



THE ELEPHANT AND VULTURE SITE IN THE GROOT WINTERHOEK MOUNTAINS OF THE EASTERN CAPE

T`numqua - 'People who are owners of n|um'

Andrew Paterson

One is immediately aware of the dramatic painting of a single large elephant superimposed on a flight of vultures from the moment one enters this isolated shelter tucked away in a small anticlinal structure in the Groot Winter Hoek mountains of the Eastern Cape Fold Belt (Fig.1). The purpose of this article is to try and enhance the understanding of this unique San painting and to suggest an interpretation based on recorded San cultural concepts.

Location and environment

The Elephant and Vulture shelter, situated at a height of 950 m, lies 4 km southeast of the highest peak, the 1 758 m high Cockscomb in the Groot Winterhoek mountains. From the Cockscomb one looks down at the Elands Valley to the south, Baviaanskloof to the west and the Karoo to the north. On a clear day many other peaks can be seen as far away as Graaff-Reinet. The mountains are a significant water divide and feed the major river drainage basins in the area.

The Gamtoos river to the west is about 645 km long and feeds a fertile catchment area of 34 635² km. The Groot River drainage system in the vicinity of the shelter will have provided the San hunter-gatherers

Andrew Paterson has studied the San rock art of the Cederberg with Prof. John Parkington of the University of Cape Town and the eCRAG rock art group of the South African Archaeological Society under the leadership of Prof. Janette Deacon for the past 17 years. andypat@iafrica.com.



Fig. 1: The central panel consisting of a single bull elephant superimposed on a flight of 19 vultures

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with access to other San groups and a fertile area for hunting eland and rhebok, foraging plant foods, fruit and nuts, and good water supplies throughout the year. The elephants in the region would have followed these rivers to forage for food and water and provide the males with access to the female elephant family units during the breeding seasons. For the vultures, the high cliffs on the Cockscomb peak would have provided an ideal place for roosting and surveillance.

History of the area and the site

Cockscomb has been referred to by a number of names over the decades. Colonel Charles Lennox Stretch (1797–1882) ascended the peak in 1829 and was the first person to record its Bushman name, namely Cuncungwa, which may be translated as 'misty peak'. Many years later, in 1970, RRW Nixon recorded that the Khoekhoen name for the peak was T'numqua, which confirms the translation of 'mountain of mist'. The Eastern Cape Mountain Club today refers to Cockscomb as T'numqua.

According to George William Stow (1822–1882), who conducted extensive investigations into rock art between 1834 and 1880, the area between the Gamtoos and the Kei rivers was the last stronghold of the Bushman in South Africa. Local records show that the odd Bushman survived as farm servants until the 1920s but the last Bushmen to operate as a band were dispersed in about 1885. This band had its hideout in the inaccessible gorges and kloofs of the Groot Winterhoek mountains.

The Elephant and Vulture shelter, discovered by the Eastern Cape Mountain Club, was introduced to Alex Wilcox by Ludwick Abel in 1963 as 'Elephant Cave'. Woodhouse referred to the site and published numerous images of it in his various books between 1979 and 1989, describing the site as containing a 'rain elephant with vultures'. Vulture images from here were used in the design of the SA Post Office 20c stamp first-day cover in 1987 with the markings 'Rock paintings/Rotstekeninge' and 'Bergville 1987-06-04' (Fig. 2).

The site was most recently documented as Site No. 4, Elephant Cave, in the interesting PhD (Wits) dissertation by Ghilraen Laue (2019).

Methodology: identify, investigate and interpret

I use a three-stage multidisciplinary approach toward the identification, investigation and interpretation of rock art, which incorporates the scientific disciplines of ecology, ethology and ethnography.

Stage 1: Identification and awareness

- Awareness of the site location, its environment and ecological setting.
- Awareness of the natural realism within the composition and subject matter of the painting.

- Awareness of implied movement, sound, and behaviour in the painting.
- Awareness of the images using photographs, computer enhancement and data recording.
- Awareness of wildlife images that support the realism in the painting.
- Awareness of the perspectives from which an artist has painted his subject matter.

Stage 2: Investigation and behaviour

- Research into current elephant and vulture behaviour – ethology.
- Research into current San knowledge of elephant and vulture behaviour – ethno-ethology.
- Research into current San behaviour, such as hunting, healing and initiations – ethnography.

Stage 3: Interpretation and concepts

- Interpretation of the painting against the background of San inherited cultural concepts.
- Interpretation of the knowledge that is stored in the painting, relevant to the San's survival.

Identification and awareness

Site location and description of the paintings

The Elephant and Vulture rock shelter has a compact, symmetrical shape and is at least 10 m deep but only 8 m wide and 3 m high at the at maximum. It is a densely painted site with over 300 images, including 81 human figures, 112 animals and at least 94 handprints and 14 finger dots. Among the animals listed are one elephant and 19 vultures (Laue 2019). There elephant and vulture paintings have been rendered in a realistic manner.

The elephant and vultures are by far the largest paintings in the shelter. They have been prominently placed on the smoothest and cleanest painting surface on the ceiling above the viewer in the centre of the shelter. The entire painting is c. 2 m across and has been executed in a deep red ochre colour. The elephant measures c. 40 cm to the shoulder and has a width of c. 82 cm. The average wingspan of the vultures is c. 29 cm and they have a body length of c. 8 cm. There are a pair of handprints below and to the front of the elephant and another pair of handprints above and directly in front of the head of the elephant. The elephant faces left and has been superimposed on the flight of 19 vultures that are flying from right to left and moving in the same direction as the elephant. Below the vultures are two small eland torsos.

To the right of the central elephant and vulture composition are at least five beautifully painted rhebok with red bodies outlined in white, white faces and white ears. The rhebok are a perfect example of the San artist's ability to capture their movement, gesture and characteristics. To the right of the rhebok are four San hunters, facing left towards the rhebok, with bows drawn and in stalking mode. Above and to the right of the rhebok and hunting composition, is a

single San male figure with a distinctly beaded waist and a rhebok strategically superimposed across his back and stomach.

To the left of the central elephant and vulture composition is the highest concentration of red-ochre handprints. They appear to be mostly right-handed prints. The handprints have sometimes been placed around San male figures and rhebok antelope but in other instances are intentionally superimposed on top of them. Another group of images has San male figures, two faint rhebok and a set of fine red parallel lines, overprinted with a set of handprints. The red lines are regarded as rain symbols (Paterson 2018). The rhebok on this side of the shelter have been painted with red torsos and white underbellies. Another set of three male figures are facing to the front with elbows out and numerous finger dots are superimposed over them.

Wildlife photographs confirming reality

I photographed and enhanced with D-Stretch all the images in the shelter. I then compared the elephant and vulture paintings to current wildlife images to confirm that the paintings are a realistic rendition of animal behaviour.

The perspective of the artist

The artist has drawn the elephant at a distance and from a sideview perspective. He would have experienced an elephant walking like this and remembered it as such, recalling it when he intended to paint it, mixed the paint and medium to the correct consistency and painted this elephant from memory. The artist has drawn the vultures at a distance from a perspective of being below the vultures. This is how the artist would have experienced them. The staggered and layering of the flight pattern that is typical of these birds has been rendered accurately. The flight of vultures would also have been drawn from the artist's memory, something that he would have experienced on a regular basis, possibly daily, as they departed from and returned to their nests on the high cliffs some 4 km away. Both elephant and vultures have been painted in a completely natural and realistic manner (Fig. 1).

An interesting aspect of the painting is that, because it has been drawn with vertical and horizontal perspectives, with the elephant positioned above the vultures, the artist has created a three-dimensional



Fig. 2: The T`numqua vultures as they appear on a SA Post Office first-day cover celebrating rock paintings

effect on the back wall and ceiling of the shelter. This type of effect has been found at another site in the Cederberg (Paterson 2019).

Investigation and behaviour

Research into the elephant behaviour

One can safely assume that the elephant was the largest animal and the vulture the largest bird in the San ecosystem at the time of the painting being created. From San ethnography we know that these two animals were important to the San for various reasons.

The African elephant is the largest and heaviest terrestrial mammal in the world. They are extremely intelligent and incredibly powerful animals (Emmett 2010). A male elephant has a maximum shoulder height of 4 m and an average weight of 6 000 kg. His age at first must is 29 years and he lives between 60 and 70 years. Average tusk weight is 49 kg (Poole 1997).

The most important aspects of the elephant in this painting is that it is a single elephant, it is walking alone with intent and it has long curved tusks. The erect tail signals intent and the heavy tusks signal age and dominance. Being on its own suggests that this elephant was in all probability a mature bull. If the artist's intention was to paint a female elephant, he would have painted a number of elephants standing together or walking in single file. Female elephants are found in family units managed by an older matriarch and are accompanied by sub-adults and babies of various sizes. Sub-adult male elephants leave their natal family units at around 14 years of age to join a male bond group with which they remain for the rest of their lives except for short periods of must when they join a female herd to breed. The handprints directly in front of a large single bull elephant suggest the importance of this elephant. A San painting with

handprints on and around the front of a must bull has been encountered at Die Mond in the Cederberg (Paterson and Parkington 2016).

The most significant factor determining bull elephant must behaviour is rainfall. Records of bull elephants in the Kruger National Park show annual must cycles between April and July each year with annual movements marked by large changes in latitude and relatively small changes in longitude (Henley 2012). Male and female elephant conceptions in the Kruger National Park show a seasonal peak that is related to the peak rainfall period (Hall-Martin 1987) (Fig. 3).

San knowledge of elephant behaviour

That elephants were present throughout the Cederberg and the south-eastern Cape is evidenced by the numerous San elephant paintings, literally hundreds, that are spread right across this area. The San's interest in and ability to paint animals so realistically is directly related to their knowledge of and ability to track animals. According to ethnographic records, the sheer volume of knowledge is breathtaking (Burton Jones et al. 1998). With regard to large animals, hunters can apparently identify the spoor of individual animals in the same way that they can identify the spoor of individual persons. Through continuous practice, San trackers have developed a high eidetic imagery for tracking and painting. The hunter-gatherer's very survival depended on this refined eidetic imagery.

Each species is perceived to have characteristic behaviour, which is governed by its *kxodzi* (customs), and each has its particular *kxwisa* (language). Animals

were believed to have acquired special capabilities by means of rational thought (Liebenberg, 1990). There are a number of medicine songs that are named after 'strong' things such as honey and elephants that were considered to possess powerful *n|um* (Bieseke 1978).

We can therefore assume that the artist who painted the elephant at the Elephant and Vulture shelter had an extensive knowledge of 'all things elephant'.

Research into the vulture behaviour

There are a number of important aspects with regard to vulture behaviour in the Elephant and Vulture shelter painting. Vultures have excellent eyesight, apparently eight times better than humans. A vulture's eyes have two lenses, one like a fisheye lens to see the broader landscape, and one to magnify objects and provide more detail while in flight. They forage using a grid flight pattern. By circling in an organised manner, one bird can see when another breaks the formation. If an individual spots something and starts to move downwards, its white back offers a beacon to the other birds, which follow suit. Vultures use thermals to gain a height advantage and by moving from one thermal to the next they can survey vast areas. They can soar to altitudes of up to 12 000 m and cover thousands of kilometres at a gliding speed of 60 km/h. Vultures have been recorded as achieving diving speeds of 120 kph as they literally fall out of the sky. It is this spectacle of vultures dropping quickly out of the sky in an isolated area that would indicate to the San hunter the presence of a kill (Emmett 2010) (Fig. 4).

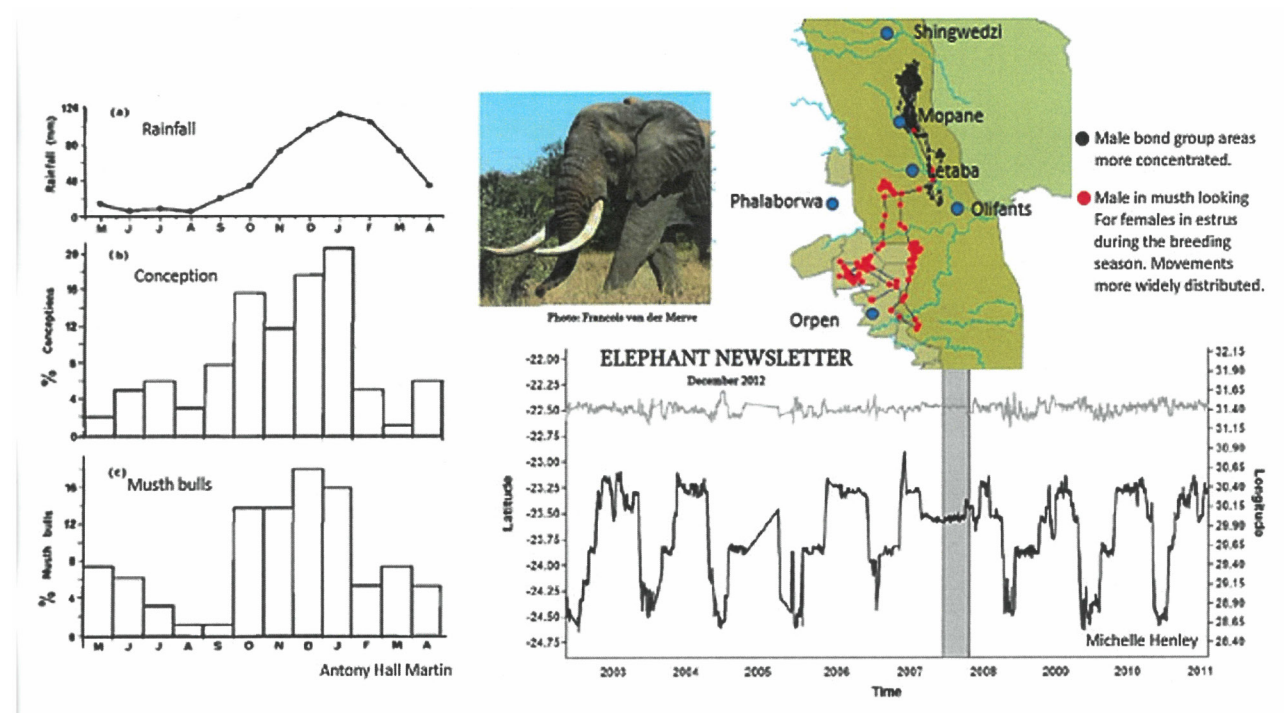


Fig. 3: The annual movement of Kruger Park elephant bulls in must while breeding in the rainy season.

Cape vultures are extremely social and breed in colonies of between six and 100 pairs on cliff faces. This provides them with a good position from which to launch their large, heavy bodies into flight. Their grassy nests are positioned on ledges, usually where there is some form of overhang. Nests are used year after year and eventually the cliff faces will become distinctly plastered with droppings. Vultures lay one egg per year.

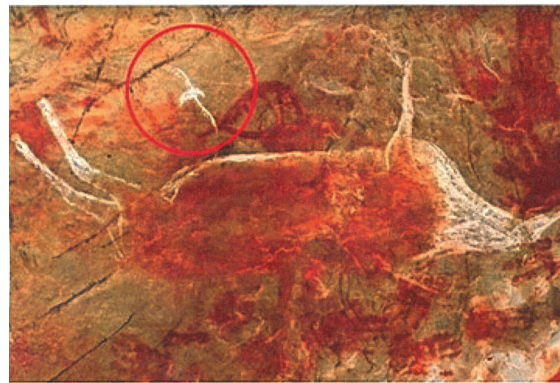


Fig. 4: Vultures at an antelope carcass. The dead eland superimposed on top of a San figure and surrounded by at least 14 handprints suggests a San first-kill celebration.

San knowledge of vulture behaviour

That vultures were present in the San environment is indicated by other vulture paintings in the area, with vultures coming to land on or sitting near a dead eland or rhebok carcass (Fig.4). Early researchers were astonished at the wealth of information given by the San. The San told that they watched hyenas sleeping in their lairs and when they woke up observed how they watched the flight direction of the vultures in the sky before trotting off in a similar direction themselves (Heinz 1978). The San considered birds to be intelligent creatures and believed them to react to many situations in the way that humans would (Liebenberg 1990).

We can therefore assume that the artist who painted the 19 vultures at the Elephant and Vulture shelter, had an extensive knowledge of all things vulture.

Interpretation and cultural concepts

This elephant and vulture painting, I believe, is a single composition artwork. It consists of a lone bull elephant moving between its male bond group area and the female family unit area during the breeding season, which is normally associated with the annual rainy seasons. A mature bull elephant in must can cover over 7 000 km² during this period. According to ethological and ethnographic research records, rain is intimately linked to both the elephant and San seasonal procreation behaviour (Fig. 4). My conclusion is that in terms of the San concept *n/o`an-ka|`ae*, which is the force constantly acting on everything to make it change (Keeney and Keeney 2015), this annual movement of an elephant in must can be regarded as being an example of that changing force, which is regarded by the San as 'the secret of creation' and procreation (Fig. 1).

I believe that the vultures, as 'hunters in the sky', have been depicted flying out from their nests on the high cliffs of the nearby T`numqua peak in search

of carrion. This was obviously a regular occurrence that took place right over the painting shelter, and the San artist would have been able to paint the vultures from memory. The San would have used their flight directions as part of determining their own hunting strategy. My conclusion is that in terms of the San concept of *n/um*, which is the vibrant energy connecting all living entities that comes directly from God the Creator (Keeney and Keeney 2015), the elephant superimposed on a flight of vultures can be regarded as being an example of that vibrant energy connecting the San people to elephants, vultures, antelope and rain in the painting (Fig 1).

The complex superimposition of rain symbols, rhebok antelope, San male figures, handprints and hunting scenes, painted in an isolated high-altitude shelter, suggests that this site could have been used for the San male *Tshoma* initiation ceremony. In terms of the San concept *n/ao*, which links the great procreative powers of men and women, namely childbirth and hunting to the vitally important polarities of the weather and rain (Bieseke 1993), these images can be regarded as being an example of the San linking hunting, rain and procreation (Fig. 3).

These three cultural concepts are abstract ideas that occur in the mind, speech and thoughts of the San. They play an important role in all aspects of San cognition, mental activity and acquisition of knowledge and understanding through their sensual experiences. The concepts are the building blocks of the San's unique cultural belief system. The elephant and vulture painting can be regarded as a symbolic expression of these cultural concepts. The bull elephant and the vulture symbolised procreation and hunting and tracking respectively. I believe that this was a male ritual site where the San went on special initiation occasions to 'celebrate life' and the transition from boy to man.

The possibility of the San people in the Groot Winterhoek area being called the *T`numqua*, which today would be translated as 'People who are the owners of *n/um*', that vital energy that connects all living entities, is rather intriguing. The Ju|`hoansi San in the Kalahari today have an elephant *n/um* song and an elephant dance called *!xo' djsxani*, which is led by a *!xo' n|um kxao*, who is an 'owner of the feeling for elephants' (Keeney and Keeney 2015).

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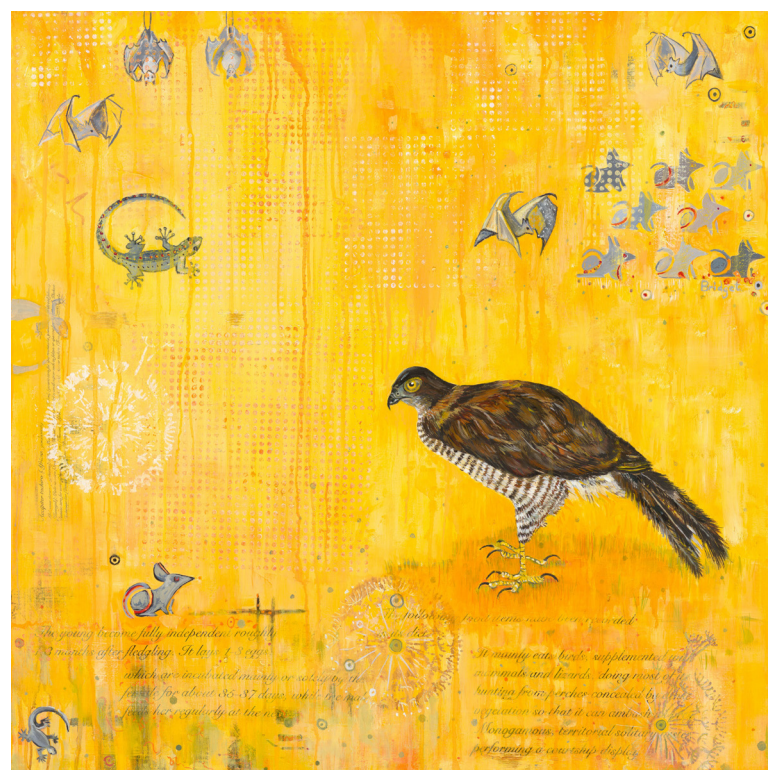
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'Eat, Drink, Prey and Love' by Bridget Heneck

Oil on canvass, 80 cm by 80 cm, part of the 'Phenomenal Cape'
exhibition from 30 January to 25 February 2022

'The black, white and yellow colouring of the African Goshawk prompted me to feature these three colours. I love the combinations that occur in nature. I thought I would include its prey too. I used edibles in a pattern format, and it added to the whimsical air of the painting' – Bridget Heneck

THE PAST IN COLOUR

Exploring the early use of ochre in southern Africa

Tammy Hodgskiss

Ochre is widely used today for a range of applications. But this mineral pigment has been in use for over 300 000 years. The term 'ochre' has many meanings: a paint, a rock, an earth pigment, a mustard hue or a powder used for skin protection. Archaeologically, ochre is used to describe a wide range of earthy, ferruginous rocks that can be ground or pulverised to make a colourful powder, usually in shades of red, yellow and purple. But any rocks that produce a pigment-rich powder, even in black, grey or blue shades, are often grouped under the ochre umbrella. The main minerals in ochre that give them their colour are variations of iron oxides and iron hydroxides, most commonly hematite (Fe_2O_3) and goethite (FeOOH). Ochre is a range of rock types, including shale, hematite, specularite, mudstone, ironstone, siltstones, earthy sandstones and even vivianite (Fig. 1).

Today ochre is widely used as a pigment in a range of ways, from external walls and artists' paint to body paint such as that used by the Himba in Namibia, who use red ochre for both skin protection from the sun and insects and for ritual purposes (Rifkin et al. 2015). It has been used as medication and an anti-bacterial paste for wounds and burns, to settle upset stomachs and for consumption as an iron supplement (Velo 1984). The range of potential uses of this iron-rich, colourful powder complicates interpretations of how it may have been used in the past.

Ochre collection and use became a regular activity around 100 000 years ago, which was a period of important behavioural and cognitive development for our species (Wadley 2015). Research into ochre use in the ancient past has focussed on understanding how and why it was used both in functional applications and symbolic use. Middle Stone Age (MSA) assemblages show that there was a clear preference for the use of red ochre, pieces with a



Fig. 1: A collection of ochre varieties, including hematite, shale, specularite, ironstone, mudstone and vivianite

sparkly, micaceous quality often having preference. Red is a powerful colour to humans – the colour of our blood. The use of red ochre at a time when we see evidence of the emergence of the complex modern human mind has prompted interpretations that ochre was used for ritual and symbolic purposes. Some of its ancient uses imply technological innovation and point to the cognitively complex abilities of the user.

Ancient ochre use in Africa

There is a long record of ochre collection and use. Much of the early evidence comes from Africa but there is also evidence of ochre and pigment use in Europe and Asia, which means that its early use was not restricted to *Homo sapiens*. There are even a handful of sites older than 300 000 years that have ochre assemblages, such as Kathu Pan, Wonderwerk Cave and Canteen Kopje in South Africa and Twin Rivers in Zambia (Watts et al. 2016). Ochre assemblages from these sites typically contain only a few ochre pieces and most have no evidence of being processed or used.

From roughly 150 000 years ago during the MSA in Africa, ochre collection and use became more widespread, with many sites containing assemblages of hundreds or even thousands of pieces. Some of these pieces display evidence of having been utilised

Tammy Hodgskiss has a PhD in Archaeology and is the curator of the Origins Centre Museum, Faculty of Science, University of the Witwatersrand, Johannesburg. tammy.hodgskiss@wits.ac.za.



Fig. 2: Examples of use-traces seen on ochre pieces from South African Middle Stone Age archaeological sites

in a variety of ways (Fig. 2). Notably, at most of these sites, bright red ochre predominates over any other colour. Provenance studies indicate that some ochre was collected from as far as 80 km away, if not more. There is rare direct archaeological evidence of ochre mining, but many pieces may have been collected as nodules lying on the ground or from exposed deposits. Lion Cavern in eSwatini is the earliest known ochre mine and was exploited from c. 43 000 years ago (ya) (Beaumont 1973).

Over 8 000 pieces of mostly red ochres were uncovered in layers dating between 110 000 and 70 000 ya at Blombos Cave on the southern Cape coast (Watts 2009). Blombos has early evidence of deliberately engraved ochre, as well as what appears to be 'drawn art' at c. 75 000 ya and ochre-processing toolkits in 100 000-year-old layers (Henshilwood et al. 2009; 2011; 2018). The toolkits consist of perlemoen (or abalone) shells that were used to mix and store compound ochre mixtures of red ochre powders, seal fat, charcoal and other ingredients. We do not know what the ochre mixture was applied to or used for.

At Pinnacle Point 13B, over 500 ochre pieces, many a bright red, were found in layers dated to between 164 000 and 92 000 ya (Watts 2010). At Klasies River, over 600 pieces of ochre in layers dating to between 110 000 and 45 000 ya were found. Some of these may have been heated intentionally to obtain red varieties (Dayet-Boulliot et al. 2017). In KwaZulu-Natal, at Sibudu Cave, over 9 000 ochre pieces were excavated in layers dating to between 77 000 and 37 600 ya (Hodgskiss 2013), and ochre powder residues found on bone and stone tools suggest a range of uses for the powder. Almost 600 pieces of ochre were uncovered in 110 000 to 52 000-year-old layers at Diepkloof Rock Shelter in the Western Cape (Dayet et al. 2013). The sites discussed here are just

a few of many coastal and inland sites in South Africa where ochre assemblages and evidence of ochre processing has been found (Hodgskiss 2020).

Across Africa there are sites with evidence of ochre use at, for example, #Gi in Botswana, Pomongwe and Zombepata in Zimbabwe, Ngalue Cave in Mozambique, and Grotte de Pigeons and Rhafas in Morocco (McBrearty and Brooks 2000; d'Errico et al. 2009). Most of these sites have been dated to between 100 000 to 70 000 ya, but some may be older. Excavations in 41 000 to 33 000 ya layers at the Porc Epic Cave in Ethiopia uncovered 4 000 pieces of mostly red and dark red ochre, as well as ochre-stained grindstones and a possible stamping implement (Rosso et al. 2016). From ~30 000 ya, Later Stone Age (LSA) ochre collection and use was regular at sites around Africa.

That many of these MSA and LSA ochre assemblages reveal the preferential use of red and dark red varieties over yellows and oranges, has prompted research into the intentional heat treatment of ochre by early modern humans (Wojcieszak et al. 2017). When ochre is heated to a temperature above 250°C, the iron oxyhydroxides (goethite) dehydrate to form hematite, causing a colour change from yellow to red (Fig. 3). This evidence, together with other behavioural and cognitive advances indicated by innovative technologies, suggests that it is likely that ochre heat treatment was taking place from c. 100 000 ya, possibly earlier. However, it must be noted that the appearance of multiple, often large, hearths at these sites increases the likelihood of some post-depositional heating and therefore colour change after use.

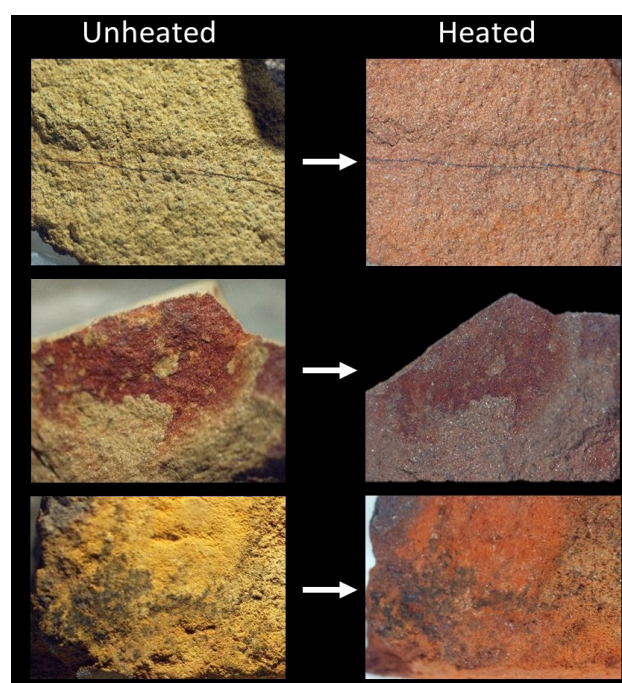


Fig. 3: Colour transformations that occur when ochre is heated.

The use of ochre beyond Africa

Although most of the evidence of ancient ochre processing is associated with archaic and modern *Homo sapiens* in Africa, both anatomically modern humans, Neanderthals and possibly Denisovans were responsible for the cave art, pigment use and symbolic items found in the European and Asian Palaeolithic. In 250 000 to 200 000-year-old layers at Maastricht-Belvédère in the Netherlands, 15 small 'drops' of a hematite mixture were found (Roebroeks et al. 2012). Pigment use increased in Europe after 60 000 ya, with black pigments, such as manganese dioxides, predominating (Zilhão et al. 2010). At Qafzeh Cave in Israel, almost 100 pieces of ochre, some used, were unearthed in layers dating to younger than 92 000 ya and ochre powder was found on perforated seashells and with human burials (Hovers et al. 2003). Ochre pieces and perforated shell beads with ochre residues were found in ~100 000-year-old layers at Es-Skhul in Israel (Salomon et al. 2012). At Jwalapuram in India (74 000 ya) one piece of ground ochre was found (Petruglia et al. 2007), while in 105 000 to 125 000-year-old layers at Lingjing in China two engraved bones, one with ochre residues, were discovered (Li et al. 2019). Finds from Madjedbebe rock shelter in Australia (65 000 ya) include used ochre and grindstones (Clarkson et al. 2017).

Using ochre – then and now

Many of the ochre pieces found at archaeological sites were collected and brought back to the sites, but not used (or not in a way that modified the surface, e.g. as an ornament or charm). Most MSA ochre assemblages comprise only a small portion (10 per cent to 20 per cent) of used ochre. There is evidence that some ochre was processed into powder. The marked or used surfaces of ochre pieces indicate how they were used (Fig. 2), with powder residues found on a range of artefacts being further evidence of this. Some of the use-traces on ochre are easy to see, such as grinding striations, facets and engraved lines, but microscopic examination reveals further evidence of use, such as polishing and smoothing that formed as a result of less aggressive actions, such as rubbing.

Markings resulting from the grinding of ochre pieces against a hard surface (grindstone) are one of the most common use-trace types found on ochre pieces in many MSA assemblages. Grinding ochre is an efficient way of producing a fine-grained, coloured powder. Intensively ground ochre pieces often develop faceted surfaces that converge to a point, making a crayon shape. These are often called ochre 'crayons', although they were not necessarily used in the way the name suggests. The only known direct evidence of intentionally drawn coloured lines in the MSA are the red ochre strokes that are visible on the edge of a small silcrete stone flake that broke off

the edge of a grindstone at Blombos Cave, dated to 75 000 ya (Henshilwood et al. 2018).

Scored, or incised or engraved, ochre pieces are not common finds during the MSA or LSA. Scored marks are made by incising an ochre piece with a sharp tool. Deliberately engraved designs are extremely rare but there are some notable examples of pieces with intentionally engraved designs, such as found at Blombos Cave, Sibudu, Klein Kliphuis and Klasies River. Smoothing or polishing forms when pieces are rubbed directly on a soft material, such as skin or hide, to mark or colour them. Another possible way of processing ochre is by crushing it between two grindstones. This would be done with softer ochre varieties and would leave little evidence behind if most of the powder was used (Fig. 4). Thick ochre powder lenses or patches were found at Sibudu, Blombos Cave and Klipdrift Shelter and provide evidence of extensive ochre processing or ochre powder production, possibly by crushing and grinding (Wadley 2010; Magnus Haaland pers. comm.).

Ochre residues are found on a range of artefacts at MSA sites, such as on stone tools, grindstones, worked bone and shell. They appear on perforated marine shells in 75 000-year-old layers at Blombos Cave (d'Errico et al. 2005) and in 70 000-year-old layers at Sibudu (d'Errico et al. 2008). Ochre residues have been found on marine shell beads at sites in Morocco dated to c. 80 000 to 70 000 ya (d'Errico et al. 2009). At all these sites it is unclear whether the shells were deliberately coloured or whether ochre residues transferred onto them when they rubbed against ochre-covered skin or hide. Some MSA stone tools have been recovered with ochre residues on their working edges that, together with micro-wear evidence, suggests the tools were used to scrape hides with ochre powder (Wadley and Langejans 2014). Ochre is used ethnographically to tan hides due to its anti-bacterial and antifungal properties. Experimental hide processing with ochre found that red ochre is an effective hide preserve as it reverses the putrefaction process and softens hides (Rifkin 2011).

At Sibudu, a 49 000-year-old stone tool was discovered with a thick red mixture made of ochre and milk casein on its unretouched edge (Villa et al. 2015). Based on the nature of the mixture, it is probable that the mixture was used as paint, perhaps on human skin. In c. 40 000-year-old layers at Porc Epic, Ethiopia, a pebble half-covered with ochre residues was possibly dipped into ochre paint and used as a stamp to apply the red pigment onto a surface (Rosso et al. 2016).

In the LSA and MSA, stone tools have been found with ochre and glue residues on the proximal and medial portions of the tool. Together with fracture patterns, it is evident that the tools were hafted onto handles using glues containing ochre powder



Fig. 4: Shale being processed into powder

(Lombard 2007). Experimental studies exploring plant resin/gum compound mixtures for hafting adhesives found red ochre to be a successful aggregate owing to higher iron and silica quantities (Wadley et al. 2009; Kozowyk et al. 2016), but that other aggregates result in adhesives that are just as, or more, successful (Zipkin et al. 2014). It is difficult to say then whether ochre was added into adhesives for its chemical properties to create a superior glue or for its visual and potentially symbolic properties, such as to represent blood.

Understanding ochre

The regular collection and processing of *red* ochres at archaeological sites and the engraving of designs on ochre pieces has come to signify complex behaviour involving ritual, symbolism and language (Henshilwood et al. 2009; Watts 2009). Indirect evidence of such behaviour is mostly represented by the presence of red ochre. Direct evidence for complexity, such as ochre processing, engravings, ochre mixtures, hafting with ochre, the heat treatment of ochre and ochre residues on artefacts, shows that later MSA *Homo sapiens* had an advanced understanding of the nature of the material. They were using and manipulating ochre for different and innovative purposes. Whether these behaviours took place at small-scale group level or within a larger social network cannot be established, but we do know that ochre was used in a wide variety of ways and that colour was likely not the only reason for its use. Physical and mineralogical factors probably also played a role. Many of the activities involving ochre required complex cognitive functioning and communication systems (Wadley et al. 2009; Hodgskiss 2014) and provide evidence of the earliest expressions of cultural and individual identities.

MSA sites in South Africa contain some of the earliest evidence for innovative and advanced bone and stone technology, novel subsistence strategies, social use of space, and the use of symbolic and decorative items. Regular ochre collection is visible in the archaeological record around the same time

as we see these behavioural advances. Anatomically modern *Homo sapiens* were evident c. 300 000 ya but evidence of complex behaviour and cognition only appears around 100 000 ya (Wadley 2015). This has made it important to fully understand the range of innovative behaviours taking place during that time. The applications, meaning and uses of ochre are important in furthering our understanding of how and when early humans became fully behaviourally and cognitively modern. These explorations into ochre-use in the ancient past have been valuable in shedding light on technological advancements, diverse individual and social behaviour, as well as cognitive abilities of early modern humans.

Acknowledgements

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CHOOSING BETWEEN APPROACHES TO SAN ROCK ART

JD Lewis-Williams

The history of southern African rock art research is more complex than is sometimes assumed. Andrew Paterson (2020) concludes his article on possible male initiation images in the Cederberg paintings by contrasting two alternative views of San rock art:

- *I propose that consideration be given to reinstating the original 'survival' model of Patricia Vinnicombe as an alternative to Lewis-Williams' current 'shamanistic' model.*

He cites only Vinnicombe's 1972 article in *Antiquity*. It is therefore useful to see what Vinnicombe (2001: 1–2) herself wrote much later in *The Digging Stick*. She illustrated two 'part human/part animal figures' and in the caption drew attention to features that point to southern San trance dances and –

- *concepts of power relating to the control of game animals. They may represent trancers who felt that they acquired animal characteristics such as hooves and horns when they were interceding with the spirit world. ... When these painted details were recorded in 1974, the specific associations with supernatural power, trancing and the spirit world were not yet clear. Thanks to later ethnographic deductions made by David Lewis-Williams, these formerly elusive metaphorical links are now readily recognisable.*

She summed up her article by concluding:

- *When most of the tracings were made some 40 years ago, postures such as arms held back, flexed torso and knees, and somersaulting or prostrate figures had not yet been specifically identified with trance. Although I had recognised the recurrence of these postures in the painted record, their significance escaped me. One of my principal reactions, therefore, when unfolding the images that had been stored in a tin trunk for so long, was the inescapable realisation that many of them (though not necessarily all) undoubtedly relate to the trance experience as initially identified by Lewis-Williams. Aspects of interpretation expressed in People of the Eland will definitely need re-thinking.*

It is clear that Vinnicombe did not see her position as an alternative to mine (Lewis-Williams 2020), and neither do I.

References appear on page 17

David Lewis-Williams is a professor emeritus in the Rock Art Research Institute, University of the Witwatersrand, Johannesburg. davidlewiswilliams60@gmail.com.

Analogous rock paintings at Junction Shelter and RSA CHI1 in the Drakensberg

Francis Thackeray

Lewis-Williams et al. (2021) report details of a painted scene at a remarkable rock art site designated RSA CHI1 in the Kamberg area of the Drakensberg in KwaZulu-Natal. Included in this panel are an eland with its head up (as if to use its sense of smell to detect something in the air), a thinly drawn ascending therianthrope climbing upwards and almost reaching the top of a line at great height, at least one thinly painted antelope depicted as if falling headlong at great speed and a remarkable image combining elements of an antelope's head (potentially a rhebok) and the wings of a bird (potentially a crane). The latter

image corresponds to what was referred to as an 'ales' (relating to the sense of flight) by Harald Pager, a 'flying buck' by Bert Woodhouse and a 'trance-buck' by David Lewis-Williams.

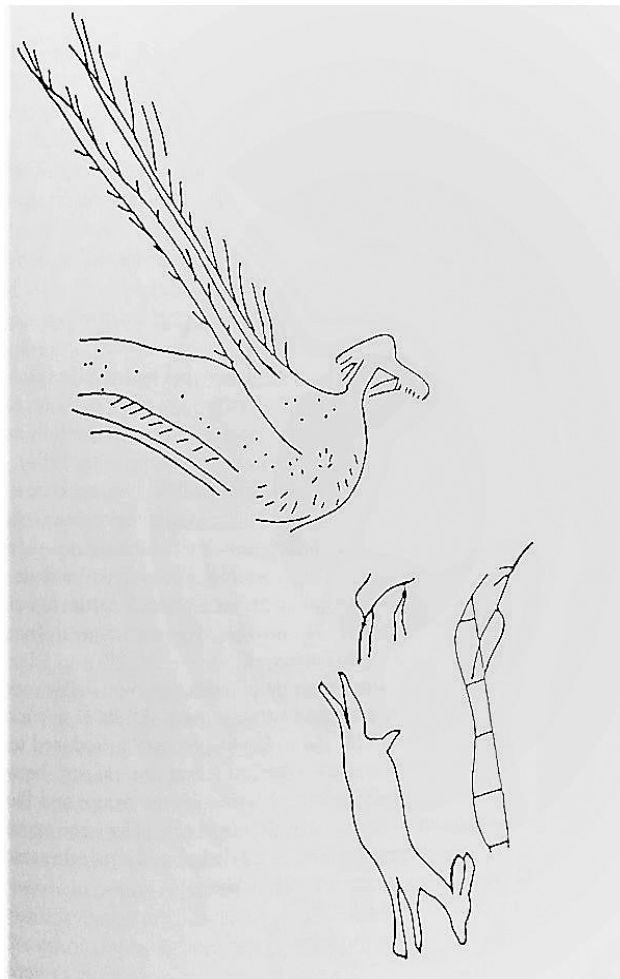
This remarkable juxtaposition of images is reminiscent of a 'falling' rhebok adjacent a person ascending (near the top of a ladder), juxtaposed by a 'trance-buck'/flying buck/ales at Junction Shelter in the Ndedema Gorge of the Drakensberg (see figure), copied originally by Pager (1971, Fig. 291). Thackeray (1990, 1994) notes that the person near the top of a ladder in this scene may relate to concepts of vertigo or 'giddiness associated with height'.

This note serves to report that elements of the two panels appear to be analogous, representing perceptions associated with altered states of consciousness (including a 'trance-buck', the concept of flight and falling at high speed). The experience of being 'high', as in the case of the top of a ladder at Junction Shelter, or at the highest extent of a line or a 'thread of light', to use a phrase by Lewis-Williams et al. (2021) for one part of the RSA CHI1 panel, can also be considered to be trance-related. Thackeray (1990) interpreted painted images of thinly drawn 'falling antelope' in the southern Cape as likewise being associated with perceptions of trance.

The 'falling' rhebok at Junction Shelter and RSA CHI1, and the associated elements, appear to be relevant to linguistic evidence that relates not only to rhebok but also to other concepts of the kind represented in rock art in regions where Nguni languages are spoken (Thackeray 1990, 1994). The question arises: to what extent did interaction between San and Bantu-speakers occur within the last 2 000 years that stimulated the development of conceptual associations in prehistory?

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A 'falling' rhebok adjacent to a person at the top of a ladder, juxtaposed with a 'trance-buck' at Junction Shelter in the Drakensberg. Originally copied by Pager (1971, Fig. 291).

Francis Thackeray is an Honorary Research Associate of the Evolutionary Studies Institute, University of the Witwatersrand, Johannesburg. mrsples@global.co.za.

IMPLICATIONS FOR INTERACTION

Forager-farmer interaction in the Middle Limpopo Valley

Siphesihle Kuhlase

The nature and extent of forager-farmer interaction in the middle Limpopo Valley (MLV) is an intriguing phenomenon. Variability in forager contexts, beginning in the early first millennium AD, reflects this fascinating sequence. In particular, there is an interesting relationship between backed tools and scrapers on forager sites. The production and variation of these tools is contextually contingent and vary in terms of frequency. When considered within a specific context, variation in material culture is perhaps indicative of foragers' agency and the specific relationships they had with farmers in the valley. Differences in material residues are also suggestive of diverse intra-forager settlement and activity patterns. This insight challenges the homogenisation of late-Holocene forager identities and compels us to reconsider the manner in which we have conceptualised foragers in the MLV.

Background

The MLV is an archaeologically rich region in central southern Africa (Fig.1), mostly famous for its Iron Age sequence dating to the early first millennium AD. Farmers were present in the area from possibly AD 350, but it was only around AD 900 that their occupation in the valley intensified (Huffman 2000). This group, who is identified by its Zhizo ceramics, introduced considerable changes in the socio-political milieu of the landscape (Hall & Smith 2000; Van Doornum 2005). In around AD 1000, the Zhizo people were replaced by a group of farmers referred to as the Leopard's Kopje people (Huffman 2000). Their presence culminated in the development of K2 and Mapungubwe. The latter was southern Africa's first state-level society (Huffman 2000; but see Chirikure et al. 2014).

Siphesihle Kuhlase is an honours student in archaeology at the University of Pretoria and part of the Hunter-gatherer Archaeological Research Project (HARP). skkuhlase340@gmail.com

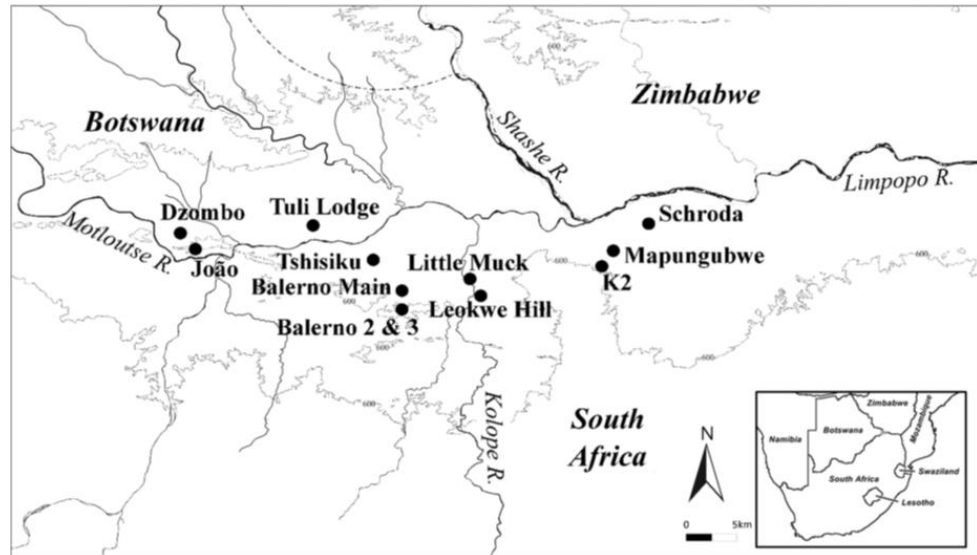


Fig. 1: A view of the middle Limpopo valley with key sites mentioned in the text (from Forssman 2019)

Throughout this period, foragers were not only present on the landscape, but they were also active participants in trade and exchange networks. They played a role in the development of socio-political complexity, yet their contribution has seen minimal research over the years. Nevertheless, recent research focusing on the forager record of the region has received renewed interest. From this research, a very interesting picture that significantly challenges earlier iterations such as those voiced within the well-known 'Kalahari Debate', is emerging (see, for example, Forssman 2021).

In the MLV, there appears to have been an intense level of interaction between foragers and farmers from the start of AD 900. This interaction resulted in assimilation, co-existence and co-dependency (Van Doornum 2005). For instance, in sites such as Euphorbia Kop and João Shelter, material culture and the use of space overlapped, suggesting the possibility of hybrid identities (see Seiler 2016).

The migration of farmers into the landscape had an impact on the settlement and mobility patterns of foragers. From AD 900, social relations may have been fragmented, resulting in foragers organising themselves according to their skill sets and socio-cultural values to participate in the emerging merchant sector. Variations in material residues allow us to explore these occurrences, and not only to evaluate

the interaction between foragers and farmers but also intra-forager relations.

There is an interesting case involving stone tools, particularly scrapers and backed tools, and their involvement within craft production and possibly even identity formation (see Sadr 2015). Tools were preferred for very specific activities that reflect key aspects of forager societies (Deacon & Deacon 1980; Lombard 2005). Generally, the tools are at the core of forager activities, such as woodworking, hide production and hunting. In the MLV, the distribution and production of these tools changed with various continuities and discontinuities. Considering the significance and utility of scrapers and backed tools in Later Stone Age (LSA) contexts, tracing patterns in production and distribution can shed valuable insights on forager lifeways and their interaction with farmers. These patterns are explored from the forager sites of Little Muck, Dzombo and Balerno Main Shelters in the MLV.

Material residues and variability

Little Muck was first excavated by Hall and Smith (2000) In their results they noted a disproportionately large number of scrapers when compared to backed tools (Fig. 2). In the first phase of farmer contact (AD 900–1000), scrapers in contrast to backed tools are at their highest frequency ($n = 185$ and $n = 7$ respectively). This trend continued into the second phase of farmer contact (AD1000–1300) but the production of both tools is very low in comparison to the previous period. Even so, scrapers still dominate the formal tool assemblage ($n = 37$ and $n = 1$). Taken in conjunction with changes



Fig. 2: A view of Little Muck Shelter (courtesy of Courtney Knell)

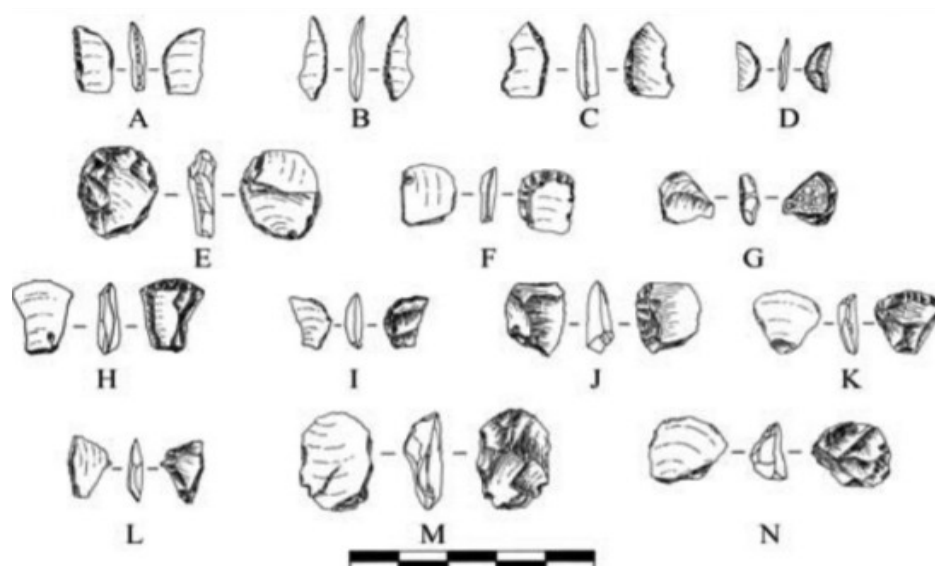


Fig. 3: An example of scrapers and backed tools from Dzombo (from Forssman 2014)

in the broader sequence of the site, this disparity led Hall and Smith (2000) to conclude that the shelter was used as a workshop by foragers to produce hides for farmers. Consequently, a decline in forager materials around the turn of the second millennium AD and an increase in farmer materials was seen as an indication that the site was appropriated by farmers.

Scrapers do indeed appear in many instances to be the most preferred and effective tool for hide production (see Deacon and Deacon 1980; Walker 1994; Wadley 1996) (Fig. 4). However, to what extent can a decrease in these tools and other forager material culture be seen as a cessation of hide production and subsequently forager occupation? This question is pertinent, especially at sites that show a trend in material culture, such as Little Muck (Fig. 4).

Variability, imbrication or a decline in material culture residues that mostly feature in craft production, such as scrapers, can be taken as a sign of changes in craft specialisation, subsistence and behavioural patterns. Denbow (2017) points out that such discontinuities and mixing of material residues can also be indicative of hybrid identities and mixed economies. This point is embraced and is, in fact, subject to renewed interest at Little Muck. Using variability in material residues as an indicator of changes in craft specialisation, behavioural and occupation patterns can shed light on the different identities of foragers and their autonomy within context-specific interaction with farmers (see Forssman 2019). This is crucial, especially considering that intra-forager interaction and variation has not been adequately engaged with in the MLV.

Contrasting the assemblage at Little Muck

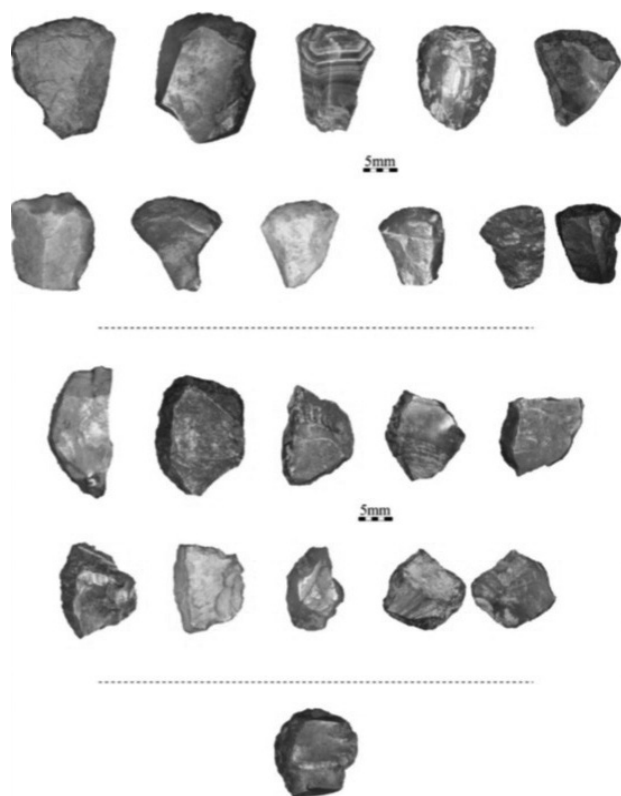


Fig. 4: An example of scrapers from Little Muck (from Forssman et al. 2018)

with that of Dzombo highlights succinctly the context of specific responses of foragers during farmer relations, and possibly even different forager identities. In contrast to Little Muck, backed stone tools as opposed to scrapers are well represented at Dzombo (Table 1). During the first phase of farmer contact, backed tools slightly dominate scrapers ($n = 10$ and $n = 17$) but a notable change occurs during the second phase with scrapers clearly being preferred ($n = 45$ and $n = 21$). This indicates distinct activities and behavioural patterns (Forssman 2019). It is interesting to note that Dzombo, like Little Muck (which is 1,5 km from Leokwe Hill) is close to the farmer complex of Mmamagwa. At around AD 900, when interaction between foragers and farmers intensified, and scrapers increased at Little Muck, the assemblage at Dzombo is fairly consistent and dominated by backed tools (see Forssman 2014: 190).

The fact that backed tools start to increase during the AD 900s suggests that while foragers at Little Muck were utilising the shelter as a workshop, most likely for trade with Zhizo farmers, those at Dzombo prioritised hunting. The relationship that foragers had with farmers at these two sites was different, even though proximity to farmer sites was similar. Perhaps, if Sadr (2015: 9) is to be followed, this variability can be taken as an indication of different forager identities and behavioural patterns.

Forssman (2019) has shown that Little Muck and Dzombo responded in different ways to the presence of farmers in the MLV from around AD 900. In addition to this, it is important to investigate the possibility of distinct forager identities. Considering the variability noted in the MLV, and the specific activities adopted at different sites, at relatively the same time, it does not suffice to homogenise forager identities. If the same forager group had occupied the area around the second millennium AD, can it not be expected that there would be uniformity in their subsistence, settlement patterns and material culture residues? Discontinuities and continuities around the second millennium AD compel us to reconsider other conclusions, even more so when we bring a site such as Balerno Main into the conversation.

Balerno Main is one of the most significant forager sites in the MLV, mostly because of its unique and expansive occupation sequence (Fig. 5). Unlike Dzombo or Little Muck, Balerno Main displays continuity from its re-occupation in 400 BC until AD 1200. The migration of farmers into the landscape seems to have been sparsely felt at Balerno Main. Artifact densities remain relatively unchanged throughout. The trend noted at Balerno Main during the AD 900 to 1000 phase differs from the other two

Site Name	Zhizo Phase (AD 900-1000)			
	No. Scrapers	%	No. Backed tools	%
Little Muck	185	93.43	7	3.54
Balerno Main	89	70.63	25	19.84
Dzombo	10	27.78	17	47.22
	Leopard's Kopje Phase (AD 1000-1300)			
	No. Scrapers	%	No. Backed tools	%
Little Muck	37	105.71	1	2.86
Balerno Main	171	61.73	56	20.22
Dzombo	45	55.56	21	25.93

Table 1: Frequency of scrapers and backed tools from Little Muck, Balerno Main and Dzombo during periods of intense farmer interaction. Table compiled using data from Forssman 2020, which gives the full data values.

sites. For instance, both Dzombo and Little Muck show an increase in the number of scrapers and backed tools during this period. On the other hand, at Balerno Main there is a decrease in both backed tools (from $n = 118$ to $n = 25$) and scrapers (from $n = 525$ to $n = 89$). However, during the second phase of interaction, there is an increase in both categories (from $n = 25$ to $n = 56$ and from $n = 89$ to $n = 171$). This suggests that at a time when other groups chose to interact with farmers, those at Balerno Main opted to limit their interaction and autonomously regulate their space. The assemblage at Balerno Main is incongruous with the situation noted at other sites. For instance, uniquely, backed tools almost equal the number of scrapers (Fig. 6).

The reason for this variability has been attributed by Van Doornum (2008) to the fact that the site was isolated from farmers and used as an aggregation site, where forager groups gathered to have social events such as marriages, gift-giving and feasting. It is also important to consider that Balerno Main's relative continuity can possibly be taken to indicate a selective response, or forager autonomy, to the participation in the region's socio-economic dynamics. While Dzombo might have predominantly been occupied by hunters during phases of contact and Little Muck by craft specialists, Balerno Main might have been occupied by a group that preferred to alternate between activities according to their specific needs.

Considering the embeddedness, multiplicity and utility of scrapers and backed tools within the LSA techno-complex (see Lombard et al. 2012), analysing frequencies in the production and distribution of these tools can shed light on a range of socio-cultural factors. According to Sadr (2015: 9), frequencies in the production and distribution of backed tools can be taken as an indication of emerging social relations, as well as a clear marker of cultural identities in times of accentuated interaction. Such conditions, manifested in the MLV when the first Zhizo people settled in the region, the foragers at Little Muck, Balerno Main and



Fig. 5: A view of Balerno Main shelter (courtesy of Tim Forssmann)

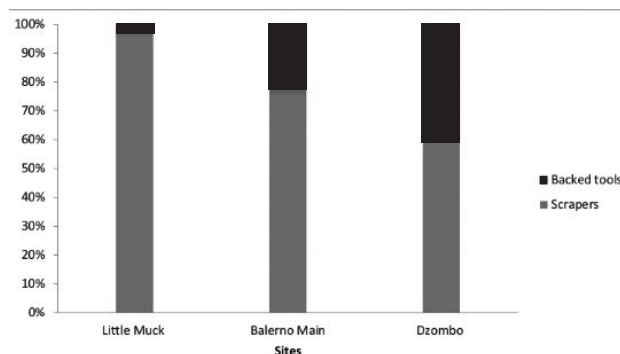


Fig. 6: Assemblage percentage of the distribution of scrapers and backed tools from Little Muck, Dzombo, and Balerno Main during phases of interaction with farmers (AD 900–1300)

Dzombo responded to this in different ways. Hence, their identities could have been different to some degree, even though they had the same stone tool technology, interacted with each other and shared similar cultural practices.

Final remarks

Variability and selective response identifiable in forager cultural remains in the MLV can be taken as an indication of different identities. Regardless, it is not the aim here to argue that certain stone tools can be equated with specific groups of people. Barham (1992) held that the stylistic attributes of stone tools cannot easily be associated with cultural identities, since those recovered by archaeologists are a product of a myriad of processes and not a desired tool.

The clear identification of intra-forager identities in the MLV still requires further investigation and the integration of different strands of evidence. However, beginning with the evaluation of the variability in material residues, settlement and subsistence patterns is a good start. Context is important, especially since the archaeology indicates that forager groups in the MLV may have been autonomous. As such, homogenising forager identities, and overlooking their complexity does not suffice as an analytical model. Although the topic of complex foragers has been investigated in many regions across the world (Arnold 1996), such an interrogation is lacking in the MLV (Cascalheira 2021).

Considering the position of foragers in the valley's socio-political dynamics and the variability present in their spaces, which for the most part indicates agency and self-regulation, the complex nature of foragers in the MLV requires investigation. Forager residues are diverse, and this diversity is further complicated by the presence of herders, who may have interacted with both foragers and farmers. The interrogation of herder signatures, alongside an intraregional analysis that considers the LSA sequence of Zimbabwe, is worthy of considerations for future research, especially if

there is to be a comprehensive understanding of the MLV's late-Holocene dynamic.

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SA Archaeological Society's President's Medal for 2021 awarded to Nicholas Wiltshire



From left: Dr Tim Maggs, Dr Janette Deacon, Nicholas Wiltshire and Dr Gavin Whitelaw

When Dr Tim Maggs was President of the SA Archaeological Society from 1992 to 1994, he raised funding and commissioned a silver medal to be awarded at irregular intervals to people who have made significant contributions towards the organisation of archaeology in southern Africa.

In September this year, the KwaZulu-Natal and Western Cape branches nominated our Treasurer, Nicholas Wiltshire, for the award. The Council voted unanimously in favour of the proposal in recognition of the major impact he has made in bringing members together online for lectures and Council meetings during the Covid-19 lockdown, for introducing the app used by eCRAG members when recording rock art and other archaeological sites, and for upgrading our membership data and making numerous administrative improvements. The medal was handed to him by the Honorary Secretary, Janette Deacon, in an informal meeting at the home of Tim Maggs and Judith Sealy. Also present was Gavin Whitelaw representing the KwaZulu-Natal Branch.

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ANOTHER LOOK AT THE EZELJAGDSPOORT SAN ROCK PAINTINGS OF THE KLEIN KAROO, WESTERN CAPE

Renee Rust

The painted imagery on rock faces at rock art sites in the Klein Karoo includes paintings with half-fish, half-human physiognomies. The layers of understanding of these therianthropes are discussed within the paradigm of locally recorded mythology. A recent visit to record the well-known Ezeljagdspoor rock art site in the Langkloof near Oudtshoorn (Fig. 1), enthused a rethink of whether these figures are indeed avian or ichthyoidal and what these features may suggest in interpretation. Myths of mythical water creatures contribute to their interpretation. Stories of water women and other powerful water creatures are shared in southern folklore.

Sacred presence and water as living entities are themes recounted throughout mythology in southern Africa. The Kalahari traditionalists, healers of the Ju/'hoansi (!Kung) San, give accounts of spiritual experiences and water, of 'travelling' to rivers and water holes, and moving underwater or underground, '... stretched out in the water' (Bieseke 1979: 56). Various elements of the /xam folklore of the southern group of San who lived mostly in the Northern Cape in the 1870s, personified water as the ambiguous !khwa (Bleek 1933; 1935) and appear to share with present-day indigenes a perception of the significance of water in ritual and initiation.

Today, among people of indigenous extraction in the northern Cape, the '... *Watergees* or water spirit ... a girl whom one can see ... in moonlight. ... clothed in white', appears as 'waterdiertjies', water-guardians and spiritual beings (Hoff 2011a: 31, 41). Female water creatures in the Eastern Cape are referred to by Xhosa speakers, the southern Nguni, as the water/river people – the *abantubomlambo*, (Prins 2001: 69). Their stories of female water beings compare

Renée Rust is affiliated with the Department of Geography, Archaeology and Environmental Studies, University of the Witwatersrand, as a Research Fellow. rustrenee@gmail.com

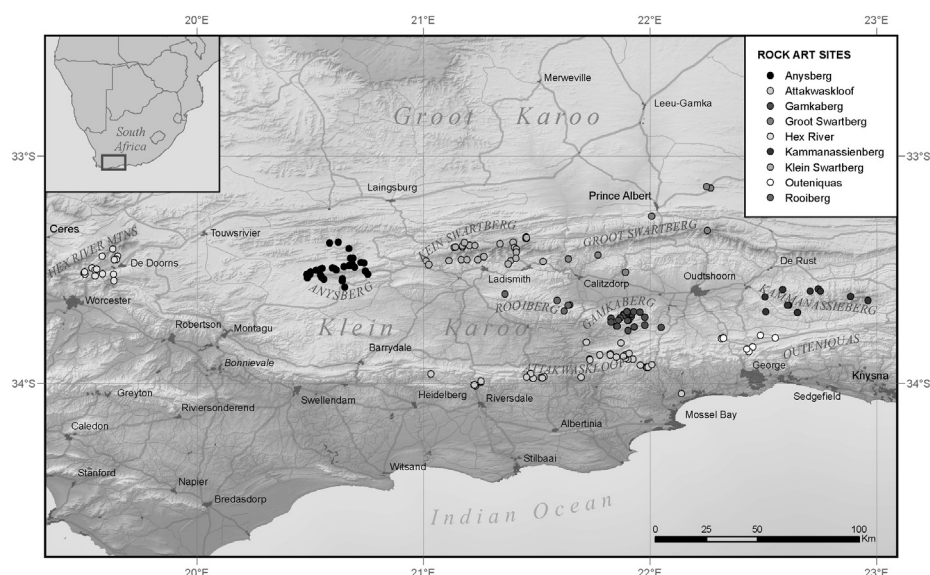


Fig. 1: Map of the research region

well with the *watermeide* 'seen' near waterholes in the Klein Karoo (Rust 2021). *Watermeid*, a colloquial term, is a term of respect.

The spiritual eminence of water

/xam folklore, collected by Wilhelm Bleek and his family between 1870 and 1880, underlies the spiritual eminence of water. /han#kassō, one of the /xam informants, said his grandfather spoke to the rain itself as a living entity, recognising certain intrinsic qualities thereof (Bleek 1933: 304). Diä!kwain, another /xam informant, referred to water as being 'alive', since it beats like a heart (Bleek 1935: 32). /han#kassō describes the rain, thundering, '... lying along in the sky' (Bleek 1933: 304). //kabbo, the /xam informant from Strandberg near Vanwyksvlei, describes the rain as gentle, a 'she-rain ... because her clouds are soft, ... for they are the rain's hair' and she lives '... at the great waterpits which are on the mountain' (Bleek 1933: 308–311; Bleek and Lloyd 1911: 193).

The rain as entity controlled the weather and influenced the health of people; the 'scent' and 'breath' of the rain was 'fragrant'; beneficial like she-rain. Femininity is the catalyst in associations with water and rain. Hoernlé (1922: 21) writes about the rain ceremony among the !Aunin or Topnaar, living south and north of the Orange river: '... as full of symbolic rites' associated with fertility. The uterine fluid of a pregnant female animal was poured on the fire and

diverted to flow into the river to ensure good rains and well-being for the group (Webley 1997).

These story lines compare with the *watermeid* story told by Afrikaander, an elderly Bushman living near Oudtshoorn over a hundred years ago, and still chronicled today in this region (Rust 2016; 2021). The indigenous people, of which Afrikaander was a member, represented the coloured population of the Cape at the time, and had 94,4 per cent Khoesan heritage (Chan et al. 2019), giving prominence to the continuum of traditions among people in the Klein Karoo.

The aquatic metaphor in folklore expresses the spiritual transformation of healers and rainmakers going 'underwater', especially 'diving' into waterholes, that is likened to achieving an altered state of consciousness, thereby entering the realm of the spirit world to heal and make rain and restore the harmony in their lives. The historical *watermeide* may link with /xam folklore and the young girls 'taken' by !*khwa*, the rain, and living under water, known after abduction as the 'wives' of the rain and becoming and resembling flowers, !*kwēiten-ttū*, which grow in the water and disappear when approached. These themes found in the stories told to Bleek and Lloyd (1911: 395) by the /xam informants may have found an evocative path throughout southern African myths.

Water, as a powerful entity linking it to femininity, initiation and well-being, have been fundamental to the psyche of the hunter gatherer from the times of the /xam, the First People, and is still central to the spiritual teachings of the Kalahari Ju/'hoansi, other San groups and local groups in the northern, eastern and western Cape. Still today water is called !*xu g!u* and is revered (Keeney and Keeney 2015: 98).

Rock art, water and 'beyond'

The /xam spoke of a supernatural potency, !*gi*., in people and things (Bleek 1935: 24). This could be likened to the later concept of *n/om* among the !Kung and other San groups (Marshall 1999). A subtle different form of bondage and control is the concept of *n/aow*, which connects a person to the wind or the rain (Marshall 1999: 169). *N/aow* interacts and influences the weather and exists in all human beings and in certain large animals. It



Fig. 2: A scan of the tracing of the Ezeljagdspoor paintings (Rust 2020)

enters a child in the womb when the mother's uterine fluid flows onto the ground (Marshall 1999). The interaction of known potency infers the spirit world and relates to storytelling (Guenther 2017).

The world of the *watermeide* also suggests an energy: the *watermeide* 'shine, glow and shimmer' (Rust 2021). Their potency enfolds the ritual and significance of water as a sacred entity. The Gamka river weaving through the Swartberg mountains to join the Olifants river as part of the Gouritz river system is a place where water spirits 'live'. Visions of *watermeide* feature notably along the Gamka river (Rust and Van der Poll 2011: 36). A sense of place and a link to the past have persisted among people through their stories. There is the suggestion of a link between the rock paintings of the Langkloof and other sites in the Klein Karoo.

Ezeljagdspoor

Recently, while tracing the well-known Ezeljagdspoor paintings in the Langkloof (Fig. 2), precariously balancing on a ladder and bending over backwards as the rock face slants upward, I was acutely aware of the documented verbatim interpretations of these paintings by the /xam informant, /han#kassō, more than 140 years ago. The paintings have been recorded, discussed and interpreted many times since they were first seen by Europeans, but the remarks made by /han#kassō when he was shown a copy by Lucy Lloyd are invaluable to our understanding of the greater part of enigmatic rock art images. /han#kassō recognised the lore of water, which made up such a large part of his belief system, in the painted imagery. Events such as these, taking place around the

paintings in 1878 were enabled by the Bleeks' astute awareness of and sensitivity to the San and their knowledge of San folklore.

The Ezeljagdspoor site is situated on the Brak rivier south of the Kammanasie mountain near Oudtshoorn. The figures, known for more than 180 years (Alexander 1837: 316), were described as 'meerminne' (mermaids) by the local people (Lewis-Williams et al. 1993: 277), and were in the past '... connected with local mythology' (Rudner and Rudner 1970: 106). In 1835, Maj. CC Mitchell first copied the paintings for Sir James Alexander. The colonial view of the time that rock paintings were simple renderings of domesticated life, gave little explanation for the figures at Ezeljagdspoor. Hollmann (2003; 2005a; 2005b: 21) has argued that these and other similar figures in the Klein Karoo and to the east are therianthropes and may represent 'swift-people', basing his interpretation on commonalities between the behavioural attributes of swifts and features shown in the painted record. He received widespread support (Lewis-Williams and Challis 2011).

I agree that some of these figures do have avian-like characteristics but would like to argue that the Ezeljagdspoor figures are more fish than swift like. Weaving together the research and argumentation that went before, further investigation has revealed that the Ezeljagdspoor figures as more aquatic than avian, for the following reasons:

1. The length of the upper 'limbs' of the ichthyoidal mode appear shorter than those of the avian renderings. However, Hollmann's avian models do indeed have 'wings' that are described as being slender and shaped like a scimitar (Hollmann 2005a; 2005b).
2. The tails in the avian model taper or are not shown in some cases (Hollmann 2005a: Fig. 7), while the lower extremities of most of the ichthyoid therianthropic figures show well-defined wide forked tails (Rust and Van der Poll 2011: 108, 109).
3. The lengthening and thickening of the lower body is more fish-like than bird-like, and resemble the caudal peduncle length of the fish, the body section from behind the anal fin to the base of the tail fin (Skelton 1993). In some examples, this section is painted with a band of colour, red mostly, highlighting the lengthening and thickening of the lower body (Fig. 3) (Rust 2008: Figs. 3.49, 4.7, 4.8; Rust and Van der Poll 2011: 108).
4. The upper part of the suggested ichthyoidal figure is more humanlike with a round head. Some figures have hook-heads, well-defined shoulders, shorter arms, and show hands and fingers. The well-defined shoulders and human arms and hands contrast with some figures with

upper limbs that curve sharply downwards, are 'wing-like' and extend, in some cases, beyond the tips of the lower limbs in a 'swept-back position' (Lewis-Williams and Challis 2011: 104), resembling swifts as suggested by Hollmann (2005a).

5. Behavioural activities of the suggested ichthyoid figures point to more human-like upper bodies with bending postures or veering arms. They even hold sticks. The Ezeljagdspoor figures are comparable to other seemingly ichthyoid figures in the rock art of the Klein Karoo and Langeberg (Maggs 1998; Rust 2008: Figs 3.48, 3.49, 4.5, 4.6, 4.7, 4.8 and 4.10; Rust and Van der Poll 2011: 108–109, 111–112). Some of these examples are found in the lower reaches of the Kammanasie mountain; near Cloetes Pass, Langeberg; on the Moerasrivier, Gamkaberg; and near Herold, Outeniqua Mountains. Images with likely fish tails were also recently found in the southern reaches of the Langeberg (cf. Copies of Hessequa/ Paardenberg Site 13: Fig. 6, Still Bay Museum).

Current completion of traced material that record the painted images of the Leeublad site in the Kammanasie, 30 km from Ezeljagdspoor, show both the avian and the ichthyoidal forms on the same rock face. This significant occurrence of both representations at the same site indicates that a choice in depiction of the therianthropes is distinguishable in the rock art sample (cf. tracings housed at Still Bay Museum).



Fig. 3: A therianthropic figure in the Kammanasie mountains, with a red band indicating the caudal area (Rust 2008)

One set of the Leeublad images have avian features or 'wings' (Fig. 4), while the other figures to the far right of the painted record show ichthyoidal features (Fig. 5). This indicates that both forms were used in the painted imagery in the Klein Karoo and points to the idiosyncratic rendering of therianthropes.

At Ezeljagdspoor the main frieze of therianthropes is well preserved and the figures superimpose and juxtapose older images. One of these older figures is a suggested ichthyoidal figure just above the main frieze of therianthropes (Fig. 2) that is similar to the yellow ichthyoidal figures at Leeublad (Fig. 5). This figure is significant as it has a hook head, a decorative band across the waist and the caudal area above the tail is more lightly coloured. This may be due to fugitive colour pigment but the difference in shading highlights this area as observed in the depiction of other therianthrope figures (Fig. 3). Whichever way these figures are interpreted, the fundamental rendering on the rock face denotes the spirit world and 'entering' the spirit world, which agrees with the 'swift-people' model by Hollmann (2003; 2005a; 2005b). It explains the behavioural manner of swifts to fly right into their holes as would be done by shamans (healers) when 'entering' the spirit world through the 'veil' of the rock face (Lewis-Williams and Challis 2011: 81) and '... in accord with beliefs about the location of the spirit-world behind the rock face' (Hollmann (2005b: 27).

Water in belief

Rain/water is indicated in many ways and the focus here is on San belief and the images that express this. Pointedly, the caption of a photograph of Ezeljagdspoor reads 'A trance hallucination of figures with fish or swallow tails'. (Lewis-Williams and Dowson 1989: 179, Fig. 87e). With due respect to and a focus on past research done on the Ezeljagdspoor images, a return to the site and the tracing of the images presented an opportunity to reconsider interpretations of these figures. Research among autochthonous progenies and San belief in general point to the links made to water in altered states of consciousness: 'swimming', going underwater or underground into a pit (Hoff 2011b). The depictions of fish in rock art are interpreted as showing altered states of consciousness and 'add up to the "underwater" trance experience' (Lewis-Williams and Dowson 1989: 88, Fig. 40).

Among the /xam, water sources or water holes were the places or openings of spiritual dwellings in the landscape (Bleek and Lloyd 1911: 217, 385). The link to the present-day significance of water sources is that dwellings of *watermeide* in the Klein Karoo are sacred places and should be treated with reverence (Rust 2021). The rock art of the Minwater site near the Moerasrivier, south of the Gamkaberg, illustrates the link between underwater experience, snakes and ichthyoidal figures. The red therianthropes to



Fig. 4: Figures with bird-like torsos appear spirit-like and indicate flight at Leeublad (Rust 2019)

the right and near the serpent at this site (Fig. 6) are reminiscent of the Ezeljagdspoor paintings 50 km distant. At both sites the figures are significantly humanlike, have possible lower ichthyoidal features and are showing the 'underwater' swimming posture.

Ezeljagdspoor and mythical water creatures

The 'old Bushman' Afrikaander's *watermeid* story is regarded as a 'Bushman folktale' (Maggs 1998). Wilhelm Bleek also believed that some paintings illustrated 'Bushman mythology', and when he saw a copy of the Ezeljagdspoor paintings wrote: 'The subject of it (the watermaidens), was explained in a fine old legend to Mr D Ballot (who kindly copied it for Mr Schunke) by a very old Bushman still surviving in those parts' (Bleek 1875: 20). He recognised certain features of the fish-like tails as being similar to the descriptions given by Afrikaander of the *watermeide* being 'half fish half flesh ...' and assumed the rest. It is uncertain as to whether Afrikaander actually saw the painting. Afrikaander responded to Ballot's question (Rust 2021), 'Do you believe in *watermeide*?', not because he was explaining the paintings (Lewis-Williams 1977; Lewis-Williams et al. 1993).

/han#kassō, shown a copy of the Ezeljagdspoor paintings, considered the figures as 'the rain's people, the rain's sorcerers' (L.VIII.1.6067-6068), which points to their mystical nature. He identified them as people



Fig. 5. The yellow therianthrope figures showing human features with ichthyoidal features at Leeublad

because of their human arms and the sticks they hold (Bleek and Lloyd Collection 1878a: L VIII 1: 6063-6068). Diä!kwain explained that sorcerers carry sticks when they dance, which is interpreted as ritualised behaviour (Bleek 1935). The potency evoked in ritual context when carrying a stick is widespread, also in living ethnography. In recent years, at Steinkopf, Northern Cape, Hoff beheld a Khoekhoe man leading a ceremonial dance holding a stick, while at Prieska, an elderly woman of /xam descent wielded a stick across a flooding river to calm the waters (Hoff, pers. comm. 2015).

/han#kassō referred to the long line with human head and human arms and fingers joining the other figures as *!khwa: !ʌhai:n;*, which dwells in the water like a worm and is the rain's navel or caterpillar (Bleek and Lloyd Collection 1878b: L.VIII.1.6074-6077; Bleek 1956: 369). The explanation by /han#kassō held two opposing themes: the power of the water people to direct the rain 'to fall' and to incite adverse weather forces. He implied that the long humanoid line, *!khwa: !ʌhai:n;*, may indicate such opposing forces and that the people depicted in the paintings may be entreating the rain's navel to be beneficial and not kill them. /han#kassō does not refer to the fish tails but this may simply be an omission in documentation or an oversight as he does not describe the lower features of the figures in any way. However, whether fish or bird-like, these Ezeljagdspoor forked-tailed figures, confirm an association with 'sorcery' (Lewis-Williams and Challis 2011: 105).

When /han#kassō commented on the paintings, it

was only three years after Afrikaander told his story of the *watermeide*. The time and space equate well. As inferred previously, although their homes were 400 km apart, both /han#kassō and Afrikaander were members of San ethnic groups and shared similar ancestries and symbolic traditions. But they did not know each other and neither mentioned the term 'mermaid', since it was probably unknown to them. Their stories are of mystical beings and potencies that relate to water, rain and healing. The interpretations of the Ezeljagdspoor images within regional knowledge share a common theme of water personified, bonded in local myth and staged in a sacred landscape where the rock art is found.

Conclusion

Early and historical ethnographies are drawn together to show similarities in ritual context (De Prada-Samper 2018). It is argued that recent mythologies are not appropriate for the interpretation of the rock art of southern Africa due to ineffectiveness of dating and authentic recordings. Analogies are thus problematic (Anderson 1997). It has been suggested that a therianthrope with a fish tail that may be interpreted as a female water spirit would probably be more authentic in concept if there was a show of breasts to define the femininity in depiction (Deacon, pers. comm. 2015). Subject to preservation and interpretation, one or two figures of suggested ichthyoidal nature possibly have breast-like protrusions that may qualify to assert this feminine feature (Fig. 6).

However, the spiritual essence of water and rainmaking is used to link the rock art and folklore



Fig. 6: Red 'swimming' therianthropes at Minwater site depicted with human arms holding sticks and fin-like extremities intertwining near a serpent (Rust 2008)

of living traditional peoples that overlies space and time, and femininity is pivotal throughout. In the rock art imagery, the connection of the feminine gender to water, healing and harmony applies to present-day mystical water creatures. The recording of /han#kassō's insight of water entities in the rock art at Ezeljagdspoor and knowledge of how to deal with the power they represent in ritual, provides this link. The ritualised 'living' wisdom surrounding *watermeide*, which signify the magical qualities of water, requires recognition as one of the ancient spiritual traditions. The story of *watermeide* is cast in terms of the narrative as a cultural precept that has survived. Tantalisingly, the rock art figures with specific fork tails are concentrated in the relatively small region of the south-western and eastern Cape.

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SA ARCHAEOLOGICAL SOCIETY

Notice of 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 10 May 2022.

In the event of restrictions on meetings associated with the Covid-19 pandemic, the meeting will be held online with annual reports distributed by email to all members to enable them to participate.

Items for the agenda should be submitted to the Assistant Secretary, Carole Goeminne, at secretary@archaeology.org.za before 10 April 2022.

Janette Deacon, Honorary Secretary
10 January 2022

CANID PROJECT

Request for samples

The question when dogs were first introduced to southern Africa has yet to be resolved. We are organising a project to use a DNA and ZooMS on canid samples to see if we can work out with whom and when this may have occurred. Was it with the first

pastoralists, c. 2000 BP, or with the Early Iron Age farmers a few centuries later? Or was it even before? We are seeking dated canid samples from before 2000 BP, as well as others from the 1st millennium AD. We invite anyone who has collections of these to join us. Contact: Andy Smith (andrew.smith@uct.ac.za) or Luc Janssens (ljcoati@gmail.com).

ARCHAEOLOGY IN BRIEF

Australian axe fragment 'very old'. The thumbnail sized flake likely dates from just after humans arrived in the country. The fragment was found in the Kimberley region by Australian National University's Sue O'Connor and analysed by Peter Hiscock from the University of Sydney. It has been dated at between 46 000 and 49 000 years old. According to Hiscock, people moving out of Africa did not have axes. The fragment was not the first of its type found in Australia. O'Connor said it was the earliest evidence of a hafted axe in the world. While hand axes appeared about 35 000 years ago in Japan, in most countries they arrived with agriculture within the last 10 000 years.

Agence France-Presse, 11/05/2016

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 palaeontology, geology and history. 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.
T: +27 (0)21 762 7347, +27 (0)72 635 2815.
F: +27 (0)866 155 874. archsoc@iziko.org.za.
www.archaeology.org.za.

Northern Branch: PO Box 41050, Craighall, 2024
Membership Secretary: Barry Jacoby
+27 (0)83 228 1692
barrydane45@gmail.com

Western Cape Branch: PO Box 426, Muizenberg, 7950
Chairperson: Yvonne Viljoen
+27 (0)82 416 0032
yv3@mweb.co.za

Trans-Gariep Branch: David Morris
+27 (0)53 839 2706
dmorris@museumsnc.co.za

KwaZulu-Natal Branch: c/o KZN Museum, P/Bag 9070, Pietermaritzburg, 3200
Secretary: Gavin Whitelaw
+27 (0)33 345 1404
gwhitelaw@msa.org.za

The Society produces the following publications:

- ☐ **South African Archaeological Bulletin**, biannual scientific publication of current research in southern Africa.
- ☐ **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.

Subscriptions for 2021: South Africa: Ordinary – R345; Joint/Family – R365; Junior members – R235. Africa ordinary – R405; Overseas ordinary – R745. Institutions: local and African – R690; Overseas – R1 525.

The Digging Stick

Editor and advertising: Reinoud Boers
PO Box 2196, Rivonia, 2128
Tel/fax: +27 (0)11 803 2681
Cell: +27 (0)82 566 6295
fox@boers.org.za

Proofreader: Dawn Green
Layout: Leonard Mafunga
Printer: TVaal Johannesburg