BLACK OR WHITE?

The identification and significance of rhinoceroses in South African Bushman rock art

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South African Bushman rock art is celebrated both as an integrated expression of a people's world-understanding and for its attention to detail. Often minutiae such as the shape of an antelope's fetlock or an elephant's swaggering gait are exactly captured in engraved or painted form. It is essential that we observe these details correctly as they fundamentally affect our interpretations of rock art imagery.

A common mistake is to overlook or confuse those physiological and behavioural details that are diagnostic of either black or white rhinoceroses, leading to a misidentification of the species depicted and a resultant skewed interpretation. This mistake may be attributable to the scarcity of rhings in South Africa's Bushman rock paintings where only 34 examples are known. Conversely, there are well over 1 000 engraved rhinos, but few people are familiar with the rock engraving tradition. Though one must be mindful of seeking too literal an identification in symbolic and religious rock art, even supernatural beliefs have earthly referents and it is necessary to be able to distinguish between black and white things in life

Recognising rhinos at a glance

The features that distinguish the two modern southern African rhinos - black (Diceros bicomis) and white (Ceratotherium simum) - are shown in Table 1 and Fig. 1. Any one of features 2 to 6 and 8 can distinguish between the species. while feature 3 pertains only after about two years when the posterior hom emerges. One or more of these features are apparent in almost all depictions of rhinos. As a test, hold up the South African R10 bank note and observe features 2 to 6. 8 and 10 of the white rhino.

Additional, but variable, distinguishing features include the adult black rhino's posterior horn. which is often more than half the length of the





Fig. 1: Distinguishing features of black and white rhinos (cf. numbers in table)

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FEATURE	BLACK RHINO	WHITE RHINO
1. Size	Smaller*	Larger*
2. Lip shape	Upper lip overbarigs lower and is pointed and prehensile for browsing	Upper lip does not overhang lower and is square for grazing
3. Horn:ear distance	3a more-on-less equal to 3b	3a distinctly less than 3b
4. Head:neck length (3:5)	Head length less than neck length	Head length more than neck length
5. Neck line	Blightly convex, almost straight	Pronounced convex nuchal hump (5a)
6. Lumbar & pelvic humps	Humps almost contiguous	Gap between humps
7. Tail position	Straight and hortzontal when defecating, alarmed or running	Curled when defecating or running. Horizontal when standing and alarmed
8. Ear shape	Tip rounded	Tip pointed
9. Mother:calf position when on the move	Call follows mother	Calf precedes mother
10. Carriage of head	Lower jaw usually horizontal to the ground or angled up to	Lower jaw always below horizontal, mouth mostly just above the

browse * Size difference is only apparent when both are seen together in the field - a very rare event. Thus both species are shown the same size in Pigure 5.

ground to graze

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Fig. 2. Redrawing of Thomas Barnes' black mine rock painting associated arm Soths Shalid Reddersburg District, Free State. Black represents grey-white. Scale bar 30 mm.

anterior hom and may even exceed it. An adult white hino's posterior hom is always less than half the length of the anterior hom. Females of both species may have thinner and longer homs than males. But in zoos, horns appear with shapes and proportions never seen in the wild.

There are thus at least a dozen ways to distinguish the two species of rhino in the field, most of which also apply to depictions of rhinos in Bushman rock art.

Rhinos in Bushman rock art

The earliest recorded identification of a rock art him of by a European in South Africa was by artist and explorer Thomas Baines. In his journal for Tuesday's March 1550 he writes. —I havo of hime caves.—I had formerly been the haunt of the wide Bushmen. We visited one.—and found several drawings of different animals. I copied one of a back thincorons, said by my companion [Doeslay McCabe] to be a very good representable [Doeslay 1664-20]. Which it was designed" (Kennedy 1664-20).

At the time Balnes had not seen a thino, but McCabe had hunted for years in what is today North West Province and Botswans, and he must have been familiar with both species. Lest year, we relocated Balnes' thino rock painting near Reddersburg in the southern Free Statu. Unfortunately, Balnes seeds in unredowing of the thino hard (Fig. 2). We agree with McCabe's identification, as the rock painting shows features 4, 5, 7 and 10.

Comparable Bushman rook paintings of rhinos

1 We provide names of access controlled rock and sites only.

are scarce. The cover of the July 1963 South African Archaeological Bulletin shows a black rhino with calf following from the Soutpansberg in Limpopo Province, with features 3 to 6 (Charteris 2001; species not previously identified). This painting is echoed 1 700 km away in the Cederberg by a well-known rock painting that appears on the June 1958 cover of the Bulletin (Fig. 3; species not previously identified). Battle Cave¹ in KwaZulu-Natal has two strange creatures once thought to represent bushpigs. but which are more likely black rhinos since bushpig tusks do not protrude above the line of the snout (although those of adult male warthou do). Near Molteno in the Eastern Cape, two black rhinos are shown being hunted with spears.



Fig. 3: Red rock painting of black mino with call following Cederberg, Western Cape.

Rock paintings of thinos are more frequent in Limpopo Province, accounting for 15 of the 34 known paintings. Across the Limpopo River, thinos occur at about 10 per cent of Zimbahwean hunther-gathere rock painting sites and they are also noticeable in Botswana's and Namilbia's rock paintings.

When one turns to South African rock engravings there is a dismatic change, Rhinso become the second most commonly depicted animal after eland, is their monumental lifes work, Gerhard and Dora Fock recorded over 500 engraved rhinos in the Northern Case, North West and Free State provinces (e.g. Fock & Fock, 1889), a number that has since more than doubled. The cover of the June 1983 South and of the cological Busidens and the cological Susidens and province that clearly displays features 3 to 8 and Povince that clearly displays features 3 to 8 and

The attention to detail in this and similar rhino engravings is astonishing. One example: the lowered head position of the magnificent charging black rhino (features 3 to 6 and 8) at Bosworth near Klerksdorp is assumed only at the



Fig. 4: Elegant engraved 555 mm charging black rhi Boseorth, North West.

very last moment before impact (Fig. 4), In contrast to the black rhino rock paintings in the Soutpansberg and Cederberg, there is an engraved example of a white rhino with its calf preceding it (Fig. 5) at the famous San's Fountain site west of Kimberley (features 3, 4, 5 and 9). Significantly, rhinos enjoy more attention to detail than any other engraved animal. Some thing engravings have had their outlines rubbed smooth, mimicking the rhino habit of rubbing against rocks to rid themselves of parasites. Flakes were sometimes chipped off rocks bearing rhino engravings, perhaps to keep as relics (Ouzman 2001). Rhino engravings also have numerous 'non-real' elements such as square-neck protrusions, zigzag lips and impossibly long homs that also represent keen observation, but at a supernatural level.

Rhinos as extraordinary animals

Part of the fitno's extraordinariness stems from its 50 mm thick layer of subcutameous fat (Smithers, 1983: 559), Many Bushman communities prized fat as a substance containing Spirit World potency by which they used to ensure the well-being of the world, for example by aiding rain-making (see Block, 1933), it seems as if the ever-observant Bushman at one time or another used the aggressive black thino as an earthy embodiment of the destructive male rain-animal that lived in the Spirit World. Similarly, they seem to have linked the more docile white rhino to the nurturing female rain-animal.

This conceptual linkage is further strengthened by rhinos' habit of wallowing in pools of water, which is also the rain-animal's home, and of giving off copious quantities of sweat from their bodies when running, in the same way the rain-animal was believed to walk the land and give off rain. These observations find visual expression on some engraved rhinos that have been hammered in the midriff in the same way the rain-shamans 'broke the rain's ribs' (Bleek 1933: 387), Fig. 6 takes these insights still further. By cutting the rock and adding two roughpecked homs to a rare pecked and smoothed hippopotamus engraving, a familiar animal is rendered unfamiliar - just like the other-worldly rain-animal. Engravings like these make us realise that they are not depictions of events like rain-making, but objects central to those events. The interplay between belief and observation is best captured in Ogden Nash's dictum: "If you think the elephant proposterous, you've probably never seen a rhingsternus!"

Conclusion

Rhinos were an important part of Bushman life and were engraved and painted with great care. The long process of uncovering the meaning they had for their makers begins with an accurate identification of what is depicted. This routine activity has led to unexpected discoveries, such as the fact that black filing outnumber white thino.



Fig. 5: Rock engraving of a white thino with call preceding it. San's Fountier, Northern Cape

depictions by a factor of at least five, even in the region north of the Vald (He-IGarib) and Ornor (Kai-IGarib) rivers, where both rhines occurred together. Given that rock art occurs through South Africa, the scarcity of white rhino depictions cannot be attributed to the animals' distribution, but must be accounted for by a social mechanism.

Perhaps the violent thunderstorms that typify South African rainfall required the Bushman to pay more attention to the destructive male rain-animal, even to the extent of fixing its earthly embodiment, the black thing, onto/into the rock in what we now call 'rock art'. There, caught between the Ordinary and the Spirit Worlds. these dangerous images were rubbed and their ribs broken to control a destructive force, even at the cost of neglecting the desirable female rain.

Rhinos are ideal animals through which to understand both the ordinary and extraordinary elements of Bushman life. By heeding our Bushman forebears' considered and encultured observations of their environment and by studying relevant ethnography and zoology we may once again integrate seamlessly the natural and cultural worlds.

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Fig. 6: Engraved 'thinopotemus' Stowlands, Free State. Scale bar 30 mm.

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4

er Y chromosome marker. Changes there revealed that the Hadzabe and Bushmen 'are as genetically distant from one another as two populations could be." Both the Bushmen and the Hadzahe appear more similar to the non-click groups than to one another. The researchers dispute the theory that the Bushman and Hadzabe languages arose independently, maintaining that the dialects are too complex.

Ancient roots for an African language?

A genetic study in Africa has revealed that the first human language may have resembled today's African click languages. The proposal is controversial, however, Found only in Africa. click-language users include the Hadza of Tanzania and Botswanan and Namibian Bushmen.

To determine whether click languages emerged from a common tonque, anthropological geneticists at Stanford analysed cells from the cheeks of several African populations for genetic markers on the Y chromosome, which fathers pass on to sons. The more related click speakers are, it was reasoned, the more likely that click languages arose relatively recently. If click speakers are genetically diverse, that could imply that other speakers lost their clicks after the click speakers diverged into separate populations.

About half the Hadzabe (plural of Hadza), a third of the Bushmen and a third of non-click speakers in central Africa share the variant studied, which is not found elsewhere. Limiting their study to just these individuals, the team then looked at anoth-

360-million-year-old fossil fish

.The 360-million-year-old fossil of a species of fish with elegant needle-like spines, previously unknown to science, has been made in a shale deposit near Grahamstown by paleontologist Robert Gess, who has been working on a site exposed by a cutting to reroute the N2 for more than 10 years. Named Diplacanthus acus, the fossil is pnly 100 mm long, but the distinctive narrow spines on its back and stomach make it almost 150 mm from top to bottom. The new specimen is probably the most complete of all the individual fish recovered from the site, with the bulk of its flesh and fin outlines preserved.