THE DIGGING STICK

Volume 24, No 3

ISSN 1013-7521

December 2007

ELEPHANTS (!Xó) OF THE CEDERBERG WILDERNESS AREA

A re-evaluation of the San paintings previously referred to as 'Elephants in boxes'

Andrew Paterson

The subject of this article is the remarkable San painting in the Cederberg called 'Elephants in boxes'. The painting is distinct and detailed, but its interpretation somehow appears to have been elusive. Interpretation has varied widely over the years, ranging from natural realism to the currently accepted view of trance-induced entoptic images. I would like to propose a return to the natural realism interpretation on the basis of recent elephant communication studies.

Interpretations

The painting (Fig. 1) was first displayed on the cover of *The South African Archaeological Bulletin* No. 63, September 1961, with the description:

Our cover design is taken from one of Mr Townley Johnson's expert tracings. This representation of a positive herd of elephants and human figures apparently wearing elephant-trunk disguises is of great interest. The network of lines enclosing the creatures reminds one of the so-called 'trapped elephants' scenes in the Kondoa district of Tanganyika.

Townley Johnson (1979) described the painting thus:

Elephants are more numerous among the paintings of the region than elsewhere, which may mean that they were of special symbolic importance. At first sight this painting could be interpreted as a series of natural or artificial barriers, perhaps pitfall traps in which elephant had been caught. However, many of the lines, such as the zigzag sections, do not seem to represent

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Fig. 1: The Cederberg elephants

any physical barrier or other object. Furthermore, the human figures with trunks suggest a symbolic association between elephant and man.

Maggs & Sealy (1983) described the paintings as follows:

	IN THIS ISSUE
1	Elephants (!Xó) of the Cederberg
	Wilderness Area – Andrew Paterson
5	Excavations at Noetzie Midden –
	Jayson Orton and Dave Halkett
9	Place names and early settlement
	patterns in England – Elwyn Jenkins
13	ArchSoc tour to Morocco: Part 1 –
15-12 10-12 10-12	Prehistory – Lilith Wynne
17	Dr Gerhard Fock: Some personal
	reminiscences – AJB Humphreys

We suggest that the series of paintings reflects trance vision and that for the San medicine man the elephant played a symbolic role parallel to that of the eland. The combinations of elephants with zigzag lines and other shapes suggest a stage of San trance performance in which the elephant, a culturally controlled and highly emotive symbol of trance power, was superimposed upon physiologically controlled hallucinatory forms.

Woodhouse (1985) suggested that:

The elephants surrounded by wavy, zigzag patterns are a local version of the rain animal folklore. The boat shapes with denticulate edges represent rain clouds.

Deacon (1994) in her chapter on elephants suggested that:

One explanation of the significance of the wavy lines around the elephants is that they represent the aura seen around visions during trance. Whatever the motivation of the artist, the lines re-enforce the nonreality of the paintings. They place the painting firmly in the realm of visions that are merged patterns of light, sometimes called entoptics, seen during trance.

The key to understanding this painting therefore appears to lie in the interpretation of the wavy or zigzag lines.



Fig. 2: Elephants with zigzag ines

The composition of the painting

The elephants have been painted as a horizontal panel in what could be described as a triptych of three related paintings with a minimum of 30 elephants. Space constraints only permit me to deal with the left hand and most distinct of the three paintings (Fig. 1). The elephants have been painted in profile, rather than in more dynamic form as elsewhere in the Cederberg where movement or action is indicated. The elephants are close together in a roughly circular formation, randomly facing inwards and outwards. Their attitude suggests that they are standing quietly together as they would do in the early morning or evening.

Douglas-Hamilton (1975), who began elephant research in Africa, described some of the characteristics of elephant social structure as follows:

My observations provided the first proof of family unit stability and showed that family ties were far wider and more lasting than had been thought. The average size of the family units was ten elephants and most of these belonged as well to larger kinship groups. The kinship ties had probably lasted over a hundred years and possibly for much longer.

Babies were always protected by an outer screen of large vigilant cows, with the calves tightly glued to their mothers' sides. On reaching maturity, young bulls were forcibly rejected by the female adults of the family. They could linger on the edge of the family for perhaps several years.

The painting under discussion contains all these characteristics of elephant social structure, right down to the ten elephants in the family unit, the protective circle and the two rejected young bulls. The two other groups of elephants in the triptych would comfortably fit into the larger kinshipgroup description.

The wavy and zigzag lines

As mentioned above, the feature that seemed to have attracted the attention of researchers is the wavy or zigzag lines. The four most striking aspects of these lines are, firstly, a single thin line that connects all the elephants in the group to one another. The lines follow the profile of each elephant, in one or more places touching the feet, stomach, groin, trunk, tail, head or back (Figs 1 & 2). Secondly, the two central elephants have zigzag lines emanating from their groins and stomachs, and the throat of the top elephant.

Thirdly, two broad irregular lines (Figs 1 & 4) surround the elephant family unit as a whole and, most importantly, the two adjacent smaller elephants, which could be seen as younger male elephants that have been pushed out of the family unit (Fig. 3). Finally, the elephant family unit has a much larger disconnected or floating line above it, which seems to be moving up and away from the group (Fig. 1).

Elephant communication

Elephant communication has been the source of intense scientific research in the past ten years. Dr Caitlin O'Connell Rodwell working in Namib-

ia's Etosha Pan described elephant communication as follows in Shwartz (2005) (refer to Fig. 2):

Elephants often lay their trunks on the ground. We think they may be using it as a tool to detect vibrations in the earth. We think they're sensing these underground vibrations through their feet. Seismic waves could travel from their toenails to the ear via bone conduction, or through somatosensory receptors in the foot similar to ones found in the trunk. Elephants may be communicating over much larger ranges than we realised, both within and between herds. Elephants don't just feel the vibes, they also transmit vibration signals through the ground, long-distance seismic messages that could play a crucial role in their survival and reproductive success.

Dr Joyce Poole enlarged further on the characteristics of elephant communication in Mayell (2004). Refer to Figs 1 and 4.

The elephants not only trumpet their calls, but squeal, cry, scream, roar, snort, rumble and groan. The elephants have a wide range of calls and signals for different purposes to secure their defence, warn others of danger, co-ordinate group movements, reconcile differences, attract mates, reinforce family bonds and announce their needs and desires.

Distinctive expressions of joy, anger, sympathy, sexual desire, playfulness and many other emotions are among their vocal repertoire. Elephants vocalize more in the early mornings and in the evenings, but this also happens to be a time of day when they are interacting more. Members of a family and bond-group maintain contact with one another over distance by using contact calls. These powerful lowfrequency calls are clearly meant to travel long distances.

The Cederberg painting contains all the features of elephant communication described by these scientists. It seems therefore that there has to be a strong case for the wavy or zigzag lines to represent the sound and/or vibrations of the elephants.

The San hunter/artist

The question one has to ask when looking at the painting is whether the San artist would have understood the social structure and communication behaviour of elephants enough to have been able to depict them in this painting in such a realistic manner. Liebenberg (1990) leaves us in no doubt about the San hunter's understanding of animal behaviour:

Each animal species is perceived to have characteristic behaviour, which is governed by its kxodzi



(customs) and each has its particular kxwisa (speech, language). The trackers' ability to interpret spoor enables them to reconstruct the context of an animal's communication even where they could hear it but not see it. Their knowledge of animals includes information on social behaviour. They know each species whether it is solitary or social; whether there is a strict or loose matriarchal system; whether the bulls run together according to age groups or not.

Taken in the context of being a hunter, one can assume that the San artist would have known everything there was to know about elephants. His ability to do a realistic painting of an elephant family unit that depicts their social structure and lines of communication would have been well within his range of consciousness. The images would have been embedded in his mind as a part of his normal everyday hunting life.

The San rain bulls

Another interesting aspect of the painting is that it might give us some insight into the origins of the rain bull and 'fetching the rain' as described in San mythology. Dr O'Connell Rodwell made the interesting statement that:

Elephants may be able to sense the environment better than we realize, as when it rains in Angola, elephants a 100 miles away in Etosha Park start to move north in search of water. It could be that they are sensing underground vibrations generated by thunder. If the San knew and understood that one of the special characteristics of elephants was their ability to pick up sound and the seismic vibrations of thunder through their feet and trunks, they would also probably have known that elephants would go in search of water well before other animals. This would lead to the possibility that we might be touching on a quite plausible explanation as to the origins of the 'rain bulls fetching the rain', as described in San mythology. This also suggests that a critical survival symbiotic relationship might have existed between elephants and man over tens of thousands of years.

Feedback from researchers

Dr O'Connell Rodwell commented as follows when contacted about the image of the painting under discussion:

Thank you so much for sending these most incredible paintings! I am very familiar with the San Bushmen rock paintings but have never come across these particular ones. This is truly remarkable! And yes, perhaps indeed it would be the Bushmen to notice such things due to their deep connection with animals and the natural world. The lines surrounding the elephants and the lines on the ground are very intriguing but most exciting are the squiggly lines going from the abdomen down to the ground. That's about as explicit as one could hope for, and yet we could never truly know if this is exactly what they were intending.

And Dr Poole responded as follows:

I wanted to confirm that I agree with your interpretations. It may also be that the artists understood that the elephant sounds also travel through the ground and so are detected both acoustically and seismically. I notice that there are zigzag lines emanating from the trunk, the feet ... the entire body. The contact calls of elephants – the very powerful calls used to communicate with family members over long distances, are highly modulated, rising sharply in pitch and falling again, much like the lines on the drawing.

Finally, the comments of Louis Liebenberg were obtained, as follows:

I think the hypothesis is very convincing and I would agree that the wavy, zigzag lines may well represent elephant communication. For the tracker the idea that the elephant could have some form of silent communication would almost have been self-evident.

Conclusion

Considering recent scientific research on elephant behaviour, and the fact that most of this research was undertaken after the article on elephants in boxes was written and the San hunter would have understood the behaviour that governs the customs and speech/language of each particular animal, it would seem entirely reasonable that the wavy and zigzag lines in this painting are a realistic depiction of the fact that the San had an in-depth knowledge of the social structure and communication systems of elephants.

I think that Townley Johnson (1979) is correct when he says that the lines do not represent any physical barrier or other object. They could, however, easily represent the sound that elephants make. In fact we might be looking at some of man's earliest markings representing sound. I feel that the lines in this painting are too specific and explicit to represent the pulsating aura seen around visions during trance.

There are four other paintings elsewhere in the region depicting elephants surrounded by lines touching feet and trunks. One of these, described by Trew (1984), has identical features and is situated 80 km from the Cederberg painting in the Hex River Valley. It therefore seems quite likely that various San artists were depicting elephant behaviour that was commonly known among San hunter/artists in the region at the time.

I agree with Townley Johnson that this painting highlights the fact that the San had a symbolic association with elephants, but would like to suggest that the painting reveals that the San also had a deep understanding of the communication, behaviour and social structure of elephant family units, and that they had possibly developed a symbiotic relationship with elephants that goes back thousands of years.

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EXCAVATIONS AT NOETZIE MIDDEN

An open site on the Cape south coast

Jayson Orton and Dave Halkett

In late 2006 and early 2007 the Archaeology Contracts Office of the University of Cape Town conducted archaeological excavations at a large open shell midden near the western end of Noetzie Beach, near Knysna (Fig. 1). The site presented itself as a large grass-covered mound with no obvious surface traces of archaeology. The deposits are located above the sandy beach between about 5 m and 8 m above sea level.



Fig. 1: Location of the Noetzie Midden

Earlier in 2006 we had conducted test excavations on the mound and these revealed the shell midden. With subsequent excavations we have been able to reconstruct its approximate structure (Fig. 2). It was found to have about 2,0 m of deposit at the deepest point, near the apex of the mound, but this tailed off sharply to the west and south. The midden extends slightly further down the dune on the eastern side. We were unable to explore the site further to the north as there it extends beneath one of the famous Noetzie Castles.

The site has experienced natural sand accumulation for several millennia, probably beginning immediately after the maximum high stand of the mid-Holocene sea level, resulting in a prominent sand dune forming at the base of the forested hillside. Some time around 3 500 years ago people began exploiting the marine shellfish that must have been abundant on the nearby rocks at



Fig. 2: Schematic cross-sections through the Noetzie Midden. The vertical line through each indicates the approximate position of the other section. The sketches are approximately to scale.

the time. The deposits indicate that the earliest occupations were somewhat sporadic, with sterile sandy layers having accumulated between the occupation middens. At about mid-depth, perhaps about 2 500 years ago and well before the introduction of pottery, occupation intensified dramatically, with far less sand accumulating between the shell lenses. This continued unabated until just before the final abandonment of the site.

Noetzie Midden layers

The 21 excavated depositional units can be grouped into seven broad composite layers based on their colour and content. General descriptions of these layers from top to bottom (with excavation units in parentheses) are as follows:

- 1. A dark brown humic soil layer with fairly dense patches of crushed shell in the lower half. This layer contains pottery and the lower parts seemed to be quite ashy (1-2).
- 2. A grey-brown layer with dense, crushed shell midden, but also including many whole shells or large fragments. It too contains pottery and is very ashy. A particularly large number of rocks, including a stone hearth, were present at this level, which is never more than about 350 mm below the surface (3).
- 3. A grey-brown layer becoming progressively paler and more yellow with depth. The shell content is continuous with Layer 2 and these two layers represent the intense occupation mentioned above (4-8).

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- 4. A lighter grey-yellow-brown layer with lots of large shell fragments and whole shells. It generally has lower-density shell than the overlying layers, but a fairly dense unit with much crushed shell lies at the base (9-10).
- 5. A series of yellow sandy units punctuated by two good shell middens containing much whole shell (11-15).
- 6. A single yellow sandy layer overlies a very thick, grey-brown shell midden containing much whole shell. Several prominent dark hearth patches were noted near the base (16-17).
- A broad sand layer lies above a shell layer that is best described as dense scatter and which represents the first occupation of the site (18-21). Below this lies sterile sand that becomes well consolidated with depth.

Besides shellfish, the inhabitants of the Noetzie Midden also consumed large quantities of fish. Judging by the variable size of the bones, several species are likely to be present, with the larger ones being steenbras or mussel cracker. Mammalian fauna are also well represented and include bovids of various size as well as seals. Domesticates are rare, with sheep represented by just two teeth in Layer 1. The ostrich eggshell (OES) fragments found are unlikely to reflect food debris, but might have been brought to the site for other reasons, perhaps even as flasks. OES is very rare in the uppermost levels with 83 per cent of fragments being found in Layers 6 and 4, but even in these it is still quite rare.

Human burials

Two burials were found within the midden. One was intersected accidentally near the eastern edge of the site during construction activities, while the other fell within our excavation. According to Genevieve Dewar, who analysed the remains, the latter was a woman approximately 40 years old. She was buried on her side in the fully flexed position typical of San burials, with her head pointed to the south. A rock had been placed above her head and ochre staining on the skull and surrounding material suggests application of the red pigment at the time of burial. The grave was a small pit of about 600 mm by 900 mm and only some 400 mm deep. It was dug from the interface of Units 7A and 7B, near the base of Layer 3, perhaps suggesting an age of close to 2 500 years.



Fig. 3: Ground stone and pottery: A – ground stone pendant, B – millededged pebble, C – stone sinker, D – decorated pottery

Cultural finds

Most archaeological excavations along the south coast have been in large cave or rock shelter sites that generally produce a substantial variety and number of cultural finds, and also often many burials. Some of these sites, like Matjies River, contain several metres of deposit spanning many thousands of years. Although the Noetzie Midden probably spans no more than about 3 500 or 4 000 years, it has produced a good variety of cultural material, although in quite low frequencies.

Stone, pottery and beads

The vast majority of cultural material comprises stone artefacts. These are mostly large informal flakes, chunks and cores on local quartzite beach cobbles. Retouched items are rare, but are distributed throughout the deposit. Quartz is present throughout, but is somewhat more frequent in the lower half of the deposit, particularly in Layer 5. Very sporadic pieces of cryptocrystalline silica (CCS) and silcrete are also present from time to time. Four tinv stone sinkers (all from Layer 3), three milled-edged pebbles (Layers 2, 4 & 5) and a ground stone pendant (Layer 4) were found (Fig. 3). Fragments of ochre were present throughout. A large quantity of unmodified rock was also hauled onto the midden, with this practice seemingly increasing during the later occupations represented by Layers 2 and 1 when a large stone-packed hearth was also constructed. Grindstones are infrequent and tend to be made on relatively thick stones. Lower grindstones are always found with the grinding surface facing down.

Fragments of pottery were the most common non-lithic cultural items found and, aside from isolated fragments in the top of Layer 3, occurred in Layers 1 and 2 only. Although most were plain, several pieces were decorated with sets of parallel incised lines (Fig. 3). A few lugs, bosses and two refitting fragments of a decorated spout were also found, the latter indicating first millennium AD occupation. In general, thin-walled overlies thick-walled pottery.

OES beads were distributed in small numbers throughout the deposit, although no fewer than 174 were found in association with the excavated burial. With the exception of a single very large (~12 mm) and broken bead from the surface, all were small to medium in size, ranging between 3,2 mm and 6,9 mm. An OES pendant decorated with small nicks around the perimeter (Fig. 4) and a round disc of some 18 mm diameter were found in Layer 3.

Shell and bone artefacts

There were also several types of marine shell pendant from Layers 2 to 6 inclusive (Fig. 4), the most elaborate perhaps being those made from alikreukel. Some are decorated in a manner similar to the OES pendant, while others are plain. Several Glycymeris sp. and other shells with small perforations near their apices were also found in various layers. The holes on these archaeological specimens are identical to those on modern shells drilled by predatory marine snails and this suggests that the Noetzie people collected these shells from the beach. Several other types of perforated shell were present. These include small Venus Ears, two whelks, one of which has three holes ground into it, several limpets, each with a small hole near the narrower end of the shell, three brown mussels with holes made variably by grinding or drilling, and three Conus sp. shells, each with a small perforation ground into their distal ends. A large number of tiny tick shells (Nassarius kraussianus) were also recovered, but many, especially in Layer 3, displayed damage that seemed entirely natural. Those found in Layers 5 and 6 tended to have more rounded holes, providing stronger evidence for their use as beads.

White sand mussels (*Donax serra*) with deliberate perforation are also found. The holes are usually larger and their function is not yet well understood, although it has been suggested that they could be leg rattles. These items are common in Layers 5 to 7 and entirely absent from Layers 1 to 3. White mussels are also sometimes retouched around their widest end, making a scraper, but examples have been found only in Layers 5 and 6. Occasionally both forms of modi-



Fig. 4 (left): Shell artefacts: A - decorated OES pendant, B - two perforated bivalves, C - two Nassarius beads, D - four alikreukel pendants, E - two shell crescents, F - perforated Donax scraper

Fig. 5 (right): Bone artefacts: A - bone needle fragment, B - bone tube bead, C & D - two bone awls, E - bone point, F - bone link shaft

fication are found on the same shell (Fig. 4). Shell crescents are rare at this site (Fig. 4). These tiny, delicate artefacts were made on the edges of brown mussel shells (*Perna perna*) and are shaped by grinding. Despite their fragility, a few whole ones have been found in Layers 3 and 4.

Few worked bones were recovered, but the finds included several awls, three link shafts, four beads and the end of what we think is a bone needle (Fig. 5). The awls, beads and needle were all recovered from the upper four layers, while the link shafts were restricted to Layers 5 and 6. Two of the beads were tube beads made from the shafts of bird bones, while the other two resembled OES beads in shape and were made from sidewall fragments of larger bones. A few large bone fragments with rounded and smoothed ends were also unearthed.

Conclusion

Noetzie Midden has provided a rare opportunity to obtain Later Stone Age material from an open context on the south coast. It affords a good opportunity to compare the finds with those from the many cave sites that have been excavated and has shown that the wide range of cultural material regularly found in caves also occurs at open sites. The similarities in artefactual content between cave and open sites suggests that the latter may not simply be shell processing sites, but may also represent places of longer-term activity.





Specialised travel at its best

S. A. Archaeological Society Tour Easter Island /Iguazu Falls/Buenos Aires/Santiago/Chilean Lake District 17 September to 02 October 2008

No one arrives on Easter Island by accident. It is on the way to nowhere, is next to nothing and has been described as "spellbinding" with iconic statues in an eerie landscape and a palpable aura. Some 3 600 km from Chile and 2 000 km from Pitcairn Island it is the remotest occupied part of the world.

The island, a UNESCO World Heritage Site, is strewn with over 800 gigantic and breathtaking "moai" statues averaging over 5m high. We will explore the statues (moai), platforms (ahus), caves, petroglyphs, Rongo-Rongo writing that remains un-deciphered, Orongo, the site of the bird man cult and Anakena beach where the original inhabitants are presumed to have landed in canoes from the Polynesian Islands.

The tour includes visits to Iguazu Falls, the site of the well known film "The Mission" with its haunting music and Buenos Aires with its history and home of the sensuous tango. From there we will fly to Santiago the capital of Chile and on to the Chiliean southern Lake District where we will visit the 12 500 year old footprints at Monteverde, reputedly the oldest inhabited site in the Americas. We will also visit the island of Chiloé, a time warp where the ancestral Mapuche peoples still live in traditional reed homes on stilts. Last but not least we will spend 5 nights on Easter Island.

The tour will be led by Lilith Wynne, a past Secretary and Chairman of the Trans-Vaal Branch, and past Vice-President of the Society. She was awarded the Presidents Medal for Services to Archaeology in 2002. Lilith has led tours with an archaeological focus since the 1992.

Seats on this tour are limited so early booking is essential. For a detailed itinerary and further information please contact Lilith Wynne, lilith@futurejhb.co.za, or Kim from Nile Travel, 011 788 3823, 083 630 7926, kim@nile.co.za. www.nile.co.za. Dates and flight schedules are subject to slight change once 2008 flight schedules are confirmed





The Digging Stick

PLACE NAMES AND EARLY SETTLEMENT PATTERNS IN ENGLAND

Elwyn Jenkins

This article considers three waves of settlers in the geographical area of present-day England, in chronological order: The Celts, the Anglo-Saxons and the Scandinavians.

Celts

The Celts found earlier inhabitants, who became assimilated into the Celtic peoples and whose ancient genes survive to this day in the people of the British Isles.

Traces of the 'Old European' language spoken before the arrival of the Celts survive in English place names. They are related to Old European names all over Europe. River names are particularly ancient and long-lasting. They were given before permanent settlements were established since they were the major travelling routes and so were very important. *Allan* was a word for 'river' and many names related to it survived in Britain. The Romans recorded ten different rivers called Alauna or Alunus, and in England today we have Ellen, Allan Water, Aln, Ale Water, Ayle Burn, Yealm, Allow, etc.

Some names that appear to be derived from Latin, Old English or Old Norse are actually older. For example, the Old European word meaning 'wet' appeared in the Latin Vedra, now River Wear, and in the Latin Verbeia, which was later interpreted as Norse *hverfr* (winding), hence the river called Weorf (963), Werf (1158), now Wharfe.

In classical authors, Great Britain is named Albion, a Celtic word. Albu was the word used for Britain by the Irish as recently as the 10th century AD. The people were known as the Pretani. This Celtic word probably means the 'Painted People' or the 'Tattooed Ones'. An alternative for Albion was therefore Pretannia. The early Celtic pronunciation has survived among modern Welsh speakers, whose name for the island is Prydain.

The Celtic language spoken in England is sometimes called Britonnic. Its only traces in the east



and south are in names of people on coins and in place names (Latinised for the Roman alphabet), for example Danum (Doncaster), Letocento (Welsh *llwyd+coed* meaning 'grey wood'), which survives as Lich(field), and Pennoccrucio, which survives as Penkridge. Place names of Britonnic origin survived in parts of England that were not anglicised until the Middle Ages, such as Herefordshire, Shropshire and Cumbria.

Brittonic river names are rare in the east and confined almost exclusively to large and medium-sized rivers, e.g. Trent and Darent. The larger the river, the older its name is likely to be. Moving westwards, one finds a higher proportion, including small rivers. In the Welsh borderlands, many rivers and even small streams have Celtic names. In Cornwall the names are overwhelmingly Celtic (Fig. 1).

One British word meaning 'river' was *abona*, hence Welsh *afon* and Cornish *avon*. There are seven Avons in England and Scotland and several in Ireland. Another word was *Dubro*, hence Welsh *dwfr*, $d\hat{w}^r$ and Dour, Dover, Doverdale, Doverburn etc, all over England. Two that are now names of towns but originally were streams are Andover and Micheldever.

A few other prominent features besides rivers are Arden (the name of the forest, meaning 'high dis-

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trict'), *penn* (end, head, headland, hill) and *dunum*, *dounum* (fort) – there are at least 16 'dun' names in Britain and many more on the Continent. Some of these elements are still found in Welsh, e.g. *dunum* is now *dinas* (city).

Cornish first had to compete with Latin, and then, even before the Romans left, with Old English, but many place names survived. Some familiar Cornish elements are *penn* (head, top, summit), e.g. in Penzance (holy headland), *pol* (pool) in Polglaze (blue or green pool) and *trev* (homestead, village, town) in Tremain (hamlet of stone). Where Cornish continued to be spoken after the Saxon conquest, Cornish people added the name of the English owner to the Cornish *tre*. Trezize means 'homestead of the Englishman'.

The survival of Celtic names in areas occupied early by Anglo-Saxons raises questions of relations between the British and Anglo-Saxons and the fate of the British. Were they exterminated, did they flee to the west or did they remain? The earlier theory was that the British in the east and south disappeared, swept away by ethnic cleansing or put to flight. It is far more likely that they were absorbed into the newly developing English communities. Linguistic, historical and archaeological evidence shows that they were gradually assimilated, and a few enclaves probably lasted as an identifiable part of the population under English rule until the 8th century. But the interesting case is Devon. While many Cornish names are Celtic, and one would expect names in neighbouring Devon to be, they are less common than expected. The explanation is most likely that the Celts of Devon fled to Brittany in France between the mid-5th and early 7th centuries, leaving it open to the English.

Anglo-Saxons

The first Germanic tribes invaded East Anglia in the 5th century or earlier. Various tribes spread across England until the 9th century, when they reached Cornwall. It used to be thought (after Bede) that the settlers were Angles, Saxons and Jutes, but there were others. The Jutes' name survived after the Norman conquest in Æt Yting Stoce (now Bishopstoke) and present-day Eadens. Suebians are remembered in Swaffham in Norfolk, and the Frisians in Friston, Frisby, Freiston and Monk Fryston. Frizington and Fressingfield contain personal names meaning 'the Frisian'. The origins of the other 'Anglo-Saxons' are uncertain (Fig. 2).



Fig. 2: Anglo-Saxon settlement (McDonald & Cresswell 1993: 31)

In the course of the 7th century, Anglo-Saxon culture became completely dominant in the lowlands, although genetically perhaps two-thirds of the population were of British descent. The earliest names reflect the fact that settlers were moving across new territory. They were folknames such as Norfolk, Suffolk, Essex, Middlesex, Sussex, which were afterwards used for their kingdoms. Later, names of specific tribes were used. They also had ways of describing a place according to its occupants without using a personal name, such as Grantchester (from *saete*, meaning 'dwellers' on the River Grant) and Epping ('people of the upland').

What was important was the name of your own group – your only identity. They travelled as bands named after their leader. Clan names were transferred to places at the end of the 5th century. These early names are a great help to historians. For example, Ripon comes from a tribe called Hrype. Plotted on a map, they show where the Anglo-Saxons went and *when* they went there. Movements of the early small tribes left their successive names along the way: for example, the migration of the tribe of Wixan can be traced: 972 Wixena broc (Whitsun Brook), 1145 Wixebrug (Ixbridge), 1257 Woxindon (Uxendon Avenue in Harrow) and 1294 Woxeleye (Waxlow).

Names ending in *-ing* are of high antiquity, from not much later than 500. The usual form was *-ingas*. It meant 'followers or descendants of'. If the leader was Reada, they were called Readingas. When they settled, they called their settlement 'The Readingas' Place', hence Reading. Spalding came from the Spale or Spaldas tribe.

Later, when they settled and amalgamated into

kingdoms, they gave true place names. But they did little conscious naming. Names were simply descriptive, so they give a very useful picture of the country with many fine details of people, beliefs and customs (e.g. field names). They were peasant, agricultural people, sensitive to different aspects of the countryside we might not even notice. Where we have few words for hills, valleys and streams, they had a range of words. For example, the following elements usually refer to 'valley': botham, bottom-, -bottom, -cleaugh, clof-, comp-, -coombe, dal(e)-, -dale, dean-, den-, hol(e)-, -hole, slade-, -slade and -sled.

In some ways, the land the Anglo-Saxons found was quite different from today, and this is where place names can help us picture the country as it used to be. In general, the names tell us that it was much wetter and much woodier, with far less farmed land and fewer towns and villages. There were more wild animals but fewer species of cultivated plants. Names for marshes survive in what are now built-up places, such as Marston, Fenton, High Marish, Mousen, Sock Dennis and its neighbour Old Sock (from 'suck'). All they needed in these fertile places was a piece of dry ground for huts called a *hyll* or e(i)q ('island', pronounced /ee/), e.g. Brightlingsea, Rye, Edale. This explains the modern address of the Great Gatsby, who lived on West Egg in Long Island Sound, off New York.

Names are a record of how they settled. *Worth* first signified an enclosure, then an enclosure around a homestead and finally a homestead. Their steady movement outwards from the first settlements can be seen in *-ingham* and *-ington*, which were offshoots of settlements, e.g. Sandringham and Winterton. Names can explain their social system and patterns of landholding. For example, *churl* ('free peasant') can be seen in Charlton and Chorlton.

The nature of the interaction between Anglo-Saxons and Celts is intriguing. For example, Sixpenny Handley and Pensax are places where Anglo-Saxons were in the minority when they were named: Sax + pen. One argument suggests that if only a small Germanic elite had arrived in Britain the general population would have continued to speak their Celtic languages or Latin, or some form of amalgamation of the two, as do the French and Spanish. The counterargument is that people can change their language without moving from their ancestral land or being swamped by numerically superior incomers. This certainly happened in Cornwall, where the spoken Celtic language disappeared by the 18th century without a mass incursion of English. The language we are using is the most telling argument against the minimalist elite model. It is English, and so are the names of most villages, fields and towns in the east and south of England today.

Scandinavians

The Scandinavians were made up of two groups, Danes and Norse. While Alfred and his successors gradually took control of the whole country, the Danes were allowed to stay and rule themselves. Alfred signed a treaty with Guthrum that divided the country in 886, creating the Danelaw. The Norse, or Vikings, arrived later (Fig. 3).

The greatest concentrations of Scandinavian names in Britain are to be found, in chronological order of settlement, in the northern and western isles of Scotland and neighbouring parts of the Scottish mainland, in the former Danelaw territories of the midlands and north-east of England, and in Cumbria. We tend to forget that the north-west was settled by Vikings, probably from Ireland. In Cumbria, numerous names of towns, villages, streams, mountains and other natural features are Viking, e.g. Rossgill, from *gill* (valley) + *hross* (horse), and Witherslack, from *viðart slakki* (wooded hollow).



The Scandinavians responded to the existing place names in different ways:

(1) They accepted them. Old English names survived in the Danelaw because the Danes were thinly spread and names were already firmly established, some even in writing. The English Vikings quickly adopted the local language, suggesting that they were in the minority. Furthermore, the Scandinavians in general were a cosmopolitan lot, used to foreign names, so they were tolerant. The most important reason was that the Old Norse and Old English languages were closely related, like different, mutually intelligible, dialects. So the names were familiar to them and they were happy to use them.

(2) They adapted the pronunciation. The mixed population produced English names modified by Scandinavian pronunciation, e.g. Shipton/ Skipton, Cheswick/Keswick and church/kirk.

(3) They added their own elements to existing names, creating hybrid names. There are many hundreds of them, far more than Celtic/Old English hybrids. They suggest much more understanding and meaningful communication between the newcomers and the existing population. One category of place names is known as 'Grimston hybrids' because they contain a Scandinavian element such as the personal name 'Grim' and the Old English -ton. These names are thought to indicate settlements taken over by Scandinavian settlers. The English peasantry would have stayed on the land, paying dues to the new lord. That is not to say that the Scandinavians were all absentee landlords: there are many loan words in English taken from Danish which refer to farming and suggest that they introduced new techniques and practices. A ground survey shows that names in -by, meaning 'village' in Danish or 'homestead' in Norse, were on poorer land, while Old English names were on better land - hence, the settlers were not bloodthirsty Vikings but pioneer farmers breaking new ground. There are even several places called Soerby or Sorbie (by on sour ground). A large number of hybrids actually have an English personal name showing ownership, even though the rest of the name is Scandinavian.

(4) They gave new names. England was a densely occupied place when they arrived, and so it was filled with existing place names. Where Scandinavians outnumbered the English they did rename many places. But they also gave a large number of new names. An example of a

name given by Scandinavian speakers and not the occupants is Ingleby, 'The village of the English'.

The commonest Scandinavian names are ones with the suffix *-by*, which are mainly Norse. (The Old English equivalent is *ton* or *tun*.) Examples are Whitby, Selby and Kirkby. The second group includes the element *-thorp(e)*. (The Old English version was *throp*, which was not used much.) Mainly used by Danes, it meant a farmstead or outlying settlement dependent on a larger village. Because it was a secondary settlement, it was later in date than *-by* names. Yorkshire has 155 of these, for example Thorpe by Water and Kettlethorpe. If places were called *Thorp* uncompounded, this shows they were insignificant, and many have disappeared.

Other characteristic place name elements (in modern form) are *toft* (plot of ground, home-stead) as in Lowestoft, *beck* (brook), *dale, fell* (hill), *garth* (enclosure) and *wich* (bay).

Conclusion

Place names support linguistic, archaeological and documentary evidence concerning the three waves of settlers considered in this article. The Celts found the country almost empty, but preserved a few very early names. The Anglo-Saxons swamped the Celts with their language, though not numerically; but the Danes and Norse and their language were assimilated. DNA, the latest form of evidence we have for the history of the peoples of England, shows that through all these linguistic changes the old genes have survived.

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ARCHSOC TOUR TO MOROCCO, JUNE 2007

Part 1: Prehistory

Lilith Wynne

Morocco is a land of undoubted contrasts – from rugged mountains to fertile valleys, and desert dunes to a coastline that attracted many invasions. It has a prehistory of at least a million years and a more recent history of Berber, Phoenician, Carthaginian, Roman, Vandal, Islamic, Portuguese, Spanish and French colonisation. Independence was achieved in 1956. My only disappointment during the tour was the apparent lack of knowledge and interest in Morocco in any period preceding the Islamic era.

The Acheulian Period

In Casablanca, with a great deal of detective work, some co-ordinates from the Internet and no help from the many letters written to local institutions, we directed our bus around a suburb to find to our own amazement that we were within walking distance of one of the classic Acheulean sites, the Thomas Quarry, which lies close to our actual objective, Sidi Abderrahman, a classic Early Stone Age site. Here to our even greater good fortune we found a team from Bordeaux University and were able to see their excavation in progress and guartzite hand axes in situ (Figs 1 and 2). The French palaeontologist pointed out bear, hyena and canid (wild dog or jackal) remains in a slightly higher site near the cliff face - the archaeologist was unfortunately on lunch!

We were actually standing on an exposed ancient shoreline, several hundred metres from the present one, dating to about 1 million years ago, making it 600 000 years younger than early Acheulean in other parts of Africa. A human mandible with robust teeth, dated to about 600 000 years ago (ya), was found associated with Acheulean tools in the younger 'pink breccia' of Thomas Quarry Cave. This hominid, like most others associated with Acheulean assemblages in Morocco, is attributed by many palaeoanthropologists to *Homo rhodesiensis* to indicate similarity to the robust Kabwe (Broken Hill) fossil skull from Zambia. At a later period the sea rose again and cut caves into the sandstone dunes. At one of these sites, Grotte des Littorines, a *Homo ergaster* lower jaw was found. Further north on the coast, near Rabat, a human fossil 350 000 to 250 000 ya has been compared, in robusticity, to Neanderthals, but as no Neanderthals have been found in Africa it is probably more like our Florisbad archaic human specimen.



Fig. 1: Acheulean site at Thomas Quarry



Fig 2: An excavated Acheulean hand axe

Stone tools and signs of early symbolism

The Mousterian (African MSA) Industry is well represented in Morocco, but we were only able to see evidence in museums. The Aterian Industry from pre-70 000 ya is best known for the beautifully worked tanged points. The *Pointe*

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Fig. 3: Tanged Pointes Marocaines in the Tetouan Museum

Morocaine actually juts out at the base to form 'wings' (Fig. 3). These were produced in response to a particular type of hafting favoured at the time, and as a grassland adaptation by a highly mobile people. Double-pointed bifacially retouched points were also common in this period and are very similar to our Still Bay points.

Another intriguing connection to South Africa is the very recent find at Grottes des Pigeons, near Tafouralt, north-eastern Morocco, of perforated, ochre-smeared shell beads. These are of the same genus, Nassarius, as those found at Blombos Cave on the Cape south coast. The Moroccan beads, associated with bifacial points, are reliably dated even older than Blombos at 82 000 ya. Interestingly, the snails are no longer found on the Moroccan coast, but only at Djerba off the Tunisian coast - a site visited by the Society on an earlier tour to Tunisia and Malta. If they did exist on the coast near Grottes des Pigeons at the time of its occupation, the shells must have been a deliberate collection since the coastline at that time was 35 km, or a day's excursion, distant.

By 12 000 ya the stone tool industry is called Capsian and from 9 500 ya one finds middens, microlithic tools and bone artefacts. Burials with red ochre and perforated shells indicate continuation of the earlier practice of personal adornment in the Maghreb (the Arab name for this westernmost Muslim country). Sea levels were lower than at present and the indigenous African Barbary sheep was hunted. It is suggested that the makers of Capsian tools were a protoMediterranean type and probably the ancestors of the Berbers. From 3 000 ya there are stone funerary monuments, but these were too far south for us to reach.

The Neolithic

Our experience of the Neolithic in Morocco was near Asilah on the north Atlantic coast. Exciting M'Soura el Utad is a 53 m x 55 m x 6 m burial mound that was surrounded by 176 megaliths. some up to 5 m high, but with only one found intact (Figs 4 and 5). Our excellent guide here, the archaeologist and conservator of the Musée de la Kasbah in Tangier, has a theory that the monoliths were toppled deliberately during the Islamic period (post-AD 700) as the same angle was used in the cutting. The only one left upright would have represented 'the one God'. Two types of construction were employed, the earlier using only stone tools and the latter metal. The guarry was nearby and there are some smaller satellite sites. The French excavators exposed thee stone-slab tables, possibly altars, and the floor of a tunnel or passage that would have had wooden supports. No skeletons were excavated. Similar sites dated to 4 000 ya have been found in Brittany and Spain.



Fig. 4: Model of M'soura el Utad Neolithic site

Pottery

The earliest evidence dates to 9 000 ya on sites near Tangier and at Cap Spartel, the north-west extremity of Africa. Faunal (ovicaprid) remains attest to early farming and cattle bones appear in the record 7 000 ya. As expected, some of the sites explored by us were often better known for their later settlements, e.g. Cotta where we only saw remains of stone garum vats used by the Romans to marinate fish in brine for the export fish paste.



<caption>

At Grotte d'Hercule, now a huge tourist attraction, the archaeology is overwhelmed by the mythology, but Roman-period quarrying of grindstones for their olive presses and wheat milling can clearly be seen in the cave walls. Artefacts from the cave floor (44 000 to 900 ya) are kept in Paris and were not even mentioned by our guide. It was here that Hercules is said to have pushed the continents apart. The geological record shows that a land bridge existed here some 65 million ya, when tectonic movements caused the Iberian Peninsula to converge with the northern tip of Africa and so create the High Atlas, Pyrenees and Alps.

Rock art

Morocco is also known for its rock art in the south depicting giraffe, rhino and elephant. This is evidence for the great environmental changes that have occurred in the Sahara. Petroglyphs, some possibly engraved with chisels (later sites actually depict metal tools), date to 10 000 ya. But we were warned by Botswana rock art expert Alec Campbell that so many have been damaged or removed for sale that it did not warrant the logistical problems of getting to a site. We saw good examples in various museums.

The history of Morocco was far more 'visible' and the evidence we saw of the Phoenician, Carthaginian, Roman, Islamic and colonial periods will follow in the next issue of *The Digging Stick*.

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A pencil drawing by the late Solomon Siko



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



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This publication is available at all good bookstores, as well as Amazon.com and Kalahari.net For further information please call UKZN Press on +27 33 260-5226 or visit their website www.ukznpress.co.za

DR GERHARD FOCK: SOME PERSONAL REMINISCENCES

AJB Humphreys

The year 2007 marked the centenary of the birth of Dr Gerhard Fock, the first professional archaeologist to be attached to a South African museum – the McGregor Museum in Kimberley. Realisation of this landmark event brings back many memories of the man (and, indeed, of his wife, Dora), some of which I would like to recount here as a small tribute to a modest and gentle individual.

To me, Gerhard Fock will always be 'Dr Fock'. Most of my colleagues, some far younger than I, came on closer acquaintance to call the Focks Gerhard and Dora. For me this was impossible. Perhaps the reason was that, when I first met the Focks, shortly after their arrival in Kimberley in 1958, I was still in high school. I had long been interested in archaeology and although I had met Mr JH Power, a former director of the Mc-Gregor Museum, he had not been a 'real' archaeologist. This very early contact with Dr Fock probably makes me one of a dwindling number of non-retired archaeologists who had direct dealings with him.

Dr Fock was very tolerant of my school-boy enthusiasm and was even prepared to indulge me by perusing the first archaeological book I ever possessed. This was SP Impey's *Origin of the Bushmen and the Rock Paintings of South Africa*. I still have a slip of paper, inserted in the book opposite a page detailing 'Archaeological Divisions', on which Dr Fock had written the comment: 'All these dates are wrong!' This is not surprising, seeing that the book was published in 1926! Dr Fock apparently decided that Impey was not suitable reading for me, for shortly afterwards he presented me with a copy of the then hot-off-the-press *Mankind in the Making*, by William Howells. Although this book is itself now dated, it is still a treasured volume in my personal library.

While I was a student, Dr Fock generously invited me to assist in various aspects of his work. At the time, the exhumation of the remains of the missionary, Revd William Ross, was probably the most interesting. Removal of the grave was necessitated by the impending construction of a bridge approach over two marked graves. Unfortunately my school obligations limited my direct involvement with Dr Fock in the first of Phillip Tobias's 'Campbell Expeditions' to study aspects of the local Griqua community, as well as the excavation of Doornlaagte in collaboration with Revil Mason and Hilary and Janette Deacon in the early 1960s. I was, however, an enthusiastic spec- tator from the sidelines.

Dr Fock spent about nine years at the museum, until

his retirement. Fate was such that I succeeded him at the beginning of 1968, having completed my Honours degree the year before. Dr Fock continued with his rock art research and was still based at the museum as a Research



Associate. But he very graciously stood back for this youngster and never tried to influence what I did. We had a happy relationship and he would always politely knock on the door before coming into his old office-cum-laboratory, which was now mine, even though the door was standing wide open.

My personal research interests did not extend to rock engravings so there was no research overlap between us. We did, however, take an interest in each other's research and I visited some of the sites that he and Mrs Fock were recording in their usual meticulous style. Locating and then relocating rock engravings in bushy environments can be problematic, but the Focks soon found a successful solution. They used to tie pieces of toilet paper to the nearest branch or bush to mark the spot. Accordingly, as one approached a site one was confronted by a landscape festooned with bits of paper flapping in the breeze.

I left the McGregor Museum also after nine years in order to take up an appointment in Cape Town at the beginning of 1977. My departure for Cape Town resulted in the loss of personal contact with Dr Fock, although, of course, I followed his rock engraving publications with interest and, perhaps, a little nostalgia for the Northern Cape.

The first time we paid a return visit to Kimberley after our departure was in June 1989. By then Dr Fock had aged greatly. He was almost totally blind and rather deaf, and was confined to a chair during the day. But I found that despite his physical frailty, his mind was fully alert. He was quite up to date on everyone's research projects in Cape Town and was particularly interested in my teaching activities. We even exchanged views about the extent of Iron Age settlement in the Northern Cape - although exactly why, I cannot now remember as neither of us was heavily involved in the field! He tired guickly so I could not spend too much time with him. My last emotion, as I left the room, was one of admiration for an aged yet dignified gentleman. He was to die less than a year later.

To me he will always be 'Dr Fock'. But I remember him with gratitude and affection.

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WE ARE WHO WE ARE BECAUSE OF WHO WE WERE

OBITUARY: MARAIS WEPENER

Guillaume Francois Marais Wepener died at the age of 89 on 17 September 2007 in George, where he and his wife, Guil, had been living since his retirement in 1978. Marais was born in the Transvaal on 17 June 1918 and educated at Jeppe Boys High School. Apart from service with the South African Artillery in Egypt and Italy during the Second World War, he spent his working life in the mining industry, firstly in Northern Rhodesia and later in Namibia. In both countries he was able to indulge his passion for adventure and the outdoors.

A man with enormous breadth of intellect, he immediately started to pursue his many interests. His real love lay with history, archaeology, paleontology and geology. He was both knowledgeable and enthusiastic, and probably derived his greatest enjoyment from sharing his knowledge with others. He is widely remembered for the many outings he led as founder and chairperson of the Southern Cape Branch of the SA Archaeological Society.

Marais covered large areas of the Southern Cape on foot and always had an eye for the landscape. Whether standing on the ridges of the Outeniqua Mountains looking for the likely route of the original Nanniedouw Pass, or looking out from the sea cliffs in pursuit of a theory on migration routes in the last ice age, his mind was always alert to his surroundings. In 1998 he published an original analysis of the siting of the Dutch East India Company's 18th century Outeniqua Outpost.

Marais is survived by his wife Guil and two daughters, Karin and Maryke. He will be greatly missed by all who knew him and his contributions will be long remembered. Hugo Leggatt



ARCHAEOLOGY IN BRIEF

Neanderthals reached China's doorstep. European Neanderthals migrated much further east than previously thought. Remains from the hominid have previously been found as far east as, but a new study extends the eastern boundary of their wanderings another 2 000 km into southern Siberia, just above the western tip of today's China. A comparison of mitochondrial DNA by geneticist Svante Paabo of the Max Planck Institute for Evolutionary Anthropology has confirmed that 40 000year-old fossils bones from sites in Uzbekistan and the Altai Mountains in Siberia genetically match the European Neanderthal. This supports a theory that Neanderthals colonised most of the Russian plains during a warming period some 125 000 years ago.

Nature/AFP, 1 October 2007

REINOUD BOERS RECEIVES PRESTIGIOUS PRESIDENT'S AWARD

At the start of the Annual School of the Trans-Vaal Branch on 20 October 2007, Mrs Jo Earle stood up unexpectedly to present the President's Award for Merit of the South African Archaeological Society to Reinoud Boers, current chairman of the Trans-Vaal Branch. Her presentation speech follows.

'As Vice-President of the SA Archaeological Society I have been asked by Council to talk on its behalf. When Dr Tim Maggs was President of the Society in 1993, he invited members to contribute to a fund for an award that would be made every three years. His aim was to honour members who have actively promoted archaeology through the Society and who have given outstanding service by disseminating archaeological information to the public and recording and conserving archaeological resources.

'It gives me much pleasure to announce that it was unanimously decided to award the fifth President's Award in the form of a silver medal to Reinoud Boers. This award has been well deserved by Reinoud as he has put in many thousands of hours working for ArchSoc. Reinoud has been on the ArchSoc Committee for 12 years and is currently serving his second term as Chairman of the Society's Trans-Vaal Branch, which involves much organisation, hard work and commitment. Reinoud also organises the ordering and selling of a wide variety of books of archaeological interest to ArchSoc members in many parts of South Africa. This activity has grown exponentially over the past years and entails keeping a constant finger on the book pulse.

[']Reinoud is the editor of *Artefacts*, the Trans-Vaal Branch bi-annual publication that contains reports on branch lectures, excursions and Annual School lectures. As if all of this is not enough, Reinoud is also the editor of *The Digging Stick*, a publication that contains archaeological articles and news of more general interest. With his business expertise and many contacts, Reinoud has obtained sponsorship by inviting individuals and corporate groups to place advertisements in *The Digging Stick*. This has enabled him to take the magazine from being a fairly slim publication to the substantial, well- presented and very readable publication that it is today. I know that he puts an enormous amount of time and effort into producing *The Digging Stick*.

Reinoud organised a very successful tour to Ethiopia in 2005, which stimulated much interest in archaeology, especially of the early hominids. He is currently organising a fascinating tour to Mali in February 2008 and in October 2007 Reinoud, assisted by other committee members, is arranging a nine-day tour of the archaeology and passes of the southern Cape and Karoo, one of the highlights of which will be a visit



to Pinnacle Point Cave near Mossel Bay.

'The President's Award is a well-deserved recognition of Reinoud's tireless and hard work for the SA Archaeological Society.'

BOOK NEWS

A Search for Origins: Science, History and SA's 'Cradle of Humankind', by Wits University academics Philip Bonner (a historian), Amanda Esterhuysen (an archaeologist) and Trefor Jenkins (a geneticist), was released in December. It offers a multidisciplinary approach to understanding the Cradle, spanning the whole broad vista from 2 to 3 million years ago to now. Prof. Philip Tobias, Himla Soodyall and others have contributed to the 15 chapters of the book, covering anything from Little Foot to the poor *bywoners* who settled the Hartebeespoort Dam area in the early part of the 20th century. Another issue dealt with in the book is how politicians from Jan Smuts to Thabo Mbeki have used the discoveries made at the Cradle to promote their own ideals and theories. Price R235.

Another important new release is Prof. Tom Huffman's *Handbook of the Iron Age*. This superbly designed and illustrated hard-cover book is the defining publication on southern Africa's Iron Age. Price R370.

Both books are available from the Trans-Vaal Branch Sales Table at the prices shown. Contact Reinoud Boers at fox@boers.org.za or by tel/fax at 011 803 2681. For the long list of other books now in stock see www.archaeology.org.za.

For the record Christine Sievers' Sixteenth Century Peppercorns' article in the August 2007 issue refers. The scale, namely 10 mm square, was omitted from the two illustrations. Also, the date in the caption to the illustration on page 13 should have read 1554.

ARCHAEOLOGY IN BRIEF

Roman artefacts from London well. A banqueting set that once graced the table of a fine-dining Roman family has been unearthed, remarkably preserved, from the bottom of an excavated well in central London. Nothing of a similar size has ever been found before in the UK. The 19 metal vessels, made from copper or lead alloy, date from between 330 and 380 AD. Among the collection are a matching set of three bowls that nest together, buckets that were probably used to water down wine, a cauldron, jugs and a ladle. It is thought that the set may have been hidden by a wealthy family preparing to leave the city, which was under constant attack at the time. Alternatively it could have been laid as an offering to water spirits when the well was closed up, as was Roman custom.

The Telegraph, 07/12/2007

World's oldest inscription found in Jiroft. The world's most ancient inscription has been discovered in the Iranian city of Jiroft. The undeciphered inscription was carved on the remains of a baked mud-brick belonging to a palace, according to Prof. Yousof Majid-Zadeh, head of the excavation team. The inscription was formed by geometric shapes. 'The only ancient inscriptions known to experts before the Jiroft discovery were cuneiform and hieroglyph,' he said. Archaeologists have found many artefacts

confirming the existence of a rich civilisation dating back to the 3rd millennium BCE. They believe the Elamite written language originated in Jiroft.

CAIS, 05 November 2007

Ancient murals found near Euphrates. Mural paintings dating back 11 000 years have been found in a building on a bank of the River Euphrates in northern Syria. According to French archaeologist Eric Coqueugniot, these are the oldest murals to be found in the Middle East. 'Geometric paintings in black, white and red have been found on the wall of a circular house with a diameter of about 7 m in Jadeh,' he said. The house dates from the start of the Neolithic era in the Middle East, 9000 years BC. Sapa-AFP, 10 Oct 2007

Archaeologists stumble on sensational find. Serbian archaeologists have found evidence of what could be the oldest-known metal workshop in Europe. According to National Museum archaeologist Dusan Sljivar, experts found a 'copper chisel and stone ax at a 7 500-year-old site near Prokuplje in southern Serbia, leading us to believe that it was one of the first places in which metal weapons and tools were made in prehistoric times.' Archaeologists hope that this find will prove that the metal age began a lot earlier than it is believed to have. Beta, 4 October 2007

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On this tour, just about every site, every visit is a high-point, but for avid rock-art enthusiasts there will be the thrill of our visits to world-renowned Palaeolithic caves such as those at Altamira and Cognac, and Lascaux II. In addition, we will visit the early pre-Neanderthal site of the Sierra de los Huesos in Spain, where archaic man lived, hunted and died, leaving behind their remains to tell us a little something about life in that region some 800 000 years ago.

Bookings close on 4 April 2008. Book now!

NOTICES

South African Archaeological Society Annual General Meeting

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 Western Cape Branch on Tuesday 13 May 2008 at 18:00 at the Iziko South African Museum, Queen Victoria St, Cape Town.

Members should submit items for the Agenda in writing to the Secretary, PO Box 15700, Vlaeberg, 8018, before 1 March 2008. Proposals must state in specific terms the resolution to be put to the meeting and the reasons therefor.

Janette Deacon, Honorary Secretary 2 January 2008

ArchSoc: Reduced subscription rates

Members who have studied the financial report for 2007 will have noted that the Society is not a profit-making organisation. The Council tries hard to keep the subscriptions affordable, and to generate enough income to cover expenses. The Constitution of the South African Archaeological Society states in section 4(b)i that 'Reduced rates may be granted to students and pensioners on such conditions as Council may prescribe'. Council has accordingly prescribed a reduced rate of R130 for students, an effective reduction of R55 in 2008. Students may apply for this reduced rate for a maximum of five years while they are studying and must submit their university student registration number as proof of their status.

As a large percentage of the Society's members are over the age of 55, it would be impractical to offer the same reduced rate to all pensioners. It was therefore agreed some years ago that pensioners who have been members for a long time and are genuinely unable to afford the regular subscription rate may ask their Branch committee to recommend them for a reduced rate. These recommendations are passed on to the Council for consideration. There is thus no automatic rate for pensioners and as long as the number of members paying a reduced rate is kept within bounds, we can continue to balance our books at the end of each year. Members who wish to apply for this reduction must therefore contact their Branch committee and not the national office or Council.

Royal Society of SA: Centenary Congress

To mark the centenary of receiving its Charter, the Royal Society of South Africa is holding a Centenary Congress on the theme *The value of science: looking back and looking forward* on 17 and 18 April 2008 in Cape Town. The congress will take the form of invited plenary lectures, supported by poster sessions, for which contributions are requested (abstracts are required by 28 February 2008). A provisional programme, registration form and further information are obtainable from Dr Margaret Avery at mavery@ iziko.org.za.



SKY-DISC PEOPLE REMAINS FOUND IN GERMANY

Archaeologists digging at the place where in 1999 the Nebra celestial disc, a 3 600-year-old depiction of the sun, moon and stars, believed to be the oldest extant calculator of the seasons, was found in eastern Germany have turned up a body and remains of a Stone Age building, adding to the riddle around one of the world's biggest archaeological sensations of the past decade. Andreas Northe, giving the results of this summer's dig, said: 'We found a child's grave, a cache of stone tools and the remains of a long-house'.

Controversy has raged since 2001 about what the gold-and-green disc was for, who its owners were and whether it could be a scientific hoax. Digs have revealed that the deserted hill in woods near Goseck may have been a town for millenia. Northe dated the latest finds to the Stone Age and said they included burned pieces of plaster wall. The house had a dimension of 6 m by 20 m. The grave was of a child aged between 1 and 3 who had been buried with a fired-clay bottle, 'a provision for the after-life', Northe said. *DPA, 7 September 2007*



ARCHAEOLOGY IN AFRICA

Jawbone of great ape could be missing link

A 10-million-year-old jawbone has been unearthed in Kenya's Nakali region that is believed to belong to a great ape, named *Nakalipithecus nakayamai*, that could be the last common ancestor of gorillas, chimpanzees and humans. The fragments were found with 11 teeth in volcanic flow deposits. 'Based on this particular discovery, we can comfortably say we are approaching the point at which we can pin down the so-called missing link,' said Frederick Manthi, senior research scientist at National Museums of Kenya. Covered in thick enamel with the caps low and voluminous, the teeth suggest that the diet of this ape consisted of a considerable amount of hard objects like nuts and seeds, according to Yutaka Kunimatsu of Kyoto University's Primate Research Institute.

The ape lived within a critical window of evolutionary time and gives credence to the theory that the evolution from ape to man may have taken place entirely in Africa. Before this finding there was so little fossil evidence in Africa dating to between 7 and 13 million years ago (mya) that some experts began to surmise that the last common ancestor left Africa and then returned later. The new ape most closely resembles the species *Ouranopithecus macedoniensis* from Greece. But the Africa/Greece connection was likely the result of apes on the move, according to Kunimatsu. 'The oldest-known ape fossil dates to 25 mya and was found in northern Kenya. It is 16 million to 17 mya that apes started to appear in the fossil record in Europe, and 13 mya in Asia,' he said.

The Kenya find follows close on the heels of a discovery of ten-million-year-old teeth from the earliest direct ancestors of modern gorillas in Ethiopia by Gen Suwa of the University of Tokyo and Ethiopian palaeontologists Berhane Asfaw and Yonas Beyene. Comprising one canine and eight molars and given the species name Chororapithecus abyssinicus, the fossils place the early ancestors of the modern gorilla 10 to 10,5 million years in the past, suggesting, according to the researchers, that the human-ape split could have occurred several million years earlier than thought. Based on the measurement of genetic 'distances', scientists had placed the divergence between chimps and humans some five to six mya, while orang-utans are thought to have parted company with our ancestors 13 to 14 mya.

Proceedings of the National Academy of Sciences/Nature/ Discovery News/The Star, November 2007

Ancient African mega-droughts and evolution

From 135 000 to 90 000 years ago tropical Africa had mega-droughts more extreme and widespread than any previously known for that region. This knowledge provides new insights into humans' migration out of Africa, according to the researchers. 'Lake Malawi, one of the deepest lakes in the world, acts as a rain gauge,' said lead scientist Andrew Cohen of the University of Arizona. 'The lake level dropped at least 600 m and archaeological evidence shows relatively few signs of human occupation in central Africa during the mega-drought period.' Other researchers have documented droughts in individual regions of Africa at that time, such as the Kalahari Desert expanding north, he said. 'But no one had put it together that those droughts were part of a bigger picture.'

The new finding provides an ecological explanation for the out-of-Africa hypothesis. 'Maybe human populations just crashed,' Cohen said. But tropical Africa's climate became wetter by 70 000 years ago, a time for which there is evidence of more people in the region and of people moving north. As the population rebounded, people left Africa, Cohen believes. The mega-droughts were discovered by studying sediments in up to 380 m long cores taken from the bottom of 706 m deep Lake Malawi and comparing the findings with similar records from Lakes Tanganyika and Bosumtwi. 'What's unique about the Malawi, Tanganyika and Bosumtwi cores is that they're continuous records,' Cohen said.

Samples from mega-drought times had little pollen or charcoal, suggesting sparse vegetation with little to burn. Another indicator of drought was species of invertebrates and plankton that only live in shallow, turbid, algae-rich waters. Proceedings of the National Academy of Sciences, 16 October 2007/Eurekalert

Egyptians the true fathers of medicine

Scientists examining documents dating back 3 500 years say they have found proof that the origins of modern medicine lie in ancient Egypt and not with Hippocrates and the Greeks. The research team from the KNH Centre for Biomedical Egyptology at the University of Manchester discovered the evidence in medical papyri written in 1500 BC - 1 000 years before Hippocrates was born. The medical documents, first discovered in the mid-19th century, showed that ancient Egyptian physicians treated wounds with honey, resins and metals known to be antimicrobial. The team also discovered prescriptions for laxatives of castor oil and colocynth, and bulk laxatives of figs and bran. Other references show that colic was treated with hyoscyamus, which is still used today, and that cumin and coriander were used as intestinal carminatives. Musculo-skeletal disorders were treated with rubefacients to stimulate blood flow and poultices to warm and soothe. They used celery and saffron for rheumatism, which are currently topics of pharmaceutical research, and pomegranate was used to eradicate tapeworms, a remedy in clinical use until 50 years ago. www.eurekalert.org, May 2007

WORLD ARCHAEOLOGY

Stone tool reveals lengthy voyage

The discovery of an adze fashioned from Hawaiian basalt on a Tuamotu atoll in French Polynesia provides the first material evidence that ancient voyagers made an 8 000 km round trip from the South Pacific to Hawaii and back again. More than 2 000 years ago, seafarers from Samoa and Tonga ventured eastward to settle on more remote archipelagos in the Pacific, including the Cook Islands, Tahiti, and the Marquesas Islands, colonising most of these places by 900 AD. Eventually, the travellers set foot on Hawaii.

Scientists have long thought that these journeys must have been accidental or one-time events, but recent research has suggested that these peoples were capable of greater feats of navigation than previously suspected. Despite this, there has been debate about how much travel and trade took place among these remote islands in eastern Polynesia during the early years of their colonisation. Hawaiian oral histories point to voyages to and from Tahiti, but in the absence of evidence these feats have remained legends.

Kenneth Collerson and Marshall Weisler at the University of Queensland, Australia, decided to trace the origins of 19 stone adzes used for carving canoes recovered from coral atolls in the Tuamotus in the late 1930s. The adzes are fashioned from basalt and must therefore have been transported from one of the many volcanic island chains in the region, possibly even from Hawaii. Because the Tuamotus rose from the sea only after 1200, the adzes provide a record of travel from after that time.

CALL FOR RESEARCH GRANTS FROM THE KENT BEQUEST

The late Dr Leslie Kent, a long-time member of the South African Archaeological Society in Johannesburg, left a generous bequest to the Society in 1992. Under the terms of this bequest the proceeds must be invested and the income, which will amount to approximately R9 000 per annum at current interest rates, will be distributed from time to time at the discretion of the Society for the following purposes:

 To finance field work or expeditions to undertake research according to guidelines laid down by the Society.

To provide grants to individuals or groups of individuals engaged on research, the subject of such research to be approved by the Society

To publish or support the publication of research results, whether or not such research has been financed by the Kent Bequest, and

 To award prizes for meritorious work in archaeology, especially by young researchers

The Society has appointed a Kent Bequest Committee and invites applications in 2008 for awards in all categories. The members of the Committee are Dr J Deacon (Secretary), Mr Reinoud Boers, Prof. Tom Huffman, Dr Tim Maggs, Prof. Innocent Pikirayi and Mrs Lilith Wynne. Please read the following guidelines and instructions carefully before completing the application form.

Guidelines

The work must be conducted in South Africa.

- The subject matter may include archaeological work of any kind that enhances our knowledge of the lifestyle of humankind in southern Africa, such as excavation, rock art recording, site recording,
 - artefact or faunal analysis, identification of plant or

animal remains, dating, surveys, physical anthropology, analysis of archaeological collections in museums, experimental archaeology, archival or bibliographic work.
Proposals may also include publications for public education and community awareness projects that popularise archaeology.

The Kent Bequest will contribute fieldwork or printing expenses only, not costs involved in analysing results or writing or editing reports or publications.

Applications for publication must be accompanied by two quotations from printers.
Preference will be given to researchers domiciled in southern Africa.

Preference will be given to researchers who are starting a career in archaeology.

Successful applicants will be required to donate one copy of reports or publications to the Society's library, one copy to the South African Archaeological Bulletin for review and, in the case of publications, one copy to each of the Society's four regional branches.

Application forms

Application forms are available from The Secretary, SA Archaeological Society, PO Box 15700, Vlaeberg, 8018, tel. (021) 481 3886, e-mail archsoc @iziko.org.za, and must be submitted **before 30 April 2008**. All applications will be refereed by specialists. The applications and referees' reports will be evaluated by members of the Kent Bequest Committee. The successful applicant/s will be notified by 30 June 2008. Collerson, a geochemist, knew that basalts from different types of islands have distinctive signatures in their trace elements and isotope chemistries. So the team took centimetre-wide chunks from the adzes and compared them to a database from sites throughout the Pacific. Although the Society Islands would have been the nearest source for basalt, the team identified adzes from the Marquesas, Pitcairn and the Austral islands, indicating extensive travel in the region. One adze had been fashioned from hawaiite, specifically from the island of Kaho'olawe.

Earlier in 2007, another group reported on the presence of Polynesian chicken bones in Chile, confirming these voyagers made it as far as the New World between 700 and 1390 AD. *Science, 25 September 2007*

The hobbit: Not human?

Scientists, wringing their hands over the identity of the famed 1 m tall 'hobbit' fossil found on the Indonesian island of Flores, have found a new clue in the wrist. Since the discovery of the bones in Indonesia in 2003, researchers have wrangled over whether the find was an ancient human ancestor or simply a modern human suffering from a genetic disorder. Now, a study of the bones in the creature's left wrist lends weight to the human ancestor theory.

The wrist bones of Homo floresiensis are basically indistinguishable from those of an African ape or early hominin, and nothing at all like those seen in modern humans and Neanderthals, according to Matthew Tocheri of the Smithsonian's National Museum of Natural History. That indicates that it is an early hominin and not a modern human with a physical disorder, he contends. The specimen lived about 18 000 years ago at a time when early modern humans populated Australia and other nearby areas, 'Basically, the wrist evidence tells us that modern humans and Neanderthals share an evolutionary grandparent that the hobbits do not, but all three share an evolutionary great-grandparent,' Tocheri said. There are things that can go wrong in the development of the wrist, Tocheri said, but they do not result in a complete change of design from modern human to chimpanzee or gorilla wrist. Journal of Science, September 2007

Iran: prehistoric fashion centre?

Stylish clothing, jewellery, makeup and textiles, all dating to 5 000 years ago, have been unearthed at the Burnt City site in Iran, pointing to a state-of-the-art textile and fashion industry. 'An eye-liner bowl, a comb, a makeup box, a marble device for applying eye liner and jewellery were dug out from the grave of just one 18-year-old woman,' said Mansour Sajjadi. Also unearthed were dresses that resemble the modern-day Indian and Pakistani saris, and what is being described as 'the most complete prehistoric cloth collection in Iran.' All kinds of cloth have been identified in this collection. *Cultural Heritage of Iran, 03/2006*

The South African Archaeological Society

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.

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

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Trans-!Gariep Branch: Chairperson:	PO Box 266, Bloemfontein, 9300 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 2008 are as follows: Individuals: Single – R185; Joint/Family – R200; Full-time students – R130; Africa – R200; Overseas – R350. Institutions: Local – R350; African – R370; Overseas – R700.

The Digging Stick

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