

## **The Comparative Analysis of Rock Art in Southern Africa. A Special Interest in the Eland**

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Research has convincingly indicated that there seem to be no link between the choice of animals painted or engraved and the dietary preferences. This argument is supported by the excavation records from various parts of Southern Africa, where the bones recovered do not always match the species of animals on the walls or boulders. Research has further indicated that eland is a spiritually significant animal in South African rock art and even beyond. I intend to investigate and analyse the distribution of the painted and engraved eland images in southern Africa to find out whether it retained its significance throughout the Southern African region. Besides the eland, there are other animal species found in rock art. I wish to investigate, through quantitative representation of animals in Southern African rock art, how and why did they become incorporated into rock art. This investigation might inform us of the possible impact of the environment and culture in making decisions on what got painted or engraved. The fact that there seems to be no strong link between the natural world and the rock art indicates that decisions were made about what was incorporated and what was not. The case study approach will be used to provide an international element. The main aim is to understand my research findings within the global landscape of rock art research.

## **Introduction**

“...I do not present a proper conclusion because this is an impossibility”  
(Tilley 1991: 172)

For many years now, professionals have studied rock art<sup>1</sup> to help improve their understanding of it and the people who made it. Researchers have categorised the art into pre-defined categories, for example humans, animals, geometric signs, which are not always as distinct as one may think. A further distinction is made: of sex and age in animals, and sex and economic activity in the case of humans. Some motifs do not fit any of these categories and are therefore considered either to be indeterminable or therianthropic (half animal and half human). While full certainty cannot be reached at the moment, mainly due to the challenges of dating rock art, the majority of the art body in Southern Africa seems to have been made during the Holocene, although some may be older; for example, Apollo 11 in Namibia has been dated to about 26 000 BP (Volmann 1984: 215; Lewis-Williams 1984: 246; Mazel 1989, 2003, 2007).

As well as categorising the art, researchers have attempted to reconstruct palaeoclimate (Clottes 1989; Layton 1992), ecosystems (Gonzalez-Echegaray 1974), economy and seasonal mobility (Mazel 1989) from the imagery. They have also attempted to provide chronologies for the art, e.g. by assuming the more complex art represents a later date (Lewis-Williams 1983: 28). The meaning of rock art eluded researchers for many years because of earlier assumptions that the art was made by people from elsewhere and thus not of African origin. Even when some agreement started emerging that the art was indeed made by KhoiSan<sup>2</sup>, it was strongly argued that rock art indicates the daily record of people's life, recording what they did and what they saw. While the origins and meaning of rock art was still under dispute, its potential role in providing an insight into how the social aspect of the artists was still acknowledged.

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<sup>1</sup> The scope of the project, covering Southern Africa in general, would include both paintings and engravings.

<sup>2</sup> I feel very uneasy with using the word. This is because the Working Group of Indigenous Minorities in Southern Africa (WIMSA is a council of Bushmen leadership in Southern Africa and a support network for Bushmen community organisations), objects to the term. They also complain about the fact that an 's' for San is always written in a small letter, which dehumanises them. I have thus decided, in the temporal usage of the word, that I would write the 's' to be a capital letter. WIMSA is of the opinion that governments, especially in South Africa, seem to consider Khoi to be more indigenous, as they are fairly represented in various government structures. I have previously preferred the word Bushmen, even though I understand its problems. The uneasiness with such a terminology in this project is that I am covering a much wider area, and including rock art that is known to have been made by the Khoi people. However, where I specifically refer to the art made by the Bushmen, I use the word as is.

In furthering the research into rock art, Patricia Vinnicombe (1972, 1976) and David Lewis-Williams (1981) argued that the use of ethnography in rock art research was inevitable. The use of ethnographic records was encouraged by the processual thinking of the time which challenged the traditional approach to archaeology. They thought that such an ethnographic approach would bring researchers closer to the 'exact' meaning behind the rock art, rather than seeing it as simple depictions relating to hunting magic beliefs and daily experiences. Lewis-Williams claimed to have decoded the meaning behind rock art following the use of the 19<sup>th</sup> century ethnography from the !Xam prisoners, collected by Bleek and Lloyd. Wilhelm Bleek was a linguist who together with his sister in law, Lucy Lloyd worked with Bushman prisoners to get their anthropological and ethnographic insight. Just like the Rosetta Stone was originally written in three scripts used in Egypt at the time of writing, rock art researchers needed a 'Jean-François Champollion' of rock art. Champollion could read both Greek and Coptic, which enabled him to successfully decode hieroglyphs in 1822 (Weissbach 1999). The Rosetta Stone of rock art was to be the 'dying eland' painted at Game Pass Shelter, in the uKhahlamba Drakensberg, an element of which will be part of my research. Through ethnography, researchers attempted to decode the meaning rock art.

Besides the Bleek & Lloyd ethnographic collection, there are two other ethnographic sources; namely, Qing's interview with Orpen and the Kalahari research. These ethnographic sources have proved useful in deciphering the meaning of the rock art imagery (Orpen 1874; Biesele 1980). There have been intense debates on the appropriateness of the Kalahari ethnography, a subject that has been called the Kalahari Revisionist Debate (see Wilmsen 1989). However, the general assumption is that this approach has enabled researchers to look at the art from an 'insider's viewpoint' (Parkington 1989). Compared to the previous 'gaze and guess' approach that searched for the meaning from a subjective outsider's background, the ethnographic approach is considered more objective. However, my opinion is that the use of ethnography does not guarantee subjectivity. It is a different subjective position, which attempts to be close to an indigenous perspective. This methodological approach led researchers to concluding that the art represents a very religious element in the lives of the Bushmen societies. Unlike the 'arts for art's sake' and hunting magic interpretations, most researchers now agree with the shamanistic interpretation, notwithstanding some differences and fiercely argued points of difference.

Since the 1970s, most ethnographic rock art research has been undertaken on the basis of accepting that the art has a religious significance (Vinnicombe 1972, 1976; Lewis-Williams 1981). David Lewis-Williams (1981) has argued that the eland is the most painted antelope in Bushmen rock art. On the basis of the ethnographic records, he has found

that it was central to a number of ritual ceremonies; namely, the boys' first hunting and the girls' puberty ceremony. This study does not intend to dispute the religious significance of the eland amongst some of the first people. The objective is to gain further insight into the complexities behind regional rock art variation. These regional differences may possibly have resulted from the difference in time and space among various sub-cultures who made the art.

Research has convincingly indicated that there seem to be no link between the choice of animals painted or engraved and the dietary preferences. This argument is supported by the excavation records from various parts of Southern Africa, where the bones recovered do not always match the species of animals on the walls or boulders (see Lewis-Williams 1972, 1974; Mazel 1989; Deacon & Deacon 1999). This phenomenon has been noted in other contexts. For example, the local environment of Koolbura and Laura in Australia is similar, but the choices of painted faunal subjects differ extensively. These differences further extend beyond the faunal subject, to the general subject matter and the style of the paintings (Flood 1989: 289–290). In their spatial analysis of about 2010 images of large animals engraved on bone, Patricia Rice and Ann Paterson (1996) compared the animal imagery on the bones with the imagery depicted on the cave walls. The results suggested that the animals whose bones were found were not similar to those frequently depicted in the art. The main explanation for these sharp differences may be culturally determined. In his paper on the comparison of animal art from the Western and Eastern Solomon Islands, Waite (1989: 339) reveals that the choice of animal motifs reflects a cultural preference rather than serving as an indicator of environmental differences between the two areas. The fact that this is a picture emerging at both regional and international level may indicate that the lack of such coherence between imagery and archaeological material does not have to do with preservation challenges (Kinsey 1989: 316). It would therefore seem there were other forces at play. How does the painting or engraving of the eland fit into this argument?

There are three rock art traditions south of the Zambezi and within my research area. These are the hunter-gather rock art by the Bushmen, herder rock art by the KhoiKhoi and the 'Late Whites' rock art of the Bantu people. For practical reasons, my research will only focus on the Bushmen rock art tradition, covering both engravings and paintings.

### **Previous research**

The research on stylistic variation of rock art in Southern Africa is very limited (Willcox 1963, 1984; Lewis-Williams 1983; Coulson & Campbell 2001). Miles Burkitt (1928), whose academic training was in lithic studies,

was the first to undertake a stylistic approach in Southern African rock art research and he identified what he considered to be major geographical art groups within Southern Africa. His research on rock art was very much influenced by his stone tools training. Since then, most researchers have localised rock art research by geographically focusing only on specific areas and provide very little comparison with other known rock art areas within the region (e.g. Rudner & Rudner 1970, Maggs 1967, Willcox 1963, David Lewis-Williams 1983, Pager 1971, Vinnicombe 1976, Parkington 2006, Eastwood & Cnoops 2006, Morris 2002, Garlake 1995, Mguni 2002, Hampson *et al.* 2002).

Peter Garlake, writing in 'The Hunter's Vision: The Prehistoric Art of Zimbabwe' (1995: 33), argued that Frobenius, one of the prominent rock art researchers, 'had wide and more prolonged first-hand field experience of the paintings in Zimbabwe and South Africa than anyone else before or since...no one has yet been in a good position to compare the paintings of the various regions of Southern Africa'. While I am aware this was about fourteen years ago, Anne Solomon (2008: 74) has anchored this sentiment. She has argued that 'since the failure of the 'structuralist' approach to construct style-based chronologies in the earlier 20<sup>th</sup> century, regional (and intra-regional) differences have received little attention'. She went further and argued that stylistic differences are possible markers of divergent traditions and thus warrant further action.

In the recent past, Nhamo (2005) conducted research as part of her Masters Degree at the University of Bergen. Her research was titled 'Out of the labyrinth: an enquiry into the significance of Kudu in San rock art of Zimunya, Manyikaland, Eastern Zimbabwe'. She only focused within one region of Zimbabwe and I am intending to look at the greater Southern African region. Ancila Nhamo is currently registered for her PhD Degree with the University of Zimbabwe and her research project is 'Characterizing hunter-gatherer rock art: an analysis of spatial variation of motifs in the prehistoric rock art of Zimbabwe'. It is a continuation on her interest in regional variation of rock art.

### **Research problem**

Any variation studies can be formulated with two intentions: to develop both spatial and chronological variation. As indicated above, we have not fully accounted for the spatial variation of rock art in Southern Africa. I am also of the opinion that the biggest challenge in addressing this concern is the fact that the social aspect in the Bleek and Lloyd ethnography is missing. There is a greater focus on the spiritual beliefs of the people who made the art, and fewer details about many other social aspects, such as relationship amongst the different groups who made the art.

While ethnography has given an insight into the possible meaning of rock art, style has been used by most international rock art researchers to study spatial variation of rock art. Some researchers even believe that 'Without style, we have nothing to talk about' (Whitley 1990: 23). But style is the big challenge. There is no concise agreement on what style is. The interpretation of style differs from one research project to another and the debates on the use of style in rock art and archaeology have been fully recorded elsewhere (Childe 1951; Wobst 1977; Conkey 1978; Conkey & Hastorf 1990; Hodder 1978, 1979, 1982; Wiessner 1982, 1983, 1985; Sackett 1982, 1985, 1986; Kimes *et. al.* 1982; Gamble 1982; Jochim 1983).

It has been previously assumed that it is possible to delimit boundaries. Such boundaries could then be explained along tribal, linguistics, geological, geographic (Peterson 1976: 61; Lewis 1988: 85) and political terms. However, this is not an easy process. It may be the reason why rock art variation studies have not formed a great part of research in Southern African region. The fact that Bushmen rock art is also technically similar (fine line paintings and the three techniques of rock engravings) is another challenge in clearly identifying geographic lines of differences. This problem is not only limited within Southern Africa. Davidson (1937: 133, 138–9) attempted to identify rock art regions in Australia. The five regions he found had an extensive overlap but were also impermanent.

The interpretation of stylistic findings is also questionable. Two different styles do not necessarily indicate different societies. One society might be represented by more than one style because of social class, gender and function among its members. Secondly, two different social groups might leave within the same geographic space and thus it is possible that a particular style may emerge (Hodder 1978). How a researcher confidently identifies this on the rock art is important to consider (see Childe 1951). But how do we confidently identify material culture to be an identity marker? Amongst the difficulties of using style to demarcate social boundaries is that at what level can the analysed stylistic be understood? Does it represent household, community, a tribe? Could it be a result of technical limitations imposed to the artists, e.g. the materials and tools used? Boundaries may also be blurred, depending on the social relations of various people at a particular geographic landscape (Barth 1969).

The current body of ethnographic literature applied in rock art research is geographically limited as it also does not fully cover the geographic spread of the region. The !Xham prisoners interviewed by Wilhelm Bleek and Lucy Lloyd were from the central interior. According to Willis (2002: 736), the Bleek and Lloyd ethnography is mainly about mythology and gender relations. The great focus on the religious and gender aspect of rock art provides a significant limitation in fully understanding other aspects of rock art production or example, the relationship amongst different social groups

credited for being the artists. This missing aspect of the ethnography has therefore deprived researchers of an opportunity to understand the cultural differences that might be behind regional rock art variation.

Using ethnographic records collected by other parties provides another challenge. Lewis Binford (1983) argued that archaeologists using the ethnoarchaeological approach should collect the relevant data they need for the specific aims and purposes built into their research. To support his argument, Binford argued that ethnographers collecting data for archaeologists often have different aims and purpose. Their concern is normally with a range of issues and not so much about the link of human activities and archaeological material (see also Johnson 1999: 52, 53; Greene 247).

While the points above are not meant to completely discredit the use of ethnography, it is important to understand the aims and objectives of the ethnographer at the time of collection, as this would reflect the kind of questions they ask during the collection of data. However, what Binford (1983) does not acknowledge, is that communities are continuously changing. It is still significant to compare different sets of ethnographic records collected over time to analyse such a periodically distant element in the memory of today's societies. If we do not have an insight from past records, we might never get closer to the truth (verisimilitude), as Popper (1934) would have said.

While changes do occur daily, there are elements which continue through change, enabling societies to tolerate the subsequent new changes (Olsen 1989: 417). In rock art, this is expressed by the continual use of certain images through time. The changes of the imagery may indicate social and economic aspects. Similarly, some images serving as a common denominator would connect artists from different social and culturally distinct groups into one 'Super Group'. The distribution of eland, whether painted or engraved, is not quantitatively uniform within all the rock art regions in Southern Africa. What could have influenced such preferential decisions is not immediately clear and should be investigated. I argue that this may indicate regional preferences by the different societal groups, making a statement about their identity.

In shaping this project looking at the distribution of eland and the analysis of the emerging distribution pattern in Southern Africa, I have two main research questions. Following from these questions are two aims and their supporting objectives. These are outlined below:

### **Research questions**

1. Does a Pan-San cosmology exist?
2. To what extent are different animals present in the art from different regions?

### **Aims and objectives**

1. Investigate the distribution of painted and engraved eland in Southern Africa.
  - a) Define the rock art regional areas in Southern Africa.
  - b) Explore whether eland imagery is found in all the regions.
  - c) Establish the stylistic and numerical patterns in the representations of eland in the regions.
2. Analyse the reasons for the distribution.
  - a) Investigate the occurrence of eland throughout the regions.
  - b) Investigate the occurrence of other animals in the art throughout the regions.
  - c) Critically evaluate whether environmental factors have had any influence.
  - d) Consider other explanations for the occurrence of specific animals in the art of the specific regions.
3. Assess the existence of a Pan-San cosmology
  - a) Assess the extent to which the evidence from 1. and 2. support the idea of a Pan-San cosmology
  - b) Consider alternative explanations for the patterning observed through 1. and 2.
4. Compare the research findings with case studies from other international rock art regions to provide a broader understanding.

### **Methodology**

Every research is founded on the basis of methodology, which then become a common denominator in how the research is conducted and the results presented. The preferred methodology must rhyme with the nature of the research to be undertaken. Providing a clear indication of the methodology used enables for a critical review of the research findings. This is important in understanding how the conclusions were reached. Any work that criticises previous research must start at the same assumptions



made by the work being reviewed. My research is founded on the same principles and relevant data will be collected for interpretation to help address the research questions, aims and objectives.

It is often questioned which is the best approach to regional spatial variation studies between the stylistic criteria or the presence and absence of motifs. Having discussed the challenges with using the stylistic criteria earlier, I intend to use the presence and absence of motifs in a particular geographic location. This means focusing on the content to record what can be seen and not be seen. The quantitative representation of such motifs will be noted. I intend to use quantitative analysis to establish rock art variation within Southern Africa and to ascertain the dominant fauna within the various rock art regions. I will then list the ten most dominant fauna from each rock art region. The list will be chronologically structured, from the most represented animal motif to the least quantitatively represented motif. The aim will be to generate a comparative understanding between the groups of animals from different regions. Such analysis might give an indication of what could have led to them being the chosen ones.

In interpreting the list of such motifs, I will consider a number of factors. These are: physical attributes, behaviour, context (are they painted in herds or in isolation), local environmental and the current un/availability of the natural species in the environment. Southern Africa has two climatic zones, the west and the east (Tyson & Preston-Whyte 2000). Could this have had an effect on the rock art produced?

Having developed the spatial variation and quantities of various animal motifs, I will then explore if there is any correlation between the spread of painted or engraved imagery with the natural spread of mammals in Southern Africa. The natural spread of various animals will be mapped against the rock art regions. The intention is to develop whether natural factors can at all be used as a first reasoning for the presence of regional differences in rock art, as the result of micro-environmental differences within the study area.

To enable me to have adequate data, for the quantitative analysis, I would consult various databases: the Namibian database from the University of Cologne's Africa Research Institute of Prehistoric Archaeology, the South African Rock Art Digital Archive (SARADA) database from the Rock Art Research Institute. The Andrew Mellon Funded SARADA database includes not only the RARI database of historical documents, photographs, tracings, sketches, redrawing and slides, it also includes private and institutional collections. Amongst these are the collections of the Natal Museum, National Museum (Bloemfontein), Iziko Museums of Cape Town, Analysis of Rock Art of Lesotho (ARAL) project,

University of South Africa, University of Cape Town, Cornelia Kleinitz's (private collection), University of Cologne and Janette Deacon (private collection). The two databases, namely SARADA and the University of Cologne, cover an extensive geographic footprint of Southern Africa. Besides these databases, I am also consulting previous publications which provide quantitative details from various parts of Southern Africa.

Quantitative studies in rock art proved unsuccessful because it was not providing researchers with a convincing understanding of why the imagery was made. However, if appropriate questions are asked, quantitative analysis might still prove to be of some use especially in this research project.

In studying the technique of using colour, I shall note the colours used for the rock art paintings. Colour is, however, not a reliable variable for conservation reasons but may still become very useful in my research project. Rock art paintings and engravings have been fading for various human and natural reasons and the rate of deterioration is not the same.

In order to study rock art chronological variation; I will use the Harrix matrix tool, focusing on the painted animals. The findings will be discussed together with those previously recorded in the UDP and Barkly East. Direct comparison is not ideal, because they are based on the use of different variables, but I hope there could be a general pattern enough for comparison. I intend to use three variables, namely, action, head type and sex. Previous research has focused on colour and its combination in a motif (mono, bi, and poly) and I shall also use it even though it is a problematic variable. I am hoping that the four variables will indicate whether there is a change on animal preference along the sequences identified.

The emerging picture from the Southern African region will be compared with international case studies. The comparison would focus on the morphology (i.e. are they mammals, wild or domesticated animals, etc). The general trend indicates that the hunting game was the most preferred, with few predators painted, i.e. the natural distribution of eagles in the Brandberg is widely known, but has not been found in the imagery record (Lenssen-Erz, personal communication, 2008). What could have encouraged this scenario?

## **Conclusion**

Lack of regional approach to rock art research, as discussed in the paper, has led to a tendency to have a 'blanket' interpretation. The premise for any research seems to be a conclusion that rock art was made for religious purposes and nothing but the spiritual belief motivated people in the decisions they made about the rock art. Our investigation of the past over a

vast geographic area should not be limited only to the similarities across, but should also consider the differences. Such differences should not be lumped under the same explanation.

In demonstrating the challenges with making generalised statement about past communities, Judith Sealy (2006), has successfully demonstrated distinct economic differences amongst two hunter-gatherer communities that lived within 14m from each other. How can we then expect rock art and the reasons explaining it to have been common throughout? It is not my intension to provide a conclusive interpretation of the regional variation of rock art because this is an impossible task. No one can and should claim to have 'best lenses' for viewing and interpreting the past.

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