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SOUTHERN AFRICA'S KHOEKHOEN HERDER ROCK ART

Sven Ouzman and Benjamin W Smith

On the shoulders of giants

Tens of thousands of rock art sites, rich associated archaeologies, vital elucidating ethnographies and a strong interpretive tradition. These are the hallmarks of 120 years of southern African rock art research. Pioneers like George Stow, Wilhelm and Dorothea Bleek, Lucy Lloyd, Maria Wilman, Janette Deacon, Pat Vinnicombe, David Lewis-Williams, Peter Garlake and others have provided the broad brushstrokes for understanding the rock art of this landscape. Or, rather, rock arts. The primary fieldwork, methodological protocols and interpretations of these pioneers permit us to understand southern Africa as home to multiple rock art traditions. To the sophistication of 'San' hunter-gatherer shamanistic imagery has been added the initiation arts of various Bantu-language speakers, the political protest art of the northern Sotho, the military-magical rock art of the Korana and the quotidian markings of European colonists. We here add to this diversity by reporting on another widespread rock art tradition hinted at by researchers like Desmond Clark, Eric Wendt, Bill van Rijjsen, Mike Wilson, Tony Manhire, Alec Campbell, Bert Woodhouse, David Morris and Gavin Anderson.

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A new rock art tradition?

These researchers expressed unease with certain rough-pecked rock engravings and finger paintings, often having a 'geometric' appearance, that do not seem San-authored. Rather, they felt that this 'problematic' rock art was the work of Khoekhoen (formerly 'Hottentot' or 'Khoi') herders. Since the mid-1990s we have tried to place these researchers' localised observations into a wider regional frame supported by primary fieldwork (Smith and Ouzman 2004). To this end we covered about 900 000 km^2, visiting 3 755 rock art sites (345 sites with finger paintings and rough-pecked engravings, 2 921 sites with brush-painted and fine-pecked rock art, and 489 sites with both techniques). We arranged our data into three inter-related categories – imagery, dating and distribution – to test whether this really was a new rock art tradition.

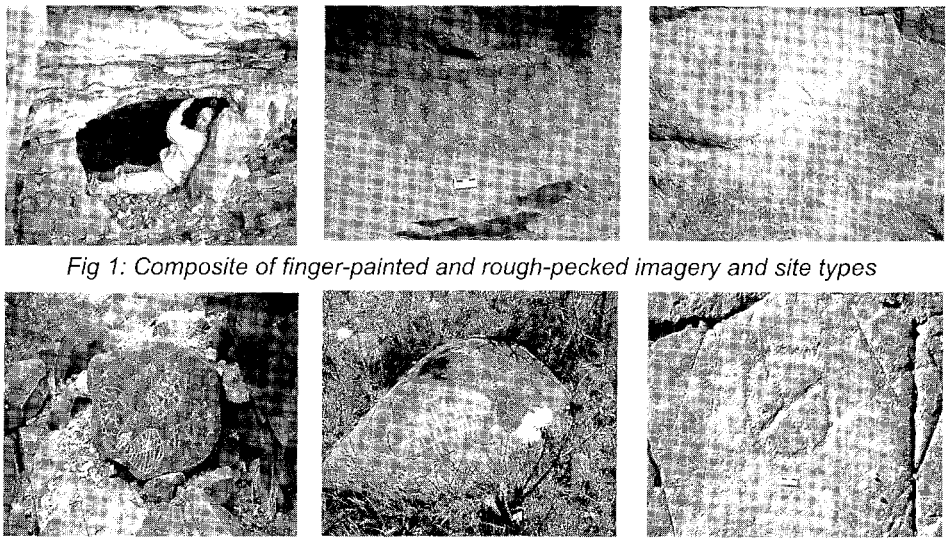
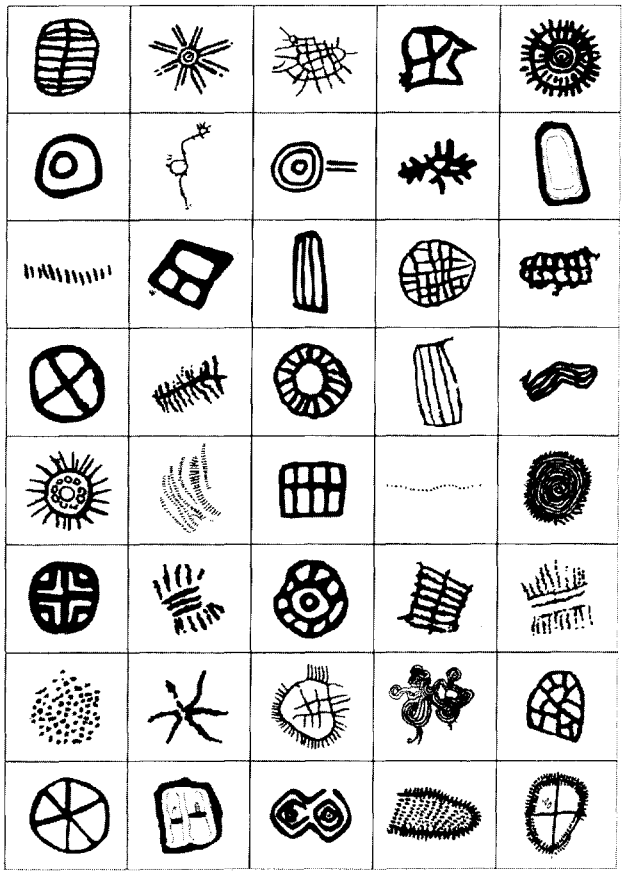


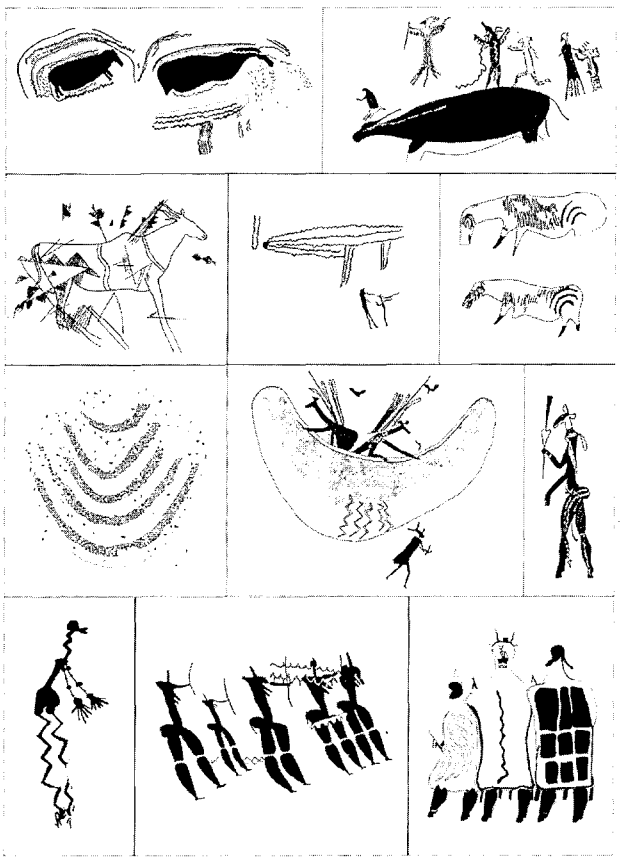
Fig 1: Composite of finger-painted and rough-pecked imagery and site types

Imagery

Throughout southern Africa, rough-pecked and finger-painted geometric 'images' exhibit a wide but structured variety (Table 1). These geo-



Non-entoptic (Table 1 – above) and entoptic (Table 2 – below) geometric imagery in southern African rock art



metrics are sometimes accompanied by hand-prints and a few rough 'representations' of humans, animals, horses and such (Fig 1). The dominantly geometric images are visually, technically and typologically different from fine-pecked and brush-painted San 'entoptics' (Lewis-Williams and Dowson 1988). San entoptics exhibit less variety and are almost always incorporated into multi-component 'representational' image clusters (Table 2). Unfortunately, some rock art research unproblematically assumes geometric imagery invariably represents entoptic phenomena. But non-entoptic geometrics are found in many rock arts across Africa. Central African (Pygmy) hunter-gatherer rock art, for example, is almost entirely geometric in form, but contains few, if any, entoptic forms.

One could, however, still argue that the 'San' – in their many forms – had more than one rock art; perhaps even one consisting of non-entoptic geometrics. Indeed, San rock art has enjoyed several shifts of emphasis. Thomas Dowson charts some of the political elements related to the European colonial period. Geoff Blundell's recently published doctoral thesis takes this understanding to a new level by providing fine-grained histories of specific San groupings' responses to and engagement with European colonialism in the late 19th and early 20th centuries. Beyond the familiar images of Lesotho and South Africa's KwaZulu-Natal Drakensberg, Ed Eastwood, Siyakha Mguni and Nick Walker, among others, have shown how San art from northern South Africa and Zimbabwe has its own particular subjects and symbols. Anne Solomon highlights gender, a societal structuring principle, in certain rock art elements, and so on. But no researcher working in any time period or place has linked non-entoptic geometric rock art to the San. It is necessary to realign one's expectations and broaden focus. Stepping back from the imagery to consider its relation to time and place helps suggest candidates, or combinations of candidates, for this rock art's authorship.

Dating

Southern African rock art is poorly dated. Ironically, non-entoptic geometric rock art has the best dating support. Simon Hall and Ben Smith's work in northern South Africa suggests a first millennium CE date for geometric finger paintings. In central South Africa, the key site of Driekopseiland – with its more than 3 000 rough-pecked non-entoptic geometrics (Fig 2) – has

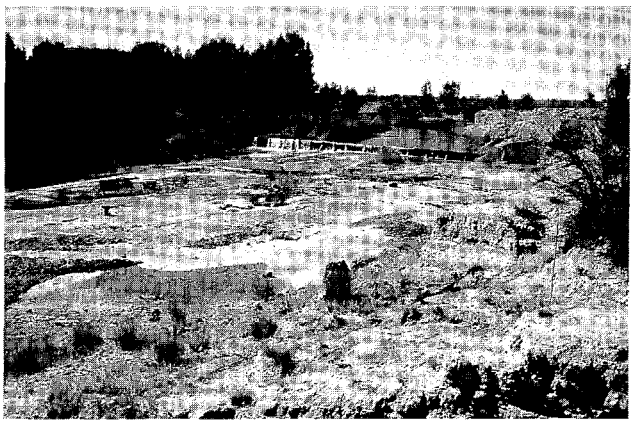


Fig 2: Driekopseiland, central South Africa

geomorphological and archaeological evidence dating most of the geometrics to between 700 and 1600 CE, which precludes Europeans as authors. Researchers in the Western Cape suggest 'more recent' dates for finger paintings and handprints. Their suggestion is supported by Nick van der Merwe and colleagues' ^{14}C age range of 1400 to 1700 CE for a finger painting that is on top of a brush-painted eland. The dating evidence suggests a broad, north-east/older to south-west/younger age distribution. There is as yet no evidence for non-entoptic geometrics older than 2 000 years in southern Africa, an age that would require us to assign hunter-gatherer authorship. This leaves the available authorial candidates as Bantu-speaking farmers, Khoekhoen herders or some combination of these groups. To resolve authorship, we examine where this rock art does and does not occur.

Distribution

Typically, rough-pecked engravings and finger paintings are found near water sources and courses (Fig 3). This pattern is what one would expect of stock-dependent people, unlike hunter-gatherer rock art, which occupies a range of site types. Further, non-entoptic geometrics occur abundantly west of the 600 mm isohyet, an environmental barrier beyond which early Bantu-speaking Iron Age farmers did not settle permanently on account of that region's decreased rainfall and reversed rain season, which did not suit their millet and sorghum crops. Compared to a rich abundance of non-entoptic geometric imagery in the paintings and engravings of the central interior, one finds, by contrast, an almost complete absence of these images as one moves into Lesotho and KwaZulu-Natal. These are regions of known and widespread Iron Age settlement, but not of any significant Khoekhoen herder presence. This pattern eliminates Bantu-speakers as candidates for authorship. Indeed, this group does not claim this rock art, which is substantially different from known rock arts by Bantu-speakers.

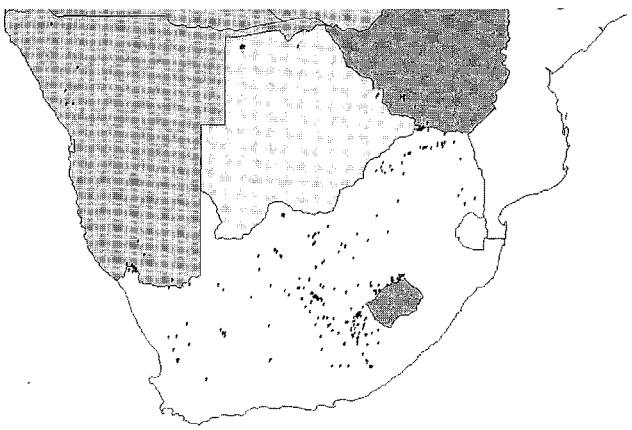


Fig 3: Distribution of Khoekhoen herder rock art sites in southern Africa.

Khoekhoen rock art

The cumulative evidential 'weight' of imagery, dating and distribution make Khoekhoen herders the more likely primary authors of this rock art. But who were and are the 'Khoekhoen'? They have been the subject of intense archaeological and contemporary political interest as their identity and relationship with autochthonous San underpins the ongoing Kalahari Revisionist Debate (Barnard 1992; see also Andy Smith and Karim Sadr's work). Some researchers argue for the migration into southern Africa about 2 000 years ago of herders who spoke a click language and who had sheep and pottery. Other researchers say this migration was later – perhaps 600 years ago – and was preceded by sheep and perhaps pottery filtering southwards from one hunter-gatherer group to another after contact with northerly farmers.

For 20 years archaeologists have used excavation, ethnography and archival research to discern distinctive material culture 'signatures' of hunter-gatherers and herders, but with limited success. The presence of a Khoekhoen rock art tradition has profound implications for this debate. South African geometric-tradition rock art is linked, via the crucially important 'stepping stone' of Tsodilo Hills in Botswana, to the Central African geometric rock art tradition made by those hunter-gatherers who became Khoekhoen herders by acquiring stock from Bantu-speaking farmers. But we need immediately to understand

Khoekhoen rock art's 'authorship' as having a dominant but not exclusive character, capable of evolving beyond its original genesis.

An analysis of Fig 4 suggests a fluidity that allowed 'other' people to participate in this rock art. This rock painting vignette found at an Eastern Cape riverside site shows an eland with tusks and an entoptic 'grid' painted within its body. This shamanic intent is supported by association with human figures depicted in body postures diagnostic of the Medicine Dance. All these images are brush painted. In a subsequent painting episode, rows of finger dots and a finger-painted zigzag line were painted on top of the brush paintings. The human figures whose torsos seem to emerge from the zigzag are, in fact, painted in a lighter red pigment. The faint remains of their legs can be discerned below the zigzag. We interpret this image cluster as a punctuated point of contact and communication between shamanic hunter-gatherers and Khoekhoen herders in the flow of interaction that took place in many areas for more than a millennium. The increase in 'representational' elements in herder rock art as one moves south and west is most likely the result of this prolonged interaction and shows a mutual absorption and reworking of personal and group identities (see also Morris 2003).

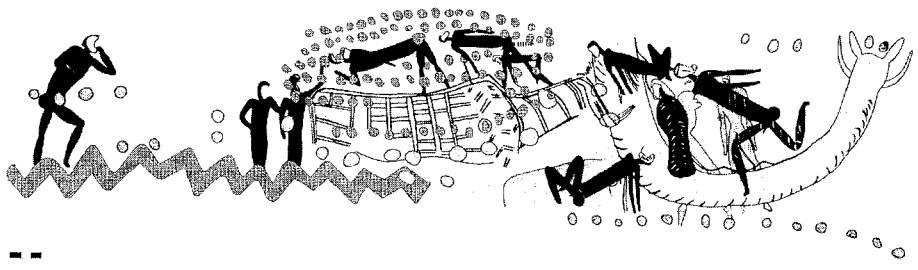


Fig 4: Multi-component, multi-authored rock painting, Eastern Cape, South Africa

Implications for past and present

The current confusion over the ethonym 'Khoe-San' and who it signifies is not only a modern or colonial confusion, but hints at a lasting multi-cultural mosaic within which people constantly nuanced and even changed identity, using material culture like rock art as integral and active parts of those changes. Ed Wilmsen observes that as soon as we start talking about 'ethnicity' we are also talking about marginality and inequality. In contrast, archaeological accounts of cross-cultural contact stress cooperation rather than the domination and violence that characterised the last few hundred years. Pre-colonial southern Africa is perhaps unlikely to have had marked, punitive distinctions between people, and we cannot simply project the identities of people observed in the shallow past back into the deep past. South Africa has suffered enough from ethnic essentialism and rigid categorisation. But long time spans and imperfect archaeological theory can tempt researchers to ascribe certain artefacts exclusively to circumscribed 'cultures'.

Yet just because these processes of identity are ever unfolding does not mean there were not key moments in identity formation that were marked with enduring, even exclusive, material culture 'signatures'. We believe rock art to be one of the most informed of these signatures because it shows a variety of capabilities ranging from enforcing distinction to reflecting upon interaction, and even producing new kinds of visual and personal expression. Thanks to the pioneers of southern African archaeology we are today able to recognise Khoekhoen rock art as a distinct expression that potentially conveys how these herders adjusted to and influenced the people and places around them. What this herder rock art means, is the subject of ongoing research.

Acknowledgements

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SHIPWRECK HERITAGE RISES FROM THE DEEP

John Gribble

One of the many strands woven into the tapestry that is the history of the Rainbow Nation is the influence and consequences of the maritime expansion of Europe into the rest of the world from the 15th century. Scattered along the South African coast are thousands of shipwrecks, the physical remains of economic and political forces that, for better or for worse, had a profound effect on the recent history of South Africa and helped to shape the nation of today.

The country's historical shipwrecks and other maritime archaeological sites form a heritage resource that is rich and diverse. It comprises at least 2 700 shipwrecks from 38 nations. The sites contain information relating to the economics, politics and daily life of the maritime past and preserve evidence of social practices, such as slavery, that had a profound effect on the development of South Africa's recent social history. Another aspect of underwater cultural heritage is pre-colonial maritime sites – like the shell middens and fish traps that line the coast – some of which are amongst the oldest evidence in the world for the exploitation by modern humans of marine resources.

These archaeological sites together contain a veritable treasure trove of information that can throw light on a wide range of historical questions of both national and international importance.

A national survey of underwater heritage

The relatively recent development of maritime archaeology as a scientific discipline in South Africa and the limited capacity of the South African Heritage Resources Agency (SAHRA) in this field have until now meant that very little accurate information is currently available on the location of the majority of underwater heritage sites around our coast. Little is known about the nature, degree of preservation and significance of sites, and the threats they face. SAHRA therefore identified a need for the establishment of a survey to locate, identify and assess the significance of underwater heritage resources along the entire South African coastline. Intended primarily as a tool for ensuring the proper management of this fragile, non-renewable resource, such a survey could also be a means to inform South Africans about this aspect of their cultural heritage.

A funding grant from the National Lotteries Distribution Trust Fund (NLDTF) enabled SAHRA to establish a major, long-term project, the National Survey of Underwater Heritage (NSUH) late in 2003. The initial three-year phase of the project makes allowance for commencing with the necessary research, undertaking as much physical surveying as possible, the development of skills and capacity relating to underwater heritage management and the promotion of public awareness about this heritage resource. The funding has created the opportunity for SAHRA to employ four new staff members and effectively form a maritime archaeological unit. Jonathan Sharfman and Nicolay Mavrodinov, maritime archaeologists trained at the University of Cape Town, have joined the project as field archaeologists, while capacity-building and training has been given a boost with the addition of Isaac Monthla and Susan Lambton-Carr as the project's two interns.

Project aims

The two primary aims of the NSUH are the production of an inventory of underwater heritage resources in South African waters and the creation of community empowerment and community involvement in underwater heritage management. As a management tool for SAHRA, the project aims to research, locate and identify sites and materials, assess their heritage significance and identify potential threats to their survival. By publicising underwater heritage the NSUH also aims to raise public awareness about this often neglected aspect of our collective national cultural heritage and foster a national commitment to its long-term management and conservation. The project will encourage public participation in and partnerships for managing underwater heritage and will aim to create opportunities for

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coastal communities in particular to derive real benefits from the conservation and sustainable use of this resource.

The project logo

The Porterville 'Galleon' was chosen as the logo for the NSUH project (previous page). Its choice was determined by the objective of finding an image that reflected the full range of South Africa's maritime heritage. The Porterville 'Galleon' is a remarkable rock painting located in a rock shelter in the mountains above Porterville in the south-western Cape, about 100 km from the coast. Generally accepted as having been painted by a San hunter-gatherer or Khoekhoen pastoralist, the image is a very accurate rendition of a European sailing vessel, probably of the period 1700-1750. The painting includes such features as the masts, spars, rigging and bowsprit of the vessel, indicating clearly that the artist had studied a European ship – possibly one lying at anchor in the Langebaan Lagoon. The image is an important graphic reminder of the meeting of the pre-colonial and colonial maritime worlds on the shores of South Africa. One feature of the painting suggests, though, that the artist was not familiar with the technology of sailing ships: while three of the mast-top flags fly in the same direction, the flag on the mizzenmast points in the opposite direction.

By using an indigenous maritime image for its logo the NSUH hopes to highlight the fact that our country's maritime history is not only the story of Europe's sea-borne economic and colonial expansion after the 1490s and its impact on the lives and livelihoods of all of South Africa's people, but that it is also part of the story of the development of modern humanity in Africa. The replacement of the hull of the Porterville 'Galleon' with an outline of the South African coastline in the logo indicates the project's national extent.

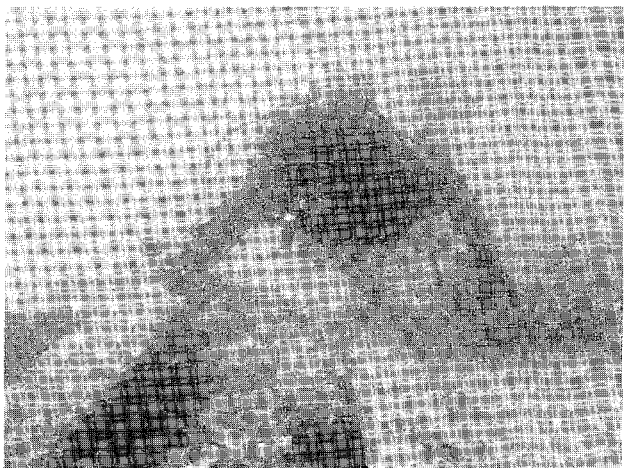
NSUH projects in 2004

Since being launched, the NSUH has initiated a number of quite varied projects. Aside from our work on the fish traps on the southern Cape coast, magnetometer surveys of Table Bay and False Bay are both well-advanced. In Table Bay, extensive surveying and diving have taken place, primarily along the eastern side of the bay down to the 15 m bathymetry line. The stretch of coast between Green Point and Table View is notorious for the number and variety of wrecks it has claimed over the centuries (the SAHRA database lists more than 450). It presented a good place to start testing our survey strategy, equipment and teamwork. Initially, historical research available to SAHRA was utilised to verify the location of known sites in the area, but once the project's magnetometer was available a general programme of remote sensing of the seabed could be started. The testing of the magnetometer on known sites produced excellent results and the team was delighted to get clear readings whenever it was in the vicinity of a wreck. Since the magnetometer is interfaced with the team's GPS, it has been possible to plot anomalies with regard to wreck positions with a great deal of accuracy.

The process of ground truthing anomalies picked up by the magnetometer has been an even more exciting aspect of the work thus far. The team has located a number of previously unknown 18th and 19th century wooden shipwrecks in Table Bay. The *Milnerton Light*, *Sternpost*, *Sunset Beach* and *Sealand Express* wrecks have yet to be identified (Fig 1). Most recently, a new wreck has been located in the area in which the Dutch East Indiaman *Nieuwe Haarlem* is thought to have been lost in 1647. The NSUH is planning to submit wood samples to the Nederlandse Instituut voor Scheepsarcheologie (NISA) for dendrochronological dating.

In False Bay, the NSUH is supervising a University of Cape Town honours student on a project to record a well-preserved late 18th or early 19th century wooden rudder discovered by sports divers in 1999. A preliminary plan of the rudder was produced at the time, but a more detailed and rigorous recording is now being undertaken by John Visser, part of whose brief

Fig 1: An NSUH diver on the Sternpost *wreck in Table Bay*



will be to make suggestions as to the future of the rudder (Fig 2). His work will help the NSUH to decide whether to leave the rudder in situ or to recover it for conservation and display. Considerations such as possible damage or loss of the rudder as a result of environmental factors and interventions by divers will be offset by the likely cost of recovery and conservation. The Rudder Project is an exciting undertaking and illustrates the synergies that are possible between the NSUH and other organisations and individuals in the field of underwater heritage management.

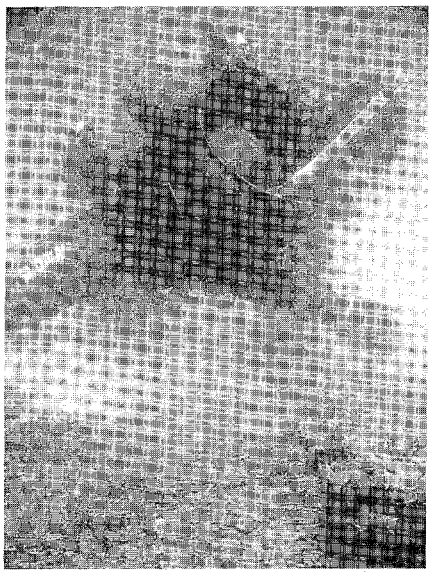


Fig 2: John Visser working on the rudder found in False Bay

Another project has been the conservation of the remaining propeller of the HMS *Sybille*, a twin-screw, second-class light cruiser of the Royal Navy wrecked 5 km south of Lamberts Bay on the Cape West coast in January 1901. The first of the *Sybille's* bronze propellers was salvaged for scrap in the mid-1970s and in 1999 the second propeller was recovered illegally by salvage divers. After a lengthy legal tussle the propeller was donated to SAHRA, which has undertaken to see it conserved and displayed in Lamberts Bay.

The NSUH team began with the construction of a plinth for the propeller. The cast iron shaft needed attention as it had suffered severe rust damage, while the bronze blades of the propeller required cleaning and polishing. With the generous assistance of Eskom and the Cedarberg Municipality the propeller was raised onto its mount and the iron shaft was sanded, cleaned and sealed. The blades were then cleaned by chemical and mechanical means before being polished and sealed with wax (Fig 3). It is hoped that this artefact will not only be a reminder of the wreck, but an educational tool that will show the importance of conserving our underwater heritage. Interpretative signs produced by SAHRA and the NSUH will be erected next to the propeller in the museum and at the site of the wreck.

A smaller project has involved the recording of a large piece of wooden wreckage on Milnerton Beach near Cape Town. Generally believed to be the remains of the *Commodore II,* a four-masted, wooden windjammer hulked and broken up in Table Bay in 1945, the wreckage is a prominent feature on the beach and a source of much local interest. As it is in the process of breaking up, it was regarded as a good opportunity for the NSUH's first intern, Isaac Montlha, to familiarise himself with shipwreck recording techniques on land before attempting to apply these underwater. An initial survey of the wreckage used baselines and offsets to record the major features. The site was photographed and the work undertaken was documented. Subsequent work has concentrated on surveying the positions of smaller site features such as nails, treenails and fastenings, and on producing a detailed site plan.

Fig 3: Jonathan Sharfman (left) and Nicolay Mavrodinov cleaning the rudder of the of the HMS Sybille

Conclusion

The first year of the NSUH has without doubt been one of the most exhilarating in the history of maritime archaeology in South Africa. The funding made available for the NSUH by the NLDTF has changed underwater heritage management in South Africa fundamentally. The development of capacity being made possible has already set maritime archaeology and underwater heritage

management on a new and exciting course, one which the NSUH is determined to develop as the project continues. Opportunities previously only dreamed of are now available to SAHRA and maritime archaeology.

The first year of the NSUH has obviously not been all plain sailing. Mounting a project of this size has been a steep learning curve for the project team. The lack of any precedent in South African maritime archaeology and underwater heritage management for a project of this nature has meant that in many instances the NSUH has had to develop systems and methodologies from scratch. Generally the team has had to learn to manage the project the hard way, by trial and error. However, the past year has welded the team into a strong and dedicated unit, the equipment necessary to conduct survey work is at hand and, most importantly, there is enough work to keep the team busy for a number of lifetimes. What more could maritime archaeologists ask for?

Hearth may put man in North America 50 000 years ago

In the growing debate about when people first appeared in North America, Albert Goodyear of the University of South Carolina claims to have found what could be sooty evidence of human occupation in North America thousands of years earlier than is commonly believed. Samples from a 51-76 mm thick and about 0,6 m wide layer of charcoal from a possible hearth uncovered at the Topper site near the Savannah River have been radiocarbon dated and show that oak, pine, red cherry and buckeye had been burned in a low-temperature fire at least 50 300 years ago.

The research has not yet been peer-reviewed, but a number of archaeologists who have visited Topper agree that it is a pre-Clovis site. Goodyear dug 4 m deeper than the soil layer containing signs of the Clovis culture and began uncovering a plethora of chert tools.

Since the first ground-breaking discovery of human artifacts in a cave near Clovis, New Mexico, in 1936, archaeologists have generally accepted that hunters migrated to North America about 13 000 years ago over a land bridge into Alaska. However, a growing body of evidence is prompting some scientists to challenge that assumption. A scattering of sites from South America to Wisconsin have indicated human presence before 13 000 years ago. While there is no ironclad proof that an older culture existed, scientists are increasingly open to the idea that humans arrived from many other directions besides the northwest.

CNN, 17 November 2004

PROTECTING PORTUGUESE WRECK AND SURVIVOR SITES

Paul Brandt

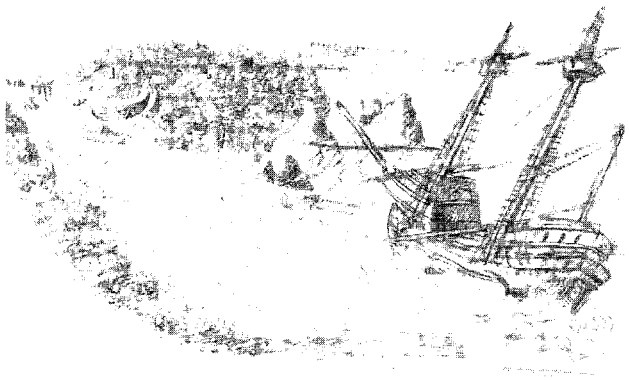
The Centre for Portuguese Nautical Studies (CPNS) was formed in 2003 by three people with a shared interest in maritime archaeology and particularly Portuguese maritime history. Dr Paul Brandt has an interest in ships, shipwrecks, and the preservation and documentation of artefacts from shipwreck and survivor sites. Archaeologist Prof. Andrie Meyer is interested in the history of early maritime trade, shipwrecks, naval artillery and historical database development. Dr Valerie Esterhuizen has a specific interest in Chinese trade porcelain, Portuguese maritime trade and Portuguese ships and shipwrecks.

Portuguese maritime history is of particular interest as it presents the first recorded European contact with South African coastal communities. The first Portuguese shipwreck of which a survivor account exists occurred in 1552. Survivors from the *São João* travelled along South Africa's east coast a hundred years before the first European settlers arrived at the Cape. Accounts from these and other early shipwreck survivors paint a vivid picture of 16th century life along the coast, their interaction with local coastal communities, and the geography, fauna and flora encountered.

Following the stranding of the *São João* near present-day Port Edward, 500 noblemen, sailors, soldiers and personal slaves attempted to walk to Mozambique, the only place where they could hope to be rescued and find passage back to Portugal. After an epic, six-month journey of hardship and suffering only 25 people arrived in Mozambique. Most of the others died, although it is recorded that some chose to remain behind along the way and were taken in by local tribes, where they continued to live. To appreciate the amazing shipwreck and survivor accounts one needs to consider the following aspects facing a survivor attempting to walk to Mozambique.

The terrain: No infrastructure and very few organized settlements; very little food and long stretches with little water (survivors ate snake skins, bones, leather and even resorted to cannibalism); deep ravines and rivers to be crossed (most could not swim); and dangerous animals.

The local inhabitants: The few communities that were encountered were either nomadic or practised subsistence farming and were generally not in a position to provide food for groups of up to 500 survivors. Local inhabitants were mostly reported to be friendly and helpful, but cordial relationships often ended in violence. One can picture desperate and hungry survivors trying to take/steal food from local inhabitants; the locals in turn defending their food supplies, knowing that if these were taken from them they would be faced with starvation until the next harvest; survivors showing off iron, copper, clothes, weapons, ornaments and other items the tribes had never seen and would try to take/steal from them.



A depiction of the stranding of the São João

The survivors: These consisted of Portuguese nobles, ship's officers, priests, often women and children, sailors, soldiers and personal slaves. Of these, only the soldiers might have been fit enough for a long trek up the coast. 'Noble people' were accustomed to being carried by slaves, as was indeed the case during the survivors' journey. Once there were no more slaves to carry them, the nobles had to walk, often with disastrous consequences.

The *Carreira da India* period (1500-1700)

The 16th and 17th century Portuguese trade with the Far East is known as the *Carreira da India* period. Trade for gold, ivory and hard woods took place in East Africa, while spices, textiles, gemstones, jewellery and porcelain were traded for in the Far East. The South African coast only

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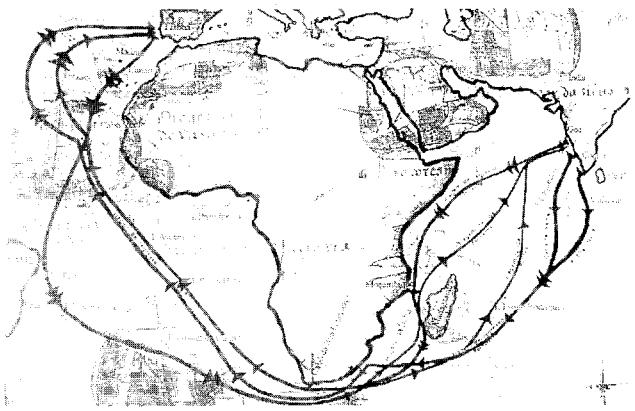
served as a source for water and possibly some food. The returning ships were often heavily laden, poorly maintained and had leaking hulls, which along the 'Wild Coast' or in the 'Cape of Storms' frequently resulted in disaster.



Voyages around the Cape during the Carreira da India *period*

The Dutch and British period (1650-1850)

The next chapter in this adventure starts with the arrival and settlement of the Dutch at the Cape in 1652. They also suffered shipwreck, but by this time ships and seafaring had improved, and shipwreck seldom resulted from overloading or poor maintenance. Shipwrecks that did occur were due mostly to faulty navigation or bad weather. By this time the coast was better known, maps were more accurate and shipwreck survivors could walk to the Cape or later to Port Elizabeth, East London and Port Natal. The local inhabitants now also included European farmers and there were trading posts. All these factors made the fate of shipwreck survivors far less uncertain. They could also hope to be rescued by search parties, either overland or by sea from the Cape. Therefore, even though we do have some Dutch and British survivor accounts, never were so many people involved, having to walk so far in such an inhospitable, unknown territory, as was the case with the Portuguese.

South Africa's role in cultural history

Initially, Portuguese seafarers adapted the Mediterranean fishing caravel for ocean travel and exploration. Subsequently, carracks, galleons and naus were constructed specifically for the Far East trade. Since all ships headed for the East had to round the Cape of Good Hope, we have along South Africa's coastline a concentration of shipwrecks from a specific period in shipbuilding and armament manufacture that is unique in the world. We also have one of the world's largest collections of Portuguese 16th and 17th century naval artillery, most of it salvaged from wrecks. One of the challenges facing the CPNS is to locate these guns, to help preserve them and to make them available for study. In the case of private collections this can be difficult and the co-operation of private individuals must be sought to allow recording and documentation.

Portuguese wrecks and artefacts along the coast are not only a part of South African but of global cultural history. This places on us a duty to protect wreck and survivor sites. The need for protection is quite urgent as maritime archaeologists have competition from sport and professional divers (and land developers) who find and explore these sites. South Africa has good legislation in place, but its long and relatively uninhabited shoreline makes control and protection very difficult. Many divers are diving at shipwreck sites and in the process some of them are destroying a part of South African and world history.

In contrast to Dutch and British wrecks, Portuguese wrecks are not regarded as 'treasure wrecks'. Portuguese ships did not carry much gold and silver and for this reason the more professional treasure divers/salvors have not given the wrecks much attention, even though their location is generally known to these divers. To date only some of the more easily salvageable guns have been recovered. But with the more exciting and potentially more lucrative Dutch and British wrecks now 'running out', Portuguese wrecks are becoming more attractive. Modern technology makes it increasingly less difficult to locate and work such wrecks. Because of this, maritime archaeologists need to research and protect the wrecks as a matter of urgency. Projects must be developed in this regard and funding found to execute them.

The challenges facing CPNS

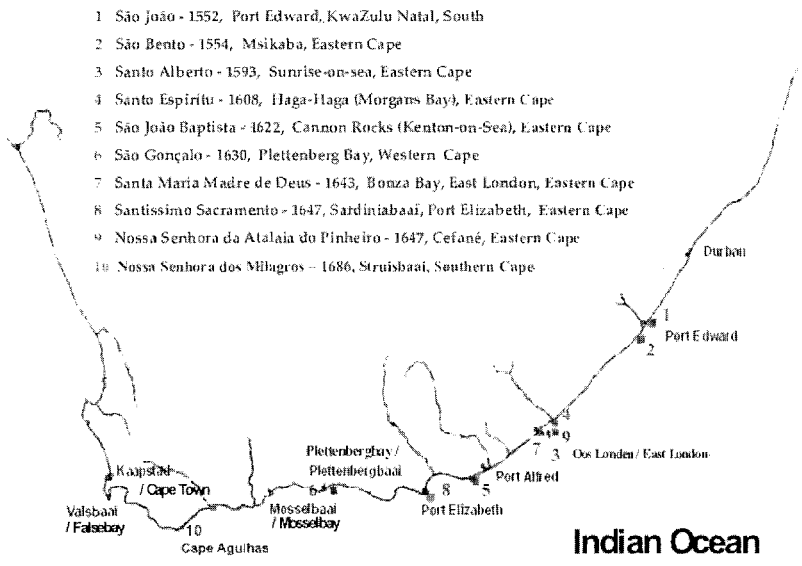
CPNS has taken upon itself the promotion of the importance of this part of cultural heritage to organisations, government, academics and the public. It is busy stimulating further research into various aspects of the *Carreira da India* period. Discussions are taking place with museums and universities on the importance of Portuguese maritime history to the cultural history of SA.

One of the biggest challenges facing CPNS is to source funding with which to promote this period and plan and execute maritime archaeological

projects on shipwreck and survivor sites in co-operation with the South African Heritage Resources Agency (SAHRA). It would like to be in the position to be able to help museums to preserve and display items from these sites to the benefit of all South Africans, especially the youth. Shipwrecks and their 'stories' are an ideal way of making history interesting and meaningful for the young.

CPNS projects

The CPNS's main project in 2004 was the arranging of a maritime archaeological conference at the Wild Coast Sun in August. The conference brought together maritime archaeologists, local and international academics, amateur historians and archaeologists, professional, sport and treasure divers, and legislators. From the outset it was apparent that everyone was in agreement about the importance of Portuguese maritime history in South Africa. It also



Map of 16th and 17th century Portuguese shipwrecks off South Africa

became clear that all those who attended the conference could play a role in furthering the aims of CPNS. Accordingly, a second conference, which is to be a major Portuguese maritime archaeology/history congress, has already been announced. Much interest has been indicated in this event, which is to be held in Mossel Bay in August 2006.

The 2004 conference was opened by the Queen of the amaPondo, Her Majesty LM Sigcau. Six international and nine local experts made presentations on topics such as Chinese trade porcelain, Portuguese maritime history, maritime archaeological projects on Portuguese shipwrecks, South African salvage legislation, Nautical Archaeology Society (NAS) training courses, navigation in the 16th century, maritime archaeological artefact preservation, database development and the National Survey of Underwater Heritage.

Ongoing CPNS projects include research into shipwreck and survivor sites, as well as trade goods, especially Chinese export porcelain. The organisation is in the process of developing a database for recording all known information on South African Portuguese shipwreck and survivor sites, including all information and artefacts held by museums and private collections. A portfolio of information is being developed for each Portuguese ship that is known to have been wrecked along South Africa's coast. Another project is to identify sites that should receive priority investigation.

A long-term vision is to have a facility where artefacts can be displayed and full-time staff are based to handle education, research, site excavation and preservation. The Dias Museum in Mossel Bay would be ideal for further development into a museum on the Portuguese mariner and his ship. CPNS is currently in discussion with relevant coastal communities, two of which are of particular significance: the amaPondo along the Wild Coast and the Zulu along the northern KwaZulu-Natal coast. An important area of research could be surviving oral history, which could point to the influence of Portuguese shipwreck survivors on coastal communities. Shipwreck and survivor sites have tourism potential for rural communities and information displays could be linked to local crafts. An important spin-off from such a development could be the protection of sites by local communities, thus making them active partners in protecting their cultural heritage. In the interim, innovative ways to protect the sites are needed.

The CPNS web site is at www.cpnssa.org. Readers interested in becoming involved in or with information on Portuguese maritime history, Portuguese shipwrecks and survivor sites may contact Paul Brandt on 082 940 2423, Andrie Meyer on 082 557 2777 and Valerie Esterhuizen on 082 929 1142.

The hobbit-sized hominids of Flores

The discovery on the Indonesian island of Flores of the skeletal remains of up to seven dwarf hominids, affectionately nicknamed 'hobbits', that stood about 1 m high, had physical features usually seen as dating from 1,5 to 4 million years ago and brains the size of a grapefruit has caused a storm in scientific circles. Their stature, brain size, receding chin, the shape of their first mandibular premolar tooth and the skull base design are all reminiscent of early *Australopithecus*, which was thought to have existed only in Africa prior to 3 million years ago. Yet the thickened cranial vault, relatively flat face and smaller molar teeth are reminiscent of *H. erectus* (1,8 million to possibly 300 000 years ago).

The Australian anthropological discoverers propose that this is a new human species and have named it *H. floresiensis*. They maintain that the 13 000-year-old specimens are not a quirk of an ancient hominin, but part of a species of miniature people whose existence overlapped with that of *H. sapiens* for nearly 30 000 years. Peter Brown of the University of New England suggests that the species could have arrived on the island in the form of *H. erectus* around 840 000 years ago. However, because the resources on the 50 km^2 island were limited, they shrank to dwarf size under evolutionary pressure, similar probably to the forces that produced the now-extinct pigmy elephant Stegodon, whose remains were found in the same limestone cave. More puzzling than body size, however, is the 'hobbit's' puny brain size. The skull of a 30-year-old adult female suggests that it operated with a brain of only 380 cc, similar – in terms of ratio to body size – to that of early hominids like *Australopithecines* and *H. habilis*. *H. erectus* had a brain capacity of between 800 cc and 1 000 cc. Even so, judging by finds, *H. floresiensis* was apparently smart enough to make and use sophisticated tools and use fire.

Some anthropologists think that naming it a new species is premature. They say that the small body and brain size could have been due to disease or pathology, but the researchers deny this. Prof. Colin Groves of the Australian National University has commented that they could not have been intelligent enough to have made and hafted the large, up to 120 mm long and complex flaked stone artefacts found with them. Groves also challenges the idea that *H. floresiensis* was a dwarf descendent of *H. erectus*, as its brain size was just too small. More likely it was descended from an ancestor somewhere between *Australopithecus and Homo*. 'This thing is more primitive than *H. ergaster* (the common two-million-year-old ancestor of *H. sapiens* and *H. erectus)* and possibly more primitive than *H. Habilis*.'

New Scientist/Archaeology, *27 & 28 October 2004*

THE SHIP CAVE PAINTING
As seen by a sailor

Nick Leggatt

In the August 2004 issue of The Digging Stick, *Hugo Leggatt and Renée Rust described an unusual rock painting of a ship in Attakwaskloof recently discovered on a farm in the Ruitersbos region of the Western Cape, north of Mossel Bay. The article generated quite a bit of interest and Mr Leggatt took various people to see it, among them a group from the Western Cape Branch of the SA Archaeological Society and his son, Nicholas, a professional sailor. The Western Cape Branch group led by Yvonne Viljoen felt that the painting clearly fell into the rock art tradition of the Western Cape. Nick disagreed, however, on the basis that there is detail visible in the artwork that indicates that the artist had experience of sailing and was more than an observant Khoi artist. His reasons are set out below.*

The ship cave painting from Attakwaskloof illustrated in Fig 1 appears to be of a Dutch East Indiaman with a rig similar to that illustrated in Fig 2, a contemporary painting from 1762. Though Captain Cook's 1768 bark, *Endeavour*, in Fig 3, is rigged somewhat differently, it serves to illustrate some points of comparison, as it is a working replica of a ship of that period.

All three vessels are depicted with their bows on the left and the stern on the right. All three vessels are three-masted. In the cave painting there appears to be one fore and aft rigged sail on the mizzenmast. In Fig 2 this corresponds with the lateen sail. The Dutch East Indiaman also has a mizzen topsail yard, though in the painting the sail is furled. The mizzen topsail was an addition that came late in the period of the development of the East Indiaman. Later still, the lateen sail evolved into the gaff sail as seen aboard *Endeavour*. The lack of mizzen topsails in the cave painting would suggest that it predates the 1762 painting.

Flying from the peak of the gaff in the cave painting there appears to be a Dutch ensign. In both Figs 2 and 3 the ensign is flying from a staff at the stern. During that period the ensign could

Fig 1: The ship cave painting in Attakwaskloof

Fig 2: Painting of a 1762 East Indiaman

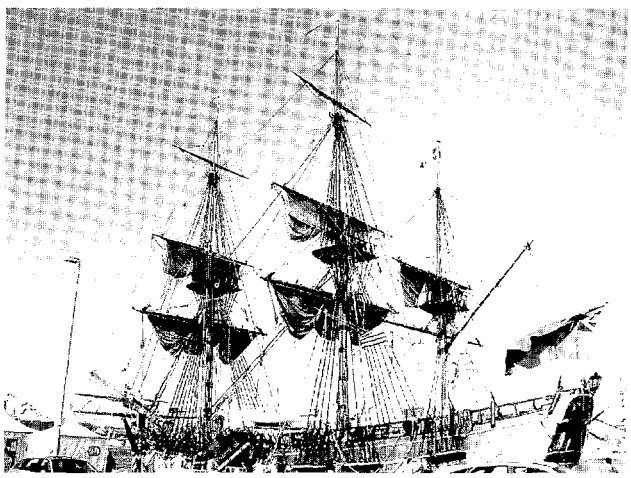


Fig 3: Photograph of a replica of Captain Cook's 1768 Bark Endeavour

Nick Leggat is a professional sailor. He was a crew member on the *Cheyenne* during its successful, early 2004 bid for the round-the-world sailing record. hl12@mweb.co.za

either be flown from a staff or from the gaff. In modern times standard practice is to fly the ensign from a staff while at anchor and from the gaff while underway. This is because the mizzen often overhangs the stern and would damage the staff when tacking or gybing. Assuming that the modern practice developed from older traditions, it might indicate that the ship is underway.

It is difficult to make out the details of the mizzen sail in the cave painting, but the fact that the gaff is indicated by two parallel lines could signify that the sail has been furled as shown in the *Endeavour* picture. On the main mast two sails are clearly shown to be set, the main sail and the main topsail, so the fact that the mizzen is furled does not necessarily imply that the vessel is at anchor. Below the bottom line of the gaff and extending up to the lower corner of the ensign is a curved line which would appear to be the flag lanyard. This is intriguing in that the flag lanyards are invisible in the 1762 painting and aboard *Endeavour*, implying that the cave artist had been close enough to the ship to observe the lanyard. It also indicates that he saw it as being of sufficient importance to be included in the painting. Bearing in mind that little or none of the vital standing rigging is shown in the cave painting, it at first seems surprising that the artist would have chosen to illustrate one of the least significant pieces of running rigging. On reflection though, it is significant that the line is indicated and also that it is curved.

First, the lanyard for an ensign flown from the gaff would need to have some slack in it to account for movement in the gaff as the sail is furled/ unfurled or trimmed. This would account for the curve in the line. Second, to the seaman an ensign flown from the gaff would simply look rather unbelievable in a picture if it did not have a line securing the lower corner to something. Third, an artist familiar with ships would have known that it is standard practice to hoist the ensign in the morning and lower it at sunset and that a lanyard would therefore need to be indicated.

At the head of the mainmast a second Dutch flag is indicated. Interestingly, both flags are indicated as being almost perfect rectangles, while the picture of *Endeavour* shows the flags folding over as they flap in the breeze. Fig 2 also shows a rectangular Dutch flag. In both the cave painting and the painting of the East Indiaman it would appear that it was significant to the artist that it should be clearly shown that the vessels were Dutch; it was not necessarily important to show the flag in a photo-realistic way. With the second flag no lanyard is shown, simply because it would be parallel to the mast and therefore unnecessary to show.

On the main mast two sails are shown in the cave painting – the mainsail and the main topsail. In the painting of the Dutch East Indiaman topgallant yards are also shown, though once again the sails are furled. Again, the topgallant sail was a late development, a further indication for an earlier date for the cave painting. Fig 3 shows how the size and importance of the topgallant sails increased as the century progressed. In the cave painting it would appear that the sails on the mainmast are set, though with traditional natural-fibre sails they were often left set at anchor so that they could dry in the sun and also so that they could be ready for immediate use if the vessel needed to get underway in a hurry. If it was at all windy in the anchorage it would have been necessary to clew the sails up as is shown in Fig 3. In this picture the sails have not been furled, but instead the clew lines have been pulled in so that the sails are roughly folded and more or less secured against the breeze. To make the sails ready for sea all that would be required now would be to release the clew lines and trim the sails to the wind direction.

Interestingly, in the cave painting it would appear that a clew line is indicated, running from the middle of the main yard, diagonally downwards and aft, to the mainsail clew. Comparing the cave painting with Fig 2, in which the clew lines are all but invisible, it is again intriguing that the artist thought them so significant that it was necessary to indicate them. In Fig 3 the clew lines are invisible as the sails have been clewed up in port. This would seem to indicate that the cave artist was sufficiently familiar with the ship to realise that the lines should be indicated when the sails were set, but that otherwise they would not be seen.

At the top of the mainmast, forward of the flag, there is a pair of diagonal lines which would appear to indicate the main topsail topping lifts. In Fig 2 the topping lifts are difficult to distinguish, but in the picture of *Endeavour* the main and main topsail lifts can clearly be seen, though the topgallant lifts are difficult to see. The lower topping lifts are easier to see partly because they are closer to the observer, but also because they are significantly thicker to account for the weight

of the much heavier lower yards. The highest topping lifts, i.e. the topgallant lift in Cook's ship, or the topsail lift before that time, where much lighter lines and therefore not so easy to distinguish from below or even from off the boat. This again makes it rather curious that the artist chose to show them at all. A possible explanation for the inclusion of the topping lift is that to a seaman it would have looked rather strange to have the topsail set with no visible means of support. From an aesthetic point of view the main yard would appear to be supported by the topsail, but the topsail yard would need some other visible source of support. On closer inspection it does seem possible that there may even be some indication of a main topping lift too, between the main yard and the foot of the topsail.

The foremast of the cave ship has faded badly and it is difficult to distinguish any significant details. The bow sections are very faded, too, but curiously there seem to be three protrusions from the bow. In Figs 2 and 3 it can be seen that most vessels of that period would have carried a spritsail and a bowsprit topsail. In later times the bowsprit topsail was done away with. These protrusions in the bow of the cave painting ship could indicate the spritsail yards and possibly the bowsprit. One might also indicate the anchor catheads on the bow, which are quite clearly visible in Figs 2 and 3. The cave painting seems to show a ship with a very pronounced sheer line, again indicating an early design of an East Indiaman. The sheer lines became flatter later on, as can be seen in Figs 2 and 3.

In conclusion

It is my opinion that the cave painting was done by a seaman who was intimately familiar with the early Dutch East Indiamen. I believe that the artist had sufficient mechanical knowledge to realise that it was important to indicate those items of running rigging that are significant to the daily running of the ship, even though they might appear insignificant when compared with other items of rigging. It was also important to the artist that the nationality of the vessel be indicated clearly, and not simply that a pair of flags be drawn in.

The location of the painting is below a ridge from which the anchorage at Mossel Bay is clearly visible. The painting is apparently done in charcoal using a technique that could easily have been employed by a 17th century seaman.

Hugo Leggatt, comments that, personally, he still leans to the view that the cave painting was probably drawn by a Khoi, likely of the Attaqua clan. However, if his son Nicholas' view was proven correct, there would be an interesting candidate as the artist, he suggests. This is Hieronymus Cruse who, during the brief term of Jacob Borghorst as Commander at the Cape, was sent by sea to Mossel Bay to trade for cattle with the Khoi and return overland. He disembarked with 15 men at Mossel Bay on 22 October 1668 and disappeared northwards, where he made first contact with the Attaquas. After spending some time with them, during which one of his men was badly mauled by a lion, he succeeded in obtaining about 90 oxen and 400 sheep, with which he returned to the Cape on 23 November.

According to Mr Leggatt, one can imagine circumstances under which Cruse, or one of his men, might have drawn an illustration of a ship for an audience of Attaquas. On the other hand, he writes, the site appears to have several layers of paintings and presumably more than mundane significance, as indicated in Renée's and his article.

'Mixed' engravings in Portugal

Of related interest, but not exactly comparable to the Attakwaskloof ship issue, is an area of rock art stretching over 17 km of the Coa river valley in Portugal. More than 200 panels of Upper Palaeolithic engravings on schistose rocks occur in several localities. The techniques are fine incisions or pecking. Engravings of historic age done in similar ways can be found in the same localities, in particular at Ribeira de Piscos. Here a rock carries a human figure with two swords dated to the 17th or 18th century. Another pecked engraving is found on a rock at Canada do Inferno. These two localities also have lots of Upper Palaeolithic engravings, though not exactly on the same rock outcrops. At Foz do Coa a locomotive can be found, while at another spot there is a drawing of a boat.

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ASKOPPIES: A LATE IRON AGE TSWANA SITE ON THE EDGE OF THE VREDEFORT DOME

Anton Pelser

During October 2004, Anton Pelser conducted archaeological excavations at Askoppies as part of a research project funded by a grant from the Trans-Vaal Branch of the South African Archaeological Society. Anton has been working at the site since late 1998 for his Masters in Archaeology at the University of the Witwatersrand, which he obtained in 2003. The present research may form part of his doctoral studies.

Askoppies is a large complex of stonewalled settlements located on the Vredefort Dome, one of the world's oldest and largest meteorite impact structures. Maggs (1976) argued that the concentration and variety of Iron Age settlements on the Dome made it a valuable area for research. The only other in-depth archaeological research on the Dome was by Mike Taylor (1979) at the nearby Buffelshoek site. The name 'Askoppies' alludes to extensive ash middens, some over 30 m in diameter and 3 m in height associated with the stone walling at the site. The extensive Late Iron Age (LSA) complex covers an area of a few square kilometres. Although it is difficult to estimate how many people lived there at any one time, it must have been in the thousands.

The aims of my earlier (1998 to 2001) research at the site were to determine the time span of settlement and the identity of the people who settled there, and to reconstruct and interpret settlement layout and the domestic economy. Most of the radiocarbon dates from Askoppies fall between late 1670/early 1680 and early 1800. The aggregated nature of the complex is typical of Tswana settlements during the *difaqane*. The absence of European artefacts suggests that Askoppies was abandoned by the mid-19th century.

On the basis of the settlement plan and pottery, the original occupants were most likely Rolong, or at least part of the south-western Sotho-Tswana cluster. The impact of the *difaqane* should not be disregarded, however. Often different groups aggregated into larger communities for mutual protection and intense interaction would have taken place in such settlements. One specific group might therefore not have been solely responsible for the ceramic assemblage found at Askoppies.

The excavation of the possible smithing unit at Askoppies

The settlement plan at Askoppies is typical of the Central Cattle Pattern (CCP), with hut bays surrounding livestock enclosures in the centre. The settlements at Askoppies are similar to Maggs' Type Z and Taylor's Type IIb sites. Agriculture played an important role in the domestic economy of the settlement, with sorghum evidently the principal crop. Clumps of these were recovered from the excavations. The sheer number and size of granaries attest to the success of agriculture. Besides cattle, sheep, goats, chickens, steenbok, springbok, blesbok and zebra formed part of the meat diet. Around 50 per cent of all slaughtered animals were non-domestic, with sheep and goats contributing half of the domestic meat sample. Other meat sources included spring and scrub hares, tortoises and guinea fowl. Freshwater food sources were barbel and other fish, crabs and mussels. Land snails may have supplemented the diet.

A fairly large number of bone and stone tools provide evidence of hide working. The tools include bone scrapers, needles and awls, as well as stone scrapers similar to those found by Mason (1986) at Olifantspoort. The remains of aardwolf, cheetah and leopard in the sample are a further indication of hide or skin working. These animals were probably hunted or snared for their skins, rather than for their meat (Hall 1987). Trade formed part of the domestic economic activities, as evident from the ivory artefacts, cowry shells and a glass bead that were unearthed.

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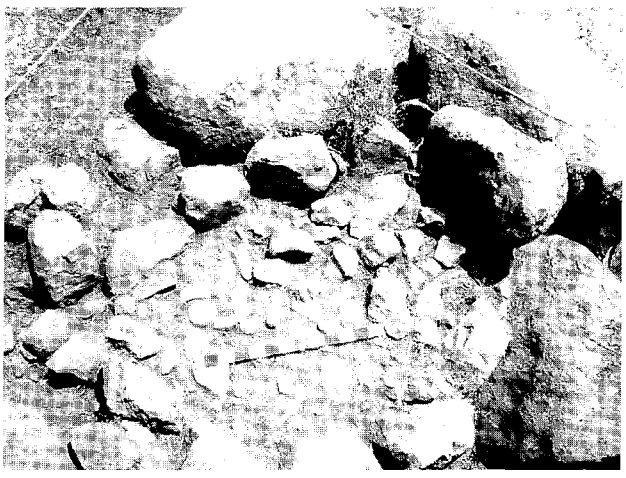
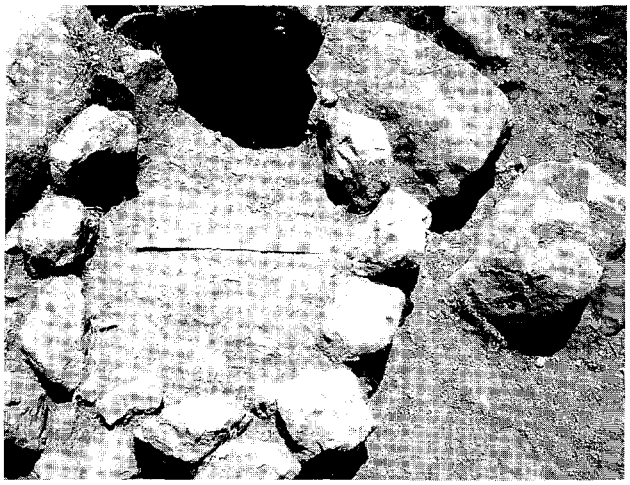
The 2004 excavations were aimed at recovering more conclusive evidence on the nature and extent of metal working at the settlement. According to Maggs (1976:14), the area with its complex geology and abundant tree cover would seem to be a likely place in which to find a smelting industry. During my earlier archaeological work some evidence concerning this aspect was recovered, including pieces of slag (possibly copper), a number of tuyere fragments, as well as copper and iron artefacts, such as earrings and hoes. Perhaps the best indication of metal working at the settlement was a cache of 14 partially finished copper earrings, small pieces of slag and a whetstone fragment found on the floor of a hut in the chief's homestead (Settlement Unit B). A large rock anvil, or smithing unit, located roughly 50 m to the west of this hut, is further evidence of metal working activities at Askoppies.

Excavation 8 (the first excavation of the new research phase) was a 3 m x 3 m dig around the smithing unit at the chief's homestead. Over and above the anvil, the smithing unit is made up of a number of large upright rocks, packed in a semicircle. The anvil, which stands about 300 mm high and is 700 mm long and 390 mm wide, has various hollows (formed by hammering and grinding) and grooves (seemingly caused by the sharpening or shaping of metal artefacts). One of the other upright stones has a few grooves as well. Large pieces of slag were lying around the edge of the semicircle.



The stone-paved circle behind the rock anvil

The excavation revealed a very interesting occurrence directly behind the anvil and other upright stones, but still within the area of the smithing unit. It is a small stone circle, 1,4 m in diameter, constructed of upright stones. After removing a few centimetres of topsoil, a stone-paved 'floor' was uncovered inside the circle. A low grinding stone, also used as a hammer stone, lay on top of the paved floor, together with pieces of slag, bone and pottery. Once the stone paving was removed, the soil became softer, even though some small stones were mixed in with the soil. Bone, teeth and pottery sherds were recovered from this area. In what seems to have been a pit (underneath the paved floor or platform), sterile soil was reached at a depth of approximately 450 mm. This is more than double the depth of the rest of Excavation 8.



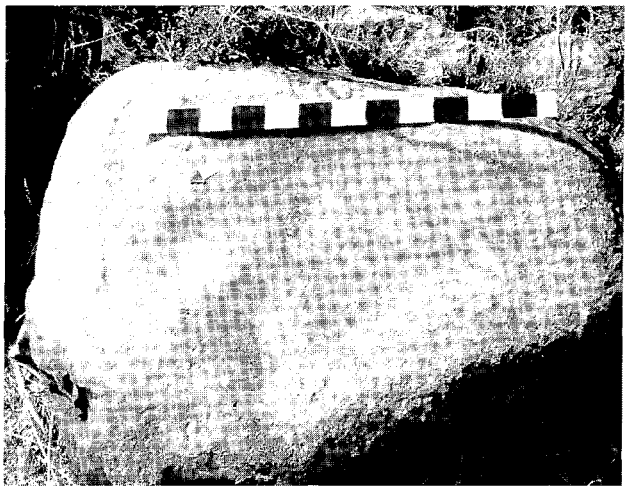
The stone circle after the paving was removed. Note the faunal remains and pottery fragments.

A fairly large quantity of bones, teeth and pottery, as well as a large number of slag pieces, were recovered from the rest of the excavation. A possible tuyere fragment and a whetstone fragment were also found. Apart from slag, these artefacts are thus far the only positive evidence that the feature was associated with metal smelting and/or working. A section of another small stone circle, as well as signs of clay walling, or a clay floor, were opened up in the south-eastern part of the excavation and this could be investigated at a later stage.

With the final analysis of cultural materials not yet complete, it would be premature to try and deduce the exact function of the feature. However, considering the pieces of slag and the physical evidence of the rock anvil, this could indeed have been a metal working area or smithy. Furthermore, a second small stone circle surrounded by and enclosing pieces of slag has been identified only 10 m north-west of the smithing unit and could point to the area as a whole

being utilised specifically for metal working. The location of the possible smithing unit with rock anvil is also of interest. It is situated inside a residential area, albeit not in the centre. As a rule, iron smelting was performed outside and smithing inside a residential unit. Evidence from Madikwe Game Reserve to the north indicates that Tswana people smelted copper in the back courtyard (Hall 2000:47). Although no copper furnaces have been found at Askoppies to date, the slag found there might still prove to be copper-based.

The rock anvil at Askoppies. The smoothed and hammered surface of the rock, as well as small grooves where objects where presumably shaped and sharpened, are clearly visible.



The next phase of fieldwork at Askoppies will concentrate on finding more evidence of metal-working. Excavations will focus on the second stone circle and the concentration of slag around it in the hope of finding a copper furnace. The analysis of the material from the 2004 excavations will include an expert analysis of the faunal remains, pottery and slag pieces.

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ROCK PAINTING OF ROAN ANTELOPE AT GIANT'S CASTLE, KWAZULU-NATAL

Francis Thackeray and Thembi Russell

Roan antelope (*Hippotragus equinus*) are rarely represented in the rock art of South Africa's Drakensberg, where eland and rhebok are relatively common. One example of roan (see accompanying sketch) has been recorded at Main Caves North in the Giant's Castle Nature Reserve (Russell 2000). The animal can be recognised as roan by its long curved horns, a prominent erect mane, long ears, a rufous colour and white facial markings. Not previously recognised in the Giant's Castle representation of roan is at least two stripes, painted on the neck of the antelope. These certainly do not relate to natural stripes on the animal and it is probable that the stripes have symbolic intent.

The significance of the stripes is not certain, but may perhaps relate to symbolic wounds, as suggested in the case of a skin with artificial stripes worn by a human figure bending forward with two sticks, photographed at Logageng (Logagani) in the southern Kalahari by WHC Taylor in about 1934 (Thackeray, in press). The photograph lacks contextual information, but was described as a 'buckjumper'. The skin worn by this individual appears to have been that of a roan antelope. The significance of the photograph has been explored in an article relating to African art, with particular reference to wounded roan (Thackeray, in press).

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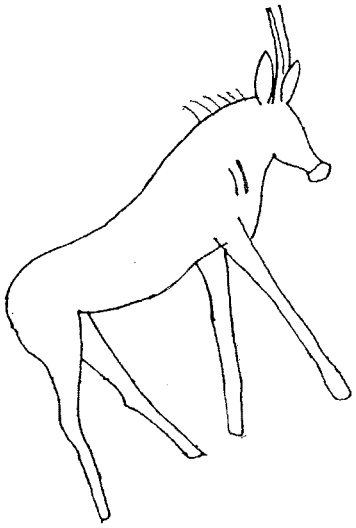

Copy of a painting of a roan antelope at Giant's Castle in KwaZulu-Natal. Note the painted stripes on the neck.

References

1. Russell T. 2000. The application of the Harris Matrix to San rock art at Main Caves North, Kwa-Zulu-Natal. *SA Archaeological Bulletin* 55: 60-70.
2. Thackeray JF. In press. The wounded roan. *Antiquity*.

ARCHAEOLOGY IN BRIEF

Mysterious Caucasian community in China. Archaeologists have started unearthing an estimated 1 000 tombs at Xiaohe, near the Lop Nur desert in Xinjiang region, once home to a mysterious civilisation that most likely was Caucasian. Their findings could help shed light on how this isolated culture ended up thousands of kilometres from the nearest Caucasian community. The tombs, thought by some to be 4 000 years old, were first discovered in 1934 by a Swedish explorer, but virtually no work was done on them over the next six decades. *AFP, October 2004*

A virtually intact Viking village. Preliminary work on a bypass in Ireland has yielded what could be the most significant piece of Viking history in Europe: a virtually intact town. Located below pasture fields near Waterford, the site appears to represent a defended, riverside settlement that most likely dates to the Hiberno Norse Early Medieval period, 800-1100 AD. Aerial pictures suggest that the settlement might be far bigger than previously thought, with up to 4 000 inhabitants and a fleet of 120 Viking ships in about 812. An abundance of artefacts were uncovered during the test excavation. Cultural organisations, academics and scholars from across Ireland and Europe have called for a full excavation.

Discovery News, 18 October 2004

3 000-year-old Hallstatt staircase. A wooden staircase dating from the 13th century BC has been found in a Bronze Age salt mine at Hallstatt in Austria. It is immaculately preserved as the micro-organisms that cause wood to decompose do not exist in salt mines. The 1 m wide, 7 m piece of staircase, which extends further down and up, is made of pine and spruce. It was found some 100 m below the surface and about 200 m from a necropolis that was the seat of the 700 BC Hallstatt Civilisation, one of the most important and advanced of the Iron Age. *AFP, 12 October 2004*

Early man mined flint. Israeli researchers have suggested in the *Proceedings* of the National Academy of Sciences that some cave dwellers were mining flint 300 000 years ago. Flint from underground makes superior tools, as exposed rock tends to be cracked or weathered. A comparison was made of the chemical compositions of a range of 300 000-year-old tools. An isotope called beryllium-10 is produced when cosmic rays react with the silicon dioxide in rock. Tools fashioned from surface flint should have higher levels of the isotope than those mined from underground. Flint blades from Tabun Cave near Haifa have beryllium-10 levels that indicate they were made from mined flint, but tools of the same age found in Qesem Cave, 100 km to the south, bear the hallmarks of surface rock. *May 2004*

EVENTS AND DESTINATIONS

12th Pan African Congress. The 12th Congress of the Pan African Archaeology Association for Prehistory and Related Studies will be held at the University of Botswana in Gaborone from 3 to 10 July 2005. Visit the PAA website: www.ub.bw/departments/humanities/panaf2005/index.html for information and updates.

Wildebeest Kuil Rock Art Centre near Kimberley is an example of a community-based public rock art project that was made possible by a grant from the Department of Environmental Affairs and Tourism and De Beers. KhoeSan people, researchers and other stakeholders joined together to conserve more than 400 engravings on a small hill and to present the site as an educational and tourism experience that can be deeply spiritual. Surrounded by land owned by the !Xun and Khwe San, the site is managed by trustees comprising community members and specialists in heritage and tourism. The San custodians are employed to guide visitors over the site. The experience begins at a visitor's centre where there are displays and a shop with !Xun and Khwe craftwork, and an auditorium with a 20-minute introductory film. The walkway of 800 m weaves up and over the hill via a number of information boards. More information: Wildebeest Kuil Rock Art Centre, PO Box 316, Kimberley, 8300. Fax: 053 842 1433. E-mail: dmorris@inext.co.za.

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

The views of the authors are their own and the Society does not take responsibility for them.

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