THE DIGGING STICK

Volume 23, No 3

ISSN 1013-7521

December 2006

## CONSCIOUSNESS: AN ALMOST-FORGOTTEN PART OF HUMAN EVOLUTION\*

#### J David Lewis-Williams

The picture alongside has become iconic. Feminist concerns aside, it represents the evolution of Man from a shambling, stooping, ape-like creature to the modern paragon we all know (and some admire). We notice that, towards the end of his evolutionary jour-

ney, he is carrying an object or two. He has become 'Man the Tool-Maker'. Or is the object a folded newspaper? 'Man the IT expert'. Or is it a cult object with supernatural powers? 'Man the Symbol-Maker'? '*Homo religioso*'?

When we contemplate this evolutionary sequence we tend to think in terms of increasing intelligence – the very faculty we ourselves use to try to understand human evolution and other problems in life. Perhaps because we value intelligence above all else, we believe that it was improving IQ scores that made evolutionary advance not only possible but also attractive. There is, however, another part of being human that is just as – arguably, more – important than intelligence. It is human consciousness. No one argues that intelligence is unimportant or that it is not in some ways related to consciousness, only that it is not everything.

If we wish to explain, for instance, why West European Upper Palaeolithic people some 35 000 years ago began to enter deep, dark

Prof. David Lewis-Williams is with the Rock Art Research Institute, University of the Witwatersrand, Johannesburg. david@rockart..wits.ac.za

\*This article is a short summary of a lecture presented at the 2006 Annual School of the South African Archaeological Society organised by the Trans-Vaal Branch. I thank the editor of the *Digging Stick* for requesting it. I also thank members of the Rock Art Research Institute, University of the Witwatersrand, for much assistance.



caves to make pictures, or how it was that, unlike their evolutionary forebears (for instance, *Homo erectus* or the Neanderthals), *Homo sapiens* communities were able to plan and imagine their movements weeks, even months, in advance and so improve their hunting strategies, or, for that matter, why people today still believe in a supernatural realm, straightforward intelligence will not be enough. We shall have to consider the role of consciousness.

To understand how important, but also elusive, human consciousness is, we can begin by considering our own daily experiences. We can



then try to compare our consciousness with that of various animals, even though we cannot, of course, think ourselves into their minds. Then we shall begin to see how it is that people came to make subterranean pictures and to hold religious beliefs.

### More than intelligence

Human consciousness is best thought of as a spectrum, comparable to the spectrum of light with its colours grading imperceptibly into one. another (see figure to the right). As our day passes, we slide from waking problem-oriented thought into daydreaming, into deep reverie, into sleep and (perchance) dreaming and, finally, into what we call unconsciousness (something of a misnomer), and then back to alert consciousness when we wake up. This back and forth shifting is neurologically controlled. There is evidence that our normal waking day comprises cycles of 90 to 120 minutes of moving from outward-directed attention to inward-directed states. It is just the way that our brains work. The number of divisons (e.g. day-dreaming, sleep dreaming) we recognise along the spectrum is not given; rather, we impose them on the 'sliding scale' of consciousness to help us understand what is a complex and subtle matter. Some researchers may recognise more 'stages' than their colleagues do.

People all over the world and, so it seems, throughout time have been intrigued by the shadowy end of the spectrum. Where, they ask, are we when we meditate, and what is really happening to us when startling thoughts suddenly burst upon us, or when we dream about being in another world, a fantastic, labile realm that does not obey the rules of our daily material world? Perhaps as a (partial) result of intriguing experiences like these at the 'deep' end of the consciousness spectrum, people have long and everywhere tried to induce such states and the hallucinations that so often go with them. They want to explore mysterious mental domains. These domains are what are generally known as 'altered states of consciousness'.

We must remember that these states vary greatly: some are intense and shocking, others are mild and comforting. All religion involves tinkering with consciousness in one way or another. Some people use meditation or profound prayer to induce states of peace and bliss, others turn to ecstatic dancing, drumming and chanting to shift their consciousness towards the mysterious end The spectrum of human consciousness



of the spectrum. Additional means of altering consciousness are numerous. All of them are used by people somewhere; they include taking hallucinogens, sensory deprivation (utter silence and darkness), pain (perhaps self-flagellation), repetition of a mantra, fasting and fatigue. Then we must also allow for pathological states, such as temporal lobe epilepsy and schizophrenia with their hallucinations of people, monsters and voices (all the senses hallucinate). In some socially approved religious contexts pathological conditions such as these are taken as divine visitations rather than madness. This rather extreme section of the consciousness spectrum we can call an 'intensified spectrum'. It is ordinary, fluctuating consciousness pushed beyond normal limits - intentionally or unintentionally.

How do we know about human consciousness? There are two ways of studying consciousness. The first is phenomenological, that is we study the phenomenon of consciousness by observing other people and ourselves and by listening to what people who have experienced altered states of consciousness say about their experiences. The other way of studying consciousness is through neurology. Neurologists study the way

2

in which the brain functions, its components and lobes, its neural pathways, synapses, neurotransmitters and electrical impulses. Needless to say, this is a very complicated undertaking and much still needs to be learned. I shall therefore stay with the phenomenological approach and describe some of the repeated elements that crop up again and again in people's accounts of their experiences and that must therefore be wired into the human brain in some way.

Regardless of culture, which is an important aspect, there are worldwide regularities in altered state experiences. This means that, if Upper Palaeolithic people 35 000 years ago had fully modern brains (few, if any, researchers would question this), they must have had experiences similar to the ones reported today, the ones wired into our brains. But what they thought about them and how they understood them in terms of their Upper Palaeolithic lives is another matter altogether. The structure of consciousness is hardwired, but its content is to a large extent, but not entirely, cultural.

#### **Cosmological levels**

Let us now consider two hard-wired experiences. They are directly relevant to the problem of why Upper Palaeolithic people went into deep caves to make pictures and, indeed, why and how they came to make pictures at all.

The first is an experience that many people report as they move towards the intensified end of the consciousness spectrum. It is a spiralling vortex, or tunnel, through which they pass. Depending on cultural context, people think of this experience as a hole in the ground, passing underwater, walking down a lengthy corridor or beneath the arches of a long cathedral nave. In a frequently reported near-death experience, people seem to move through a passage with a bright light at the end. Their brains are shutting down and they are entering an altered state of consciousness in which hard-wired experiences begin to take over.

The other experience is of weightlessness and floating. All over the world shamans who enter altered states speak of flying to supernatural realms or to other parts of the material world. They often speak about rising up and becoming attenuated. Sometimes they combine the floating experience with the vortex; they rise up in order to enter a tunnel where they may have to fight off frightening spirits bent upon barring their way. Sometimes they combine all this with an underwater interpretation of their experiences; they swim through constricting waters towards a light. (Incidentally, all these states are experienced by San religious practitioners and are depicted in San rock art.)

Out of these two experiences of passing through a tunnel and floating comes a conception of the cosmos that is, to all intents and purposes, universal. Why, we may ask, do almost all people everywhere think of the cosmos as tiered? They believe that there are at least three levels: the one on which we live our daily lives, one in or beyond the sky and a third beneath our feet, underground. Some societies believe in multiple zones both above and below the earth. Yet, if you come to think about it, there is no observable, material evidence for the existence of these two spiritual realms. Just as thunder does not naturally and inevitably betoken the presence of a god above, we have to believe in spirits before we recognise their activities in the sky or, for that matter, beneath our feet.

If we combine the floating and vortex experiences with the hallucinations and visions we encounter at the dark end of the consciousness spectrum, we have an almost universally conceived cosmos. People everywhere believe that there is another realm occupied by spirits and forces that have some bearing on life in the material world - the spirit realm seems to have an unnerving tendency to break into our world. They also believe that these spirits and forces reside in realms above and below. In traditional Christian belief we have Heaven above and Hell below. But the spirit world is not only in remote places. It is also inside our heads, wired into our brains. People therefore think of the spirit world as simultaneously transcendent and immanent.

## **Upper Palaeolithic caves**

It is now becoming clear what was (I argue probably) happening in the Upper Palaeolithic caves of France and Spain. People entered the caves in the belief that they were going into a subterranean spirit realm. The cave in the mind (the vortex) became virtually indistinguishable from a cave in the ground. The passageways were the entrails of this underground realm.

The shapes of caves are, however, all different. Add to this point the fact that everyday society was already divided into leaders and various groups of people, some with more power or influence than others. In using the caves, people found that all the varied parts – large chambers, connecting passages and very small *diverticules* – meant that the overall community of people was necessarily divided up into groups that could fit into the available spaces: numerous people in the larger areas and only a few special people in the remote, smaller areas (see figure below). The act of making underground pictures in different parts of the caves could thus be harnessed to reinforce – to dramatise – these social divisions. How could this be done?



For Upper Palaeolithic people, caves led to an underworld where they could contact powerful spirits and animals

The entire community could gather outside a cave. A limited number of people may have met in a large chamber near the entrance (like the Hall of the Bulls in Lascaux) to make pictures communally and to chant and dance. Then certain selected people went farther into the narrow tunnels where only one or two could go at a time to seek visions of powerful spirit animals (like the Chamber of Felines, also in Lascaux). In the sensory deprivation of the underground chambers and perhaps (but not necessarily) aided by hallucinogens, intense concentration, chanting and meditation, they 'saw' what they had been prepared to see (probably with the help of other more experienced religious leaders), like a limited number of animal species that were believed to have supernatural power. When someone who had had such an experience climbed back to the daylight, he or she was probably imbued with new power and influence.

When people see hallucinations, their mental images are often experienced as projected onto a wall or flat ceiling, rather like a slide or film show. Upper Palaeolithic people could then reach out to make contact with their now-invoked spirit animals, to touch them and to 'fix' them on the wall with their fingers in soft mud or with paint or engraved lines. In this way the conventions for representing three-dimensional things (such as animals) by a series of two-dimensional lines on a plane surface were *discovered to be already within the human brain*, rather than being invented by one or two especially intelligent people.

#### **Religion and divisiveness**

All religion depends on uncanny experiences and revealed knowledge. It is science that produces knowledge that can be verified, tested and rejected if necessary. Revealed knowledge necessarily carries with it the approval of God. That means that some people have more contact with God than others and people outside a given religion are believed to have much less, if any. People who experience altered states of consciousness frequently claim to have gained insights into the very meaning of life, but when we question them about exactly what that meaning is we hear only trivial platitudes. Yet they believe they have profound knowledge. Perhaps we should not be surprised at the divisiveness of religion in today's world.

So, when we contemplate the human evolution sequence at the beginning of this article, we see that there has been a sustained development of intelligence and better understanding about how the world and even the human brain itself work. But we are also still carrying the mental baggage of long-gone millennia. Still today, shifting consciousness remains a source of bizarre beliefs and divisiveness.

#### Further reading

Edelman, GM and Tononi, G. 2000. *Consciousness: How matter becomes imagination*. London: Penguin.

Kurtz, P (ed.). 2003. *Science and religion: Are they compatible?* Amherst, NY: Prometheus Books.

Lewis-Williams, JD. 2002. *The mind in the cave: Consciousness and the origins of art.* London & New York: Thames & Hudson.

Lewis-Williams, JD. 2003. *Images of mystery: Rock art of the Drakensberg.* Cape Town: Double Storey. French edition, Paris: Le Seuil.

Lewis-Williams, JD and Pearce, DG. 2004. San spirituality: Roots, expressions, and social consequences. Walnut Creek, CA: AltaMira Press; Cape Town: Double Storey.

Lewis-Williams, JD and Pearce, DG. 2005. *Inside the Neolithic mind: Consciousness, cosmos and the realm of the gods*. London & New York: Thames & Hudson.



## THE ROCK ART OF THE BRANDBERG/DAUREB IN NAMIBIA

### Tilman Lenssen-Erz

Over the past 30 to 40 years southern African rock art has experienced a remarkable development. From being a mainly antiguarian and aesthetic interest of white academics and amateurs, though an avant-garde theoretical discourse within archaeological circles, it has moved back to the ordinary people in rural areas who (re-) appropriate this heritage for their claims for land and identity. The rock art recording project of the University of Cologne has been an archetypal part of this development. The project was started in 1963 and received continuous funding from the Deutsche Forschungsgemeinschaft (German science foundation) until October 2006 - a full 43 years! The main focus was always of an archaeological nature aimed at the collection of data supported by thorough archaeological documentation (Kuper 1989). Eventually it took on more expressly theoretical (if contested) stances and in recent years it has linked up with rural communities.

Chief results of the project are a large-scale record of rock art all over Namibia (Scherz 1970, 1975, 1986) and valuable archaeological evidence on the antiquity of the art. Excavations by Wendt in southern Namibia yielded a date of approx. 27 000 years for the oldest art (Wendt 1976), while Breunig and Richter dated parietal art in the Brandberg/Daureb at 2 700 years (terminus antequem; Breunig 1989). As an offshoot of the project, recordings of rock engravings in South Africa by Gerhard and Dora Fock were supported and published as well (Fock 1979; Fock & Fock 1984, 1989). But the largest amount of work was dedicated to the rock art of the Brandberg/Daureb, where Harald Pager started his documentation in 1977.

After his untimely death in 1985 (Lenssen-Erz 1986), a whole team took over to publish his recordings (Pager 1989, 1993, 1995, 1998, 2000). The project ended with the publication of the sixth volume (Pager 2006). It resulted in roughly three quarters of the Brandberg/Daureb rock art (and well over 80 per cent of Pager's documentation) being published in book format.

New funding has to be found for the remaining volume and the date of publication is still undecided. All in all these books consist of some 4 000 pages of catalogue publication in which every single figure and every scene is reproduced and filed according to specifically designed analytical schemes (Lenssen-Erz 2001).

The project with its strict documentarian approach has received harsh critique (e.g. Lewis-Williams 1990; Dowson 1990; Kinahan 1995) in which its theoretical foundation is contested. However, either the existing theoretical papers were ignored (e.g. Kinahan 1995) or misrepresented (e.g. Lewis-Williams 1990: 129 in which an explicitly heuristic approach is described as a claim for objectivity). Another line of critique was that the structuralistic analysis destroys the complexity of the art (Dowson 1990: 175) and the creativity of the artists (Lewis-Williams 1990: 135). This is based on a deep misconception of such an analysis - the same stance might be taken in criticising that English grammar destroys the complexity of language in a Shakespearian theatre play. On the other hand, no alternative hypotheses have been forwarded for the ecological (e.g. Lenssen-Erz 1994) or spatial (Lenssen-Erz 2004) interpretations.

An example of the development that has taken place over the life of the project is the naming of the mountain that has been at the centre of the project. In the first years of readying Harald Pager's documentation for publication it seemed obvious simply to use the name 'Brandberg', since the local Damara name 'Daureb' was hardly established beyond the region. Dâureb means 'the burning one' in Khoekhowab (W Haacke, pers comm) and today the indigenous community living below the mountain in the small town of Uis has started to replace the colonial name, such as in Daureb Mountain Guides and Daureb Crafts. There is strong evidence that Daureb is an original name for the mountain among the indigenous population and not a derivation of its European name, even though the German Brandberg means 'burning mountain'.

The early Swedish traveller Andersson reported on the activities of a Captain Messum, who in the

Dr Tilman Lenssen-Erz is a rock art archaeologist with the African Archaeology Unit, Institute of Prehistoric Archaeology, University of Cologne, Germany. lenssen.erz@uni-koeln.de

mid-19<sup>th</sup> century was the first European to explore the Brandberg/Daureb region from the coast (after Vedder 1934: 396). He encountered about 50 families of 'Berg-Damaras' living together at the foot of a steep mountain, which they called 'Dourissa'. It is not difficult to identify in this word the female form 'Dâures', which even today can still be found occasionally. (In Khoekhowab the ending '-b' is masculine and usually denotes strong, hard, high things, while the feminine '-s' stands for soft, wide and weak things.) There is no indication that the name 'Brandberg' was established at this time, even though the first visit by a European to the central Namibian highlands was by a Pieter Brand in 1792. However, he does not seem to have come anywhere near the Brandberg/Daureb (Vedder 1934: 34) and until Captain Messum's presumed visit, this area was off the main Namibian travel routes. It is inconceivable that the name should have travelled to the remote local population of the region, who would have had to retranslate it into their vernacular by 1850.

Today, it would seem appropriate to name the mountain by its two most established names, even if after another ten years or so the common usage may be just Daureb. Other indigenous names are also beginning to surface, such as Danibeb ('honey mountan', T !Oe'amseb, pers. comm) for the highest peak, which today is usually still being referred to by the German

colonial name 'Königstein' ('king's rock').

Within the last ten years the Brandberg/Daureb and its cultural heritage have become an important resource for the Uis community, for whom almost no other source of income is available. While as late as the early 1990s rock art was virtually unknown to these people, as a result of visits by them to rock art sites and the availability of books on rock art (which were donated to the school by the Heinrich-Barth-Institut), they gradually became acquainted with the art. At first they used it for souvenir production, but later, after training as guides, they began to organise guided tours to the White Lady Shelter and to other sites in the Brandberg/Daureb. Today, two individuals are permanently employed by the National Heritage Council, while a dozen others regularly work as guides on a freelance basis. Their service is enhanced by the training they receive as guides and by new visitor centres that have been established in Uis and at the start of the White Lady trail. Those who began as informal, unorganised and officially not approved parking attendants have now established an approved, professional, income generating and community based cultural tourism organisation.

#### Reprint of 'Amis Gorge' volume

The (preliminary) end of the Cologne rock art project was celebrated by Harald Pager's documentation being handed over officially to the National Museum and National Archives of Namibia in 2005 and an international conference being held in Windhoek under the theme 'A Homecoming of Rock Art' (Sandelowsky 2006). Two other conclusive events occurred: not only did the 6<sup>th</sup> rock art monograph in the series, entitled The Rock Paintings of the Upper Brandberg, see the light of day (Pager 2006), but plans to reprint the first volume in the series, Amis Gorge (Pager 1989), were announced. This volume was sold out just one year after its appearance and has since been much soughtafter. The decision to reprint is based on a suf-

> ficient number of enquiries having been received by the publisher, the Heinrich-Barth-Institut.

Readers who have an interest in collecting the series, but who have not been able to obtain the first volume can now subscribe for a copy, which will cost €100 plus postage costs from Germany and local handling costs. Purchase of the second edition is highly recommended as antiquarians charge exorbitant prices for the first edition. Orders are being taken by the South African Archaeological Society (contact Reinoud Boers, e-mail: fox@boers.org.za, or tel/fax: 011 803 2681).

#### References

Breunig, P. 1989. Archaeological investigations into the settlement history of the Brandberg. In: Pager, H. *The rock paintings of the* 

The Digging Stick

Vol 23(3) December 2006



*Upper Brandberg – part I, Amis Gorge*. Cologne: Heinrich-Barth-Institut: 17-45.

Dowson, TA. 1990. Rock art research's umbilical cord: A review of *Africa Praehistorica*, Vol. 1. *Cimbebasia* 12:172-176.

Fock, GJ. 1979. Felsbilder in Südafrika. Teil I. Die Gravierungen auf Klipfontein, Kapprovinz. Cologne, Vienna: Böhlau Verlag.

Fock, GJ and Fock, D. 1984. *Felsbilder in Südafrika. Teil II. Kinderdam und Kalahari.* Cologne, Vienna: Böhlau Verlag.

Fock, GJ and Fock, D. 1989. *Felsbilder in Südafrika. Teil III. Die Felsbilder im Vaal-Oranje-Becken.* Cologne, Vienna: Böhlau Verlag.

Kinahan, J. 1995. Theory, practice and criticism in the history of Namibian archaeology. In: Ucko, PJ (ed.) *Theory in archaeology: A world perspective*. New York & London: Routledge: 76-95.

Lenssen-Erz, T. 1994. Jumping about – Springbok in the Brandberg rock paintings and in the Bleek/Lloyd collection. An attempt at a correlation. In: Dowson, TA and Lewis-Williams, D (eds). *Contested images: Diversity in Southern African rock art research.* Johannesburg: Witwatersrand University Press: 275-291.

Lenssen-Erz, T. 2001. *Gemeinschaft – Gleichheit – Mobilität. Die Felsbilder im Brandberg, Namibia, und ihre Bedeutung. Grundlagen einer textuellen Felsbildarchäologie.* Cologne: Heinrich-Barth-Institut.

Lenssen-Erz, T. 2004. The landscape setting of rock-painting sites in the Brandberg, Namibia: Infrastructure, Gestaltung, use and meaning. In: Chippindale, C and Nash, G (eds). *Pictures in place: The figured landscapes of rock-art.* Cambridge: Cambridge University Press: 131-150.

Lenssen-Erz, T and Erz, MT. 2000. *Brandberg – Der Bilderberg Namibias. Kunst und Geschichte einer Urlandschaft.* Stuttgart: Thorbecke.



# The Rock Paintings of the Upper Brandberg – part VI, Naib (B), Circus and Dom Gorges. 2006

Limited edition, format 240 x 340 mm, cover in colour Tome 1: Half linen-bound, 456 pp with thousands of rock art reproductions, 8 colour plates

Tome 2: Hardcover box containing paperback (196 pp) with tables, 9 folded plates (700 x 1 000 mm) with large-scale rock art friezes

Price: Rand equivalent of € 100 plus shipping costs of € 17 (credit cards welcome)

Orders: Contact Reinoud Boers Tel/Fax: 011 803 2681 E-mail: fox@boers.org.za

Orders are also taken for the second edition of Volume 1

Lewis-Williams, D. 1990. Review article: Documentation, analysis and interpretation: Dilemmas in rock art research. *South African Archaeological Bulletin* 45: 126-136.

Pager, H. 1989, 1993, 1995, 1998, 2000, 2006. The Rock Paintings of the Upper Brandberg: Part I – Amis Gorge; Part II – Hungorob Gorge; Part III – Southern Gorges; Part IV – Umuab and Karoab Gorges; Part V – Naib Gorge (A) and the Northwest; Part VI – Naib (B), Circus and Dom Gorges. Cologne: Heinrich-Barth-Institut.

Sandelowsky, B. 2006. A homecoming of rock art – Harald Pager's work returns to Namibia. *The Digging Stick* 23(1): 13-14.

Scherz, ER. 1970, 1975, 1986. *Felsbilder in Südwest-Afrika: Teil I – Die Gravierungen in Südwest-Afrika ohne den Nordwesten des Landes* (Fundamenta A 7/I); *Teil II – Die Gravierungen im Nordwesten Südwest-Afrikas* (Fundamenta A 7/II); *Teil III – Die Malereien* (Fundamenta A 7/III). Cologne, Vienna: Böhlau Verlag.

Vedder, H. 1934. Das alte Südwestafrika. Berlin: Martin Warneck Verlag.

Wendt, WE. 1976. 'Art mobilier' from the Apollo 11 cave, South West Africa: Africa's oldest works of art. *South African Archaeological Bulletin* 31: 5-11.



#### ARCHAEOLOGY IN BRIEF

Palaeolithic Age stone tools found in China. Archaeologists have discovered 21 sites of ruins and thousands of stone tools dating back to more than 20 000 years ago in north-west China's Shaanxi province. The stone implements include fine stone cores, a millstone and other tools. The most eyecatching discovery was a polished shovel made of shale, which is 127 mm long, 92 mm wide and 8 mm thick. Experts estimated it to be the earliest polished stone tool ever discovered in the country.

Rxpgnews, 13 December 2006

**Graves hint at contact with Romans.** Ancient graves excavated in western Sweden have yielded sherds from ceramic vessels made in the Roman Empire. The find could challenge assumptions about contacts between people in Sweden and the Romans. The graves in Stenungsund have been dated to between 1 and 300 AD. The remains of burned bones from two people were also found. 'There are pieces from four or five vessels in each grave; we have never previously found so many in Sweden,' said Bengt Nordqvist, who is leading the dig for the National Heritage Board. 'Over in Europe this kind of discovery is normal, but in Sweden it is very unusual.'

The Local, 8 November 2006

**6 500 year-old Neolithic shrine in Prague.** Archaeologists have uncovered a third 6 200 to 6 500year-old round shrine, or rondel, in Prague. The 23 m diameter rondel was enclosed by two ditches with three palisades and had gates facing east and west. Round Neolithic buildings, built by descendants of old farming cultures, are found in eastern Germany, the Czech lands and Hungary, and could have spread from the Danube River valley, where the Neolithic culture originated.

CTK Czech News Agency, 9 June 2006

## STRAIGHTENING THE RECORD EVEN FURTHER

#### Andrew B Smith

I must thank David Lewis-Williams for jumping to Alex Willcox's defence regarding the reading of my note in the April 2006 issue of *The Digging Stick.* I must admit that I had not seen Willcox's rejection of Breuil's interpretation of the 'White Lady' of the Brandberg. However, that was not the intent of my note. I was focusing on Willcox and Van Riet Lowe's belief that connections could be made between the rock art of the Iberian Peninsula, the Sahara and Southern Africa, as depicted in his map (Willcox 1984: 251, map 21-1).

To quote Willcox (1984: 250): 'The case for diffusion is strongly supported by the archaeological evidence of the associated stone implements which all the way from Eastern Spain and North Africa ... to the Cape ... are microlithic industries of the same general kind. The occurrence of paintings showing bows and arrows in all areas affords further evidence for cultural diffusion (or migration of peoples).' Willcox may have rejected Breuil's interpretation of the 'White Lady', but he could, like Jeffreys (1968) before him, still accept that 'Hottentot languages show an affinity in certain respects to "Hamitic" languages' (Willcox 1984: 25), a belief that had been strongly rejected as far back as 1934 by Maingard.

#### References

Jeffreys, MDW. 1968. Some semitic influences in Hottentot cultures. Johannesburg: Wits University Press.

Maingard, LF. 1934. The linguistic approach to South African prehistory and ethnology. *South African Journal of Science* 31: 117-143.

Van Riet Lowe, C. 1949. Rock paintings near Cathedral Peak. South African Archaeological Bulletin 4: 28-33.

Willcox, AR. 1984. The rock art of Africa. Johannesburg: Macmillan.



#### *Earth Bow – an etching by Lyn Smuts. This is 14/40 in the edition.*

Lyn is a partially deaf artist doing her master's in sound perception



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

# THE CAPE GALLERY



60 Church Street Cape Town 8001 Tel/Fax 021 423 5309 E-mail: cgallery@mweb.co.za Web-sites: www.capegallery.co.za www.capeinfo.com/capegallery

Gallery Hours: Mon - Fri 9.30 am - 5.00 pm Sat 9.00 am - 1.00 pm

Mastercard Visa Amex Diners Club

Arrangements can be made to freight your purchases home.

# SHIPWRECKS, SURVIVORS AND TRAGEDY The potential for shipwreck survivor camp research in South Africa

#### Liz van Tonder

The Portuguese were one of the first European nations to carry out far-reaching voyages of maritime discovery and exploration. Because these vovages formed such an integral part of Portuguese society, the genre of world shipwreck stories had its modest beginnings within this culture. In 1488 Bartholomeu Dias became the first European to sail from the Iberian Peninsula to the southern tip of Africa. The rounding of the Cape of Storms, so named by Dias, was a momentous event offering Portugal the promise of a sea route to India. But within less than a hundred years, between 1552 and 1647, eight homeward bound ships, inadeguately surveyed and repaired in India and also fatally overloaded with trade goods from China and India, had been wrecked on or near the South African coast (Duffy 1955).

#### A tragic history

The first of these ships, the *São João*, is one of the greatest enigmas in South African maritime history, not only because so little is known about its cargo, passengers and crew, but also because the location of the wreck has puzzled researchers from the early 20<sup>th</sup> century. It is an important part of South Africa's maritime history as it was the first cargo ship to be wrecked along the country's coastline. Although not the true location of the wreck, the coastal town of Port St Johns at the mouth of the Umzimvubu River serves as a reminder of the tragic story, since it is named after this 16<sup>th</sup> century galleon.

The account of the wrecking of the São João with her cargo of Chinese porcelain, cotton piece chin in India on 3 February 1552 with a little more than half the amount of pepper the ship was capable of carrying. According to the survivor account, the difference in cargo was made up with other merchandise, which made her an exceptionally heavily laden ship (Theal 1898).

Sailing with favourable winds along the coast of Natal, the *São João* made it as far as 25 leagues (75 nautical miles or 120 km) from the Cape of Good Hope. Here headwinds were encountered and because the ship was so large, long and heavily laden, the captain, the master and the pilot decided to turn the ship around and sail with the wind. The vessel laboured in the rough seas for 27 days and successive storms damaged the ship even further. They lost the mast, topsail, mainsail, other shrouds and, most important, the rudder. An emergency, makeshift rudder proved to be useless as it was too short and the ship could not be steered with it (Theal 1898).



Fig 1: Map showing the possible locations of 16<sup>th</sup> century Portuguese shipwreck sites (see table)

goods, carpets, carnelian beads and precious stones is considered the most famous of all Portuguese shipwreck stories. She left Co-

Liz van Tonder is a maritime archaeologist. She studied the *São João* survivor camp for her Masters degree and is enrolled for a PhD degree at the University of Pretoria. wrecks@lantic.net

Portuguese snipwrecks under investigation and their location	Portuguese sh	ipwrecks un	der invest	tigation	and their	locations
--	---------------	-------------	------------	----------	-----------	-----------

Ship	Year	Month	Wreck site	Length of stay	No. of survivors	
São João	1552	June	Port Edward area	12 days	25	
São Bento	1554	April	Msikaba River Mouth	26 days	322	
São Thomé	1589	March	Possibly near Hully Point	1 day	98	
Santo Alberto	1593	March	East London	9 days	285	
São João Baptista	1622	October	Near the Great Fish River	± 1 month	279	
São Gonçalo	1630	July	Plettenberg Bay	11 months	100	
Nossa Sehora De Belem	1635	July	Port St Johns	6 months	260	
Nossa Senhora Da Atalaya	1647	_July	Cintsa Bay	12 days	270	

On 8 June they were once again in sight of the Natal coast and having no other choice, with the rudderless ship leaking badly and served only by a few dilapidated sails, the captain and his officers decided to let the ship drift with the current until they reached a depth of ten fathoms (about 18,2 m). On approaching the shore one of the boats was launched to find a safe place to beach. A suitable area was located and the captain managed to steer the galleon to the selected area, the ship being anchored in seven fathoms of water. The captain, his wife and children were put ashore with some 20 men to guard them against possible hostile inhabitants and the boat made several successful trips from ship to shore before it was destroyed in the surf.



Fig 2: Aerial photo of sites PED1 at Tragedy Hill and PED2 on Keisers Farm (Photo: J Coetzee)



Fig 3: Aerial photo showing site PED3 in relation to the Kuboboyi River (Photo: J Coetzee)

The *São João* was driven ashore with the remainder of the ship's crew and passengers still on board. The galleon split in two pieces amid-ships and within an hour these broke into a further four pieces. This breaking up caused the merchandise and boxes to float to the surface and crew members tried to get ashore using these as floats. More than a hundred passen-

gers, slaves and crew were lost. The loss of cargo was as catastrophic, being described by the survivors in the following manner: '... the merchandise in the ship, belonging to the king and others, was worth a million in gold, for a vessel so richly laden had not left India since it was discovered' (Theal 1898).

There were no means by which the survivors could build a craft to take them to Mozambique as the São João had been broken up completely. The survivors formed a company of some 500 and remained on the shore at the wreck site to salvage anything useful thrown up on the beaches and to give the injured time to recover. They had access to drinkable water and built a sort of fortification with chests and barrels and, unlike some other shipwreck victims, were apparently not disturbed or confronted by indigenous people from the surrounding area. After 12 days, on 7 July, they decided to walk along the coast towards Mozambique and suffered greatly during the journey. Eventually, only 25 of the original 500 or so shipwreck survivors reached Ilha de Moçambique on 25 May 1553 (Theal 1898).

## Methodology

Modern-day literature and film confirm that maritime disasters, sea battles and shipwreck survivors are an enduring fascination. As a result, we find ourselves familiar with the psychological trauma of the wreck crisis, the difficult dynamics of individual or group isolation and the necessity for survivors to salvage the wreck and adapt to unfamiliar and potentially hostile environments. Yet research on the subject of survivor camps is limited, not only in South Africa, but internationally. It is for this reason that a project was launched in 2001 with the aim of locating the survivor camp of the *São João*.

Envisioning the actions of the survivors once on land formed part of the method developed to build predictive models of the possible location of the survivor camp of the *São João*, while the descriptions of other Portuguese campsites along the south-east coast of South Africa played a significant role in this regard. The fact that there were eight Portuguese shipwrecks within a period of less than a century (1552 to 1647) and that they were all wrecked between Port Edward and Plettenberg Bay (see table) meant that the survivor camps not only shared a period of time, but a region characterised by more or less the same climate and vegetation. Information available from the other wrecks was of great value in indicating the manner in which Portuguese survivor camps were constructed. By applying a comparative historical archaeological approach, a template of survivor camp characteristics could be developed to obtain what can be regarded as typical. These characteristics were then applied to develop predictive models for the possible location of the site. Both the positive factors that supported and the negative factors that detracted from a location were listed to determine the most viable option.

#### Survivor camp characteristics

The survivor sites were never more than 1 km from the actual wreck site and were located as close as possible to fresh drinking water. The survivors sought shelter from the wind and weather in the colder months of June, July and August and the shelters were more often than not placed strategically close to a wood, trees or a thicket to provide protection against weather and against possible enemies. In most cases the camps were erected on flat areas, as they had to accommodate large numbers of people. Most survivors mentioned that they erected tents, wooden structures, shacks or houses made from the merchandise they had salvaged from the ship. The camps often consisted of smaller units or tents, built within the limits set by the captain. The salvaged provisions were placed in the centre of the camp, where they were guarded.

The survivors were divided into groups, squadrons or parties. In nearly all cases the passengers were separated from the seamen and soldiers. The captain stayed with the passengers, though in a few cases he was separated to keep watch. In only one instance were burials mentioned, even though there were always fatalities.

#### The São João survivor camp

The comparative analysis and geographical survey of the *São João* survivor and other Portuguese shipwreck accounts (Fig 1) indicated three possible locations for the wreck in the area of Tragedy Hill (Port Edward) worthy of investigation (Burger 2003). These included PED1 at the foot of Tragedy Hill, PED2 in the centre of Keisers Farm and PED3 closer to the Kuboboyi River (Figs 2 and 3).

A comparison of the predictive models indicated



Fig 4: Chinese porcelain sherds, dated according to motifs, are common in Port Edward. The top centre piece has the mark of the Jiajing period, which dates the Port Edward porcelain to between 1522 and 1566.

that PED2 was the most likely site for the *São João* survivor camp. Subsequent excavations in the area of PED2 yielded artefacts, food remains and other details that complemented the historical record and strengthened the theory that PED2 is in fact the location of the camp. The discovery of a large cache of peppercorns of foreign origin at the site merits the continuance of research in the area, especially since the peppercorns are the first cultural remains found that may be linked to a survivor camp (Figs 4, 5, 6 and 7).

Fig 5: Cypraea moneta, commonly known as money cowries. They are not indigenous to the south-east coast of South Africa.



## The future of survivor camp research

The next step should be to broaden the framework of maritime archaeological analysis on survivor camps, whereafter one could move towards addressing some of the concerns that motivate other areas of archaeological research. These are the development of models on survivor behaviour and first contact with indigenous peoples. This could be attempted by looking at survivor accounts, archaeological analyses and descriptions of the material record.

In the future a compilation and analysis of the accounts and reminiscences of indigenous peoples with whom the survivors made contact could be considered for research to establish the extent and effect of that contact on such peoples and their societies. Proposals have recently Fig 6: Some examples of the carnelian beads that are washed onto the beach in Port Edward



Fig 7: Some of the peppercorns found at site PED 2

been made for a project to do genetic ancestry testing and oral history recording along the Wild Coast and in areas where descendants of shipwreck survivors now live. The aim would be to establish correlations between the ancestral stories encoded in people's genes and the written and surviving oral histories.

Research on shipwreck survivor camps could have the following outcomes:

- □ Increase our understanding of the survivor adaptation process and social divisions within a shipwreck survivor camp, which would ultimately assist in model building
- □ Reveal the physical layout of camps and supply much-needed information on burial practices, thus assisting in pattern recognition
- □ Create an opportunity for future comparative studies
- □ Encourage further research in a little-known aspect of South African history

#### Conclusion

Four hundred and fifty years after the first merchant ship, the *São João*, was wrecked on the east coast of South Africa, the first concentrated effort was made to find and study the survivor camp of this particular ship on a scientific basis. Recently a group was established at the South African Heritage Resources Agency to record, monitor and police maritime archaeological sites in South Africa. These events are an indication that maritime archaeology, in particular the research and conservation of shipwrecks, is of growing interest among the public and academic communities in South Africa. Shipwreck survivor camps on the other hand are a neglected terrestrial component of maritime archaeology. For this reason research on shipwreck survivor camps should be given greater consideration, especially since South Africa has such a wealth of maritime archaeological sites and material along its coast.

#### References

Burger, E. 2003. Reinvestigating the wreck of the sixteenth century Portuguese galleon *São João*: A historical archaeological perspective. Masters thesis, University of Pretoria.

Boxer, CR. 2001. The tragic history of the sea. University of Minnesota Press: 3-26.

Duffy, J. 1955. *Shipwreck and empire.* Cambridge: Harvard University Press: 26-35.

Theal, GM. 1898. *Records of South-Eastern Africa.* London: Government of the Cape Colony. Reprint: C Struik, 1964, 1: 128-149.

#### 

## ARCHAEOLOGY IN BRIEF

Ancient footprints found in Mexico. A trail of 13 fossilised footprints running through the Coahuila valley in a northern Mexican desert could be among the oldest in the Americas. According to archaeologist Yuri de la Rosa Gutierrez of Mexico's National Institute of Anthropology and History, the footprints are believed to be between 10 000 and 15 000 years old, but more tests need to be carried out. The oldest discovered footprints in the Western hemisphere are in Chile, which are believed to be 13 000 years old. The age of these is dwarfed by those found in Laetoli in Tanzania, which are believed to have been made 3,5 million years ago. Each of the Mexican footprints is 270 mm long and under 20 mm deep. They spread over a distance of 10 m. *Associated Press, 26 October 2006* 

Infection killed Tutankhamun. King Tut died of an infected wound in the left knee, according to new research on the 3 300-year-old mummy by Eduard Egarter Vigl, the caretaker of Ötzi the Iceman, and Paul Gostner, head of radiology at Bolzano General Hospital. They found compelling evidence for a deadly infection after examining 3D images of the left knee and foot. The CT scan revealed that both the kneecap and the foot were broken. The fact that embalming liquid had entered the spaces within the knee fracture was a clear sign that the pharaoh was mummified when the wound was still open. Traces of gold leaf decorations were found in the left knee. They entered the knee violently, according to Egarter and it was likely that the boy suffered a violent blow, probably by a sword, which would have lodged gold fragments from the decorations of the pharaoh's armour or dress into the knee. Alto Adige, 30 January 2006

# **IRON AGE SALT PRODUCTION AT BALENI**

#### **Alexander Antonites**

Baleni, also known as Sautini, is a mineral hot spring located in the Lowveld. It is a truly unique site since it is one of the last places in southern Africa where non-mechanised salt production still takes place. Every winter, small groups of local women come to the spring to harvest small amounts of salt for their own use and to supplement their income. Although archaeological research at Baleni between 2003 and 2005 focused primarily on Iron Age production, modern-day salt-making proved a valuable source for confirming hypothetical Iron Age production methods (Antonites 2005).

The Baleni spring is quite remote, being situated about 20 km to the south-west of Giyani and 10 km from the Kruger National Park's western boundary. The main spring issues into a shallow depression, which is discernable as a reed covered swamp, roughly 450 m in length and 150 m wide. Swamp water drains into the nearby Klein Letaba River through a small outlet. Water temperature at the eye has been measured at 43,9 °C and the water has high levels of sodium chloride (NaCl). The geothermal water source is a subsurface aquifer located at great depth and the heated water reaches the surface through a fissure (Kent 1986).

#### The salt production process

To the salt-makers, the warm water, the rising bubbles and the sulphurous smell that emanates from the swamp are all signs that bind Baleni with the spiritual world. To them, the metaphysical forms an integral part of the entire salt production process. Because of this, salt-making is governed by several taboos and prerequisites to ensure a successful and productive process. Salt workers with infants are not allowed at the spring and no sexual contact is permitted during the saltmaking process. Other ritual practices associated with salt-making include the use of pseudonyms for common objects around the spring: rocks (maribye) are referred to as peanuts (tindluwa), and reeds (rihlanga) as spears or arrows (thlari or nseve). A spirit medium also determines the specific day on which production



A cone of salt produced at Baleni

will start. On the established day the salt-makers will place libations and small offerings at the foot of a dead *Combretum imberde* (leadwood) tree on the edge of the swamp into which the spring flows (Witt 1966; Terblanche 1994).

This event takes place during the start of the dry season, which is no coincidence since the seasonal decline of groundwater levels plays a crucial part in salt-making. During the winter months, as water levels in the swamp recede, a crust of white, saline soil forms on the newly exposed littoral. Salt-makers gather this crust and take it to a production area usually located in the immediate vicinity of the swamp.

Here the crust is mixed with river sand to loosen its texture, which would otherwise be too claylike. The loosened crust is then placed inside a filter or straining device and leached to produce brine. The device consists of a funnel-shaped basket made from grass and bark strips, woven onto a rectangular wooden frame with sides roughly



The location of Baleni

Alexander Antonites is with the Department of Anthropology and Archaeology, University of South Africa. antona1@unisa.ac.za



Looking east over the swamp into which the Baleni spring flows

600 mm in length. The inside of the basket is waterproofed with clay except for a small opening left at the bottom through which the brine drips. The rectangular frame rests in the forks of four planted poles, about a metre off the ground, so that the basket is suspended in the air.

The salt-makers leach the mixture placed inside the filter with water obtained from the swamp or the Klein Letaba River. The resultant brine slowly drips through the small opening in the bottom and collects in a container underneath the hanging basket. This process is repeated until the salt-maker decides that a sufficient amount has been collected. The filtered brine is then reduced to salt crystals by being simmered over an open fire, a process that needs constant supervision as the batch of salt will be ruined if burnt at this stage. When the content reaches a porridge-like consistency, the pot is removed from the fire and allowed to cool. Finally, the damp salt is formed into a cone-shape by paddling it with the hands



A typical brine filter or straining device

and drying it in the sun (Witt 1966; Terblanche 1994).

A consequence of this production method is the build-up of debris mounds. These form as salt-makers empty the leached-out crust from the filters and discard other refuse, such as food remains and ash from the reduction fires. Ceramic vessels, although today largely replaced by metal and plastic containers, would in the past also have ended up on these mounds. From an archaeological point of view, each mound, therefore, contains the material remains of past saltmaking activities.

#### Production in the Late Iron Age

This persistent process of mound formation and expansion makes production areas very conspicuous. Continued over centuries, the result around Baleni is a landscape dotted with more than 730 mounds. These vary in size, but in areas where production activity was concentrated mounds have formed on top of each other to create embankments more than 2 m deep and 20 m long.

In 2003 and 2004 three archaeological mounds were excavated. The ceramic assemblages were analysed according to vessel style elements (Huffman 1980) and three phases were identified. These cover almost the entire Lowveld Iron Age ceramic sequence. The earliest production activities at Baleni are associated with ceramics of the 3<sup>rd</sup> to 7<sup>th</sup> century Silver Leaves and Mzonjani styles. These are followed by the 11<sup>th</sup> to 13<sup>th</sup> century Eiland/Kgopolwe ceramics phase. The most recent phase of archaeological saltmaking is associated with Letaba ceramics, which appear in the Lowveld in the 17<sup>th</sup> century (Evers 1981).

The similarities in the production debris suggest that the methods used to make salt at Baleni have remained largely unchanged throughout all three phases. Furthermore, the observation of modern production methods seems to confirm the use of similar methods during the Iron Age. The excavated mounds had a complex stratigraphy, indicative of a rapid and simultaneous deposition of strata. This is consistent with the recorded process of the basket-type filters being emptied out.

The filter discard consists primarily of a sandy loam interspersed with lenses and pockets of sand, clay, ash and charcoal. The primary sandy loam matrix is probably the leached out salt crust, since it closely resembles the soils around the swamp where the crust is formed. Mixing the collected crust with coarse river sand before filtration would account for the pockets of coarser sand within the mounds. The clay strata inside the mounds are probably the remnants of the



A brine filter with its adjacent debris mound

clay lining used to waterproof the filters. The presence of ash and charcoal may indicate that Iron Age salt-makers also reduced brine to salt crystals over an open fire. Exterior soot deposition on large proportions of the ceramic assemblage provides further proof for this method of brine reduction.

Large proportions of heavily fragmented ceramic vessels within the mounds characterised the excavations. Concentration and fragmentation are a direct result of the salt-making process. Heat from the reduction process and the caustic nature of brine will weaken a vessel's structure. When brine is able to seep into the vessel wall and dry, the salt crystals will break the vessel apart. As a result, ceramic salt-making vessels have a very short period of effective use.

#### Conclusion

Salt is virtually impossible to trace in the archaeological record mainly because it is usually consumed, and once deposited quickly dissolves. Because of this, production sites like Baleni offer the only discernable physical evidence that salt was produced during the South African Iron Age. Viewed in isolation, the physical remains of salt-making at production sites like Baleni are difficult to interpret. However, the practices of modern salt-makers at the spring do provide possible analogies for Iron Age

salt-making methods. The research at Baleni suggests that Iron Age salt production seems to have used very similar methods to those employed at the site today.

#### References

Antonites, A. 2005. The salt of Baleni: An investigation into the organisation of salt production during the Early Iron Age of South Africa. MA dissertation, University of Pretoria.

Evers, TM. 1981. The Iron Age in the Eastern Transvaal, South Africa. In: Voigt, EA (ed). *Guide to archaeological sites in the Northern and Eastern Transvaal.* Pretoria: Transvaal Museum: 65-109.

Huffman, TN. 1980. Ceramics, classification and Iron Age entities. *African Studies* 39(1): 121-173.

Kent, LE. 1986. The thermal springs of the North-Eastern Transvaal. *Annals of the Geological Survey of South Africa* 20: 141-154.

Terblanche, HP. 1994. Geselekteerde tegniese skeppinge van die Tsonga vrou, met spesifieke verwysing na die Tsongakraal-Opelugmuseum. MA dissertation, University of Pretoria.

Witt, J. 1966. Primitive salt production in the North-Eastern Transvaal. *Scientific South Africa* 3(6): 21-24.





# Castles and Wild Places Ireland Tour, September 2007

Journey deep into the history and prehistory of the Emerald Isle. Visit ruined abbeys, dark castles, neolithic chambers, barrow graves, lonely dolmens on windswept moors, Celtic high crosses and Iron Age ring forts.

Experience the wild beauty of the Aran Islands and the weird landscape of the Burren with its maze of underground caves. Sail on Viking longboats down ancient waterways and dance the night away in traditional lrish pubs.

Please contact Sian Hall at: Tel: +27 (0)33 3307729 Cell: +27 (0)83 530 0273 E-mail: tambuku@netactive.co.za www.freewebs.com/maloti





The Origins Centre offers visitors a unique experience of Africa's rich, complex and sometimes mysterious past. Combining cutting-edge technology with the creative vision of South Africa's foremost artists, the narrative structure of the museum takes visitors through an extraordinary journey of discovery.

The journey begins with the origins of humankind in Africa and then moves through the development of art, symbolism, technology – the very things that give us our humanity. The journey then continues through the destruction of the great and diverse southern African rock art traditions – the world's oldest continuous art forms – at the hands of colonists, before ending, more positively, with the re-discovery of these ancient masterworks in a contemporary world.

Unashamedly Africa-centric, the Origins Centre seeks to restore the continent to its rightful place in history – as the place where everything that makes us who we are today originated.

**16 display areas:** Wander through the world's leading rock art museum either on a self-guided tour with audio-guide player, or join a scheduled tour with guide. For either, adults pay R45, children (under 12) R25, and pensioners and students R35. Prices for private tour groups are available on request.

**Origins Shop:** The museum shop offers a superb collection of African arts and crafts, gifts and an unequalled section of books on Africa, ranging from rock art, San and Khoi studies and archaeology to history, art, peoples and cultures, and more, as well as books for the children of Africa.

Café fino serves coffees and light meals.

**ORIGINS CENTRE** is situated at 1 Yale Road, Wits University (East Campus), Braamfontein, Johannesburg.

Tel: 011 717 4700 info@originscentre.co.za www.originscentre.co.za

> WE ARE WHO WE ARE BECAUSE OF WHO WE WERE

### SOUTH AFRICAN ARCHAEOLOGICAL SOCIETY

#### PO Box 15700, Vlaeberg, 8018, South Africa

Notice is hereby given in terms of section 8(a)(i) and (ii) of the Constitution that the Annual General Meeting of the Society will be hosted by the KwaZulu-Natal Branch on 15 May 2007 at 18:15 at the Waterfall Library, 11 Link Road, Waterfall, Hillcrest.

Members should submit items for the Agenda in writing to the Secretary, PO Box 15700, Vlaeberg, 8018, before 1 March 2007. Proposals must state in specific terms the resolution to be put to the meeting and the reasons therefor.

Janette Deacon Honorary Secretary 22 January 2007

## CATHOLIC UNIVERSITY OF MALAWI NEEDS OLD BOOKS AND JOURNALS!

The Catholic University of Malawi, located at Montfort in the Chiradzulu District (see: http://www. sdnp.org.mw/edu/new/univeristy.html), opened its doors in September 2006. It is the first and only university in Malawi that offers an anthropology and archaeology programme.

The library of this new university is still very small and Wits students are trying to source books and journals to expand it. If you should have issues of the *SA Archaeological Bulletin*, *The Digging Stick*, the *Goodwin Series* or any other relevant books or journals on archaeology and anthropology and feel like a late spring clean-up, please contact Geeske Langejans at Wits University, tel: 076 569 0801 or 011 717 6063. E-mail: langejansg@science.pg.wits.ac.za.

Any duplicate copies of publications that may be collected will go to the Wits archaeology graduates resource room.



#### FOR THE RECORD

Inexplicably, the word 'art' disappeared from the heading of Mr Pieter Jolly's article "Two related rock <u>art</u> conservation/education projects in Lesotho' featured on page 13 of the August issue of *The Digging Stick.* The Editor's apologies!

Mr Jolly has also requested the following correction: In the first paragraph on page 14 the reference to Luca Smits should read Lucas Smits.

## SIGNS OF OLDEST HUMAN RITUAL IN BOTSWANA?

An archaeological find in Botswana may indicate ritual practice 70 000 years ago. Associate professor Sheila Coulson from the University of Oslo made the discovery in the secluded Rhino Cave while searching for Middle Stone Age artefacts in the Tsodilo Hills. The hills are famous for having the largest concentration of rock paintings in the world and are still a sacred place for the San, who call them the 'Mountains of the Gods' and the 'Rock that Whispers.'

Coulson and her team found a large rock inside the cave that they say resembles a giant python, with natural features in the stone forming an eye and a mouth. The 6 m by 2 m stone is also scarred by three to four hundred human-made grooves that may have been meant to resemble scales. In a test pit dug directly in front of the python stone they found many artefacts, which, apart from tools used in carving the stone, were all spearheads and articles that could be connected with ritual use. Unlike the dull coloured tools found at other Tsodilo caves, these artefacts were fancily polished. Some of the hundred-plus, brightly coloured spearheads, which appear to be identical to those found at another Botswana site that has been dated to 77 000 years ago, seem to have been brought to the cave from great distances in an unfinished state and finished off at the site. Quartz flakes were also found packed in some of the cave's crevices.

Some points were intentionally broken or burned in what Coulson believes was a ritual destruction of artefacts. But only the red spearheads were burned. It was a ritual destruction of artefacts. There was no sign of normal habitation. 'Our find means that humans were more organised and had the capacity for abstract thinking at a much earlier point in history than we have previously assumed,' Coulson said. 'They brought [the points] from hundreds of kilometres away and intentionally burned them.' Coulson also noticed a secret chamber behind the python stone. Some areas of the entrance to this small chamber were worn smooth. 'The shaman would have had a good view of the inside of the cave while remaining hidden himself. When he spoke from his hiding place, it could have seemed as if the voice came from the snake itself.'

While large cave and wall paintings are numerous throughout Tsodilo Hills, there are only two small paintings in this cave: an elephant and a giraffe. These images were rendered exactly where water runs down the wall. Coulson thinks that an explanation for this might come from San mythology. In one San story, the python falls into a body of water and cannot get out by itself. The python is pulled from the water by a giraffe. The elephant, with its long trunk, is often used as a metaphor for the python. 'In this cave we find only the San people's three most important animals: the python, the elephant and the giraffe. That is unusual. This would appear to be a very special place.' The python is one of the San's most important animals. Their legends have it that mankind descended from the python and the ancient, arid streambeds around the hills are said to have been created by the python as it circles the hills in its ceaseless search for water.

findings have been received with Coulson's scepticism from some researchers, who say that more research is needed to confirm the age and purpose of the site. Until recently most anthropologists believed that 'modern' human behaviour requiring symbolic thought did not originate until 40 000 or 50 000 years ago - around the same time that early humans first migrated out of Africa. But a 2001 discovery by archaeologist Christopher Henshilwood shifted the debate on such theories. His team found specialised bone tools and engraved red ochre, as well as marine shell beads, in Blombos Cave and dated them to 75 000 years ago, suggesting that the humans who left Africa might have already exhibited 'modern' behaviours.

Michigan State University anthropologist Larry Robbins studied Rhino Cave in the mid-1990s and has previously suggested that the site might have been used for rituals, based on the rock paintings found there. But he's not certain that such rituals were being practised as far back as Coulson suggests, or that the 'python rock' played a role. Botswana's Alec Campbell, an authority on the Tsodilo Hills, suggested that some of the grooves on the python rock may have been made around the time that Coulson's team suggests. 'You get these grooves all over the world, and they go back a very long time, possibly 300 000 years in one Indian location.' But he is unconvinced that the rock is meant to resemble a snake. 'The grooves likely possess some sort of symbolic purpose and possibly a religious one, but to say that this particular frieze represents a snake and it is the earliest religious site that is known, I just don't think that makes sense.'

The cumulative evidence, however, is convincing to Coulson. 'It is the whole package of behaviour traits from our excavations that has led us to conclude that the only plausible explanation is that this site was used for ritual purposes,' she said. 'The intentional stuffing of quartz flakes into a crack in the wall beneath the snake, the exceptional treatment of all the points recovered, are behavioural patterns that do not fit any patterns we know of from the many other sites from this era.'

> Reuters, 30 November, & National Geographic News, 22 December 2006

#### OUTSTANDING ACHIEVEMENT

# Bert Woodhouse receives the Order of Ikhamanga

Congratulations to Herbert (Bert) Woodhouse, a long-standing member of the Society, who was awarded the Order of Ikhamanga in Bronze for Outstanding Achievement in and Contribution to the Field of Rock Art by President Mbeki on 27 September 2006. It is a well-deserved honour for Bert's life-long dedication to rock art research.

In response to a congratulatory letter from the Trans-Vaal Branch, Bert wrote: 'Over the years from the fifties until now my wife Shirley and I have derived great pleasure from our membership of the Society and participation in its activities. In particular I have enjoyed leading groups to rock art in the eastern Free State and Natal.' The library of the University of Pretoria, which is the custodian of Bert's rock art collection, added its congratulations. It is their intention to digitize the collection for uploading into the library's website.

The Order of Ikhamanga is awarded to South Africans who have excelled in the fields of the arts, culture, literature, music, journalism and sport. The Ikhamanga (strelitzia) plant symbolises the unique beauty of achievements by men and women



who carry colourful South Africa aloft. Elements of the Order include the Lydenburg Head (No. 1 in the illustration), the African drum (No. 2), a crown symbolising a feathered head-dress with rays of the sun (No. 3) and roads portraying all roads leading to Africa and the Cradle of Humankind (No. 4 & 5), which emphasises the long, hard road to achievement, excellence and success.

Previous recipients of the Order in Bronze include Christian Ashley-Botha (contribution in the field of choral music), Matlhaela Michael Masote (development of youth orchestras and choral music in the classical genre), Oscar Pistorius (athletics and contribution to the well-being of disabled people) and Sibusiso Vilane (inspiring and excellent achievement in the field of mountaineering).

Many of the news items featured in *The Digging Stick* have their origin in *Paleonews*, a twiceweekly compendium of archaeological and scientific news extracted from the international media and circulated electronically by Tinus de Beer of the South African Amateur Society of Palaeontologists. E-mail Tinus at paleonews@icon.co.za to find out how to subscribe to this service for free.

#### Blombos

An evolutionary tale of survival tactics, sexual selection, death (the price of evolution) – 75 000 years ago

The dawn of perception, or art for art's sake? Or some new trait in the scheme called survival. To set you apart and impress a new mate, And gain more attention than a dominant rival. You had to try out a new strategy, (In this case, ochre stones worked in a cave by the

(In this case, ochre stones worked in a cave by the sea)

And open new doors on evolutionary fate.

But then she chose you to father her child, She definitely saw you had something else. Not just adapted to life in the wild – Some extra way of expressing yourself. So, together in the sunset on a southern shore, Patterns in rippled sand, perhaps, meant much more. How to preserve them was clearly inspired.

So skills learned, practiced and perfected, Starting a tradition, valued by friends. But why were these traits ever selected? Passed on to offspring, and those who descend From these genes, to ultimately sway Evolution's fine balance of fitness versus the costs of display,

And Homo sapiens in ways never expected.

So this geometrically scored red ochre stone Means modern thinking, modern man? Or symbolic art in a class of its own? The quantum jump seems the desire to plan Abstractions and artifacts that transcend the moment, Or death itself – a consciousness of life's denouement An awareness we now claim our own.

> Dr Avril Arthur-Goettig, Munich, Germany (Submitted by Prof. Christoper Henshilwood)

## **Cave Elegy**

Rain has washed this midden debris clean And left a shine of pearl where dust had been, As if to grace the hidden bones beneath With flowers from the sea – a Nereid wreath? And here, by yellowed vertebrae displayed, Lie graded shells, in ordered row, An offering from long ago: The burial necklace of a Stone Age Maid.

Faded cone shells on a rotted string By now, all colour gone, a simple thing. And yet, this treasure from a thousand years Remembers love, remembers primal tears And binds us, humbled in our sea-loud cave To those who made this vanished mound, Who left such riches in the ground, Who speak the common language of the grave.

HP Thesen, Knysna, South Africa

# ARCHAEOLOGY IN AFRICA

#### Bird of prey did kill Taung Child

The mystery surrounding the death of the Taung Child has been solved, says Wits fossil expert Prof. Lee Berger. 'We have undeniable proof that the Taung Child was killed by a bird of prey.' The discovery of the child's fossilised skull in 1925 led to the understanding that humans originated in Africa, but until now researchers have been uncertain what led to the hominid's death. Ten years ago Berger and his colleague, Ron Clark, suggested that the Taung Child was killed by a large predatory bird since the top of the skull has a flap of compressed bone consistent with the damage that might have been left by an eagle's talon. But this did not convince other experts, many of whom believed that the three-and-a-half-year-old, who died nearly two million years ago, was too large to have been killed by an eagle.

Berger was prompted to take a closer look at the Taung Child's skull last year after he was asked to review research submitted to the *American Journal of Physical Anthropology* by US researchers from Ohio State University interested in the damage crown eagles inflict on their monkey prey. He was astonished to find puncture marks and ragged incisions in the skull's eye sockets identical to those described by the US researchers. 'How I and my colleagues missed it, I have no earthly idea,' Berger said. He had checked the markings against a cast of the Taung Child made in 1925 to make sure they were genuine.

Business Day, 13 January 2007

#### Ancient ethnic diversity in Egypt

Scholars have long believed that ancient Egypt was a genetic stew of ethnicity, but now new evidence suggests that this may have been true even in the upper echelons of society, according to researchers who have used a blend of art and science to recreate what the ancients looked like in real life. They have used CAT scans to model the skulls of seven mummies from various museums, revealing physical features that range from Mediterranean to African. All seven were buried with the trappings of high status, including two clearly connected to the priesthood, said project leader Jonathan Elias, director of the Harrisburg, Pennsylvania, Akhmim Mummy Research Consortium. He cautioned against drawing firm conclusions from such a small sample, but said the findings suggested a society where race had little to do with class.

#### Humans left Africa, then some returned

Humans first moved out of Africa about 70 000 years ago, but 30 000 years later some of them moved back. That is according to a study based on DNA evidence from human remains found in Africa, which shows that a small group of early humans returned to Africa. The research suggests that the return occurred around the same time as another group left the Middle East and moved into Europe, according to Antonio Torroni, a geneticist at the University of Pavia in Italy.

The new study reported in *Science* builds on the theory that humans migrated from Africa in a single dispersal about 70 000 years ago, leaving east Africa by crossing the Red Sea, then journeying south, following a coastal route along the Arabian Peninsula and on to India, Malaysia and Australia. Other models suggest that humans left Africa in multiple waves of migration via northern and southern routes. The single 'out of Africa' dispersal is believed to have given rise to all modern non-African populations, but scientists have been puzzled by two genetic populations found only in northern and eastern Africa, whose ancestors appear to have been Asian.

By sequencing the mitochondrial DNA from 81 individuals in both of these genetic groups scientists have found that the two populations must have arisen in south-western Asia and returned to Africa about 40 000 to 45 000 years ago. It is suggested that they arrived from the Middle East, the same area from which another genetic group — one typical among Europeans — was at the same time moving toward Europe. 'It is a finding that supports the view that the first [Late Stone Age] cultures in North Africa and Europe had a common homeland in the Levant,' Torroni said. *National Geographic News, 14 December 2006* 

#### Wits scientists find important lamprey fossil

Scientists from Wits and Chicago Universities have uncovered a remarkably well-preserved fossil lamprey from the Devonian period that reveals today's lampreys as 'living fossils' since they have remained largely unaltered for 360 million years. Chicago's Michael Coates joined Wit's Bruce Rubidge and graduate student Rob Gess to describe the new find in Nature. 'Apart from being the oldest fossil lamprev yet discovered, it shows that lampreys have been parasitic for at least 360 million years,' said Rubidge. Lampreys are long and eel-like and have no fins or scales. They attach themselves to and feed on other fish. Of the 46 000 known species of vertebrates, lampreys and hagfish are the only surviving jawless vertebrates. Because they do not have bone or any substantial cartilage, they are extremely rare as fossils.

Gess found the less than 50 mm long specimen, *Priscomyzon riniensis*, in an ancient estuary in Grahamstown. According to Coates, lampreys are very primitive animals, yet with highly specialised feeding habits. Obviously exceptional survivors, the animals predate the advent of modern fish and have survived at least four major extinction events. 'There are few representatives of these early branches in vertebrate evolution that are still around today.'

October 2006

# ARCHAEOLOGY AROUND THE WORLD

#### Vatican confirms St Paul's coffin found

Vatican archaeologists have confirmed that St Paul was buried beneath the Roman church bearing his name. They said they have identified a Roman sarco-phagus beneath the main altar and an epigraph: 'Paul apostle – martyr.' A small hole in the lid of the stone coffin, through which pilgrims would push pieces of fabric to touch the bones of the martyr, has been filled.

St Paul's sarcophagus, which dates back to at least AD 390, was found after five years of extensive excavations at the St Paul Outside the Walls basilica, which is second only in size to St Peter's in Rome. Paul of Tarsus was a Jew who campaigned against Christians until converted on the road to Damascus. Arrested on obscure charges, he insisted on his right as a Roman citizen to be tried in the capital of the empire. He was acquitted, but was later a victim of Christian persecution in Rome and was beheaded. In the early fourth century Emperor Constantine built a church above his tomb outside the walls of the city.

The interior of the sarcophagus has not yet been explored, said Giorgio Filippi, the Vatican archaeologist who headed the project. Two ancient churches that once stood at the site of the current basilica were successively built over the spot where tradition said the saint had been buried. The second church, built by the Roman emperor Theodosius in the 4<sup>th</sup> century, left the tomb visible, first above ground and later in a crypt. When a fire destroyed the church in 1823, the current basilica was built and the ancient crypt was filled with earth and covered by a new altar.

Associated Press, 6 December 2006

#### Darius the Great palace discovered?

An Iran-French archaeological team has discovered the remains of a large palace, believed to be from the Achaemenid era (648 BC to 330 BC) at Bolaghi Gorge near the ancient site of Pasargade. Geophysical tests revealed the possible existence of a huge building and excavations showed that the site had one historic layer only. Despite hopes of unearthing the palace intact, a number of wells dug by smugglers and serious bulldozer damage were found. Below the layer damaged by bulldozers, the team found the 350 mm high and 500 mm diameter pillar base that looks like an inverted bell. It is built of the same stone used in the construction of the palace at Persepolis. The stone is so carefully varnished that one can clearly see one's reflection in it. A royal seat, constructed of soil and condensed sand, pieces of clay bricks and three clay walls were discovered as well. It is believed that the palace belonged to either Darius the Great, who ruled between 521 and 486 BC and built Persepolis, or to the kings that preceded him. CHN, 15 May 2006

### The South African Archaeological Society

The Society was founded in 1945 to promote archaeology through research, education and publication. It is a non-profit organization – Registration No. 024-893-NPO.

Cape Town head office: PO Box 15700, Vlaeberg, 8018. Tel: +27 (0)21 481 3886. Fax: +27 (0)21 481 3993. archsoc@iziko.org.za

This is the society for members of the public and professionals who have an interest in archaeology and related fields such as rock art, palaeontology, geology, etc. Four branches serve the interests of members. They arrange regular lectures and field excursions guided by experts, annual and occasional symposia, and longer southern African and international archaeological tours.

Trans-Vaal Branch:	PO Box 41050, Craighall, 2024
Membership Secretary:	Mrs Jo Earle
	011 706 6905
	jwearle@mweb.co.za
	www.archaeology.org.za
Western Cape Branch	: PO Box 26, St James, 7946
Chairperson:	Ms Yvonne Viljoen
	021 788 5620
	yvonne1@pixie.co.za
KwaZulu-Natal Branch	∷c/o Natal Museum, P/Bag
	9070, Pietermaritzburg, 3200
Secretary:	Ms Bronwyn van Doornum
-	031 776 3600
	bvandoornum@nmsa.org.za
Trans-!Gariep Branch:	PO Box 266, Bloemfontein,
	9300
Chairperson:	Dr Zoe Henderson
	zoelh@nasmus.co.za

The Society produces the following publications:

- € South African Archaeological Bulletin, a scientific publication of current research in southern Africa twice a year
- € The Digging Stick, the Society's general interest magazine – three issues a year
- € Goodwin Series, an occasional publication on a specific field of archaeological interest

**Subscription rates for 2007** are as follows: Individuals: Single – R165; Joint – R185; Students and Concessionaries – R130. Institutions: Local – R350; African – R350; Overseas – R650.

#### **The Digging Stick**

Editor and advertising:	Reinoud Boers
	PO Box 2196, Rivonia, 2128
	Tel: 011 803 2681
	Fax: 0866 199 133
	Cell: 082 566 6295
	fox@boers.org.za
Layout:	Marion Boers
Printer:	TVaal Johannesburg
and a second	