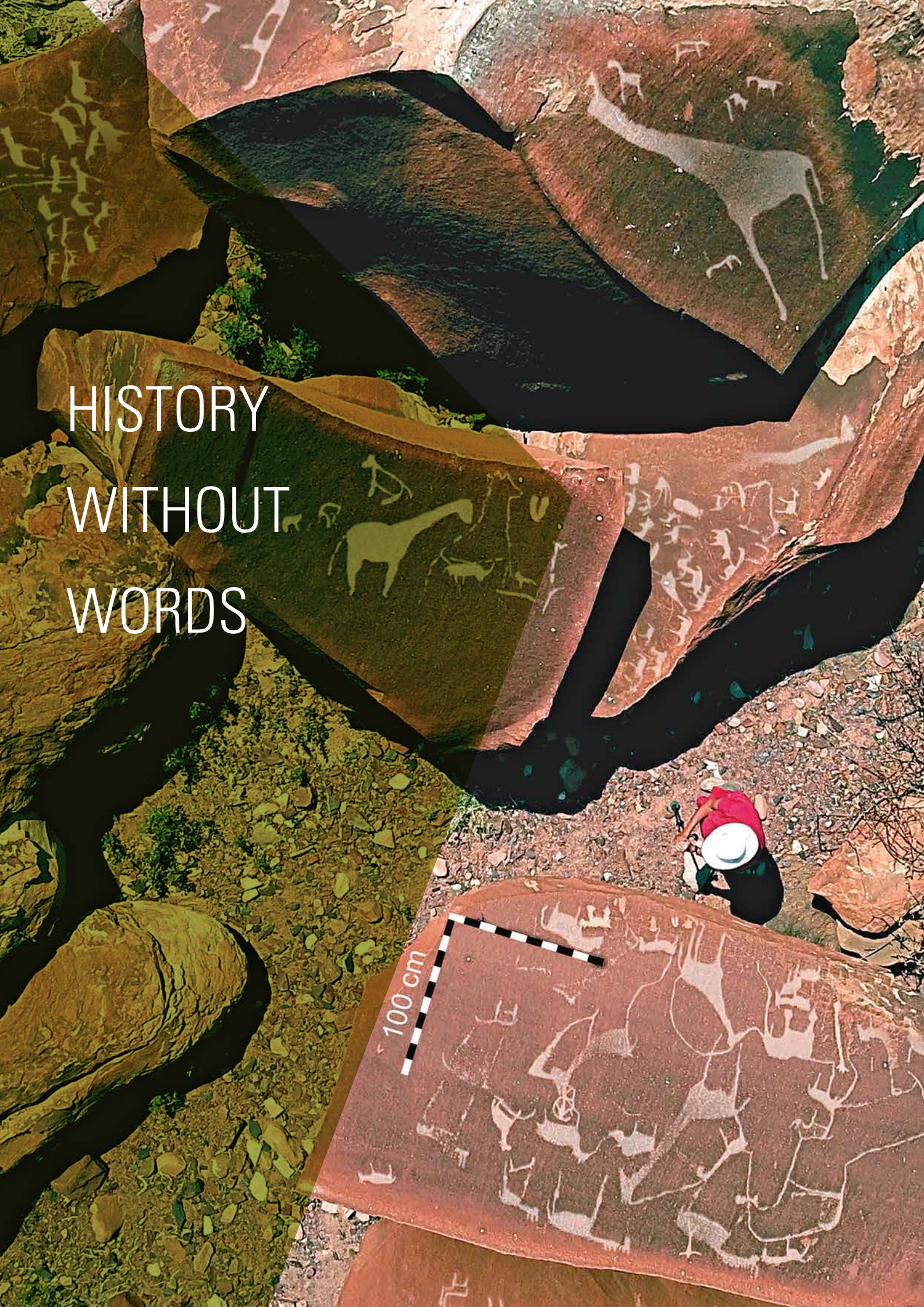


HISTORY
WITHOUT
WORDS



News from the Stone Age

Archaeologists from Frankfurt study rock art in the Namib Desert

By Peter Breunig and Gabriele Franke

Stone Age artists left behind thousands of rock pictures in the Namib Desert. A team from Goethe University Frankfurt has devoted itself to conducting research in inhospitable environments. A somewhat different research report.

From the waterhole at the end of the gorge, we can hear the roar of a lion. Shortly afterwards, it walks past us – just a few metres away. A second one climbs up the steep face opposite. A little later, from a safe distance, we see three more lying in the shade next to the water. In the previous nights, a game camera with an automatic release was positioned there and took pictures of leopards, hyenas, jackals, honey badgers, rhinoceroses, zebras, ostriches and antelopes. During the day, a horde of baboons occupied the same spot. Another time, elephants visited our camp at night. This is the setting for research work conducted by Goethe University Frankfurt in north-western Namibia.

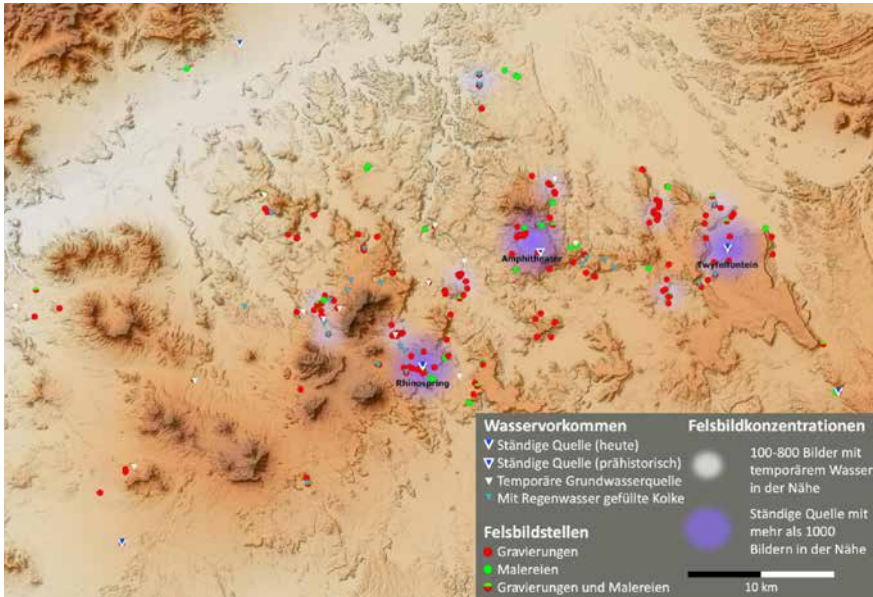
Readers might feel slightly hoodwinked to learn that we are not in the lush green tropics but in the heart of the hyperarid (i.e. extremely dry) Namib Desert. Nor is our research concerned with living animals that somehow manage to survive despite the drought, but about prehistoric rock art. The pictures painted with colours or carved into the rock are fascinating because they express an ancient world of human imagination. The paintings mostly show people and animals, the rock engravings primarily animals, tracks and geometric patterns.

Unexpected mass of pictures

Rock art is found almost everywhere in Africa, in the north, east and south. But nowhere is it more concentrated than in Namibia. There are 1,466 individual rock engravings in the gorge with the lions alone and 445 at the place where the elephants came to visit at night. Nearby is the UNESCO World Heritage Site of Twyfelfontein, which, with 2,500 pictures, has long been considered a highlight of rock art in southern Africa. Yet Twyfelfontein is only the small, eastern part of a much larger area where people produced rock art in times that cannot be dated precisely. Since 2012, our African archaeology team from Frankfurt has documented and analysed over 11,000 engravings and 1,200 rock paintings. These are distributed over more than one thousand rock faces in a strip that stretches 40 kilometres from Twyfelfontein westwards into the centre of the Namib Desert. The intention is to digitally preserve this unique cultural heritage for the future using high-resolution 3D models and special methods for enhancing the contrast if pictures are very faded.

The research region, which covers about 1,600 km², does not bear an official name on any map. It is called Mik Mountains in Afrikaans and Doro !nawas in the native Damara language, which means Rhinoceros Desert. Nobody would have expected such a mass of pictures in one of the driest areas on Earth. Why did people enter this hostile desert? Why did they produce so many pictures there in particular? Since 2017, a project at Goethe University Frankfurt funded by the German Research Foundation has been searching for answers.

Pictures of animals carved into rock in Rhinospring Gorge, one of the main sites of the Frankfurt project. The pictures have been highlighted in white to make them clearly visible.



played a central role. The Mik Mountains presumably boasted resources that were not available on the same scale in other regions. It cannot have been plants. Botanical studies have revealed that it was not possible to survive solely on the few plants that were edible.

This leads us to think that people stayed in the Mik Mountains at times when animals lived there as well. Many of the animals we regularly encountered are undemanding and persevere in the desert as long as they can find food and water. Unlike in the humid east of Namibia, in the Mik Mountains water is only permanently available in a few places. That there is water at all is a hydrogeological peculiarity of the region – and ultimately the reason for the wealth of archaeological remains. Twyfelfontein is one such site, and others are located deeper in the desert. Far to the west, in the dry heart of Rhinoceros Desert, lies GaiAs, a small depression that always contains water. When it rains enough, temporary water reservoirs are additionally formed. These places are the focal point of life in the desert. Sooner or later, the animals photographed by our cameras come there to drink. Easy prey for hunters: if you know the spots, all you need to do is lurk in wait for the animals. In humid areas, hunting is more laborious and less certain. If the animals find water almost everywhere, hunting necessitates complicated tracking and stalking. Does that make Rhinoceros Desert a godsend for hunter-gatherers because prey congregates in predictable places and ensures their survival in this way?

This is supported by the fact that there are camp sites near the waterholes with a large number of finds, especially stone artefacts. These camps are off the beaten track and not visible from the water, so that the animals coming to drink are not frightened away by humans. The waterholes themselves were central places for the groups of people, for hunting as well as for their own supply of precious water. The huge concentration of rock art at the waterholes also testifies to this. By far the majority of it in the Mik Mountains is found within their radius.

IN A NUTSHELL

- Rock art is found throughout the world, but is particularly concentrated in some areas of Namibia: since 2012, the team of archaeologists from Frankfurt has documented and analysed over 11,000 engravings and 1,200 paintings in the Namib Desert in the north-western part of the country.
- Since 2017, a German Research Foundation project has been dealing among others with the question of why so many pictures were produced explicitly in the hostile desert.
- The concentration of pictures in the radius of the few waterholes might be interpreted as marking territorial claims to scarce resources, such as the water itself and the animals that come to drink there.
- Occasionally, destroyed pictures were found. This is interpreted as evidence that the use of the resources may not have been without conflict.

The first assumption is that the climate in the past was more favourable and that people were not faced with the rigours of the desert. But this is not the case. The Namib is regarded as the oldest desert on Earth. Desert-like conditions have existed there since the birth of the Atlantic Ocean following the breaking up of Gondwana, the geological supercontinent that dominated the southern hemisphere for nearly 500 million years. As it drifted apart, the African and South American continents were formed. From the middle Tertiary onwards, the cold Antarctic waters of the Benguela Current have flowed along the south-west coast of Africa, creating a foggy desert in the land behind, where coastal fog often penetrates far inland. However, the climate fluctuates here as well. For example, in the Mik Moun-

tains, hardly any rain has fallen in the last ten years, and many animals migrated from the region or died of thirst. In the spring of 2022, however, heavy rains ended the dry period, making the desert green and leading to the animals' slow return. It is likely that humans and animals adapted their behaviour to such fluctuations in the past as well.

Rock art and water

For hunter-gatherers, who were responsible for producing most of the rock art, procuring food



This map of the research region in the Mik Mountains shows the sites of rock paintings and rock engravings, all close to permanent and temporary waterholes.

Today, like in the Stone Age, the waterholes still attract numerous animals – a porcupine can be seen here, photographed with an automatically activated game camera.



A section of one of the richest sites in the research region. On this rock alone, 333 individual rock engravings were counted. Most of them show animal tracks and occasionally humans.

Purpose of the pictures

Is there a connection between the fact that pictures were mainly found close to water and the puzzle about their purpose? Here we can only speculate. Following the ethnographic accounts about the San, the traditional hunter-gatherers of southern Africa, the theory emerged that the pictures might be associated with shamanistic activities and trance. However, motifs painted on or engraved in the rocks in Namibia do not quite match this theory because the depictions of people mainly show everyday situations: there are individual figures just standing there, people in groups, people on the move with equipment, mostly walking, sometimes running, occasionally sitting as if taking a break. Among the exceptions are complex actions such as life in a dwelling, dancing or hunting. Even rarer are the supernatural themes to be expected from shamanism and trance, such as animal-human hybrids. The same applies for the many depictions of animals: the antelopes, ostriches, zebras, rhinoceroses, elephants, big cats, hyenas and jackals, painted with fine brushes or chiselled in stone, are a more or less accurate and realistic reflection of the local animal world. Supernatural fantasy creatures are largely absent. In the case of the rock engravings, which only rarely depict people, there are two additional groups of motifs:

human and animal tracks as well as geometric shapes composed of circles and lines. In the latter, the representatives of the shamanism/trance theory see entoptic patterns (created in the inner eye), as these are said to occur in an early stage of trance.

The observations made in the research region of the Frankfurt team permit an alternative explanation: paintings and engravings differ significantly in terms of technique, but also regarding the topics depicted and the composition of the various pictures on the walls. It is hardly imaginable that both types of rock art could have been produced by the same people. Rather, the difference is a sign of two traditions with their own values, norms, and perhaps their own reasons for expressing themselves in pictures at all.

Painters vs. engravers

Whether the painters and engravers ever encountered each other or existed at the same



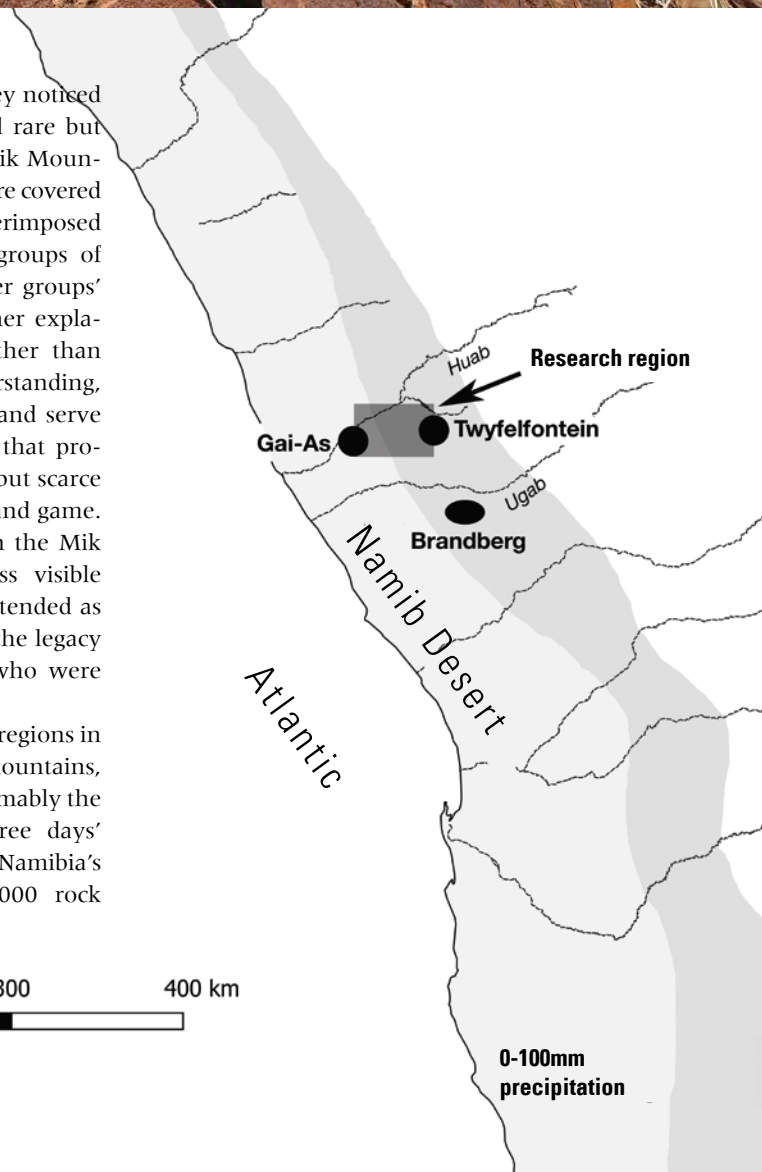
The pictures engraved in the rock often show animals that are depicted in a naturalistic style. The most common ones are ostriches.



Here, the former inhabitants of the Mik Mountains have carved rhinoceroses and zebras into the rock.

time, we do not know. But at least they noticed each other's pictures. We have found rare but unequivocal evidence of this in the Mik Mountains. For example, paintings exist that are covered with impact scars, scratched, or superimposed with engravings. It seems that the groups of engravers wanted to destroy the other groups' paintings. This finding suggests another explanation for the rock art's purpose other than shamanism and trance. In our understanding, engravings mark ancestral territories and serve as clearly visible signs to the groups that produced them of their claim to the vital but scarce resources found there, such as water and game. Paintings, by contrast, are far rarer in the Mik Mountains and mostly occur in less visible places. It seems as if they were not intended as clear territorial markers, but more as the legacy of groups not native to the region who were aware that they were intruding.

Thus, there are two major rock art regions in north-western Namibia. In the Mik Mountains, engravings dominate; they were presumably the home of the engravers. Two to three days' march south is the Brandberg. In Namibia's highest mountain range, some 50,000 rock



paintings attest to the homeland of the painters. Due to their proximity, both groups were likely familiar with the respective other region. It is therefore conceivable that people advanced into foreign territory in times of need because the resources of the two regions are very different and thus complement each other. The destroyed paintings in the Mik Mountains could be evidence of a violation of foreign territory. Interestingly, the opposite could also apply. For example, on the Brandberg, engravings are only found in a ravine at the foot of the massif, which partly respect the paintings but are also partly superimposed on them. Perhaps the engravers advanced as far as here, but never into the heart of the Brandberg. Due to a lack of suitable dating methods, we are unable to reconstruct the chronology of events, we can only get closer to what happened in prehistoric times on the basis of hypotheses.

The research project on the rock art and archaeology of the Mik Mountains, funded by the German Research Foundation, is practically concluded and will end in February 2023. A detailed catalogue of all 222 sites with extensive picture material will be handed over to the National Heritage Council in Namibia and made available for future research. The Frankfurt team would now like to extend its studies to other rock art regions in Namibia and has already begun with documentation in the south, east and north of the country for this purpose. They are currently working on a new research proposal. ●



The authors

Peter Breunig, born in 1952, was professor for African prehistory at Goethe University Frankfurt until 2019. Upon his “retirement”, he was designated Distinguished Professor. Breunig, who originates from Flörsheim, studied prehistory and early history as well as history, geology and ethnology at Goethe University Frankfurt and the University of Cologne and earned his doctoral degree with a thesis on the C14 chronology of the near eastern, south-eastern and middle European Neolithic. He also earned his postdoctoral degree (habilitation) in Cologne. In 1989, he returned to Frankfurt as a research associate in the archaeology subproject of CRC 268 on “History of Culture and Language in the Natural Environment of the West African Savannah”. In 1992, he was appointed as professor for African prehistory, from 1998 to 2002 he was spokesperson of CRC 268, from 2004 to 2009 spokesperson of Research Unit 510 “Environmental and Cultural Change in West and Central Africa” of the German Research Foundation and from 2009 to 2020 head of the long-term research project “Development of Complex Societies in Sub-Saharan Africa: The Nigerian Nok Culture” of the German Research Foundation. The German Research Foundation project “Rock Art in the Mik Mountains”, of which he is in charge, has been running since 2017.

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Gabriele Franke, born in 1963, is currently a research associate at the Frobenius Institute in the German Research Foundation project on the Mik Mountains in Namibia. From 2009 to 2021, she worked at the Institute for Archaeological Sciences at Goethe University Frankfurt as a research associate in the long-term research project of the German Research Foundation on the Nok culture of Nigeria. From 2002 to 2007, she studied prehistory and early history, historical ethnology and archaeometry in Frankfurt, where she earned her doctoral degree in 2015. For her thesis on the ceramics and chronology of the Nok culture, she was awarded the Christa Verhein Prize in 2016. Her main research interests are the archaeology of West Africa and African rock art.

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