# Seeing and Remembering: Rock Art Sites at the Farm Krumneck in the Khomas Region of Namibia

by André du Pisani

Keywords: Rock art; rock engravings/petroglyphs; Khomas Region; *Krumneck*; landscape archaeology; panels/panoramas; shamans/shamanistic; dating of rock art.

### **Abstract**

Namibia is world-renowned for its many archaeological sites and treasures. This rock art, both paintings and engravings or petroglyphs, hase been extensively documented and researched for over a millennium. The epicentre of research has concentrated on the apex sites such as the great massif of the Daurês/Brandberg with many thousands of paintings and fewer engravings. Other localities that have been well researched include, among others, the impressive Erongo Mountains, the World Heritage Site at |Ui-|aes or Twyfelfontein, the granite Spitzkoppe that towers over the desert floor, the engravings and paintings of northern Damaraland and Kaokoland in the Kunene Region, the paintings and engravings of southern Namibia right down to the Orange River and the engravings at the farm Margaretental near Witvlei, east of Windhoek. More recently extensive documentation and research of several thousands of paintings and engravings are ongoing at Mikberg and its environs in the Kunene region.

More recently approaches to the study of rock art have evolved from considering single paintings or engravings towards seeing these as belonging to panels or panoramas<sup>1]</sup>. Landscape archaeology has been another more recent innovation, while dating has benefited from new technologies. What is also relatively recent, are attempts by researchers to engage local communities and trackers in their efforts to conserve and interpret the meaning and socio-cultural relevance of particular paintings.

Compared to other regions of the country, the Khomas region has been relatively under-researched. This is despite its size of 36,861 sq.km or 4.47 per cent of the total land area of 824,116 sq.km, its demographics with an estimated population size of about 430,000

(2018) and its economic, political and cultural importance to the country. Moreover, the region has more than 330 known rock art sites, all on privately-owned farms. The last region-wide published survey of rock art was done by Peter Breunig in 2014 and by the late Dr Ernst Rudolf Scherz in 1986, respectively. Other important and innovative archaeological research has been and is being undertaken by private archaeologists, notably by Dr John Kinahan, Mr Goodwin Gwasire of the University of Namibia (UNAM) and by Dr Alma Nankela of the National Heritage Council, while German researchers such as Professors Peter Breunig (Frankfurt am Main) and Tilman Lennsen-Erz (Cologne) also collaborating with Namibian-based researchers, continue to research rock art in the country at more than one site.

While my personal interest in Namibian rock art dates back to 1967, I started documenting rock art in the Khomas region intermittently a decade ago, and have visited 55 of the more important rock art sites. The work continues on a modest scale and is entirely self-funded. This brief article is an attempt to highlight some of the lesser-known sites on the private farm *Krumneck*, and to emphasize their importance for the heritage of humankind. Some generalisations that may hold for other rock art sites in the region will also be advanced in the conclusion. An in-depth exploration of their diverse meanings falls outside the purpose and scope of this cursory contribution.

### Introduction

With the rise of global interest in the art of Africa, rock art is now rightly considered an integral part of world heritage. This was not always the case, as the epistemology of European art history and theories relegated it to a category called 'primitive art'. There remains, also in this country, a profound disrespect for rock art. As Forssman and Gutteridge (2012) point out, ongoing practices of chipping, chiselling, mining and building on rock art panels, pose a serious threat to the survival of rock art in parts of southern Africa. In this country, there have been disturbing reports of local mining activities that have destroyed archaeological sites, inclusive of rock art sites, mostly in the Erongo region of this country (Report by Jana-Mari Smith in *Republikein*, 24 March 2020:5). While it is true that local communities are the main custodians of heritage, a great deal of ethically-informed education on the aesthetic and cultural value of rock art in this country needs to be undertaken.

Most of the rock art in Namibia falls within the timeline of the *Later Stone Age* (LSA) that can be subdivided into an older and more recent period, from 20,000 as recent as 130 years BP (Before Present) (Richter, 1984 & 1991; Breunig, 2014; Kinahan, 1984 and Lennsen-Erz, 2000). There are older rock art sites in the country that date back to the *Middle Stone Age* (MSA), for example, those in the Huns Mountains in the ||Kharas region and the world-renowned *Apollo 11* cave that yielded some of the oldest known art in Africa.

While it is difficult to identify the origins of various technological innovations, the *Later Stone Age* (LSA) saw the introduction of bronze and iron, and many of the rock art sites, also in the Khomas Region, are accompanied by bored stones, grooved stones, stone tools in the form of microliths, jewellery such as beads and pendants, tortoiseshell, and earthenware ceramic pottery (Forssman & Gutteridge, 2012:23).

San<sup>2</sup> tools underwent significant innovation during the LSA and became more specialized in terms of their functions. A number of such stone tools have been used for specific purposes such as scrapers, used mostly for scraping animal hides and wood; segments for fixing arrow tips to a shaft; adzes used for stripping bark and then smooth the wood so that it can be used as arrows, and awls used to bore holes in leather or to make ostrich eggshell beads (for an illustration of LSA stone tools in Namibia, see Breunig, 2014:80).

# The chemistry of paint

Chemical and geological analysis has shown that red or ochre paint widely used in the rock art panels of the region comes from hematite that is mostly composed of oxide, with a red to brownish-red streak, and when crushed, produces red ochre. The natural colour is then mixed with the blood of an animal and with animal fat to produce a glue-like substance that can last very long. The white used in some paintings come from calcite, a carbonate of a single element (calcium); while the black comes from charcoal. Parkington (2003:40) notes that black paint is much rarer than ochreous red shades. It is made from powdered manganese dioxide which, like iron oxides, is finely powdered before use. The key to a good pigment is the fine texture of the powder, as coarser grains would not penetrate the painted surface sufficiently well to remain as a painted shape.

All oxides, hydroxides and dioxides used in paintings are inorganic materials not suitable for radiocarbon dating, whereas charcoal is potentially datable (Lenssen-Erz & Erz, 2000:90-91). Amplifying this challenge, in an erudite presentation at the Namibia Scientific Society (NSS), Dr Alma Nankela of the National Heritage Council elaborated on the reasons why radiocarbon C-14 dating of rock art has several limitations. Key to this is the fact that arriving at a reliable chronology is most challenging in the absence of any stable organic material (Nankela, 2019). This presents a practical problem when it comes to the dating of rock art in the region, country and beyond.

Recent technological developments, however, such as the use of portable X-ray Fluorescence Spectrometers (XPF), have enabled more accurate dating, provided that sufficient carbon is available to be dated. This, however, is often not the case (Nankela, 2019).

### Seeing and understanding as contested terrain

Seeing rock art is one thing. Understanding and interpreting it another, for there is no universally agreed way of understanding rock art. One tradition is to see rock art as a story-line with at least three registers. Following David Lewis-Williams (1981) these are: aesthetics, the story, and interpretation.

The sense of aesthetics of the San, according to Lewis-Williams, resides in the cosmic, cultural, social and symbolic functions rock art representations have for them. Not in art traditions, schools, styles or spatial perspective. The second register—the story-line—is about the life-world and experience that is being represented through images of hunters, gatherers, social activities, dance, conflict and so forth. The third register is that of interpretation. At this register, the paintings and engravings are considered in terms of their purposes and meanings. This is the most complex of the three registers and some archaeologists, like Peter Breunig (2014:107), argue that it is practically impossible to answer questions of purposes and meaning, even if it is understandable that the search for answers is legitimate and is likely to continue. Perhaps modesty is in order here.

Notwithstanding my personal reservations about ascribing shamanic significance to every painting, it has to be recognized that the dance is a central social and cosmological activity in the life of the San. Anthropological research has shown that the trance dance transcends most tiers of San cosmology. Elements from this ritual permeated everyday life as well as San thought. Richard Katz, a renowned anthropologist with vast field experience, sees the trance dance as the central feature of San culture. It was their primary expression of religion, healing and cosmology. For the *!Kung* San of the Kalahari, it was an integrating event of great social import (Katz, 1976, 1982). The trance dance is one of the most important hunter-gatherer rituals and has been extensively studied by many anthropologists apart from Katz, among them, Richard Lee (1979), Lorna Marshall (1961, 1969 & 1976) and Megan Biesele (1976, 1993).

The dance solved many problems and relieved much tension in the community. Healing and rain dances were regularly performed. The dance took many forms and served various social purposes. The shaman<sup>3</sup> played a key role in the dance and normally entered into an altered state of consciousness.

To his credit, Tilman Lenssen-Erz and his wife, Marie-Theres Erz (2000), both with a long association with rock art research in the country, propose a far less ambitious functional typology or matrix based on human activity and gender considerations for looking at rock art. He and his wife classified human figures they researched at the Daurês/Brandberg into three groups: male, female and "persons" (of unclear gender). Rock paintings are texts that represent humans and animals engaged in activities consistent with their actual behaviour (Lenssen-Erz, 1999:57). Their matrix is most useful and informs some of the readings of rock art covered in this article.

Ernst-Rudolf Scherz (1986), a true pioneer of rock art recording and research in the country, also classified the paintings in terms of a clear typology. He identified animate

and inanimate paintings within a broad range, scenic representations (such as trees, clouds and rain), and paintings from 'another world' 'aus einer anderen Welt' (1986: 34-5). He also distinguished between stylistic variation and the motif of the paintings.

The so-called *shamanistic reading* of rock art has gained considerable traction since the 1980s with the work of Lewis-Williams and Dowson (1989) and particularly in Lewis-Williams' more recent writings (2014: 144-148). The *shamanistic cosmos* with its altered states of consciousness at three registers, is a complex matter that is anchored in the linguistic and anthropological research of many scholars, notably the work of Bleek and Lloyd (1968), Lee (1986), Marshall (1969) and Katz (1972, 1982), among others. Elsewhere I have attempted a synthesis of the various arguments (du Pisani, 2020: 1-75, forthcoming), but do not wish to narrate it here for purposes of this exploratory contribution.

# Reading the story-lines in rock art

With a rock art database of 62,200 images at 1,207 known sites, the more than 300 sites in the Khomas region constitute a significant part of the national database. Recently I had the pleasure and privilege of working with Prof. Dr Peter Breunig of the University of Frankfurt am Main in updating the rock art atlas for the country. The importance of the Khomas region for rock art conservation and research is beyond question.

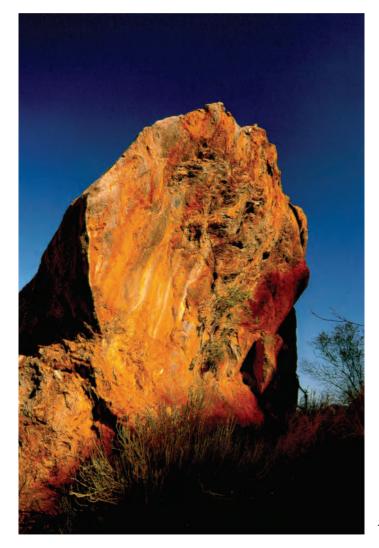
On a recent visit to the farm *Krumneck 20* of 11,659ha, approximately 40km south of the capital city Windhoek, I was fortunate to see and document several rock art panels. The farm is adjacent to *Krumneck West 20/3* and nestles in close proximity to several well-known farms to the west and the south, notably *Prospect, Hoffnungsfeld 19/R/B, Melrose (368)* and *Brigadoon. Krumneck* also borders *Lichtenstein Süd (44)* with the impressive *Bismarckfelsen (2,418m)* further to the west and other hills, composed of erosion-resistant quartzite of the *Melrose* Formation. The farm shares a border with *Lichtenstein, Lichtenstein-Ost* and *Lichtenstein-Nord* with the prominent *Lichtenstein Langer Rücken* a notable feature of the Khomas Highands. The southern border of the farm runs along the *Oamites Mountain* that reaches a height of 2,140m. The *Oamites Formation* is part of the *Hohewarte Complex* (Schneider, 2008:169).

In his survey of Namibian rock art, Scherz in Vol. 111 (1986:330-331) identified two principal sites on the farm, one west of the farmhouse at the rock formation that gave the farm its name, and one to the east of the house at the foot of a 'Felskopfes' under an overhang. Using his typology of rock art mentioned earlier in this contribution, he identified two elephants, several humans, line drawings, a springbok and what he called "two engaged persons". Scherz (1986) also identified some well-preserved groove stones, small stone tools, pottery, ostrich shell and grindstones.

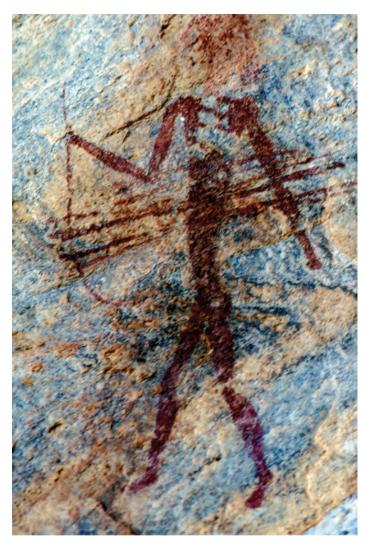
During my field visit to *Krumneck* in July 2019 I, too, saw well-preserved groove stones, grindstones, specialized small stone tools, ostrich egg beads and earthenware pottery. I also observed that some of the paintings had been chipped and had been visited

intermittently. In the company of the owner of the farm, Ms Meike Woker and Mr Gerhard Rust of *Lichtenstein-Ost*, we visited four sites on the farm. The two sites to the east of the farmhouse offer a commanding view across the plain towards the *Oamites Mountain* part of the *Hohewarte Complex* and beyond. We were able to recognize almost 50 paintings, some of these, beautifully executed, all rendered in ochre.

The two eastern sites are in close proximity to each other on rock overhangs on the slope of a prominent mica-granite ridge. At the base of the ridge, a variety of trees and shrubs provide food to antelopes such as kudu and to various bird species. A prominent boulder sits lower down the slope directly south of the two sites. The following three photographs show the boulder and two of the truly exceptional paintings.



Photograph 1
Prominent boulder bathed in morning light directly south of the two eastern rock art sites at the farm Krumneck. The track that leads to the two sites passes the boulder (Photo: André du Pisani)



Photograph 2 An exquisitely painted human figure, carrying a bow and bundle of arrows (Photograph: André du Pisani)

This figure is rendered in ochre and is considerably larger (20cm) than any of the other human figures painted in close proximity to it. In San hunting, arrows are not just tools, but according to a highly respected South African archaeologist, Prof. Janette Deacon, "artefacts of the mind". For example, holding arrows in bunches seems to be linked to potency. It is not something a hunter will typically do; normally he will carry his arrows in a quiver because they are dangerous weapons. However, not only in the physical world are arrows a danger, but also in the spiritual realm. Arrows are linked to supernatural potency. Animals depicted with arrows sticking out of them are not necessarily being hunted, but are rather imbued with potency. Humans are sometimes painted, as in this image, holding clumps of arrows, symbolizing that they are harnessing their supernatural power. Therefore, arrows

are a good metaphor for controlled supernatural power. The detail on this image is striking; possibly the image of a shaman? (Deacon, 1988: 129-140).



Photograph 3: A well-executed image of a female kudu (Photo: André du Pisani)

The painting of a female kudu is 22cm in length and is recognizable on account of the head with large ears. Certain features are characteristic of this species. Kudus are often painted with large ears, nuchal humps, long necks and males have long spiralling horns. Kudus are the most powerful animals in San thought in northern South Africa. In the Mapungubwe region of northern South Africa, eastern Botswana, parts of Namibia and in much of Zimbabwe, kudus are often painted as the largest animal on the panel.

The importance of the kudu in parts of southern Africa is evident in the attention to detail; both polychromatic and monochromatic images are present and the kudu is often the most commonly painted motif. The crack in the surface of the rock might suggest the entry to or exit from the spirit world.

The rock art panel on the western side of the farmhouse, along the eastern side of the rock face that gave the farm its name, is equally impressive for it contains renderings of two elephants, several human figures, a painting of a springbok and a few line drawings. There are actually two panels on the eastern side of the *Krumneck* rock. One is almost at the base of the rock, while the other is higher up, and offers an unobstructed view of the farmhouse and earth dam, further east. It is significant that several of the paintings have

been painted over cracks in the rock. This might suggest a division, akin to a veil, between the real and the spiritual world. Such cracks may have been used in various ways, with various functions. These are not images themselves, but features of the rock face that images 'interact' with. The San believe the rock face is a veil or divide between the real and the spiritual worlds. Therefore, if one could access what is behind the rock, or simply pass through it, one would, in fact, enter the spirit world (Forssman & Gutteridge, 2012: 199).

At the July 2019 visit to the panels on the *Krumneck* granite/proton rock, one could still see the dorsal line of an elephant. Much more interesting are two other paintings, neither of which has received a mention in the 1986 volume by Scherz; the first is a well-executed painting of a carnivore, possibly a leopard, and the second, two human figures that may represent a shaman and his teacher. These two paintings will now be briefly considered, bearing in mind that they form part of a much bigger panorama of over three metres in length and that they are surrounded by many other paintings of animate and inanimate subjects. Due to the locality of the panorama, there has been a noticeable degree of exfoliation and other forms of weathering. While the individual paintings are still visible, these are presumably not as clear to the naked eye as when Scherz visited the site in the mid-1980s.



Photograph 4 shows the painting of the carnivore, possibly a leopard, while the next photograph shows the painting of two human figures interacting (Photos: André du Pisani)

Commonly depicted carnivores include leopards and lions, while less frequently painted carnivores in Namibia include hyena and jackal. Cats are very much feline in appearance but not always distinguishable from one another. This painting shows the spots of the leopard and emphasizes its athletic shape. Carnivores are mostly linked to threatening forces and danger. Shamans are often depicted around carnivores. In some paintings in South Africa, arrows are flying towards them, indicating that they are powerful, or are being attacked by another shaman because they are evil in nature.

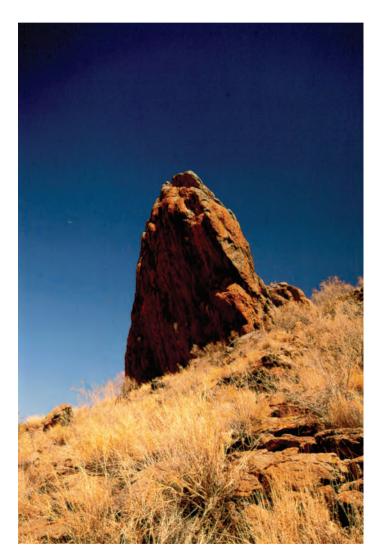
Directly underneath the painting there is a human-like smudge. The smudge of paint might indicate that someone attempted to access the painting for its potency.



Photograph 5 shows the painting of two figures interacting in a way that may suggest shamanic activity (Photo: André du Pisani)

Shamans are often painted in many different positions and fashions. They may carry various tools, including dancing sticks, hunting bags and weapons. They may have an elongated body, feathers, wings, wear masks, or a tail. They could be kneeling or touching other humans, bending forwards, running or shooting arrows, be partially or fully transformed into an animal or be depicted capturing a rain animal.

The detail in these two figures is considerable, especially the facial features of the top figure are striking, while the bottom figure appears to bend forward with the assistance of the teacher shaman.



Photograph 6 shows the actual Krumneck rock from below. The rock paintings are below the overhanging rock that makes a sizeable shelter (Photo: André du Pisani)

*Krumneck* also boasts several *Owela-gaming boards* east of the farmhouse not far from the secondary road that links the farm with the main tar road, the B1, to Rehoboth and further south Gaming boards are of archaeological importance, and remind one of the *morabaraba* or *mzozo* boards along the east coast of Africa. There may well be migration involved as such boards are widely associated with the Damara- and Nama-speaking communities.



Photograph 7 shows one of several Owela-gaming boards at the farm (Photo: André du Pisani)

The length of this gaming board is over two metres and the engraving was done on a flat rock surface with a light patina<sup>4</sup>, indicating that such boards may be of recent origin. The technique used was pecking with a harder rock onto the softer surface of the flat rock.

# Conclusion

The rock art at *Krumneck* falls within the *Later Stone Age* (LSA). The ethnographic record suggests a link between San beliefs and the images at the farm. While there is a link between the ethnographic record and the rock art here described, it is not self-evident that the use of the ethnographic record in archaeology is unproblematic. This is so because the San alive today are very different from their pre-colonial counterparts. A great

deal of human evolution has taken place over the past 27,000 years, believed the period hunter-gatherers are known to have lived in different parts of southern Africa.

Arguably one can learn much about the different meanings of rock art from modern San, but one should guard against this becoming the sole interpretation technique in the archaeological record. Rock art images come in many shapes, forms and cultural and social contexts. In all cases, the identity of the image-makers needs to be appreciated carefully by "a detailed inspection of the images, a consideration of their spatial and chronological distribution and associations, and some ethnographical or historical continuation of their production" (Parkington, et al. 2008: 12-13). Lewis-Williams echoes a similar sentiment when he argues that the researcher must harness the insights of ethnography as well as San folklore and myths as key sources for understanding rock art imagery (2009:41-42; 2010:1-18).

Based on the insightful research of Lewis-Williams and Pearce (2004:99), one feature of San rock art panels "that especially moves from narrative to essence needs to be emphasized when we approach the relationship between rock paintings and mythology. It is synecdoche – a part stands for a whole".

The different technologies evident in the paintings themselves, the presence of bored and grooved stones, the specialized stone tools and the earthenware pottery, all suggest that the rock art at *Krumneck* has in all likelihood been produced by hunter-gatherers such as the San. Based on the patina, the *Owela* gaming boards may have been produced by people other than San, possibly by the Oorlam/Nama, Damara and Herero communities and are, arguably, of more recent origin than the paintings.

The rock paintings, considered within this wider frame, are broadly similar to thousands of other paintings in the Khomas region and other parts of the country and southern Africa, more generally. Some of the paintings considered in this contribution have deep symbolic meaning and one may argue a link between such images and San cosmology. Other images show exquisite attention to detail and one can trace the painted sequence of motifs on the different panels. Every panel has to be analyzed within a dynamic cultural and social context of relations that connect the artists with a wider community and society. The panels are also specific marking places in the landscape. Preserving the panels also preserves nature.

## Acknowledgements

The first acknowledgement goes to the artists who bequeathed a priceless treasure to world heritage.

Special thanks and appreciation go to Ms Meike Woker and her family, owners of the farm *Krumneck*, who kindly gave me permission to visit the four sites on the farm and who accompanied me on the visit; to Mr Gerhard Rust and his wife Ines, owners of the farm *Lichtenstein-Ost* for their interest in my work; to friend and colleague, Emeritus Professor

Piet van Rooyen, an avid rock art researcher, for his friendship and encouragement; to Professor Peter Breunig (Frankfurt am Main) and Prof. Tilman Lenssen-Erz for graciously sharing their considerable knowledge of Namibian rock art with me. Finally, Professor Emeritus David Lewis-Williams (who is Senior Mentor in the Rock Art Research Institute, University of the Witwatersrand, Johannesburg) for his lifetime's work and dedication to research and the understanding of rock art.

### **Endnotes**

- <sup>1]</sup> A rock art panel refers to one 'canvas' comprising a series of images and not an entire site. A rock art site may contain several rock art panels.
- <sup>2</sup> The word San refers to hunter-gatherers and foragers. In some Bantu languages, the word carries a pejorative meaning of "thieves', hence some researchers prefer the older word "Bushmen". Both terms are problematic.
- <sup>3</sup> A Shaman is a person capable of entering the spirit world and of performing tasks in the spiritual realm. The word 'shamanistic' refers to diverse rituals and beliefs that exist within a tiered cosmology.
- <sup>4]</sup> Patina refers to the chemical change of the surface of an object.

### References

- BIESELE, M. 1976. Aspects of !Kung folklore. In R.B. Lee & L. De Vore (eds.), *Kalahari Hunter-Gatherers: Studies of the !Kung San and their neighbours.* Harvard University Press, London.
- BIESELE, M. 1993. Women like meat: The folklore and foraging ideology of the Kalahari Ju/'hoan. University of the Witwatersrand, Johannesburg.
- BLEEK, W.H.I. & Lloyd, L.C. 1911/1986. Specimens of Bushmen folklore (Facsimile reprint). C. Struik & Co., Cape Town.
- BREUNIG, PETER. 2014. Archäologischer Reiseführer Namibia. Africa Magna Verlag, Frankfurt a. M.
- DEACON, J. 1984. *Later Stone Age* people and their descendants in southern Africa. In R. Klein (ed.), *Southern African prehistory and paleoenvironment*, pp. 221-328. Balkema, Rotterdam, The Netherlands.
- DEACON, J. 1988. The Power of a Place in understanding Southern San Rock Enravings. *World Archaeology* 20(1):129-140.
- DU PISANI, A. 2019. Rock art notes vol. 8, pp. 1-8, unpublished field notes, Windhoek.
- DU PISANI, A. 2020. *Mindscapes: The story of Namibia in art and stone*, unpublished chapter, pp. 1-75 (forthcoming).

- FORSSMAN, T. & Gutteridge, L. 2012. *Bushman rock art an interpretative guide*. South Publishers, Pinetown.
- KATZ, R. 1976. The Painful Ecstasy of Healing. *Psychology Today*. December, pp. 81-86. KATZ, R. 1982. *Boiling Energy*. Harvard University Press, Massachusetts.
- KINAHAN, J. 1984. Four thousand years at the Spitzkoppe: Changes in human settlement and land use on the edge of the Namib Desert, in *Cimbebasia*, 12, pp. 1-14.
- LEE, R.B. 1979. *The !Kung San: Men, women and work in a foraging society.* Cambridge University Press, Cambridge, U.K.
- LENSSEN-ERZ, T. 1998. The Third Gender: Human-gender-related patterns of activities in the rock paintings of the Brandberg, Namibia. In: Andrew Banks, Hans Heese & Chris Loff (eds.) The Proceedings of the Khoisan Cultures & Cultural Heritage Conference, pp. 146-152, Infosource, Cape Town.
- LENSSEN-ERZ, T. & Erz, M. 2000. Brandberg Der Bilderberg Namibia, Kunst und Geschichte einer Urlandschaft. J. Thorbecke Verlag, Stuttgart.
- LEWIS-WILLIAMS, J.D. 1981. Believing and seeing: symbolic meanings in southern San rock paintings. Academic Press, London.
- LEWIS-WILLIAMS, J.D. 1986. The last testament of the southern San. *South African Archaeological Bulletin*. Vol. 41: 10-11.
- LEWIS-WILLIAMS, J.D. & Dowson, T. 1989. *Images of power understanding San rock art*. Southern Book Publishers, Halfway House.
- LEWIS-WILLIAMS, J.D. 1990. *Discovering southern African rock art*. David Philip Publisher, Claremont.
- LEWIS-WILLIAMS, J.D. and Dowson, T. (eds.) 1994. *Contested images: diversity in southern African rock art research*. Witwatersrand University Press, Johannesburg.
- LEWIS-WILLIAMS, J.D. 2002. Stories that float from afar: ancestral folklore of the San of southern Africa. Struik, Cape Town.
- LEWIS-WILLIAMS, J.D. & Pearce, D.G. 2004. San spirituality. Double Storey, Cape Town.
- LEWIS-WILLIAMS, J.D. & D.G. Pearce (2009). Constructing spiritual panoramas: order and chaos in southern African rock panels. In: *Southern African Humanities* 21, pp. 41-63.
- LEWIS-WILLIAMS, J.D. 2011. San rock art. Jacana Media, Auckland Park.
- LEWIS-WILLIAMS, J.D. 2014. The mind in the cave. Thames & Hudson, London.
- MARSHALL, L. 1976. *The !kung of Nyae Nyae*. Harvard University Press, Cambridge, Massachusetts.
- MARSHALL, L. 2004. *Nyae Nyae !Kung beliefs and rites.* Peabody Museum Press, Cambridge, Massachusetts.
- NANKELA, A. 16 April 2019. The Feasibility of radiocarbon C14 dating of rock paintings in Namibia? *unpublished lecture*, Namibia Scientific Society, Windhoek.
- PARKINGTON, J. 2003. Cederberg rock paintings. Krakadouw Trust, Cape Town.

- PARKINGTON, J., David Morris and Neil Rush (2008). *Karoo rock engravings Marking places in the landscape*. Creda Communications, Cape Town.
- RICHTER, J. 1991. Studien zur Urgeschichte Namibias. Holozäne Stratigrafien im Umkreis des Brandberges. Africa Praehistorica 3, Heinrich-Barth-Institut, Köln.
- SANDELOWSKY, B. 2004. Archaeologically yours. A personal journey into the prehistory of Southern Africa, in particular Namibia. Scientific Society of Namibia, Windhoek.
- SCHERZ, E-R. 1986. Felsbilder in Südwest-Afrika Vol. 111. Böhlau Verlag, Köln.
- SCHNEIDER, GABI. 2008. *The roadside geology of Namibia 2*, revised edition. Gebr. Borntraeger, Berlin/Stuttgart.
- SMITH, JANA-MARI. 24 March 2020. Mynbou 'n bedreiging vir prehistoriese kuns, in *Republikein*, p. 5, Windhoek.
- VINNICOMBE, P. 1996. On cultural exchange and the interpretation of rock art in southern Africa. In: *Current Anthropology* 37 (3): 513-514.

### JOURNAL 67

Namibia Scientific Society / Namibia Wissenschaftliche Gesellschaft Windhoek, Namibia 2020

ISSN: 1018-7677 ISBN: 978-99945-76-71-5