

Universidade de Trás-os-Montes e Alto Douro

Analysis of the Management of Twyfelfontein World Heritage Site, Namibia

Tese de Doutoramento em
Quaternario: Materias e Culturas

Nome do candidato: Emma Imalwa

Nome dos orientadores: Prof. Dr. Luis Miguel Oosterbeek
Dr. Fernando Coimbra



Vila Real, April 2016

Universidade de Trás-os-Montes e Alto Douro

**Analysis of the Management of Twyfelfontein World Heritage
Site, Namibia**

Tese de Doutoramento em
Quaternario: Materias e Culturas

Nome do candidato: Emma Imalwa

Nome dos orientadores: Prof. Dr. Luis Miguel Oosterbeek
Dr. Fernando Coimbra

Composição do Júri:

Prof^ª Dr^a Maria Helena Paiva Henriques, Arguente

Prof. Dr. Luís Mota Figueira, Arguente

Prof. Dr. Artur Abreu Sá

Prof. Dr. Davide Francesco Delfino

Prof. Dr. Luiz Miguel Oosterbeek, Orientador

Vila Real, 2016

DECLARATION

I declare that this thesis is my own work and has not made of sources or means other than those stated.

.....

Emma Imalwa

ABSTRACT

Cultural heritage sites designated as World Heritage are amongst key tourism attractions in the world. Visitor use of World Heritage Sites has strained the capabilities of heritage organizations to protect and present the outstanding universal values for which a site was inscribed onto the World Heritage List. Recognition of the challenges facing World Heritage Sites has forced an assessment of their management and the recognition for better knowledge about their status and the effectiveness of their management strategies. In addition the management of these sites is crucial as they have an economic basis in tourism and have an academic function in safeguarding the heritage database. Like most African countries, Namibia has recognised the importance of sustainably managing its cultural heritage resources to ensure its transmission to future generations.

While the notion of sustainability forms a vital part of decision making for any cultural heritage project, the balance between the present and future uses of cultural heritage sites are often complicated by political, social and economic considerations. Cultural heritage management in Namibia has primarily been concerned with research of rock art sites and other archaeological sites and the preservation of such sites and other monuments by means of heritage legislation. While the research on the archaeological record of Namibia has been instrumental in documenting the archaeological heritage of the country, such research has shed very little light on the complexities of managing cultural heritage sites.

The study explores the management of cultural heritage resources in Namibia using Twyfelfontein World Heritage Site as an example. The site was inscribed onto the World Heritage List in 2007 for its exceptional rock art heritage. With more than two thousand images, the site has the largest concentration of rock art engravings in southern Africa. Twyfelfontein is one of the most visited rock art sites in southern Africa with up to 50 000 visitors a year, a figure comparable to the Niaux Cave in France. The site's management is a crucial issue, as the site does not only have to confirm to national management guidelines but also international ones like the World Heritage Convention.

Rock art tourism is a highly vulnerable heritage of broad public interest, only sustainable within an effective management framework. Given that many view World Heritage Sites as

models of managerial excellence and learning platforms for managers of other protected areas, it is therefore assumed that if effectively and efficiently managed there is a significant opportunity for Twyfelfontein to impact the state of conservation of other cultural protected sites in Namibia. The main objective of the study is to analyze the approach to the management of Twyfelfontein as a cultural heritage resource. In particular the thesis aims to present an overview of how Twyfelfontein is managed by the National Heritage Council and the challenges faced by the institution in executing its mandate for better conservation and utilisation of the site.

The study recommends the evaluation of five management processes namely: conservation, visitor management, interpretation, and stakeholder involvement and documentation management. These five management processes represent some of the main issues presented by international organizations such as UNESCO, but also because they respond to sustainable principles of managing World Heritage sites. The five management processes along with their selected indicators were evaluated according to a developed set of criteria. The field of cultural heritage is abundant of specialized literature as well as various charters and conventions, and it is on the basis of a number of these that the indicators for the present evaluation were developed. The study is also informed by the opinions of three heritage practitioners and the local community through a series of interviews. In addition to that, the opinions of the local tour guides and visitors were also sought after through a completion of two different questionnaires.

The analysis reveals that the challenges facing the management of Twyfelfontein World Heritage Site is mainly an institutional problem. It appears that the National Heritage Council has no clear criteria guiding its decisions on the management of the site and other rock art sites in the country. Site management is weak which stems from a failure to fully recognise the significance of the site past its economic value and failure to introduce new heritage management practices. The thesis also reveals that heritage as a concept on its own is not sustainable. The site has to be managed as part of a larger complex cultural environmental context. The success of the site will depend to a great extent on strategic planning, management structures that promote research and stakeholder involvement.

Keywords: Twyfelfontein, World Heritage, Namibia, heritage management, rock art, National Heritage Council

RESUMO

Os sítios culturais designados como Património Mundial estão entre as principais atrações turísticas do mundo. O uso do Património Mundial pelos visitantes gera tensões às organizações do património, sobre as suas possibilidades de proteção e apresentação dos valores universais excepcionais pelos quais um sítio foi inscrito na Lista do Património Mundial. O reconhecimento dos desafios locais do património mundial tem forçado uma avaliação da sua gestão e o seu reconhecimento para uma melhor compreensão do seu estado e da eficácia das suas estratégias de gestão. Além disso, a gestão destes sítios é crucial, pois eles têm uma base económica no turismo e têm uma função académica na salvaguarda da base de dados do património.

Como a maioria dos países africanos, a Namíbia reconheceu a importância de gerir de forma sustentável os seus recursos de património cultural para garantir a sua transmissão às gerações futuras. Ao mesmo tempo que a noção de sustentabilidade constitui uma parte vital do processo de decisão para qualquer projeto de património cultural, o equilíbrio entre as utilizações atuais e futuras do património cultural são muitas vezes complicadas por considerações políticas, sociais e económicas. A gestão do património cultural na Namíbia preocupou-se essencialmente com a pesquisa de sítios de arte rupestre e outros sítios arqueológicos e com a preservação desses sítios e outros monumentos através da legislação de património. Enquanto a pesquisa sobre o registro arqueológico da Namíbia tem sido fundamental para documentar o património arqueológico do País, essa investigação tem derramado muito pouca luz sobre as complexidades de gestão de sítios de património cultural.

O estudo explora a gestão dos recursos de património cultural na Namíbia usando o Património Mundial de Twyfelfontein como um exemplo. O sítio foi inscrito na Lista do Património Mundial em 2007 pelo seu excepcional património de arte rupestre. Com mais de duas mil imagens, o sítio tem a maior concentração de gravuras rupestres da África Austral. Twyfelfontein é um dos sítios de arte rupestre mais visitados na África Austral, com até 50 000 visitantes por ano, um número comparável aos dos visitantes da gruta de Niaux em França. A gestão do sítio é uma questão crucial, dado que não só tem que se adequar às diretrizes nacionais de gestão, mas também às orientações internacionais, como a Convenção do Património Mundial.

Dado que muitos sítios do Património Mundial são vistos como modelos de excelência de gestão e plataformas de aprendizagem para gestores de outras áreas protegidas, e, portanto, percecionados como tendo uma gestão eficaz e eficiente, existe uma oportunidade significativa para Twyfelfontein impactar no estado de conservação de outras zonas culturais protegidas na Namíbia. O principal objetivo do estudo é analisar a abordagem à gestão de Twyfelfontein como um recurso de património cultural. Em particular, a tese tem como objetivo apresentar uma visão geral de como Twyfelfontein é gerido pelo Conselho de Património Nacional e os desafios enfrentados pela instituição na execução do seu mandato para uma melhor conservação e utilização do sítio.

O estudo recomenda a avaliação de cinco processos de gestão, a saber: conservação, gestão de visitantes, interpretação e participação dos interessados e gestão da documentação. Estes cinco processos de gestão representam algumas das principais questões apresentadas por organizações internacionais como a UNESCO, mas também respondem a princípios sustentáveis de gestão de sítios do Património Mundial. Os cinco processos de gestão, juntamente com seus indicadores selecionados, foram avaliados de acordo com um conjunto de critérios.

O domínio do património cultural é abundante em termos de literatura especializada, bem como de várias cartas e convenções, e é nesta base que os indicadores para a presente avaliação foram desenvolvidos. O estudo também é informado pelas opiniões de três profissionais do património e da comunidade local, através de uma série de entrevistas. Além disso, as opiniões dos guias turísticos locais e dos visitantes também foram recolhidas com recurso a dois questionários diferentes.

O turismo de arte rupestre envolve uma herança altamente vulnerável de amplo interesse público, que só é sustentável dentro de um quadro de gestão eficaz. A análise revela que os desafios que se colocam à gestão do Património Mundial de Twyfelfontein são principalmente de ordem institucional. O Conselho Nacional do Património parece não ter critérios claros que orientem as suas decisões sobre a gestão do sítio e de outros locais de arte rupestre no País. A gestão do sítio é fraca, o que decorre de uma falha em reconhecer plenamente a importância do local para além do seu valor económico e da não introdução de novas práticas de gestão de

património. A tese também revela que o património como um conceito por si só não é sustentável. O sítio tem de ser gerido como parte de um mais amplo complexo contexto cultural ambiental. O sucesso do sítio dependerá, em grande medida, do planeamento estratégico e de estruturas de gestão que promovam a investigação e o envolvimento das partes interessadas.

Palavras-chave: Twyfelfontein, Património Mundial, Namíbia, gestão do património, arte rupestre, National Heritage Council

ACKNOWLEDGEMENTS

Firstly I would like to take this opportunity to thank Professor. Oosterbeek for my acceptance into the Doutoramento em Quaternario: Materiais e Culturas program at the University of Tras-Os-Montes e Alto Douro. Furthermore I would like to thank him for the encouragement received throughout the period of my study. I would like to sincerely thank Dr. F. Coimbra for his expert guidance and advise without which this thesis would have never been completed.

I also would like to thank Dr. Jeremy Sylvester an expert on Namibian cultural heritage issues for his support and guidance received from him throughout the period of my study. His insights and ideas have made the study an interesting learning experience and provided food for thought.

At this time I would also like to express my gratitude to the staff of the National Museum of Namibia for their assistance, in particular I would like to extend this gratitude to Mrs. Esther Moombola-/Goagoses, Head of the National Museum of Namibia for her support and encouragement during my study. I would like to express my gratitude to the Government of Namibia for providing me with the necessary financial aid which made it possible to carry out my research. Finally my thanks goes to my family for allowing me to undertake this study and bearing with during this time.

Contents

DECLARATION	iii
ABSTRACT	iv
RESUMO	vi
ACKNOWLEDGEMENTS	ix
LIST OF ILLUSTRATIONS	xix
Tables	xix
Figures	xx
LIST OF ABBREVIATIONS	xxiii
CHAPTER 1. INTRODUCTION	1
1.1. Background	1
1.2. Defining the problem.....	2
1.3. Research aims	3
1.4. Significance of the study	4
1.5. Thesis overview.....	5
CHAPTER 2. CULTURAL HERITAGE MANAGEMENT IN NAMIBIA	8
2.1. South African heritage legislation pre-independence.....	8
2.1.1. The Bushmen Relics Protection Act of 1911	9
2.1.2. Natural, Historical and Monuments Act of 1923	10
2.1.3. Natural and Historical Monuments Relics and Antiques of 1934	10
2.2. Cultural heritage management in Namibia.....	12
2.2.1. Cultural heritage management in colonial Namibia	12
2.2.2. Cultural heritage management in apartheid Namibia	13
2.2.2.1. National Monuments Act of 1969	13
2.2.2.2. National Monuments Council.....	14
2.2.2.2.1. <i>The permit system</i>	15
2.2.3. Cultural heritage management in an independent Namibia.....	16
2.2.3.1. National Monuments Council of Namibia.....	17
2.2.3.2. National Heritage Act of 2004	18
2.2.3.2.1. <i>National Heritage Council</i>	20
2.2.3.2.2. <i>The National Heritage Register</i>	20
2.2.3.2.3. <i>Nomination of heritage places and objects</i> ...	21

2.2.3.2.4.	<i>Conservation areas</i>	22
2.3.	International law as a tool for cultural heritage management	22
2.3.1.	Principle international cultural heritage policy documents	23
2.3.1.1.	Sixth International Congress of Architects, Madrid 1904	23
2.3.1.2.	Athens Conference of 1931	23
2.3.1.3.	The Venice Charter 1964.....	23
2.3.2.	World Heritage Convention	24
2.3.2.1.	The World Heritage Committee	25
2.3.2.2.	Outstanding universal value	26
2.3.2.3.	Significance of the Convention	26
2.3.2.4.	Weaknesses of the Convention.....	28
2.3.2.5.	The World Heritage Convention and Africa	29
2.4.	Summary	30
CHAPTER 3. TWYFELFONTEIN WORLD HERITAGE SITE		32
3.1.	Location.....	33
3.1.1.	Brief history of the Odendaal Commission	33
3.2.	Name of Twyfelfontein	35
3.3.	Twyfelfontein local community	35
3.3.1.	Anthropological research on Namibian communities	36
3.4.	Physical aspect of Twyfelfontein	36
3.4.1.	Geology	36
3.4.1.1.	Twyfelfontein Formation.....	38
3.4.2.	Climatic data.....	38
3.4.2.1.	Rainfall	39
3.4.2.2.	Temperature.....	40
3.4.3.	Flora	40
3.4.4.	Fauna	40
3.5.	Rock art	41
3.5.1.	Rock engravings	42
3.5.1.1.	Subject matter.....	43
3.5.1.2.	Engraving techniques	45
3.5.2.	Rock paintings	46
3.6.	Excavations	48

3.6.1.	Material culture	49
3.7.	Administrative Framework of Management	50
3.7.1.	Cultural significance.....	51
3.7.2.	Site ownership	52
3.7.3.	Site management	52
3.7.3.1.	Management of Twyfelfontein before 1990	53
3.7.3.2.	Management of Twyfelfontein after 1990.....	54
3.7.3.2.1.	<i>Local community management</i>	54
3.7.3.2.2.	<i>Visitor numbers</i>	55
3.7.3.2.3.	<i>Rehabilitation</i>	55
3.8.	Summary	59
CHAPTER 4. METHODOLOGY		61
4.1.	Framework for analysing the management processes	61
4.2.	Data collection strategies.....	62
4.2.1.	Literature review	63
4.2.2.	Field work.....	63
4.2.2.1.	Non-participant observation	64
4.2.2.1.1.	<i>Visitor observation</i>	64
4.2.2.1.2.	<i>Local tour guide observations</i>	65
4.2.2.2.	Interviews	65
4.2.2.2.1.	<i>Heritage practitioners interviews</i>	66
4.2.2.2.2.	<i>Local community interviews</i>	67
4.2.2.3.	Questionnaires	69
4.2.2.3.1.	<i>Visitor questionnaire</i>	70
4.2.2.3.2.	<i>Visitor comments</i>	71
4.2.2.3.3.	<i>Local tour guide questionnaire</i>	71
4.3.	Scoring criteria for the management processes	72
4.4.	Summary	72
CHAPTER 5. HERITAGE MANAGEMENT PROCESSES.....		73
5.1.	Conservation.....	74
5.1.1.	Monitoring.....	75
5.1.2.	Maintenance	76
5.1.3.	Conservation interventions	77

5.2.	Visitor management	78
5.2.1.	Visitor data collection	79
5.2.2.	Visitor facilities	79
5.2.3.	Monitoring and research of visitor impacts	80
5.3.	Interpretation	80
5.3.1.	Control of interpretation	81
5.3.2.	Interpretative techniques	81
5.3.3.	Staff training	82
5.4.	Stakeholder involvement	83
5.4.1.	Communication with stakeholders	84
5.4.2.	Local community involvement	84
5.4.3.	Socio-economic development	85
5.5.	Documentation management	86
5.5.1.	Archive maintenance	87
5.5.2.	Public accessibility	88
5.5.3.	Computerization	88
5.6.	Summary	88
CHAPTER 6.	ROCK ART MANAGEMENT IN NAMIBIA	89
6.1.	Southern African rock art distribution	90
6.2.	Brief history of rock art research in Namibia	91
6.2.1.	Reinhardt Maack	91
6.2.2.	Henri Breuil	92
6.2.3.	Ernest Rudolph Scherz	92
6.2.4.	Harald Pager	93
6.3.	Rock art distribution in Namibia	94
6.4.	Authorship of Namibian rock art	95
6.5.	Age of Namibian rock art	96
6.6.	Rock art management strategies in Namibia	98
6.6.1.	Cultural heritage institutions	99
6.6.2.	Conservation interventions	99
6.6.3.	Tour guides	100
6.6.4.	Awareness	101
6.6.5.	Heritage inspectors	101

6.7.	Challenges of managing rock art sites.....	102
6.7.1.	Weak institutional capacities.....	102
6.7.1.1.	Ineffective ways of administering the sites	103
6.7.1.2.	Lack of heritage legislation enforcement	104
6.7.1.3.	Resource constraints.....	104
6.7.1.4.	Monitoring and maintenance programmes	106
6.7.1.5.	Centralized management of rock art sites.....	107
6.7.2.	Political ideology.....	108
6.8.	Summary	109
CHAPTER 7.	FINDINGS.....	111
7.1.	Performance indices for conservation evaluation.....	111
7.1.1.	Monitoring.....	111
7.1.2.	Maintenance	113
7.1.3.	Conservation interventions.....	114
7.1.3.1.	National Heritage Act of 2004	114
7.1.3.2.	Physical conservation interventions	115
7.1.3.3.	Admission fee.....	118
7.2.	Performance indices for visitor management evaluation	118
7.2.1.	Visitor data collection	119
7.2.1.1.	Visitor numbers	119
7.2.1.2.	Nationality	120
7.2.1.3.	Seasonality.....	121
7.2.1.4.	Visitor age	121
7.2.1.5.	Visitor comments.....	122
7.2.2.	Visitor facilities	124
7.2.3.	Monitoring and research of visitor impacts.....	126
7.2.3.1.	Signage	127
7.3.	Performance indices for interpretation evaluation.....	128
7.3.1.	Control of interpretation.....	129
7.3.1.1.	Significance of the site	129
7.3.1.2.	Ownership of the site.....	130
7.3.2.	Interpretative Techniques	132
7.3.2.1.	On-site interpretation.....	132

7.3.2.2.	Sources of information	133
7.3.3.	Staff training	134
7.3.3.1.	Authorship	135
7.3.3.2.	Local guide knowledge and presentation of the site.....	136
7.4.	Performance indices for stakeholder involvement	138
7.4.1.	Communication with stakeholders	138
7.4.2.	Local community involvement.....	139
7.4.3.	Socio-economic development	141
7.4.3.1.	Employment	141
7.4.3.2.	Infrastructure	142
7.5.	Performance indices for documentation management.....	143
7.5.1.	Archive maintenance	144
7.5.2.	Public accessibility	144
7.5.3.	Computerization	144
7.6.	Performance indices of management processes by heritage practitioners.....	145
7.6.1.	Performance indices by National Heritage Council archaeologist	145
7.6.2.	Performance indices by UNESCO Program Specialist for Culture.....	146
7.6.3.	Performance indices by site manager	147
7.7.	Conclusion.....	147
CHAPTER 8. RECOMMENDATIONS AND CONCLUSION		148
8.1.	Recommendations for the management of Twyfelfontein	148
8.1.1.	Evaluation and review of the existing management plan	149
8.1.2.	Site monitoring	150
8.1.3.	Documentation	151
8.1.4.	Human resource management and staff capacity building	152
8.1.5.	Stakeholder outreach and engagement	153
8.1.6.	Community involvement and benefits.....	154
8.1.7.	Awareness creation.....	155
8.1.7.1.	Public awareness	155
8.1.7.2.	Political awareness	156
8.1.7.3.	Diverse interpretation techniques	157
8.1.8.	Monitoring and research of visitor impacts.....	158
8.1.9.	Alternative conservation measures.....	159

8.2. Recommendations for future research.....	160
8.3. Conclusion.....	161
BIBLIOGRAPHY	162
APPENDICES	175
Appendix 1: Indicators and Scoring for Management Processes by the Author	176
Appendix 2: Interview with National Heritage Council Archaeologist	178
Appendix 3: Interview with UNESCO Program Specialist for Culture in Namibia	182
Appendix 4: Interview with Twyfelfontein Site Manager.....	188
Appendix 5: Survey Interview with Local Community	191
Appendix 6 : Visitor Questionnaire.....	193
Appendix 7 : Twyfelfontein Guide Questionnaire	196
Appendix 8: Visitor numbers to Twyfelfontein 2007 to 2013	197

LIST OF ILLUSTRATIONS

Tables

Table 2.1: Rock art sites declared national monuments by the Historical Monuments Commission	13
Table 4.1 Scoring criteria for performance of management processes by heritage practitioners, visitors, local community and local tour guides	70
Table 5.1: Heritage management processes and their indicators evaluated by the author	74
Table 7.1: Performance indices for conservation indicators by the author	111
Table 7.2 Entrance fee for Twyfelfontein	118
Table 7.3 Performance indices for visitor management evaluation by the author	119
Table 7.4: Performance indices for interpretation evaluation by the author	128
Table 7.5: Visitors' responses to Twyfelfontein guides local on rock art.....	137
Table 7.6 Performance indices for stakeholder involvement evaluation by the author	138
Table 7.7: Performance indices for documentation management indicators evaluation by the author	144
Table 7.8: Management processes evaluation by heritage practitioner	145

Figures

Figure 3.1: Location of Namibia's two World Heritages: Twyfelfontein and Namib Sea Sand	32
Figure 3.2: Political map of Namibia showing its 14 regions	34
Figure 3.3: General geological map of Twyfelfontein.....	37
Figure 3.4: Map showing climatic regions of Namibia.....	39
Figure 3.5: Engraving of cattle in the Twyfelfontein core area	43
Figure 3.6: Weathered rock engravings	43
Figure 3.7: Rock art panel in the buffer zone with engravings of different kinds of animals	44
Figure 3.8: Engraving of giraffe in the core area	45
Figure 3.9: Dancing kudu rock art panel in the core area	46
Figure 3.10: Zwei Schneider rock art painting shelter	47
Figure 3.11: Paintings inside the Zwei Schneider rock art shelter	48
Figure 3.12: Ostrich eggshell beads and discs from Affenfelsen.....	50
Figure 3.13: Twyfelfontein visitor centre	57
Figure 3.14: Two shaded resting areas at the site	57
Figure 3.15: Viewing platform at dancing kudu rock art panel	58
Figure 3.16: Twyfelfontein tour guide	59
Figure 3.17: Cashier at the reception	59
Figure 4.1: Framework for accessing the management of protected areas	61

Figure 6.1: Distribution of rock art sites in southern Africa	90
Figure 6.2: White lady painting	92
Figure 6.3: The main distribution of rock art sites in Namibia	95
Figure 6.4: Two of the seven Quartzite slab depicting animal	97
Figure 6.5: Apollo 11 Cave interior before the excavation that revealed the painted slabs.....	98
Figure 7.1: Photograph with torn plastic covering	113
Figure 7.2: Visitor's opinion on site maintenance	114
Figure 7.3: Pathway on the dancing kudu route constructed using gabions	116
Figure 7.4: External tour guide vehicle entering prohibited area	117
Figure 7.5: Tour groups often consist of more than 10 people	117
Figure 7.6: Visitor numbers for Twyfelfontein from January 2007 to December 2013	120
Figure 7.7: Visitor age profile	122
Figure 7.8: Type age group of visitors to Twyfelfontein	122
Figure 7.9: Shaded car park.....	124
Figure 7.10: The craft area	125
Figure 7.11: Visitor opinions on state of visitor facilities.....	126
Figure 7.12: Information boards at site entrance.....	127
Figure 7.13: Figure 7.1.2 One of the sealed off rock art panels.....	128
Figure 7.14: Site values assigned to the site by visitors, local guides and local community .	130
Figure 7.15: Responses to site ownership by visitors, local guides and local community	131

Figure 7.16: Visitors responses as to how they learned about Twyfelfontein	134
Figure 7.17: Authorship of Twyfelfontein rock art.....	136
Figure 7.18: Figure 7.1.3 Lion's mouth	138
Figure 7.19: Typical house at Twyfelfontein	143

LIST OF ABBREVIATIONS

EIA: Environmental Impact Assessment

LSA: Late Stone Age

ICOMOS: International Council on Monuments and Sites

ICCROM: International Centre for the Study of the Preservation and Restoration of Cultural Property

IUCN: International Union for Conservation of Nature

MBEC: Ministry of Basic Education and Culture

MET: Ministry of Environment and Tourism

MYNSSC: Ministry of Youth, National Service, Sport and Culture

NHC: National Heritage Council

NMC: National Monuments Council

NTDP: Namibian Tourism Development Programme

SADC: Southern African Development Community

SAHRA: South African Heritage Resource Agency

SANS: South African National Society

SARAP: Southern African Rock-Art Project

SWA: South West Africa

UNESCO: United Nations Educational, Scientific and Cultural Organisation

CHAPTER 1. INTRODUCTION

1.1. Background

There is increasing evidence of a serious breakdown of many protected areas which are currently being destroyed and degraded (Hockings *et al.*, 2000). Some only remain secure by virtue of their remoteness. The current concerns with the conservation of archaeological sites amongst the public and professionals alike have become an important theme in current discussions because these resources are deteriorating at an increasing rate. This deterioration is because of a wide array of causes, ranging from neglect and poor management to increased visitation, from inappropriate past treatments to deferred maintenance. Recent pressures from economic benefits from tourism activities have also accelerated damage to many archaeological sites unprepared for development and visitation.

Archaeological sites have long been part of heritage, certainly before the use of the term “heritage” and the formal study of tourism. Recognition of the problems facing archaeological sites especially those of conservation importance has forced an assessment of their management and the recognition for better knowledge about their status and the effectiveness of management. According to Hockings *et al.*, (2000) the management of a site is influenced by contextual issues; and in the case of a protected area by its significance and uniqueness, and the threats and opportunities that it faces. The conservation and management of any archaeological sites through a new field of professional endeavour, is becoming a crucial aspect of modern archaeological research. This is because of its importance such as having an ideological basis in establishing cultural identity, linked with its educational function, it also has an economic basis in tourism and has an academic function in safeguarding the cultural heritage database.

Thus, most countries in the world are becoming more and more aware of the importance of better managing and preserving their archaeological heritage and have passed legislation to protect this heritage. In southern Africa the uncontrolled export of San or Bushmen rock paintings and engravings and the realisation that the San people were no longer painting or engraving and that existing rock art was vulnerable to deterioration led to the passing of

heritage legislation. The establishment of this legislation in the region was identified as a key strategy to conserving and protecting rock art. The development of heritage legislation allowed for some rock art sites of national conservation importance to be declared national monuments.

A recent phenomenon in most developing countries is the listing of rock art sites and other archaeological sites of outstanding universal value as World Heritage. This listing is meant to bring in extra tourists to the sites or attract more government and agency support for the maintenance of the sites' values. However on closer inspection it is apparent that there are other implications of World Heritage Listing, including uses of the site, new regulatory structures, changed economic flow and the politics of heritage. These issues can be collectively examined as issues that arise as a result of the listing of the site.

1.2. Defining the problem

In most southern African countries studies linked to the management of rock art sites are often concerned with those sites imbued with sacred values in places like Domboshava (Pwiti 1996; Pwiti and Mvenge 1996; Taruvinga 2001; Taruvinga and Ndoro 2003) and Tsodilo Hill in Botswana (Thebe 2006) and how these traditional methods need to be incorporated into the management of such sites. The argument for using traditional methods or a combination of both (traditional and preservationist methods) stems from the argument that the preservationist method which is used primarily in rock art management, mostly focuses on the physical management of rock art sites has not produced tenable results. Although the management of rock art sites in Namibia is hardly complicated by issues of living heritage, their management as well as the management of other archaeological sites and collections remains a problem.

In Namibia rock art sites are particularly vulnerable because of weak institutional capacities to enforce heritage legislation and implement site management plans. Namibia has seen an increase in the number of visitors at major rock art sites such as Twyfelfontein and the Brandberg since its independence in 1990. The increase in the number of people visiting has been relevant in creating local employment through the employment of locals as tour guides.

However the increase in visitor numbers to these rock art sites has had significant consequences on the fragile environments and the rock art itself especially in the absence of proactive management protocols.

Twyfelfontein, the Brandberg and the Spitzkoppe where for a long time controlled by local community tourism enterprises and to this day, the Spitzkoppe remains for the most part still under the control of the local community. Community management of rock art sites of national and conservation importance arose from weak heritage institutional capacities such as the lack of site management by the national heritage institution at the time, the National Monuments Council (NMC), to actively assert its role as the national heritage custodian and failure to enforce heritage legislation. On the other hand a profit driven industry of community based tourism that derive income from visitor fees was for partly to blame for the deterioration at Twyfelfontein ten years ago.

The community-based management system at Twyfelfontein proved inadequate to manage and conserve the site; footpaths had become severely eroded which threatened to destabilize important rock art panels. In addition to that the absence of visitor facilities such as toilets resulted in much of the site being badly polluted. It is then in light of the past challenges experienced at Twyfelfontein that this dissertation embarks to explore the current management strategies of the site. Given that Twyfelfontein is a World Heritage Site, its management is a crucial issue, as the site does not only have to confirm to national management guidelines but also international ones like the World Heritage Convention. It is argued that unless the site is well managed it is not likely to guard the values that it was declared a World Heritage site. Effective management is a vital tool for the conservation of rock art for future generations (Abungu 2006).

1.3. Research aims

Once an archaeological site has been open to the public, different sets of management questions arise. A site that is chosen for public use must be equipped with management measures that will ensure that any increase in visitor numbers will have a minimum impact on the cultural resource and its surrounding environment. According to Hockings *et al.*, (2000)

the management of a site is influenced by contextual issues; and in the case of a protected area by its significance and uniqueness, and the threats and opportunities that it faces. Tourism at rock art sites therefore remains an issue of ongoing debate.

The growth of tourism in any form is usually encouraged by most governments, particularly in developing countries because of the expectations that it will contribute to economic development of the areas (Hall 1995). Very little thought is given to the impacts of tourism on the cultural heritage resources such as rock art sites. While tourism is a substantial income generator which could assist with the conservation of the site and create local employment opportunities, it can also pose a threat to the integrity, authenticity, preservation, and management of such sites.

The hypothesis of this thesis is that the World Heritage status of Twyfelfontein is insufficient for sustainable heritage management, and that a combination of research and stakeholder involvement is the basis for such sustainability. In terms of enabling the management of public rock art sites, the present dissertation aims to examine the current state of rock art management in Namibia. Specifically the dissertation aims to present a detailed analysis of how Twyfelfontein is managed by the National Heritage Council (NHC)¹, and the challenges faced by the NHC in executing its mandate.

1.4. Significance of the study

Although there has been a great detail of research on rock art in Namibia (particularly in the Brandberg), very little research on the management of these sites has been conducted. Like most countries in Africa, Namibia have no source of information of how rock art sites of outstanding conservation importance such as Twyfelfontein are being managed. Coupled with that is often a poor understanding about what sustainable management means.

This dissertation is significance for the following reasons:

¹ The National Heritage Council is the official heritage conservation body of Namibia which was established under the National Heritage Act No.28 of 2004

1. The analysis of management of Twyfelfontein will highlight the significant changes that have taken place at the site since its inscription as a World Heritage site in 2007
2. The study attempts to give a general overview of the strengths and weaknesses of the managing the site and outline areas that need improvements
3. The study will propose possible solutions for Twyfelfontein to improve its resilience for tourism
4. The study will contribute the national and international literature on cultural heritage management in Namibia

1.5. Thesis overview

The dissertation is divided into eight chapters. Following the background information, the statement of the problem, research objectives and significance of the study discussed in **Chapter 1**, **Chapter 2** examines the number of ideological changes that have come about during the different political periods in Namibia have significantly defined cultural heritage management and provided a foundation for managing cultural heritage resources in the country today.

However before discussing the developments in cultural heritage management in Namibia, the evolution of heritage legislation in apartheid South Africa is also discussed in **Chapter 2**. The genesis of the Namibian heritage legislation is inextricably connected to that of South African and in order to understand the development of heritage legislation in Namibia it is important to review such developments in South Africa. The discussion on Heritage legislation in independent Namibia follows and focuses on heritage legislation operating in the country and the heritage institutions tasked with managing heritage in Namibia from 1990.

International heritage laws are also discussed in **Chapter 2**; first by briefly discussing the principle charters and conferences relating to conservation and management of cultural heritage sites that gave rise to the World Heritage Convention. An understanding of the World

Heritage Convention is significant given the fact that Twyfelfontein is a World Heritage Site, which means that the site does not only conform to national management guidelines but also those of the Convention.

Chapter 3 introduces the area of study. First the history of Twyfelfontein in terms of the origins of the name of the site and its historical settlement history is briefly presented. This discussion is followed by a discussion of the physical aspects of the site (geology, climate, vegetation and fauna). A brief discussion on the archaeological background and rock art of Twyfelfontein follows and this is intended to give the reader an idea of the archaeological background of the site.

Finally some important characteristics of Twyfelfontein are presented namely: cultural significance, ownership, and management framework and protection activities. The protection activities presented here are those that took place prior to 1990, the year of Namibian independence, and those that took after 2004 when the National Heritage Act was enacted.

Chapter 4 is dedicated to the methodological approaches used to analyse the management of Twyfelfontein World Heritage Site. Here the data collection strategies such as interviews, questionnaires and personal observation are discussed and the author explains why they were chosen thus providing a foundation for the results obtained.

Chapter 5 presents the five management processes evaluated in this study along with their chosen indicators. The five management processes evaluated in this study are: conservation, visitor management, interpretation, stakeholder involvement and documentation management were evaluated at Twyfelfontein. These processes were chosen because these are some of the main issues presented by international organisations such as UNESCO but also because they respond to sustainable principles of managing world cultural heritage sites. The field of cultural heritage is abundant of specialised literature as well as various charters, conventions etc., and it is on the basis of a number of these that the indicators for the present evaluation were developed.

The aim of **Chapter 6** is to give the reader a background on the management of rock art sites in Namibia. The chapter starts off by giving a brief introduction of the distribution of rock art in the world and southern Africa. This is then followed with a brief discussion about the distribution of rock art, authorship, early rock art research and age of Namibian rock art. Mention of the age of the country's rock art is necessary in order to be able to place the art in a regional as well as an international context. The author then discusses the management of rock art in Namibia by looking at the different strategies employed in the management of this cultural heritage resource during the colonial, apartheid and post-colonial eras. The chapter concludes by discussing some of the challenges which are associated with managing rock art sites in the country.

In **Chapter 7** the findings of the five management processes evaluated in the study for are presented and commented upon. In the conclusion issues affecting the management of the site are present briefly.

Chapter 8 provides a summary of the purpose of the study. In this chapter recommendations related to the conservation and management of Twyfelfontein and beyond are suggested. The chapter also recommends future research topics.

CHAPTER 2. CULTURAL HERITAGE MANAGEMENT IN NAMIBIA

Cultural heritage management encompasses a broad range of issues related to the protection, preservation, and use of cultural heritage resources. Cultural heritage management developed in response to the many threats to cultural heritage sites for instance poor management; increased visitation, inappropriate past treatments and deferred maintenance. Means and methods of mitigating the impact on cultural heritage sites have been developed such as the development and implementation of policy and legislation (both national and international); collection and management of data; and the education and training of professionals and the public.

O’Keefe and Prott (1984) note that, despite a notion that the inherent value of items or places of cultural heritage should be itself a bar to prevent harm to that heritage, the realities and dangers facing cultural heritage in general require some level of governmental inversion, generally through legislation. According to Deacon (1997a), the legal protection of cultural heritage sites through heritage legislation appears as one of the strongest mechanisms for the conservation of heritage places. In a broad sense, heritage legislation therefore becomes a behaviour and practice, as well as mechanism for punishing non-complying actions or behaviour.

2.1. South African heritage legislation pre-independence

An assumption is often made that the care and protection of archaeological heritage resources in Africa was introduced only during the colonial times. However the fact that Europeans found many archaeological sites well preserved is the result of both natural preservation factors and philosophies of most traditional African societies based mainly around certain cultural practices (Ndoro 2001, 2003, 2005; Mumma 2003, 2005; Jopela 2010a, 2010b,; Eboreime 2009; Ndlovu 2011). It is important to note however that not all sites enjoyed the same level of protection, with protection being directed almost exclusively to those sites associated with ritual ceremonies (Ndoro 2005; Mahachi and Kamuhangire 2009; Ndoro and Kiriama 2009).

Although pre-colonial Africa had extensive systems in place to control access to important archaeological sites, the European colonizers failed to recognise these traditional management systems and their role in preserving the sites. With colonization, formal management systems for managing archaeological heritage resources were introduced throughout the African continent (Ndoro and Pwiti 1999, 2001; Négri 2009). This means archaeological sites became government property with the introduction of protective heritage legislation (Said 1999; Smith 2004).

The transfer of ownership of cultural property to government departments such as museums therefore meant that local communities no longer had legal access to such sites (Ndoro 2001; Ndlovu 2011). Public knowledge of archaeological findings in southern African was concentrated amongst the European settlers while in the African reserves (homelands) an awareness of archaeological heritage management issues, as articulated in the protective legislation remained unknown (Ndoro 2005).

2.1.1. The Bushmen Relics Protection Act of 1911

In South Africa the practice of managing cultural heritage resources dates to 1911. In 1911 the Bushmen Relics Protection Act (no. 22 of 1911) was passed to control the export of Bushman rock paintings and engravings to Europe and other parts of South Africa (Abrahams 1989; Rudner 1989; Deacon 1991, 1993a, 1997a; Deacon and Pistorius 1996; Tötemeyer 1999). The act was enacted at the instance of the South African National Society (SANS), (Ndlovu 2005; 2011). The act introduced measures for the protection of Bushmen heritage; which included paintings as well as Bushmen owned contents of graves, caves and shelters and forbade the unauthorised removal or exports of artefacts and introduced penalties for damaging or destroying sites. This act was later adopted in Botswana (Campbell 1998) and Zimbabwe (Ndlovu 2011).

The act did not reflect the country's wider cultural heritage and merely intended for the protection of the cultural heritage of a very small segment of South Africa's population. Anything not considered Bushmen heritage did not fall within the protection realm of this act.

Furthermore the Bushmen Relics Protection Act did not create the mechanisms necessary for administering its provisions and left it to organisations such as SANS and others to monitor and to protect sites. The defects of the act eventually led to the proclamation of the Natural and Historical Monuments Act No. 6 of 1923 which operated alongside the Bushmen Relics Protection Act (Rudner 1989; Deacon 1991, 1993a; Kotze and van Rensburg 2002; Whitelaw 2000, 2005).

2.1.2. Natural, Historical and Monuments Act of 1923

The Historical Monuments Act (no. 6 of 1923) provided further general heritage protection either than what was considered Bushman heritage. Importantly, the act formed a Commission for the Protection of Natural and Historical Monuments of the Union of South Africa. The commission is commonly known as the Historical Monuments Commission and referred to in legislation as the ‘commission’. This was the first body charged with responsibility for South Africa’s heritage. The Commission’s tasks included compiling a register of monuments to be preserved (Deacon 1991, 1993a; Rudner 1989).

The Commission was appointed by the Governor General, who was tasked with creating a register of monuments which in its opinion “ought to be preserved”, and the assessment of the legal ownership of any monument. The definition of ‘monuments’ by the Commission included both natural and cultural heritage which had aesthetic, historical or scientific value (Tötemeyer 1999). Due to a lack of financial assistance from the State, however, the Commission could not declare monuments (Vogt 1995, 2004; Tötemeyer 1999).

2.1.3. Natural and Historical Monuments Relics and Antiques of 1934

The Natural and Historical Monuments, Relics and Antiques Act (no. 4 of 1934) repealed both the Bushmen Relics Protection Act and Natural and Historical Monuments Act. This act re-enacted and amended their provisions in amplified form and provided for the control and export of certain antique objects. The act broadened the scope of sites and objects protected by the Commission to include natural and historical sites and objects, paleontological, archaeological and anthropological materials and antiques. Under this act, the name of the

Commission was changed to the Commission for the Protection of Natural and Historical Monuments, Relics and Antiques but continued to be referred to in legislation as the 'commission'.

This act introduced provision for active protection measures, allowing rock art sites and other sites to become national monuments on recommendation of the commission to the relevant Minister. The proclamation of a site as a national monument is considered the highest recognition given to heritage sites in Southern Africa (Ndoro 2005). The motivation for declaring some sites as national monuments was that such proclamation strengthens protection of these places by providing legal safeguards against destruction, vandalism and encroachment. However the act, later amendments, led to a mere ten rock art sites being declared as national monuments (Deacon 1993a).

It was the policy of the Commission in the early 1950s not to proclaim archaeological sites as national monuments, except in unusual circumstances. The Commission believed that archaeological sites were offered satisfactory protection through general provisions of the Preservation of Natural and Historical Monuments, Relics and Antiques Act (No 4 of 1934) (Deacon 1993a, 1996). Given the open and accessible nature of rock art sites and the lack of state-based conservation measures, vandalism was common. Although the regulatory framework for the protection of cultural heritage was notably enhanced under this act, the scope of protection was still limited to objects and places that in opinion of the Commission were worthy of conservation.

The loop-hole was quickly recognized and led to the Natural Monuments Amendment Act No. 9 of 1937 and Monuments Amendment Act No. 13 of 1967. The Natural Monuments Amendment Act No. 9 of 1937 made provision for rescinding monument status and determining boundaries of monuments (Rudner 1989; Deacon 1991; Whitelaw 2005). It also granted the Commission with powers to confiscate monuments owned but not maintained by local authorities. The Monuments Amendment Act No. 13 of 1967 regulated certain procedures of the Commission extended its powers, recommended the granting subsidies for the purchase or restoration of monuments and gave additional powers to the Minister. The

National Monuments Act No.28 of 1969 repealed earlier legislation and became operational in South Africa and Namibia in 1969.

2.2. Cultural heritage management in Namibia

Formal protection for cultural heritage came late in Namibia. This is not to say that cultural heritage care and protection did not exist in Namibia before the introduction of heritage legislation. The care of graves and sacred objects by various ethnic groups was something that was practised in pre-colonial Namibia and continues to this day. The slowness of the colonial government to act in this area can be partly attributed to that fact that after the fall of German colonial rule² the country was left without ‘government’. There were five years of martial law and then from 1920 the country was administered as a ‘C’ class mandate. During this period time South Africa had the responsibility as a ‘sacred trust of civilization’ of the territory known today as Namibia.

2.2.1. Cultural heritage management in colonial Namibia

In 1948, the South West Africa Scientific Society became the first scientific institution to initiate measures to legally protect Namibia’s cultural heritage through the establishment of the Historical Monuments Commission for South West Africa ³ (SWA) (Tötemeyer 1999; Vogt 1995, 2004; Gwasira 2005). The Scientific Society was also the founder of what is known today as the National Museum of Namibia. The museum was founded in 1907 and became known as the State Museum in 1957. From 1925 and 1957 the State Museum was jointly maintained and developed by Scientific Society and the South West African Administration.

The Historical Monuments Commission managed to preserve a significant number of cultural and natural sites and relics such as historical buildings, rock art sites (table 2.1) and ecologically and several significant biotopes such as the Waterberg Plateau Park, Fish River Canyon and Lake Otjikoto. Several rock art sites were proclaimed national monuments under Act No.9 of 1937 and Ordinance No.13 of 1948. As the Historical Monuments Commission

² Namibia was a colony of the German Empire from 1884-1915

³ South West Africa was the name for modern day Namibia when it was ruled by Germany and later South Africa

was not set up by an act of Parliament, it was without force of statute and was dissolved in 1969 when the National Monuments Act No.28 of 1969 became operational in Namibia.

Site	Gazette No. and date	Nature of Rock Art	Nearest town/ settlement
Phillip's Cave	1575 of 1 st February 1951	Rock paintings	Usakos
Paula's Cave	1581 of 1 st March 1951	Rock paintings	Omaruru
Brandberg	1603 of 1 august 1951	Rock paintings	Uis
Twyfelfontein	1707 of 15 th August 1952	Rock paintings and engravings	Khorixas
Bushmen Paradise Cave	1844 of 1 st July 1954	Rock paintings	Usakos
Etemba Cave	2786 of 1 st May 1967	Rock paintings	Okombahe
Peet Albert's Kopje	2768 of 1 st May 1967	Rock engravings	Kamanjab

Table 2.1: Rock art sites declared national monuments by the Historical Monuments Commission

2.2.2. Cultural heritage management in apartheid Namibia

2.2.2.1. National Monuments Act of 1969

The National Monuments Act (No.28 of 1969) became the first heritage legislation to be adopted in Namibia and operated in the country from 1969 to 2004. The act was used almost immediately in Namibia upon promulgation in the South African Parliament in 1969 and functioned in Namibia as it did in South Africa (Tötemeyer 1999) with minor exceptions. The act provided for different categories of protection of heritage sites. Archaeological, meteorological, paleontological and historical sites older than 50 years old for example received a general 'blanket' protection or protection through a permit system. Under the framework of the National Monuments Act No.28 of 1969, the National Monuments Council (NMC) was instituted in terms of Section 2 of the National Monuments Act which is discussed in 2.2.2.2.

The National Monuments Act was amended various times. The National Monuments Amendment Act (no. 22 of 1970) provided for the exploration of land declared or about to be declared a national monument. National Monuments Amendment Act (no. 35 of 1979) defined the objectives of the NMC to "*preserve and protect the historical and cultural*

heritage, to encourage and promote and the protection of that heritage and coordinate activities in connection with monuments in order for monuments to be retained as tokens of the past and may serve as an inspiration for the future”. It is interesting to note that despite being amended many times, amendments of the Act in Namibia only applied up to 1979. According to Hall (2005) the system for heritage conservation as set out in the NMA although much amended remained fairly rooted in European and specifically pre-war World War II British traditional practices focusing primarily on monumentalism and exclusion of local communities in the managing archaeological resources.

2.2.2.2. National Monuments Council

Under the framework of the National Monuments Act (no.28 of 1969), a regional committee of the NMC was instituted in terms of Section 2 of the National Monuments Act 1969⁴. The Council was composed mainly of the former members of the Historical Monuments Commission (who were exclusively white) and continued to render the same type of heritage service as before (Tötemeyer 1999). Monuments afflicted with settler history were held in high esteem and therefore well preserved and protected. Most of the archaeological sites were proclaimed national monuments in the 1950s under Act No.9 of 1937 with the most recent proclamation of an archaeological site being proclaimed a national monument in 1968. All 47 monuments proclaimed thereafter are of an historical, or rather colonial nature.

In terms of the National Monuments Act No. 28 of 1969, the NMC may declare or provisionally declare to be a monument any site which it considers to worthy of such status and requiring special protection this would bring. The term ‘national monument’ has considerable implications; as it raises the question of what is meant by ‘national’ particularly in country as divided and racially diverse as Namibia. The declaration of sites as national monuments was linked to the interests of heritage personnel who were all white and thus had a political agenda.

Between 1980 and 1986, the State Museum (now the National Museum of Namibia) was responsible for the administration of the NMC (Tötemeyer 1999). In terms of legislation in

⁴ Section 68, National Heritage Act, Government Gazette Republic of Namibia, No. 3361, Windhoek, 29 December 2004

place at the time, this arrangement was illegal. The reason for this is not clear because the Council was the statutory body and not the State Museum. The Council had the framework autonomy and it is still not understood even today why the State Museum took this responsibility. Perhaps the reason in so doing could be that this was a cheaper option until a dedicated budget was established for the Council to establish a secretariat and become an institution, rather than just a committee that met occasionally. The Council received during these years little assistance from the State Museum. In 1986 the Council succeeded in taking up, at least partly, the autonomy it legally had since 1969 and moved to its own office with its own staff (Tötemeyer 1999).

2.2.2.2.1. *The permit system*

The permit system was a method used by the NMC to restrict access to rock art sites. The permit system required all persons entering proclaimed national monuments to acquire a permit from the NMC. Destruction, damage, alternation, excavation or removal from the original site of a feature considered to be heritage resource without a permit from the NMC was considered an offense⁵. Permits were issued free of charge by the NMC if the application is approved by the Council's Scientific Committee today researchers have to pay for permits. The permit system worked well for surveys and excavations that were conducted professionally. At the entrances to the major valleys of the Brandberg; Tsisab, Amis, Numas, there was a board with the inscription "*No entry without a permit, by order, National Monuments Council*".

The permit system lapsed in 1980s due to a lack of trained personnel at the sites who could check whether visitors had permits or not and to supervisor the activities of the visitors. This resulted in further uncontrolled visits to many rock art sites. As a result there were no patrols in the area to enforce the permit requirement, the boards were not maintained and eventually disappeared. The permit system is still in use today but only for persons wishing to carry out research at rock art sites and does not apply to regular visitors. Various amendments were made to the act to expand powers of the NMC to conserve cultural heritage (Abrahams 1989; Rudner 1989; Deacon 1991; Tötemeyer 1999).

⁵ Section 12(2A), National Monuments Act of 1969

2.2.3. Cultural heritage management in an independent Namibia

Although many laws were replaced or amended after independence in 1990, it is impossible to replace all laws at once and as such the Namibian Government adopted many outdated and inappropriate laws and subsidiary regulations from the then apartheid South African regime. The National Monuments Act No.28 Of 1969 as amended until 1979 and remaining in force by virtue of Clause 140 of the Constitution of the Republic of Namibia Section 12, paragraph 3 (a) applies. Article 140(1) of the Namibian Constitution confirms this adoption with the provision that: *‘Subject to the provisions of this Constitution, all laws which were in force immediately before the date of Independence shall remain in force until repealed or amended by Act of Parliament or until they are declared unconstitutional by a competent Court’.*

The loopholes of the National Monuments Act No.28 Of 1969 were acknowledged by the Namibian Government shortly after independence when a draft of the Heritage Bill and the Namibian National Heritage Council Bill, which were compiled in 1994. The draft represented the first large-scale effort to canvass as to what the post-independence definition of Namibian national heritage was, and how it should be protected. Furthermore since South Africa repealed the National Monuments Act in 1999 when the country passed the National Heritage Resources Act of 1999 was an indication of the inadequacy of the act to address serious problems relating to cultural heritage.

Minutes from a meeting held at the Geological Survey of Namibia⁶ in 1995 revealed that the attendees held many concerns regarding the Namibian National Heritage Council Bill. Attention was drawn to the fact that inadequacies of the National Monuments Act had become public knowledge and the exploitation therefore by local and foreign interests was a matter of grave concern. A second issue was the need for agreement on the wide scope of heritage issues which affected a large number of interested groups, and professional bodies in addition to government ministries. It was noted at this meeting that the existing pressures on the government legislative programme and the very small number of legal drafts people available to assist in finalising the new heritage legislation would cause delays.

⁶ Minutes from a meeting held at the Geological Survey of Namibia on 12th April 1995 to discuss national heritage legislation and associated administrative structures

2.2.3.1. National Monuments Council of Namibia

Namibia gained its independence from South Africa in 1990 and this brought another set of political and social changes that affected the management and presentation of cultural heritage. The emphasis was placed on heritage that best served construction of identity that the national state wanted to portray. Under the new Government however, the make-up of the Council underwent change in order to reflect the demographics of the country. The NMC was “*indigenisation*” by the Presidential appointment of seven new “*respectable citizens*” (Tötemeyer 1999; Vogt 2004).

A workshop geared towards the formulation of a new cultural heritage was held in Windhoek from 16-19 May 1994⁷. Comments made by attendees at the workshop revealed to some degree that the newly appointed Council members had an inadequate understanding of the archaeological and cultural heritage issues in the country. Also the then Ministry of Basic Education and Cultural (MBEC) also did not thoroughly understand the powers with which the NMC already had in terms of the National Monuments Act.

Three statements made in the document which support this conclusion:

- The Council is an arm of government⁸
- The Council is an integral part of MBEC⁹
- The National Monuments Council holds a questionable parastatal status¹⁰

In reality however none of these statements were correct. In terms of the National Monuments Act, the NMC is not an arm of the Government, nor is it an integral part of MBEC and it is also not a parastatal. The NMC was actually a statutory body established to serve as the main regulatory body for heritage in Namibia under the National Monuments Act and although the NMC was funded by the government it had independent powers to implement the terms of the

⁷ Title: Workshop towards the Formulation of a New Legislation on Namibia’s Cultural Heritage

⁸ page 8

⁹ page 21

¹⁰ page 22

act. It was clear from these statements that if the legal position of the NMC as legally stipulated in the National Monuments Act was not understood by the Government, it was also to be expected that the general public would also not understand its position. The author is strongly of the opinion that the lack of the full understanding of the National Monuments Act and weakness of the NMC management contributed to the deterioration of the Namibian national cultural heritage at the time.

The allocation of a small budget to the Council was also raised an area of concern. The following recommendations were made to allow the Council to generate its own funds:

- The NMC should move away from the MBEC so that it can directly lobby its own funds from the government.
- The NMC should be able to vigorously generate its own income through donations and gate fees as is the practice in most SADC¹¹ (Southern African Development Community) countries.
- Further on in the report, mention is made of the NMC's need for more autonomy and a minimum of administrative "red tape" and so that it has more "more control over its operational funds" which should include "retaining all the money which it may generate" (p.26).

2.2.3.2. National Heritage Act of 2004

The Namibian Government embarked upon a new chapter in terms of managing its cultural heritage resources when it repealed the National Monuments Act with the passing of the National Heritage Act (no. 27 of 2004¹²) which became operational in 2005. The National Heritage Act is an act "*to provide for the protection and conservation of places and objects of heritage significance and the registration of such places and objects; to establish a National*

¹¹ SADC is a regional economic community which was established in 1992, comprising 15 member states; Angola, Botswana, Democratic Republic of the Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe

¹² National Heritage Act, Government Gazette of the Republic of Namibia, No. 3361, Windhoek: 29 December 2004

Heritage Council; to establish a National Heritage Register; and to provide for incidental matters”¹³.

Under the National Heritage Act, formal protections are similar to those provided by the National Monuments Act for instance, blanket protection for cultural heritage of sites older than 50 years is retained, as is the permit system through which work on these sites is managed. Unless an authorised permit or the National Heritage Council (NMC) has decided that a permit is not enquired, it is an offense for an person to remove, demolish, damage, despoil, develop, alter or excavate, all or any part of protected place¹⁴. A person who contravenes this provision is liable to a fine of up to N\$ 100 000 or to be imprisoned for up to five years, o both the fine and the imprisonment. Existing national monuments will retain their status.

A major departure from previous legislation is the provision made for environmental impact assessment (EIA). Namibia, along with South Africa and Botswana are the only countries in sub-Saharan Africa that have unambiguous provisions for EIA to be carried out prior to the commencement of any major development project. Developers’ are required in terms of the legislation to notify heritage authorities of their intentions for any development over certain specified site categories. The heritage authorities may require that an impact assessment is carried out at the developers' cost.

It is the view of the author that the current heritage legislation is overly legalistic or vague on approaches to protecting cultural heritage especially as it relates to archaeological heritage. The act makes no direct reference to the protection of archaeological heritage and the primary method of protecting any heritage place or object is only through listing of heritage places and objects in the National Heritage Register. The heritage significance criteria stipulated under the act makes no reference to scientific significance at all although research significance is referred to in one criterion. It has been observed that the National Heritage Act does not adequately cover heritage such the living heritage (cultural rituals, practices).

¹³ Act 287 Parliament of Namibia. Government Gazette of the Republic of Namibia, December, 29, 2004

¹⁴ Section 46 National Heritage Act

In Namibia as is the case in all southern African countries there has been improvements in the laws that govern the way archaeological heritage resources are used and protected. However most heritage legislation is silent when it coming to defining the values it seeks to protect (Ndoro and Pwiti 2001; Ndoro 2005). This is because heritage legislation continues to be linked with European ideas of appropriate conservation techniques which exclude other forms of management systems (Cleere 1984, 1989; Said 1999; Hall 2005; Ndoro 2005; Mahachi and Kamuhangire 2009; Négri 2009; Jopela 2010a, 2010b). As a consequence the management of archaeological resources remains highly centralised for the most part and the role of local communities in the management of these resources remains minimal (Chirikure and Pwiti 2008; Chirikure *et al.*, 2010).

2.2.3.2.1. *National Heritage Council*

Under the National Heritage Act, the National Heritage Council of Namibia (NHC) was established and replaced the NMC. The NHC is made up of between seven and fifteen members including the Permanent Secretary responsible for culture, as a body corporate¹⁵. Under the new act the NHC has a broader mandate which includes the establishment of the National Heritage Register, the power to declare a conservation area around a heritage site and to stop any mining or development activities being carried out on an area of land which is believed to be archaeological.

2.2.3.2.2. *The National Heritage Register*

The National Heritage Register which was created on 23 November 2007¹⁶ serves as the national inventory of proclaimed heritage sites and objects. Heritage places may include National Monuments¹⁷, protected places¹⁸ and listed buildings. The national heritage register is more significant for its symbolic value than for the actual power of its protections. The register has not been influential in shaping other heritage listing processes, as most sites remain unreported.

¹⁵ Section 3 to 15

¹⁶ National Heritage Register created, The Namibian Newspaper, 23 November 2007

¹⁷ That is heritage places declared as national monuments under Section 35 of the Act and those which were national monuments immediately before the commencement of the Act by virtue declaration under the National Monuments Act No.28 of 1969

¹⁸ The Act defines “protected place” to mean a place declared and registered as a heritage place under the Act

2.2.3.2.3. *Nomination of heritage places and objects*

Namibia inherited a society that is characterised by social and economic inequalities which were manifested in the unequal regional distribution of officially recognised cultural heritage resources. In light to manifest the unevenness in types of heritage sites acknowledged and promoted, the National Heritage Act recognised the need to re-address this situation. Through the NHC, individuals and communities can nominate sites that they consider to be significant. This allows for the creation of a diverse suite of heritage places and objects other than those that represent only the interest of the state thus reducing the existing imbalance of the current regional distribution of officially recognised cultural heritage resources.

Nomination of a place or object as national heritage must be done in writing to the NHC in a manner approved by the Council, specifying the reasons why the place or objects warrants declaration. Information relating to each place and/or object should be something that is not already known. If the place or object is archaeological in nature the council may accept a nomination of any archaeological object associated with that place or object or unique specimen which includes an archaeological object associated with that place for declaration as an archaeological object. The Council then has to recommend this place or object to the Minister who turn may accept or refuse this proposal.

Although the regulatory framework for the nomination of places and objects as national heritage is notably enhanced under this Act, the scope of protection is still limited to objects and places that in opinion of the NHC and the Minister are worthy of conservation. In reality many people are not aware of this because public nomination of heritage places and objects is concept usually referred to rather than practised. Once a place or object is listed on the inventory by the NHC, the NHC has the right to ‘enter into agreement with the owner with a view to the conservation of its environment’ or its preservation or presentation to members of the public and in agreement with the owner to construct access roads, fences, walls or gates to enclose the site and develop a site management plan.

2.2.3.2.4. *Conservation areas*

The National Heritage Act also empowers the NHC to declare by notice in the Gazette and after consultation with the relevant Ministry, any area defined in the notice to be a conservation area on the grounds of its historic, aesthetic or scientific interest¹⁹. Certain activities:

- a) development which exceeds 10 000 square meters in extent or the estimated cost of which exceeds 2 million;
- b) the construction of a road, wall, power line, pipeline, canal or any other similar form of linear development or barrier exceeding 300 meters in length;
- c) or the construction of a bridge or similar structure exceeding 50 meters in length) may not be undertaken in a conservation area without the permission of the council.

A person wishing to undertake such activities must give the council at least 90 days' notice. Within 30 days of receipt of notice the council must inform that person whether or not the council requires him or her to obtain at his or her expense an environment impact assessment from a person with appropriate professional qualifications or experience.

2.3. International law as a tool for cultural heritage management

This section covers the international legal protection in particular the World Heritage Convention. The author briefly discusses the principle charters and conferences relating to conservation and management of cultural heritage sites that gave rise to the World Heritage Convention. An understanding of the World Heritage Convention is significant given the fact that Twyfelfontein is a World Heritage site, which means that the site does not only conform to national management guidelines but also those of the Convention.

¹⁹ Section 54

2.3.1. Principle international cultural heritage policy documents

2.3.1.1. Sixth International Congress of Architects, Madrid 1904

The recommendations of the Sixth International Congress of Architects of 1904, or more commonly referred to as the Madrid Conference of 1904 prescribed unified principle of urban conservation. The Madrid Conference of 1904 did so by emphasising the importance of minimum intervention in dealing with ruined structures and the finding a functional use for historical building. The document sets forth the principle of unity of style, which encourages restoration according to a single stylistic expression.

2.3.1.2. Athens Conference of 1931

The Athens Conference of 1931 was organised by International Museums Office and was held in Athens in 1931. The conference culminated in the historic Athens Charter of 1931. The Athens Charter proliferated principles for preservation and restoration of ancient buildings. Recommendations of the Athens Conference stated that it is essential that principles guiding the preservation and restoration of ancient building should be agreed upon and be laid down on an international basis, with each country being responsible for applying the plan within the framework of its culture and traditions.

This document therefore introduced important conservation concepts and principles as the idea of a common world heritage, the importance of setting of monuments, and the principle of reintegration of new materials. By defining these principles for the first time, the Athens Charter of 1931 contributed towards the development of an extensive international movement which has assumed concrete form from national documents and was responsible for the establishment of the International Centre for the Study of the Preservation and the Restoration of Cultural Property (ICCROM).

2.3.1.3. The Venice Charter 1964

International Charter for the Conservation and Restoration of Monuments and Site (The Venice Charter) was accepted laying down the international recognition of the importance of protecting monuments from deterioration and other threats in the interest of a common

heritage. It sets forth principles of conservation based on the concept of authenticity and the importance of maintaining the historical and physical context of a site or building. The Venice Charter was the most influential international conservation document for 25 years.

2.3.2. World Heritage Convention

The Convention Concerning the Protection of the World Cultural and Natural Heritage (also known as the World Heritage Convention) is based on the work that started at the 1931 Athens Conference of the League of Nations on the Protection of World Cultural Heritage. The World Heritage Convention was adopted in 1972 by the General Conference of UNESCO. The impetus for World Heritage Convention was, in part, an outgrowth of the international cooperative efforts of the 1960s to save the Abu Simbel temples in Egypt. The temples were to be flooded by the construction of the Aswan Dam would result in the flooding and destruction of many important archaeological sites and treasures in Nubia (O'Keefe and Prott 1984; Munjeri 2009). UNESCO launched an international campaign in which more than 50 states participated in a 50 million US Dollar project to conduct archaeological research, to dismantle the temples and then to move them to higher ground. The success of this project and others helped to strengthen the international consensus on the necessity for an international normative instrument.

The World Heritage Convention (UNESCO 1972) has achieved a great deal since its establishment and today it is among the foremost international tool for conservation and probably the best known. Its success is demonstrated by universal membership. The key message of the Convention is to ensure the identification, protection, conservation, presentation and transmission to future generations of cultural and natural heritage of outstanding universal value to future generations. At a conceptual level, the World Heritage Convention is concerned with the preservation of the heritage values of a place as a whole, rather than just individual elements within a place.

Historically, the World Heritage Convention it is the most important heritage convention for Namibia, as it represents the first adoption of a document of heritage conservation principles by the Namibian Government. The Convention was ratified by the Namibian Parliament on 6

April 2000²⁰. The country is also signatory to the Convention on the Protection and Promotion of the diversity of Cultural Expressions (ratified by Namibian Parliament 2006) and Convention for the Safeguarding of the Intangible Cultural Heritage, 2003 entered into force internationally on 20 April 2006 (ratification approved by Parliament 7 November 2006 and effective from 19 December 2007).

2.3.2.1. The World Heritage Committee

The World Heritage Convention is administered by a World Heritage Committee which was established in 1976. The Committee consists of 21 nation elected from those nations that are party to the Convention. The elections are held every second year. The World Heritage Committee coordinates the process of designating sites through a system known as inscription, which includes an evaluation of the resources by experts against a set of known criteria.

The Committee's main tasks are:

- Define the criteria for inclusion of a property of outstanding universal value on the World Heritage List. Article 11 of the Convention defines that the World Heritage Committee: *“shall establish, keep up to date and publish, under the title of “World Heritage List, “a list of properties forming part of the cultural heritage and natural heritage [...], which it considers as having outstanding universal value in terms of such criteria as it shall have established. An updated list shall be distributed at least every two years.”*
- Prepare and publish a List of World Heritage in Danger. This list includes world heritage properties threatened with destruction, major alternation or abandonment. Each time the committee makes a new entry on the List of World Heritage in Danger it is required to publicise the fact immediately.
- Delete from the World Heritage List those properties that have lost their World Heritage values through damage or deterioration.

²⁰ www.epi.freedom.org/whtrty.html

- Administer the World Heritage Fund

2.3.2.2. Outstanding universal value

While the language of the World Heritage Convention may imply the need for the universal protection for cultural heritage places, its focus is only on those places of outstanding universal value. Outstanding universal value is described as “cultural and/or natural significance which is as exceptional as to transcend national boundaries and to be of common importance for the present and future generations of all humanity” (UNESCO 2005:49). Since 1978 the Operational Guidelines for the Implementation of the World Heritage Convention ²¹ (UNESCO 1999, 2005, 2008) outline the criteria and conditions for the assessment of the outstanding universal value of nominations brought forward by individual states that have ratified the World Heritage Convention.

The definition of outstanding universal value has been subject to much reflection almost since the start of the World Heritage Convention. In 1976, an expert meeting hosted by UNESCO with the Advisory Bodies IUCN²², ICOMOS²³, ICCROM²⁴ considered what was understood by outstanding universal value and produced a first version of criteria to be satisfied in order to demonstrate outstanding universal value. In 2005, a UNESCO Special Expert Meeting in Kazan on the Concept of outstanding universal value affirmed that outstanding universal value is defined by the thinking of the World Heritage Committee, supported by the Advisory Bodies who consider the nomination, at the time of inscription of the property on the World Heritage List and will be subject to evolution over time.

2.3.2.3. Significance of the Convention

Fundamentally, the Convention establishes heritage conservation as an international cooperative duty, rather than something undertaken solely in the national interest. In this regard it can be considered highly successful, as an almost universally adopted instrument which has facilitated international cooperation, although concerns have been raised that the

²¹ The Operational Guidelines were consequently revised over the years.

²² IUCN: International Union for the Conservation of Nature

²³ ICOMOS: International Council of Monuments and Sites

²⁴ ICCROM: International Centre for the Study of the Preservation and Restoration of Cultural Property

lack of follow-up commitment by UNESCO and increased tourism at World Heritage Sites can cause more harm than good. A fundamental element of the World Heritage Convention is that, through cooperation, individual nations can ensure that their respective cultures are not diminished through the loss of cultural property.

To achieve the proper management of World Heritage Sites, the Convention places binding obligations that all signatory nations to the Convention to enact domestic legalisation to ensure the Convention can be implemented within the signatory nation, although such arrangements vary (O'Keefe 2000, 2002). This is an important issue, not just in relation to tourism but in relation to all activities within the country that may affect a World Heritage Site as far as the management and protection is concerned.

While the Convention is not principally concerned with archaeological heritage, it however establishes key principles for its protection. By requiring States Parties to manage the process of archaeological investigation within their borders, it puts archaeology into a class of discipline to be regulated, much as any other. It moves archaeology out of a remote, academic framework into the essential business of government. And as a part of the business of government, it inevitably touches on the lives of the citizens of signatory nations, making the protection of cultural property a general societal concern. The latter half of the clause identifies the importance of archaeological sites remaining in situ, that is, in their original location.

This statement therefore acknowledges archaeological sites as drawing at least some of their inherent worth from their original location; relocating archaeological relics and monuments to museums and other cultural institutions is therefore not always appropriate. While the majority of the remainder of the Convention does not specifically mention archaeological sites or relics, the duty to prevent the illicit transfer of a range of cultural objects is clearly spelled out by the Convention. The last Article requiring specific mention in relation to archaeology is Article 10, which in part requires antique dealers to establish a register of provenance for all cultural property in which they deal. Clause 10 (b) however, relates specifically to the States Parties' responsibility with respect to the education of the public, to

“create and develop in the public mind a realisation of the value of cultural property and the threat to the cultural heritage created by theft, clandestine excavations and illicit exports.”

2.3.2.4. Weaknesses of the Convention

It is UNESCO's primary belief that the inscription of heritage properties under the World Heritage label enables adjustments of unfavourable preservation developments. In reality however the World Heritage Convention offers little specific protection for cultural heritage especially where its destruction may be intentional. Thus in circumstances where the responsible State Party chooses to act in a manner which is contrary to the conservation of a World Heritage Place; there is little the international community can do in a legal sense. Undoubtedly the most dramatic recent example of this was the destruction of the giant Buddas in Bamiyan, Afghanistan which despite being inscribed on the World Heritage List and international protestations, were destroyed by the ruling government of the time.

Signature to the Convention is merely an indication that the State Party regards the text as correct regarding what has been agreed upon. UNESCO's Declaration Concerning the Intentional Destruction of Cultural Property (UNESCO 2003), explains “*cultural heritage is an important component of the cultural identity of communities, groups, and individuals, and thus...its intentional destruction may have adverse consequences, not just related to buildings and landscapes, but also to members of a community and their traditions and values.*” The List of World Heritage in Danger is the major tool of moral suasion to persuade governments to take appropriate action to limit harm, but there is no mechanism to compel action. Sanctions, if any, are a matter left to domestic legislation.

While the effectiveness and relevance of the World Heritage Convention has been the subject of debate, as a document of principle it remains influential in the formation of domestic heritage legislation. The choice of a single legal instrument for the protection of the world's cultural heritage was optimistic to say at best, because the policy carried out in the two domains were unequally developed in their motivations and principles. Furthermore the Convention is however restricted to cultural property within government control (such as that

located in museums and state institutions) and does not deal with cultural property which is privately held. The intangible aspect of world heritage sites are not considered

2.3.2.5. The World Heritage Convention and Africa

Although most African countries have signed the 1972 World Heritage Convention, the African continent has itself the smallest number of sites inscribed onto the World Heritage List. The continent's extremely rich and varied cultural heritage is not well represented on the World Heritage List. By 1995 only 17 African properties were represented on the World Heritage List. By 2008 the Convention had been ratified by 183 States out of 192 Member States of the United Nations, forty-three of which are from sub-Saharan Africa (Munjeri 2009). Today there are 120 world heritage sites in Africa of which 35 are inscribed for their outstanding natural qualities, while 80 are listed as cultural sites and an additional five satisfy both natural and cultural criteria²⁵.

During the 1980s, the implementation of the 1972 Convention was accompanied by an attempt to systematically standardise the nominations. This standardisation, the advantages of which should be acknowledged, entailed nevertheless a certain number of drawbacks. In fact, the forms drawn up at that time by the World Heritage Committee in agreement with the Secretariat of UNESCO, with ICOMOS, and with ICCROM responded in essence to the requirements of developed countries having had long experience in the management of the monuments, the groups of buildings, and the sites in their physical heritage.

The inscription procedures provided for by the Operational Guidelines have for a long time been inadequate for conditions in African countries. The failure of international laws to take into account some of Africa's perspective on heritage has resulted in most international laws and regulatory mechanisms, particularly those of UNESCO and ICOMOS, not being successfully implemented in many African countries. Crucial steps have been taken towards the recognition of the intangible values of indigenous people (e.g. its adoption as a criterion for listing cultural landscapes).

²⁵ www.africanworldheritagesites.org

2.4. Summary

The aim of heritage legislation has largely been to define aspects of the cultural heritage resources in order to protect them. Legislation symbolises the importance of something to society. Where laws exist to protect such things on paper, each thing is noted as having a value to society. In fact, in the absence of legislation, the situation might be that cultural heritage in particular archaeological heritage would be specifically viewed as not being valued, and thereby be potentially more subject to threat. Cultural heritage legislation therefore serves a useful purpose, as it reinforces society's value for the physical remains of its past and ensures that past is protected. In the absence of these laws, it is unlikely that moral force alone would prevent transgressions (deliberate or accidental) against the cultural heritage.

Today cultural heritage sites in southern Africa are protected under the same general legislation (Ndoro and Pwiti 2001; Ndoro 2005). Heritage legislation in the region is fairly uniform in terms of objectives, definitions, forms of ownership, actions or practices permitted or prohibited and sanctions (Hall 2005; Ndoro 2005). The author is of the opinion that this uniformity in national legislation across the region is a consequence of South Africa's improvement in the conservation and management of its cultural heritage resources. Namibia's National Heritage Act No. 27 of 2004 for example was heavily influenced by the South African National Heritage Resources Act No.25 of 1999.

The number of ideological changes that has come about in different political periods have significantly defined cultural heritage management and provided a foundation for managing cultural heritage resources in Namibia today. The author argues that many of the problems which have arisen from the management of cultural heritage resources stem from the manner in which the legislation has been implemented. The Namibian cultural heritage management regime, past and present, has never made specific provision for the protection of archaeological heritage and included local community.

The passing of the National Heritage Act No. 27 of 2004 in Namibia was based on the good intentions of the Namibian Government, but it faces a number of challenges. Regulations,

appointments and declarations made under the National Monuments Act survive under the National Heritage Act. These regulations do not replace or repeal any regulations which have been made in terms of the previous National Monuments Act No.28 of 1969 for instance blanket protection for sites older than 50 years is retained, including archaeological and paleontological sites as well as meteorites (of any age) as is the permit system through which work on these sites is managed and artefacts can be exported within and out of the country.

Institutional incapacity to provide proper site management, as well as external factors is still a stumbling block to the successful implementation of heritage legislation and as a result archaeological heritage is still threatened. It should be stressed here that these challenges are not unique to Namibia. The current legislation is overly legalistic or vague on approaches to protecting archaeological heritage. The National Heritage Act makes no direct reference to the protection of archaeological heritage and the primary method of protecting any heritage place or object is only through listing on the National Heritage Register. The heritage significance criteria stipulated under the Act make no reference to scientific significance at all although research significance is referred to in one criterion.

When laws are made, they capture moments in time and should be revisited as society changes. The significance of a site or object is not absolute, but variable and socially determined. Although the Namibian government has recognised the importance of Namibia's archaeological heritage and provides a protective mechanism which may be used to protect that heritage in certain circumstances, few fundamental changes have actually occurred in the body of Namibian heritage law since 1969.

CHAPTER 3. TWYFELFONTEIN WORLD HERITAGE SITE

The aim of this chapter is to provide the reader with basic knowledge about Twyfelfontein World Heritage Site. There is little known about the consequence of the development of cultural heritage tourism in Namibia especially at its two World Heritage sites - Twyfelfontein which was inscribed onto the World Heritage List on 28th June 2007 and the other natural-Namib Sand Sea which was inscribed onto the World Heritage List in 2013 (fig.3.1²⁶).



Figure 3.1: Location of Namibia's two World Heritages: Twyfelfontein and Namib Sea Sand

There are in addition other sites that have been placed on Tentative List²⁷: Brandberg National Monument Area, the Fish River Canyon and the Welwitschia Plains between the Swakop and Khan Rivers. These tentative list sites all owe at least in part of their value to the underlying geology and geomorphology. The fact the Namibia would like to have more sites nominated

²⁶ www.audleyblog.com/2013/06/24/namib-sand-sea-declared-world-heritage-site/

²⁷ The Namibian tentative list for world heritage sites was composed in 2002

as World Heritage in the future, it is important to have an idea how the country's first World Heritage site is being managed.

3.1. Location

Twyfelfontein World Heritage Site is located in the Khorixas Constituency of the Kunene Region of north-western Namibia. The rock art site is approximately 480km north-west of Windhoek (Namibia's capital city), and about 90km west of the town of Khorixas which is the nearest urban centre. The site falls within the boundaries of the Twyfelfontein-Uibasen Conservancy. Twyfelfontein is located in an area formally known as Damaraland. The term Damaraland is a colonial construction, a result of South African enforcement policies of apartheid in Namibia. The former Damaraland roughly comprised an area today covered by south-western part of the Kunene Region and the northern half of the Erongo Region (Forrest 1998).

3.1.1. Brief history of the Odendaal Commission

Namibian independence in 1990 resulted in the country being restructured into fourteen administrative regions²⁸ (fig.3.2) and the term Damaraland ceased to be a formal region. However the term Damaraland is still frequently used to refer to a geographical area, although administratively it has no purpose. Between 1921 and 1990 Namibia was under white South African colonial rule²⁹, but up about the 1960s South Africa had allowed the white Namibians to build and development government institutions, however plans were made to claim the direct running of the entire Namibian bureaucracy (Forrest 1998).

In September 1962 the South African Prime Minister Hendrik Verwoerd appointed a commission called the Odendaal Commission to investigate the social and economic conditions of Namibia (du Pisani 1986). The objective of the Commission was to ingrate the territory of Namibia more closely with South Africa. The Commission presented a report in

²⁸ Zambezi Region, Erongo Region, Hardap Region, !Karas Region, Kavango East Region, Kavango West Region, Kunene Region, Ohangwena Region, Omaheke Region, Khomas Region, Otjozondjupa Region, Omusati Region, Oshana Region, Oshikoto Region

²⁹ Prior to this Namibia (then called Sudwest-Afrika or South West Afrika) had been a German colony. In 1921 the League of Nations granted South Africa a formal mandate to administer South West Africa

1964³⁰ which recommended that the South African system of ethnic institutional segregation or apartheid should be extended to Namibia as well in order to administer the native reserve areas in the territory. It was argued that integration of the various ethnic groups would lead to social unrest and tribal violence and the result would be a lack of progress (Bruwer 1966; Forrest 1998). Namibian communal areas were then divided into ten separate homelands. It also believed that some migrations to these homelands was voluntary because of the promise for self-governance.



Figure 3.2: Political map of Namibia showing its 14 regions³¹

In reality however their powers were very limited and the headmen were appointed by South African authorities (Forrest 1998). Many people living in urban areas were forcefully removed; forcing people to live in reserves also meant the many people were forced to become migrant labourers. The Twyfelfontein land was transferred to communal use for

³⁰ Title: Report of Enquiry into South West African Affairs, 1962-1963

³¹ www.ezilon.com/maps/africa/namibia-maps.html

Damara people in 1964 on the recommendation of the Odendaal Commission. But no farmers came forward to make use of the land and it lay abandoned for many years. Following Namibian independence in 1990, the land became State Land under the Ministry of Lands, Resettlement and Rehabilitation.

3.2. Name of Twyfelfontein

The name Twyfelfontein is a relatively new name for a very old fresh water spring known to early Damara people who lived in the area as /Ui-//aes (among packed stones). In the 1940s, when the area opened up for farming, the Twyfelfontein land was granted on licence to the farmer David Levin. At that time of Levin's arrival, a few Damara people lived close to the spring in 32 huts (Kinahan and Kinahan 2006; Kinahan 2010).

Levin named the place Twyfelfontein (Krynauw 1968) which means “doubtful fountain” in the Afrikaans language. The name Twyfelfontein was registered in 1951. Today Twyfelfontein or /Ui-//aes are the official names proposed by Namibia. Today the name Twyfelfontein refers to the spring itself, to the valley containing the spring, and in the context of travelling and tourism also to a greater area containing nearby tourist attractions: the rock engravings, the Organ Pipes, Burnt Mountain, Dorros crater, and the Petrified Forest.

3.3. Twyfelfontein local community

Laow Inn settlement is the closest community to the Twyfelfontein World Heritage Site. Laow Inn is located some eight or nine kilometres from the rock art site. The name Laow Inn originated from a small shop and bar established in 1990s by a man nicknamed Laow and it soon became the name of the settlement. Laow Inn was originally a cattle post to the farm Blaauwpoort, but it became a permanent settlement due to job opportunities in tourism. The Laow Inn community is very small, consisting of about seventy-five households, which amounts to about three hundred people. However this number varies as some people are only here on a part basis, spending the rest of the time in Khorixas and on family farms.

3.3.1. Anthropological research on Namibian communities

Unlike many other communities in southern Africa residing close to archaeological sites, the Laow Inn community is not over studied. In fact many of the people (including the headman of the village/ local community) appreciated the fact that someone was taking an interest in them and their feelings about the management of the site. Anthropologically research on Namibian communities has tended to focus on small marginalised groups of people such as the Ova-Himba and the so called Bushmen people, who are well represented in literature, while others have received little anthropological attention.

Early on, the Bushmen were viewed as objects of study internationally because of their way of life as 'primitive' hunter-gatherers representing some kind of Stone Age remnants. It was also easy to get permission to study the Bushmen during the colonial times since the colonial administrators did not perceive these people to be in a position to threaten the colonial authorities (Gordon 1992, 2000; Ndlovu 2005; 2011). In later years much anthropological attention was been directed towards the study of the Ova-Himba groups who due to both geographical and political isolation to a high degree have preserved major parts of their traditional life styles. Between 1975 and 2000, more than half of all PhDs completed on Namibian subjects have concerned the Ova-Himba and Koakoveld. The survival of the cultures of these marginalised people are threatened by the increase in tourism in their areas and anthropological studies are seen as an absolute necessity in order to document as much as possible about their lifestyles of these groups.

3.4. Physical aspect of Twyfelfontein

Here the geology of the Twyfelfontein area, its climate, flora and fauna are discussed.

3.4.1. Geology

Twyfelfontein lies in a valley running northwards and carrying a small tributary of the Huab River, the Aba Huab River. The Huab Basin is a marginal rift basin, recording Karoo and Post-Karoo sediments (Horsthemke *et al.*, 1990). In the Huab area, Karoo sediments are represented by the Permian-Triassic Gai-As and Doros formations (Stanistreet and Stollenhof

1999) whereas post-Karoo deposits include the Cretaceous Etendeka Group (Twyfelfontein Formation, Awahab, and Tafelberg formations) (Milner *et al.*, 1994).

The Karoo sequence began with an extensive glaciation event during the Permo-Carboniferous Dwyka phase. As the glaciers retreated about 280 million years, large spreads of sand and shales were laid down. From 200 to 170 million years ago, an arid phase led to the deposition of sands, some of which now cap the Waterberg Plateau and the Etjo sandstones or now known as the Twyfelfontein sandstone.

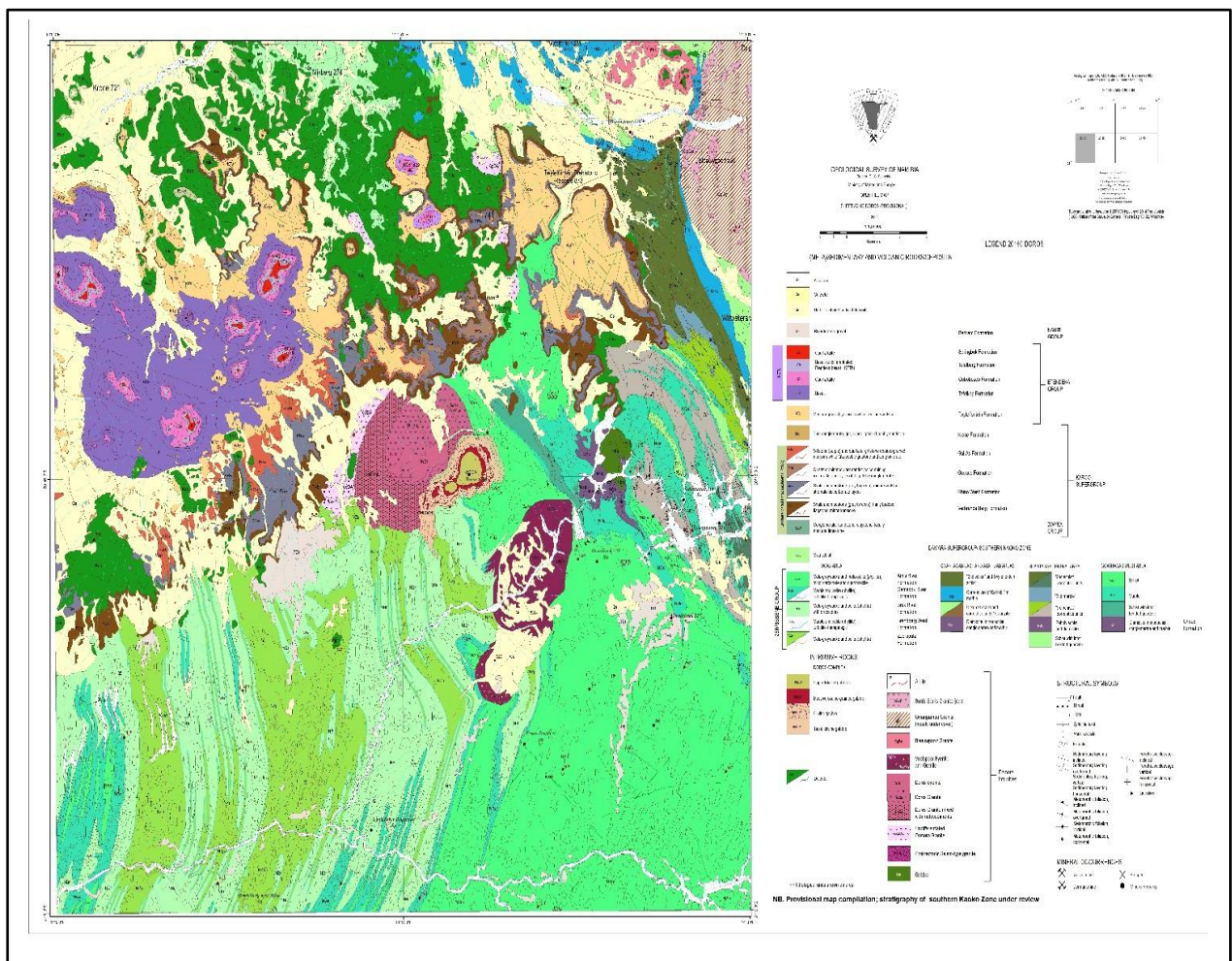


Figure 3.3: General geological map of Twyfelfontein³²

³² Map: Geological Survey of Namibia

3.4.1.1. Twyfelfontein Formation

Twyfelfontein Formation is refers to an Aeolian sandstone found in the area. The name Twyfelfontein Formation is taken from the farm Twyfelfontein 534 west of Khorixas. Only the latest publications use the name Twyfelfontein Formation while older publications refer to the Aeolian sandstone as the Etjo Formation (Mountney *et al.*, 1998). The Twyfelfontein Formation dominates the Twyfelfontein landscape and overlies the middle Permian rocks throughout the Huab Basin. The Twyfelfontein Formation in the Huab Basin covers about 5000 square kilometeres (Mountney & Howell 2000).

Four lithostratigraphy units have been distinguished in the Twyfelfontein Formation (Mountney *et al.*, 1998); from the base to the top: the Krone Fluvial Member, the Mixed Aeolian-Fluvial Unit, the Main Aeolian Unit and the Upper Aeolian Unit. The Aeolian beds of Twyfelfontein sandstone provide the majority of the engraved surfaces sandstone was deposited about 130 million years ago and it is on this sandstone that the engravings are engraved. A minority of the engravings appear on the Krone member; these rock are often extremely hard and the engravings tend to be rather shallow.

3.4.2. Climatic data

Namibia can be divided into four geographic regions; the Namib Desert, the Namib escarpment, the Central Plateau and the Kalahari sandveld. The Namib Desert and coastal plain make up about 15% of Namibia which explains the aridity of Namibia. The most important environmental characteristic of Namibia is its aridity. Namibia is the most arid country south of the Sahara. Below is map of the climate map of Namibia (fig. 3.4).

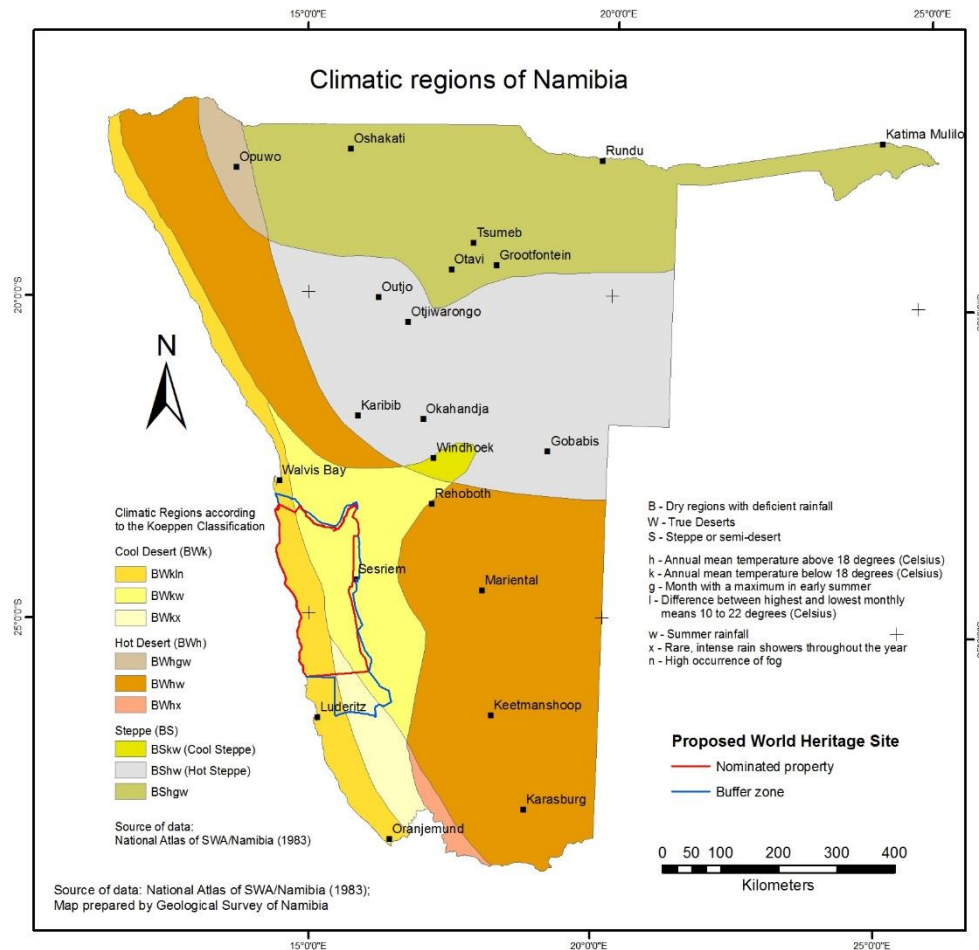


Figure 3.4: Map showing climatic regions of Namibia

3.4.2.1. Rainfall

Twyfelfontein is situated on the edge of the Namib Desert and is characterized by an arid and semi-arid climate and the average rainfall is approximately 100mm. Areas with such low annual precipitation usually have a great variability in rainfall (Ahrens 2001) which means that Twyfelfontein area may receive relatively high rainfall in one year, followed by dry period of several years. The sparse and unpredictable rainfall is a key factor influencing the biodiversity of the Twyfelfontein area. The extensive network of rivers and stream beds that cross it are flooded almost every year due to heavier rains further inland and much water thus can be stored in the ground along the riverbeds. This allows for rather substantial vegetation compared to many other areas of equal aridity, for example the occurrence of many tree species, despite long periods without rainfall. Thus this area also acts as an important corridor for animal species moving across this rugged environment.

3.4.2.2. Temperature

The average annual temperatures of the Twyfelfontein area is 20-22°C with the average maximum of 34-36°C and an average minimum of 8-10°C. Summer maximum temperatures sometimes exceed 45°C. In summer, month of November, diurnal temperatures vary from 10 to 39 °C while in winter month of July temperatures vary from 5 and to 20 °C. The harsh climate means that the area is sparsely populated. The shortage of water both in terms of rainfall and permanent surface water is the main limiting factor for the economy and determines that way people try to secure their livelihoods.

3.4.3. Flora

Flooding of the main watercourses helps to sustain fairly dense riparian vegetation, characterised in the area by large tree species such as leadwood, camelthorn and mopane. On the open sandy plains mopane is the dominant species, along with ringwood tree and Shepard's tree although the trees tend to small and widely spaced. The sandy plains support dense strands of annual grasses after the rain, and clumps of the succulent milkbush. Numerous plants in this area have well documented application in traditional medicines. A wide range of plants also formed part of diet until recent times, although collection of plants for food and medicine no longer occurs at Twyfelfontein and traditional knowledge of the plants uses may well have died out.

3.4.4. Fauna

For an arid environment Twyfelfontein supports many animal species, ranging from elephants to micro-mammals. Twyfelfontein is home to over 300 recorded bird species, 48 animals' species, and 18 species of lizards and 24 species of snakes. The presence of animal species and their population sizes are prone to severe fluctuation according to season and rainfall and this is especially true for desert elephants and certain migration bird species. The mammal fauna includes many small species of shrews, mice, gerbils and bats, which are not readily observed. Large, more observable mammals include schrub hare, Cape ground squirrel, dassie rat, chacma baboon, African wild cat, blacked-backed jackal, springbok, and oryx. Elephants, lions, spotted hyena, leopard and black rhinoceros are still regularly recorded in

the area. Among the reptiles recorded at Twyfelfontein are a variety of skinks, lizards, and geckos.

3.5. Rock art

The engravings of Twyfelfontein were first brought to the attention of Reinhardt Maack when the land surveyor Volkmann wrote to notify him informing him of a remarkable group of rock engravings at a spring called /Ui-//aes (Viereck and Rudner 1957; Kinahan and Kinahan 2006). Maack however never visited the site. In 1946 the farmer, David Levine who settled at Twyfelfontein reported the engravings to the authorities in Windhoek (Viereck and Rudner 1957). Scherz visited Twyfelfontein for the first time in 1950 and in 1963 he became the first researcher to study and document the engravings (Scherz 1975) and to this day his documentation of the site remains the most detailed publication of the site.

According to his documentation there were 2 404 individual images of rock engravings on more than 200 sandstone slabs (Scherz 1975). This number differs from the number of individual rock engravings recorded by John Kinahan and his wife Jill Kinahan in 2005 (Kinahan and Kinahan 2006). As part of the World Heritage nomination dossier preparations detailed field records were made of the rock art in the core area of the site during February 2005 and during this survey 235 painted and engraved surfaces were documented with a total of 2 075 identifiable images (Kinahan and Kinahan 2006). According to Kinahans the discrepancy being due to Scherz's inclusion of all engraving sites in the Twyfelfontein valley (i.e. the core area and buffer zones).

Scherz was also instrumental in having Twyfelfontein proclaimed a national monument supported by Abbé Breuil (National Archives of Namibia HMK 15/1/3; Viereck and Rudner 1957). Twyfelfontein was declared a national monument in 1952 under Article 7 of Ordinance 13 of 1948³³. Additional publications emanating from the survey of Twyfelfontein were the guidebooks of Krynauw (1968) and Viereck (1959). Selective documentation by Dowson (1992) was carried out for a review of southern African rock engravings.

³³ Official Gazette of SWA, Government Notice No.234 Official Gazette 1986

3.5.1. Rock engravings

With more than two thousand images, Twyfelfontein has the largest concentration of rock art engravings in southern Africa (Viereck and Rudner 1957; Scherz 1970, 1975; Dowson 1992; Kinahan and Kinahan 2006; Kinahan 2010). The engravings at Twyfelfontein document an extensive history of human ritual and artistic endeavour relating to hunter-gatherer communities in this part of southern African over at least 2 000 years, and eloquently illustrates the links between the ritual and economic practices (Kinahan and Kinahan 2006; Kinahan 2010). All the rock engravings and rock paintings within the Twyfelfontein core area are attributed to San hunter-gatherers who lived in the region long before the influx of Damara herders and European colonists. According to Viereck and Rudner (1957) the last stage of engravings, with a fair amount of certainty, can be associated with the Bergdama people, who introduced their own crudity in the same way as they probably, did with the late paintings of the Brandberg.

Radiocarbon dates from the excavations at three rock art shelters at Twyfelfontein show that the engravings are at least 5 000 years, although it is possible that some of the engravings may be older but some are younger, for instance the engravings of cattle must date to at least 1 000 (fig.3.5) when farming communities spread throughout Namibia (Wendt 1972; Kinahan 2010). In addition the importance of the site is that the engravings are found in all stages of weathering (fig.3.6) and various motives are found here, which makes it possible to arrange the styles in chronological order according to the rate of weathering. These characteristics were recognised and led to its preconisation in designations as a World Heritage Site.



Figure 3.5: Engraving of cattle in the Twyfelfontein core area³⁴



Figure 3.6: Weathered rock engravings³⁵

3.5.1.1. Subject matter

The subject matter of rock engraving at Twyfelfontein are mostly animals (fig. 3.7). Almost all the animals are identifiable to species level, the most important numerically important constitute giraffe at 40% (fig. 3.8), followed by rhino at 19%, zebra at 12%, oryx at 8%,

³⁴ Photo: Emma Imalwa

³⁵ Photo: Emma Imalwa

ostrich at 6% and cattle at 5% (Kinahan and Kinahan 2006). The numerical importance of various subjects in the rock art of Twyfelfontein is an immediate indication that the rock art is a selection of significant species, and not merely a reflection of their natural abundance in the area (Kinahan and Kinahan 2006:24). There are also panels with abstract images depicting simple rows of dots, radiating lines and circles carved out or pecked out in the rock. Human figures comprise under 0.5% of the identifiable subjects in the rock engravings.

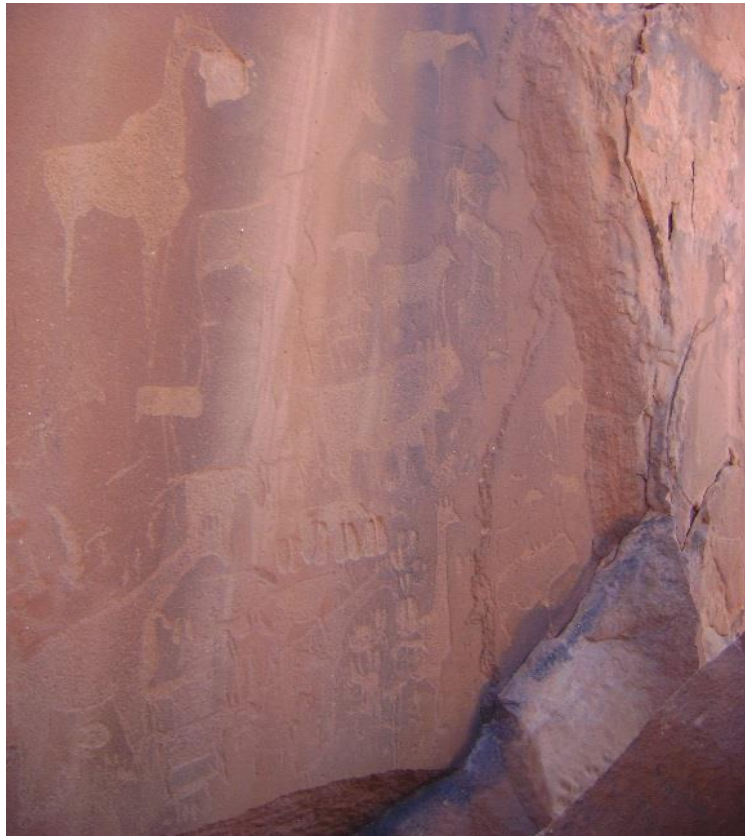


Figure 3.7: Rock art panel in the buffer zone with engravings of different kinds of animals³⁶

³⁶ Photo: Emma Imalwa



Figure 3.8: Engraving of giraffe in the core area ³⁷

3.5.1.2. Engraving techniques

The engraving techniques at Twyfelfontein can be narrowed down to basically two methods or a combination of these methods: pecking and polishing. The great majority of images at Twyfelfontein were executed using the pecking technique; engravings are made from abrasions of the rock surface or sometimes by incision with a pointed stone. The pecked marks reflected a variety of percussion points ranging from fine to coarse and from circular to angular. The pecked images vary from crude to fine the result frequently depended on the type of tool used and the stone being pecked. The pecked engravings range from simple to complex designs: the simpler designs are often the geometric shapes, some are lightly engraved and appear fresh while others are deeper and appear older.

Engravings made using the polishing technique were made by repeatedly rubbing a hard object backwards and forwards while other images show no perceptible depth and appear to have been made by simply brushing the rock with a pounding action. Polished engravings include cupules depressions, which seemed to be made using a smooth pebble against the inner surface of the depression and the famous ‘dancing kudu’ (fig. 3.9). The kudu is placed in the centre of the abstract images therefore making it difficult to decide what the animal is

³⁷ Photo: Emma Imalwa

doing. So-called cupules and grooves, sometimes in regular patterns, have been made in relatively soft rock types where the colour contrast between the surface and underlying rock has been less important than the granularity of the rock.



Figure 3.9: Dancing kudu rock art panel in the core area³⁸

3.5.2. Rock paintings

The rock shelters are found above and in between the huge blocks depicting the engravings. According to Kinahan (2010), hidden paintings, located in rock crevices and other places, have a double significance in the sphere of ritual practice. Affenfelsen³⁹ is small shelter under a protruding nose of a huge split sandstone block on a terrace above the old Levin farmhouse (Wendt 1972). There are several painting on the ceiling and engravings on the blocks immediately outside the shelter.

Zwei Schneider⁴⁰ (fig. 3.10) is a shelter under a huge sandstone block on the terrace above the old farmhouse. This former name of the site was Terrace Shelter but was renamed Zwei

³⁸ Photo: Emma Imalwa

³⁹ Affenfelsen is a rock art painting shelter named after a line of painted human figures on all four who were mistakenly interpreted as apes.

⁴⁰ Zwei Schneider (lit.: two tailors) is a rock art painting shelter named for two painted human figures shown sitting "tailor fashion".

Schneider by Wendt because of the painting human figures sitting (fig. 3.11). Hasenbild is a small rock art shelter located in buffer. The site is under a huge sandstone block slight above a small river bed some distance from the old farm house. In 1972 Wendt observed that several of the painting in the shelter were crumbling (Wendt 1972). The rock art paintings of Twyfelfontein are executed in a style comparable to the Erongo and Brandberg (Viereck and Rudner 1957). Unlike the engravings, the paintings depict mainly human figures.



Figure 3.10: Zwei Schneider rock art painting shelter ⁴¹

⁴¹ Photo: Emma Imalwa



Figure 3.11: Paintings inside the Zwei Schneider rock art shelter ⁴²

3.6. Excavations

The knowledge about the socio-economic activities of the hunter-gatherers at Twyfelfontein is fragmentary and often from ambiguous archaeological evidence (Kinahan 2010). The archaeological evidence for Twyfelfontein comes from archaeological excavations carried out at three rock shelters; Affenfelsen, Zwei Schneider and Hasenbild during excavations by Wendt in 1968. The radiocarbon dates at Affenfelsen is 3 450 BP that of Zwei Schneider 5 850BP (Wendt 1972). Two radiocarbon dates from Hasenbild 370±50BP and 180±60BP were obtained (Wendt 1972; Freundlich *et al.*, 1980).

These excavations demonstrate that hunter-gatherers having been living in this part of Namibia over the last 5 000 years (Wendt 1972; Kinahan and Kinahan 2006; Kinahan 2010). All three excavations were of a limited scale therefore limiting the subsistence patterns of the occupants. It is important to note that these dates do not provide direct dates for the art itself, rather they provide the probable time in which the rock art was made. It is generally agreed that the Late Stone Age (LSA) is the period when most of rock art in southern Africa was made, by San hunter-gatherers (Deacon & Deacon 1999; Lewis-Williams & Dowson 1990,

⁴² Photo: Emma Imalwa

2000; Lewis-Williams 2004). The LSA dates to between 22 000 and 2 000 years before the present (Deacon and Deacon 1999).

3.6.1. Material culture

The radiocarbon dates at Affenfelsen and Zwei Schneider are associated with a microlithic industry of the LSA known as the Wilton from the Eastern Cape in South Africa (Viereck and Rudner 1957). The Wilton Culture continues from about 6 000 to about 150 BP. The lack of quantitative and qualitative data on the LSA stone assemblages in Namibia has meant constant comparison of the Namibian tool kit to those described in neighbouring South Africa (Rudner 1952; Martin and Mason 1954; Wendt 1972). Although comparisons of lithic assemblages found in Namibia are comparable to those found on South African sites, the limited extent of excavations and the low frequency of stones artefacts on Namibia sites should be borne in mind before drawing parallels with South African lithic assemblages. The names proposed for the lithic assemblages found on Namibia sites are still a contentious issue and the subject of ongoing debate.

Occupation layers at all three excavated sites contain a microlithic stone industry where formal tools made up 5.3% of the toolkit and of these 90% were microlithic types including segments, points and scrapers (Wendt 1972). At Affenfelsen artefacts made from ostrich eggshells (fig. 3.12) include ostrich eggshell beads (found in all stages of manufacture) and a few fragments of ostrich egg containers. Other artefacts at the site include two fragments of schist pendants and only a few fragments of worked bone. There were only a few potsherds, strictly on the surface.

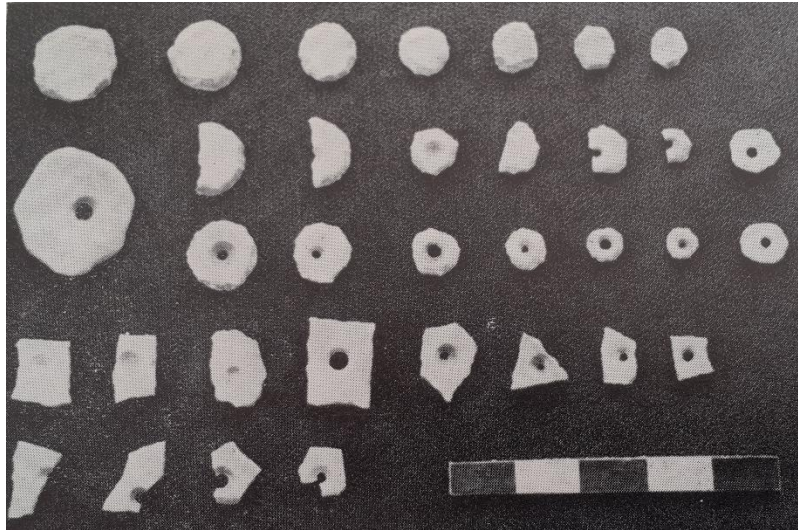


Figure 3.12: Ostrich eggshell beads and discs from Affenfelsen⁴³

At Zwei Schneider besides the stone tools a fair number of ostrich eggs were also found. At Hasenbild the toolkit is similar to that of Affenfelsen; other artefacts found at the site includes two fragments of sandstone slab with a pattern of shallow pits, a decorated slab, small lumps of pigment, ostrich eggshell bead occurred in relatively large numbers with several fragments of ostrich eggshell pendants and discs; very few potsherds mostly found on the surface (Wendt 1972). The excavated sites reflect the material culture of a hunter-gatherer society and do not show any signs of food production.

3.7. Administrative Framework of Management

The aim of this section is to provide the reader with basic information about the management of Twyfelfontein World Heritage Site which are aspects necessary for the analysis. The following site characteristics are briefly discussed:

- cultural significance
- ownership status
- site management

⁴³ Photo: W.E. Wendt 1972

- conservation interventions before inscription

3.7.1. Cultural significance

The development of Twyfelfontein World Heritage Site and its tourism objectives exposes it to dangers of deterioration. In addition the site has various cultural significances that need to be protected. As required, Namibia had to submitted two motivational documents namely; the Nomination Dossier and the Property Management Plan for submission to UNESCO, to ensure the inscription of Twyfelfontein as a World Heritage site. While the Nomination Dossier demonstrates the outstanding universal value of the property and whether or not the site has a proclaimed Buffer Zone and is protected under any national legislation, the Property Management Plan must provide answer to questions relating to the management of a site.

The Operational Guidelines for the Implementation of the World Heritage Convention states that a site which is nominated for inclusion on the World Heritage List will be considered to be of outstanding universal value if it meets one of the six criteria set out (UNESCO 1999, 2008). The criteria that were cited by Namibia in support of its nomination of Twyfelfontein listing are criterion iii and criterion v. The criteria as described in the nomination dossier, as justified by the State Party are quoted in full below.

- *Criterion (iii):* The State Party justifies this criterion on the basis of the number of engravings, their good state of conservation, and their wide ranging subject matter relating to the hunter-gatherer tradition. ICOMOS considers that the rock art engravings and rock paintings of Twyfelfontein form a coherent, extensive and high quality record of ritual practices relating to hunter-gatherer communities in this part of southern Africa over at least two millennia and can justify the use of this criterion.
- *Criterion v:* The State Party justifies the use of this criterion on the basis that the rock art is an excellent example of the links between ritual and economic practices in the apparent sacred association of the land adjacent to an aquifer as a reflection of its role in nurturing communities over many millennia.

3.7.2. Site ownership

Today the area surrounding the Twyfelfontein World Heritage Site falls within the boundaries of a conservancy called the Twyfelfontein-Uibasen Conservancy. Conservancies were established for conservation purposes mainly of wildlife management; and are managed by multiple landholders, who share costs and benefits in an equitable manner. By enhancing habitat protection and boosting wildlife populations, conservancies are intended to draw foreign capital from tourism and sustainable utilization ventures. However since the site is both a national monument and World Heritage site, the core area as well as the buffer zone are excluded from the jurisdiction of the conservancy and Twyfelfontein World Heritage Site falls under the ownership of the Republic of Namibia..

The core area (Twyfelfontein Historic Reserve (722)), which is the actual World Heritage Site is found on a west facing slope below high sandstone cliffs and measures 57.4269 ha. The core area contains the bulk of the rock art, associated archaeological remains and forms the main focus of attention for the NHC. There are no people residing within the boundaries of the core area. The core area is surrounded by a buffer zone. The buffer zone encloses a larger area comprising both sides of the valley and a significant portion of the surrounding hills.

The buffer zone is a combination of properties collectively known as the Twyfelfontein Reserve, measuring 9194.4828ha. Included within its boundaries are the Burnt Mount and Pipe Organs geological monuments and a number of important archaeological and rock art sites. The buffer zone consists of two accommodation establishments; the Twyfelfontein Country Lodge and Aba-Huab Camp site. The implementation of a buffer zone around the core area is probably the strongest protection for the site which is intended to protect the general environment of the site against encroachment by settlement and other activities that could threaten its integrity and reduce its value as a heritage and tourism asset.

3.7.3. Site management

The NHC, in terms of the National Heritage Act No.27 of 2004 is the management authority responsible for Twyfelfontein. The NHC is responsible for undertaking all activities related to

site management which are overseen by a site manager. The budget and other matters relating to the site are administered by the director of the NHC at the head office in Windhoek. The activities of the NHC are supported by an appropriation of parliament, as well as by fees levied, interest accrued and other money received according to stipulations of the NHC. Locally management of the site is exercised by the site manager who is stationed at the site.

The site manager is responsible for:

- Regular monitoring of the site
- Reporting threats or damages to the national heritage council
- Informing permanent staff and contract workers of the significance of the site
- Ensuring that all visitors are accompanied by a guides

3.7.3.1. Management of Twyfelfontein before 1990

Although Twyfelfontein was supposed to be administered by the NMC which was responsible for management of the site, its management has always been centre controversy. For more than thirty years following its proclamation as a monument in 1952, there were no facilities for visitors at the site. According to the records of the National Archives, David Levin served as an honorary curator while he was farming at Twyfelfontein (National Archives HMK 15/1/3). However the farm was expropriated in 1965 as part of the land set aside by the Odendaal Commission (discussed above) for resettlement of the Damara people. As a result of change of leaseholders, the site fell into a state of despair. The incidence of graffiti and other acts of vandalism in the core area of the site was documented during the 1988 survey (Kinahan & Kinahan 1988).

Damage of various kinds was noted at site such as damage to a small number of panels was noted, the first indications of the severe soil erosion were observed, which showed the development of deep erosion gullies in the pathways that are perpendicular to the slope ground. This neglect coupled with the lack of formal reception facilities, toilets and other

visitor facilities contributed to the steady deterioration of the site during the last two decades. After the report of the 1988 survey, the NMC and the National Museum of Namibia carried out extensive repairs to the network of paths in the core area of the site and erected a simple information shelter (NMC 14/2/2/5). The paths were constructed with concrete and local stone, and at certain points ceramic numbers were attached to the rock with epoxy cement. In addition the construction of the pathways and erection of an information shelter a caretaker for the site was also appointed.

3.7.3.2. Management of Twyfelfontein after 1990

Periodic public complaints continued, mainly with regard to the lack of visitor facilities, the lack of trained guides and the absence of a site manager. In this section the management of Twyfelfontein by the local community is discussed, visitors numbers and the finally the rehabilitation of the site.

3.7.3.2.1. Local community management

The management of Twyfelfontein under the control of the local community resulted in further damage to the site mainly due to a lack of effective supervision which in turn resulted in unrestricted visitor access at the site. The result of this was uncontrolled soil erosion to some of the paths laid out in 1988 which were worn out to 0.6 m below the natural surface of the hillside. This soil erosion threatened a number of important rock art panels. However considering the lack of effective supervision at the site and the extreme vulnerability of rock art there is remarkably little damage due to direct and intentional vandalism.

The lack of effective supervision of Twyfelfontein by the NMC led to the local community making poor decisions for instance they allowed the Twyfelfontein Country Lodge in 1999/2000 to incorporate Seremonienplatz, one of the major rock art sites in the buffer zone as part of its entrance. The location of the entrance of the lodge is in contravention of the National Heritage Act, Part V, Section 46. The penalties and fines provided by the heritage legislation in this instance of contravention did not constitute a deterrent. In the process, the site has been seriously damaged and was not included as part of the World Heritage Site, and

moreover the site is continually places at risk by the fact that the rock art forms part of a passage without any protection for the engravings to this day.

3.7.3.2.2. Visitor numbers

Irregular and somewhat contradictory visitor statistics are available for Twyfelfontein from 1988 to 2002, with more regular information becoming available only from 2004. It was probably from 1964 with the construction of the road (D3214) that the site began to receive regular visitors. Although David Levin was issued with a visitor register in the 1950s when he was an honorary curator of the site (National Archive HMK 15/1/3 Twyfelfontein) these records appear to have been lost. When Levin left the farm in 1965 there was no caretakers to collect visitor statistic at the site until the late 1980s.

Visitor figures from the 1980s indicate an increase from 11 030 in 1988 to 18 103 in 1991 (Kinahan 2003). This growth of almost 40% probably reflects an overall increase in tourism to Namibia after independence in 1990. Visitor numbers have grown from steeply over the last ten years first reaching 20 000 in 1996. Projections based on sampling of visitor statistics for 2002 indicate that numbers had begun to approach 40 000 per year. This growth pattern that emerges from these statistics is as follows: from 1990 to 1996 numbers grow by 44%; between 1996 and 2002 numbers grew by 64% and overall growth during the last ten years has been approximately 70% (Kinahan 2003).

3.7.3.2.3. Rehabilitation

A long and complex process of negotiation was required before the NMC could gain control of the site which legally was under their care. This arrangement between the local community and the NMC was concluded in 2004. In order to restore, preserve and protect the site, encourage and stimulate scientific research, encourage tourism and expand our knowledge on the environment in general rehabilitation of the site was necessary. A combination of factors combined to push the rock art of Twyfelfontein to centre stage. At a local level following the work carried out by John Kinahan and his wife Jill Kinahan showed that the site was in serious need of rehabilitation. Internationally, UNESCO reports on World Heritage Sites

inscriptions stressed the under representation of African heritage and archaeological sites, and over representation of European historic buildings (UNESCO 1994). Increased awareness of the international value of rock art influenced the nomination of Twyfelfontein.

In January 2003, the NMC in partnership with the Namibia Tourism Development Programmer (NTDP) in the Ministry of Environment and Tourism, commissioned a detailed development proposal for the site (Kinahan 2003). The proposal recommended that the site be taken under direct control of the NMC, with the appointment of a cashier and the establishment of regular visits to the site by the Council head office personnel. In October 2003, the NMC and NTDP hosted a workshop entitled “Giving the Past a Future: Sustainable Tourism for Rock Art Sites in Namibia”. The workshop was attended by local and foreign experts, as well as representatives of the local community and the tourism sector. The proposal set out detailed requirements for site management and conservation measures, including a complete revision of the path network, erection of viewing platforms at certain sites, dust control measures, training of guides, visitor centre and provision of toilet facilities.

The European Community-funded the NTDP and the Namibia Archaeological Trust, donated about N\$ 700 000⁴⁴ for emergency repair works which laid the foundations for the eventual nomination of Twyfelfontein as a World Heritage site. With the funding, an official site entrance was developed at the site, a visitor centre (fig. 3.13), establishment of new paths which have been repaired or re-routed in order to minimise the impact of visitor traffic, shaded rest (fig. 3.14), directional signs, dry compost toilets, viewing platforms (fig. 3.15) at three major rock art panels. All the handrails, rest shelters, visitor centre, toilets, viewing platforms were made from recycled scrap-metal, salvaged from old mine workings and are reversible without damaging the site.

⁴⁴ Namibian Newspaper (a newspaper daily): Title: *Steps afoot to restore, protect rock art*. Lindsay Dentlinger 24 febraury 2004



Figure 3.13: Twyfelfontein visitor centre ⁴⁵



Figure 3.14: Two shaded resting areas at the site ⁴⁶

⁴⁵ Photo: Emma Imalwa

⁴⁶ Photo: Emma Imalwa



Figure 3.15: Viewing platform at dancing kudu rock art panel⁴⁷

Other measures taken to protect the rock art sites are the training of guides to give guided tours at the site (fig. 3.16). The aim of training local guides was that they could be used as a first line of defence against damage to the rock and environment. These guides were trained in areas of; history of area, knowledge of rock art, fauna, flora, geology and other subject relevant to the area. The effectiveness of these visitor management strategies will be discussed in chapter 7. In 2004 cashiers (fig. 3.17) were officially appointed from the ranks of informal guides and the NMC head office personnel began regular visits to the site.

⁴⁷ Photo: Emma Imalwa



Figure 3.16: Twyfelfontein tour guide ⁴⁸



Figure 3.17: Cashier at the reception ⁴⁹

3.8. Summary

The management of Twyfelfontein has changed since the declaration of the site as national monument in 1952. For more than thirty years following its proclamation as a monument in 1952, the site fell into a state of despair as a result of change of management hands. The change in the management of the site coupled with the lack of formal reception facilities,

⁴⁸ Photo: Emma Imalwa

⁴⁹ Photo: Emma Imalwa

toilets and other visitor facilities contributed to the steady deterioration of the site during the last two decades. Incidence of graffiti and other acts of vandalism and indications of the severe soil erosion in the core area of the site was documented in during the 1988 survey. This survey led to the repairs to the network of paths in the core area of the site and erection of a simple information shelter. The lack of effective supervision of Twyfelfontein by the NMC led to the local community making poor decisions with regards to the integrity of the rock art by allowing the Twyfelfontein Country Lodge in 1999/2000 to incorporated Seremonienplatz as part of its entrance.

A combination of factors combined to push the rock art of Twyfelfontein to centre stage. At a local level following the work carried out by John Kinahan and his wife Jill Kinahan showed that the site was in serious need of rehabilitation. Internationally, UNESCO reports on World Heritage Sites inscriptions stressed the under representation of African heritage and archaeological sites, and over representation of European historic buildings (UNESCO 1994). It is the view of the author that it was the increased awareness of the international value of rock art as the well as Namibia wanting to have a World Heritage site that influenced the rehabilitation of the site and taking over of the site by the NMC.

CHAPTER 4. METHODOLOGY

4.1. Framework for analysing the management processes

The study of heritage management is a diverse field which can be researched from many different angles. Different situations and needs require different levels of assessment, approaches and emphasis. This study used a framework (fig.4.1) developed by the World Commission on Protected Areas for assessing the management of natural protected areas (Hockings *et al.*, 2000). Though it was developed with natural protected areas in mind the framework is so broadly and flexibly formulated that it can easily be adapted to the management of places with cultural significance.

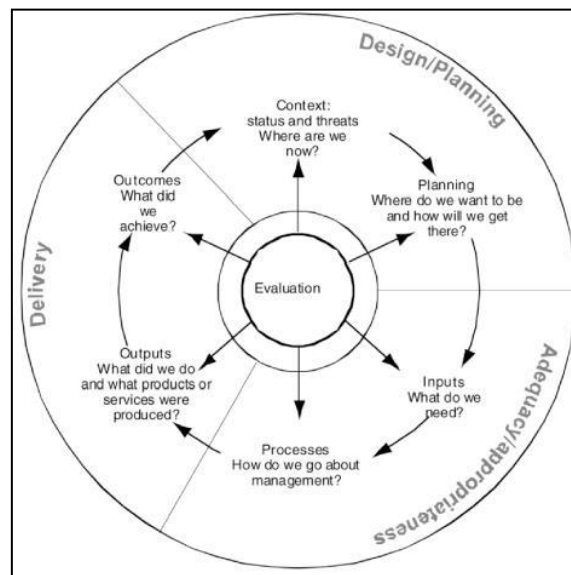


Figure 4.1: Framework for accessing the management of protected areas⁵⁰

If we refer to the above mentioned framework, management is regarded as a six step process which is cyclic in nature. Good management implies that evaluation of every phase of the cycle should be done if the heritage institution to function effectively and efficiently, the evaluation of every phase has its own specifics. If we refer to the above mentioned framework the proposed evaluation would fit into the assessment of the fourth element of the management cycle, namely the management processes. For the present evaluation an

⁵⁰ Source: Hockings *et al* 2000

assumption is made that, being a World Heritage site, Twyfelfontein strives to achieve in a balanced way the basic goals of heritage management; preservation, and uses of the site which are compatible with its cultural significance.

The proposed evaluation focuses on finding out whether the management processes deemed necessary for the achievement of these goals exist and function. This type of evaluation cannot give a direct answer if goals of heritage management are achieved. Rather it tries to find out whether the necessary conditions for the achievement are present. Management process evaluation is characterised by width, rather than depth, less time and cost for conducting it, and is based primarily on literature research, opinions of heritage practitioners, visitors and local tour guides, and the author's observations.

4.2. Data collection strategies

Currently heritage has been theorised as a range of social processes and experiences through which people invest things, places and practices with value and sentiment, and claim them in collective ownership or guardianship, to affirm continuity and identity (Filippucci 2009:30). For this reason social researchers face a number of obstacles in their pursuit of finding the ideal method of collecting data. Of course this charge is a problem for all forms of data collection. A basic premise of good social research is therefore the use of 'triangulation' – more than one form of data collection (Hussey and Hussey 1997).

It is therefore common practice to combine different methods of data collection in order to increase the depth of information and a mix of methods can help to clarify the results. This research makes use of both quantitative approach and the qualitative approach which are the two main types of empirical research in the social sciences (Hussey and Hussey 1997; Berg 1998; Kane & O'Reilly De Brun 2001). Qualitative data as the name suggests is concerned with qualities and non-numeric characteristics whilst quantitative data is all data collected in numerical form (Hussey and Hussey 1997). One of the main advantages of a quantitative approach is the relative ease and speed with which the research can be conducted. Qualitative data methods can be expensive and time consuming but it produces more real basis for analysis and interpretation.

According to (Hussey and Hussey 1997) the main purpose of combining qualitative and quantitative research methods is to achieve one or more of the following:

- to arrive at a better understanding of the topic being studied
- to learn from specialist certain issues related to the subject matter
- to become acquainted with problem areas and constraints
- to assess the feasibility of the topic being researched

4.2.1. Literature review

A literature review identified a paucity of information on cultural heritage management at Twyfelfontein and other rock art sites in Namibia and a general lack of information on cultural heritage tourism in Namibia. Literature review provides the reader with background information on Twyfelfontein, the development of heritage management in Namibia. Primary and secondary data includes relevant literature from books, journals, publications and conferences and workshop.

4.2.2. Field work

The author visited the site in September 2010, August 2011 and May 2013. In September 2010, the author visited the Twyfelfontein for the first time. The aim of this trip to the site was first and foremost to establish a research strategy. This was done by observing the site manager, the local tour guides (how they conducted the tours), the cashiers as well the behaviours of the visitors. During this time period the author also looked if brochures were available on the site, and if there was information in any of the accommodation establishments about rock art or the NHC to allow for comparisons in the next three years. In May 2013, interviews with the local community members were conducted, visitor and local tour guide questionnaires were also administered.

4.2.2.1. Non-participant observation

Non-participant observation is one of the techniques used to collect data in an unobtrusive manner. One justification for the use of unobtrusive methods lies in the methodological weakness of interviews and questionnaires. There is the assumption that ‘truths’ about people are best gained through talking (Kelleher 1993). A problem with this assumption is that what we gain ‘simply by asking’ is often shaped by dynamics surrounding the interaction between researcher and researched (Lee 2000:1). Questions about experience, attitude and belief might be addressed just as effectively by watching what people do, looking at the physical evidence of various kinds, and drawing on the written as well as the spoken voice, as they are by interviews and questionnaires (Veal 1997; Lee 2000; Tubb 2003). While this is limited to finding out what people do at a site rather than why they do it, it provides rich and explanatory data (Veal 1997; Tubb 2003).

Although non-participant observation is one of the most basic techniques for gathering data, it has the drawback that the researcher needs to determine in advance what they are looking for. The collection of data using the non-participant observation approach means that individuals do not know they are being observed, therefore limiting the concern that the observer may change their behaviour (Kane & O’Reilly De Brun 2001). Thus the question of ethnics becomes an important one generally participants in research must give consent to being subject of research, with non-participant observation this is not possible as this might have introduced potential source of bias since the tourist might have behaved in a different way.

4.2.2.1.1. Visitor observation

In this study the author wanted to access visitor behaviour at the site to get a better understand them. The author observed the interactions of the visitors with the local guides, their attitudes towards the rock art, the time spend looking the display in the visitor centre before and after the tour, and if they purchased any crafts. Visitors were observed on the tour during the morning hours; 08h00-11h30am (when the temperatures were cool), while observation inside the visitor centre took place both in morning hours (when the author was taking breaks from going on tours) and in the afternoon 13h00pm-15h00 daily.

By observing the visitors the author was able to establish the demographic characteristics of visitors and compare this information to what was obtained in the visitor questionnaire discussed below. While conclusions might be drawn from observing behaviour, it is not a generalisation and the interpretation is open to bias by the researcher as well as timing of the research; the phenomena might change with time, season and things might be missed. Thus the period of observation has to take place during different times of the year as well as during different times of the day.

4.2.2.1.2. Local tour guide observations

In addition to observing the behaviour of the visitors on the site, the author also monitored how the local tour guides presented the site and their behaviour by accompanying them on some of their tours. Although the guides were aware that the author was conducting research, they were not aware of the specifics of the research. Informing the guides about what the author was observing might have introduced a potential source of bias, since the guides might have behaved in a different way. Observation of the guides can provide useful information on the actions taken for visitor management on site as well as staff training.

4.2.2.2. Interviews

The analysis of various aspects of people's attitudes towards the past constitutes a major area of heritage research, and the interview is one of the most common used qualitative methods in such studies (Sørensen 2009:164). Interviews are a form of a direct elicitation research method that can be used to aid documentation and analysis of perceptions, attitudes and motivations of heritage users and practitioners (Keitumetse 2009; Filippucci 2009; Sørensen 2009). The realisation of interviews has many advantages. For example conducting interviews does not require high and heavy equipment, and a notepad and or a tape recorder suffice (the author made use of both).

Interviews are used by researchers who are interested in providing a richer explanation of the situation and they are typically conducted on a smaller scale. Interviews are also highly beneficial for gathering detailed information about people's values, beliefs, anxieties and opinions. The presence of the interviewer allows for complex questions to be explained, if

necessary to the interviewee. In addition interviews provide a more complete understanding as they allow individuals responses to be explored and probed in depth.

However interviews involve significant cost in time and effort, involved in both data collection and data analysis. In addition interviews create attitudes in part because the act of eliciting data from respondents or informants can itself affect the character of the responses obtained as respondents commonly try to manage impressions of them in order to maintain their standing in the eyes of an interviewer (Lee 2000). Furthermore, respondents have to be accessible and to be willing to answer a researcher's questions for interviews to be effective.

4.2.2.2.1. Heritage practitioners interviews

Three heritage practitioners were interviewed; the NHC archaeologist⁵¹, was interviewed in December 2012, the UNESCO Programme Specialist for Culture in Namibia⁵² at the time was interviewed in January 2013, while the interview with the site manager⁵³ was scheduled to take place while the author was doing fieldwork at the site in May 2013, however this did not happen and the site manager answered the question via email. These individuals were chosen due to having a role in the management or knowledge on the issues facing the management of Twyfelfontein or heritage management in Namibia.

The main purpose of these interviews was to get their point of view on the way the five management processes (the management processes are discussed in the next chapter) are organised and function. For all three interviewees, structured interview questions were used. Using structured interview questions was important because with the exception of the site manager, the other two interviewees were already known to the author. When the interviewer and interviewee are known to each, it is common for the interview to deviate into other areas of discussion. There are some similarities between the questions. Differences in the interview questions of the three interviewees is the result of experience and knowledge of heritage management processes and job responsibilities.

⁵¹ See Appendix 2 for interview questions and answers

⁵² See Appendix 3 for interview questions and answers

⁵³ See Appendix 4 for interview questions and answers

The first question asks all three respondents if Twyfelfontein has a site management plan. This is an important question because for any management process to be effective, a site management plan is required. The other questions aimed at facilitating the analysis of the management of the site. All three heritage practitioners were asked questions about the management processes as this states which processes need to be improved upon. This also makes it easier to compare the results of the author to those of the respondents and to eliminate bias with the findings of the author. The last two questions ask each interviewee to identify the biggest problem facing the site and how best these problems can be overcome. This information is useful when looking for reasons of poor or good performance of the site as it helps the reader to understand the type of environment the sites is operating.

The interview with Mr. Dijakovic was taped recorded, and in the other two cases tape recording of the interviews was not possible for the following reasons:

- The interview with the National Heritage Council archaeologist was not tape recorded at the time of the interview. The author did not feel it that is was necessary to tape record the interview as the difficulty of note taking whilst listening was not anticipated.
- The interview with the site manager was not taped recorded, because on the day of the scheduled interview the site manager could not make it due to other commitments. Thus the author emailed the site manager the interview questions which she completed and send back.

4.2.2.2.2. Local community interviews

With the aim of learning about the local community's attitudes towards the management of Twyfelfontein an interview questionnaire was developed. The author interviewed thirty-five individuals (each from a different household) from Laow Inn settlement which is the closest community to the World Heritage Site. Interviews with the local community were conducted in May 2013 over a two week period. A structured interview questionnaire on the identified components of research was used in order to ensure consistency as well as effective time management during the interviews. In addition the structured questionnaire aimed to obtain insight into how different informants respond to similar questions. Despite its usefulness, an

interview questionnaire is restrictive (due to its rigid structure) and may fail to obtain more subtle responses of people's relationship to heritage (Sørensen 2009).

During each interview, the author made it clear to each interviewee that she was employed by the National Museum and not the NHC. It was important to make this distinction because of the some strains between the NHC and some members of Laow Inn. Heads of the households were the main persons targeted for these interviews. In cases where the head of the household was not available during the visit, the next person in the household was interviewed. In some cases some of the interviews were conducted in the work places of community members this was done to increase the sample size.

The interview questionnaire contained seven questions which can be found in Appendix 5. Respondents were asked about their occupations, if they had ever been to the site, why the site was important, ownership and management of the site as well as questions about the stakeholder involvement (level of involvement in the management of the site and communication with the NHC). The questionnaire was in English. As the author could not communicate with some members of the community in English, a translator (one of the Twyfelfontein staff members) offered to do translation into the Damara-Nama language. As a translator was used to interview some of the local community members, the interviews took longer than expected.

Even in cases where the author did not make use of a translator, interviews still took a long time to be carried out because people wanted to discuss issues not related to the study in which case the author felt compelled to stay and listen. The author did not consider it necessary to tape record the interviews with members of the local community. This is especially true in cases where the author made use of a translator. The exchange of information from one party to another meant that interviewees could only say a few things at a time to allow the translator to pass on the information onto the author. In addition taking notes also helped to identify common patterns in terms of responses and to summarise and further categorize responses.

Although the author wanted to conduct individual interviews this was not always possible. In some cases all adult members of the family were at home because they are unemployed and in other cases neighbours were visiting the household where the interview was taking place. In five cases, the author found the head of the household with neighbours she had to conduct group interviews. In this case the author was unable to capture divergent views, opinions and experiences because although a different questionnaire was completed for each respondent their answers were very much influenced by what other had said.

4.2.2.3. Questionnaires

The questionnaire is the most frequently used method in the social science field. Questionnaires tend to be used to explore attitudes and opinions about certain issues, objectives and situations. The questionnaire also has other functions such as measurements of awareness and knowledge and behaviour. Questionnaires have certain advantages over interviews. For one, they have the advantage of being cheap, the only costs are those associated with printing. They are especially useful in surveying people who are distributed over a wide geographic area where the travelling demands on an interviewer would be excessive. Using questionnaires reduce biasing error caused by the characteristics of the interviewer. The absence of an interviewer provides greater anonymity for the respondent.

Although questionnaires allow a larger sample size and a range of questions to be addressed, it nonetheless met with a corresponding loss in the richness of data. The drawback to using a questionnaire is that researcher cannot explain questions that the respondent has not understood and ask for further elaboration of replies. Therefore the questions need to be simple and easy to understand. Furthermore there is no control over who fills out the questionnaire and the researcher can never be sure that the right person completed the questionnaire. Those who cannot read the language in which the questionnaire is composed are excluded from the study. The evaluation was composed of two different questionnaires.

4.2.2.3.1. Visitor questionnaire

Up until recently the individual consumer of heritage has, up until recently, been neglected in much heritage management. The heritage visitor is nevertheless, an important evaluator of the service experience being provided at cultural heritage sites. Whether visitors are regarded as guests or tourists; researchers and heritage organisations are increasingly attempting to tap into people's minds in order to better market, present or enhance the tourist experience. Of course, simply getting information is not the same as making use of it in an efficient manner to enhance the experience of future uses.

The questionnaire was a mixture of 'closed answer' and 'open answer' questions. 'Closed answer' questionnaires involve respondents choosing from a selection of answers. 'Open answer' questionnaires on the other hand involve respondents answering questions with a sentence or two. The questionnaire was composed of ten questions (see Appendix 6 for details).

The visitor questionnaire was constructed to 1) compile a visitor profile based on demographic characteristic (age, nationality, employment); 2) provide information about level of visitor satisfaction, 3) find out how visitors proceeded and analysed information presented to them by the guides.

Two of the questions were designed to be answered using different 5-point Likert-type scale (table 4.1). This scale was used to evaluation the following;

- knowledge of the Twyfelfontein guides in rock art
- to rate the visitor facilities

Score	1	2	3	4	5
Scoring criteria	Unsatisfactory	Satisfactory	Good	Very good	Excellent

Table 4.1: Scoring criteria for performance of management processes by heritage practitioners, visitors, local community and local tour guides

The author asked the Twyfelfontein guides to hand out questionnaires to visitors at the end of their tour. Questionnaires were also placed at the reception and bar areas of the Aba-Huab Camp Site, as this is where most of the independent travellers stay. The placing of the questionnaire in the campsite reflects the intention of the study to focus on independent travellers rather than members of commercial tour groups. Tour groups do not allow the researcher to capture divergent views, opinions, and experience because responses of large groups are influenced by group setting.

4.2.2.3.2. Visitor comments

Various claims have been made about the usefulness of visitor books in the management of rock art sites. First in an era where people complain they are over-surveyed visitor books do not, by and large, interrupt the operations of a tour nor are they intrusive in terms of asking delicate questions. Second, this form of research is relatively low cost, and relatively easy to administer. Visitor books are useful especially at remote spots where they are the only contact with the visitor (Franklin 2011). Depending on their layout, visitor books can serve as interpretive devices, as outlets to understand visitor experience, as a check on visitor numbers, provide information for how a site can be managed more effectively and reduce the incidence of vandalism (Swadley 2002; Deacon 2006; Franklin 2011).

There are of course limitations with this type of data collection method. Jacobs and Gale (1986) in their discussion of visitor books of world renowned sites such Uluru and Kakadu National Park suggest that visitor books are limited because they do not provide accurate numbers of visitors at a site. Jacobs and Gale (1986) note that there is always the possibility of visitors falsifying entries. Of, course, this charge is a problem for all forms of data collection. Research in the field of interpretation has emphasised the importance of understanding visitor's needs, motivations, prior knowledge, attitudes and beliefs in relation to an interpretive site or experience (Beckmann 1999).

4.2.2.3.3. Local tour guide questionnaire

The local tour guides questionnaire was handed to the guides while they were on their breaks. As some of the guides were undergoing training at the time of the research, the author

attended some of their classes and asked them to complete the questionnaire during their breaks. The Twyfelfontein guide questionnaire can be found in Appendix 7. The questionnaire was ‘open answer’ and it was composed of nine questions relating to-period of employment, significance of the site, ownership of the site, authorship, conservation activities (who monitors the site and how often) etc. The guides were also asked about how often they have meetings with the site management.

4.3. Scoring criteria for the management processes

Evaluation of management processes requires setting up standards of the basis of which indicators of the assessments of performance are established. Since what was being evaluated is broad, it was necessary to develop a scoring criteria without going into too much detail. In the essence of this study only a general idea of how the management processes performed was required. The ‘Likert’ or ‘Summative’ (Trochim 2006) scale method was used to score the indicators of the management processes based on the opinion of the author (see Appendix 1 for details). A similar scaling method was also used to score the management processes based on the opinions of the heritage practitioners (see table 4.1). The scale used for the heritage practitioners is also used in the study to also rate visitors’ perceptions on some management processes.

4.4. Summary

A methodology for the analysis of Twyfelfontein was developed which focused on the evaluation of five core management processes which are discussed in the next chapter. Two main sources of data have been used- written sources, comprised of published material on the subject of heritage management, Twyfelfontein and rock art, and primary data gathered during field trips to the site by means of observation, visitor and local tour questionnaires, and interviews with the local community. The evaluation also includes the opinions of three heritage practitioners through interviews. In respect to published material on the heritage management in Namibia very little has been written.

CHAPTER 5. HERITAGE MANAGEMENT PROCESSES

Heritage management can be defined as “all the processes of looking after a place so as to retain its cultural significance, caring not only for the cultural heritage values but also the surrounding environment” (Pearson and Sullivan 1995:9). Although management is recommended for cultural heritage resources, neither the market nor the product is clearly defined. Cultural heritage management, especially as it relates to archaeological heritage management in Africa has come a long way of development with the concept broadening over the years. Until the 1990s, cultural heritage management was confined nearly entirely to conservation activities, while visitors were regarded as a problem.

Changes in the political and social conditions after the independence of most African countries led to fewer finances being available for cultural heritage which forced heritage managers to pay more attention to visitors as a source of revenue. The latest stage in development of cultural heritage management was the recognition that heritage is not simply a physical resource, but that it has multiple meanings for different people that need to be taken into account. Apart from tangible elements such monuments, sites and objects, cultural heritage encompasses ethical values, social customs, belief systems, religious ceremonies and traditional knowledge systems of which intangible heritage is the sign and expression (UNESCO 2003a).

The analysis of the management of Twyfelfontein World Heritage Site focuses on the evaluation of five management processes and their indicators (table 5.1) to see how they perform against a developed set of criteria. The five management processes namely: conservation, visitor management, interpretation, stakeholder involvement and documentation management were evaluated at Twyfelfontein. These processes were chosen because these are some of the main issues presented by international organisations such as UNESCO and HERITY⁵⁴ but also because they respond to sustainable principles of managing world cultural heritage sites. The field of cultural heritage is abundant of specialised literature as well as various charters, conventions etc., and it is on the basis of a number of these that the indicators for the present evaluation were developed.

⁵⁴ the International Organisation for the Quality Management of Cultural Heritage

The evaluation is based on the assumption that all the processes have equal importance for the successful management of the site. The authors writing on heritage management generally avoid pointing out which management processes are more important than others (maybe with the exception of conservation that is often considered to be a crucial one), as this would depend much on the specifics of each site. The management processes will be looked at individually. It should be noted that in practice there cannot be strict borders between the management processes, because they are interrelated and it is difficult to separate them. For example interpretation and visitor management are closely related- interpretation is often the method whereby the significance of the site is revealed to the visitor and is therefore regarded as an important component of visitor management. The distinction made here is for purpose of facilitating the analyses.

Management Processes	Indicators
Conservation	<i>Monitoring physical condition of the site</i>
	<i>Maintenance</i>
	<i>Conservation interventions</i>
Visitor Management	<i>Visitor data collection</i>
	<i>Visitor amenities</i>
	<i>Monitoring and research of visitor impacts</i>
Interpretation	<i>Control of interpretation</i>
	<i>Interpretation infrastructure</i>
	<i>Staff training</i>
Stakeholder Involvement	<i>Communication between management authority and stakeholders</i>
	<i>Local community involvement</i>
	<i>Socio-economic development</i>
Documentation Management	<i>Archive maintenance</i>
	<i>Public accessibility</i>
	<i>Computerization</i>

Table 5.1: Heritage management processes and their indicators evaluated by the author

5.1. Conservation

Conservation of a place or site should be based on its cultural significance and comply with some standards either specifically formulated for the site or adopted from international charters and conventions. Conservation is seen as the first requirement for site management. The key

message of the World Heritage Convention, is the need to conserve and transmit cultural and natural heritage of outstanding universal value to future generations. In this paper the term 'conservation' is used in a narrower sense and is defined as the 'safeguarding of the physical fabric from loss and depletion, based on the belief that material culture possesses important scientific and aesthetic information as well as the power to inspire memory and emotional response' (Ndoro 2005).

Once this requirement is fulfilled, the site can be used for a number of other purposes such as tourism, education and research. Most heritage managers traditionally consider the conservation of the heritage place as their primary duty and direct most of their resources to this end (Hall and McArthur 1996, 1998; Deacon 2006). In most African countries, conservation still remains the focus of heritage managers. The failure to conserve the heritage resource and its setting is seen as something that will attract fewer tourists and will lead ultimately, to a damaged resource that will no longer generate income.

Conservation is an essential part of the site management but is not identical to it (Whitely 2001, 2005). Whitely (2005) describes site management as something that commonly works with conservation, including human access to the site, the use of the site and regular visitation. Relating conservation with site management is a crucial issue in heritage management long-term planning especially as the interest in cultural tourism has created new management needs to respond to ever increasing rates of growth and change.

5.1.1. Monitoring

The physical condition of a site is an issue of concern shared by many people from site managers, to archaeologists and the general public. Jokilehto (1997:5) writes "to monitor a heritage site means to observe and document its condition periodically, to understand and measure the trends in the impact of its use, decay and weathering over time, to anticipate any risks in or around the site, and to report into the conservation management process for the purpose of corrective action and forward planning".

Effective monitoring of a site is the key to maintaining credibility of the World Heritage List and ensuring high standards of conservation. The monitoring system should focus more regularly on issues most critical to the World Heritage Convention, such long terms threats, or loss of outstanding universal value as effects of human induced processes. The primary task of the World Heritage Convention is the long term conservation of a site inscribed onto the List. The WHC requests state parties to ensure that World Heritage sites maintain the qualities for which they are inscribed on the list (article 4 and 5).

The monitoring of the site can be done in 2 ways:

- Reactive monitoring: i.e. the assessment of the state of conservation of the sites whenever problems are identified
- Periodic reporting, i.e. the six year cyclic review of state parties' policies and legalisation as well as of the organization, management and conservation of each site in a given region.

Monitoring requires specialised training in a number of disciplines such as conservation, condition reporting and visitor management (Deacon 2006). Site managers and those tasked with monitoring cultural sites should be given a framework of principles and procedures that will allow them to oversee the planning, understand the quality of technical advice and recognise the application of correct principles and procedures.

5.1.2. Maintenance

The end result of monitoring is maintenance, that is, the implementation of strategies that maintain, as much as possible, environmental stability, and prevent or limit future damage and deterioration to a heritage site. Maintenance is considered fundamental in the care for the fabric of a place⁵⁵ and according to some authors it is one of the cheapest conservation options available to site managers (Pearson and Sullivan 1995; Jokilehto 1997). It is

⁵⁵ Australia ICOMOS, article 16

important that maintenance is carried out regularly, ideally on the basis of detailed maintenance programme. Without regular maintenance the site's fabric will decay over time.

In the case of rock art sites, provision should be made for regular visits to the site by the site manager (Deacon 1993b). Actions that are taken to maintain a site should be distinguished from other forms of conservation interventions. Maintenance operations should be performed in a manner that best meets the mission and strategic goals of the site. How a site is maintained has an impact on the visitor experience as well as the staff's ability to conduct research and conservation. Maintenance is generally a preventative conservation treatment, while other conservation options involve intervention after the event of deterioration or damage. Simple acts of physical intervention can be undertaken as part of the ongoing maintenance of a site.

The rationale behind this is that if the underlying source of a problem cannot be eradicated, its potential to cause decay can at least be minimised or even removed as it becomes apparent. Maintaining the invaluable and the often fragile nature of heritage places requires a team of well-trained individuals with specialised training in a number of disciplines such as conservation, condition reporting and visitor management. It is also very important that site managers recognise the limitation of their own expertise, and do not attempt interventions that may interfere with the delicate balance of the site, or that produce unwanted consequences. In maintaining the site, it is the site manager's responsibility to identify the problem before it becomes too extensive, which may involve the need to call in a conservator or specialist to undertake the work.

5.1.3. Conservation interventions

According to Deacon (1992), the vulnerability of the site should be the determining factor in the type of precaution undertaken at a site. Each solution affects the way archaeological information is preserved and how the site is experienced and understood. Special measures should be taken for the protection of the setting, which is usually connected with the concept of zoning and more specially creating buffer zones around the core areas of the site and within them only a limited number of activities are allowed. The main issues that rock art

management strategies have tried to address over the past decades is the issue of sustainable cultural tourism.

Trying to make cultural heritage tourism more sustainable is the challenge that most World Heritage sites are facing. The weakness surrounding the term sustainability is the absence of existing examples of sustainable systems to explore the realities of sustainability especially at cultural heritage sites. To this end the most commonly used management strategies focus primarily on controlling access to the sites (installing fences, allowing access with only official guides) and visitor behaviour and knowledge (notice boards, brochures) (Deacon 2007). The protection measures such as cages and fences are obstructive and may serve to increase the amount of damage because their authoritarian nature called out to be challenged (Blundell 1996; Smith 2006). In addition fences are less satisfactory as they are costly and age badly however they can be sometimes used to keep animals out of the sites.

5.2. Visitor management

In the context of heritage, visitor management is the practice of ensuring that visitors receive a quality sustainable experience; while assisting the achievement of the area's overall management objectives and minimising the risk of damage to the site (Pearson and Sullivan 1995; McAuthur and Hall 1996). There are a number of reasons why visitor management is becoming increasingly important task to be undertaken at heritage sites, as many sites have seen a significant growth, particularly those that have achieved World Heritage status (ICOMOS 1993; Shackley 1998; Pedersen 2002) due to a number of factors including the increased mobility and interest in cross-cultural dialogue and the discovering result from globalisation. The high number of visitors to World Heritage sites therefore makes visitor management as essential management process for the safeguarding the heritage resource.

Visitor management as a challenging activity due to the demands put on satisfying the visitors. There is often a tendency that overemphasises the visitor perspective as the most important part of management (McAuthur and Hall 1996). However visitor management should incorporate a range of techniques, skills and tools ranging from very simple measures such as physiological barriers, signs and staff presence, to the provision of interpretive

programs, guides and elaborate visitor facilities. The survival of cultural heritage sites and the continued support of society for them will depend to quite an extent on heritage manager selecting the right techniques for managing the visitor and the heritage site.

5.2.1. Visitor data collection

The only way managers can understand visitors to their sites and formulate appropriate visitor management plans are by collecting data about them. Two types of visitor data can be collected- quantitative and qualitative. Quantitative data gives information about the number of visitors, usually accompanied some basic visitor characteristics like nationality, size of group etc. This data type is useful in a number of ways. For example it can be used for accessing the target audience which could be useful for interpretation. Qualitative data is non-numeric, is descriptive in nature and concerns more complex visitor characteristics like motivations, expectations, behaviour etc. Gathering of information requires the use of more sophisticated techniques like interviews, self-completed questionnaires and observations (Pedersen 2002).

5.2.2. Visitor facilities

Jacobs and Gale (1985) note that once a site is open to the public, it must be equipped with management measures that will ensure that any increase in the number of visitors will have a minimum impact on the site. Most visitors will have basic expectations of the site that they visiting and these expectations must be met in order to repeat visitors as well as to maintain the reputation of the site. Basic expectations can be clean toilets, resting areas, parking areas and refreshment place. These basic visitor amenities can be used to control and regulate use within the site to enhance visitor experience and to minimise damage to the site and its contents. A curio shop present in the vicinity of the rock art to purchase souvenirs is recommended as it decreases the chances of visitors taking souvenirs from the site (Steel 1991).

5.2.3. Monitoring and research of visitor impacts

Glasson *et al.*, (1995) state that tourism is by its very nature an agent of change. The most obvious negative impact of visitation is the potential for physically harming the site. Some of the impacts of change may be controlled, regulated or directed. If properly managed tourism has the potential of being a renewable industry. If mismanaged it has the capability of destroying the very resource upon which it was build. All tourism activities at cultural sites lead to environmental and social change. Knowledge of the causes of tourism impacts can aid in planning and is essential for determining whether management objectives are being met.

Knowledge on the causes of the impact could provide valuable information on the interaction between the visitor and resource, and put planning on firmer ground (Gale and Jacobs 1986, Glasson *et al.*, 1995). Thus the behaviour of tourists at heritage sites needs to be constantly monitored (Pearson and Sullivan 1995). Research on visitor impacts as state Hall and Page (2002) is relatively recent and is reactionary and site specific. The impact of visitors on a rock art site was tested most publicly at Lascaux in France in the late 1950s and early 1960s when nearly 2000 people were entering the site each day (Deacon 2006:384). These studies demonstrated that monitoring and research of visitor impacts is fundamental for the conservation of rock art sites because many threats to these sites have been linked to tourism. The way tourism is managed determines the extent of impacts on the physical and cultural environment.

5.3. Interpretation

Tilden (1957:8) described interpretation as “an education activity which aims to reveal meanings and relationships through the use of original objects, by first-hand experience, and by illustrative media, rather than simply to communicate factual information”. Being aware that prehistoric heritage is subject to rapid deterioration, cultural heritage managers have a responsibility to diffuse this knowledge to the public (Herbert 1995; Edwards 1996; McArthur and Hall 1996; Alpin 2002). The role of interpretation is to make people more aware of the places they visit, to provide knowledge which increases understanding and promote the interest which will led to greater enjoyment and perhaps greater responsibility. Interpretation thus represents a link between the resource and the visitors.

While there is a growing interest in the concept of interpretation there is a lack of research measuring its effectiveness. Research in the field of interpretation has emphasised the importance of understanding visitor's needs, motivations, prior knowledge, attitudes and beliefs in relation to an interpretive site or experience (Edwards 1996; Beckmann 1999). Interpretation is by its very nature subjective. It is crucial that those visiting cultural sites be aware that interpretation of the site is influenced by site management, the state, and by our own beliefs. It is also crucial that the message about the site is conveyed in such a manner that the visitor is aware that what they are seeing is an interpretation, rather than the 'truth'. However interpretation must be closely integrated with other dimensions of visitor management such as strategic planning, visitor research and programme evaluation (McArthur and Hall 1996).

5.3.1. Control of interpretation

Site managers should strive for control of interpretative activities in respect to the place (Feilden and Jokilehto 1993, 1998). The reason for controlling interpretation is to ensure that the site is interpreted in a meaningful way. On the other hand specialists, such as archaeologists, historians, designers and marketing people can all be useful on occasion, and are sometimes necessary. When consultants are used to interpret a site, it is important that the manager stays in control of the process and oversee the program closely.

5.3.2. Interpretative techniques

Hall and McArthur (1996, 1998) observed that three essential ingredients of interpretation are the visitor, the message and the technique. The attention span of people is short and it is useful to confront the visitor with themes and techniques in order to awaken a range of sense. Interpretation programs do not have to be complex or costly. In many instances simple, cheap programs are all that are required. Simple demonstrations, self-guiding walks and leaflets, interpretive signage or a visitors' book with explanatory material may be all that is required. All managers should have basic interpretive skills and many have very developed skills in this area.

5.3.3. Staff training

In terms of interpretative material such as brochures, maps and material related to local attractions or to the authority or organisation managing the site, most African cultural sites do not have them. Without these additional interpretative materials interpretation is almost entirely reliant on guides for interpretation. Training is generally a short term cost that provides instruction as to how something should be done. Often training is one of the first things cut when budgets are tight. The decision to not provide adequate or appropriate training for site staff, generally has a negative impact on performance, lifespan and appearance of the site. Hiring well is important to any organization.

One of the best methods to protect a cultural site is to employ well trained, well-motivated staff (Deacon 1993b). It is therefore important that in addition to basic conservation training programmes, training should also include a component of interpretation in their courses of study. In addition it is important that site managers and their staff understand the mission of the heritage institution managing the site. This helps to ensure that that each decision they make and each task they carry out supports the mandate of the managing heritage organisation. Supervising a cultural heritage site requires knowledge of the technical aspects of the work supervised, but require other skills that facilitate good performance. Site managers should have perspective and judgement require to engage people, leadership skills, prioritization and scheduling work.

Supervising a World Heritage site is very different from an office environment and requires specialised knowledge about how each staff member at the site fits into the bigger picture. Specialised education for tour guides encompasses more than skills for tour guiding, they should receive training in areas in order to best fulfil their responsibilities such as foreign language, safety professional and administrative work. Tour guides are among the first people to respond to emergency situations that occur in the field. Therefore it is important that the guides be aware of the potentially serious or threatening situations s well as appropriate responses to these situations.

5.4. Stakeholder involvement

In the context of cultural heritage, stakeholders are those individuals or groups who have a legitimate ownership of, or interest in the site and who can influence its conservation and management. The number of stakeholders at a world heritage site is influenced by a number of factors such as popularity and location. The remoteness of a site can mean that the number of stakeholder groups and potential beneficiaries of the site is limited which might make co-ordination easier. International stakeholder groups are particularly active at world heritage sites in many parts of Africa with a lesser extent in South Africa. Their involvement is often related to capital investment management and technical work such as rehabilitating sites and establishing interpretation facilities and services.

The number, type and characteristics of stakeholders vary from site to site. According to Howard (2003) stakeholders can be grouped into six categories (owners, outsiders, insiders, governments, academics and media) which can be used as a starting point in identifying who the stakeholders of a site are. The process of stakeholder identification is facilitated by the organization that is responsible for taking a lead in a given process. It is important for stakeholder identification to be based on the principles of inclusiveness rather than exclusivity. Site managers as well as the organisation managing the heritage are responsible for balancing the interests of each stakeholder. Without understanding how stakeholder interests fit together, it would be impossible to formulate a mission or strategic plan with goals and objectives.

Pedersen (2002) points out some reasons for involving stakeholders in heritage management:

- it saves time and money
- failure to understand stakeholder positions can delay or block projects
- managers can be informed about misunderstood cultural differences
- problems areas overlooked by experts can be identified
- useful input concerning desired conditions at a site can be provided

5.4.1. Communication with stakeholders

Effective communication is part of the foundation for the success of the site and heritage managing organization. Because of the role of stakeholders in heritage management it is important that communication with them is carried out on a planned basis and should begin as early as possible in any planning process. The aims, objectives and strategies of all stakeholders must be communicated to each other if the tourism businesses are to be sustained, despite the fact that they value the heritage resource differently. The basic objective of the communication is to ensure that the views of the key stakeholders are sought to insure there is informed decision-making. In addition, communication is about providing an opportunity for people to influence decisions and is not just about giving or receiving information.

It is important that clear communication strategies should be used any time the site is sharing information with its staff, visitors and other stakeholders. Communication can be pursued in a number of ways and through a variety of events. Ongoing effective communication means the employment and training of members of the managing authority. Conflicts of interests at archaeological sites are mostly the result of competing interests of various stakeholders, including government, local communities and the private tourism sector. Successful site management requires dialogue and a participatory approach to the whole issue of conservation and use (Abungu 2006).

5.4.2. Local community involvement

Often writers referring to “community” do not explain what they mean by these words and the term is often used in an elusive and vague manner (Abercrombie *et al.*, 1988). In reality however the concept of ‘community’ is complex. In the framework of this thesis, the term community and in particular local community is defined in terms of geographical area, the people within a given locality closest to the site. Local communities are perhaps some of the most important stakeholders at cultural heritage sites and hence their involvement is an issue that is increasing being debated within heritage studies and management agencies. A whole issue of the journal *World Archaeology* (34[2], 2002) was devoted to the subject of community involvement in archaeology.

Community involvement/participation as an ends and means has been examined from political, sociological, environmental, geographical, bureaucratic, management, economic and tourism development perspectives (Tosun & Timothy 2003). Therefore it may be correct to say that: community participation is not a simple matter of faith but a complex of issues involve different ideological beliefs, political forces, administrative arrangements and varying perceptions of what is possible (Midgely *et al.*, 1989:ix). Neither nomination dossiers nor periods reporting questionnaires do explicitly oblige nations to perform community involvement as precondition for inscription onto the Word Heritage List. However it is the national heritage authority that decides on the execution of participatory approaches. Given the present societal situation it is doubtful whether there is enough political will on the nation states side for a broad involvement of local communities.

However in recent years heritage managers and archaeologists have come to the realization that the alienation of local communities was depriving them of allies in the protection of sites (Pedersen 2002; Abungu 2006; Chirikure & Pwiti 2008). Local people are physically closer to the heritage sites than heritage officers and thus their potential role is indisputable. According to Ndlovu (2009, 2011) lack of community involvement has contributed to the vandalism of rock art and other heritage resources in South Africa and elsewhere. For example at Domboshava in Zimbabwe, the local community was unhappy about the fact that the site museum kept all income from visitors and the local community did not share in the benefits, which led to vandalism where brown paint was used to obliterate a large panel of rock paintings (Pwiti 1996; Pwiti & Mvenge 1996; Taruvinga 2001; Taruvinga & Ndoro 2003).

5.4.3. Socio-economic development

The international Cultural Tourism Charter adopted by ICOMOS at the 12th General Assembly in Mexico and the UNWTO⁵⁶ recognise tourism can be a catalyst for national and regional development, bringing employment, exchange earnings, balance of payments advantages and important infrastructure development benefiting local communities and visitors alike (ICOMOS 1999; UNWTO 2010). The valorisation of archaeological heritage as

⁵⁶ United Nations World Tourism Organisation

a key to resource for socio-cultural and economic development implies the creation of the alliance of tourism and archaeology (Carbone *et al.*, 2013).

Bringing together host communities and their heritage sites demands appropriate capacity building for ensuring economic or financial activities and community benefits. It includes developing tourism infrastructure and investment in small-scale local enterprises that benefit both the heritage site conservation and local community. In most developing countries the potential of World Heritage status especially at remote cultural sites is appealing. World Heritage status in most African countries offers unique opportunities for local community empowerment through integrated rural development with potential to mobilize resources for cultural tourism (Glasson *et al.*, 1995; Eboreime 2009). World Heritage status can therefore increase the relevance of an area to the local community and hence their contestation with management at times. It is prescribed in the World Heritage Convention that local communities should be involved in the management of their heritage and derive associated benefits.

5.5. Documentation management

Documentation management refers to the care of preserving and making easy to reference all textual, graphical, and photographic information gathered during the process of inventory, research and conservation of a heritage site (Feilden & Jokilehto 1993, 1998). The question of documentation management of cultural heritage resources is a key issue in the conservation process (Cleere 1984, 1989; Feilden & Jokilehto 1993, 1998). The base line documentation of the site is the first requirement for effective monitoring of the site condition.

Documentation is also the basis of all planning for site facilities. When the site is opened to public access careful records should be kept in order to generate a database reflecting different aspect of the site such as- visitor numbers, size of visitor groups, the length of time spent on the site and the nationality of the visitor. At rock art sites, for example, such recording should not just restricted to the rock-art – number of images, colour, condition, position, technique, type and potential threats – but also to the associated archaeology, geology, vegetation, climate and natural, human and future threats to the site.

Feilden & Jokilehto (1993) highlight four main reasons for the importance documenting information of heritage place:

1. It is an essential source for assessing the significance of a place and for conducting future research
2. It provides activities in carrying out conservations activities, as when undertaking conservation actions it should be known which parts of the fabric are in their original state and which are the results of intervention
3. It is the basis for all monitoring activities because it provides the base line for them and allows for the investigation of trends concerning condition of the site.
4. In the case of rock art, recording of the art ensures the survival of the images and serves a means to present these images to the world.

5.5.1. Archive maintenance

Heritage management requires accurate and up to date inventories. However for many countries in Africa, a comprehensive picture of heritage is still incomplete as there are few inventories of heritage sites and monuments, thus rendering effective management impossible (Eboreime 2009:2). Given the importance of managing documentation, a heritage organization should maintain and regularly update an archive.

According to Pearson and Sullivan (1995) a heritage archive should be:

- Accessible
- Well organized
- Simple to use
- Mandatory and automatically updated
- Securely stored

5.5.2. Public accessibility

Article 32⁵⁷ of the Australia Burra Charter and Venice Charter (ICOMOS 1964) states that records associated with history and the conservation of a place should be publically available. The Venice Charter even encourages the publication of such records. Availability of records associated with a heritage place acknowledges that heritage is owned by the community in the broadest sense and that the role of heritage management is to take care of this perspective place and make it accessible to the public in all possible ways. In most African countries the assessable records for heritage management are either grossly inadequate or non-existent (Eboreime 2009). And when present, these records are often difficult to locate and scarcely used by other related institutions in the planning and implementation process.

5.5.3. Computerization

Digitalising information greatly facilitates entry, query and retrieval of information. In most African countries information about cultural heritage resources is not computerized, as most heritage institutions are underfunded. The acquisition of computer hardware and software and personnel training necessary to ensure efficient storage, retrieval, and manipulation of national site inventory database is a problem for most African countries (Eboreime 2009). A well maintained documentation archive could be very expensive and despite its good organisation the search for information could be time consuming.

5.6. Summary

The five management processes evaluated in this study are: conservation, visitor management, interpretation, stakeholder involvement and documentation management were evaluated at Twyfelfontein. These processes were chosen because these are some of the main issues presented by international organisations such as UNESCO but also because they respond to sustainable principles of managing world cultural heritage sites. The field of cultural heritage is abundant of specialised literature as well as various charters, conventions etc., and it is on the basis of a number of these that the indicators for the present evaluation were developed.

⁵⁷ Australia ICOMOS 1999

CHAPTER 6. ROCK ART MANAGEMENT IN NAMIBIA

The basic principle of rock art conservation is that this heritage resource is a fundamental part of the world's heritage; its accumulation offers testimony of different religious practices, way of life, cultures, economic and social activities practise as well as the biodiversity of the landscape during times for which there were no written records. Furthermore rock art is a heritage resource which is a non-renewable that once it is damaged cannot be replaced. In Europe little attention was paid to the conservation of rock art sites until the 1960s. The importance of conserving rock art in Europe was realised when it became obvious that the Lascaux paintings were degrading because of the climatic disturbance brought by hundreds of thousands of yearly visitors.

The heavy damage of about a dozen paintings in the cave of Niaux in 1978/9 raised further public awareness of the vulnerability of rock art (Clottes 1995). The discovery of the Grotte Cosquer in 1991, the Grotte Chauvet in 1994 both in France as well as international safeguarding campaign in 1994 for the petroglyphs of Foz Côa, Portugal, which were endangered by the construction of barrage, fostered international awareness and support for the protection and conservation of rock art. In the 1980s, rock art came into the focus of international conservation policies⁵⁸. In 1982/83, UNESCO expressed its specific interest in rock art with the commissioning of the “*World Report on the State of Rock Art*”, and through the launch of the World Archive of Rock Art (WARA) project in 1983-84.

The project of WARA has over 200 000 slides, numerous photographs, tracings, recording, reports and surveys of rock art sites in five continents (Anati 2004). The numerous rock art organisations that begun to appear⁵⁹ in the 1980s also contributed to raising public awareness of the importance of rock art (Bednarik 2001) seeking for standardisation of terminologies and methodologies and a re-assessment of conservation and site management practices and conditions. Recognising the importance of their rock art, cultural heritage conservation institutions in southern African countries coordinated informally through the Southern African Rock-Art Project (SARAP) since 1996 have collaborated in identifying and

⁵⁸ The recognition of rock art's global cultural significance was first expressed in the inscription of Kakadu National Park in Australia and the Archaeological Park and Ruins of Quirigua in Guatemala on the UNESCO World Heritage List in 1981.

⁵⁹ Such as the Australian Rock Art Association (AURA); the Southern African Rock Art Research Association (SARARA); the Eastern African Rock Art Research Association (EARARA).

nominating a representative and sample of rock art in the region for the World Heritage List. These efforts have led to the inscription of Tsodilo (Botswana), uKhahlamba/Drakensberg Park (South Africa), Matobo Hills (Zimbabwe) and Twyfelfontein World Heritage Site (Namibia).

6.1. Southern African rock art distribution

Rock art presents more than 90% of all known prehistoric art (Bahn 1997). Exploration of its distribution has not been exhaustive, but contemporary estimations suggest about 70 000 sites of rock engravings and paintings throughout the world including over 45 million images and signs on record (Anati 2004). The greatest number of the world's rock art is found in Africa. In southern Africa⁶⁰ (fig. 6.1) alone there are at least 50 000 rock art sites (Deacon 2002). Rock paintings and engravings, particularly from Namibia, Zimbabwe and South Africa have been known for a long time.

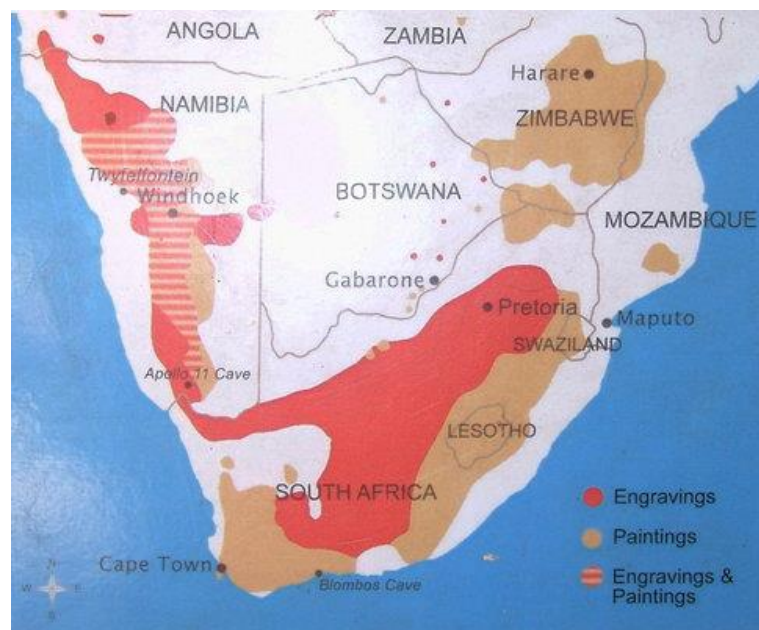


Figure 6.1: Distribution of rock art sites in southern Africa⁶¹

⁶⁰ Angola, Botswana, Kenya, Lesotho, Malawi, Mozambique, Namibia, South Africa, Tanzania, Uganda, Zambia, Zimbabwe, Algeria, Chad, Egypt, Mali, Libya, Mauritania, Morocco, Niger, Somalia, Sudan.

⁶¹ <http://evolutionistx.wordpress.com/2015/09/08/into-africa-the-great-bantu-migration>

6.2. Brief history of rock art research in Namibia

Given the richness of rock art heritage in Namibia, it is no surprise then that archaeological research in the country has for the most part concerned itself mainly with rock art and related studies, therefore making rock art the country's most well documented archaeological heritage. Documented interest in rock art in Namibia dates back to 1879 when the research was ordered by a British Commissioner named Palgrave (Kinahan 1994, 1995). In 1879 the German missionary Hugo Hahn spoke of engravings and paintings. Interest in rock art was limited largely to amateur researchers until a German officer named Jochmann published copies of some paintings from the Brandberg, Spitzkoppe and Erongo in a popular German journal (Viereck and Rudner 1957). In 1930 Hugo Obermaier and Herbert Kühn published the first monograph about Namibian rock art.

In the field of rock art research in Namibia, German contribution is the largest. The rock art recording project of the University of Cologne started in 1963 and received continuous funding from the Deutsche Forschungsgemeinschaft (German science foundation) until October 2006. The project has been intensively involved in rock art research particularly in the Brandberg. In total more than 30 000 engravings and paintings from all over Namibia and another 40 000 paintings in the Brandberg Mountain area have been documented under this project.

6.2.1. Reinhardt Maack

Maack is accredited with generating the most attention from professional archaeologists for his 'discovery' of the "White Lady" of the Brandberg (fig. 6.2) in 1918 and his subsequent interpretation relating to this figure (Breuil 1948; Viereck and Rudner 1957; Viereck 1959; Pager 1989). Maack's diary records his excitement at this discovery and he records how he chased after his companions in order to show the site to them. He traced the painting of the White Lady and his drawing reached Abbé Breuil who was in South Africa at the time. Maack was also the first to record the engravings of Twyfelfontein in 1921. He reported his findings in a report written for the South West Africa Administration.



Figure 6.2: White lady painting ⁶²

6.2.2. Henri Breuil

Breuil came to Namibia and South Africa to conduct his own field work after World War II. The purpose of his studies in the country was mainly for interpretative purposes. At his time, Breuil was not only one of the most influential scholars of European cave art but he was also a worldwide authority in rock art studies. He recorded a large number of paintings and published them in a premium monograph series. Breuil was also the first person to give a description of Philipp' Cave on Ameib Ranch in 1957 (Breuil 1957). Breuil's rediscovered of the Brandberg paintings especially the 'White Lady' in 1950 and devoted a whole book⁶³ to this rock art site in 1955.

6.2.3. Ernest Rudolph Scherz

Scherz and his wife were Breuil's guides to various rock art sites in Namibia. Scherz's approach to rock art research in the country was systematic, as he wanted to record everything and not just selected sites. In the 1960s, Scherz's work became part of the Cologne rock art research programme *Felsbilder im südwestlichen Afrika* (Breunig 1986; Kinahan 1995). The

⁶² Photo: Emma Imalwa

⁶³ Breuil, H.: 1955. *The White Lady of the Brandberg*. London

research programme was funded by the Deutsche Forschungsgemeinschaft (DFG). Chief results of the project are a large scale record of rock art all over Namibia (Scherz 1970, 1975). Scherz's research style emphasised documentation and little if any interpretation.

Scherz photographed, described and catalogued more than four hundred sites, the paintings were photographed and where necessary, traced and reproduced in watercolours (Viereck & Rudner 1957; Kinahan 1994, 1995). His findings were published in three separate columns between 1970 and 1986. In the late 1970s Rudolph Kuper succeeded Hermann Schwabedissen as director of the University of Cologne research programme. Kuper fostered the final publications of the rock art surveys conducted by Scherz and Fock and, by 1986 six volumes had been completed. Scherz was succeeded by Harald Pager, whose job was to record the art which Scherz could not because of his age.

6.2.4. Harald Pager

Harald Pager, who had gained international reputation for his Ndedema rock art documentation, was hired by the University of Cologne research programme to document the rock art of the Brandberg. Pager started his documentation of the Brandberg rock art in 1977. Pager believed that it was possible to document the rock art of the Brandberg in two years, however he ended up working in the Brandberg for seven years almost uninterrupted and recorded detailed copies of the paintings until his untimely death in 1985. Pager located 879 rock art painting sites in the upper Brandberg and copied more than 43 thousand single figures.

Pager's work revealed that there are more than 1 000 sites in the Brandberg. After his death a whole team led by T. Lenssen-Erz over to publish his recordings in 2006. The project ended with the publication of the sixth volume which was published in 2006 (Pager 1989; 1993; 1995; 1998; 2000). Every single figure and every scene is reproduced and filed according to specially designed analytical schemes. The end of the University Cologne rock art project in Namibia was celebrated by Pager's documentation being handed over officially to the National Museum of Namibia.

6.3. Rock art distribution in Namibia

Despite its aridity and general difficulty of access north-western Namibia, this region has yielded many important archaeological finds including several localities with very high concentrations of rock art sites (fig.6.3). A wide ranging survey of rock art sites in Namibia confirmed the importance of the north western regions and a number of the sites were proclaimed national monuments to preserve the outstanding example as part of Namibian cultural heritage.

The concentration of rock art sites are associated with granite massifs of the Brandberg and Erongo and the inselbergen of Spitzkoppe. There are approximately two thousand rock painting sites are known from the Brandberg alone. The great wealth of rock in the Erongo Mountain has been a motivating factor for archaeological exploration in the area (Martin and Mason 1954; Wadley 1977, 1979; Kinahan 1990). The concentration of rock art sites within a relatively restricted area is therefore due to a combination of environmental and cultural factors. The determining factor in the clustering of the rock art sites is the presence of reliable springs, and is generally accepted that the sites were occupied during the dry season as pints of aggregation and ritual activity (Kinahan 1990).

In the Hungorob ravine at the Brandberg, most of the rock art sites are concentrated in the upper reaches of the ravine, where they are loosely clustered in the vicinity of a few small but reliable waterholes (Kinahan 1999). Sites at the Spitzkoppe, exhibit a smaller pattern of distribution, with large central sites located at the waterholes and smaller peripheral sites scattered about in the same general area (Kinahan 1999:370). Rock art sites are considerably underrepresented in both eastern and northern parts of Namibia. The simplest explanation is that suitable rock surfaces were not available in these areas.

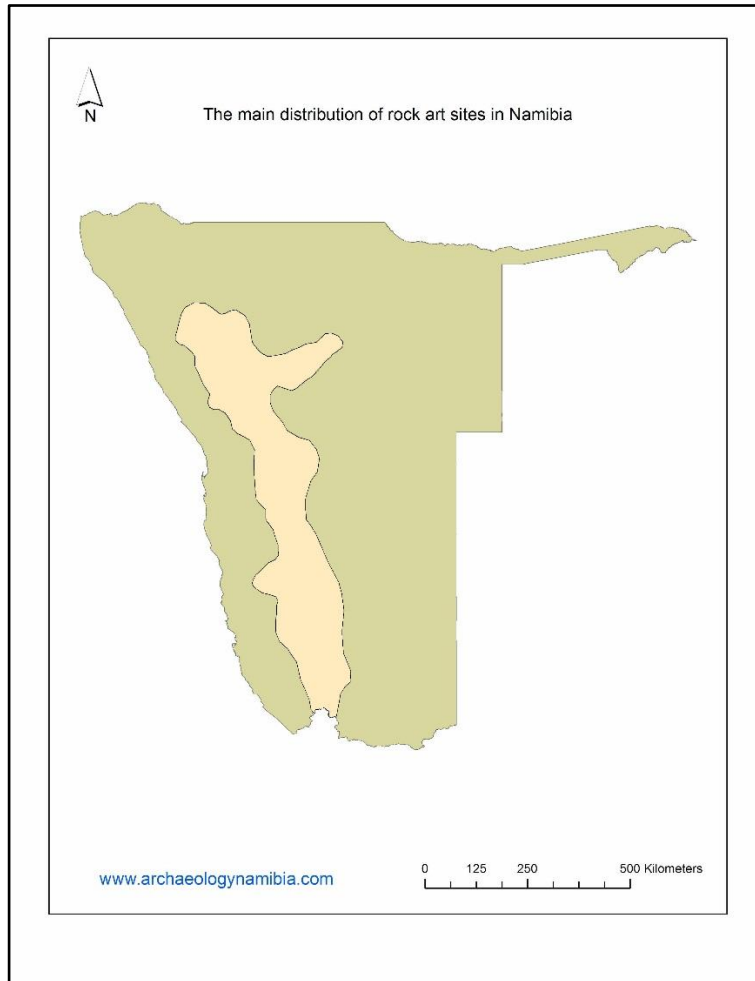


Figure 6.3: The main distribution of rock art sites in Namibia

6.4. Authorship of Namibian rock art

The cognitive explanation as to the meaning of rock art in Namibia is comparatively less well studied than other areas of southern Africa. The famous “White Lady” of the Brandberg discovered in 1918, received the most focus with regards to the authors of the rock paintings in the area. In the early 1950s a claim by French pre-historian Abbe Breuil that the “White Lady” was of Mediterranean rather than African origin (Breuil 1948, 1949a, 1949b, 1955). Debates surrounding the authorship, age and interpretation of the White Lady frieze dominated Namibia’s rock art research for some decades.

Although his claims were dismissed, it attached a certain romance to the rock art of the area and ensured its lasting appeal as a tourist attraction. Breuil’s status as an international

authority on rock art meant that his views regarding the painters of “White Lady” were so powerful that they still linger today in spite of having been proven false. Many of Breuil copies are misleading. They display features such as lips and chins which cannot be found on the origin paintings, even allowing for deterioration since he copied them (Jacobson 1976, 1989).

Early investigations of the Brandberg have helped to establish the indigenous origin of rock art and thereby clarify the questions as to its authorship (Schofield 1948; Walton 1954; Rudner 1957). Most of the rock art in the country has been attributed to the San people who occupied the region before the arrival of Bantu speaking farming communities during the early part of the first millennium as the content and symbolism are very close to the social values which still prevail today. However artists of the paintings of Apollo 11 Cave cannot be pinpointed to specific cultural groups. It is therefore more appropriate to refer to the artists by their activity such as saying hunter gatherers than ethnicity.

6.5. Age of Namibian rock art

There are very few radiometric dates for Namibian rock art. Its age is based on the general position of rock art sites within in the settlement history of central Namibia. Most of the country’s prehistoric rock paintings are more than 800 years BP and are estimated to be between 2 000 and 4 000 years old (Willcox 1971; Breunig 1986). In 1954, Breuil had one of the first radiocarbon dates made regarding Namibian rock art (Martin and Mason 1954; Breuil 1955). The age of $3\,368 \pm 200$ was obtained from charcoal that was sampled from the second layer of the excavation at Philip’s Cave in the Erongo Mountains.

In the late 1960s, Wolfgang Erich Wendt started researching archaeological material that could be found in close association with rock art. Since most of rock art is estimated to be 2 000 and 4 000 years old, it was unexpected surprise when seven stone slabs (fig. 6.4) containing painted animal figures from Apollo 11 Cave (fig. 6.5) yielded a date of about 28 000 and 32 000 years BP (Wendt 1972, 1974, 1975, 1976; Masson 2006). The slabs came from an outstanding stratigraphy of several late Middle Stone Age occupations at the site

time, making the slabs the oldest form of rock art, whether parietal or portable, which had been recorded not only in Namibia but also Africa at that time.

The animal motifs of the Apollo 11 slabs are also older than those in some of the best known partial cave paintings of the Upper Palaeolithic period of Europe, such as those at Lascaux in France and Altamira in Spain, both of which are dated to less than 17 000 years BP, though more recent discoveries at Chauvet Cave in France have pushed the date for the earliest Upper Palaeolithic cave paintings in Europe to 32 000-30 000 years BP. Recent press releases concerning the world's oldest cave paintings 30 000 and 32 000 from Chauvet Cave in southern France have never mentioned the Namibian discovery. The oldest rock engravings could be around 10 000 years old. The age of the Apollo 11 Cave slabs lent considerable impetus to the University of Cologne research programme and led directly to the mounting of its most ambitious project: the documentation of the rock art of the Brandberg Mountain which remained largely un-investigated since Breuil.



Figure 6.4: Two of the seven quartzite slabs depicting animal ⁶⁴

⁶⁴ Photo: National Museum of Namibia



Figure 6.5: Apollo 11 Cave interior before the excavation that revealed the painted slabs⁶⁵

6.6. Rock art management strategies in Namibia

Human activity and actions account for more rock art deterioration than all other agents collectively (Rudner and Rudner 1970; Rudner 1989; Deacon 1993b, 1997b, 2006, 2007; Smith 2006). People's lack of knowledge with respect to the vulnerability of rock art and how to behave in its presence, are contributing factors to the deterioration of rock art (Bednarik 1993; Coulson and Campbell 2001). Thus the main issues that rock art management strategies have tried to address over the past decades have been the protection of the sites from human damage and promotion of public awareness including tourism.

To this end the most commonly used management strategies focus primarily on controlling access to rock art sites, minimising natural weathering and visitor behaviour and knowledge (Deacon 1997b, 2007). There is no right way to manage rock art sites as each site is different and needs specific conservation methods to suit its needs. Management methods of rock art sites include regulations, enforcement and restricting measures at sites physical alternations, adjustments and uses of site, education, site information which will provide visitors with behaviour methods at sites (Pedersen 2002). The strategies used to manage rock art discussed below.

⁶⁵ Photo: W.E. Wendt 1972

6.6.1. Cultural heritage institutions

In Namibia as is the case in most African countries, cultural heritage is regulated by a heritage institution. The heritage institutions which have played a role in the conservation of Namibia's rock art sites are the Historical Monuments Commission, National Monuments Council (NMC), National Museum of Namibia (NMN) and the National Heritage Council (NHC). Heritage legislation provides for the establishments of heritage institutions which under the control of councils or commissions commonly lay down the rules and norms that stipulate what actions are required, permitted, or forbidden at cultural heritage sites which are often open to the public.

Without effective institutions to regulate management practices and tourism activities, cultural heritage resources such as rock art sites would be irreversibly destroyed. The effective and sustainable management of rock art is a vital prerequisite for conserving the history and identity of the people of Africa for future generations (Abungu 2006). Heritage institution also have the authority to declare certain of national interest as national monuments to safeguard them from destruction. However destruction, damage continued, showing failure of heritage legislation alone to protectively protect rock art sites (Ndlovu 2005; Smith 2006).

6.6.2. Conservation interventions

Originally the "White Lady" Shelter was the only rock art site that had any form of physical protection in the Brandberg and the rest of Namibia. The shelter had dramatic cages, but the cages were vandalised. Other paintings in the Tsisab Ravine (where the "White Lady" painting is found) had no form of physical protection and visitors could touch the paintings. With the exception of the Jochmann Grotte most of the sites on the Tsisab Island are small and visitors cannot help brush against the art. Besides the direct impacts of human actions on painting such as touching and vandalism, humans also introduce changes in atmospheric conditions, which accelerate the natural weathering processes and deterioration of rock art (Bednarik 1993).

In 2004, the NMC announced an action plan for the conservation and management of Namibia's major rock art sites. The move to improve the conditions at some rock art sites came at the time that Namibia was planning to nominate one of five possible sites for its first World Heritage site. It would be inappropriate to apply for World Heritage status of a rock art site if the majority of the sites were not adequately protected and managed. The aim of the action plan was to restore, preserve and protect these environments, encourage and stimulate scientific research, encourage tourism and expand knowledge on the environment in general.

At the Brandberg sites of Tiara Shelter, Ostrich Cave and Girls' School Shelters pathways were re-enforced and coarse gravel was laid on fine sediments below the paintings. Elevated pathways were built as a preventative measures at Twyfelfontein and signs placed at sites cautioning people not to touch the rock art (this will be discussed in more detail in the next chapter). At Spitzkoppe, most picnic and camping areas have been shifted away from the rock art sites to curb smoke damage and grease splatters; roads and tracks which vehicles take to within the 100 meter of rock art sites are to be closed off. Under the NHC the Spitzkoppe Conservation area was proclaimed a heritage place on 1st September 2011. This proclamation means that protection was extended to numerous other rock paintings and other cultural resources in the larger Spitzkoppe area.

6.6.3. Tour guides

One of the biggest problems of managing rock art sites is how to respond to sudden increase of visitors at the sites. Many of the threats to rock art sites have been linked to tourism. Cultural heritage management and tourism sectors have not formed a true partnership. Tourism values may be therefore compromised to protect the archaeological values, or the archaeological and other cultural values are compromised to promote tourism. In southern Africa the latter is true. In the earlier times sites such as Twyfelfontein and the Brandberg were visited only by surveyors, mountaineers and interested archaeologists therefore limiting the damage caused by people.

Since the country's independence in 1990, a large number and ever increasing numbers are flocking to see the rock art. In order to restore, preserve and protect these environments and

their contents, local community members were trained at Brandberg, Spitzkoppe and Twyfelfontein. The aim of training local guides was that they could be used as a first line of defence against damage to the rock and environment. These guides were trained in areas of; history of area, knowledge of rock art, fauna, flora, geology and other subject relevant to the area.

6.6.4. Awareness

In Namibia there appears to be a lack of initiative at all levels of administration to educate the general public about the value of the rock art. The National Museum of Namibia has historically been central to the protecting and promoting of rock art. The main role of the Museum in rock art management is interpretation and documentation. The Museum in partnership with the Heinrich-Barth Institute of the University of Cologne constructed a permanent rock art exhibited entitled “*Rock art in Namibia: it’s past and present*”. The aim of the exhibition is to send the message how to behave at rock art sites. The location of the display is at the Alte Feste (a display centre of the National Museum) as this one of few historical places that tourists in Windhoek visit. This exhibition has not been successful in creating awareness of rock art amongst the Namibia public. The exhibition has also not been in use for a few years as the Alte Feste has been closed for renovations.

6.6.5. Heritage inspectors

The National Heritage Act No.27 of 2004 empowers the NHC to appoint heritage inspectors with the consent of the Minister or other persons in charge of the relevant Ministry or public authority. In addition to the appointment of heritage inspectors into the NHC, any officer of the police or customs is deemed a heritage inspector. This arrangement is ideal as it increases the number of people engaged in surveillance work of potential infringement and alleviates the policing problems often faced by heritage institutions. The primary responsibility of heritage inspectors includes reporting, recording, protecting, preserving and maintaining heritage places. The inspectors have the power to arrest, to enter properties where heritage places are located and to search without warrant for relics and antiques.

6.7. Challenges of managing rock art sites

Many of the challenges experienced with managing rock art sites are strongly linked to some aspects of legislation enforcement. This is because although the colonial and post-colonial governments have enacted laws to protect rock art from vandalism and theft, these laws are rarely enforced. The obligation to protect heritage is implicit in legislation but how this is achieved varied on the type of heritage and the mentality of those tasked with managing the cultural heritage resources.

Currently no effective law enforcement work takes place at any of the rock art sites. Neither do the heritage institutions have information about the type, frequency and degree of damage being done through vandalism, fire and disfigurement of rock art sites. This is the result of factors examined and discussed below. It is necessary to point out that these challenges though discussed under different headings should not be viewed as separate from each other as they are strongly interrelated and the division here is the purpose of clarity.

6.7.1. Weak institutional capacities

The undying problem with most efforts to preserve rock art sites appears to originate from weak institutional capacities. The weak institutional capacities of past and present heritage institutions have made it difficult to enforce heritage legislation. Heritage institutions in Namibia since independence are funded by the government but with independent powers to implement heritage legislation. Furthermore heritage institutions and their advisory bodies tend to be ad hoc and may sometimes lack adequate or appropriate background on heritage management processes.

The weakness of heritage institutions in enforcing the law and their lack of understanding of heritage legislation has resulted in major rock art sites being exploited by local businesses, local community and visitors. Namibia's three major rock art sites area- Twyfelfontein, Brandberg and Spitzkoppe where for a long time controlled by local community tourism enterprises these circumstances arise from lack of site management by the then heritage management institution, the National Monuments Council on the one hand and the emergency

of community based tourism that derive income from visitor fees. Effective protection of national monuments, especially those receiving significant number of visitors requires national heritage institutions to actively assert their role as the national custodian.

6.7.1.1. Ineffective ways of administering the sites

According to the National Heritage Act No. 27 of 2004, the NHC must introduce and maintain a site management plan for each protected place which is a national heritage site and for other protected places determined by it. A site management plan must be prepared in accordance with the best cultural, environment, ecological, scientific, educational principles that can responsibly be applied taking into account the location, size, and nature of the site and the extent of the resources of the Council. The National Heritage Act No.27 of 2004 provides that such a site may be managed; *a) solely by the council; b) by the council in conjunction with staff members of the Ministry of Environment and Tourism (MET) designated by the Minister responsible for that Ministry; or c) by any person traditional authority, institution or undertaking in accordance with terms and conditions of a contract entered into approval with the Minister.*

In Namibia, as is the case in South Africa, the law makes it possible for individuals to own private land thus consequently there may be national monuments and other archaeological sites found on that particular piece of land. Archaeological materials or the contents of archaeological sites, including rock painting and engravings are automatically protected under the National Heritage Act and may not be held in private ownership. If so decided the Council may acquire the property on which the archaeological materials occur. Such monuments become public property under the guidance ship of the Council. The Council may negotiate servitude rights to such sites in order to facilitate public access.

Although national monuments found on private land are accessible to the public, visitors require the permission of the landowners before entering the property. This means that it is not easy to trespass on these areas without mutual consent from the owner. Although in reality these rock art sites are property of the state, heritage institutions often leave the management of such places to those individuals choosing instead to concentrate on major rock art sites.

Although acceptable arrangements for public access are in place, visitors are not supervised on the sites. It is difficult for heritage authorities to expect an owner to adequately manage property and abide by the legislation when the state does not set an example in the maintenance of such properties. There are no legal acts that determine the level and way of participant in the protection of the site as well as interaction with the state. Although many techniques for preserving sites on private land have been identified, it takes a tremendous amount of time, effort and money to be effective.

6.7.1.2. Lack of heritage legislation enforcement

There seems to be a lack of knowledge or comprehension on the Namibian heritage legislation at large. The difficulty in enforcing the law also comes from a lack of initiative at all levels of administration to educate the general public about the value of the rock art. For example the rock painting shelter Omungunda 99/1 in the former Kaokoland is occasionally visited by the Ova-Himba people living in the area who sing and dance inside the shelter (Lessen-Erz and Vogelsang 2005). Their body paint which is composed of a mixture of animal fat and red ochre have left traces of red colour in some part of the shelter (Lessen-Erz and Vogelsang 2005). No efforts have been made by the NHC to directly engage with local communities who live in the vicinity of the archaeological sites and sensitise them to the importance of the rock art.

6.7.1.3. Resource constraints

The need for rock art conservation and management attracts little recognition and inadequate funding and support. When one considers the challenges that Namibia is facing (high HIV rates, high unemployment rates) it is understandable why funding for heritage and in particular archaeological heritage is not always regarded as a priority and is therefore remains underfunded. Heritage institutions. Governments demand more and more that heritage pays for its own way. Heritage institutions have to operate in a situation characterized with a decrease in public funds allocated to heritage protection because the responsibilities of these institutions include not only rock art conservation but also the management of other national monuments such as other archaeological sites and objects; paleontological sites, old buildings and places of historical significance.

In addition to the inability to carry out conservation work due to limited funding, there is a prevalent shortage of qualified and competent personnel. When the Historical Monuments Council was established in 1948, it consisted only of five members but in 1950 was extended to seven members, all of whom rendered unpaid services (Tötemeyer 1999). The organisation was funded by donations from its members. Today there is only one archaeologist employed at the NHC and the other is the author of this dissertation employed by the National Museum of Namibia. Both archaeologists at each institution are tasked with all work related to the archaeology field, be it historical archaeology, history etc. The consequences are incomplete inspection and monitoring of rock art sites and other archaeological in the country.

Thus the competition for public funding becomes stronger and stronger and it is evident heritage sites cannot be entirely financed by the state, which means that managers have to look for alternative sources of funding. The mistake that cultural experts make is that they often talk about cultural heritage management as a completely separate issue from land use management. This has led to a lack of funding for the conservation of rock art sites. In fact culture as a concept on its own is not sustainable and that is why a focus rooted in landscape, territorial management is important as it brings together the concept of cultural heritage and daily live concerns (economic, social, cultural etc.).

Rock art sites are always linked to natural resources, Namibia's major rock art sites, the Brandberg, Twyfelfontein and Spitzkoppe are good examples. The Brandberg and Spitzkoppe mountains are especially famous for the natural scenic mountains as well as Later Stone Age (LSA) rock art. Thus the Ministry of Environment and Tourism (MET) is a major stakeholder. However because of the rock art sites, the mountains are under the jurisdiction of NHC. The legislation applicable for the protection of the mountain is therefore the National Heritage Act of 2004. However the NMC and now NHC have experienced problems in implementing their mandates due to underfunding. There is a need to review and harmonise policies of natural heritage with those concerned with cultural heritage.

The problem with administration of rock art sites in Namibia also has to do with the fact that is that very little or no stimuli for private persons, NGOs⁶⁶, local communities and other government agencies and ministries as stakeholders which makes fund raising activities difficult. Following the neglect and resultant despair of the country's major rock art sites, it was evident that vast sums of money were required to bring the sites back to their origin state. It is therefore important that strong relations between the local heritage institutions and foreign ones be established. The rehabilitation works of the country's main rock art sites (Spitzkoppe, Brandberg and Twyfelfontein) was funded by the European Union through the Namibian Tourism Development Programme (NTDP) this was discussed in chapter 3. UNESCO and the NHC have jointly funded tour guide training on the implementation of the site management plan (Kinahan and Kinahan 2006).

6.7.1.4. Monitoring and maintenance programmes

The problem of the management of rock art sites is compounded by the fact that nearly all of Namibia's rock art sites are located in remote areas, and the majority of these sites do not have patrols to enforce regulation. Over the years, unrestricted visitor access to rock art sites in the Brandberg area, Spitzkoppe and Twyfelfontein has resulted in the desecration of the fragile environment and damage to rock art sites. At Twyfelfontein for example to this day, guides from the Twyfelfontein Country Lodge provide tourists access to a number of rock art sites within the buffer zone such as the Klein Seremonienplatz and, Adam and Eve Shelter, Hasenbild Shelter and the Siebenplatten engraving site. These guides are not trained to interpret rock art and consequently these sites are at risk and a number of acts of vandalism have been committed.

Thus the inability to enforce the law comes from of the difficulty of identifying and appending the offenders. The Namibian Police and customs officers with whom NHC is supposed to coordinate legislation enforcement are usually handicapped because they do not understand their roles in the protection of the sites. It is therefore a challenge for a police or customs official to go and open a legal case for the violation of heritage legislation. Besides

⁶⁶ non-governmental organisations

the lack of experience, they also lack interest. Police officers are also never going to initiate an interest in acquiring heritage training this must come from heritage officers.

6.7.1.5. Centralized management of rock art sites

The centralised management of rock art sites and other cultural sites is a stumbling block to meaningful local community involvement (Pwiti and Mvenge 1996; Ndoro and Pwiti 1999). The lack of local community involvement is one of the challenges which seem to be synonymous with archaeological heritage management in Africa for many years (Said 1999; Taruvinga 2001; Ndoro & Pwiti 2001; Ndoro 2003, 2005; Taruvinga and Ndoro 2003; Deacon 2007; Chirikure and Pwiti 2008; Chirikure *et al.*, 2010; Jopela 2010a, 2010b). Ndlovu (2005, 2009, 2011), argues that the exclusion of local communities in the management of rock art sites has been based on the assumption that makers of this heritage are extinct and with the introduction of heritage legislation, archaeological sites became government property.

It has now been recognised that formal management systems on their own are incapable of ensuring a holistic and management of local immovable heritage (Mumma 2003:43). Local people are physically closer to the rock art sites than heritage officials and thus their potential role is indisputable. It should be noted here that activities of institutions responsible for the management of heritage resources are often field oriented and would there beneficial to train local communities to look after these sites. This is not to suggest that community involvement is the only solution for the conservation of rock art sites. Namibia's major rock art sites have suffered decay under the management of local communities and there is also evidence that local people's support for protected areas depends on the perceived costs and benefits of conservation.

The centralization of the management of cultural heritage also has much to do with the economic management. Namibia's most popular rock art sites; the Brandberg and Twyfelfontein are major income generators not only for members of local communities but also for the NHC. If cultural sites are profitable for the NHC their managed is likely to be highly centralised. Put another way: 'if monuments pay they stay' (van Schalkwyk 1995:4). The non-economic management of the heritage has resulted in what can be perceived as a lack

of appreciation and care of cultural heritage. When the rock art sites are not linked with economic potential they do not encourage activities such as preservation, maintenance and development.

In South Africa the management framework for cultural heritage management is more decentralised than Namibia's framework providing three levels of management and inclusion of living heritage. The National Heritage Resources Act of 1999 is more explicit about the involvement of local communities. The management of heritage resources are based on a grading three tier grading system. SAHRA (South African Heritage Resource Agency) is responsible for administration of heritage resources at national level or Grade I heritage resources. Below SAHRA are the provincial authorities responsible for the nine provinces or Grade II heritage resources, while local municipalities have the responsibilities for sites of local significance and those that have not been graded.

According to Ndlovu (2011) and Hall (2005) public participation is a concept usually referred to rather than practised. Despite the recognition of the different value systems, the significance grading system is fundamentally empiricist in that significance is considered to reside within heritage resources rather than be assigned to them by people and interest groups. Moreover this system is problematic because it allows for the assignment of responsibility on the basis of significance rather than on the protection measures appropriate to a particular site (Ndlovu 2011). Sites should be graded in terms of the protection measures required rather than in terms of significance.

6.7.2. Political ideology

There is little doubt that the degree of acceptance of archaeology, as a professional discipline that provides information on the history of a people, is directly related to the prevailing political ideology of the country concerned (Kristiansen 1989:23). Over the period which heritage legislation has been operating in Namibia, a division has emerged between the types of heritage that should be protected reflecting the changing political agendas of those in power. Conserving the archaeological heritage therefore becomes part of the political balancing act. What is evident from the onset of the management of cultural heritage

resources in Namibia is that it was inextricably connected to the ‘bias in the South African National Monuments Commission towards conservation of buildings and sites associated with European colonist’ (Tötemeyer 1999:73).

The membership of the Historical Monuments Commission and the NMC before 1990 were composed exclusively of whites. The membership of these organisations had an influence on the types of cultural heritage resources; of all the proclaimed national monuments by the Historical Monuments Commission and the NMC before 1990, 80% reflected settler history (Tötemeyer 1999; Gwasira 2005). After 1990 when Namibia obtained its independence, this new nation state’s commitment to cultural heritage seems to be directed mostly exclusively to the liberation struggle for independence. Some national monuments declared by the NMC after 1990; Three Heroes’ Statues at Parliament Building (10th December 2001), Heroes Acre (20 August 2002), Grave No 171 (the Mass Grave) in the old Location Cemetery and Omuguluwombashe (declared 15th August 2004) would not have been considered as being ‘in the national interest’ during the apartheid era.

Although our politics have changed we are still in a process of transformation. The choice of the sites has been undoubtedly influenced by the interests of the current government, NMC members, as well as by interested members of the public. Even today the rock art’s uniqueness and values is not fully recognised by the independent Namibian Government as an extremely valuable heritage that requires protection. This would seem to imply that when archaeology is closely tied to politics, protective measures are more effective (Ndoro 2005; Négri 2009). On the other hand when this link is missing it becomes harder to implement the law as people do not commit themselves to heritage unless that undertaking corresponds to deeply felt needs. The case of Great Zimbabwe is a great example of archaeological heritage strongly connected to national and political identity.

6.8. Summary

Cultural heritage management as fostered through heritage legislation has been inadequate in protecting rock art sites and other cultural heritage. Reliance on formal structures is not always the best solution where heritage is widely spread and the responsible institutions are

understaffed to fulfil their management mandates. Most of the rock art sites are located in remote areas while heritage institutions have always been based in Windhoek. The long-term viability of protected areas will depend on the support of the people who live around them. Involving local communities in the conservation efforts of rock art sites means that there is and increased field level presence. Debates over local communities' ability to manage their cultural resources are a part and parcel of broader struggles over political and economic power and authority in African countries.

The management of rock art sites in Namibia is usually considered much later when the heritage is threatened; Twyfelfontein World Heritage Site, rock art sites in the Brandberg area and Spitzkoppe rock art sites are good examples. Although the heritage authorities and the government after independence have taken more interest in rock art since the nomination of Twyfelfontein as a World Heritage Site, rock art priorities still remain low. Saying that the conservation of rock art is for the public good does not necessarily guarantee recognition and conservation of such heritage. There is a greater need for the Namibian Government to be sensitised on the importance of the country's rock art sites since at present, there is little investment in the cultural heritage sector.

In order to facilitate effective management and regulation of rock arts sites certain key management tools must be available to heritage institutions. There is a need to invest in educated, well informed heritage officials. This is a crucial aspect of good management. Each newly appointed governing body member should complete an orientation programme to ensure that incoming members are familiar with purpose management structures and processes of the heritage institutions. A database on all the known sites should be established and maintained, and systematic archaeological surveys must be organised. Ideally management plans for rock art sites should be developed by heritage specialists in consultation with local communities and land owners.

CHAPTER 7. FINDINGS

The findings of the secondary research have been presented in chapters 2, 3, 4 and 5. The findings of the management processes are presented here based on the findings of the author, heritage practitioners, local community, Twyfelfontein tour guides and visitors.

7.1. Performance indices for conservation evaluation

Table 7.1 shows the performance indices for the different conservation indicators evaluated by the author. The scoring criteria is explained in Appendix 1.

Indicators	Scores	Scoring criteria
Monitoring of the physical condition of the site	0	<i>No/little monitoring i.e. simple activities like picking up litter</i>
Maintenance	0	<i>No/little maintenance (simple activities like cleaning)</i>
Conservation interventions	1	<i>Conservation either satisfactory/not fully implemented</i>

Table 7.1: Performance indices for conservation indicators by the author

7.1.1. Monitoring

The author is not convinced that monitoring occurs on daily or a regular planned basis, hence the score of “0” for this conservation indicator. While accompanying the local tour guides during their tours, the author did not see any of the guides inspecting the art rock or taking any notes. The large size of the tour groups as well as the time intervals between these tour groups does not allow for specific monitoring activities. The positioning of some of the rock art panels as well as the geology of the sandstone on which the engravings are carved is characterised by flaking as such require planned monitoring. In addition monitoring requires specialised training in a number of disciplines such as conservation, condition reporting and visitor management which neither the guides nor the site manager are trained in. The NHC archaeologist does not have all the necessary experience, indicating during her interview that finding an expert is always a problem.

The NHC archaeologist indicated that since her appointment at the institution there have been improvements in conservation, saying that the local tour guides and site manager have been asked to observe and document everything and in case of any emergency the site manager is expected to report immediately to the head office (personal communication). The site manager (personal communication) and the local tour guide questionnaire answers indicated that the site was monitored on a daily basis. Monitoring as it relates to activities such as picking up litter takes place on a more regular basis however monitoring as it refers to simple and less costly activities like monitoring the display, inspecting the comment book is not carried out on a planned or regular basis.

The display in the visitor centre is poorly looked after, since visiting the site for the first time in 2010 the author noticed that the plastic covering some of the photographs in the kiosk are torn (fig. 7.1). This is because the photographs are facing direct sunlight. At the time of visiting the site in 2013, the author realised that the torn plastic covering had not been replaced. The photographs in metal casing are covered with sand because they have no protective casing like glass and the casings are rusting. By ignoring regular planned monitoring the NHC is doing little to ensure equipment meet its life expectancy.

It is correct to say that the only ‘real’ monitoring of the physical condition of Twyfelfontein took place during the 2005 survey when the site was being considered for World Heritage Listing. The lack of monitoring activities of rock art sites is linked to the political eras of Namibia; prior to independence focus on the management of cultural heritage resources was given to monuments associated with settler history and after independence national priorities of cultural heritage has been oriented towards liberation history. This is not to say that cultural heritage was not considered a nationality priority after independence; (after all the drafting of the Heritage Bill started as early as 1994), but rather to point out that technically nothing was done to care of rock art sites and other archaeological sites.



Figure 7.1: Photograph with torn plastic covering⁶⁷

7.1.2. Maintenance

During the two week period of field work in May 2013 visitor questionnaires were handed out for the first time. During this time only 200 visitors completed the questionnaire despite the questionnaire being placed at the site and in the reception of the Aba-Huab campsite to increase the sample size. The small sample size can be attributed to two main factors; in the first place visitors do not spend much time on the site before and after the tours and in the second place after the tour many visitors do not return to the campsite immediately after their tours but rather explore the area returning to the campsite only at night. The sample size should be taken into consideration when drawing conclusions because this is not a representative sample of the number of visitors coming to the site.

The visitor questionnaires revealed that most visitors seemed pleased with the overall presentation of the site (fig.7.2). Of the two hundred (200) visitors who completed the questionnaire, sixty-five (65) did not respond to this question. A hundred and thirty (130) of those who responded indicated that the site was well maintained while five (5) did not share this view. In general Twyfelfontein can be described as a clean site. Maintenance is the end result of monitoring. Therefore if no monitoring takes place then maintenance activities are

⁶⁷ Photo: Emma Imalwa

almost unlikely. As mentioned above the engravings are carved into sandstone, which is characterised by flaking and any maintenance would require constant maintenance, by a trained specialist. At the moment the NHC does not dispose of a specialist to attend to this matter. The NHC archaeologist indicated (personal communication) that moving the rock art panels could be an option however this would compromise the integrity of the site. In addition it is the view of the author that removing the panels would be a costly operation and such an activity depends on the availability of funds.

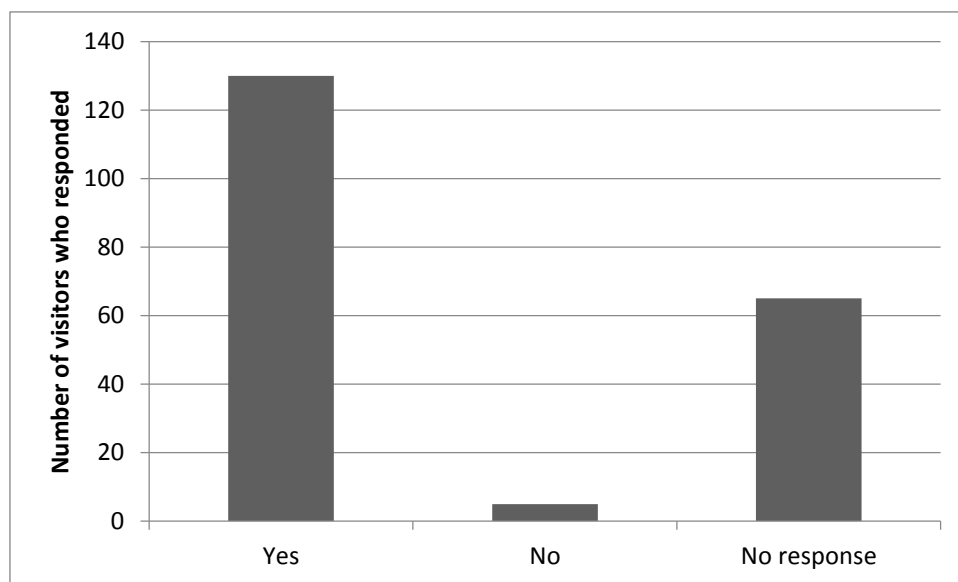


Figure 7.2: Visitor's opinion on site maintenance

7.1.3. Conservation interventions

The conservation interventions both physiological (the National Heritage Act of 2004) and the physical conservation interventions and the admission fee are presented here.

7.1.3.1. National Heritage Act of 2004

The principle instrument of protection for the site is the National Heritage Act (no.27 of 2004), particularly section 46 (1) (a) in terms of which it is prohibited to (a) remove or demolish; (b) damage or despoil; (c) develop or alter; or (d) excavate all or any part of the

protected place. Implementations mechanisms for measures are set out under Division 4, Part VII, Section 63, which defines the offenses and penalties in terms of the Act.

7.1.3.2. Physical conservation interventions

Most of the physical conservation interventions at Twyfelfontein were discussed in chapter 3. The physical conservation interventions at the site can be described as being good; the conservation standards adopted at the site conform to the ones developed internationally. The conservation treatments at the site are:

- Reversible
- Ensure harmony with the original design and workmanship
- Do not allow new additions to dominate over the original fabric
- Meet the test of authenticity in design, material, workmanship and setting

Building at Twyfelfontein have been designed to leave the smallest footprint possible, no cement or concrete is used. Walls are constructed from gabions (wire baskets filled with stones) and the roofing is made from recycled steel drums. Gabions have also been used for seating along the guided route and paths on all the steep gradients (fig.7.3). Other paths are laid out and constructed with minimal disturbance on the surface and are defined on either side with loose packed stones and the maintenance of these pathways simply requires that they are raked or filled with dry stones as shown.



Figure 7.3: Pathway on the dancing kudu route constructed using gabions ⁶⁸

Although the conservation interventions at Twyfelfontein are described as being good, this conservation indicator scored “1” because they are not fully implemented. Figure 7.4 shows an external tour guide vehicle entering a prohibited area. In this photograph (taken May 2013) the external tour operators were tracking the movement of the desert elephants and the physical barrier did not deter them. Enforcement of rules is an important technical proficiency and the enforcement of rules is not only needed to protect the outstanding universal value of the site, but also to maintain respect of the site management. It is important that the site manager needs to communicate to external tour agencies the need for certain rules and the behaviour that should be prohibited. The absence of a guard at the site after hours is a problem and this is something that the NHC should look into.

The viewing platforms installed at three of the most visited rock art panels and famous image clusters such as the ‘Lion Man’ and ‘Dancing Kudu’, helps to remove the physical contact with the engravings and their immediate surrounding while allowing visitors the best possible vantage point of the engravings. The viewing platforms have shelves for visitors to place their food or drink before climbing the platforms. The type of visitors to Twyfelfontein are usually large group sizes (fig.7.5) which means that compliance of the capacities of the facilities is not always respected. According to specifications, the visitor amenities were devised to cater for ten or fewer people, while paths, rest areas and toilets were designed

⁶⁸ Photo: Emma Imalwa

around this same average, and the viewing platforms were designed to a safe maximum of eight people. Groups of more than twenty have be observed on the viewing platforms.



Figure 7.4: External tour guide vehicle entering prohibited area ⁶⁹



Figure 7.5: Tour groups often consist of more than 10 people ⁷⁰

⁶⁹ Photo: Emma Imalwa

⁷⁰ Photo: Emma Imalwa

7.1.3.3. Admission fee

Many protected areas lack adequate and sustainable sources of funding needed for the management of the sites and as a consequence heritage institutions have been forced to look for funding else. Generating revenue to support management of a site has become key objective for maintaining World Heritage Sites and the most spread source of income are visitor fees. The admission is not only a source of income for heritage place but can also be seen as protection for the site. However on the other hand visitor fees in some cases can deprive poor people from visiting the site which is the case for the majority of Twyfelfontein local community who have never visited the site citing high visitor fees as the main reason. The Twyfelfontein entrance fee (table 7.2) is payable at the visitor centre, no booking is required, even for large groups. Included in the admission fee is the service of Twyfelfontein guides.

Prices			
Namibians	Non-Namibians	Educational tours	Vehicle prices
0-5 years: N\$ free	0-5 years: N\$ free	Not more than 100 learners N\$ 500	Sedan, 4x4 and bakkies: N\$20
6-17 years: N\$ 20	6-17 years: N\$ 30	Tertiary (not more than 100 students): N\$ 600	17 seater buses and trucks: N\$50
18+ years: N\$ 30	18+ years: N\$ 50		

Table 7.2: Entrance fee for Twyfelfontein

7.2. Performance indices for visitor management evaluation

Table 7.3 shows the performance indices for visitor management indicators as evaluated by the author. The performance indices for the heritage management processes indicators were given on a three-point scale (see Appendix).

Indicators	Scores	Scoring criteria
Visitor data collection	1	<i>Simple techniques (age, number nationality)</i>
Visitor facilities	1	<i>Basic amenities, restrictions not respected</i>
Monitoring and research of visitor impacts	0	<i>No/little monitoring and research</i>

Table 7.3: Performance indices for visitor management evaluation by the author

7.2.1. Visitor data collection

This indicator scored “1” because simple techniques are used to collect visitor data and accurate information on visitor statistics is not ways available. Visitor data at Twyfelfontein is collected by use of a visitor book (this information is collected on a daily basis) and more recently a comment book. Information recorded in the visitor books at Twyfelfontein is limited to visitor numbers, nationality and dates on which the visits occurred. The visitor categories that are captured are very few in number for instance it is not known which of the visitors to the site are school children. The site manager mentioned (personal communication) that the purpose of the visitor book was to determine the visitor numbers and the origins of the visitors. Although this type of data is useful in a number of ways; for instance for accessing the target audience in term of nationality which could be useful for interpretation, the author is of the view that its collection is merely for statistical purposes.

7.2.1.1. Visitor numbers

Visitor records at Twyfelfontein are not systematically analysed or archived; the most recent records available are from January 2007 to December 2013 (fig.7.6). Twyfelfontein receives an estimated number of 50 000 visitors a year, the high number of visitors to the site is due to the fact that the site is found on tourist circuit route. The total number of visitors to the site in 2007 was 50 392 and in 2008 the total number of visitors to the site was 58 257 (this is 7 865 more visitors than the previous year). This growth in 2008 probably reflects an overall increase of visitation to the site after inscription of Twyfelfontein as a World Heritage Site in 2007. From 2011 to 2013 there has been a fall in visitor numbers reaching 51 431 in 2013. It is not clear what caused the decline in visitor numbers.

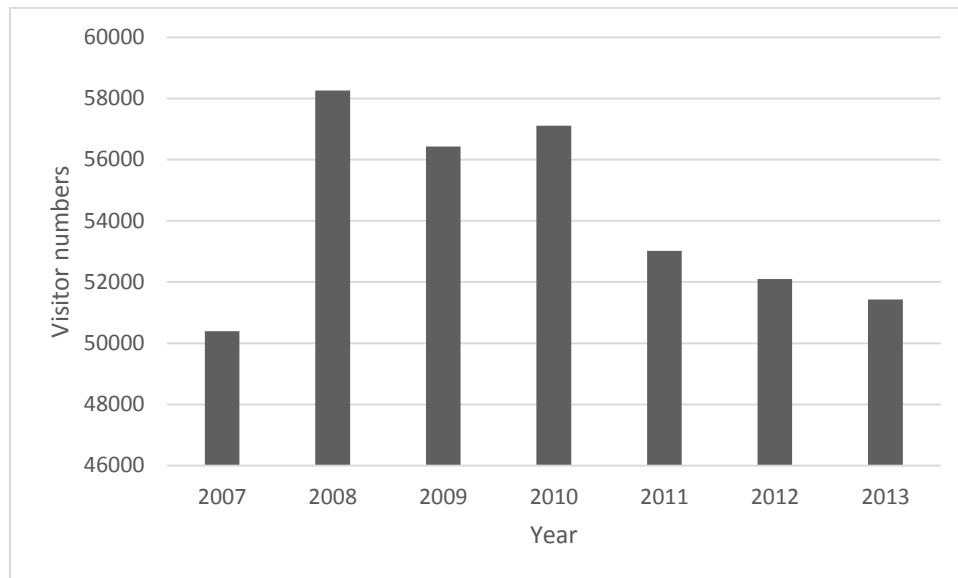


Figure 7.6: Visitor numbers for Twyfelfontein from January 2007 to December 2013

7.2.1.2. Nationality

Total visitor population for each nationality were determined for each year in order to access changes in visitor origins from 2007 to 2013. According to the visitor book Twyfelfontein is mostly visited by Germans this is also confirmed by the author's observation. It must be emphasised that visitor patterns are highly dynamic while the German component is solid and reliable. The author observed in most cases that independent travellers groups were composed of different nationalities. The author noticed that in most cases the person filling in the visitor book records only their own nationality and not of the rest of the group thus it is not always possible to determine the nationality of independent travellers. The space provided in the visitor book to note nationality is also small.

An analysis of the visitor numbers leads to the conclusion that the World Heritage Listing of Twyfelfontein has had of more an impact on foreign visitors than domestic ones. The low number of Namibian visitors to Twyfelfontein is low irrespective of the seasons. The low number of Namibians visiting the site can be attributed to two reasons- 1) the remoteness of the site; 2) in general Namibians have not established a culture of heritage tourism. Many Namibians living in Windhoek have never visited its museums. When asked why awareness of sites such as Twyfelfontein is underdeveloped amongst the younger generation, the

UNESCO Program Specialist for Culture in Namibia at the time (personal communication) indicated that the problem is that the culture sector in Namibia is not visible or strong enough, which leads to the lack of awareness about cultural heritage sites and their importance amongst the general public. The UNESCO Program Specialist for Culture in Namibia further went on to say that the lack of awareness has to do with the availability of information about Twyfelfontein and that this question about awareness goes for the whole culture sector in Namibia, saying that cultural heritage is not promoted well enough amongst its own citizens.

7.2.1.3. Seasonality

For all the years a well expressed seasonality shows that the period of active visitation at Twyfelfontein is August (see Appendix 8). There is a sharp decline in visitor numbers during the summer months between December and January. Periods of peak visits during the day were also observed, with visitor numbers peaking in mid-morning while it was still cool. This peak accounts for more than 50% of the daily flow and there tends to be a lesser peak in the late afternoon. This means that guides may have to conduct more visits during the morning hours which requires more guides to be on duty. Even with very detailed visitor statistics the follow of visitors is somewhat unpredictable and it is for this reason that it is recommended that large groups make advanced booking.

7.2.1.4. Visitor age

Evidently the majority of visitors to the site are over the age of 55 years old (fig.7.7). This information is not only supported by the information provided in the visitor questionnaire, but also observation (fig.7.8). When this number is compared to the number of visitors under the age of 25 it can be seen that ten of visitors who completed the questionnaire are under the age of 25. Only two people who completed the questionnaire stated that they were university students. The relative advanced age of the tourists coming to Twyfelfontein is not surprising considering that this age group is retired and has more time to travel. Visitors over the age of 55 are however not future clients. According to the people working at the site (personal communication) school children visit the site but not often. In the next couple of years the target group should be widened to attract school children and younger visitors in general.

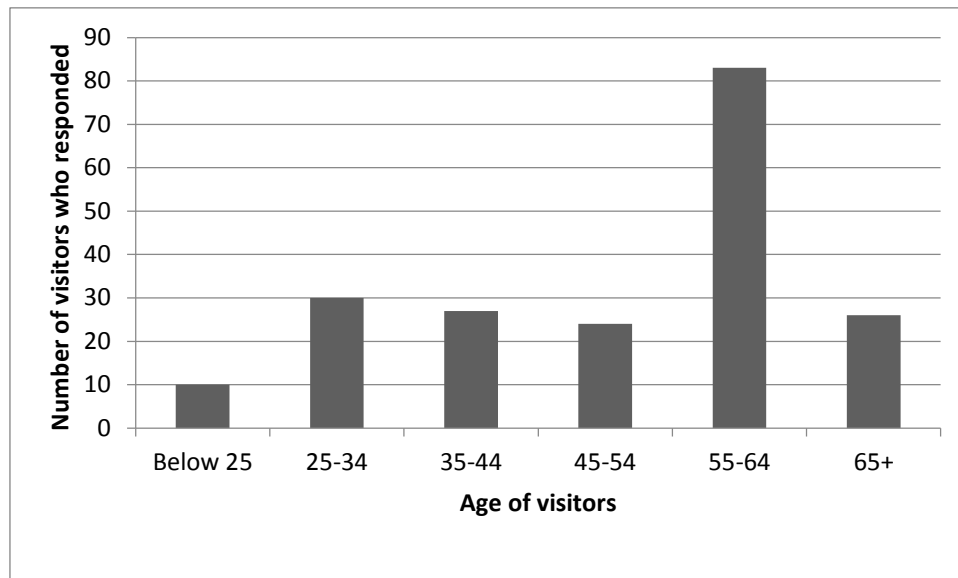


Figure 7.7: Visitor age profile



Figure 7.8: Type age group of visitors to Twyfelfontein⁷¹

7.2.1.5. Visitor comments

At Twyfelfontein, comment boxes and currently the use a comment book have been used as interpretive devices, as outlets for the visitor's feelings. These are very simple devices and if used correctly can be effective tools, particularly at a site as regularly visited as

⁷¹ Photo: Emma Imalwa

Twyfelfontein. The idea of a comment box was first introduced at the site in January of 2010 by the then site manager. The aim of the comment box was to allow visitors to express their opinions about the site and these comments could eventually be used to improve the site's experience for the visitors. In September of 2010 while visiting the site, the author found only eleven comments in the box, which were all written on different pieces of paper and various languages. The small number of comments found in the box could not be collated according to different themes and whether they were considered positive, negative or neutral.

It appears that comments are not taken away, scrutinized and are not taken seriously by management. The author was informed by a staff member (who wishes to remain anonymous) that the small number of comments in the box was the result of guides opening the box to look for money tips as well as to remove negative comments left by visitors. When the author asked the site manager about this, the site manager had no idea that this was happening. In 2012, the NHC archaeologist introduced another comment box this time with a lock. While doing field work at the site in May 2013, the author discovered that the lock on the box was broken and there were no comments inside. The reasons for the opening the box were the same as before.

In order to curb this problem, the current site manager introduced a comment book to replace the comment box in January 2013. During the author's field work in May 2013, the author found that the book was not situated in an accessible place, the book was kept in a cupboard the entire time and was only removed when the author asked for it. Furthermore the book was not updated and had less than ten pages written on yet it yet it was introduced in January of 2013. It appears that comments are not taken away, scrutinized and are not taken seriously by management. The small number of comments found in the book could not be collated according to different themes and whether they were considered positive, negative or neutral. This is why heritage organisations such as HERITY suggest heritage institutions to engage an independent surveyor over a short time period.

7.2.2. Visitor facilities

This indicator scored “1” because although the site has most of the basic visitor facilities there is not always systematic management towards the compliance of the capacities of the facilities. The development of the visitor facilities was essential for better site management and conservation of the site. Visitor facilities at Twyfelfontein consist of a visitor centre, shaded car park dry compost toilets (toilets are be found at the visitor centre and on the routes), resting areas on the site and viewing platforms. The shaded park (fig. 7.9), was constructed in February 2013.

Parking areas create the first impression of the site as it is the first thing the tourist sees before entering a site. If these areas are well maintained, this presents the impression that the site is not neglected and that it is maintained regularly by staff demonstrating authorities are in the vicinity thus lessening chances of vandalism (Deacon 1992; Swadley 2002). Twyfelfontein’s visitor centre is small; it consists of a reception area (where entrance fees are paid and the tour guides meet and greet visitors), a small permanent exhibition, craft area (fig. 7.10); an outside kiosk where refreshments can be purchased.



Figure 7.9: Shaded car park⁷²

⁷² Photo: Emma Imalwa



Figure 7.10: The craft area⁷³

Visitors were asked to evaluate the state of the toilets, car park, visitor centre and kiosk using a five-point scale developed in chapter 4. The results of this evaluation are presented in figure 7.11. Although visitors were asked to provide explanations of their ratings of each facility, many did not do so. This made it difficult to collated reasons for ratings according to themes and whether they were considered positive, negative or neutral. One hundred and sixty (160) visitors were happy with the shaded parking spaces while the external tour guides (personal communication) said the poles between the parking spaces were too close together. This view is shared by the author whose car could not fix without having to push one mirror in. The closeness of the poles as well as the low roof of the parking prevented the tour buses and trucks from parking in the shaded parking yet they were expected to pay the parking fee. One hundred and thirty nine (139) of the visitors complained about the odour from the toilets saying it was too close to the kiosk.

Visitors complained that the crafts being sold are not related to rock art. The author also observed that these items were hardly purchased. The site manager said (personal communication) in comparison to the prices of the crafts sold at Brandberg, the craft prices at Twyfelfontein were too high and the site manager had asked the local community members several times to lower their prices but that they are unwilling to do so. The craft centre does

⁷³ Photo: Emma Imalwa

not reflect well on the site; the vendors are not provided with the necessary facilities for them to do their jobs well, and the space is too small. Although it is important for the community to generate some income through the selling of crafts, vendor activities should not interfere with the site's greater vision and mission. The author also observed most visitors asking why the site did not sell post cards or books so that they could buy these items as souvenirs.



Figure 7.11: Visitor opinions on state of visitor facilities

7.2.3. Monitoring and research of visitor impacts

All visitation to a site alters the site's conditions which are not always evident but do exist. In order to give the public access to the site and limit damage caring planning and monitoring is paramount. The high number of visitors in the core area at the same time creates problems of monitoring of the visitors by the guides. This visitor management indicator scored "0" because specific monitoring and research of visitor impacts at Twyfelfontein are not carried out. The majority of visitors to Twyfelfontein travel in organised tour groups which usually consist of more than six people, although groups of more than fifteen at a time have been observed. The tour group visitors often tend to be people over the age of 55 and these types of visitors are considered high risk because they are more prone to accidental touching of the art as they who hold on the rock for support.

7.2.3.1. Signage

In many countries, the law provides for the provision and presentation of information on protected heritage sites which is generally achieved via the erection of plaques or information boards at sites (Bednarik 1993). Two main information boards (erected on either side of the path leading to the visitor centre) are found at the site entrance (fig. 7.12), both of these information boards point out the behaviour expected at the site. The board on the left hand side was erected in February 2013 and contains more elaborate information about site etiquette. Unfortunately the writing on this board is not easily seen by the visitors of its small font and as such most of the visitors just glance at it. The notice board on the right hand side is more legible as the font is larger and the information is straight to the point; “no camping allowed” and the operating hours of the site.



Figure 7.12: Information boards at site entrance⁷⁴

The placement of some rock art panels means that they are “hidden”, examples include the panel with the waterhole symbols, the engraving at the bottom of the Lion Man viewing platform and the giraffe at one of the sealed off rock art panels (fig. 7.13). These engravings require signs to make them more visible or necessitate that guides point them out to the visitors. Local guides do not point these engravings out which create an impression that the art is not important and leaves some of the engravings vulnerable to the visitors. According to Deacon (1993b), damage is not done by sheer number of visitors alone, but by the ignorant behaviour of those tasked to look after the heritage. Deacon (1993b) goes onto say more harm

⁷⁴ Photo: Emma Imalwa

is done by untrained people, thus it is advisable to pay for expert advice and on the long term planning for rock art protection.



Figure 7.13: Figure 7.2.3 One of the sealed off rock art panels⁷⁵

7.3. Performance indices for interpretation evaluation

Table 7.4 shows the performance indices for interpretation indicators as evaluated by the author. The performance indices for the heritage management processes indicators were given on a three-point scale (see Appendix 1).

Indicators	Scores	Scoring criteria
Control of Interpretation	1	<i>Interpretation both by staff and non-staff</i>
Interpretive techniques	0	<i>Visitor needs not taken into account</i>
Staff training	1	<i>Training on ad hoc basis</i>

Table 7.4: Performance indices for interpretation evaluation by the author

⁷⁵ Photo: Emma Imalwa

7.3.1. Control of interpretation

This indicator scored “1” because interpretation of the site is done both by external guides and Twyfelfontein tour guides and is not entirely controlled by the National Heritage Council (NHC). When asked if external guides were conducting tours on the site both the site manager (personal communication) and the NHC archaeologist (personal communication) mentioned that external guiding on the site had been stopped as external guides do not respect site regulations such as exceeding the maximum number of people allowed on the viewing platforms and go on unauthorized routes.

However the situation of not respecting the site rules is not unique to the external guides. The local tour guides also exceed the maximum number of people allowed on viewing platforms. The author was shocked to hear that external guides were no longer conducting tours at the site because in 2010, 2011 and 2013, the author witnessed external guides conducting tours in the core area. The Twyfelfontein guides mentioned in their questionnaire that they need the help of external guides to reduce workload especially during the high season and that language also played a major role as the local tour guides are not trained in foreign languages.

7.3.1.1. Significance of the site

A cultural good has a value recognised at a social level which can support its preservation and improvement. It is important when discussing the concept of value, to understand the origins of the rational philosophy as the concept of cultural significance can help to identify and assess the attributes which make a place of value to the community, to the nation and the world. While society, or part of it, gives a site its own values, the NHC must be aware that, they have a role in forming or guiding the public's awareness of its past and hence may actually mould the way in which society values cultural sites.

Although some of the values for the site are assumed to be common knowledge, for the purposes of this research it was decided to carry out an assessment of the extent to which this is the case amongst the local community, visitors and Twyfelfontein guides. It is important to note that the author did not provide any categorization of answers for the respondents. Thus

the different categories of the significance of the site results from the author's attempt to better represent the range of responses received from the research subjects. The values assigned to the site varied amongst the various groups (fig. 7.14).

Of the 200 visitors who completed the questionnaire only 125 responded to this question. The majority of the visitors (82) indicated that the site was important for its historic or cultural values. Very few visitors took into consideration the importance of the site for the local community. The local tour guides and local community mentioned the economic values of the site. In such an environment such as this, with the high unemployment numbers, economy is of course the far most obvious aspect to be considered by those living in the area. Only one guide indicated that the site is important because of its World Heritage status and five local community members indicated that the site is important because of rock art.

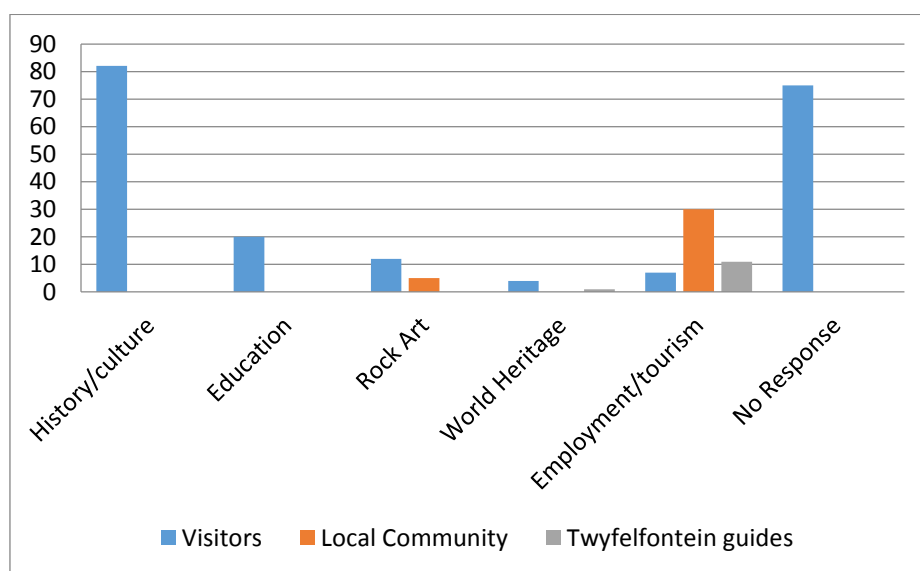


Figure 7.14: Site values assigned to the site by visitors, local guides and local community

7.3.1.2. Ownership of the site

An important social issue that has contributed to debate around rock art tourism initiatives in some countries has been the question of ownership (Ndoro 2005; Deacon 2006). Perceptions of who owns the site can have profound effects on the success of managing the heritage. Although it is assumed that site ownership is common knowledge, for the purposes of this

research it was decided to carry out an assessment of the extent to which this is the case amongst the local community, visitors and Twyfelfontein guides. Once again, it is important to note that the author did not provide any categorization of answers for the respondents. Thus the different categories of ownership results from the author's attempt to better represent the range of responses received from the research subjects.

Analysis of the responses from all three groups shows that the government is generally regarded as the primary institution owning the site (fig. 7.15). Some visitors said that the site was owned by the local community, NMC, NHC, UNESCO, Levin, Twyfelfontein Country Lodge, and Namibia Wildlife Resorts (NWR). Some of the visitors even thought that the site answer was owned by UNESCO- this kind of misconception comes from the media; they speak of UNESCO World Heritage Site, however UNESCO does not own or manage the site. These variations in visitors' responses to site ownership mean that this information is not well presented. The local people said that some staff members from the NHC said they owned the site. This is something that was confirmed by the village headman (personal communication) and several others. Managing cultural heritage sites of national importance is often a contentious not only in Namibia but in most African countries.

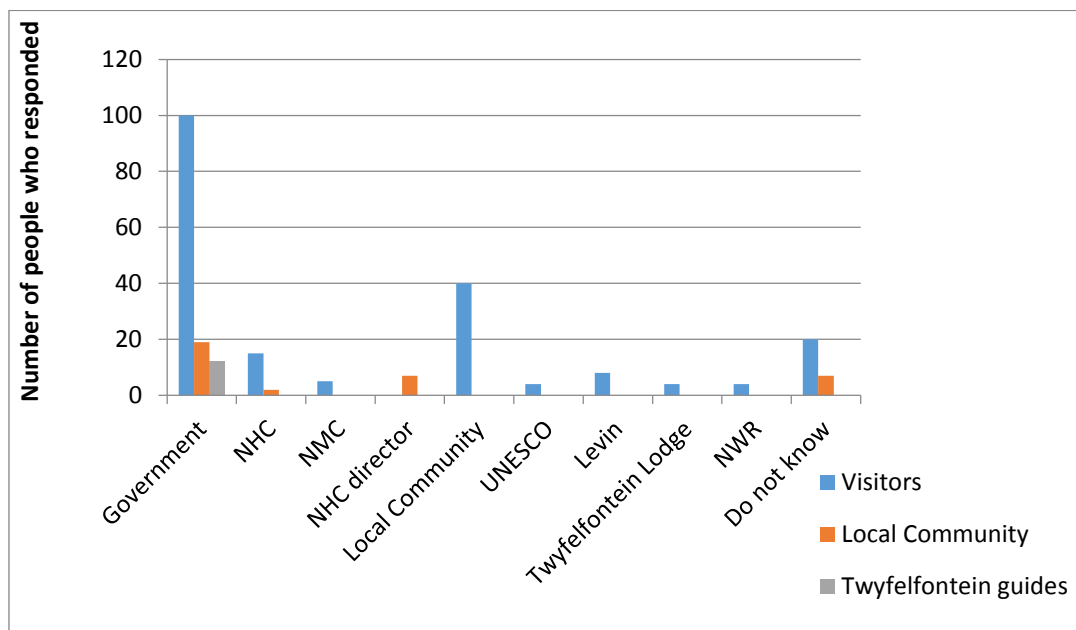


Figure 7.15: Responses to site ownership by visitors, local guides and local community

7.3.2. Interpretative Techniques

Different groups of people can constitute the visitor flow to a place of cultural significance and they may need to be approached with different interpretation strategies. Alpin (2002) writes it is not possible to cater for all visitor segments but nevertheless knowledge of their characteristics and needs is fundamental to any attempt to provide interpretation even if the management opts for single interpretation strategy. The criteria for audience are demographic characteristics, particularly age, educational level and origin (McArthur and Hall 1996; Alpin 2002). Two basic interpretative techniques are employed at the site mainly display (which consists of both printed material and installations) and guided tours. The themes presented throughout the visitor centre are; archaeology (some interpretation of the engravings), history, fauna and flora, geology and conservation interventions at Twyfelfontein. The author believes that the site is presented as a relic with no relevance to today's socio-economic cultural environment.

7.3.2.1. On-site interpretation

Interpretative infrastructure refers to the physical installations and areas at or connected with a cultural heritage site that may be specifically utilised for the purpose of interpretation and presentation (ICOMOS 2008). Moscardo (1996) states that studies on visitor centres underline the importance of visual elements such as models, photos and artefacts found that they carried the highest information value. It is the opinion of the author that the interpretation infrastructure at Twyfelfontein does not add much value to the site experience in either an educational sense or in entertainment terms as the visitors spend little or no time looking at it. Even the NHC archaeologist indicated (personal communication) that the interpretation was too general and not at all visitor specific. The visitor centre has failed to communicate some of the interesting factors of the site and rock art.

Where the printed material is accompanied by explanatory texts it only appears in English. Most of the external tour guides mentioned that (personal communication) the lack of other languages such as German to explain the display also contributed to the lack of interest in the display by the visitors. Another reason why visitors do not spend time watching the exhibition has to do with time and space. As already mentioned the visitor centre is very small

and as there is no pre-booking system, the size of the visitor centre coupled with the size of the group means there is not much room left to view the display. Visitors are also rushed out to create space for incoming groups. The variety of people addressed by interpretation in visitor centres means that the value of education is diminished since the mass is constrained by time.

7.3.2.2. Sources of information

Generally there seems to be a lack of an organised campaign to inform people about Twyfelfontein and other rock art sites in Namibia. Most visitors to archaeological sites often lack the basic information about the site that they are visiting. The NHC archaeologist (personal communication) indicated that brochures were introduced at the site in 2012, but the author did not find any during any of the field work trips. The visitor centre has a low level of rock art awareness with only a small amount of information on Namibian rock art. In terms of interpretative material such as brochures, maps and books, the author did not find any on the site or at the lodge and campsite in the area.

In their questionnaire, visitors were asked how they came to learn of Twyfelfontein. It appears visitors travelling in organised tours learned about the site whilst on their tours (fig. 7.16). On-site behaviour indicated that the visitors travelling in tour groups were often not interested in what the guides were saying (this could be a factor of not understanding English) and were more concerned about taking pictures as they already had background information on the site. The majority of the independent travellers on the other hand said they ‘stumbled’ upon the site.

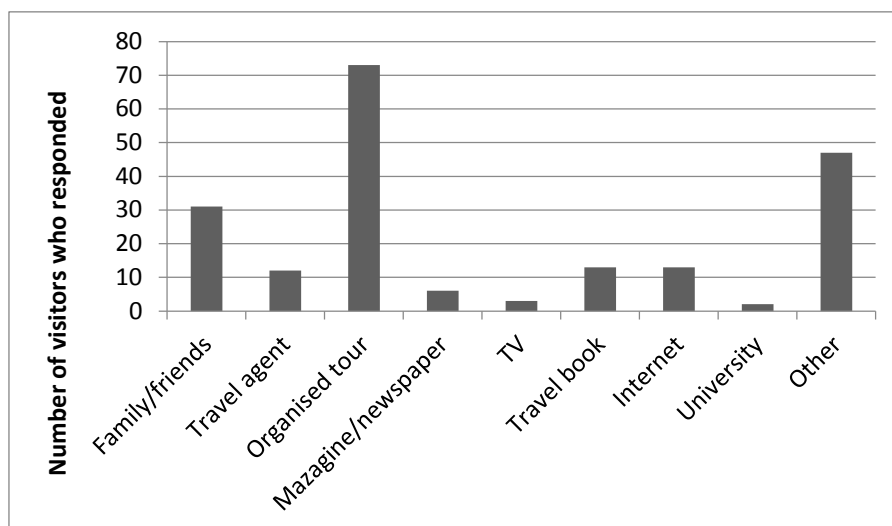


Figure 7.16: Visitors responses as to how they learned about Twyfelfontein

7.3.3. Staff training

There were about fifteen guides working at Twyfelfontein in May 2013. The guides working at Twyfelfontein before the NMC regained control of the site had formed a guides association called Twyfelfontein Tour Guides Association. The guides received some basic training through Nacobta⁷⁶; the training provided basic information about rock art, fauna and flora on the area. Urgently needed at the site is appropriate training of the guides. The NHC archaeologist confirmed during her interview that guides receive training about rock art but it is not on a regular basis saying that there was a need for a workshop with the guides. The site manager when asked in which of the five management processes researched in this study the guides received training she mentioned conservation and interpretation. The site manager thought the guides were doing a good job based on information from staff meetings, feedback from the comment book and by accompanying them on some of the tours.

The author was fortunate to sit through a training session of the guides from Twyfelfontein, Brandberg and Petrified Forest while visiting Twyfelfontein in May 2013. One of the aims of the training was to train the guides in subjects such Namibian archaeology, history of the Namibia etc., as opposed to training them on only what is found their respective sites. The guide job at Twyfelfontein is a step towards the most desired employment, namely that of

⁷⁶ Nacobta: Namibia Community Based Tourism Association Group

national guide. To become a national guide is hard; you need a certain level of education and the necessary courses are expensive and sponsors are hard to come by. What emerged from these sessions was the majority of the guides from all three sites lacked many interpretation skills and general knowledge about archaeology and Namibia's history.

7.3.3.1. Authorship

According to Abungu (2006) African rock art has been a contested heritage, particularly in regard to its origins and creators. Many researchers of southern African rock art uncritically ascribe all major rock art sites to the Bushmen/San as do writers of travel books which has an influence on people's view of the past. It is therefore important that guides are aware of the different schools of thought to allow them to present this information to visitors when necessary. Visitors, local guides and the local community were asked who made the rock art of Twyfelfontein in their questionnaires. It is important to note that the author did not provide any categorization of answers for the respondents. Thus the different categories of authorship of the rock art result from the author's attempt to better represent the range of responses received.

The majority of answers (fig. 7.17) to this question said that the San/Bushmen made the rock art. Other responses from the visitors about who executed the rock art were; shaman, the people who lived here, Levin and the hunters. Two of the local guides however argued that the only reason why the site is ascribed to the Bushmen is that they are the only ethnic group that has in historical times practised religious traditions that scholars think are linked to rock art. These guides argued that since the Damara and Bushmen share a similar cultural background it is also likely that the Damara are authors of the rock art at the site.

The possibility that the site might be connected to the Damara ancestry evokes a sense of ownership and pride. The argument supporting this view is based on the Damara people's historical connection to north-western parts of Namibia and there is no historical record of the Bushmen in this part of the country. One of the external guides (personal communication) argued that if the San truly executed the rock art at Twyfelfontein and elsewhere in the

country why has this tradition ceased, after all the San are renowned for passing traditions from one generation to the next.

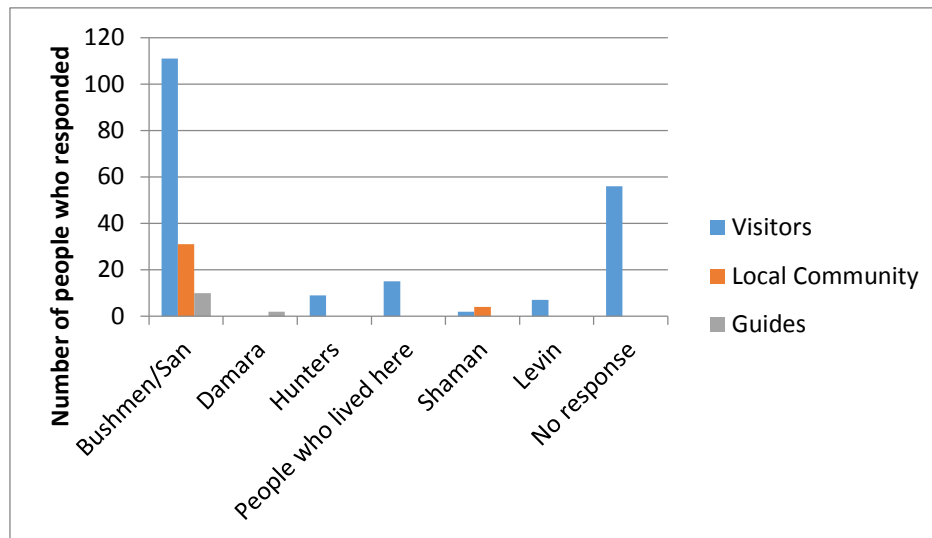


Figure 7.17: Authorship of Twyfelfontein rock art

7.3.3.2. Local guide knowledge and presentation of the site

In order to monitor how the guides present the site the author went on twenty different tours over a two week period in 2013. In addition to this, visitors were asked to comment on knowledge of the guides using the scale developed in chapter 4. Fifty six (56) of the visitors did not respond to the question (table 7.5). However of those who did respond, one hundred and forty four (144) said the knowledge of the guides about rock were positive saying that the knowledge was ‘good’.

One visitor noted that their guide told them “*extra stories about the paintings and plants and animals when she noticed we were interested*”. Forty three (43) visitors indicated that the knowledge of the guides was satisfactory. Comments made by some of the visitors said that the guides were missing a broader knowledge and that their presentation lacked a bit of extra explanation. The author observed the guides were not able to answer such as why the farmer Levin left the place in a clear and simple manner. Providing answers to such questions is one of the requirements for visitor satisfaction.

Scoring criteria	1	2	3	4	5	No response
No. of visitors who responded	7	43	89	5	0	56

Table 7.5: Visitors' responses to Twyfelfontein guides local on rock art

The guides fail to give the visitors information as to the type rock art found on the different routes, and the difficulty of each tour. In one case a visitor found that the walk was too long and that they were not informed about this beforehand, and they were also not informed of the dangers that they could face on the site. There are four main routes in the core area. Route 1 is in easiest route and consists of ten well preserved engravings. These are mostly geometric depictions which show some visual effects of trance. The second route has more than 20 engraved panels on a thirty minute tour with a local tour guide; the tour includes the ruins of the Levin farmhouse and the spring. The engravings include well preserved examples of birds, antelope and schematic depictions.

Route 3 is commonly known as the Dancing kudu route. All visitors to this route need to be guided by a local tour guide. As the name suggest this route features the famous 'dancing kudu' engraving. The route includes a rest area and toilet. The walk to the Dancing Kudu is on a steep gradient and takes on average 35 minutes (not including the viewing time). Due to its elevation, the Dancing Kudu route offers an extensive view of the area, and also the so called Lion's Mouth (fig. 7.18) is found on this route. Route 4 is also for guided tour and takes approximately 80 minutes, the main attraction here is the 'lion man' panels in which elements of lion and human are combined.



Figure 7.18: Figure 7.3.3 Lion's mouth⁷⁷

7.4. Performance indices for stakeholder involvement

The performance indices for stakeholder involvement indicators are shown in table 7.6. The performance indices for the heritage management processes indicators were given on a three-point scale (see Appendix). As is evident from the table stakeholder involvement at Twyfelfontein is hardly practiced.

Indicators	Scores	Scoring criteria
Communication with stakeholders	1	<i>Communication irregular makeshift basis</i>
Local community involvement	0	<i>Not involved in planning process</i>
Socio-economic development	0	<i>No or little development</i>

Table 7.6: Performance indices for stakeholder involvement evaluation by the author

7.4.1. Communication with stakeholders

The remoteness of Twyfelfontein has meant that the number of stakeholders and potential beneficiaries of the project is limited, which makes coordination somewhat easier. In terms of communication, much can be improved upon and some more meetings between different

⁷⁷ Photo: Emma Imalwa

stakeholders should be carried out regularly. At the moment it is still something that seldom happens. Joint management committees are an important mechanism for coordinating stakeholders and one of the coordination mechanisms for World Heritage Sites that UNESCO recommends. Twyfelfontein has a functioning joint management committees. The committee meets on an issue basis, rather than as a matter of course. The site manager indicated (personal communication) that communication with the local community takes place during joint management committee meetings and sometimes meetings happen on a regular basis. The NHC archaeologist said (personal communication) communication with the stakeholders is not undertaken on a regular basis.

According to three local tour guides, communication between them and site management takes places every second or third month while the rest of guides did not answer this question. The local community said that they had only two direct meeting with the NHC after Twyfelfontein was declared a World Heritage Site and that communication with them is done through the joint management committee and it is completely sporadic. According to them, the only time that the NHC communicates with them is if they need help for instance with the cleaning of the site. The community said they would like to have more direct meeting with the director of the NHC. In the view of the author, the only stakeholder towards which the NHC/site manager is proactive is the Twyfelfontein Country Lodge. This is probably because the lodge provides a number of services to the site. The external tour guides expressed a wish for communication with the NHC as they felt that they could contribute to how the site is been interpreted and book tours beforehand.

7.4.2. Local community involvement

In view of the immovable character of World Heritage, heritage properties share territories with local communities. The function of these local communities in the protection and preservation of World Heritage is both active and passive. The cooperation and involvement of local communities in the protection of heritage properties is essential to the objectives of the protection and preservation. Local communities should therefore be considered as partners and not only beneficiaries. In the Operational Guidelines of 2008 State Parties are encouraged

to prepare their Tentative Lists with the participation of a variety of stakeholders, including site managers, local communities, NGOs and other interested parties and partners⁷⁸.

Despite the generally good relations between the local community and the NHC, tensions do arise from time to time around specific issues, such as access to infrastructure, management of the conservancy, tour guiding and the like. As with most other sites in southern Africa, where the rock art is located on communal or state land rather than private property, the Twyfelfontein management plan requires that the entire local community site involved in the planning, execution and management of the site development. However this is not the case and an almost total disregard of its importance can be noticed. The site manager (personal communication) indicated that the local community is involved in the idea sharing and management practices.

The community felt that any involvement they had with the site was limited to being employed there either as guides or part of the maintenance staff (cleaners; cashier etc.). The UNESCO Program Specialist for Culture in Namibia at the time (personal communication) agrees that community involvement is basically the tour guide service and that the NHC needs to do more to involve the community. The UNESCO Program Specialist for Culture indicated that systems have to be in place for this to happen. This view is also shared by the NHC archaeologist (personal communication). The community interviews further revealed that they wished to be consulted on matters relating to the employment of the site and development in the community as it directly affected their futures and those of their children.

For example before the NMC took over the management of the site, local school children would do guided tours during the school holidays. This has been stopped because children lack the knowledge that has been acquired by the guides during their training. Twyfelfontein as well as several rock art sites faced extreme deterioration after independence when community based management systems proved inadequate to the conservation problems at the site. This could in part explain the hesitation of the NHC is actively involving the community in decision making process.

⁷⁸ Operational Guidelines paragraph 64.

7.4.3. Socio-economic development

UNESCO's tourism programme at World Heritage Sites is directed towards actively engaging local communities in the safekeeping of sites, and also the development of local and sustainable economic benefits. The primary concern with tourism at Twyfelfontein is its potential to create employment for the local community. Employment opportunities that have been created in the area of Twyfelfontein World Heritage Site include the establishment of accommodation facilities namely the Aba-Huab campsite which is owned by a local man, Twyfelfontein Country Lodge and the Damara Living Museum. It is difficult to evaluate the economic impact of visits to Twyfelfontein, there is lack of accurate data.

7.4.3.1. Employment

The extent to which employment is created is influenced to a certain degree to the linkages between tourism and other sectors of the economy. While the tourism industry provides jobs for the local community, locals generally hold poor quality and low paying jobs that mostly involve manual work. Most of them are employed as cleaners, kitchen hands, cooks, and drivers. On the other hand expatriate staff occupy senior and management positions such as managers, chefs etc. This is especially true for the Twyfelfontein Country Lodge and the position of the site manager. The reason given for this development is that expatriates possess skills in the tourism industry which locals do not have. The majority of those who were interviewed, expressed disappointment with the World Heritage status of the site arguing that it does help to improve their lives because they are not in joint venture with the NHC.

Based on the interviews with the community members, the majority of them are unemployed. In fact when asked how many of them had ever visited the site eighteen (18) people indicated that they had never been there. The number one reason was the entrance fee of thirty Namibian dollars was too high. External tour guides reported (personal communication) that if the entrance fees were lower, more people would visit the site as this the situation in other parts of the country where entrance fees have been lowered for local community members. Other reasons for not going had to do with transport, old age, it's a tourist place. Those who visited the site were there because at some stage they had worked on the site. The owner of

the Damara Living Museum and two of his staff members said that they have been to the site to educate themselves and pass on information to tourists who visit their museum.

The local community has been allowed to run the kiosk on the site as well to sell traditional crafts. Close inspection has revealed that not all items are locally made by the community. The problem with this is that after handing in their crafts they are not allowed to go to the site to see whether their products are selling. They therefore felt that only people's crafts were selling either because they had family working there. However this is not true as the majority of the tourists do not even look at the crafts because they are too expensive. This conclusion was reached observing the activities of the tourists. Besides the high price the crafts are not reflective of rock art. The author was also informed by a staff member that the local community is not allowed on site because they fight in front of the visitors.

7.4.3.2. Infrastructure

One of the ways in which tourism can influence the domestic economy of the host area is through development of infrastructure. Tourism development should benefit the host community not just by providing jobs but also improving their quality of life by introducing basic services such as water, primary education and health care and gaining skills. The area has a largely poor developed infrastructure. Despite the high numbers of visitors to the site each year, tourism has not stimulated the investment in infrastructure (roads) and services (schools, police, banks, fuel station) which will benefit the local community.

The wealth generated through the different tourism activities is not evenly distributed and despite the increase in economic opportunities in recent years, Damaraland in general remains underdeveloped and there are local concerns that much of the income goes to outside investors. In the literature this type of tourism is referred to as 'enclave tourism' (Britton 1982; Ceballos-Lascurain 1996. According to Glasston et al., (1995), the dominance of the industry by foreign investors and the non-local investment can reduce the control over local resources. The community has little access to basic services and infrastructure, proper housing and no portable water.

Laow Inn mainly consists of small square houses which are made from recycled materials (fig. 7.19). There are also houses which are consisted in a more traditional manner, of wood usually from Mopane tress and covered with a mixture of soil and dung. Several of the houses have roofs made of sheets of corrugated iron and the floors made of concrete but these materials are more expensive. All the services, ATM and fuel station (which does not always have fuel) are provided by the Twyfelfontein Country Lodge. The local community expressed that they wished some of the revenue generated by the site would go to creating services in the community. All interviewees confirmed that there had been no discussion at local level on how this could be achieved.



Figure 7.19: Typical house at Twyfelfontein⁷⁹

7.5. Performance indices for documentation management

The ratings for the documentation management indicators are presented in the table 7.7.

⁷⁹ Photo: Emma Imalwa

Indicators	Scores	Scoring criteria
Archive maintenance	1	<i>Archive exist but not maintained</i>
Public accessibility	1	<i>Available on demand</i>
Computerization	0	<i>Not computerised</i>

Table 7.7: Performance indices for documentation management indicators evaluation by the author

7.5.1. Archive maintenance

Although the site manager indicated (personal communication) that the archive is well maintained, the author gave archive maintenance “1” because the archive is not well organised, mandatory and automatically updated. When research is conducted at the site by external researchers, the data obtained is not always entered into the archive. In addition it is not easy to reference simple information such visitor numbers which is collected on a daily basis.

7.5.2. Public accessibility

The archives such as visitor records are not readily accessible and have to be generated upon request. The NHC archaeologist stated (personal communication) that the records are mainly for internal purposes adding that other heritage institutions also do not readily have access to them. This is due to the fact that there is no system in place which makes it is difficult to circulate the information. However all publications for the purpose of research are available to the public upon request. Permission to access documents has been done so by writing to the director of the NHC. This is a formality, denial for such request can be denied if the reason is grounded.

7.5.3. Computerization

There is no comprehensive central database for Twyfelfontein or other rock art sites in Namibia. Although there have been projects to computerize heritage archives in Namibia this has been not been useful. For example in 2010 the Museums Association of Namibia organized a project for the computerization of the heritage archives, this project failed and is not available digitally. The majority of the archives are not computerized; however the reports

that are generated from research permits are computerized. In 2012 the NHC website was launched and provides brief information about the heritage places in the country..

7.6. Performance indices of management processes by heritage practitioners

As mentioned in chapter 5, for the dissertation the author interviewed the NHC archaeologist, the UNESCO Program Specialist for Culture in Namibia and the Twyfelfontein site manager. Table 7.8 gives the performance indices for the management processes by these heritage practitioners. The performance indices were given on a five-point scale, as discussed in chapter 5 one signifying unsatisfactory performance and five signifying excellent performance.

Management Process	NHC archaeologist	UNESCO Program Specialist for Culture in Namibia	Site manager
Conservation	2	1	4
Interpretation	2	3	4
Visitor Management	2	2	4
Documentation Management	1	3	3
Stakeholder Involvement	2	2	4

Table 7.8: Management processes evaluation by heritage practitioner

7.6.1. Performance indices by National Heritage Council archaeologist

With the exception of documentation management which was rated 1 “unsatisfactory”, the NHC archaeologist evaluated all the other management processes as 2 “satisfactory”. According to the NHC archaeologist (personal communication) since the inscription of Twyfelfontein as a World Heritage Site, there is no form of documentation of the conservation and management at the site. She added that there is no continuous assessment

due to the absence of an archaeologist on site. According to the NHC archaeologist conservation is the biggest challenge of all management processes.

The nature of the sandstones means that the rock art panels are flaking and there are not many solutions to this problem. In addition conservation at the site is a problem because the NHC archaeologist does not have all the experience and training needed to manage a rock art site. The NHC archaeologist said that there is lack of communication channels between the head office and the site manager saying that events are not reported on time to allow for appropriate measures to be taken. For example that earthquake that occurred in March 2012 was only brought to her attention in June of that same year.

Visitor management according to the NHC archaeologist is satisfactory because there is no control of visitors. Where interpretation is concerned, the NHC archaeologist said that there has been some improvement such as erection of the information board on arrival at the site which states site etiquette. Communication with the stakeholders such as the local community and the Twyfelfontein Country Lodge is not conducted on a regular basis, and the local community is not involved in the planning process of the site.

7.6.2. Performance indices by UNESCO Program Specialist for Culture

UNESCO Program Specialist for Culture's (Mr. Dijakovic) evaluation of the management processes varied. According to him (personal communication) conservation is the biggest challenge that Twyfelfontein is facing. So from this point of view it is understandable why the process has been evaluated so low. He said that based on his discussions with the NHC, the institution is trying to manage and improve upon this issue. He however indicated that what remains unclear is how fast the process is going and whether finances are available is another thing that should be taken into account. Mr. Dijakovic said that visitor management goes hand in hand with conservation.

According to him documentation management was "good" as there are a number of publications about Twyfelfontein; the question is how these publications are presented to the public. He indicated that interpretation of the site was good but there was always room for improvement as information is available but it is not well presented. Like the NHC

archaeologist, Mr. Dijakovic believes that community involvement at Twyfelfontein was not good, saying that the local community's involvement in the site is limited to the guiding services. He indicated that much more needs to be done to involve the local community.

7.6.3. Performance indices by site manager

The first thing that makes an impression in the manager's evaluations is that they tend to be higher than those of the UNESCO Program Specialist for Culture and the NHC archaeologist. With the exception of documentation management which was rate "good", the site manager related all the other management processes as "very good". A possible reason could be that the site manager has given better evaluations to the management processes as she is responsible for the site in order to present it in a better light. Another possible reason could be that the processes are understood in a rather old fashioned way or that the site manager is not very familiar with all the points of good practice heritage management, highlighted in chapter five. From this point of view it is understandable that these processes have been evaluated so high. When asked what the biggest problem facing the site, the site manager said erosion, earthquakes, no water at the centre and the manager house and toilets. She said that in order to solve this borehole should be drilled, or use water from the spring.

7.7. Conclusion

Cultural heritage management in Namibia is hampered by lack of adequately trained personnel, lack of funds, and lack of appropriate equipment such as computers. This dissertation has demonstrated that the management of Twyfelfontein is still at its early stage of development. While this is the case, issues of sustainability are not given much consideration. The results from the evaluation concluded that common conservation measures were implemented at the site to provide standard conservation practices. However there is still room for improvement on how conservation and other management processes are carried out at the site. The results have led to the formulation of recommendations that can be applied at Twyfelfontein as well as at the other rock art sites in Namibia. These recommendations are discussed in the next chapter.

CHAPTER 8. RECOMMENDATIONS AND CONCLUSION

In terms of its archaeological heritage, Namibia has been blessed with a rich corpus of surviving rock art. Despite this richness in rock art heritage, very little is known about the management of public rock art sites of national and conservation importance such as Twyfelfontein and Brandberg, where tourism is a major determining factor for the future of these sites. Tourism has both negative and positive effects on the survival of rock art sites. On one hand, an increase in visitation can alter the natural condition of sites if poor management strategies are in place. On the other hand tourism at rock art sites has the potential of contributing to the awareness and conservation of these sites.

Therefore the main aim of this dissertation was to analysis the current management practices at Twyfelfontein World Heritage Site. To see how management functioned at Twyfelfontein, the study evaluated the level of performance of five management processes namely; conservation, visitor management, interpretation, stakeholder involvement and documentation management and their chosen indicators. These processes were measured according to a developed set of criteria (see Appendix 1). The study was also informed the opinions of heritage practitioners, local tour guides, local community and visitors to the site.

8.1. Recommendations for the management of Twyfelfontein

It appears that the National Heritage Council has no clear criteria guiding its decisions on the management of Twyfelfontein and other rock art sites in the country. The evaluation shows that some change in management is needed to guard the outstanding universal value of the site. Twyfelfontein is mainly threatened by a weak institutional capacity. This has to do with the fact that heritage practitioners may not be very familiar with all the points of good heritage management and in particular the management of heritage resources such as rock art sites. The understanding of heritage management could be characterised as rather technical in nature as it is confined predominately to the physical aspects of the heritage resources. The recommendations for managing Twyfelfontein are presented below. It is necessary to point out that these recommendations though discussed under different headings should not be

viewed as separate from each other as they are strongly interrelated and the division here is the purpose of clarity.

8.1.1. Evaluation and review of the existing management plan

Although a management plan was submitted along with the nomination dossier, it appears that such plans are still not implemented by the NHC. If the management plan ‘remains on the shelves’, it becomes clear that the site’s management strategies will not be achieved. The most effective way to manage the site is have a sound management plan and implement the plan. In terms of the National Heritage Act, Part V, activities which may negatively affect the site are proscribed, and in terms of Part VI, Section 58, the Council is obligated to formulate and implement an appropriate site management plan. Regular evaluation of the management plan is necessary to estimate to what extent the management plan has been successful in archiving the NHC’s goals.

Heritage managers have to work in a constantly changing environment which inevitably necessitates evaluation and review of the respective plan, otherwise it becomes gradually obsolete, because it may not be adequate to the existing conditions anymore. Regular monitoring as well as regular maintenance programmes are only possible and effective if the guidelines of the management plan of the heritage propriety are implemented. It is therefore proposed that a new site management plan be drawn up according to developed set of criteria which should ideally be contained in policy documents. The implementation of these guidelines on how to preserve and conserve the site will ensure the long term physical survival of the archaeological site as well as enhancing visual character of the landscape setting. The NHC should be bound to follow its own policies in making decisions regarding the site. Such policies should also set clear guidelines for the public as to how the NHC is to implement its policies.

In addition to that, the management plan has to consider the following factors:

- The plan should have clearly defined objectives

- The plan should be comprehensive to people from different backgrounds
- The current and future uses of the site,
- The real and potential benefits of site management for the public,
- Administrative (staff are required in order to implement the plan),
- The financial cost of maintaining the site (a qualified staff component is necessary)

8.1.2. Site monitoring

Issues concerning research on monitoring and the condition monitoring of rock art sites have been largely overlooked and in most cases are still neglected by researchers and heritage institutions. Experience from the United States of America (Thorn & Dean 1995; Dean 1999) and Australia (Bednarik 1989; Loubser 1991) have demonstrated that monitoring is a crucial step in any management process because it enable conservators and managers to determine the causes and rates of deterioration in order to diagnose and develop appropriate conservation strategies for the site. The first step towards monitoring of a rock art site is condition assessment; the evaluation, recording and documentation of natural and human impacts on the tangible and intangible condition of a site and its immediate surroundings (Ndoro 2006). A condition monitoring form and colour photographic prints of rock art panels with symbols of deterioration signs could be provided to the land owners and site managers as a monitoring tool.

Conservation seems to be the biggest problem of all the management processes researched in this study. The physical conditions of open-air site such as Twyfelfontein should be inspected more regularly than ‘indoor’ sites as it does not exist in a controlled environment and is therefore threatened by many factors. Any monitoring of the physical condition of the site and rock art panels at Twyfelfontein have to recognise that this is a continuous process which requires a considerable injection of time, energy and money. Deacon (2006) writes subsequent monitoring programme is a crucial step that is all too often neglected, possibly because it continues after the management plan has been written and is not included in the budget.

Damage to rock art sites is almost certain when there is a lack of monitoring and maintenance coupled with the lack of implementation of a management plan. The core area of Twyfelfontein is highly vulnerable to environmental pressures related to the geology of the area. Large sections of the cliff have broken away and fallen onto the lower slopes below where they provide the majority of the rock surfaces on which the engraving and painting were executed. The rock surfaces themselves are fragile and prone to weathering. The instability of the lower slopes is geologically determined and cannot be engineered to prevent gradual retreat of the scarp.

The tasks of monitoring the physical condition of Twyfelfontein is made difficult by the fact that the site requires staff with specialised training in a number of disciplines such as conservation, condition reporting and visitor management which neither the guides nor the site manager are trained in. Also the NHC archaeologist does not have all the necessary experience. In addition to the unqualified staff component, the NHC disposes of a very small staff number. From the above said it is evident that with very limited human capacity available for the exercise of heritage management at the site it is hard to follow the best heritage management practices. The site manager should be allowed to improve his professional qualifications and remain up to date with developments in the field of rock art and site management in particular.

8.1.3. Documentation

Heritage management practices demand for a systematic record and documentation of protected areas and therefore implies that to monitor a site is to document it. There is a need to manage the data of rock art and other heritage, and currently rock related information is scarce and the little information that does exist is often difficult to find. Documents regarding the site management and the physical condition of the site have to be accurate and easy to access. It is important to emphasise the need for pre-intervention documentation and recording, not only to show the condition of the site and engravings but also to give an indication of the likely problems.

Photography is probably the most important and simplest visual method of documenting the condition of the site and the site facilities. Photographs give the morphology of the surface of the structures and extent of the defects. Old and new photographs can be compared in order to identify the recent developments. Furthermore it allows for establishing the type of maintenance type to use. Another possible documentation strategy would be a creation of a centralised register. Such a register could assist with the collection of rock art data and help improve understanding of rock art and preservation issues. The idea to centralise heritage data is not new. Worldwide projects exist that aim to bring together heritage data from a variety of projects with their respective aims and objectives. Such projects include UNESCO's World Heritage List. There is a need to establish a digital archive to conservation issues on a national scale.

8.1.4. Human resource management and staff capacity building

A critical challenge at the site is that the variety of specialist skills required, from tourism to heritage management, infrastructure development, community development, and the like are absent. The outcome of the study showed that the local guides working on the site are not equipped with skills that would enable them to identify the potential or threatening problems affecting the site. Without a properly trained site staff component, Twyfelfontein will become degraded, so losing much of its value as a cultural heritage resource. The author is of the view that the management of Twyfelfontein needs two types of specialists: those who specialise in conservation and those who specialise in tourism management.

Specialist in both fields will enhance the management of the site for the enjoyment of the visitors and for the benefit of the local community. It is clear from the experience of the author that the majority of the guides and site managers at cultural heritage sites as well as cultural officers in Namibia have limited understanding of what their responsibilities concerning the immovable heritage cultural heritage entails. This is not a condition endemic to Namibia. It can be just as profound in the so called developed countries. For example acts of vandalism at petroglyph sites occurs in Scandinavia (e.g. painting on them) is still being continued in some regions today.

Conservation is a learned behaviour. Site managers and those tasked with the care of cultural sites should be given a framework of principles and procedures. The UNESCO Declaration concerning the Intentional Destruction of Cultural Heritage (especially Article VI) needs to be better promoted among those who are managing rock art sites. This will allow them to oversee the planning, understand the quality of technical advice and recognise the application of correct principles and procedures. The local tour guides should also be monitored regularly to experts unknown to them, who should check whether they comply with prescribed standards. In addition, guides should be trained with the objective of how to handle bad behaviour on site from visitors.

8.1.5. Stakeholder outreach and engagement

Like the management of any business organisation, the successful management of rock art tourism is dependent on the different individuals and communities involved in the enterprise agreeing on the broad values and on the conservation principles that need to be met (Deacon 2006:380). Communication therefore becomes a vital skill for heritage institutions and site managers. Heritage organizations and site managers need skills in interpersonal relationships, conflict resolution, and communication in order to work with members of other government agencies, NGOs, the local communities, civil society and visitors.

If conservation and management of Twyfelfontein is to be implemented, decision-makers should address the key concerns of different stakeholders on a priority basis and in transparent manner. Working closely with stakeholders, who have varying goals can be challenging; holding public meeting and workshops about protected areas issues may not be comfortable but necessary. But these are tasks that cannot be avoided in the field protected area management. Achieving skills in this arena would go a long way towards protecting values and providing local benefits. Heritage managers need communication skills that will not only help them understand research results, but will also be useful in communicating information needs to scientists so that they conduct research valuable in addressing issues.

However communication can be a difficult process. Communication at Twyfelfontein is not just a problem between the NHC and its stakeholders, but also between the site management

and the NHC head office. Events that happen at the site are not reported on time to allow for proper measures to be taken. It appears that the head office is not always aware of what is happening at Twyfelfontein, for example the NHC was not aware that external tours are still taking place at the site.

8.1.6. Community involvement and benefits

People living in isolated areas with limited access to external markets and infrastructure facilities are likely to remain poor and continue to depend on resources either natural or cultural found in their areas. The conservation of cultural resources such as rock art will only succeed if local communities participate in protected area management and in return receive sufficient benefits. This study revealed that attitudes of the members of the local community at Twyfelfontein towards conservation are influenced by associated benefits. This demonstrates that conservation is linked to economic development of rural communities. Any conservation program relating to Twyfelfontein or any other rock art sites must consider socioeconomic characteristics of community around the site.

Finding a sound management strategy that integrates community wellbeing and the conservation of Twyfelfontein is imperative. The author is strongly of the opinion that if a management plan is drawn up between the local community, NHC and heritage conservation specialists there will be a better outcome. Although most of the guides hired are local, there are no community benefits strategies developed that will ensure local communities derive maximum benefits from the site. The local community should not only be included in the tour guiding, but also be deemed a primary and priority group in management decisions regarding the site.

There is also general consensus that local communities often lack the management skills required to become effective site managers. In this regard existing site manager at Twyfelfontein should be the primary conduit for skills transferred to the site staff. In pursuit of such as strategy, funds for training should be made available. Such training opportunities

will also enable the Twyfelfontein local community to acquire skills, and more income they need to independently take care of other sites in the surrounding areas over time.

8.1.7. Awareness creation

Awareness creation is an important technical proficiency needed by heritage organizations. Awareness creation is not solely about promoting but about making connections between the public and the outstanding universal value of the site. There is a need to raise awareness about rock art, the range and severity of threats to it and the need for effective responses to those threats. Public and political awareness of rock art is vital for successful planning and budgeting for conservation and management. The heritage sector is no longer limited to classic heritage fields such as museum studies, anthropology or archaeology but overlaps with other sectors such as environmental issues and tourism. To implement a successful protected area marketing program, site managers need an understanding of how these things fit together in a comprehensive and systematic manner.

8.1.7.1. Public awareness

One of the most important functions of conservation management in rock art tourism is public education (Whitely 2001). We do not know whether there is a point at which the provision of more public education will significantly increase the number of visitors and, if this happens, whether this will in turn impact positively or negatively on rock art sites in general (Deacon 2006:381). Interpretation and education not only helps managers communicate outstanding universal value to visitors but also may help address impact issues.

The number of Namibians visiting Twyfelfontein and other rock art sites in the country remains low. This low number of Namibians to cultural protected areas in general are linked to the invisibility of the culture sector in the country which is not visible or strong enough. Namibia is a vast country which means it is expensive for people to travel to sites such as Twyfelfontein. It is fine to have the site where it is but there is a need to promote the resource elsewhere. Presentation of the values of a site requires that visitors and the civil public be provided with information about the site. For example cultural officers in Oshakati (in the

northern part of the country) should be able to speak about Twyfelfontein or the Oranjemund shipwreck despite where there are stationed. The problem with this is that most cultural officers have never been to these places.

The NHC in collaborations with other heritage institutions in the country should distribute materials such as posters to schools and museums throughout the country. The site should continue to be advertised in the local media network, including newspapers, TV, mass meetings, posters and brochures throughout the year. The communication efforts should include constant public awareness programme aimed at a variety of stakeholders rather than just art lovers. Educating younger people from the local community, giving technical training to adults and providing centres for public health are essential to integrate into archaeological heritage conservation. Children are particularly significant segment for interpretation. Educational systems may not provide the programming for specific areas, and a site visit by the local school is often a very useful complimentary program to formal education.

8.1.7.2. Political awareness

The economic situation, often with socio-political overtones, inevitably affects the preservation and presentation of heritage. The Namibian Government is confronted with numerous problems, including the lack of infrastructure, education, primary health and clean water. Therefore rock art conservation and archaeological heritage in general are not government priority; as a result there is little if any investment in this heritage. A disjunctive relationship between the significance of cultural heritage and its management is highly influenced by the political situation in the country.

For example today more resources are devoted to cultural resources that reflect the liberation struggle history of the country. As no link exists between the liberation struggle and rock art, the conservation of rock art sites in Namibia remains a problem. It is however important to note that cultural sites afflicted with the liberation history of the country have also suffered from neglect. An example is the five million dollar Eenhana Shrine in northern Namibia which was meant to attract tourists and members of the public and to keep the history of

liberation struggle alive did for the most part not attract many visitors⁸⁰. It is thus the opinion of the author the cultural heritage sites in Namibia will become white elephants as they are not well advertised to the Namibia Government.

It is the duty of the National Heritage Council to make sure that the government is well aware of these sites and their importance. A critical issue is raising awareness amongst politicians and officials at all levels of government of the need for conservation of archaeological and other cultural heritage sites through necessary funding and legislation. The prestige of World Heritage status of Twyfelfontein has helped considerably in this regard. Government could contribute funding towards the education of rock art at educational institutions through educational subsidies and various campaigns.

8.1.7.3. Diverse interpretation techniques

The interpretation techniques used at Twyfelfontein are not diverse. For example there is no interpretation or educational activities available to children who visit the site. To be able to communicate the values of the site and its environment to a diverse audience⁸¹ several methods of interpretation are needed. Currently, the most important method of interpretation at the site is tour guiding. Tour guiding requires flair and enthusiasm for the job as well as considerable experience in talking to parties of people of different ages and interests. There should be more variety and in depth information on subjects being interpreted for people who choose to know more according to their interest.

The NHC should develop information materials such as brochures, books and maps in a few languages for marketing purposes. Not only do books increase the knowledge for the site, they generate income for the site and the NHC. There is especially a need for development of a site specific brochure. General information in brochure informs the visitors about the layout of the site so that they can plan their visit accordingly based on their interest and knowledge. These brochures should be sold not only at the site but also in museums throughout the country.

⁸⁰ Shrine Unknown. New Era Newspaper, 24 January 2011

⁸¹ diverse audience includes school children, Namibian public, international community

The current situation at Twyfelfontein is that people go to see the engravings and nothing else. The perception of how to manage archaeological sites in Namibia is that of the 19th century. However at an archaeological site such as Twyfelfontein, there is the chance to offer something else like a heritage centre which could be located in nearby community. At the moment the visitor centre is too small and cannot accommodate more than 50 people at a time without being too crowded. The National Heritage Council should lobby for funds to build a heritage centre. The establishment of heritage centre could be used for educational activities such as experimental archaeology for children. All the material excavated from the sites in Twyfelfontein area should be repatriated to Twyfelfontein where they should be interpreted in this place through display and verbal interpretation. This building could incorporate a library and craft centre.

8.1.8. Monitoring and research of visitor impacts

The World Heritage Convention requires state parties to protect and present the outstanding universal value which form the basis for inscription of a site on the World Heritage List. Visitor management is a crucial management aspect as poor visitor management is a threat to the preservation of the site. Kinahan (2010) writes that visitor pressure at Twyfelfontein is higher than elsewhere in Africa. The location of Twyfelfontein means that the site attracts many visitors and evidently numerous factors should be considered to ensure that the survival of the rock art and its surrounding environment is not threatened by the tourism prospect.

Deacon (2006) writes that at rock sites, it is important to monitor visitor impacts closely. This is because a surprisingly high percentage of the damage to rock art sites is caused by people, and most of the damage you can do something about in the short term is caused by people. Management of tourism is itself a challenging task, often occurring within a dynamic, continuous setting. Heritage managers must often make decisions between competing goals-protecting the outstanding universal value, but also allowing access for visitors to appreciate, understand and enjoy them.

At Twyfelfontein there seems to be a lack of mechanism for a coordination of visitor activities. There are no restrictions on the number of tourists entering the site each daily.

Although visitor management measures such as an entrance fee, viewing platforms, presence of guides etc., are present no other measures exist to control the impact that large visitor numbers have on the site. In order to reduce congestion and crowding at the site, some procedures should be taken, these including limiting group sizes and introducing a booking system. As no booking system exists at the site there is no information on the number of people visiting the site on a particular day. This often leads to congestion on the site which leads visitors to clamber onto rock some of which have engravings on them. A booking system will be necessary in the near future. Another problem is that the guides do not speak out against bad visitor behaviour and point out art that is 'hidden'. According to Deacon (1993b), damage is not done by sheer number of visitors alone but by the ignorant behaviour of those tasked to look at the heritage. In addition the management of visitors should follow the Principle for Sustainable Tourism set out in ICOMOS guidelines.

8.1.9. Alternative conservation measures

The increase in the number of visitors to the Twyfelfontein coupled with weak site management could cause the site to deteriorate at a faster rate. The Lion Man seems to be the preferred visitor route by tour guides. This means that visitor traffic on the trail is such that there is a sense of loss for the place. In addition the constant use of this route means it inevitably causes a certain amount of erosion to the ground and the rock art even though this is not always immediately visible. Fundamental to the conservation of the rock art is the dispersal of visitors between sites thus distributing their impacts.

It is necessary to impose strict carrying capacity or alternative plans to relieve the core area with the introduction of organised visits to Zieben Platten engraving site. The site is located on the fringes of the core area. The Zieben Platten site is a collection of seven engravings panel some of the engravings found at the site. However, the site is not well advertised at the visitor centre (there is little information on the site to encourage visitors to visit it) and seems on a whole to rather neglected as there are no visitor controls at the site. In the past this site has suffered from human damage as there was no monitoring of the visitors' activities. For example, the cross-like motif pecked and numerous instances of graffiti can be found at this site.

The site is underdeveloped with no means of keeping visitors away from the rock art by means of constructed barriers. To avoid problems experienced in the past, the implementation of sensitive and sustainable management and presentation practises at the site are necessary. Although a guide is supposed to be stationed at the site, the author did not see anybody there. The author was informed by some of the staff members that the lack of infrastructure, fear of missing out from money tips and the presence of snakes were some of the reasons why there were no guides at the site. Also this site is located close to the river bed which the desert elephants use as a migratory route. The author was also informed that some of the guides who were stationed at the site were fired. The site manager could not elaborate further on this issue saying it was an internal matter.

8.2. Recommendations for future research

The management of rock art sites in southern Africa has become an important issue and the opportunities for research are numerous. Below is a list of possible research topic for Twyfelfontein:

1. The inventorying of rock art is important for rock art research and site management but also for protection: it is impossible to effectively protect a resource that remains unrecorded. At no stage in the history of Twyfelfontein has a proper inventory or evaluation been undertaken on the heritage values of the area. Before Twyfelfontein was nominated as a World Heritage Site, comprehensive recording of the site took place, however these findings are still not available to the general public and has to be generated on request.
2. Interpretation has become a popular issue at cultural sites. Future research should focus on the research centre. The research should include a deeper investigation of information from visitors to see how well information is presented. Secondly visitor characteristics should be established by the site in order to attempt to adapt the style of management and more specifically in terms of choosing an approach to visitor management.

3. The focus of research on the interactions between the guides and visitors would be informative
4. Research should be done on the usefulness of visitor and comment visitor books.
5. Finally evaluation of the performance of more management processes such as fund raising, strategic planning should be considered.

8.3. Conclusion

The analysis reveals that the conservation of Twyfelfontein is mainly an institutional problem. It appears that the National Heritage Council has no clear criteria to guide its decisions on the management of Twyfelfontein and other rock art sites in the country. Any conservation interventions at Twyfelfontein have to recognise that this is a continuous process and that the continued existence of the engravings will depend on regular monitoring and maintenance program. Factors such as the current and future uses, the real and potential benefits of such site management for the public, the financial cost of maintaining the site and the availability of other similar sites/purpose, should be considered when drawing up the management plan.

It is important to note that the future of Twyfelfontein as well as that of other rock art sites in Namibia lies in the concentrated efforts made by the government, scientific institutions researchers, non-governmental organisations, landowners, local communities and individuals. Finally it should be noted that though lots of criticism has been put forward by the author, it should be borne in mind, many of the management processes acquired importance in heritage management recently and those tasked with managing heritage are unaware of how to perform them. Stakeholder involvement for example is a relatively newcomer in the field of heritage management. Countries of the so called developed world have a lot to do in this regard, something that is suggest by much of the heritage management literature. There is a need to move away from a centralised management, towards a partnership-driven site developments in which rock art is managed as a collaborative process with all stakeholders involved. Further research is needed into the economic and social factors behind rock art tourism.

BIBLIOGRAPHY

- Abercrombie, N., HILL, S & Turner, B. 1988. The Penguin Dictionary of Sociology. Penguin Press: London.
- Abrahams, G. 1989. A review of the South African cultural heritage legislation, 1987. *In*: H. Cleere, ed. *Archaeological Heritage Management in the Modern World*, pp. 207–20. London: Unwin Hyman.
- Abungu, G. 2006 Rock Art Management in Eastern and Southern Africa: Whose Responsibility? *In*: N. Agnew & J. Bridgland, eds. *Of the Past to the Future: Integrating Archaeology and Conservation*, pp. 331-335. Proceedings of the Conservation Theme of the 5th World Archaeological Congress Washington D.C., 22-26 June 2003. Los Angeles: The Getty Conservation Institute.
- Ahrens, C.D. 2001. Essentials of Meteorology. An Invitation to the Atmosphere. Pacific Grove (US): Brooks/ Cole.
- Anati, E. 2004. Introducing the World Archives of Rock Art (WARA): 50.000 years of visual arts. *New discoveries, new interpretations, new research methods*, XXI Valcamonica Symposium, Capo di Ponte, Edizioni del Centro, pp. 51-69. Accessed June 2014 <http://www.ccspp.it/ANATI WARA rev PRE.htm>
- Aplin, G. 2002. *Heritage: identification, conservation and management*. Oxford, Oxford University Press.
- Beckmann, E.A. 1999. 'Minimising the human factor: Changing visitor impacts through interpretations'. *Proceedings of the Interpretation of Australia Association National Conference*, Hobart, September 1999, IAA, Collingwood, Vic, pp.22-29.
- Bednarik, R.G. 1989. Priorities in rock art conservation. *Pictogram* 2(1): 5-6
- Bednarik, R.G. 1993. Rock art management in Australia. *Pictogram* 1:1-5.
- Bednarik, R. G. 2001. Rock Art Science. The scientific study of palaeoart. IFRAO 1. Turnhout: Brepols.
- Berg, B.L. 1998. Qualitative Research Methods for the Social Sciences, 3rd ed. Allyn & Bacon, Boston, USA.
- Breuil, H. 1948. The White Lady of the Brandberg, S.W.A., her companions and her guards. *South African Archaeological Bulletin* 3: 2-11.
- Breuil, H. 1949a. Some foreigners in the frescoes on rocks in Southern Africa. *South African Archaeological Bulletin* 4: 39-50.

Breuil, H. 1949b. The age and authors of the painted rocks of Austral Africa. *South African Archaeological Bulletin* 4:19-27.

Breuil, H. 1955. *The White Lady of the Brandberg*. The Trianon Press. London.

Breuil, H. 1957. *Philipp Cave*. Abbé Breuil Publications. London.

Breunig, P. 1986. Archaeological investigations into the settlement history of the Brandberg. In: H. Pager, ed. *The rock paintings of the Upper Brandberg- part I, Amis Gorge*, pp. 17-45. Cologne: Heinrich-Barth-Institut.

Blundell, G. 1996. Presenting South Africa's rock art sites. In: J. Deacon, ed. *Monuments and Sites South Africa*, pp. 71-81. Sri-Lanka: ICOMOS.

Bruwer, J.P. 1966. *South West Africa: The Disputed Land*. Cape Town: Nasionale Boekhandel.

Campbell, A. C. 1998. Archaeology in Botswana: Origins and Growth. In: P.J. Lane, A. Reid & A. Segobye, eds. *The Archaeology of Botswana, Ditswa Mmung*, pp. 24-49. Gaborone: Pula Press and the Botswana Society.

Carbone, F., Oosterbeek, L., & Costa, C. 2013. *Paideia* approach for heritage management. The tourist enhancement of archaeological heritage on behalf of local communities. *Revista de Turismo y Patrimonio Cultural*, Vol. 11 (2), 285-295.

Chirikure, S., & Pwiti, G. 2008. Community Involvement in Archaeology and Cultural Heritage Management: an Assessment from Case Studies in Southern Africa and Elsewhere. *Current Anthropology*, 49(3): 467-85.

Chirikure, S., Manyanga, M., Ndoro, W., & Pwiti, G. 2010. Unfulfilled promises? Heritage management and community participation at some of Africa's cultural heritage sites. *International Journal of Heritage Studies*, 16(1-2): 30-44.

Cleere, H. 1984. *Approaches to archaeological heritage*. Cambridge, UK: Cambridge University Press.

Cleere, H. 1989. *Archaeological heritage management in the modern world*. London: Unwin Hyman.

Clottes, J. 1995. Perspectives and traditions in Paleolithic rock art research in France. In: K. Helskog & Olsen, B. eds. *Perceiving rock art: social and political perspective*, pp. 35- 64. Oslo: Novus forlag. Instituttet for Sammenlignende Kulturforskning.

Clottes, J. 2006. Rock Art in Latin America and the Caribbean: an over-view. *Thematic Study of Rock Art in Latin America and the Caribbean*, pp.167-182. Paris: ICOMOS.

Coulson, D., & Campbell. 2001. *African Rock Art: Paintings and Engravings on Stone*. New York: Harry N. Abrams.

Deacon, J. 1991. South African rock art and the National Monuments Council. *Occasional SARARA Publication*, 1: 229-34.

Deacon, J. 1992. *Minimum standards for archaeological site museums and rock art sites open to the public*, National Monuments Council.

Deacon, J. 1993a. Archaeological sites as national monuments in South Africa: a review of sites declared since 1936. *South African Historical Journal* 29: 118–131.

Deacon, J. 1993b. *Management guidelines for rock art sites in two wilderness areas in the Western Cape*. Report Submitted to the Department of Environmental Affairs and Tourism, Stellenbosch.

Deacon, J. 1996. Case studies of conservation practice at archaeological and paleontological sites. In: J. Deacon, ed. *Monuments and Sites- South Africa*, pp. 53-70. Colombo: ICOMOS.

Deacon, J. 1997a. South Africa's new heritage legislation. *World Archaeological Congress Newsletter*, 5(1): 3.

Deacon, J. 1997b. A regional management strategy for rock art in Southern Africa. *Conservation and Management of Archaeological Sites* 2:29-32.

Deacon, J. 2002. *Southern African Rock Art Sites*. *International Council of Monuments and Sites (ICOMOS)*. www.icomos.org/studies/sarockart.htm. Accessed August 2005.

Deacon, J. 2006. Rock art conservation and tourism. *Journal of Archaeological Method and Theory* 13(4): 376-396.

Deacon, J. 2007. Management strategies for African rock art. In: J. Deacon, ed. *African Rock Art: The Future of Africa's Past. Proceedings of the 2004 International Rock Art Conference*: pp. 29-34. Nairobi: TARA.

Deacon, H. & Deacon, J. 1999. *Human beginnings in South Africa: uncovering the secrets of the Stone Age*. Johannesburg and Cape Town: David Philip.

Deacon, J. & Pistorius, P. 1996. Introduction and historical background to the conservation of monuments and sites in South Africa. *Monuments and sites in South Africa*, 1-8. Colombo: ICOMOS.

Dean, C. 1999. "Images past, images present: the conservation and preservation of rock art". *Proceedings from the Rock Art Preservation and Conservation Symposium, International Rock Art Congress, Flagstaff, Arizona, 1994*. American Rock Art Association, Tucson, Arizona.

Dowson, T. A. 1992. *Rock Engravings of Southern Africa*. Johannesburg: Witwatersrand University Press University Press.

- Du Pisani, A. 1986. *SWA/Namibia: The Politics of Continuity and Change*. Johannesburg: Ball Publishers.
- Eboreime, J. 2009. Challenges of heritage management in Africa. In: W. Ndoro, A. Mumma, & Abungu, G, eds. *Cultural Heritage and the Law: Protecting Immovable Heritage in English-speaking Countries of Sub-Saharan Africa*, pp. 1-5. Rome: ICCROM
- Edwards, J. 1996. Visitor management and the sustainable tourism agenda. In: L. Briguglio, ed. *Sustainable Tourism in Islands and Small States: Issues and Policies*, pp. 137-147. Londer, Printer.
- Feilden, B. & Jokilehto, J. 1993. *Management guidelines for World Cultural Heritage Sites*. Rome: ICCROM.
- Feilden, B. & Jokilehto, J. 1998. *Management guidelines for World Cultural Heritage Sites*. Rome: ICCROM.
- Filippucci, P. 2009. Heritage and Methodology: a view from social anthropology. In: M. Sorensen, M. & J. Carmen *Heritage Studies: Methods and Approaches*, pp. 319-325. London: Routledge.
- Forrest, J.B. 1998. *Namibia's Past Apartheid Regional Institutions: The Founding Year*. Rochster (US); Suffolk (UK): University of Rochester Press.
- Franklin, N.R. 2011. Visitor books in the management of rock art sites: an evaluation using Carnarvon Gorge as a test case. *Rock Art Research*, vol. 28, number 2, 251-264.
- Freundlich, J.C., Schwabedissen, H., & Wendt, W.E. 1980. Köln radiocarbon measurements II. *Radiocarbon* 22,1: 68-81.
- Gale, F., & Jacobs, J. 1986. Identifying high risk visitors at Aboriginal art sites in Australia, *Rock Art Research* 3 (1): 3-19.
- Glasson, J., Godfrey, K. & Goodey, B. 1995. *Towards Visitor Impact Management: Visitor Impacts, Carrying Capacity and Management Response in Europe's Historic Towns and Cities*. England: Avebury.
- Gordon, R.J. 1992. *The Bushmen Myth. The Making of a Namibian Underclass*. Boulder (US); Oxford: Westview Press.
- Gordon, R.J. 2000. The status of Namibian anthropology: a review. *Cimbebasia* 16: 1-23.
- Gwasira, G. 2005. Managing with Borrowed Laws: Cultural Heritage Management in Namibia. In: W. Ndoro, & G. Pwiti, eds. *Legal Frameworks for the Protection of Immovable Cultural Heritage Africa*, pp. 46-48. Rome: ICCROM.

Hall, C.M. 1995. Tourism, Ecotourism and Protected Areas. Gland: IUCN Publication, pp.159.

Hall, A. 2005. Initiating a review of national heritage legislation in the South African experience. In: W. Ndoro, & G. Pwiti, eds. *Legal frameworks for the protection of Immovable Cultural Heritage Africa*, pp. 36-41. Rome: ICCROM.

Hall, M., & McArthur, S. 1996. Heritage management in Australia and New Zealand. Oxford University Press.

Hall, C.M. & McArthur, S. 1998. *Integrated Heritage Management Principles and Practice*. The Stationary Office, London.

Hall, C.M. & Page, S.J. 2002. The geography of tourism and recreation- Environment, Place and Space. London: Routledge.

Herbert, D. 1995. Heritage, Tourism and Society. London, Mansell.

Hockings, M., Stolton, S., and Dudley, N. 2000. *Evaluating Effectiveness: A Framework for Assessing the Management of Protected Areas*, Gland, Switzerland and Cambridge, UK: IUCN.

Horsthemke, E., Ledendecker, S., & Paroda, H. 1990. Depositional environments and stratigraphic correlations of the Karoo sequence in North-Western Damaraland. *Commun Geological Survey Namibia* 6: 63-75.

Howard, P. 2003. *Heritage, Management, Interpretation and Identity*, London: Continuum.

Hussey, J. & Hussey, R. 1997. *Business Research. A Practical Guide for Undergraduate and Postgraduate Students*. Palgrave: Basingstoke.

ICOMOS. 1964. *International Charter for the Conservation and Restoration of Monuments and Sites*. Venice.

ICOMOS. 1993. Tourism at World Heritage Sites: The Site Manager's handbook. Washington, US/ ICOMOS.

ICOMOS. 1999: International Cultural Tourism Charter, International Council on Monuments and Sites, Mexico, 1999.

ICOMOS. 2008. The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites.

Jacobs, J.M., & Gale, F. 1986. Tourism and protection of Aboriginal Cultural Sites. Australian Heritage Commission.

Jacobson, L. 1976. The Brandberg: a re-investigation. *Boll. Del Centro Camuno di Studi Preistorici* **16**:156-160.

Jacobson, L. 1989. The White Lady of the Brandberg: a reinterpretation. *Namibiana* 2, 21-9.

Jokilehto, J. 1997. Monitoring Cultural Heritage Sites.

<http://www.culturelink.or.kr/doc/Monitoring%20Cultural%20Heritage%20Sites.doc> (accessed April 2004).

Jopela, A. 2010a. Traditional Custodianship of Rock Art Sites in Central Mozambique: a case study from Manica District. *Studies in African Past* 8:161-177.

Jopela, A. 2010b. Towards a condition monitoring of rock art sites: the case of BNE 1 in Free State Province, South Africa. *South African Archaeological Bulletin* **65** (191): 58-66.

Kane, E. & O'Reilly De Brun, M. 2001. *Doing Your Own Research*. London: Marion Press.

Keitumetse, S.O. 2009. Methods for investigating locals' perceptions of cultural heritage product for tourism: lessons from Botswana. In: M. Sorensen & J. Carmen, eds. *Heritage Studies: Methods and Approaches*, pp. 201-16. London/ New York: Routledge.

Kellehear, A. 1993. *The Unobtrusive Researcher: A Guide to Methods*. St. Leonards, NSW: Allen and Unwin.

Kinahan, J. 1990. Four thousand years at the Spitzkoppe: changes in settlement and land use on the edge of the Namib Desert. *Cimbebasia* **12**: 1-14.

Kinahan, J. 1994. Theory, practice and criticism in the history of Namibian archaeology. In: P.J. Ucko, eds. *World perspective on archaeological theory: diversity in theory and practice*, 76-95. London: Routledge.

Kinahan, J. 1995. Theory, practice and criticism in the history of Namibian archaeology. In: P.J. Ucko, ed. *Theory in Archaeology. A world perspective*, pp. 77-95. London; New York: Routledge.

Kinahan, J. 1999. Towards an archaeology mimesis and rainmaking in Namibia, Rock Art. In: P.J. Ucko & R. Layton, eds. *The archaeology and anthropology of landscapes: Shaping your landscape*, pp. 490-499. London, Routledge.

Kinahan, J. 2003. *A Proposal for the Development of Community-Based Tourism at Three Archaeological Sites in North-Western Namibia*. Quaternary Research Services Report 48. Commissioned by Deloitte and Touche, London.

Kinahan, J. 2010. The rock art of /Ui//aes (Twyfelfontein): Namibia's first world heritage site. Scandinavian Society for Prehistoric Art. www.sspa.se/pdf/2010/KinahanA10.pdf (accessed March 2010).

Kinahan, J. & Kinahan, J. 1998. *Recording and evaluation of the Twyfelfontein rock engravings for the submission of management recommendations*. Report submitted to the Directorate of Nature Conservation and lodged as an Internal Report, State Museum, Windhoek.

Kinahan, J. and Kinahan, J. H. A. 2006. *Twyfelfontein /Ui-//aes World Heritage Site Volume 1: Nomination dossier & Volume 2: Property management plan*. National Committee for the Implementation of the World Heritage Convention in Namibia.

Kotze, L. J. & van Rensburg, L. J. 2002. Legislative Protection of Cultural Resources: a South African Perspective. Paper presented at the 8th Annual Qualitative Methods Conference: 'Something for nothing', 1 May–30 September 2002.

Kristiansen, K. 1989. Perspectives on the archaeological heritage: history and future. In: H.F. Cleere, ed. *Archaeological heritage management in the modern world*, pp. 23-29. London: Unwin Hyman.

Krynauw, D.W. 1968. *Twyfelfontein*. Windhoek, National Monuments Council of South West Africa.

Lee, A. 2000. *Unobtrusive Methods in Social Research*. Buckingham: Open University Press. <http://www.mcgrawhill.co.uk/openup/chapters/0335200516.pdf> (accessed 15 July 2013).

Lessen-Erz, T. & Vogelsang, R. 2005. Populating No-Man's Land: Rock Art in Northern Namibia. *South African Archaeological Society Goodwin Series* 9:54-62.

Lewis-Williams, D. 2004. *Discovering Southern African Rock Art*. Cape Town: David Phillip.

Lewis-Williams, D. & Dowson, T.A. 1990. Through the veil: San rock paintings and the rock face. *Southern African Archaeological Bulletin* 45: 5-16.

Lewis-Williams, D. & Dowson, T.A. 2000. *Images of Power*. Cape Town: Struick Publishers.

Loubser, J. 1991. The conservation of rock paintings in Australia and its applicability to South Africa. *Narvorsinge van die Nasionale Museum, Bloemfontein* 7(7): 113-143

Mahachi, G. & Kamuhangire, E. 2009. Administrative arrangements for heritage resources management in sub-Saharan Africa. In: W. Ndoro, A. Mumma, & G. Abungu, eds. *Cultural Heritage and the Law: Protecting Immovable Heritage in English-speaking Countries of Sub-Saharan Africa*, pp. 43-51. ICCROM Conservation Studies 8. Rome: ICCROM.

Martin, H., & Mason, R. 1954. A test trench in the Phillips Cave, Ameib, Erongo Mountains, South West Africa. *The South African Archeological Bulletin*, Vol. 9, No.36: 148-151.

Masson, J. 2006. Apollo 11 Cave in Southwest Namibia: Some observations on the site and its rock art. *South African Archaeological Bulletin*, **61**(183): 76-89.

McAthur, S. & Hall, C.M. 1996. 'Visitor management and interpretation at heritage sites'. In: C.M. Hall and S. McAthur, eds. *Heritage Management in Australia and New Zealand: The human dimension*, pp. 18-39. Oxford University Press, Oxford.

Midgley, J., Hall, A., Hardiman, M., & Narine, D. 1986. In: J. Midgley, A. Hall., & M. Hardiman & D. Narine, ed. *Community participation, social development, and the state*, pp. vii-ix. London: Methuen.

Milner, S.C., Duncan, A.R., Ewart, A. & Marsh., J.S. 1994. Promotion of the Etendeka formation to group status: a new integrated stratigraphy. *Commun Geological Survey Namibia* 9:5-11.

Moscardo G. 1996. Mindful visitors-Heritage and Tourism. *Annals of Tourism Research*. Vol. 23, No. 2: 376-397.

Mountney, N., & Howell, J. 2000. Aeolian architecture, bedform climbing and preservation space in the Cretaceous Etjo formation, NW Namibia. *Sedimentology* 47: 825-849.

Mountney, N., Howell, J., Flint, S., & Jerram, D. 1998. Aeolian and alluvial deposition within the Mesozoic Etjo sandstone formation, northwest Namibia. *Journal of African Earth Science* 27(2): 175-192.

Mumma, A. 2003. Community-Based Legal Systems and the Management of World Heritage Sites. *World Heritage Papers* 13: 43-44. Paris: UNESCO.

Mumma, A. 2005. The link between traditional and formal legal systems. In: W. Ndoro & G. Pwiti, eds. *Legal frameworks for the Protection of Immovable Cultural Heritage in Africa*, 22-24. Rome: ICCROM

Munjeri, D. 2009. Introduction to international conventions and charters on immovable cultural heritage. In: W. Ndoro, A. Mumma, & G. Abungu, eds. *Cultural Heritage and the Law: Protecting Immovable Heritage in English-speaking Countries of Sub-Saharan Africa*, pp.13-23. ICCROM Conservation Studies 8. Rome: ICCROM.

Ndlovu, N. 2005. Incorporating Indigenous Management in Rock Art Sites in KwaZulu-Natal. Unpublished MA thesis, Grahamstown: Rhodes University.

Ndlovu, N. 2009. Access to rock art sites: a right or qualification? *South African Archaeological Bulletin*, 64(189): 61-68.

Ndlovu, N. 2011. Legislation as an Instrument in South African Heritage Management: Is it Effective? *Conservation and Management of Archaeological Sites*, Vol. 13 No.1:31-57.

Ndoro, W. 2001. Heritage Management in Africa. *The Getty Conservation Newsletter* 16 (3): 20-23.

Ndoro, W. 2003. Traditional and Customary Heritage Systems: Nostalgia or Reality? The implication of managing heritage sites in Africa. *World Heritage Papers* 13: 81-84. Paris: UNESCO.

Ndoro, W. 2005. *The Preservation of Great Zimbabwe- Your Monument Our Shrine*. Rome: ICCROM.

Ndoro, W. 2006. Condition survey. Paper presented to the 4th Technical Course on Rock Art Conservation, Africa 2009, Namibia, 17 July- 10 Augusts 2006.

Ndoro, W., & Kiriama, H. 2009. Management mechanism in heritage legislation. In: W. Ndoro, A. Mumma, & G. Abungu, eds. *Cultural Heritage and the Law: Protecting Immovable Heritage in English-speaking Countries of Sub-Saharan Africa*, pp. 53-62. ICCROM Conservation Studies 8. Rome: ICCROM.

Ndoro, W., and Pwiti, G. 1999. The colonial legacy: Heritage management in Southern Africa. *African Archaeological Review* 16 (3): 143-153.

Ndoro, W., and Pwiti, G. 2001. 'Heritage Management in Southern Africa: Local, National and International Discourse'. *Public Archaeology* 2 (1): 21-34.

Négri, V. 2009. Introduction to heritage law in Africa. In: W. Ndoro, A. Mumma, & G. Abungu, (eds) *Cultural Heritage and the Law: Protecting Immovable Heritage in English-speaking Countries of Sub-Saharan Africa*, pp. 6-10. ICCROM Conservation Studies 8 Rome: ICCROM.

O'Keefe, P. J. 2000. "International cultural property: Traditional culture and folklore: Droit de suite." *Media and Arts Law Review* 5(2): 121-125.

O'Keefe, P.J. 2002. *Shipwrecked heritage: a commentary on the UNESCO Convention on underwater cultural heritage*. Leicester: Institute of Art and Law.

O'Keefe, P. J. and Prott, L.V. 1984. *Law and the cultural heritage: Volume 1: Discovery and Excavation*. Abingdon, Professional Books Ltd.

Pager, H. 1989. The Rock Paintings of the Upper Brandberg, part I: Amis Gorge (edited by Tilmann Lessen-Erz). *Afrika Praehistorica* 1, Koln 1989.

Pager, H. 1993. The Rock Paintings of the Upper Brandberg, part II: Hungorob Gorge (edited by Tilmann Lessen-Erz). *Afrika Praehistorica* 4, Koln.

Pager, H. 1995. The Rock Paintings of the Upper Brandberg: part III- Southern Gorges. *Afrika Praehistorica* 7, Koln.

Pager, H. 1998. *The Rock Paintings of the Upper Brandberg: Part IV-Umuab and Karoab Gorges*. *Afrika Praehistorica* 10, Koln.

Pager, H. 2000. *The Rock Paintings of the Upper Brandberg: part V- Naib Gorge (A) and the Northwest*. *Afrika Praehistorica* 12, Koln

Pager, H. 2006. *The Rock Paintings of the Upper Brandberg: part VI- Naib (B), Circus and Dom Gorges*. *Afrika Praehistorica* 20, Koln

Pearson, M. & Sullivan, S. 1995. *Looking after heritage places*. Melbourne: Melbourne University Press.

Pedersen, A. 2002. *Managing Tourism at World Heritage Sites: A Practical Manual for World Heritage Site Managers*. World Heritage Manuals. Paris: UNESCO World Heritage Centre.

Pwiti, G. 1996. Let the ancestors rest in peace? New challenges for cultural heritage management in Zimbabwe. *Conservation and management of archaeological site*. 1 (3): 151-60.

Pwiti, G., & Mvenge, G. 1996. Archaeologists, tourists and rainmakers: problems in the management of rock art sites in Zimbabwe- A case study of Domboshava National Monument. In: G. Pwiti, G & R. Soper, eds. *Aspects of African Archaeology*, pp. 817-24. Harare, University of Zimbabwe.

Runder, I. 1989. *The Conservation of Rock Art in South Africa*. National Monuments Council: Cape Town.

Rudner, J. 1952. Some stone implements from northern South West Africa. *South African Archaeological Bulletin*, 7: 155-161.

Rudner, J. and Rudner, I. 1970. *The hunter and his art. A Survey of rock art in Southern Africa*. Cape Town: Struik.

Said, H. 1999. The history and current situation of cultural heritage care in sub-Saharan Africa. *Asian and African studies*, 8 (1) 91-100.

Scherz, E.R. 1970. Felsbilder in Südwest-Afrika: Teil I: Die Gravierungen im Südwest-Afrika ohne den Nordwesten des Landes. *Fundamenta* A7. Koln/Wien 1970.

Scherz, E.R. 1975. *Felsbilder in Südwest-Afrika: Teil II: Die Gravierungen im Nordwest Südwest-Afrika*. Bohrlau Verlag, Koln.

Schofield, J.F. 1948. The age of the rock paintings of South Africa. *South African Archaeological Bulletin*. 3:79-88.

Shackley, M. 1998. *Visitor management: Case studies from World Heritage Sites*. Oxford, Butterworth, Heinmann.

Smith, B. 2006. Rock art tourism in southern Africa: problems, possibilities and poverty relief. In: N. Agnew & J. Bridgland, eds. *Of the Past to the Future: Integrating Archaeology and Conservation. Proceedings of the Conservation Theme of the 5th World Archaeological Congress Washington D.C., 22-26 June 2003*, pp.322-330. Los Angeles: The Getty Conservation Institute.

Smith, L. 2004. *Archaeological Theory and the Politics of Cultural Heritage*. London/ New York: Routledge.

Sørensen, M.2009. Between the lines and in the margin: interviewing people about heritage and identity. In: M. Sorensen and J. Carmen, ed. *Heritage Studies: Methods and Approaches*, pp.164-177. London/ New York: Routledge.

Stanistreet, I.G., & Stollenhof, H. 1999. Onshore equivalents of the main Kudu gas reservoir in Namibia. In: N. Cameron, R. Bate, & V. Clure, eds. *The oil and gas habitats of the south Atlantic*, vol.153, pp. 345-365. London: Special Publication Geological Survey.

Steel, R.H. 1991. Report on the condition of rock paintings at Giant's Castle, Natal, Drakensberg, South Africa. *Pictogram*, 4, 2-10.

Swadley, B.2002. *Rock Art in Arkansas: Actively Managing Rock Art Sites*. Department of Parks and Tourism, Arkansas.

Taruvinga, P. 2001. Salvaging Vandalized Rock Art at Domboshava National Monument in North-Eastern Zimbabwe. In: D. Bumbaru, S. Burke, J. Harrington, M. Petzet, & J. Ziesemer, eds. *Heritage at Risk*, pp. 217–19. ICOMOS Publication. Munchen: K. G. Saur.

Taruvinga, P. and Ndoro, W. 2003. The vandalism of the Domboshava rock painting site, Zimbabwe: some reflections on approaches to heritage management. In: N. Stanley-Price, ed. *Conservation and Management of Archaeological Sites*, 6 (1): 3–10.

Thebe, P. 2006. Intangible Heritage Management: Does World Heritage Listing Helps? In: N. Agnew, & J. Bridgland, eds. *Of the Past to the Future: Integrating Archaeology and Conservation. Proceedings of the Conservation Theme of the 5th World Archaeological Congress Washington, D.C., 22-26 June 2003*, pp. 312-321. Los Angeles: The Getty Conservation Institute.

Thorn, A. & Dean, C. 1995. Condition surveys: an essential management strategy. In: G. Wards & L. Ward. Eds. *Management of Rock Art Imagery*, pp. 116—123. Melbourne: Occasional AURA publication 9.

Tilden, F. 1957. *Interpreting our heritage*, Chapel Hill: The University of North Carolina Press.

Tosun, C., and Timothy, D.J. 2003. Arguments for community participation in the tourism development process. *Journal of Tourism Studies*, Vol 14, No.2: 2-15

http://www.jcu.edu.au/business/public/groups/everyone/documents/journal_article/jcudev_012866.pdf. (Accessed January 2013)

Tötemeyer, A.J. 1999. *The State of Museums in Namibia and the Need for Training in Museum Studies*. University of Namibia, Windhoek, Namibia.

Trochim, W.M.K. 2006. The Knowledge Base-Social Research Methods. www.socialresearchmethods.net/kb/ (Accessed May 2009)

Tubb, K.N. 2003. An Evaluation of the Effectiveness of interpretation within Dartmoor National Park in researching the goals of sustainable tourism development. *Journal of Sustainable Tourism*. Vol.11, No.6, pp.476-498.

UNESCO. 1972. *Convention Concerning the Protection of the World Cultural and Natural Heritage*. Paris: UNESCO.

UNESCO. 1999. *Operational Guidelines for the Implementation of the World Heritage Convention*, Paris: UNESCO

UNESCO. 2003. Declaration Concerning the Intentional Destruction of Cultural Property.

UNESCO. 2005. *Operational Guidelines for the Implementation of the World Heritage Convention*. UNESCO doc. no WHC-2005/WS/02. Paris: UNESCO.

UNESCO. 2008. *Operational Guidelines for the Implementation of the World Heritage Convention*. Paris: UNESCO.

UNWTO. 2010. *Tourism and the Millennium Development Goals, Sustainable, Competitive, Responsible*. Madrid: World Tourism Organization.

Van Schalkwyk, L.O. 1995. A new relevance for old monuments: the Isandlwana model. *SAMAB* 21:40-43.

Veal, A.J. 1997. *Research methods for leisure and tourism: a practical guide*. 2nd ed. Financial Times Pitman Publishing, London.

Viereck, A. 1959. Die Felsbilder von Twyfelfontein. *Journal der SWA Wissenschaftliche Gesellschaft* 13.

Viereck, A., & Rudner, J. 1957. Twyfelfontein- a centre of prehistoric art in South West Africa. *The South African Archaeological Bulletin* 12:15-26.

Vogt, A. 1995. *National monuments in Namibia*, Vol 1 & 2. Unpublished MA These. University of Stellenbosch. Republic of South Africa.

Vogt, A. 2004. National Monuments in Namibia. An inventory of Proclaimed national monuments in the Republic of Namibia. Gamsberg Macmillan, Windhoek.

Wadley, L. 1977. *Some aspects of Holocene prehistory in central S.W.A.* Unpublished MA Thesis. University of Cape Town.

Wadley, L. 1979. Big Elephant Shelter and its role in the Holocene prehistory of central South West Africa. *Cimbebasia* (B) 3:1-76.

Walton, J. 1954. South West African rock paintings and the triple curved bow. *South African Archaeological Bulletin*. 9:131-4.

Wendt, W. E. 1972. Preliminary report on an archaeological research programme in South West Africa. *Cimbebasia* (B) 2: 1-61.

Wendt, W.E. 1974. "Art mobilier" aus der Apollo 11 Grotte in Südwest-Afrika. *Acta Praehistorica et Archaeologica* 5, 1974, 1-42.

Wendt, W.E. 1975. Die ältesten datierten Kunstwerke Afrikas. *Bild der Wissenschaft* 10: 44-50.

Wendt, W.E. 1976. Art mobilier from the Apollo Cave, South West Africa: Africa's oldest dated works of art. *South African Archaeological Bulletin* 31:5-11.

Whitelaw, G. 2005. Plastic Value: Archaeological Significance in South Africa. In: C. Mathers, T. Darvill, & B. J. Little, ed. *Heritage of Value, Archaeology of Renown: Reshaping Archaeological Assessment and Significance*, pp. 137–56. Gainesville: University Press.

Whitley, D.S. 2001. *Handbook of Rock Art Research*, AltaMira Press, Walnut Creek.

Whitley, D.S. 2005. *Introduction to Rock Art Research*, Left Coast Press, California.

Willcox, A.R. 1971. Summary of Dr. Denningers report on the age of paint samples taken from rock paintings in S.A. and S.W.A. *South African Journal of Science*, Special Supplementary issue 2:84-85

APPENDICES

Appendix 1: Indicators and Scoring for Management Processes by the Author

Management process	Indicator	Scoring criteria	Score
Conservation	Monitoring the physical condition of the site	<i>No/little monitoring (simple activities like picking up litter)</i>	0
		<i>On ad hoc basis</i>	1
		<i>On a regular planned basis</i>	2
	Maintenance	<i>No/little maintenance (simple activities like cleaning)</i>	0
		<i>On an ad hoc basis</i>	1
		<i>On a regular planned basis</i>	2
	Conservation Interventions	<i>No conservation interventions</i>	0
		<i>Conservation either satisfactory/ not fully implemented</i>	1
		<i>Conservation interventions satisfactory and fully implemented</i>	2
Visitor Management	Visitor data collection	<i>Not conducted</i>	0
		<i>Simple techniques (age, number nationality)</i>	1
		<i>Sophisticated surveys (observation visitor behaviour etc)</i>	2
	Visitor amenities	<i>None</i>	0
		<i>Basic amenities, restrictions not respected</i>	1
		<i>Basic amenities, restrictions respected</i>	2
	Monitoring and research of visitor impacts	<i>No/little monitoring and research</i>	0
		<i>On ad hoc basis</i>	1
		<i>On regular planned basis</i>	2
Interpretation	Control of interpretation	<i>interpretation mainly by external licensing</i>	0
		<i>interpretation both by staff and non staff</i>	1

		<i>Interpretation mainly by management authority</i>	2
	Interpretative Techniques	<i>Visitor needs taken into account</i>	0
		<i>Visitor needs partly taken into account</i>	1
		<i>Interpretation adapted to visitor needs</i>	2
	Staff training	<i>Once off training</i>	0
		<i>Training on ad hoc basis</i>	1
		<i>Training on regular planned basis</i>	2
Stakeholder involvement	Communication between management authority and stakeholder	<i>No communication</i>	0
		<i>Communication irregular makeshift basis</i>	1
		<i>Communication on regular planned basis</i>	2
	Local community involvement	<i>Not involved in planning process</i>	0
		<i>Involved in some aspects</i>	1
		<i>Involved in whole planning process</i>	2
	Socio-economic development	<i>No or little development</i>	0
		<i>Some development i.e. job creation</i>	1
		<i>Basic services i.e. clean water, clinic</i>	2
Documentation management	Archive maintenance	<i>No archive</i>	0
		<i>Archive exist but not maintained</i>	1
		<i>Archive well maintained</i>	2
	Public accessibility	<i>Not accessible</i>	0
		<i>Available on demand</i>	1
		<i>Publically available</i>	2
	Computerization	<i>Not computerised</i>	0
		<i>Partly computerised</i>	1
		<i>Fully computerised</i>	2

Appendix 2: Interview with National Heritage Council Archaeologist

Name: Alma M. Nankela

Job Title: National Heritage Council Archaeologist

Interview date: 13/December 2012

1. To ensure that Twyfelfontein has a long term future as a cultural attraction, a sustainable management plan needs to be drawn up and implemented. Is there a management plan for Twyfelfontein? If yes is it in line with the principles of UNESCO?

Answer: Yes, there is a plan, but it needs to be reversed. To a certain degree it is in line with the principles of UNESCO, but not all the principles are applicable to the Twyfelfontein situation.

2. There are many different management processes that are considered essential for the effective management of cultural sites. Here I have identified five management processes that need a closer look at Twyfelfontein; these are conservation, documentation management, visitor management, interpretation and stakeholder involvement. How would you rate the level of performance of the following management processes at Twyfelfontein based on scoring provided?

Scoring criteria	Management process	Given score
1=unsatisfactory	Conservation	2
2=satisfactory	Visitor management	2
3=good	Interpretation	2
4=very good	Stakeholder involvement	2
5=excellent	Documentation management	1

3. Explain your rating for the level of performance of the five management processes.

Management process performance	Given score	Reason for Rating
Conservation	2	<i>Events are not reported on time</i>
Visitor management	2	<i>There is no control of the visitors. The laws such as the maximum number of people on the platforms are not respected.</i>
Interpretation	2	<i>There has been some improvement in the interpretation and presentation of the site since I was appointed. There is a new panel upon arrival at the site of the rules of the site.</i>
Stakeholder involvement	2	<i>Communication with stakeholders is not carried out on a regular basis. All stakeholders such as the local community and the lodge are not involved in the planning of the site.</i>
Documentation management	1	<i>Since inscription of there is no form of documentation of the conservation and management activities of the site. There is no continuous assignment because there is no archaeologist on site.</i>

4. How is conservation managed?

Answer: Since my appointment there have been improvements in the conservation in 2012. For example there is an annual report has to be submitted of all the conservation problems. The guides and the site manager have been asked to observe and document everything. Also a new protocol has been introduced where the site manager is expected to report to the head office immediately.

5. Who manages the archives?

Answer: It is used to the heritage manager, but since then, this responsibility has been handed over to me.

6. Are the archives computerized? If no, why not?

Answer: The reports generated from the permits. There is no system in place therefore it is difficult to circulate information to the scientific committee.

7. Are archives readily accessible to the general public?

Answer: No, it mainly for internal purposes not really sure it mostly among heritage institutions. However all publications for research are accessible.

8. Is the interpretation of the site visitor specific?

Answer: No, it is general

9. What materials are used to present the site?

Answer: Brochures were recently introduced in 2012.

10. Do guides follow special training?

Answer: Yes they receive training, but it is not regular. There is a need for a workshop with the guides.

11. Are outside guides on the site. Why?

Answer: Yes, in 2011 I observed outside guides but this has been stopped in order to improve conservation of the site. The outside guides do not respect the values of the site, they go to restricted paths.

12. How would you sum up the biggest problems of the site?

Answer: Conservation is the biggest challenge of all the management processes. It is the most problematic. The panels are splitting but there is not much that can be done, because if we remove the panels we are taking them out of their cultural context. It is hard to find a solution. Finding an expert is always a problem, you need to get an expert from elsewhere like South Africa. I am an amateur archaeologist; this is also a learning process for me. The problems are not reported on time, for example, the earthquake in March was only reported in June. Currently no conservation plans exist for Twyfelfontein and the conservation activities at the site are based to some degree on the conservation recommendations set out in the Nomination Dossier. This dossier was compiled in 2005 and is therefore outdated and the goals that were mentioned in there need to be re-evaluated. The human threats are minimal.

13. What could be done to improve the management of the site?

Answer: The NHC needs to be more serious and be aware of what is happening at the site. The management plan should be revised constantly for long term sustainability. Involvement of the local community is important.

Appendix 3: Interview with UNESCO Program Specialist for Culture in Namibia

Name of interviewee: Mr. Damir Dijakovic

Job title: Program Specialist for Culture at UNESCO

Date of interview: 11 January 2013

1. To ensure that Twyfelfontein has a long term future as a cultural attraction, a sustainable management plan needs to be drawn up and implemented. Is there a management plan for Twyfelfontein? If yes is it in line with the principles of UNESCO?

Answer: There is a rule introduced into the World Heritage Convention, some ten years ago, I'm not sure exactly when, but I believe that it was some ten years ago, maybe even more. Each world heritage site should have a management plan. From the beginning from 1972 when the world heritage convention starting working, not all the sites, actually there were no there were no management plans and then gradually people started introducing management plans until they became compulsory.

So from that point onwards even before the nomination the sites on the tentative list being proposed in the period of the preparation for the file, management plan has to be introduced already. I believe that Twyfelfontein has the management plan but I am not 100% sure buy you can check this thing on the web and with the National Heritage Council. The management should be in line with UNESCO. Each management plan has to be indorsed by the World Heritage Committee. It is a complex process for the management plan. From that point of view it must be, it is a Namibian introduced document but it has to go along with the international standards.

2. There are many different management processes that are considered essential for the effective management of cultural sites. Here I have identified five management processes that need a closer look at Twyfelfontein; these are conservation, documentation management, visitor management, interpretation and stakeholder involvement. How would you (in your personal capacity having an archaeological background) rate the level of performance of the following management processes at Twyfelfontein using the table provided?

Score	1	2	3	4	5
Scoring criteria	<i>Unsatisfactory</i>	<i>Satisfactory</i>	<i>Good</i>	<i>Very good</i>	<i>Excellent</i>

Management process	Given score
Conservation	1
Visitor management	2
Interpretation	3
Stakeholder involvement	2
Documentation management	3

3. Explain your rating for the level of performance of the five management processes

i. Conservation (unsatisfactory):

Answer: I do have some concerns of conservation that is a known issue. The panels that are flaking off, it are the quality of the stone but it is also conservation management. This goes to the visitor management. The interesting thing when you get the guide, they were told that this thing is an issue but the way they present it is wrong. You can say this to me but you can't just say to a visitor like that. There is a danger because then you have to add what is done to protect because if this is gone in 3-4 years' time then there is no more site. so it also part of the cleaning house or staff training you have to explain to guides but this a continuous process of training them. There is a need to explain to the guides what it means when you say this kind of thing. Conservation issue in Twyfelfontein is an important. I spoke to April (Director of NHC), I know that things are being done but the fact is how quickly. And I am

not aware how finance is available to actual do to conservation on the site so that is one of the issues that have to be looked at.

ii. Documentation management (good):

Answer: As far as I know it is perfectly ok. I know that about Twyfelfontein quite a number of publications have been done, the question is how well this presented, for example on the national heritage council website.

iii. Visitor management (satisfactory):

Answer: See conservation

iv. Interpretation (good):

Answer: Interpretation is pretty good, although you can always improve it. Information exists; it's not that it doesn't exist. Presentation of this information would need to be better. First thing is the web; national heritage council has discovered the web. There must be much more in the interest of the site and generally about heritage management in Namibia.

v. Stakeholder involvement (satisfactory):

Answer: Community involvement at Twyfelfontein is not satisfactory. This local community basically the guide service is local community can it be better of course. On the way to Twyfelfontein there are so many places you can stop to buy stuff, there is a curio shop over there can there be more of that. There are a lot of incentives that one can do to stronger involve local communities.

Again management systems must be in place. It is by the principles and requirements of the world heritage convention. Ok there are different degrees of efficiency and effectiveness how management principles adapt. From what I know and from what I can compare with other heritage sites around the world I would yes it can be better of course. I mean everything can, but from the time being what I saw in the world heritage site of Twyfelfontein pretty much well is organized.

There is certainly space for improvement. National Heritage Council like any other monuments councils in other country there are always challenges how you can improve the procedure, how you can increase the expertise of the institution. It is a question of institution that never stops so the same goes for the NHC. I know that for a fact this is a constant process.

4. Amongst the younger generation awareness of the importance of sites such Twyfelfontein is underdeveloped? Why this case is and what can UNESCO do to assist the Namibian in creating awareness amongst the younger generation?

Answer: I would say yes. And that goes basically with interpretation and presentation. What is the availability of information about Twyfelfontein? It goes beyond that. The question goes to the whole cultural sector in Namibia. It is not visible enough, it is not strong enough. Cultural heritage is not promoted well enough primarily among its own citizens. That is one of the things. We are now working on intangible cultural heritage. Any activity related to heritage should have awareness raising program this is a long term process it stems out from the cultural sector. The fact that the culture section falls under the Ministry with the long name where culture is in the end of the name and probably the end in reality. How many people are actually employed in the culture sector in Namibia?

One of the things again that UNESCO is doing is the statistic of culture. We are doing this thing with UNAM (University of Namibia) it just started a few months ago not much to show but again it is a process. To bring up statistical elements to show how much culture make in the economic development of Namibia. The number of people in archaeology is not trained to deal with the site. You know exactly what to do to preserve the site, but no one trained us to go to the public, we don't know this thing. We do the excavation, we do the publications and that is where it stops. We never manage to create links to the ministry of tourism.

We are never to manage to convince the Prime Ministry's Office that these are resources that need promotion and protection. And that is where gaps exist between, for example tourism, economic development, what does parliamentary know of these things. These are the gaps

which are never taught in university. This is the challenge where National Heritage Council, ministry of culture to find a way to spread out the word.

One of the things is go to the web, start producing things. It is not only in Namibia. Here it is a pity because a country of 2.3 million people it should be so difficult to make promotion of their own heritage known to everyone. But it is about developing mechanism. Mechanisms you and I are not trained for and this is the challenge. National Heritage Council has appointed public relations, but it not something that is going to change in 6 months or a year. It will take about five year or ten years to change this thing. There is need to raise awareness amongst general population. We have heritage week but how many people are participating in heritage week.

5. How would you sum up the biggest challenge of the site?

Answer: The thing is that how to improve situation of Twyfelfontein without depending on this framework, I believe it is possible. But that requires personal investment. Few people that is actually dedicated to Twyfelfontein to work on it solely. So that Twyfelfontein can be what it is supposed to be? The biggest challenge is to improve the management. It is continuous process. If you want to manage the site well you never stop improving your management procedures. Over there right now is the conservation issue conservation should start. I know that Alma she prepared a project proposal for the conservation of some panels. That is one of the options. I think in that it ok, in layman terms.

6. And how can these challenges are best addressed?

Answer: Things can be done better; there are processes that people are working on. How this will affect other rock art sites is the economy issue. How much funds Namibia has and invests in archaeological sites, excavation, conservation, publications, and promotions I don't know. That is one the challenge. From a statistic point of view how much money does culture sector receives and for which branches this money is dispersed.

I would like to see how much money is allocated for archaeology in Namibia; excavations, conservations, and excavations and presentation. How many of these sites are open to the

public. I don't have the information; I don't where to look for it. We have a world heritage site but what about other sites we shouldn't disregard.

Appendix 4: Interview with Twyfelfontein Site Manager

Name of interviewee: Miss E. Hinda
Job title: Twyfelfontein Site Manager

1. Does Twyfelfontein have a management plan

Answer: Yes

2. How long have you been working as the site manager?

Answer: months

3. What are your duties as a site manager?

Answer: The site manager did not respond to this question.

4. Do you feel that you have enough information to make decisions with confidence?

Answer: Not really, because I always have to consult with Head Office for final decisions

5. How do you assess the organization and functioning of the five management process based on the table provided?

Score	1	2	3	4	5
Scoring criteria	<i>Unsatisfactory</i>	<i>Satisfactory</i>	<i>Good</i>	<i>Very good</i>	<i>Excellent</i>

Management process	Given score
Conservation	4
Visitor management	4
Interpretation	4
Stakeholder involvement	4
Documentation management	3

6. How often do you monitor the site?

Answer: Daily, reporting done monthly to Head of Heritage Management, Periodic reporting done to UNESCO in 2009.

7. What do you look for when monitoring the site?

Answer: Graffiti, condition of rock engravings/paintings, soil erosion, littering, movement in rocks.

8. How often do you research and monitor visitor impacts?

Answer: Research is mostly done by Alma, during high season, after heavy rains or earthquake

9. How do you collect information about the visitors?

Answer: Visitor statistics/register and customer care survey questionnaires

10. What is the purpose of the visitor book?

Answer: To determine the origin and number of tourists visiting the site

11. Why do you have a comment box? How often do you collect the comments and what are they used for?

Answer: We no longer make use of the comment box; however, we do have a comment book. The comment book is very helpful as it clearly indicates areas where site management in general can be improved

12. How do you know that the guides are doing a good job?

Answer: Call meetings, feedback from comment book, accompany them during guided tours

13. Are there external guides on the site and if so why?

Answer: No

14. In which are of the five management processes are the guides trained?

Answer: Conservation, Interpretation

15. Who are the stakeholders of the site?

Answer: JMC Members

16. How often do you communicate with them?

Answer: During JMC Meetings, sometimes daily

17. What is the extent of the local community in the management of the site

Answer: Share ideas, management practice

18. According to you which is the biggest problem facing the site?

Answer: Erosion, earth quake, no water at centre/staff house, toilets

19. According to you what need to be done to solve the problem?

Answer: Drill borehole/rehabilitate or use water from the spring.

Appendix 5: Survey Interview with Local Community

1. What is your occupation?

.....

2. Have you ever been to the site? Why?

.....
.....
.....

3. Why is Twyfelfontein rock art site important?

.....
.....
.....

4. Who owns the site?

.....

5. Who manages the site?

.....

6. What is level of community involvement in the management of Twyfelfontein?

.....
.....
.....

7. How often do you have meetings with the management of Twyfelfontein?

.....

.....

.....

.....

Appendix 6 : Visitor Questionnaire

Dear Sir/Madam

The National Museum of Namibia together with the University of Tras-os-Montes e Alto Douro in Portugal is conducting a study about the management of Twyfelfontein world heritage site as part of PhD research. In order to understand your perceptions (views) and to identify areas of improvement, it is important to carry out this survey. The information provided by you could assist in future planning of the sites to better accommodate the needs of visitors. You have been randomly selected to be a respondent. Privacy is key principle of this survey. There are no right or wrong answers, and most importantly candid and honest answers are the most useful. Thank for your time.

1. Age group

- a. Below 25
- b. 25-34
- c. 35-44
- d. 45-54
- e. 55-64
- f. 65+

2. Employment:

- a. High school
- b. University
- c. Unemployed
- d. Employed
- e. Retired

3. Nationality

- a. Namibian
- b. Other

4. How did you learn of the site

- a. Family/ friends
- b. Travel agent
- c. Organised tour
- d. Magazine/newspaper
- e. TV
- f. Travel book

- g. Internet
- h. University
- i. Other.....

5. Why is Twyfelfontein World Heritage site important?

.....

.....

.....

6. Who owns the site?

.....

7. Who made the engravings at Twyfelfontein?

.....

8. Please rate the knowledge of the tour guides using the following scores (please tick)

Score	1	2	3	4	5
Scoring criteria	<i>Unsatisfactory</i>	<i>Satisfactory</i>	<i>Good</i>	<i>Very good</i>	<i>Excellent</i>

9. Do you feel the site is well maintained (please tick)

- a. Yes

.....

- b. No

.....

10. Please rate the following visitor amenities(please tick)

Facility	1=unsatisfactory	2=less satisfactory	3=somewhat satisfactory	4=good	5=excellent
Visitor centre					
Kiosk					
Toilets					
Car parks					

Appendix 7 : Twyfelfontein Guide Questionnaire

1. How long have you been working at the site?

.....

2. Why is Twyfelfontein important?

.....

.....

.....

3. Who owns the site?

.....

4. Who monitors the site?

.....

5. How often is the site monitored?

.....

6. What skills and level of education do you need to become a guide?

.....

7. Are there are other guides on the site? Why?

.....

.....

Appendix 8: Visitor numbers to Twyfelfontein 2007 to 2013

Months	Years						
	2007	2008	2009	2010	2011	2012	2013
January	2060	2370	2484	2172	2014	1957	1730
February	2222	2656	1714	2011	1297	1769	1715
March	3160	3692	2330	3782	2379	2573	2912
April	3034	3943	4486	4214	3969	4072	4059
May	3921	4426	4826	4307	4980	3832	4050
June	4111	3268	3554	3404	2950	3070	3126
July	4193	6464	6348	6636	4841	5917	5783
August	8238	9052	9180	9070	9094	8536	8170
September	5646	6440	6882	6183	6509	5742	5824
October	6337	7250	7201	6949	7357	7126	7431
November	5000	5983	5244	5547	5366	5341	5226
December	2470	2713	2176	2832	2262	2162	1405
Total	50 392	58 257	56 425	57 107	53 018	52 097	51 431

