chaired the session on 'Living cultural heritage – community-based tourism and other kinds of utilisation of heritage in rural areas'. Formal contributions and active participation in all discussions by members of different Namibian communities, as well as from the countries of our sub-region, illustrated how seriously the preservation of rock art and archaeological evidence was being taken. Dr Janette Deacon demonstrated the vastness of the subject of prehistory with illustrations of ancient artistic expression in Namibia and elsewhere, referring in particular to ochre engraved with geometric designs dated to 75 000 years found at Blombos Cave on the Cape south coast. Similar motifs had been recurring worldwide ever since, she said.

Information of this kind brings home how young the human race is and that it started in southern Africa! Against this background the concept of unity in diver-

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## AMAF/HERITAGE KWAZULU-NATAL

The following vacancy exists in Pietermaritzburg:

### ASSISTANT DIRECTOR RESEARCH AND PROFESSIONAL SERVICES

**Salary:** R139 302 – R168 279 per annum (Level 9).

**Requirements:** Relevant degree. Experience in Archaeology and Historical, Anthropological and Built Environment matters. Valid Code 08 driver's licence.

**Duties:** To deal with compliance issues, and facilitate and implement the following: budget, strategic plan inputs, management programmes, database registers, Council directive, needs and desirability applications.

**A detailed job description** may be obtained on the Amafa website: [www.heritagekzn.co.za](http://www.heritagekzn.co.za).

**Forward your application and CV to:** The CEO, Amafa aKwaZulu-Natali, PO Box 523, Ulundi, 3838. **Closing date:** 30 May 2006.

## AMAF/HERITAGE KWAZULU-NATAL

The following vacancy exists in Pietermaritzburg:

### PRINCIPAL HERITAGE OFFICER ARCHAEOLOGY

**Salary:** R116 658 – R135 438 per annum (Level 8).

**Requirements:** Honours degree in Archaeology and relevant experience in Heritage Resources Management. Computer literacy. Valid Code 08 driver's licence.

**Duties:** Ensure compliance with the KZN Heritage Act. Conduct archaeological surveys. Implement Heritage Management Programmes.

**A detailed job description** may be obtained on the Amafa website: [www.heritagekzn.co.za](http://www.heritagekzn.co.za).

**Forward your application and CV to:** The CEO, Amafa aKwaZulu-Natali, PO Box 523, Ulundi, 3838. **Closing date:** 30 May 2006.

sity was touched on more than once. It pleaded for promoting mutual respect and awareness of the common heritage. It implied that no individual tradition or participation of any one person or ethnic group may be denied the right to claim ownership to the exclusion of any other. No one should be prevented from participating, contributing and being proud of this universal heritage.

It deserves noting that a group of San made a particularly impassioned claim of being committed to the preservation and interpretation of rock art. They were emphatic about their reputation of being gentle, harmless and ready to share. But they were no longer prepared to be excluded. This contribution as well as the interest and commitment of fellow Africans marked the Homecoming of Rock Art in that guests from abroad no longer dominated the programme. The conference furthermore differed from similar events in that the main topic of discussion was documentation and preservation rather than interpretation. Several papers and discussions were accordingly devoted to the issue of cultural preservation and management. Case studies from all over the world related to a few common denominators: community participation and management of sites and their environment, and the sensitisation of the media, the public, decision-makers and the tourism industry. Consequently, the following resolution was unanimously adopted at the wrap-up meeting:

*The conference celebrating the Homecoming of Rock Art resolves to promote the awareness of humanity's heritage documented in rock art and other archaeological finds worldwide, but particularly in Africa.*

*The commonality found in the early history of mankind is reflected in the sentiment of unity in diversity.*

*It is recommended that:*

- ☐ *Local communities with an interest in rock-art sites will always be consulted and empowered to participate in, and benefit from, the conservation, presentation and management of the art and the intangible heritage associated with it.*
- ☐ *Communication between political decision-makers and partners in the society should become more prominent for the sake of preservation and publication of our heritage.*
- ☐ *Information relating to humanity's heritage documented in rock art and other archaeological finds should be incorporated in the school syllabus.*
- ☐ *A Department of Anthropology and Archaeology should be established at the University of Namibia.*

Those attending the wrap up session were not only in agreement with this resolution, but they also voted for a committee to ensure follow-up and report-back to the Pan-African Archaeological Conference to be hosted in Botswana in early July 2006.

# ARCHAEOLOGY AND GEOMORPHOLOGY: EENSAAMHEID PAN, NORTHERN CAPE

John Masson

*This is an informal account of the fortuitous find of a Late Acheulean (ESA) site in the Northern Cape and an attempt to place it within the time-frame of the changing landscape of the pan area from Plio-Pleistocene to recent times.*

During the closing stages of a colonial history research project in southern Namibia (Masson 1995, 2001), the trail of the central figure of the project led my wife and me across the border from Namibia to South Africa by a little-used crossing point into the red dune and white salt-pan country of the southern Kalahari. The trail ended on the farm Eensaamheid, about 100 km north of Upington, where our central figure, Jakob Marengo, a Namibian guerrilla leader fighting the Germans, was killed on 20 September 1907 in an overwhelming show of force by over 100 mounted police and troops of the Cape Colony.

On a visit to the farm in 1998, we met the owners, Stefan and Petro Malan. At some point, Stefan mentioned that there were Stone Age sites on the north side of Eensaamheid Pan, which an archaeologist had visited some years earlier, reporting that they spanned the whole period of Stone Age prehistory. It was not until 2001 that we were able to pursue Stefan's offer to take us to the area. We travelled the 15 km in an old battered pick-up, driving over the high dunes and down across the pan. We made several visits on our own in that year and the subsequent two years, camping in the 'straat' between the dune ridges, driving over the high dunes and down to the pan, racing across its hard dry surface to the north shore, then picking our way westwards over beach gravels right to the edge of the most promising site.

## Archaeology

This site is on a remnant of an old strandline or raised beach about 10 m above the present 'high water mark' and is bounded on the east side by a red dune and on the west by stony hillocky ground stretching away to another red dune in

the distance. The old strandline is liberally sprinkled with water-worn cobbles and pebbles, and a more discrete scattering of artefacts and waste material. Their most distinctive components are small end-struck and bifacially worked hand-axes, none larger than 120 x 80 mm, pointed flakes, some almost ovate, a few long (c. 80 mm) unretouched flakes and a number of side scrapers, all 'scaled down' like the hand-axes. The material used throughout is fine-grained sandstone or quartzite, except for one slim hand-axe of pink silcrete, and all of it represented in the water-worn cobbles and pebbles. The artefacts themselves are not heavily water or wind-worn and only lightly patinated, and appear to represent a homogenous assemblage.



*A sample of artefacts found at the site*

Despite a careful search of the site and other north shore strandline remnants and lower beach gravels, no 'larger-sized' (200-250 mm in length) Early Stone Age (ESA) bifaces as commonly known from Acheulean sites elsewhere, notably in Swaziland, were found. Only one small heavily-rolled Middle Stone Age (MSA) flake of black chert came to light amongst the beach gravels, which stretch for several hundred metres from the base of the elevated strandline to the 'shore'. However, in the hollows of a large red dune that protrudes onto the pan to the east of the site there are small flakes of translucent chalcedony and fragments of ostrich-egg shells that suggest a Late Stone Age (LSA) presence at some much later period. This might even relate to the historical period, because Bushman

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groups survived here into the early 20<sup>th</sup> century (Cornell 1920). Although only the one undoubted MSA flake was seen, it seems probable that an MSA site exists somewhere in the vicinity of the pan. The pan is saline and only during the first rains of summer does the run-off collect in brackish pools along the present shoreline. It is this meagre water resource that would have been used by early hunter-gatherers.

A study of the archaeological evidence led to the conclusion that it had an affinity with assemblages described as Fauresmith by Goodwin and Van Riet Lowe (1929) and that it was integrally linked to the evolution of the Levallois flaking technique and typology (Van Riet Lowe 1945). With regard to the hand-axe component, Van Riet Lowe observed 'that the hand-axe became less and less important and was gradually superseded and replaced by other types of tools until, in the Final Fauresmith, we cannot say whether we are at the end of the ESA or at the beginning of the MSA. This Final Fauresmith is literally a period of transition and is distinguished only by the presence of hand-axes; the remaining tools and *debitage* being completely MSA in form and fineness of finish' (1945:52). While the Eensaamheid assemblage certainly resembled the Fauresmith, it did not fit the description of the Final Fauresmith and appeared to be entirely ESA.

These early descriptions appear to have withstood the test of subsequent research because, as far as I am aware, only Sampson dismissed such assemblages as 'the now outdated concept of the "Fauresmith industry"' (1974:121). Recent overviews of South African Stone Age archaeology, e.g. Deacon and Deacon (1999: 93-4) and Mitchell (2002:62-3), recognise the Fauresmith in its own right as a step in the transition from the ESA to the MSA. Beaumont (1990) describes two Fauresmith sites near Kimberley in the Northern Cape and uses relative thickness values to show that the hand-axes there are thicker, though smaller, than their older, Acheulean counterparts. Also, in a more recent and detailed study of an Acheulean site near Taung in the Northern Cape, Kuman echoes the above quotation from Van Riet Lowe about the lingering presence of ESA hand-axes in an otherwise MSA assemblage (2001:20), though the term Fauresmith is used only sparingly. Nonetheless, it seems appropriate to give the small Eensaamheid sample a name, so it has been described here as Fauresmith-Acheulean.

## Geomorphology

Apart from the archaeological sites, there are other intriguing features of Eensaamheid Pan, such as the linear red dunes and the vast deposit of water-worn boulders of up to 1 m in diameter, and cobbles, pebbles and angular weather-shattered rocks at its northern end. If some temporal relationship between these two main aspects of the geomorphology could be established it might be possible to be more precise about where the site fits into the Acheulean time-frame. To attempt such an exercise without the benefit of surveying equipment may be regarded as not very meaningful, but I was able to locate part of a 1975 edition of the SA Surveyor General's 1: 50 000 Topographical Sheet of the pan area on which a large number of spot-heights had been plotted in lieu of contours. These spot-heights are used in the following summary of the Eensaamheid geomorphology.

The southern Kalahari dune field is the most arid part of the Kalahari Desert, with a mean rainfall of 150-200 mm, though with an inter-annual variability greater than 45 per cent (Leistner 1967:19; Stokes et al 1997:83). The farm track from our camp in the 'straat' climbs north over two high-fringing lunette dunes, with a maximum altitude of 909 masl before dropping steeply to the southern floor of the pan at 836 m. Such dunes lie downwind of the prevailing wind direction, in this case from the north to north-west across the pan, and are a common feature of southern Kalahari pan geomorphology described by Thomas and Shaw (1991:159). The north-western shore of the pan forms a wide embayment which is fringed by a cobble and boulder 'beach', which ascends gently inland until it meets the remnants of a higher strandline (the site area) that is partly overlain by fingers of linear red dunes and intra-dune (straat) vegetation. At the eastern end of the embayment is a remnant of a higher land surface, an older strandline or perhaps an ancient river terrace at a maximum height of 853 m. It has withstood erosion better than the lower strandline because of a capping of hardpan calcrete, which overlies a crumbling scarp of nodular (or honeycomb) calcrete. The lower strandline of the site area is strewn with water-worn cobbles and pebbles set in red sand from an encroaching dune and overlies a bed of nodular calcrete. The embayment ends in the west at a prominent linear red dune which runs down the western shore of the pan.

The lower strandline is at its most prominent in the western part of the embayment, which is bounded by the aforementioned red dune and backed by a wide intra-dune 'straat'. Indeed, because of the size of some of the boulders it has the appearance of a fluvial rather than a lacustrine or beach deposit and probably embouched on the pan (valley floor) as it lost gradient, producing an outwash fan. The rock types comprising the strandline gravels are mainly of the Karoo sequence – sedimentaries and volcanics – with older metamorphic rocks, e.g. cherts and jaspers. It seems probable that these gravels represent an ancient drainage line of the Molopo valley system, which flowed southwards towards the Orange River. Although now choked by sand in its lower course, the Molopo valley can still be recognized as a major fluvial feature, albeit relict, in this part of the Northern Cape (the present bed of the Molopo is about 50 km south-west of Eensaamheid). On this interpretation, the high level remnant could be a terrace of the ancient river system which, together with the lower strandline remnants, were eroded by fluvial action to the present beach level. Because of the intensity of river (or flood) flow required to mobilise the gravels, these events must have taken place long ago.

This strong fluvial action, which as has been postulated by Partridge and Maud (1987:198-200), arose in the wake of Late Pliocene tectonic uplift or tilting that, together with an intensification of desert-climate regimes, generated strong erosive run-off as is also especially evident in the rivers that flow into or traverse the Namib Desert to the west (Ward et al 1982: Table 1). The fluvial action could have been in the form of massive sheet floods in braided river courses and might have even begun in mid-Miocene times as a result of earlier tectonic movements.

It seemed likely that this period of river rejuvenation would have left its mark on other pans in the area. Indeed, Cornell, a diamond prospector who spent some time in 1912 in the area north of Eensaamheid and towards the Kuruman River valley, noted that most of the pans 'at some time contained a large quantity of water as the margin was covered with a miniature beach of pebbles of jasper, banded ironstone etc, identical with the deposit found along the Orange River' (1920: 262). It was he who saw Bushmen in the area. Cornell's observation was tested at Kumkum Pan, about 12 km south-east of Eensaamheid. In addition, the public road crosses the northern tip

of this pan on a spongy, salt-encrusted surface in which many ESA artefacts and flakes are embedded. Other nearby pans inspected from a distance did not reveal any major deposits, although there are some at Norekei Pan. Nevertheless, it seems possible that further research will reveal a wider spread of these Plio-Pleistocene gravels.



*The eroding face of the 845 m strandline that is at the top of the slope. Note the springbok track running across the slope.*

The present landscape of linear red dunes and vegetated 'straat' is of far more recent origin. Stokes et al (1997) have identified two periods of dune building in this part of the Kalahari, namely an earlier period from 270-230 000 years ago and a later period from 150-100 000 years ago. They do not rule out the possibility of the reworking of earlier aeolian deposits down to the contact with underlying sediments, but consider that the present red dunes represent the main reworking and development of the dune system of the south-west Kalahari and that no significant linear dune building occurred during the Holocene (1997:90).

The position is somewhat different in the north-eastern Kalahari which is now less arid than in earlier times, but has retained a longer record of aeolian activity. Stokes et al (1998:320) have identified four periods of aridity and dune building, viz. 1150-950 000, 460-420 000, 260-200 000 and post-200 000 years ago. The two younger periods are generally in line with the episodes in the southern Kalahari. Although the authors do not link the two data sets, it may be permissible to suggest that the earlier episodes in the north-eastern Kalahari also occurred in the southern Kalahari but are now not identifiable. This sequence of arid-humid climatic fluctuations

is also demonstrated by Partridge (2002) from the borehole core sediments of the Tswaing impact crater, which spans the past 200 000 years. In addition, evidence obtained from deep-sea sedimentary and polar ice cores shows the familiar but complex saw-tooth pattern of glacial-interglacial cycling, which is reflected in the fluctuating aridity of the Kalahari aeolian and sedimentary record during most of the Quaternary.

### The age of the assemblage

What can be gleaned from the foregoing information about the place of this proposed Fauresmith-Acheulean site in the Pleistocene period of southern Africa? The age of the Eensaaheid site should predate the succeeding MSA, which began about 200 000-250 000 years ago (Volman in Klein 1984; Deacon & Deacon 1999). Perhaps the Eensaaheid artefact makers were there upwards of 300 000-500 000 years ago in the mid-Pleistocene, by which time Plio-Pleistocene uplift and river rejuvenation had long deposited the gravels and eroded the higher strandlines, but also long before the formation of the potentially earliest red linear dunes in the Late Pleistocene, possibly about 100 000 years ago, and probably in a period when the area was no more arid than it is at present.

These observations are of necessity a simplification of the geomorphology and archaeology of the site, which offers plenty of scope for more detailed research in both fields, but they nevertheless offer a glimpse of a fascinating landscape that has changed enormously from late Plio-Pleistocene times (the last three million years or so) and which has presented obstacles and challenges to early human activity through the millennia, as indeed it does to the present day pastoral activities on Eensaaheid.

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## Archaeological and Cultural Tour: CITIES OF KINGS AND MYSTIC ARTISTS

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## WITS HONOURS DAVID LEWIS-WILLIAMS

Wits University in April 2006 conferred an Honorary Doctorate in Science on archaeologist David Lewis-Williams for elevating rock art studies, a traditionally descriptive and marginalised area of research, to the leading edge of archaeological method and theory. He was a catalyst in the development of the study of the southern San rock art that is now the best-studied corpus of rock art in the world. From the early 1970s to the mid-1980s his research focused on quantitative and statistical study of San rock paintings, reflecting a characteristic of all of his research: careful and rigorous data collection and analysis. By the late 1970s he had developed an interpretive approach employing symbolic anthropological techniques and ethno-historical data that resulted in detailed symbolic interpretations of San iconography. In more than 150 scientific articles and 14 books since that time he has created a large and coherent corpus of interpretations of San art.

Prof. Lewis-Williams' research and influences have extended far beyond rock art studies. His theoretical concerns have ranged from social theory to the social and political implications of archaeological practice.

He has contributed greatly to elevating the southern San into national consciousness. This fact was confirmed by President Thabo Mbeki's call upon him to compose the national motto for the new South African coat-of-arms, the centrepiece of which is a rock painting reproduced from one of his publications. The coat of arms' motto 'Diverse People Unite' is written in the Khoisan language of the /Xam people, the oldest known inhabitants of South Africa, and was adopted on the 6<sup>th</sup> anniversary of Freedom Day in 2000.

Lewis-Williams is also the author of one of the best-selling archaeological books of recent years – *The Mind in the Cave: Consciousness and the Origins of Art* – based on his extended research on European Upper Palaeolithic rock art. He joined Wits in 1978 as a lecturer in the Department of Social Anthropology and was appointed Director of the Rock Art Research Institute (RARI) in 1986. RARI has built up the world's largest archive of rock art recordings and became the leading centre for rock art training and publication. He recently received an A-rating from the National Research Foundation (NRF) and continues to serve Wits as Professor Emeritus and Senior Mentor.



## ARCHAEOLOGY IN AFRICA

### 'Missing Link' human skull found in Ethiopia

Palaeoanthropologists in Ethiopia have unearthed a near-complete *H. erectus* skull at Gawis in Ethiopia's north-eastern Afar region, which they say could be a 'missing link' between that species and modern man, as the face and cranium have features found in both early and modern human species. Gawis is situated near Hadar, where Donald Johanson in 1974 found the 3.2-million-year-old remains of 'Lucy', the partial skeleton of a hominid belonging to the species *Australopithecus afarensis*. The area is rich in fossil and archaeological deposits ranging from 10 000 years to 5.6 million years in age.

The cranium of the new discovery was found in two pieces in a small gully and is believed to be between 500 000 and 250 000 years old. The director of the Gona Paleoanthropological Research Project, Dr Sileshi Semaw, an Ethiopian research scientist at the Stone Age Institute at Indiana University, said the fossilised specimen came from 'a very significant time' in human evolutionary history and appeared 'to be intermediate between the earlier *H. erectus* and the later *H. sapiens*.' The face and cranium of the fossil are recognisably different from those of modern humans, but the specimen bears unmistakable anatomical evidence that it belongs to the modern human ancestral line, he said. 'It opens a window into an intriguing and important period in the development of modern hum-

ans.' Not much is known about the period in which *H. erectus* supposedly evolved into our own species. The fossil record for this period is sparse and most of the specimens are poorly dated. *H. erectus* lived from about 1.9 to 0.8 million years ago.



BBC News, 26 March 2006

[ArchSoc members who toured Ethiopia a year ago met with Dr Semaw and his team in the Afar region not far from where the new find has been made - ed.]

### When humans and chimps split

A study of genes in humans and chimpanzees pins down with greater accuracy when the two species split from one. The evolutionary divergence occurred between 5 and 7 million years ago, an estimate that improves on the previous range of 3 to 13 million years. Sudhir Kumar of Arizona State University used genetic sequencing to make the most comprehensive comparison to date of genes from humans, chimps, macaque monkeys and rats. He examined the number of mutations in the DNA sequence of each species to estimate its rate of evolutionary change.

LiveScience, 20/12/05

## WORLD ARCHAEOLOGICAL NEWS

### Italians find ancient Ur tablets

Italian archaeologists working in Iraq have found a trove of ancient stone tablets from the fabled civilisation of Ur. The tablets, made of clay and bitumen, bear around 500 engravings of a literary and historical nature. According to team leader Silvia Chiodi, the most surprising thing is the time span the tablets cover, ranging from 2 700 BC, the First Dynasty of Ur, to 2 100 BC, the Third Dynasty. Chiodi said the tablets would probably occupy a prominent place in a new Virtual Museum of Iraq, which Italy is building to show people what Baghdad's celebrated museum of antiquities looked like before it was looted in the wake of the US-led invasion of Iraq. About a half of 40 star attractions of the museum have yet to be retrieved. Of the 15 000 items taken from storerooms, 8 000 have not been returned, despite an amnesty.

Ur, near the southern Iraqi city of Nassiriya, is cited in the Bible as the birthplace of the prophet Abraham. It was the religious hub of Sumerian civilisation at the start of a series of dynasties that ruled Mesopotamia from around 4 000 BC. The most prominent monument at the site is the best-preserved ziggurat or stepped pyramid in the Arab world, which was built by the Sumerians around 4 000 BC and restored by Nebuchadnezzar in the 6<sup>th</sup> century BC.

ANSA, 28 March 2006

### Earliest evidence of organised warfare in Mesopotamia

A huge battle destroyed one of the world's earliest cities in upper Mesopotamia at around 3 500 BC, according to the University of Chicago and the Department of Antiquities in Syria. 'The whole area of our most recent excavation was a war zone,' said Clemens Reichel, the American co-director of an archaeological expedition to the mid-4<sup>th</sup> millennium BC settlement of Hamoukar. The discovery provides the earliest evidence for large-scale organised warfare in Mesopotamia. The team found extensive destruction with a 3 m high protective mud-brick wall having undergone heavy bombardment by sling bullets and collapse in an ensuing fire. The excavators retrieved more than 1 200 oval-shaped 25 mm long by 38 mm diameter bullets and some 120 round 64 mm to 102 mm diameter clay balls.

Excavations at Hamoukar have played an important role in redefining scholars' understanding of the development of civilisation. Earlier work had contended that cities first developed in the lower reaches of the Euphrates valley and that those early centres, part of the Uruk culture, established colonies that led to the civilisation of the north as the people sought raw

materials such as wood, stone and metals. Work at Hamoukar has shown that some of the elements associated with civilisation developed there independently of influences in the south and that the two forces may have had a violent confrontation. According to Reichel, dug into the destruction debris that covered the excavated buildings were numerous large pits that contained vast amounts of Uruk pottery. 'If the Uruk people weren't the ones firing the sling bullets they certainly benefited from it. They took over this place right after its destruction.'

Hamoukar has many distinctively urban features. Two large building complexes built around square courtyards have been excavated so far. Though both buildings follow closely a house plan known from other sites in Syria and Iraq, their function seems to have been non-domestic. One of the structures contained a large kitchen with a series of large grinding stones embedded in clay benches and a room-sized baking oven, suggesting that food production occurred here beyond the needs of a single household. In one of the complexes, stamp seals and over 100 clay sealings (lumps of clay used to close containers, usually impressed with a seal) were found, suggesting that it was used as a storage and commodities redistribution centre. It appears that certain elements of technological specialisation were present at Hamoukar several hundred years before the settlement's destruction.

University of Chicago, December 2005

The South African Archaeological Society was founded in 1945 to promote archaeology through research, education and publication. It publishes the *South African Archaeological Bulletin*, a scientific publication of current research in southern Africa (twice a year), *The Digging Stick*, the Society's general interest newsletter (three issues per year), and occasional publications in the *Goodwin Series*.

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