Prehistoric Hunter-gatherer Groups on the Edge of North-western Namibia's Namib Desert

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Introduction

In recent years, anthropology has seen a shift in the evaluation of evidence for violent altercations between hunter-gatherer communities (Allen and Jones 2016; LeBlanc and Register 2003). Contrary to the once prevalent myth of the peaceful forager, evidence is mounting that violence beyond the level of personal antipathy is not a phenomenon solely related to sedentary farming communities, but extends further into the past to also include hunter-gatherer societies. The development of interhuman violence remains controversial, however, because archaeological evidence for the contact between prehistoric hunter-gatherer communities is scarce and rarely precise enough to identify, let alone differentiate, war and violence in these pre-agrarian periods of humanity's past. Most models are based on ethnographic observations of present-day hunter-gatherers, and cannot simply be grafted onto prehistoric groups, which existed in completely different social and ecological environments.

The most direct evidence for violence among prehistoric hunter-gatherers comes from human skeletons showing signs of fatal injury (Lahr et al. 2016). This article discusses a different source: rock art. Images of persons with weaponry, Scenes of people using weapons against others, or representations of weapons such as shields which were not used for hunting, are a nearly global phenomenon across diverse prehistoric periods and social contexts (see for example Bahn 1998: 196–197; Boreson 2012; Crosby 1997; Crotty 2001; Hygen and Bengtsson 2000; Keyser 1975, 2004; Keyser et al. 2012; Klassen 1998; Nash 2005; Risch and Meller 2017; de Saulieu 2004: 69–92; Taçon and Chippendale 1994; Walsh 2000). The rock art discussed in this article was made by hunter-gatherers, since it shows only wild animals and no signs of sedentism or food production. Sedentary farmers never appeared in this desert-like area. The art is not an extension of the above examples of violence or its tools; rather, the individual images show signs of having undergone violence themselves. At issue are a number of rock paintings that occur sporadically across a region with a significantly larger number of petroglyphs. The paintings show evidence of having been struck, scratched, partially chipped away or erased by subsequent rock carvings. Modern vandalism can be ruled out due to the paintings' location in extremely isolated and inaccessible areas of the Namib Desert. The central parts of the region in which the images are concentrated have never been an area of colonial settlements. The tracks leading into this area were mostly created by our fieldwork. Only two or three touristic routes that are potentially dangerous to the inexperienced traveller exist. The traces created by tourists at the rock art sites are different from the ones mentioned above: they consist of initials, calendar dates or unsuccessful attempts at their own images of animals. The wide geographical spread of these paintings destroyed in the past, and the aggression behind their destruction, may suggest conflict between hunter-gatherers who made rock paintings and hunter-gatherers who made rock carvings.

The hypothesis that these rock paintings are representative of physical conflict allows considering a meaning of the images beyond the usual interpretation. Rock art, both paintings and engravings, have been interpreted in southern Africa for years as the symbolic expression of

shamanistic trance experiences (Lewis-Williams and Dowson 1989). This concept fits with certain images in some regions, for example in the Drakensberg Mountains in South Africa. Its rock art played an important role in developing the San trance hypothesis (Lewis-Williams 1981).The images in the area of north-western Namibia under consideration here, however, do not fit this concept. They mostly reflect realistic images of the local fauna; apart from geometric designs, no depictions of supernatural beings or symbolic behaviour have been identified. The motifs and geographic distribution of the images, and the occasional traces of their destruction, suggest an alternative interpretation – as signs of territoriality.

Territories and territoriality form a complex, interdisciplinary subject in archaeology (Feuer 2016; Zedeño 2016). In a break from early considerations, it is undisputed today that territoriality did not only arise with the advent of agricultural societies, but that hunter-gatherers had a sense of territoriality and did not travel aimlessly around the landscape (Peterson 1975: 57). Territoriality encompasses both geographic and social boundaries. Marking boundaries requires some form of communication as a central aspect of territoriality (Dillian 2003: 124). Rock art can take such a form (Bouchet-Bert 1999; Dematte 2004; Taçon 2016). The case of territoriality considered here fits a model in which increased territoriality correlates with resource predictability and resource density (Dillian 2003, referring to Dyson-Hudson and Smith 1978). It is assumed that the larger the predictability and density of resources becomes, the more territorial behaviour develops. This assumption can be applied to the research area under study. Resources consist of water and animals coming to this water. Both occur in a frequency not commonly expected in an arid environment, and their steady occurrences are highly predictable. Thus, territoriality according to this model seems a very probable interpretation in the research area, which is strengthened by the traces of destruction described below.

Rock Art in the Rhino Desert

Throughout the twentieth century, the rich store of Namibian rock art was documented both in nationwide surveys (Scherz 1970, 1975, 1986) and in intensive regional studies (Breuil 1955, 1957, 1959, 1960; Pager 1989–

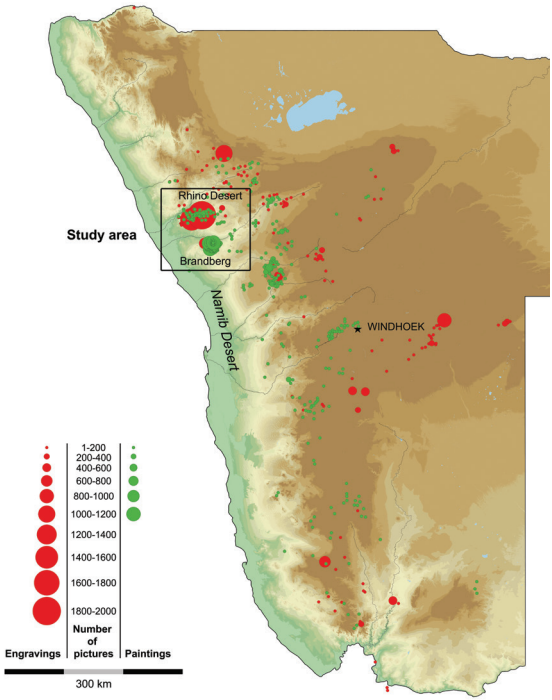

Fig. 1. Map of Namibia showing the distribution of rock engravings (red dots) and rock paintings (green dots) (based on Scherz 1970; 1975; 1986; Pager 1989–2006 and author's unpublished data from northwestern Namibia's Rhino Desert) (map created by and reproduced with permission of Johannes Behringer).

2006). These efforts revealed a concentration of rock art at the edge of the Namib Desert in north-western Namibia (fig. 1). Unlike rock art in the Sahara, the documented rock art in the Namib does not show evidence of a climate, but instead indicates an environment with a climate that has not changed fundamentally since the formation of the Benguela Current in the mid-Tertiary (Diester-Haass et al. 1990). More rock art occurs in this arid region than in the rest of Namibia. With respect to the rock paintings, the Brandberg, Namibia's highest mountain range, shows by far the highest national density, with several tens of thousands of rock paintings (Lenssen-Erz 2001). Carvings, on the other hand, are concentrated in the region immediately north of the Brandberg. Here lies the Twyfelfontein site, which was named a UNESCO World Heritage Site in 2007 (Kinahan

2010) and is seen as the highlight of petroglyph sites in southern Africa (Dowson 1992: 111). Recent research, however, reveals that this highlight is only the eastern section of a distinct region of rock art which extends up to 40 km westward into the Namib Desert (Breunig et al. 2019). The rock art is spread out over two conservancies; conservancies being the means by which the government of Namibia places control over the protection and preservation of nature and natural resources directly in the hands of local inhabitants. One conservancy is named Uibasen Twyfelfontein; the other, which encompasses the majority of the area under discussion here, is Doro !nawas. In Khoekhoegowab, the local Damara-Nama language, !nawas means 'rhinoceros,' while doro is linked with aridity and desert conditions. For this reason, we refer to the entire region under discussion as 'Rhino Desert.'

Since 2015, the rock art of the Rhino Desert, including that at Twyfelfontein, has been the subject of systematic study in an area of about 1300 square kilometres between ca. 14° and 14,45° East and 20,45° and 20,70° South. Surveys have particularly followed the escarpments of sandstone plateaus where the highest density of images is found and extend onto the plateau areas. The large size of the research area does not allow for a comprehensive prospection but all regions have been surveyed to a certain extent. The density of the survey tracks suggests that the recorded rock art sites encompass most of the preserved and still visible images. As of April 2018, the collection comprised over 10,000 petroglyphs on over 900 distinct boulders or rock walls across approximately 200 sites. There is no other region with a comparably high density of rock carvings anywhere else in Africa. For the most part, the art is found in immediate proximity to the few permanent sources of water in the Rhino Desert. This includes Twyfelfontein (this Afrikaans name means 'uncertain wellspring'), where after recently completed documentation work approximately 2400 individual petroglyphs had been counted. Some 11km to the west is a circular basin known as 'the Amphitheater,' where 1248 carvings are clustered at one single section of the southern basin wall. Directly next to this area is a growth of *Salvadora persica*, a large bush which frequently grows in dry riverbeds, where its roots can reach moist soil. *Salvadora*'s location in the Amphitheater may thus indicate that, when rainfall

levels were slightly higher, water was available there for the creators of the rock art who came here to seek it. Another 10km further west, now far into the Namib, the next water source may be found in a canyon known as Rhinospring. Here, 1436 carvings have been recorded on 162 different boulders, in some cases in a very high density (fig. 2). The areas surrounding these three water sources at Twyfelfontein, the Amphitheater and Rhinospring account for approximately 50 percent of the rock art in the Rhino Desert, showing a clear correlation between the permanent availability of water and the occurrence of petroglyphs. Twyfelfontein, Amphitheater and Rhinospring were quite likely three central points of a system of paths along which hunter-gatherers moved when in the Rhino Desert. Their presence is attested to by a number of habitation sites near rock shelters with concentrations of artefacts made of stone and ostrich eggshell.

In addition to the central points where water is permanently available, there are further sites nearby, close to various depressions, which temporarily fill with water after rain. Here too, there are clusters of rock art, with at times several hundred distinct engravings in one place. Plotting the location of these petroglyphs and those at the larger, central locations close to more permanent water sources shows a general pattern of human occupation of the Rhino Desert characterized by three central points, each about a day's walk apart (fig. 3). Between these points, spread out over the larger area, we find sites with very little rock art and little to no stone or ostrich eggshell artefacts. These are most likely the signs of brief stops during the journey between the central points.

In addition to the rock carvings, there are also rock paintings throughout the Rhino Desert, though at 1000 documented paintings these are comparatively few in number. Unlike in the Brandberg, where paintings occur mostly on open, clearly visible rock walls in rock shelters, the Rhino Desert paintings are found at places that seem almost deliberately hidden. In some cases, they are on the undersides of rock shelters and can be reached only by crawling. Perhaps such out-of-the-way placement, in conjunction with the destruction mentioned above and explored in greater detail below, suggests that the hunter–gatherers who produced rock paintings were not welcome in the Rhino Desert.

Fig. 2. Bird's-eye view of 7 of the 162 boulders exhibiting rock carvings at the Rhinospring site. The carvings have been digitally whitened for greater visibility (photograph by P. Breunig).

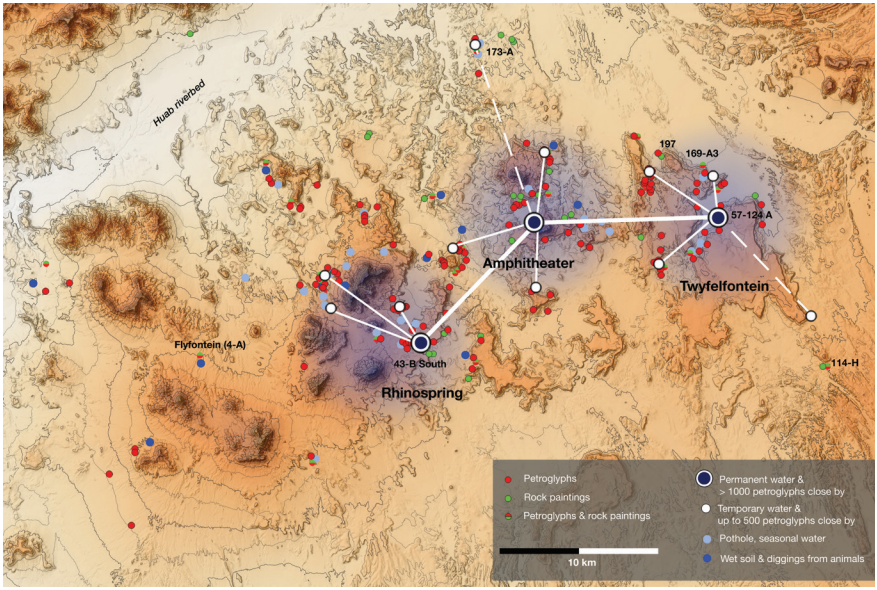

Fig. 3. Map of Rhino Desert showing the distribution of petroglyph sites as well as permanent and temporary water sources. The distribution reveals a pattern centred on three points with permanent water and over 1000 petroglyphs. For each centre, there are also associated temporary water sources with up to 500 petroglyphs, each at a distance of 5–10km from the centre. Sites with destroyed rock paintings are marked by their names (topographical map created by and reproduced with permission of Johannes Behringer).

The dating of the rock art is of major importance for understanding these correlations. A lack of reliable methods, however, makes accurate dating impossible. Based on their context with otherwise dated, the paintings of the region seem to belong primarily to a main phase between 4000 and 2000 BP (Richter 1991). This confirms the age of approximately 3000 years for stratified fragments of rock paintings excavated in the Brandberg (Breunig 1989: 33–35). First results of optically stimulated luminescence (OSL) measurements from toppled boulders with rock art in the Rhino Desert give similar age estimates (Susanne Lindauer, pers. comm.). Consequently, the only time frame that can be reliably given for the phenomena discussed here is 'the Holocene', with a higher likelihood of late Holocene activity for both engravings and paintings.

Destroyed Rock Paintings

Throughout the Rhino Desert, clear signs of the destruction of paintings can be observed wherever rock paintings and engravings appear side by side. Fig. 3 shows the location and distribution of currently known sites featuring damage to, or destruction of, paintings. Site 43-B south is an obvious example of such destruction, where the painting depicting human figures was struck with a pointed object. In other cases of the destruction of human imagery, figures are scratched out rather than struck, as is clearly visible at site 4. Yet another method was used at site 197: broad scraping or rubbing across the paintings on the rock surface. Several sites will be presented below (N.B. sites in the uninhabited Rhino Desert do not have names. They are given a sequential numeric designation. Each boulder with rock art at the same site is given an appended letter; the different sides of such a boulder are indicated by the cardinal direction in which they face).

Flyfontein (4–A)

Site 4 is located on the western edge of the study area, in the hyper-arid central Namib, but near a temporary water source (fig. 4). There are several instances of rock art, including paintings on a vertical rock wall (fig. 5) in a valley beginning below this water source. Central to this panel are four walking human figures. The painted section of the rock wall is covered

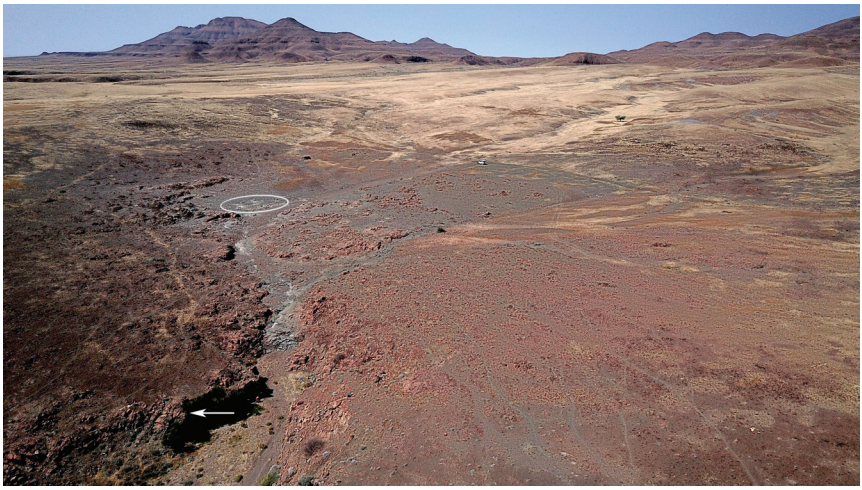

Fig. 4. Aerial view of the Flyfontein site (4–A). The circled area is a temporary water source, while the arrow marks the location of rock paintings. The white van in the picture's centre (square) may be used for sense of scale (photograph by P. Breunig).

Fig. 5. Frontal view of site 4-A with rock paintings in the marked area, shown in greater detail in fig. 6 (photograph by P. Breunig).

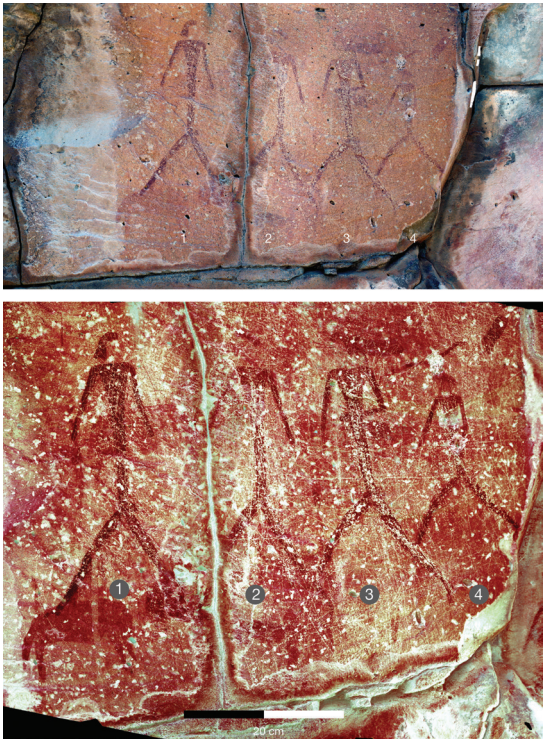

Fig. 6. Flyfontein, site 4–A. Paintings of human figures, with visible marks of being struck by a sharp object (above). Heightened contrast photograph of the paintings reveals the strike marks and scratches in greater detail (below) (photographs by P. Breunig).

with individual, point-shaped indentations. Heightening the contrast of the photograph not only shows this phenomenon more clearly, but also reveals numerous scratches over the painted bodies (fig. 6)[1]. Notably, the two middle figures (nos. 2 and 3 in the photograph) are so completely covered in scratches as to be nearly erased.

43–B South

Site 43 lies nearly 300m as the crow flies from the permanent water source of Rhinospring in the middle of the Rhino Desert. It is made up

[1] On all rock paintings, the contrast of the photographs was increased using the software tool Dstretch (www.dstretch.com; see in particular the contribution by J. Harman on using decorrelation stretch to enhance rock art images at www.dstretch.com/AlgorithmDescription.html).

of large slabs of rock that broke off from the adjacent edge of a plateau (fig. 7). 95 petroglyphs were found at the site, most of them on the large northern slab (43-A). On the south side of the adjacent rock slab (43-B), there are paintings on the wall of a low alcove formed by the interlocking slabs (fig. 8). These paintings are faint and only barely visible, but among the most clearly identifiable are seven human figures which have been purposely destroyed by being struck (fig. 9). The middle figures (nos. 3 and 4 in the photograph) show the largest number of strikes all over the entire body. The others, in particular those marked no. 1, 2 and 6, show strikes concentrated around the head. Increasing the contrast of the photographs reveals additional paintings, no longer visible with the naked eye and showing animals and human figures (fig. 9, bottom). They were presumably not destroyed because they were not clearly visible when the destruction of the painting occurred. On the same slab to the right, we find an engraving of a quadruped partially obscuring a painting below it (fig. 10). Here, heightened contrast reveals the painted figure to have a strong rump and broad neck typical of a zebra (fig. 10, bottom), but this determination of species is uncertain. What can be taken as certain, on the other hand, is that the engraving was purposely made on top of the painting and served the purpose of destroying it.

Fig. 7. Aerial view of site 43, showing the position of petroglyphs on rock slabs 43–A and paintings on 43-B south. The person to the right of the rock slabs may be used for sense of scale (photograph by P. Breunig).

Fig. 8. Rock wall 43–B south, with the position of the rock paintings marked. For detail of the left rectangle, see figs. 9, for detail of the right consult figs. 10 (photograph by P. Breunig).

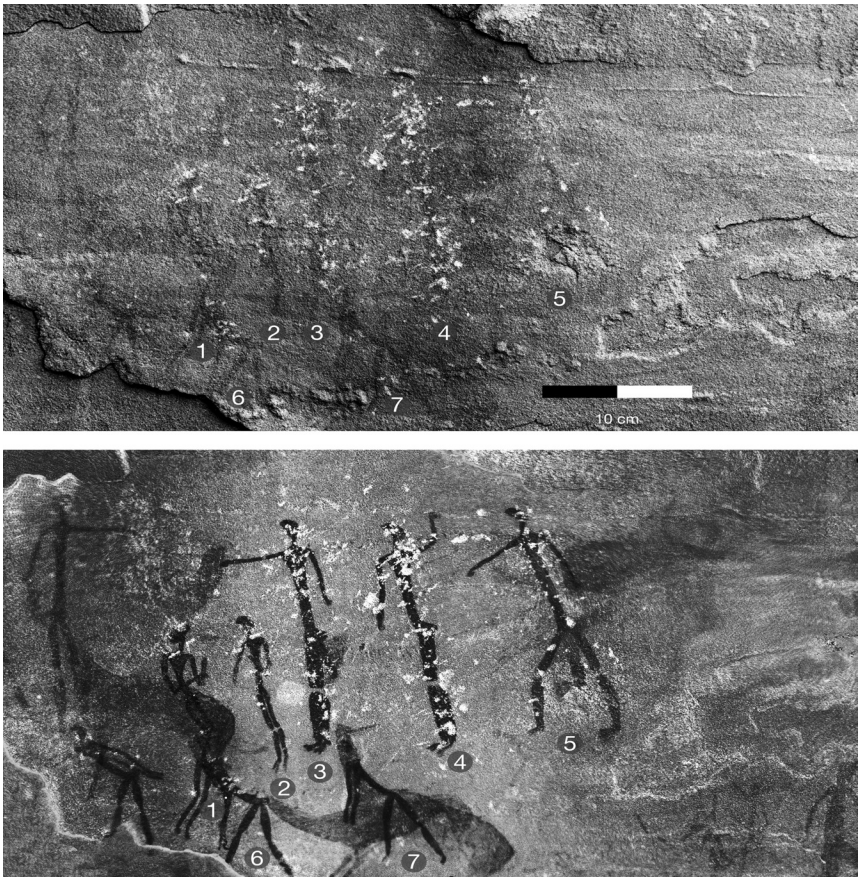

Fig. 9. Paintings of human figures from site 43—B south, covered in strike marks (above), and heightened contrast photograph (below) (photographs by P. Breunig).

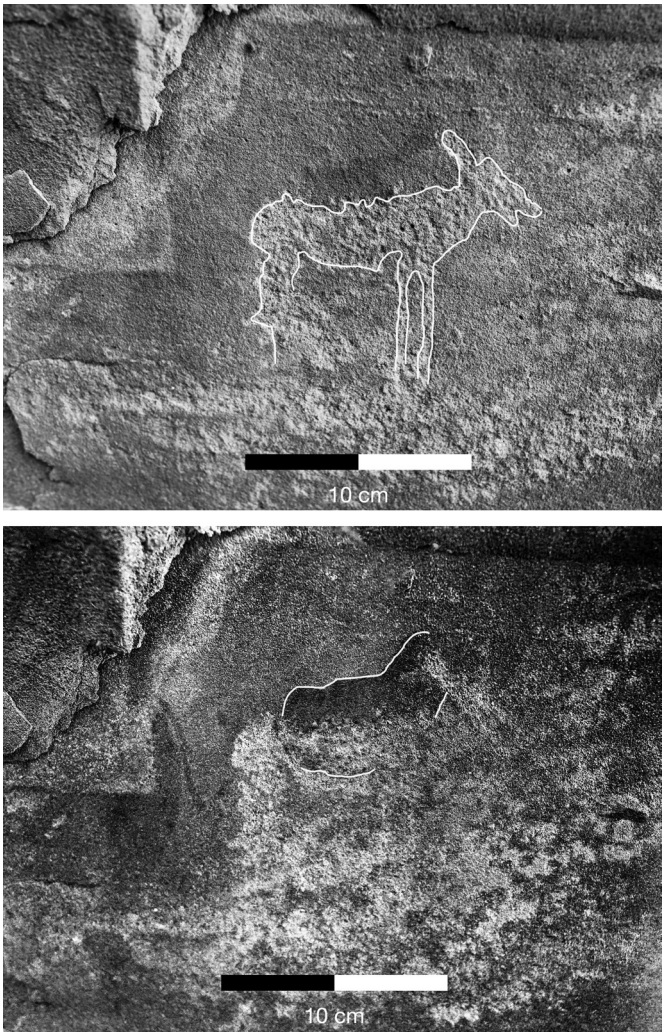

Fig. 10. Rock painting destroyed by overlaid petroglyph, outlined in white (above). Heightened contrast view and outline of the visible part of the destroyed painting (below) (photographs by P. Breunig).

57–124 A

57–124 A is one of 192 rocks at the UNESCO World Heritage Site of Twyfelfontein which have rock paintings. It is located on the southern side of Twyfelfontein, somewhat apart from the main concentration of rock art, and consists of a boulder with an overhanging portion with rock paintings in a position consistent with the observations already described here (fig. 11). There are 17 paintings on the rock wall in question (fig. 12). An unfinished painting of a quadruped (no. 1) is covered by three intersecting engraved lines which give the impression of 'crossing out' (fig. 13). Clustered to the lower right of this figure are a number of antelopes, other quadrupeds, and ostriches. They are partially weathered, and no longer clearly discernible due to the use of white paints for various parts of the figures (nos. 2–15). This part of the panel, which contains the largest number of figures, has been purposely covered with two carvings of quadrupeds of not clearly identifiable species (nos. 16 and 17).

Fig. 11. View of the site 57–124 A at Twyfelfontein. The white frame marks the area shown in fig. 12. The white arrows on the boulder were made before Twyfelfontein became a UNESCO World Heritage Site (photograph by P. Breunig).

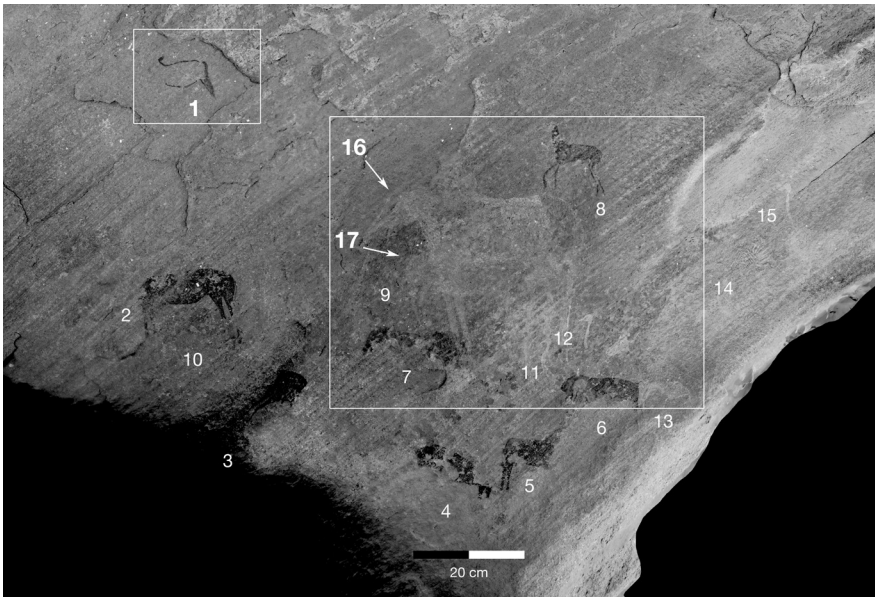

Fig. 12. Rock paintings at site 57–124 A (nos. 1–15) and two petroglyphs made on top of the paintings (nos. 16 and 17) (photograph by P. Breunig).

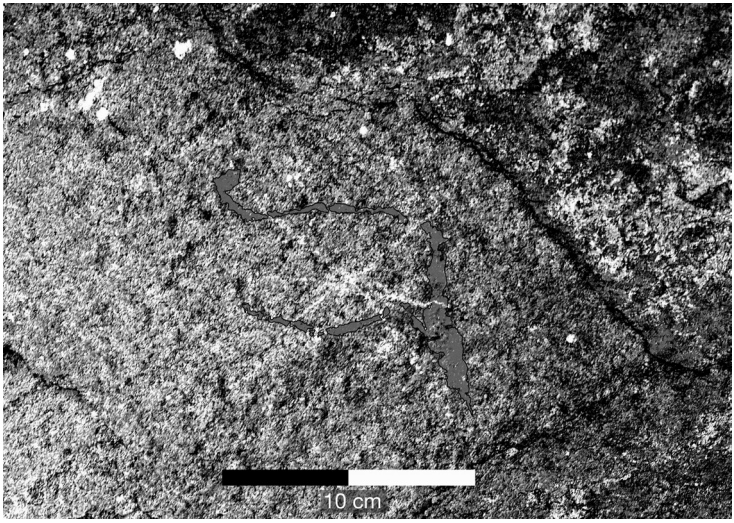

Fig. 13. Site 57–124 A. Heightened contrast photograph of the incomplete painting of a quadruped (outlined in black for clarification) overlain by intersecting incised lines (photograph by P. Breunig).

114–H

114–H is the easternmost site of the study area (fig. 3). It is located directly next to a permanent water source and consists of a large, vertical cliff face (fig. 14). Unlike various rock walls with engravings scattered around the water source, this particular wall features both paintings and engravings. The paintings are poorly preserved, but two partially visible sections show that they are covered by carvings (fig. 15). In section 1, an ostrich has been engraved over remnants of a no longer identifiable painted figure. Directly below, the rear legs of a large carving presumably depicting a zebra cover and destroy a likewise no longer identifiable quadruped (section 2). Section 3 is characterized by scratches above the painted body of an animal, of which only the rear remains visible (fig. 16).

Fig. 14. Aerial view of site 114, indicating a water source (circle) and nearby rock art 114–H (arrow) (photograph by P. Breunig).

Fig. 15. Site 114–H, with the position of rock art marked by a rectangle (photograph by P. Breunig).

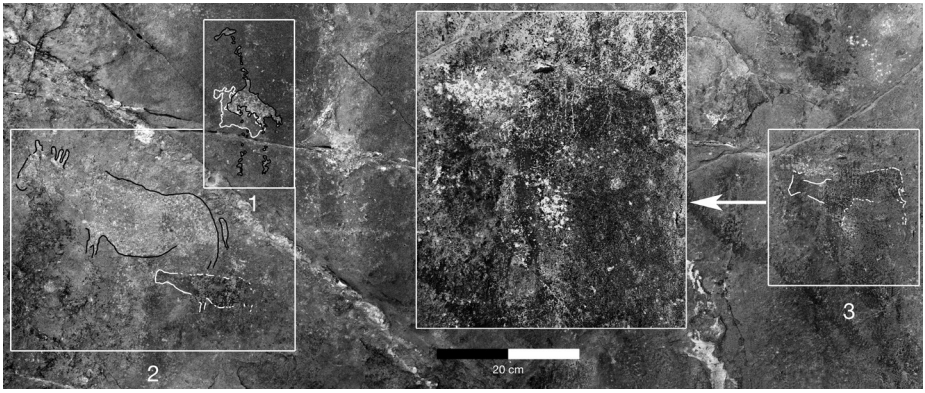

Fig. 16. Petroglyphs (outlined in black) overlay the remnants of rock paintings (nos. 1 and 2) (outlined in white) and scratched painting (3) (outlined in white, on the left side a blow-up with heightened contrast for better visibility of the scratches) at site 114–H (photograph by P. Breunig).

169–A3

Site 169 lies on the north-eastern edge of the study area, north of Twyfelfontein by approximately 3.5km as the crow flies. It consists of a group of imposing boulders with petroglyphs beside the slope of a plateau (fig. 17). One of the large boulders lies slightly askew, so as to form an overhanging shelter on the underside of which a number of paintings are barely visible (section A3). Heightening the contrast on photographs shows the painting details more clearly (fig. 18), but makes it harder to see the numerous white marks where the three images of people have been struck (nos. 2–4 in fig. 18). By contrast, the animal figures (nos. 1 and 4–7) are largely untouched. Images of people were also observed as preferred objects of destruction at site 197 (see below).

Fig. 17. View of site 169, with arrow indicating the position of the paintings at 169–A3 (photograph by P. Breunig).

Fig. 18. Heightened contrast photograph of rock paintings of animals (nos. 1, 5–7) and human figures (nos. 2–4) at site 169–A3 (above) and unaltered photograph (below) (photographs by P. Breunig).

173–A

173–A is a natural rock shelter of more than 30m length in the northern part of the study area (fig. 19). The walls of this overhanging cliff are covered in numerous rock paintings and carvings. In two places (sectors C and G in fig. 19), carvings seem purposely to cover paintings. In sector C, there are three such examples (fig. 20), with heightened contrast clearly revealing the defacement of paintings by overlaid carvings (fig. 21). In section 1, two unidentifiable animals have been carved over the torso and arms of a human figure. Section 2 shows a human figure overlain by an antelope whose horn also extends onto a third person further to the right. In section 3 there is a carved animal overlaying a human figure, with an elephant carved to the right covering up a painted giraffe with spotted fur. The carvings are here connected by lines.

The situation is similar for the pictures in sector G (fig. 22), with a bird figure and nonrepresentational marks covering a painted human figure in section 1. To the right, similar nonrepresentational marks cover a painted giraffe with fur patterning. Its front legs are covered by a small carved elephant. In section 2, the paintings have been removed with particular intensity: two painted men face each other with outstretched arms, but what was between their arms has been completely erased by carvings of animals, of which the topmost is recognizable as a zebra.

197

Site 197 is located in the same region as site 169 and consists of an oblong rock slab at the bottom of a valley near the slope of a plateau (fig. 23). Towards the slope, the slab forms a low overhang that can only be reached by crouching or crawling. On the underside of this overhang, there are three paintings of human figures (fig. 24). For two of these figures (nos. 1 and 3) only the lower half of the body is preserved. The area on which the figures are drawn is both smoother and lighter than the surrounding rock surface. The fact that this texture is limited to the area of the paintings suggests that it is a result of attempts to scrape the paintings off with a hard object. Below the human figures, a painted zebra—not discovered on-site, but revealed only by heightening the contrast of the photograph after the

Fig. 19. Frontal view of the rock shelter 173–A, indicating the position of the rock art in sectors C and G, as discussed here (photograph by P. Breunig).

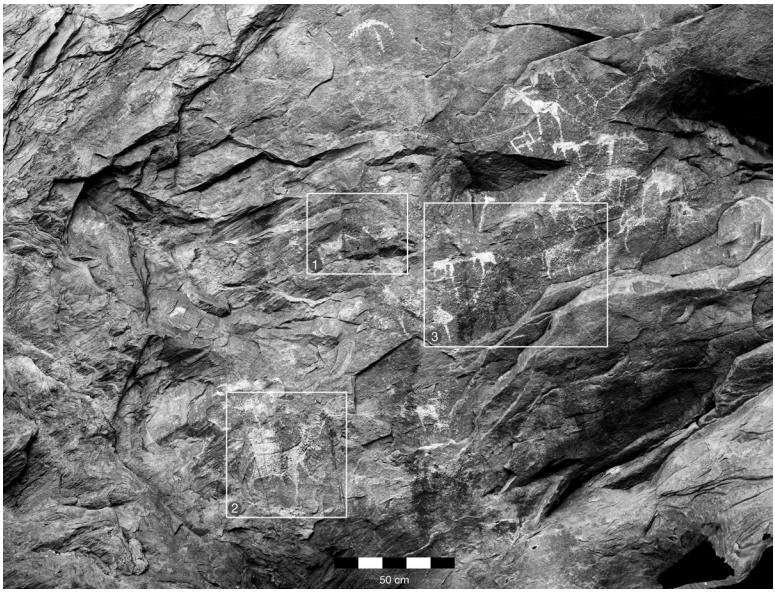

Fig. 20. Overlapping carvings and paintings in sector C at site 173–A (photograph by P. Breunig).

Fig. 21. Heightened contrast photographs of the overlapping carvings and paintings in sector C of site 173–A, as shown in fig. 20 (paintings outlined in white, engravings in black) (photographs by P. Breunig)

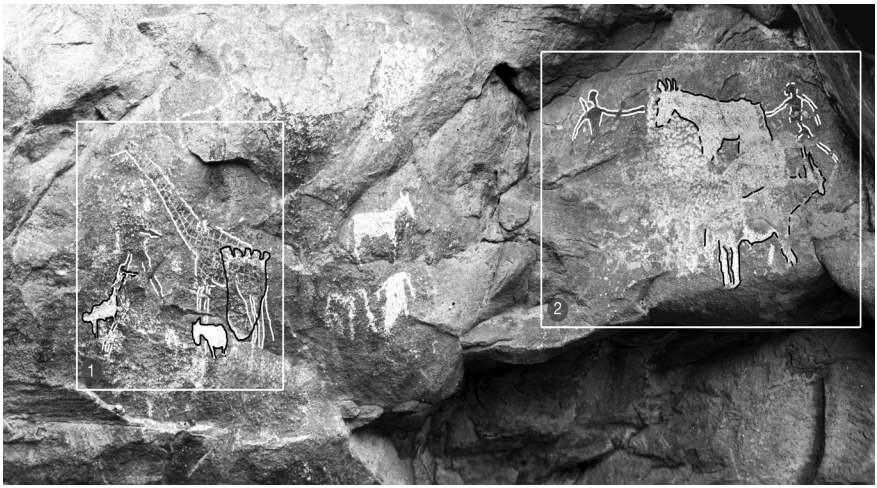

Fig. 22. Overlap of petroglyphs and paintings in sector G at site 173–A (paintings outlined in white, engravings in black) (photograph by P. Breunig).

fact (fig. 24)-was spared this treatment (no. 4). Maybe only the human figures were the target of destruction but it is equally possible that at the time of destruction the zebra was as hardly visible as it is today, and thus not damaged.

Rock Art as Sign of a Claim to Resources in the Desert

The scratched or struck rock paintings may be understood as evidence of conflict between those who made rock paintings and those who made rock carvings. The painters were active primarily around the Brandberg, while the carvers seem to have been most active in the Rhino Desert. Whether these two groups ever encountered one another face-to-face remains unknown. This is partly because rock art cannot be dated precisely enough to answer that question. What is certain, however, is that either group saw signs of the other's existence in the form of large quantities of rock art—as it is simply impossible to miss the rock art in the area under consideration.

Further considerations are based on the essential differences between the rock paintings and carvings and thus presumably between the two groups which produced them. Not only is the means of producing the

Fig. 23. View of site 197. The position of the paintings on the underside of the large rock slab is indicated by the arrow (photograph by P. Breunig).

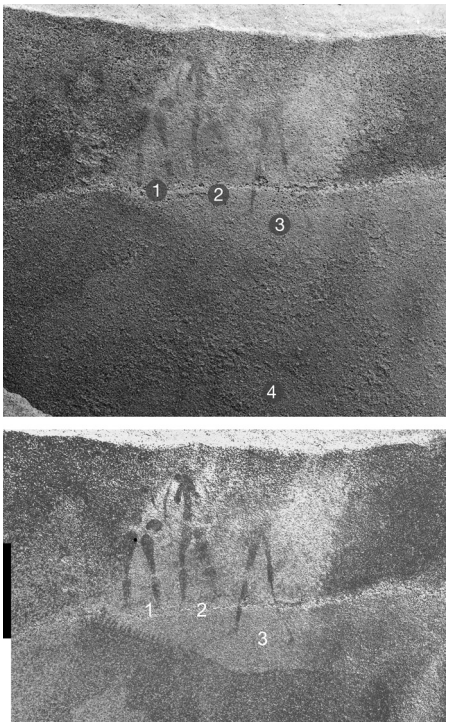

Fig. 24. At site 197, apparent signs of an attempt to scrape off rock paintings of human figures (above). Below: heightened contrast photograph (photographs by P. Breunig).

distinct types of rock art different, but the imagery presented is particular as well. Both show animal figures, differing only in the preference of species shown. But for other motifs, the differences are fundamental. The paintings seem to centre on human figures, which are present as a motif in over half of the observed paintings. This prevalence is the foundation for a theory of the paintings' social function (Lenssen-Erz 2001: 73). In the carvings, however, human figures are almost entirely absent, with only a few exceptions; and these exceptions, unlike the realistic animal carvings, appear highly stylised across the board. This particular treatment of depicting humans is not a matter of technique or special circumstances and places. Rather, they are mostly integrated in compositions together with other images, primarily of animals, and made in the same technique as these. In addition, the carvings also show many animal and human tracks as well as geometrical patterns, all of which are virtually unknown in the rock paintings. The places where the rock art is found differ as well: carvings occur primarily on free-standing boulders, paintings primarily on protected walls in rock shelters. This difference, however, may be due to selective preservation, since paintings are not preserved as well in the open than carvings.

Both areas in north–western Namibia in which petroglyphs and rock paintings are concentrated receive less than 100mm of precipitation annually on average and are thus classified as desert. Nevertheless, there are certain places where vital resources occur in unexpected abundance in an otherwise barren desert environment. In the Rhino Desert, these are the wellsprings that carry water even after several rainless years. Apart from the large dry riverbeds which run through the Namib, these are the only locations marked on Namibia's hydrogeological survey as 'porous aquifers moderate potential' (Christelis and Struckmeier 2011). The water sources thus consist either of permanent wellsprings, such as at Twyfelfontein, or moist sections of soil at which digging yields water. As wildlife cameras show, a number of different animals visit these water sources (*Equus zebra hartmannae, Antidorcas marsupialis, Oryx gazella, Struthio camelus, Diceros bicornis, Panthera pardus, Panthera leo, Canis mesomelas, Crocuta crocuta, Parahyaena brunnea, Papio ursinus, Mellivora capensis* and *Hystrix africaeaustralis* as well as civets, rabbits, hyraxes and a large number of

birds, particularly Columba guinea and *Pterocles namaqua*). For this reason, the sporadic and highly limited supply of water actually offered hunter-gatherers in the Rhino Desert an advantage not found in water-rich areas: they would reliably encounter many species of animal because they congregated at the few existing water sources. Hunting these animals was therefore simple and highly efficient. Hunters did not need to follow animal tracks over long distances in order to kill prey that could easily spot their approach in open terrain. Instead, they could wait concealed by the watering hole. From this perspective, the desert no longer appears as a marginal, inhospitable world, but turns out to provide nearly ideal conditions for hunter-gatherers.

The situation is similar in the approximately 500–600km^2 which make up the Brandberg. Given its location at the edge of a desert, the Brandberg exhibits a remarkable degree of biodiversity (Kirk-Springs and Marais 2000). Those familiar with the territory can always find rain water that has been 'stored' in pools and crevices over long periods. The rocky soil retains water and allows plants -many of which are useful food sources- to thrive, so that the mountain range appears like an oasis in the desert. While the large animals of the Rhino Desert do not live in the Brandberg, there is a sizable population of small animals, most notably Procavia capensis, Petromus typicus and Pronolagus radensis, many of which may be caught and eaten (Van Neer and Breunig 1999).

Due to these readily available resources, the Brandberg and the Rhino Desert were coveted environments, as evidenced by the rich store of archaeological finds, particularly the unique concentration of rock art. In general, the group producing rock paintings and the group producing rock carvings respected each other's territory, as the paintings and carvings occur together only rarely. At times, possibly when resources in one or the other group's territory became scarce, there were excursions into the neighbouring environment. In the Brandberg, this is attested by engravings in a canyon at the foot of the mountain near a water source -just as in one's own territory (Gwasira 2011). The visitors did not, however, venture as far as the other group's territorial centre marked by the thousands of paintings in the high mountain range, or at any rate the intruding group did not make any of their own traditional rock carvings here. The situation in the Rhino

Desert is similar, albeit with the roles reversed: the hidden, not externally visible places where the paintings were made to appear as the sign of a hesitant claim to foreign territory, as though the intruders were aware of contravening territorial norms. The result of the contravention may then have been the purposeful destruction of the intruding group's paintings, as described above.

It should be noted that interpreting the destroyed rock paintings considered in this paper as evidence of a contested claim to limited resources in a desert climate is only one of presumably many conceivable explanations. During fieldwork in Nigeria several years ago, I encountered rock art that had been destroyed for a completely different reason. These rock paintings near the town of Geji in Bauchi State are covered with marks similar to those described above at site 43–B south. In order to protect the rock art from further destruction, the paintings were enclosed in a wire cage. Interviews with locals later revealed that the destruction was not the result of conflict, but rather of the belief that the strength of the ancestors who produced the paintings resides in the paintings' colours. In order to profit from this strength, locals chipped off and ate the paint. It is hardly possible to exclude with any certainty a similar explanation for the destruction of the paintings in the Rhino Desert.

However, the spatial separation of the centres of paintings and carvings, the ecological advantages of the spaces in which they occur, and the established signs of destruction of rock paintings allow us to deduce that the areas and their resources were divided into separate territories. The rock art, in this interpretation, can be easily understood as a sign of a traditional claim to a particular territory, the vital resources of which ensured the survival of the respective group. In the Rhino Desert, the rock art is concentrated near the source of these resources, in amounts proportional to the availability and significance of the wildlife or water to the group's survival. In the Brandberg, these factors appeared not to have mattered: the sites there are differentiated according to function (Lenssen-Erz 2004). Evidently, in the case of the Brandberg, the decentralised distribution of the paintings indicates the claim to the area as a whole. The situation in north-western Namibia, suggesting at least a locally relevant interpretation of rock art as a manifestation of territorial concerns and boundaries, thus provides

an alternative to the common explanations for southern African rock art, which often involve shamanism and trance (Lewis-Williams and Dowson 1989).

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