KOLMANSKOP: AN INDUSTRIAL HERITAGE RESOURCE OR ONLY A TOURIST ATTRACTION?

The Assessment of Value with regard to Kolmanskop Ghost Town
And the Industrial Landscape of the Sperrgebiet National Park, Namibia

A 60-credit research project (mini-dissertation) submitted
In partial fulfilment of the degree of
Master of Philosophy in Conservation of the Built Environment

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Author's Statement

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Nicola Alexander, October 2010
KEYWORDS:
Industrial Heritage
Values-Based Conservation
Authenticity and Cultural Significance
Sustainable Development
Heritage and Tourism
Heritage in the Post-Colonial Context

ABSTRACT:
Kolmanskop Ghost Town is situated within the Sperrgebiet National Park on the South-West Coast of Namibia. The diamond-mining town was established in 1908 and abandoned in 1956. Kolmanskop’s status as a tourist attraction has been readily established and it is regarded as an important economic resource by the nearby community of Lüderitz. The key question of this research project is whether the site is also able to fulfil the criteria of an industrial heritage resource?

The principal method employed is that of values-based conservation. The study relies principally on the survey of a broad range of individuals and stakeholders in order to establish present values as they pertain to Kolmanskop. The results are substantiated by historical research and an assessment of the natural, socio-cultural and socio-political contexts.

The findings show a lack of awareness surrounding the technological and social values of the site, whereas economic and historical values take precedence. Therefore as it presently stands, Kolmanskop is recognised primarily as a tourist attraction. The study finds that technological and social values need to be promoted in order to reconcile Namibia’s mining heritage within Namibian society; thereby allowing its recognition as a National Heritage Site and part of the National Estate.

The case study serves as an example for the appropriate treatment and recognition of industrial heritage in Namibia. It further addresses the underlying tensions between heritage and tourism; looking toward finding a sustainable development solution within the post-colonial context of Namibia.
CONTENTS

List of Figures 8
List of Abbreviations 10

CHAPTER 1

1.0 Introduction 12
  1.1 Problem Statement 13
  1.2 Identification of Key Question and Sub-Questions 14
  1.3 Outline of Dissertation 15

CHAPTER 2

2.0 Methodology 17
  2.1 The Case Study Method 18
  2.2 Discussion of Methodological Approaches 20
  2.3 List of Methods and Sources to be consulted: 20
    2.3.1 Literature Review
    2.3.2 Historical and Archival Documents
    2.3.3 Contextual Mapping
    2.3.4 Personal / Expert Observation
    2.3.5 Individual and Expert Interviews
      (i) Identification of Stakeholders
      (ii) Insiders and Outsiders
      (iii) Structure and Interviewing Techniques
  2.4 Synthesis and Analysis of Results 24

CHAPTER 3

3.0 Literature Review 26
  3.1 Industrial Heritage 27
  3.2 Value and Cultural Significance 30
  3.3 Values-Based Conservation 33
  3.4 Values-Based Conservation and Sustainability 35
  3.5 The Potential for Dissonance 36
    3.5.1 Heritage and Tourism
    3.5.2 Heritage in the Post-Colonial Context

CHAPTER 4

4.0 Historical Background 39
4.1 The Discovery of Diamonds (1908)  
4.2 Kolmanskuppe (1908-1919)  
   *KBG and the Establishment of the Mining Operations*  
4.3 Kolmanskop (1920-1956)  
   *CDM and Consolidation of the Mining Interests*  
4.4 Kolmanskop Ghost Town (1956-Present)  
   *Museum and Development of Tourist Attraction*

**CHAPTER 5**

5.0 **Definition of Study Area and its Component Parts**  
5.1 Area 1: Kolmanskop Ghost Town  
5.2 Area 2: ‘Native’ Hospital and Compound  
5.3 Area 3: Centralwäsche, Processing and Recovery Plant

**CHAPTER 6**

6.0 **Discussion of Value Contexts**  
6.1 Geographical and Physical Context  
6.2 Legislative Context  
6.3 Socio-Economic Context  
6.4 Socio-Cultural and Socio-Political Context

**CHAPTER 7**

7.0 **Expression of Values as they pertain to Kolmanskop**  
7.1 Identifying a Typology of Values  
7.2 Discussion of Authenticity  
7.3 Discussion of Cultural Significance  
   7.3.1 Age and Rarity Value  
   7.3.2 Historical Value  
   7.3.3 Symbolic Value  
   7.4.4 Social Value  
   7.3.5 Aesthetic Value  
   7.4.6 Economic Value

**CHAPTER 8**

8.0 **Assessment and Conclusion**

9.0 **List of Sources**
APPENDIX

Appendix A: List of Interviewees

Appendix B: Demographic Data Information Sheet

Appendix C: Interview Questions

Appendix D: Mapping of Values Data

Appendix E: Example of Annotated Interview Sheet

Appendix F: Nizhny Tagil Charter for the Industrial Heritage (2003) TICCIH
LIST OF FIGURES:

Cover: Kolmanskop Ghost Town overlooking the Namib Desert (N Alexander, 2010)

Figure 1: Annotated Map of the Sperrgebiet (Restricted Mining Area) ................. 11
Figure 2: Summary Table of Value Typologies ................................................. 32
Figure 3: Survey Plan of Kolmanskuppe (c.1914) ........................................... 40
Figure 4: Survey Plan of Kolmanskuppe (1929) ................................................ 41
Figure 5: Survey Plan of Kolmanskop Museum (1980) ....................................... 42
Figure 6: Early Photograph of Kolmanskuppe (c.1908/09) ................................... 46
Figure 7: Photograph depicting early mining methods (c.1908/09) ....................... 46
Figure 8: Photograph depicting early mining methods (c.1911/13) ....................... 46
Figure 9: The Centralwasche (or Main Processing Plant) at Kolmanskop, c.1913 ... 47
Figure 10: Machinery and Equipment inside the Centralwäsche ............................ 48
Figure 11: The Lüderitz Power Station, 1912 ...................................................... 48
Figure 12: Machine Hall inside Lüderitz Power Station, 1912 ............................... 48
Figure 13: ‘Millionaire’s Row’ Kolmanskop (c.1928) .......................................... 50
Figure 14: Mine Manager’s Residence (c.1928) ............................................... 50
Figure 15: Remains of Old Compound close to Centralwäsche .............................. 50
Figure 16: The Benzole-Electric Locomotive used on the Diamond Fields ............. 51
Figure 17: Railway Map of the South-West African Diamond Fields .................... 52
Figure 18: Interior View of Store, Kolmanskop (1934) ....................................... 55
Figure 19: Haus Schneider, Germany (left) & Haus Schneider, Namibia (right) ...... 55
Figure 20: Children play in the Kolmanskop School Yard (1928) ....................... 57
Figure 21: General Dealer, Kolmanskop (1925) ............................................... 57
Figure 22: General Dealer, Kolamanskop (1928) .............................................. 57
Figure 23: The newly completed Turnhalle and Kasino Complex (c.1928) ............ 58
Figure 24: Social Evening at the Kegelbahn, Kolmanskop (c.1929) .................... 58
Figure 25: Kolmanskop Context Plan .............................................................. 62
Figure 26: Annotated Diagram of ‘Kolmanskop Ghost Town’ .............................. 63
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>Annotated Diagram of 'Native' Hospital and Compound</td>
<td>64</td>
</tr>
<tr>
<td>28</td>
<td>Annotated Diagram of Centralwäsche</td>
<td>65</td>
</tr>
<tr>
<td>29</td>
<td>Panoramic View of Kolmanskop Ghost Town</td>
<td>66</td>
</tr>
<tr>
<td>30</td>
<td>Kolmanskop, National Geographic</td>
<td>67</td>
</tr>
<tr>
<td>31</td>
<td>View toward Omtanda, 'Native' Hospital and the Compound</td>
<td>68</td>
</tr>
<tr>
<td>32</td>
<td>Segregated Living Quarters</td>
<td>69</td>
</tr>
<tr>
<td>33</td>
<td>Remnants of Industry</td>
<td>70</td>
</tr>
<tr>
<td>34</td>
<td>Remains of the Centralwäsche, Kolmanskop</td>
<td>72</td>
</tr>
<tr>
<td>35</td>
<td>Workers with Classifiers in Operation</td>
<td>72</td>
</tr>
<tr>
<td>36</td>
<td>Classifiers Abandoned in the Desert, Centralwäsche</td>
<td>72</td>
</tr>
<tr>
<td>37</td>
<td>Map of Namibia showing Context of Sperrgebiet</td>
<td>75</td>
</tr>
<tr>
<td>38</td>
<td>Aerial view of the Orange River Mouth</td>
<td>77</td>
</tr>
<tr>
<td>39</td>
<td>Linear Dunes and Vigorous Coastline</td>
<td>77</td>
</tr>
<tr>
<td>40</td>
<td>Surfaces of Dolomite Worn Smooth by Wind-driven Sand</td>
<td>78</td>
</tr>
<tr>
<td>41</td>
<td>'Living Town' of Luderitz (left) and 'Ghost Town' of Kolmanskop (right)</td>
<td>79</td>
</tr>
<tr>
<td>42</td>
<td>Diagram of Mining Licence Areas</td>
<td>80</td>
</tr>
<tr>
<td>43</td>
<td>Diagram of Value Typologies as they Pertain to Kolmanskop</td>
<td>89</td>
</tr>
<tr>
<td>44</td>
<td>Visitor Book Entry, 17.08.2000</td>
<td>97</td>
</tr>
<tr>
<td>45</td>
<td>Onkel Heinrich, Centralwäsche (1928)</td>
<td>98</td>
</tr>
<tr>
<td>46</td>
<td>Fashion Shoot, Kolmanskop</td>
<td>99</td>
</tr>
<tr>
<td>47</td>
<td>Plate 8, Baker’s House (Helga Kohl)</td>
<td>100</td>
</tr>
<tr>
<td>48</td>
<td>Visitor Numbers, Kolmanskop Ghost Town</td>
<td>101</td>
</tr>
<tr>
<td>49</td>
<td>Entry Permit to Kolmanskop Ghost Town</td>
<td>104</td>
</tr>
</tbody>
</table>
LIST OF ABBREVIATIONS:

CDM  Consolidated Diamond Mines (Pty) Ltd.
DKG  Deutsche Kolonialgesellschaft für Süddeutschland (Colonial Company)
DKEBBG  Deutsche Kolonial-Eisenbahn-Bau und Betriebsgesellschaft
GCI  Getty Conservation Institute
GTT  Ghost Town Tours
KBG  Koloniale Berbaugesellschaft (Stauch)
MET  Ministry of Environment and Tourism (Namibia)
MLR  Ministry of Lands and Resettlement (Namibia)
MME  Ministry of Mines and Energy (Namibia)
MRD  Mineral Resources Department (Namdeb)
NAMDEB  Namdeb Diamond Corporation (Pty) Ltd.
NHA  National Heritage Act, 2004 (No.27 of 2004)
NHC  National Heritage Council of Namibia
NHRA  National Heritage Resources Act, 1999 (No.25 of 1999)
SNP  Sperrgebiet National Park
SWAPO  South West African People’s Party
TICCIH  The International Committee for Conservation of Industrial Heritage
Figure 1: Annotated Map of the Sperrgebiet (Restricted Mining Area)
N Alexander with underlay: original drawing by Hoffman, 1912 (MRD, Namdeb)
CHAPTER 1

1.0 INTRODUCTION
1.1 Problem Statement

Kolmanskop is situated 10km outside of Lüderitz at the north-west corner of the Sperrgebiet National Park. The park is one of the world’s top 25 biodiversity hotspots and at the same time, it is home to the world’s greatest diamond placer deposit. Although Kolmanskop falls within the boundaries of the Sperrgebiet National Park, it remains under jurisdiction of the Namdeb Diamond Corporation (Pty) Ltd. in terms of the present mining licence agreement.

Kolmanskop Ghost Town is the principal tourist attraction to the Karas Region of Namibia; drawing between 30 000 and 35 000 visitors per annum. It is therefore regarded as an important economic resource by the nearby community of Lüderitz. Yet at the same time, Kolmanskop is rich in historic value and, although not listed on the Namibian Heritage Register, it is regarded by some as one of Namibia’s primary industrial heritage sites.

Namibia’s first historic diamond find in 1908, not far from where Kolmanskop is now situated, gave rise to an industrial revolution which altered the surrounding stretch of Namib Desert and transformed colonial German South-West Africa. The significant influx of wealth had far-reaching social and economic consequences which still hold implications to this day, even though all production at Kolmanskop ceased in 1930 and the town was effectively abandoned in 1956.

In an effort to protect its mining and economic interests, the German colonial authority proclaimed the Sperrgebiet on 22nd September 1908 as the area bounded in the north by the 20th parallel of south latitude, in the south by the Orange River, and in the east by a line running 100 km parallel to the Atlantic coastline. (Figure 1.) The remains of the industrial settlement at Kolmanskop and other scattered ruins along Southern Namibia’s west coast are artefacts of the intense mining activity which has been conducted within the Sperrgebiet over the last century and still continues within certain parts of the licensed area to this day. Therefore they are central to the history and development of diamond-mining in Namibia.

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1 See Sandpaper (Issue 13) December 2008, p.1
2 Dr. Gabi Schneider, Statement of Significance: Kolmanskuppe (Schneider, 2008) A ‘placer’ is the term used to describe a deposit of sand or gravel, containing particles of valuable minerals, (Oxford Compact English Dictionary).
3 Elizabeth Bay Mining Licence Area No.45
4 Personal Communication: Howard Head, Ghost Town Tours (10.08.2010)
5 Dr. Gabi Schneider, Statement of Significance: Kolmanskuppe (Schneider, 2008)
6 Namdeb still operates mines at Elizabeth Bay, Bogenfels and Oranjemund using modern technology and innovative mining techniques.
The centennial anniversary of the first Namibian diamond discovery was marked by the proclamation of the Sperrgebiet National Park in 2008. Changes in the socio-economic and socio-political contexts support a re-assessment of the heritage values or cultural significance of Kolmanskop and similar industrial sites located within the Sperrgebiet National Park. Among these driving contexts or trends are the following:

- A growing recognition of the importance of industrial heritage (locally and internationally) along with the need for its appropriate conservation and management.\(^7\)

- An awareness of the increasing tension between the economic use of the site for tourism on the one hand, and the need for its appropriate heritage management and conservation on the other.

- The need to find alternative sources of income: as local mining operations begin to approach their end-of-life, there is an urgent need to find sustainable development plans for the region which includes the harbour town of Lüderitz to the north, and the mining town of Oranjemund to the south.

In summary, the problem is grounded in current trends and international best practice with regard to the conservation of industrial heritage. The principal method to be employed is that of values-based conservation and the problem will be discussed with reference to the underlying tension between heritage and tourism and within the framework of sustainable development in context of a post-colonial Namibia.

### 1.2 Identification of Key Question and Sub-Questions

The key question of this research, is whether Kolmanskop is valued only as an economic resource in the form of tourist attraction – or whether it qualifies as a heritage resource in terms of its significance as an industrial heritage site?

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\(^7\) The Burra Charter (1999) defines cultural significance as the aesthetic, historic, scientific, social or spiritual value for past, present or future generations. The charter goes further to describe cultural significance as embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Further, places may have a range of values for different individuals or groups. (Australia ICOMOS Burra Charter, 1999)

\(^8\) The Nizhny Tagil Charter for the Industrial Heritage (2003), published by the International Committee for the Conservation of the Industrial Heritage, is an important document with regard to international best practice and helpful in establishing a sound basis for assessment and conservation. The charter outlines the values associated with industrial heritage and the importance of identification and conservation.
The above question is broken down and dealt with through a series of smaller sub-questions as follows:

- What values are associated with the site and why is it considered significant?
- Who does the valuing, who is included and who is excluded?
- Is the full range of values accounted for?
- What about social and worker’s values?
- And technological value; can industrial heritage be regarded as such without the relics of technology of that industry?
- How do those values differ among different individuals and groups?
- How have contextual factors influenced these values?
- And what does this mean for the conservation of the industrial landscape of the Sperrgebiet National Park and the sustainable future of the neighbouring towns of Lüderitz and Oranjemund?

1.3 Brief Outline and Approach

Chapter 2 outlines the methodology to be used with specific reference to values-based conservation. The various sources to be consulted are listed and discussed. This research project is essentially a social sciences undertaking, and therefore data will rely chiefly on observed behaviour and interview material.

Chapter 3 introduces the main themes and establishes a broad framework for the enquiry in the form of a Literature Review. First it is important to understand what is meant by Industrial Heritage. Second, the concept of value is discussed and the method of values-based conservation introduced. Finally it is important to refer to some of the main arguments regarding the relationship between heritage and tourism with specific reference to the politics and meaning of heritage in post-colonial contexts and the potential for dissonance.

The historical background is introduced in Chapter 4. Although the case study is concerned very much with the present values as they pertain to Kolmanskop, a brief introduction to the origin and development of the site is necessary to understand the full historical, social and technological significance of the resource in question.

This study is not limited to Kolmanskop Ghost Town alone, but the discussion encompasses a much larger area, incorporating a number of different sites. Therefore in Chapter 5, the extent of the study area and its component parts is identified and defined.
The importance of the relationship between context and value should not be underestimated. Four different value contexts, which have a bearing on the way in which the site is perceived and valued, are identified and discussed in Chapter 6.

Chapter 7 presents the main body of discussion where a typology of values is identified and then discussed under different headings. This chapter builds on the observations of the previous two chapters. It serves to give a holistic and broad understanding of the significance of the site. The discussion pulls together information and sets of values from the different sources, particularly those which emerged through the interviewing process. This chapter establishes a basis for drawing some answers to the key questions as outlined in the introduction.

Finally Chapter 8 provides a summary assessment of the values as they pertain to Kolmanskop and draws some conclusions regarding the main question. The recommendations suggest a way forward in appropriate management of the industrial heritage landscape within the Sperrgebiet National Park and the greater post-colonial context of Namibia.
CHAPTER 2

2.0 METHODOLOGY
2.1 The Case Study Method

This research paper employs the single case study method. Therefore the abandoned mining town of Kolmanskop, in Southern Namibia, serves as a laboratory for the assessment of significance and study of value with regard to industrial heritage in a developing country which is still in the process of self-consciously redefining itself in a post-colonial context. The focus of this study is not concerned with the present interpretation and management of Kolmanskop Ghost Town. Rather it is an academic enquiry into the many and diverse ways in which industrial heritage is valued - not only as a tourist attraction, but with reference to the other meanings and significance of heritage sites in general.

The aim of this research project is ‘exploratory’ (Mouton & Marais, p. 42) because it involves an evaluation of significance, around the identified case study, in order to gain fresh insights and to establish a framework for future decision-making around industrial heritage in the Sperrgebiet National Park and the national context of Namibia, with reference to similar southern African and post-colonial states in general.

Because values and value contexts are subject to change and therefore specific to time and place; the nature of this study is cross-sectional. That is to say, the research will focus specifically on the present situation, as it pertains to Kolmanskop, and is not an historical reflection on past values or understandings of the site (Mouton & Marais, p. 41).

Similarly, value is assessed differently on different scales. For example an enquiry at the level of personal or family, individual or community, regional or national, continental or global – is likely to reveal different results. As expected the articulations between these different scales are complex and they do not nest together perfectly. The concept of universality assumes that certain aspects of heritage are meaningful to all people, regardless of their cultural, social, political or economic differences (Avrami & Mason, 2000, p. 69). However Avrami and Mason are critical of this concept, stating that there is a great deal of evidence to suggest that local, place- and community-bound values are a far more important impulse behind conservation. (Avrami & Mason, 2000, p. 69) Therefore I have chosen to limit

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9 The former German colony of South-West Africa was mandated by the League of Nations to South Africa in 1919. It later continued to be held in defiance of the United Nations by the South African apartheid government. Namibia achieved independence in 1990 after a protracted armed resistance struggle led by SWAPO (South West African People’s Party). SWAPO is now the ruling party in an independent and democratic Namibia.

10 ‘Universality’ serves as an underlying rationale behind the UNESCO World Heritage List.
the scope of this study to the immediate local, place- and community-bound values with specific reference to the Namibian context.

In summary, there are several reasons why Kolmanskop qualifies as a suitable case study in this situation:

- Kolmanskop presents a typical case of industrial heritage which has undergone the full cycle of establishment, heyday and redundancy - and finally its re-use as tourist attraction. Therefore the site encapsulates issues typically involved in the conservation of industrial heritage and the values associated with that heritage.

- The site is located within the post-colonial context of Namibia where mining is associated with former colonial oppression and exploitive capitalism. What is more, the present interpretation of the site displays a dissonant disregard for its industrial proletariat; see (Tunbridge & Ashworth, 1996, p. 240).

- The study area comprises not just Kolmanskop Ghost Town, but all aspects of industrial heritage within the greater landscape: an abandoned town, a redundant processing and recovery plant, various diggings and discarded machinery, the workers compound . . . as well as the remains of railway lines, water and power infrastructures.

- Because the economic value of Kolmanskop has already been translated into a tourist site; it is accessible, recognisable and well-known. Therefore a broad range of interviewees were easily identified and comprises experts, stakeholder organisations and individuals.11

- Finally, it should be noted that my own position as researcher was strengthened by my familiarity with the site; having lived in Lüderitz for two years and being presently based in Oranjemund. I was therefore well aware of the issues involved, and had relatively easy access to information through my association with Namdeb Diamond Corporation (Pty) Ltd.12 and my involvement in the local community.

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11 However it should be noted here that this aspect also presented a weakness in that it was found that outside of the experts, there were few real ‘champions’ for the heritage of Kolmanskop and it appears to be viewed primarily as an economic resource.

12 My husband, James Alexander, is presently employed as a Geologist at Namdeb.
2.2 Discussion of Methodological Approaches

“No single discipline or method yields a full or sufficient assessment of heritage values; therefore, a combination from a variety of disciplines should be included in any comprehensive assessment of the values of heritage”


It is proposed that a combination of quantitative methods (positivist research paradigm) and qualitative methods (interpretative research paradigm) will be employed in this research. Dainty uses the term complementarity as the case where two strategies are employed in order to dovetail different aspects of an investigation (Dainty, p. 8). The combination of quantitative and qualitative methodologies allows different approaches to the same enquiry, leading to richer insights with regard to values.

An important aspect of Values-Based Conservation is that it should rely on a multi-disciplinary approach. However a truly multi-disciplinary approach is made impossible by the scope and time constraints of this research. Nevertheless an attempt has been made to employ a variety of methods and sources, some of which are specific to traditional conservation research, while others have been adapted from related disciplines such as anthropology and sociology. In this regard Low’s essay entitled “Anthropological-Ethnographic Methods for the Assessment of Cultural Values in Heritage Conservation” has proved useful. In this essay, Low outlines the Rapid Ethnographic Assessment Procedures (REAP) used by the US National Park Service to assess the planning, design, reconstruction and management of heritage sites within the US National Parks. This is an inclusive methodology which has proved useful in solving heritage conservation problems (Low, 2002, p. 37).

2.3 List of Methods and Sources to be consulted:

2.3.1. Literature Review

The primary aim of the literature review is to contextualise the problem statement, and describe the universe within which the research is situated. Reference to parallel examples, both local and international, focuses the enquiry and helps to identify critical issues.

The evidence and sources are described in detail under Chapter 3 but in summary, these literatures include a definition of industrial heritage, a discussion of value and
cultural significance, an introduction to values-based conservation and reference to the potential for tension or dissonance with regard to the relationship between heritage and tourism and the politics and meaning of industrial and mining heritage within post-colonial contexts.

2.3.2 Historical and Archival Documents

The critical review of historical documents, archival photographs and newspapers is an important first step in the research enquiry. Low advises that a thorough understanding of the history of the site is required in order that areas of co-operation and conflict become clear and identifiable. (Low, 2002, p. 38)

Although this is very much a study of the present condition, an understanding of the historical development reveals valuable insights as to what is being conserved, the exploration of different value contexts, and the identification of a variety of experts, stakeholder organisations and individuals with an interest or claim on the site in question.

The majority of historical research for this paper relies on secondary sources. The published material is listed in the bibliography, but the principal texts include Levinson’s account of “Diamonds in the Desert: The Story of August Stauch and his Times” (1983/2009), Schoeman and Kohl’s photographic and historical account “Kolmanskop: Past and Present” (2004) and Dr. Gabi Schneider’s recent publication “Treasures of the Diamond Coast: A Century of Diamond Mining in Namibia” (2009).

Archival information, consisting mainly of photographs, was obtained from the following sources: the National Archives of Namibia (Windhoek), the local museums in Oranjemund and Lüderitz and the museum at Kolmanskop Ghost Town.

Survey maps, the original conservation report by Walter Peters (1979) and the architectural survey conducted by Edda Schoedder (1983) were sourced from the Namdeb Archive and Document Centre located within Namdeb’s Mineral Resources Department in Oranjemund.

2.3.3 Contextual Mapping

Mapping has proved useful in gaining a better understanding of the historical development of the site through comparison between the original layout and what remains of the historic fabric. When used together with GIS information, (i.e. overlays / combinations of data sources) mapping can be used to reveal patterns, uses, links and relationships within the landscape at a variety of different scales.
Several surveys of the area, including Kolmanskop, were undertaken from the earliest establishment of mining interests in 1908. The Germans necessarily kept detailed records of the claims and licence areas; sampling and resource information; as well as the building and infrastructural layouts, including power, water and telephone networks. These original survey drawings were updated and revised periodically through the 1920s and 1930s by Namdeb’s predecessor CDM. These drawings were obtained through the Mineral Resources Department (MRD) at Namdeb, Oranjemund.

More recent satellite imagery has been downloaded from Google Earth. This provides an overview of the present layout and use, and allows the researcher to explore the surrounding context and relationships at a variety of different scales.

2.3.4 Personal / Expert Observation

This is a traditional and largely technical approach, relying on professional survey and assessment of the site. The method is based on personal judgement and therefore must be substantiated by quantitative and qualitative data. Nevertheless when personal observations and community interactions are carefully recorded; they contribute to the existing contextual information and data, thereby enriching the research and assisting in accurate data interpretation.

I have been fortunate to live in Lüderitz for two years and am now based permanently in Oranjemund. My husband is employed by Namdeb as a Geologist; therefore I have a good understanding of the context and am aware of the broad range of issues involved. I have been fortunate to visit Kolmanskop several times over the last five years and have made my own notes and observations over that time. As a member of both the Lüderitz and Oranjemund communities, I have been party to informal discussion and am intimately aware of present interpretations and many of the current values at play.

2.3.5 Individual and Expert Interviews

Qualitative and interpretive techniques are used to supplement basic quantitative data. With this in mind, interviews are often considered one of the most important sources of case study information (Yin, as quoted in Proverbs & Gameson, p. 10).

The questionnaire was prepared in advance and addressed to a cross-section of individuals - representative of different groups and positions - in a series of interviews over a one month period. The aim of the survey was not to arrive at fact, but rather an interpretation of the different values at play. Therefore the framing of the interview was carefully considered in order to elicit qualitative information which
established an understanding of the interviewee’s present position and was able to generate insight into the problem. With regard to the interview process; the key aspects considered are discussed in more detail below:

(i) Identification of Stakeholders

Warren suggests that “in the logic of survey research, interviews are conducted with a representative sample of a larger population, drawn systematically in order that the findings will be generalisable to that population” (Warren, 2001, p. 87).

In this case, the focus of the investigation is the values at play, not so much from a personal perspective, but rather from the representative view of different groups and organisations. Because the aim of this research is to engage beyond a simple one-sided statement of significance by an architect, archaeologist, historian or other expert, see (Avrami & Mason, 2000, p. 9), the identification of individuals, with special interest or expertise to comment on the site, required careful consideration. The interviewees that were chosen are listed, together with comment on their affiliation and interest in the site, in the table under Appendix A.

(ii) Insiders and Outsiders

In identifying stakeholders, Mason recommends making a clear distinction between insiders and outsiders (Mason, 2002). This concept is essentially related to issues of power. Insiders may consist of public officials, policy makers and conservation professionals who have an active role in policy and decision-making. Mason describes outsiders as everyone else with a stake in the heritage in question but with little or no leverage on the process (Mason, 2002, p. 17). Avrami and Mason warn that “participation, power and ownership are all bound up in the ways in which cultures are created and progress” (Avrami & Mason, 2000, p. 9).

With this in mind, Warren suggests covering each interview with a fact sheet containing demographic information (Warren, 2001, p. 90). This is helpful in establishing the interviewee’s position and aids in the appropriate interpretation of information by placing the answers within context. An example of this demographic data sheet is attached under Appendix B.

(iii) Structure and Interviewing Techniques

In an essay on Qualitative Interviewing, Warren quotes from Rubin and Rubin who note that qualitative interviews use three kinds of questions: main questions that begin and guide the conversation, probes to clarify answers or request further examples, and follow-up questions that pursue the implications of answers to main
questions (Warren, 2001, p. 86). This approach has been followed in the structure and format of the questionnaire.

Warren goes on to note the importance of the ‘face-to-face’ interview in gleaning qualitative information. He states that “although asking, listening, talking and hearing are important, so are seeing and feeling as means of apprehending the social world. Although the frame of talking and listening may be apt for conceiving telephone interviews, the frame of social interaction accords better with the face-to-face qualitative interview” (Warren, 2001, p. 98). This direct approach has been followed with one exception, when the interview had to be conducted telephonically due to distance and time constraints.  

A pro-forma interview was drawn up consisting of seven questions. Questions (1) to (5) relate specifically to values and valuing, whereas questions (6) and (7) raise contextual issues and the relationship of the site to Lüderitz and the Sperrgebiet National Park. The first interview was treated as a pilot study in order to establish the correct approach, analyse results and adjust the questions where necessary. As a result, question (8) was added with regard to the challenges facing Oranjemund and whether the interviewee considered it part of the same story as that of Kolmanskop - or an entirely separate history. An example of the pro-forma interview is attached under Appendix C.

The main discussion, and the conclusions that are drawn, rely heavily on information gleaned through the interview process. Therefore in instances where interviewees are quoted directly, they were presented with a draft of the research paper, in which their input was highlighted, and were invited to indicate approval or comment.

2.4 Synthesis and Analysis

The synthesis of results is an important and necessary step in analysis and interpretation of the collected data. The process is necessitated by the multi-methodological nature of the research. Low describes triangulation as the “search for common elements and patterns of behaviours and the identification of areas of conflict and difference, both in the nature of the data and in the groups themselves” (Low, 2002, p. 38).

Information gleaned from several different sources allows the researcher to test the findings and substantiate arguments through a system of cross-referencing and overlays. The use of qualitative research to corroborate quantitative research and vice versa ensures validity. Therefore all data, collected from a broad range of

13 Dr. Gabi Schneider (10.09.2010)
different sources: interview, historical research, contextual analysis and mapping overlays, was mind-mapped in order to establish key points, links and patterns. See Appendix D.

Analysis of the synthesised data necessarily involves a combination of quantitative and qualitative techniques in order to establish hierarchies (i.e. ranking and prioritisation) and to resolve overlaps. According to Avrami and Mason “culture is a fluid, changeable, evolving set of processes and values and not a static set of things” (Avrami & Mason, 2000, p. 10). Keeping in mind this inter-relationship between values and their respective contexts, the results are not considered final and conclusive, but reflect the situation at this specific moment in time - with reference to the past and at the same time looking forward to the future.
CHAPTER 3

3.0 LITERATURE REVIEW
Mouton recommends that any research project should be integrated into a wider framework of relevant theory and research which is reflected in a review of the literature. (Mouton & Marais, p. 191) This chapter serves to introduce the main themes of the discussion; thereby establishing a theoretical framework for the enquiry. They are namely industrial heritage, values and cultural significance, values-based conservation and the relationship of values-based conservation to sustainability. In any discussion of value; tensions and conflicts are likely to arise. The potential for dissonance is discussed in terms of the relationship between heritage and tourism, and the meanings and use of heritage in post-colonial contexts.

3.1 Industrial Heritage

*Heritage* may be simply defined as that which is inherited (or claimed) by the present, in order to pass that inheritance onto the next generation. Following the principles of international best practice, the conservation of heritage has come to be based on the assessment of two criteria: cultural significance and authenticity.\(^{14}\)

As this formula is applied to a wider range of objects in an increasingly broader range of contexts, the notion of what constitutes *heritage* becomes increasingly harder to define. Whereas traditionally *heritage* was limited to historical monuments and masterpieces; in post-modern society the concept of *heritage* has been expanded to include, amongst other things: the vernacular, natural, cultural and industrial landscapes that are felt to be of significance to specific groups or society in general. (Jensen, 2000, p. 68)

The Charter of the International Committee for the Conservation of Industrial Heritage defines *industrial heritage* as “heritage which consists of the remains of industrial culture and which are of historical, technological, social, architectural or scientific value.” (The International Committee for the Conservation of the Industrial Heritage, 2003, p. Cl.1) Therefore the definition of industrial heritage extends beyond technological remains to places which were used for social activities related to industry; for example housing, religious worship or education.

Walsh, working within a European context, identifies a current boom in the preservation and marketing of industrial heritage. He states that “buildings which represent past industries must be conserved as historical and archaeological resources, due to the fact that they represent such a radical transformation in human society comparable to the transition to farming in the Neolithic” (Walsh, 1992, p. 83).

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\(^{14}\) This statement refers to international best practice as enshrined in the World Heritage Agreement and the Burra Charter (1999).
However, in terms of presentation, Walsh warns against a tendency toward ‘historical amnesia’. He explains that industrial sites represent a valuable resource which can help people understand the processes which led to the relative comforts of modern life but also the exploitation of millions worldwide. Therefore industrial heritage comprises not only technological value, but social values also need to be acknowledged and explored. Industrial sites are as much symbols of grandeur and technological progress; as they are monuments to the suffering and labours of people\textsuperscript{15} (Walsh, 1992, p. 83). Historically, industrial archaeology has indeed focussed principally on buildings and the machines they once housed. However more recently the scope has been extended to lives and experiences, social structures and the cultures of associated working populations. (Worth, 2004)\textsuperscript{16}

The principal challenge to the conservation of industrial heritage is that it no longer serves any practical use. Purpose-built structures and machines have been rendered technologically redundant by progress or else, as in mining, the focus of the resource has shifted elsewhere. What remains are, more often than not, an immobile group of cumbersome, large and unattractive buildings. Without the technology and machines they once housed, along with the un-named workers that operated them, we are left with an empty shell which resembles more ‘white elephant’ than heritage resource.\textsuperscript{17}

With this principle in mind, Quaghebeur states that in the case of industrial heritage; social, scientific and technological values will generally be more important than aesthetic considerations. (Quaghebeur, 2000, p. 36) Therefore conservation studies should not only be grounded in an analysis of landscape, site and structure but also contextualised within a broader social and economic framework, with a full understanding of technological and mechanical processes involved.

Similar to agricultural development, mining processes represent a dramatic intervention on the landscape. Environmental legislation currently requires that these are rehabilitated, but evidence of workings and mine-dumps can also be regarded as

\textsuperscript{15} Walsh makes reference here to Binney, Machin and Powell (1990) “Bright Future, the Re-Use of Industrial Heritage” London: SAVE Britain’s Heritage

\textsuperscript{16} Worth is quoting from Palmer and Neaverson (1998) “Industrial Archaeology: Principles and Practice” London: Routledge

\textsuperscript{17} The Lüderitz Power Station is one such example. All that remains of the 1911 electrical works, that once powered the diamond fields, is the structure that housed it. All machinery has been removed and local knowledge, together with the histories of the people that worked there, has been lost to the mists of time. What remains is an empty shell of little significance other than its historical associations.
heritage sites in themselves, because these dramatically altered landscapes survive as representative of tremendous human endeavour and technological innovation.\(^{18}\)

Internationally, the subject of industrial heritage is increasingly being pushed toward the forefront of heritage concerns as a result of large-scale closures, declining resources and identification of alternative technologies which have rendered mines and factories redundant. (Bergeron, 1998) The TICCIH charter identifies the need for programmes in which the conservation of industrial heritage is integrated into policies for economic development along with regional and national planning. (The International Committee for the Conservation of the Industrial Heritage, 2003, p. Cl.4.ii)

The recent Australia ICOMOS annual conference was entitled 2010 Outback and Beyond. The conference was hosted in the mining town of Broken Hill and comprised three main themes: the future of historic towns, industrial heritage and pastoralism. The conference papers raise pertinent issues on the subject of industrial heritage and provide some useful international examples.\(^{19}\) Further, David Worth’s thesis discusses the concept of industrial landscapes and the increasing importance of the recognition of such landscapes in finding sustainable conservation solutions (Worth, 2004).

The Blaenavon Industrial Landscape in South Wales was declared a world heritage site in 2000. It is one of the finest examples in the world of a landscape created by coal-mining and iron-making in the late 18\(^{th}\) and early 19\(^{th}\) Centuries. The landscape stretches over an area of 30km\(^2\) and consists of *inter alia* iron ore patches, coal mines, limestone quarries, iron forges, brickworks, pathways, scattered workers’ housing and a grid-plan company town around the church, chapel, school and ironmaster’s mansion. (Wakelin, 1998) The site presents an interesting comparison case to Kolmanskop and the Sperrgebiet because it has been treated as an integrated heritage landscape rather than a collection of isolated sites. Wakelin concludes that although management of the Blaenavon Industrial Landscape is challenging, it shows the potential of partnerships for the holistic evaluation and care of important historic industrial areas. (Wakelin, 1998)

In a local context, the recent inception of the ‘De Beers Diamond Route’ is of interest. It is the product of a partnership between environmental conservation and tourism. The tourist route links nine sites across South Africa which all relate to the

\(^{18}\) For example, The ‘Big Hole’ in Kimberley represents a marked scar on the landscape. This hole has become an integral part of the city and presently serves as the focus of the mining museum.

country’s diamond-mining heritage. (The properties are privately owned by De Beers or the Oppenheimer family.) The route provides insight into South Africa’s cultural, historical and diamond-mining features. It introduces the idea of an industrial network stretching across the country from north-east to north-west\textsuperscript{20} and includes Kimberley, “which represents an intense flowering of Victoriana in a remote and inhospitable location” (Tunbridge & Ashworth, 1996, p. 239).

Kimberley itself presents some parallels to the case at Kolmanskop, as both towns were established in the wake of a diamond rush and are both historically associated with De Beers. However in the case of Kimberley, the colonial character is that of English rather than German, and the heritage site is located within a thriving urban environment rather than abandoned and ruined . . . left to the fate of a inhospitable desert.

In Namibia at present, industrial monuments are recognised principally for their museum or monumental use. Vogt’s inventory of National Monuments in Namibia lists five proclaimed industrial heritage sites, two of which are associated with the development of the railway, and the other three with the supply of water - a scarce commodity in the desert environment (Vogt, 2004). Although several of the old mining-magnate houses in Lüderitz have been declared National Monuments, the decision is attributed to primarily aesthetic and architectural concerns. Mining and related industrial sites, such as the Lüderitz Power Station, have not as yet been added to the National Heritage Register. Considering the importance of the industrial revolution that took place at Kolmanskop (and in the surrounding Sperrgebiet) at the turn of the century, along with the significant role that mining still plays in the Namibian economy, this appears to be a glaring omission and one which should be remedied as a matter of priority.

3.2 Value and Cultural Significance

No aspect of human life is unrelated to values, valuations, and validations. Value orientations and value relations saturate our experiences and life practices from the smallest established microstructures of feeling, thought and behaviour to the largest established macrostructures of organisations and institutions. The history of cultures and social formations is unintelligible except in relation to the history of value orientations, value ideals, goods values, value responses, and value judgements, and their objectivities, interplay and transformations.

(Fakete, 1988, p. i)

\textsuperscript{20} See www.diamondroute.co.za or http://www.miningweekly.com/article/de-beers-opens-diamond-route-in-south-africa-2010-02-04
According to Connor, the process of ‘evaluation’ can’t be avoided. He refers to the process of estimating, ascribing, modifying, affirming and denying . . . as a natural impulse, comparable to ‘breathing in’. (Connor, 1992, p. 8)

*Value* is a broad term suggesting usefulness and benefits. De la Torre defines *value* as a set of positive characteristics or qualities perceived in cultural objects or sites by certain individuals or groups. (de la Torre, 2002, p. 3) It follows that values are the underlying reason for conservation – the corollary being that no society will strive to conserve what it does not value.

In the conservation field, the term *cultural significance* is used to describe heritage importance as determined by the aggregate of values attributed to the site or object in question. (de la Torre, 2002, p. 3) Therefore by this definition, *heritage* is no longer the domain of masterpieces or monuments but any cultural object, site or landscape can be transformed into a heritage *resource* through the attribution of value. See (Riegl, 1982) (Lipe, 1984)

Lowenthal identifies that in our present time, the human need to attach meaning to past objects has become ever more “voluminous, complex and multivalent.” It would appear that the more *heritage* is valued – the more its possession and meaning is disputed. (Lowenthal, 2000, p. 18) Contestations arise in questions of how objects are valued. And by who are they valued? Across what range? In what context? And how can such a vague notion of value be adequately assessed?

The principle distinction to occupy theorists and conservationists from the turn of the century is whether values are intrinsic to the resource, or whether they are applied and therefore relative:

- The essentialist conception of cultural heritage determines significance as inherent or intrinsic to the actual material or object. (For example: aesthetics, artistic quality or authenticity.) This is a traditional view and follows proponents such as Ruskin, Dehio and to a certain degree, Riegl. Throsby describes this as the ‘humanist view’ with an “emphasis on the universal, transcendental, objective and unconditional characteristics.” (Throsby, 2000, p. 28)

- However, within the postmodern condition, absolutism has been replaced by theories of relativism. In the last two or three decades the playing field has

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21 Jensen points out the only real difference between these philosophical approaches is the essential characteristics of objects worth preserving (Jensen, 2000)
been expanded to incorporate a shifting and heterogeneous interpretation of value. (Throsby, 2000, p. 28) The constructivist view is based on the premise that identity does not rest in things but is instead; a function of relationships. Therefore social relations, and practices embodying social relations, determine the identity of cultural and social objects. (Jensen, 2000, p. 43) Relativism introduces a degree of uncertainty; where values are no longer fixed, but vary according to different spatial and social contexts.

Traditionally conservation experts concentrated only on traditional (or intrinsic) value but more recently, cultural significance has come to refer to the values raised by new stakeholders or constituents such as social and economic values. (Australia ICOMOS, 1999)

Rather than choosing one approach over the other, Connor proposes that we should attempt the difficult feat of thinking absolutism and relativism together rather than apart and antagonistic. (Connor, 1992, p. 1) Therefore it can be argued that it is not necessary to choose but that the answer lies somewhere in between. We need to embrace the paradox of value: absolutism / relativism, intrinsic value / contingency, use-value / exchange-value, essentialism / historicism, intransitive / transitive. (Connor, 1992, p. 2)

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**Figure 2: Summary Table of Value Typologies**

The table above provides a summarised sample of some different heritage value typologies as put forward by different philosophers and organisations. Note that the Burra Charter (1999) introduces the notion of social value in addition to the more traditional notions of value. The typology proposed by English Heritage (1997) appears the most balanced and indicates a step away from expert values and connoisseurship toward a more inclusive approach, which incorporates a broader range of views and stakeholders, see (Mason, 2002, p. 10). These lists are by no means exhaustive and it is obvious that some of the values will overlap or in many

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22 For example, socio-cultural and economic values have begun to play an increasingly important role in assessments of significance and international best practice as codified in the Burra Charter (1999).
cases are contingent. However the table provides a useful illustration of the varied and complicated nature of value and assessment of significance.

In summary, questions of value and significance have long been regarded as a principle informant within the field of conservation. However the need to incorporate methodologies and value approaches from a variety of other disciplines, such as anthropology, economics, psychology and philosophy, has led to the development of values-based conservation which will be discussed in more detail below.

3.3 Values-Based Conservation

“Values-based conservation offers a framework for dealing holistically with the site and to address both contemporary and historic values of a place.”

(Mason, 2006)

Restauro critico (critical conservation) developed in Italy during the 1950s and is considered an antecedent of values-based conservation. The practice was developed by Argan, Brandi, Pane and Bonnelli, who built on the theoretical base established by Boito, Giovannoni and Riegl (Townsend, 2003, p. 31). Importantly, the core basis of conservation shifted from an art-historical perspective to a critical sphere. Critical conservation is defined by Bonnelli as “first a critical process and then a creative act, the one as an intrinsic premise of the other” (Townsend, 2003, p. 32). Therefore each historic object is treated as unique, and each critical assessment leads to its own unique solution.

Hence the approach emphasised the need and importance of both an assessment of cultural significance and an assessment of the environment in question (Townsend, 2003, p. 32). The critical approach established the fundamental basis for the modern conception of heritage conservation – in order to determine whether a building is worth conserving, all decisions must be based first and fore-most on an assessment of (a) cultural significance and (b) authenticity.

The methodology of values-based conservation is founded on the principle that a thorough assessment and understanding of the full range of values (both absolute and relative) is required as fundamental to the decision making process, hence the terms values-based or values-led conservation.

Australia ICOMOS and English Heritage have been influential in both advancing and codifying the method of values-based conservation. According to a GCI research report; “both organisations have established policies for integrated conservation management, employing value-driven planning methodologies that attempt to incorporate values more effectively in conservation decision making” (Avrami &
Mason, 2000, pp. 4-5). Similarly, the Nizhny Tagil Charter for Industrial Heritage also advocates values-based conservation methods in the appropriate conservation of industrial heritage. (The International Committee for the Conservation of the Industrial Heritage, 2003)

Some of the fundamental or key aspects of values-based conservation are as follows:

- Conservation is no longer regarded as a technical endeavour but is increasingly seen as a social practice. Hence, there is a need for a multi-disciplinary approach and the adoption of a wider range of methodologies. Increasingly assessment tools are being adopted from related professions, for example anthropology / ethnography, environmental conservation and economic field.

- De la Torre refers to the ‘democratisation’ of heritage conservation, which requires broader consultation and inclusivity. (de la Torre, 2002, pp. 3-4) The assessment of value is no longer the exclusive domain of professionals or experts, but requires broad consultation of a variety of stakeholders, social groups and members of the public.

- Thirdly there is an acknowledgement of the contingency and transience of value where cultural heritage is regarded as a dynamic process. According to Bluestone, aspects of every culture are often being transformed, defined and redefined, valued and de-valued. He goes on to warn that conservators need to be open to the possibility that the places they conserve for one purpose – may take on different meanings over time. (Bluestone, 2000, pp. 65-67)

- This notion that values are contingent, being socially as well as spatially constructed, has led to an acknowledgement of the role of context in the shaping of heritage and conservation. Analysis of a broad range of contexts: physical, historical patterns and narratives, social processes and management; help to explain the many ways in which people invest meaning in, and apply multiple values, to objects and places.

Avrami identifies that although a substantive body of literature has developed in conservation with regard to recording, understanding and evaluating material conditions, there is still little knowledge with respect to the actual process of analysing value and related contextual factors. (Avrami & Mason, 2000)

In late 1997, the GCI initiated a program of research to explore the role of values in cultural heritage conservation with the long term aim of identifying, developing, and
disseminating methods for, and information about, the assessment of cultural significance as part of conservation planning.

Arising from this study are two reports, published by the Getty Conservation Institute, which have proved useful in the design of the methodological research: Avrami & Mason (eds.), *Values and Heritage Conservation: Research Report*, 2000 and de la Torre, Marta (ed.) *Assessing the Values of Cultural Heritage: Research Report* 2002.

Mason makes the following case for the methodology of values-based conservation: (Mason, 2006, p. 35)

- The method enables a holistic understanding of the site.
- The method leads to an acknowledgement and inclusion of a greater range of stakeholders by accounting for all values of the site.
- The method reveals, and helps to repair gaps, in knowledge about the historical environment.
- And comprehensive knowledge about a site’s values helps guide appropriate decision making and ensures long term *viability* and *sustainability*\(^{23}\).

### 3.4 Values-Based Conservation and Sustainability

Mason puts forward that a more encompassing assessment of heritage values, and the integration of these different values will lead to better, more sustainable, conservation planning and management. (Mason, 2002, p. 6)

The term *sustainable* is defined by English Heritage’s as the “capability to meet present needs without compromising the ability to meet future needs”. (English Heritage, 2006) As the framework of *sustainability* is explored with regard to heritage planning and management; values-based conservation has been identified as a basis for appropriate decision making and a means of ensuring viability and long term sustainability.

> “The historic environment is increasingly seen as a resource that should be used sustainably for the benefit of present and future generations, a resource which can only be sustained within a broad social and economic policy framework”

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\(^{23}\) Note that the keywords ‘viability’ and ‘sustainability’ have been emphasised by this author.
Worth identifies an imperative for mechanisms to facilitate the reconciliation of the country’s development needs with conservation of the historic and natural environments: “whilst the sustainable development of South Africa’s natural environment has been the subject of much research, the historic environment has not been similarly addressed” (Worth, 2004). Although this statement is made with regard to a South African context, I would argue that the same would apply to its north-west neighbour, Namibia.

3.5 The Potential for Dissonance

Tunbridge and Ashworth identify that different uses of heritage raise an additional set of tensions, stemming from the incorporation of many and diverse values. They have coined the term heritage dissonance to describe this phenomenon (Tunbridge & Ashworth, 1996, p. 5).

The several areas for potential conflict are discussed in detail under their publication Dissonant Heritage (Tunbridge & Ashworth, 1996). However there are two potential areas of conflict which are worth discussing under this literature review with reference to Kolmanskop and the industrial heritage of the Sperrgebiet. The first is the use of heritage for tourism, and the second is the use of heritage in a post-colonial context.

3.5.1 Heritage and Tourism

The conversion of the past into a set of products and experiences has become a phenomenon increasingly referred to as the heritage industry. Although natural attractions have long been considered a tourism draw-card, in the modern world there is an increasing demand for cultural attractions. It would appear that heritage appeals to a public fascination with the past and nostalgia.

The built environment with its historic buildings, quite apart from their intrinsic value and beauty, presents a major economic resource and an irreplaceable capital asset (van Zyl, 2005). Likewise the natural and cultural landscapes of any country are considered a national asset and are marketed as such abroad. At the 12th General Assembly of ICOMOS in 1999, the organisation emphasised that tourism, an essential part of many national and regional economies in the world, can be regarded as a positive force for conservation - when managed successfully (van Zyl, 2005, p. 75).

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24 For further discussion refer to Hewison, R. 1987. The Heritage Industry (London: Methuen)
Tunbridge and Ashworth warn that “heritage elements should be promoted with sensitivity to their prime inheritors or the process of tourism marketing will engender a too-familiar dissonance of its own” (Tunbridge & Ashworth, 1996, p. 93).

Cognisance must be taken of the social impacts of tourism due to the fact that - as Tunbridge and Ashworth note - substantial dissonance potential exists between tourists and residents, particularly in the often wide divergence between the two groups in respect of the cultural and political uses of heritage. They state that this is most clearly the case when tourists from rich, western countries visit poor non-western societies, especially when a colonial relationship between them formerly existed (Tunbridge & Ashworth, 1996, p. 67).

Van Zyl advises that if the primary objective of encouraging tourism is to maximise the social and economic development of the country in question, then appropriate tourism management requires the support of national government in terms of regulation, maintenance of infrastructure, issues of land use and the promotional or generic marketing of the country abroad (van Zyl, 2005, p. 34).

Furthermore, if heritage tourism products are an integral part of a nation’s identity, they need to be managed as such. The classification of heritage should not be left solely in the hands of private operators guided only by economic and profit concerns, but demands a holistic government-led approach which takes into consideration the full values of the national heritage estate (van Zyl, 2005, p. 90).

3.5.2 Heritage in the Post-Colonial Context

With reference to the Preamble of the National Heritage Resources Act of South Africa (1999), Shepherd notes how heritage has been “reconceptualised around notions of redress and the explicit recognition of previously marginalised narratives and categories of heritage” (Shepherd, 2008, p. 121). Further, Shepherd attributes heritage with the ability to operate as one of the “principal sites for negotiating issues of culture, identity and citizenship in the post-colony” due to its paradoxical nature (Shepherd, 2008, p. 121).

Yet responses to the conservation of colonial legacies within the post-colony vary between “active maintenance, benign neglect to gradual elimination and sudden death”. Tunbridge and Ashworth identify the problem as a dissonance fuelled by “manifest differences in material well-being between former colonial masters and native under-classes” (Tunbridge & Ashworth, 1996, p. 224).
The challenge to the conservation of industrial heritage - and mining heritage in particular - is obvious when one acknowledges its perception as a symbol of former colonial oppression identification with exploitive capitalism. Heritage sites such as Gold Reef City and the Kimberley Big Hole emphasise this capitalist legacy and have been conserved and reconstructed by capitalist interests (Tunbridge & Ashworth, 1996, p. 224).

However industrial building types differ from other forms of built heritage because, unlike the colonial mansions, they are fundamentally linked to the proletariat and the workplace. Therefore it can be argued the problem lies in interpretation and perception rather than fact. Regardless of positive or negative connotations, industrial heritage has the potential to incorporate and represent a broad range of racial, economic, religious, political and social groups. Quaghebeur argues that it is in fact a heritage “indivisibly linked to that of the people” (Quaghebeur, 2000).

With regard to mining heritage in South Africa, Tunbridge and Ashworth criticise Gold Reef City, Kimberley and the restored mining town of Pilgrims Rest in the Transvaal as so far having displayed a dissonant disregard for its industrial proletariat. (This is despite the fact that it was in Kimberley, that the first segregated African mine-workers compounds were established.) However since 1993, a rewriting of the composite script of Kimberley’s history has begun and efforts are being made to remedy this situation (Tunbridge & Ashworth, 1996, pp. 240-242).

Tunbridge and Ashworth make a clear distinction between history, which is “what a historian considers worth recording”, and heritage which is “what contemporary society chooses to inherit and pass on to the next generation” (Tunbridge & Ashworth, 1996, p. 6).

If we adopt Shepherd’s notion of heritage as a social effect - then the mining heritage of Kolmanskop and the Sperrgebiet presents a unique opportunity in the post-colonial context. By acknowledging the full range of historical, technological and social values, along with the economic importance of Namibia’s diamond mining heritage to the nation as a whole, perhaps heritage can begin to fulfil its idealised function as a site of redress and reconciliation?
CHAPTER 4

4.0 HISTORICAL BACKGROUND
Figure 3: Survey Plan of Kolmanskuppe (c.1914)
Note position of the Railway Siding and extent of development prior to the outbreak of WWI.
Koloniale Bergbaugesellschaft (MRD, Namdeb)
Figure 4: Survey Plan of Kolmanskuppe (1929)
Plan illustrates layout of Kolmanskop ‘town’ at height of development, prior to closure of Centralwäsche (the main processing plant) and cessation of mining activity.
CDM, drawing by Remmer (MRD, Namdeb)
Figure 5: Survey Plan of Kolmanskop Museum (1980)
Drawing by Edda Schoedder, based on Remmer’s 1929 Survey (MRD, Namdeb)
On face value Kolmanskop is a Ghost Town, lying in ruins that are visibly decaying back into the desert from which they emerged. In its ruined and broken state, it is difficult to grasp the full historical value of the site. The industrial networks that once linked it into a greater context have been removed or are buried in the desert sands. The abbreviated version of its history focuses almost exclusively on what was the ‘elite’ residential area. The technological and social significance of the site is largely unacknowledged or else forgotten. In order to understand the full value of the site, it is necessary to provide a brief introduction into the site’s development, decline and subsequent reinvention as a tourist attraction – looking beyond the Ghost Town’s aesthetic significance to explore deeper meanings in terms of economic and mining importance, industrial innovation and social heritage that still has resonance in the post-colonial context of Namibia today.

4.1 The Discovery of Diamonds in the Desert (1908)

Nama and Herero uprisings at the turn of the century led to widespread unrest in the German colony of South-West Africa. The need to transport troops and supplies to the fighting zone prompted the colonial authority to build a railway line linking the existing harbour town of Lüderitz to the town of Keetmanshoop 360km inland.

In 1907, August Stauch arrived in the colony from Germany to take up his appointment as Bahnmeister (railway supervisor) at a small station called Grasplatz on the Lüderitz-Keetmanshoop line. Stauch and his team were responsible for maintenance of the surrounding railway line – this required considerable effort as the tracks had to be continuously cleared of the wind-driven desert sands. According to Schoeman, the local nomadic groups of indigenous people were physically unsuited to the work and therefore coloured workers were recruited from the Cape Colony south of the Orange River to maintain the German railway line (Schoeman & Kohl, 2004, p. 11). Several historical accounts attribute the discovery of the first diamond to one such worker, Zacharias Lewala, who picked up the ‘pretty stone’ in April 1908 and handed it to his supervisor August Stauch (Levinson, 2009) (Schneider, 2009) (Schoedder, Otto-Reiner, & Rusch, 1983) (Schoeman & Kohl, 2004). According to Levinson, this first discovery was made near a railway siding identified as Kolmanskuppe, 25 (Levinson, 2009, p. 39).

Before publicly declaring the find on 20 June 1908, Stauch took two decisive steps: first, he set about obtaining mining rights from the Deutsche Kolonialgesellschaft für

25 Johnny Kolman was a local transport rider regularly following the route between Keetmanshoop and Lüderitz. In 1905, after out-spanning his ox-wagon close to a low lying ‘kuppe’ east of Lüderitz, he was trapped in a vicious sandstorm. Kolman was fortunate to be rescued, but his wagon remained trapped in the sand for several years giving rise to the name ‘Kolman se Kuppe’ or ‘Kolmanskuppe’. (from Ghost Town Tours Information Booklet)
Südwest-Afrika (DKG) and staked claims in the surrounding area; and second, he secured financial backing from his superiors Sönke Nissen (Chief Engineer) and Max-Weidtmann (Director). “On 8 May 1908 they concluded an agreement amongst themselves, and without consulting the DKEBBG, included them in the agreement; thus reserving the right to secure the mining rights alongside the building site of the railway between Lüderitzbucht and Keetmanshoop” (Bravenboer & Rusch, 1997, p. 128).

In order to protect German interests, the colonial authority took a high-handed approach and proclaimed the Sperrgebiet (or prohibited area) on 22 September 1908 to be the area bounded in the north by the 20th south latitude, in the south by the Orange River, and in the east by a line running 100 km parallel to the Atlantic coastline. The sole right to prospect and mine minerals was given to the DKG but prior recognition was given to claims that had already been duly reported, hence apart from the colonial mining company, just four other companies were granted mining and prospecting rights: the Koloniale Bergbau Gesellschaft (Stauch), the Kolmanskuppe Gesellschaft (Schuster) the Diamanten Aktiengesellschaft (Weiss, De Meillon and Co.) and the Vereinigte Diamantengesellschaft (G.F. Schmidt) (Levinson, 2009, p. 65).

On 5 January 1909, Stauch’s syndicate was transformed into a limited company - the Koloniale Bergbau-Gesellschaft mbH (KBG). The company was registered in Berlin with a capital of 100,500 Reichmark. Shareholding comprised Stauch (20%) Nissen (20%) Weidtmann (20%) the Aktiengesellschaft für Verkerswesen27 (31%) and Lenz and his son-in-law Reh28 (9%) (Schneider, 2009, p. 39).

Zacharias Lewala’s story ends here, but Stauch and his company the Koloniale Bergbau-Gesellschaft, are indelibly printed into the pages of Namibia’s mining history and is entwined with the legacy that he established at Kolmanskop. Dorian Haarhof’s poem tells the story of the first diamond discovery, in which the outcome for the marginalised worker and colonial capitalist is thrown into sharp relief:

A first Discoverers’ book
poses Stauch full page on a rock
a sepias frontispiece
hand high on thigh,

26 The Deutsche Kolonial-Eisenbahn-Bau und Betriebsgesellschaft was Stauch’s former employer.
27 The Aktiengesellschaft für Verkerswesen was the German holding company of the DKEBBG.
28 Lenz and Co. was the local company contracted to build the railway line in the German Colony.
4.2 Kolmanskuppe (1908 – 1919)

**KBG and the Establishment of Mining Operations**

The settlement of Kolmanskuppe started off in 1908 with a few wooden buildings, corrugated iron claddings and an office from which the KBG operated (Schneider, 2008). An early photograph gives some indication of the harsh environment and overwhelming hardships that these early diamond miners had to overcome. (Figure 6).

Initial diamond recovery methods were basic using a combination of sieves, washtubs and beer-crates (Schneider, 2009, p. 31). The main logistical problem was a lack of adequate water supply. However the need for better and more efficient recovery rates led to development of technology suited to the unique conditions. The local invention of the Plietz Jig represented significant improvement in this regard and proved extremely effective in separation of diamondiferous gravel.29

The establishment of centralised mechanised plants was a tremendous step forward in terms of recovery efficiency and mining output and according to Schneider, the KBG took the lead in this respect. In 1910, the company ordered two plants from the Maschine-Anstalt Humboldt in Köln-Kalk, Germany. The first mechanised plant was erected south-west of Kolmanskuppe and called the Nordblockwäsche. The second was constructed in the southern part of Fiskusblock 1 (Schneider, 2009, p. 34).

In the technological pursuit toward improving mining production and hence profit, the Nordblockwäsche was developed even further in 1913. A larger plant was ordered from the company of Friedrich Krupp in Magdeburg-Buckau, Germany and the new improved Nordblockwäsche was renamed the Centralwäsche. The plant was

29 The invention is attributed to Albert Plietz, a Lüderitz-based blacksmith and his colleague Schlossermeister Schulz. The Plietz workshop is still operating in Lüderitz to this day. (Schneider, 2009, p. 33)
Figure 6: Early Photograph of Kolmanskuppe (c.1908/09)
(Sam Cohen Library, Swakopmund)

Figure 7: Photograph depicting early mining methods (c.1908/09)
The early miners were able to simply collect the diamonds off the surface of the desert sands.
(Taken from Kolmanskop, Past and Present, p.15 Helga Kohl)

Figure 8: Photograph depicting early mining methods (c.1911/13)
Note that digging and washing done entirely by hand.
(Sam Cohen Library, Swakopmund)
commissioned in 1914 and had a staggering throughput capacity of 1500m$^3$ of sand for each 18-hour working day.$^{30}$

The mechanised plants required electricity in order to power the state-of-the-art machinery and equipment. To this end the KBG undertook construction of the Lüderitzbucht Power Station in 1911, thereby ensuring adequate power supply to the diamond fields (Schneider, 2009, p. 43). The power was relayed to Kolmanskuppe and the nearby mine at Elisabethbucht by cable, with transformers erected at strategic points (Bravenboer & Rusch, 1997, p. 320). The coal-fired power station and extensive electrical network represented a significant technological innovation taking into consideration that Kolmanskuppe was lit up by electricity - free of charge - at a time when the whole of Germany, and even major parts of London, were only lit by gas street lights! (Schneider, 2009, p. 43).

![Figure 9: The Centralwasche (or Main Processing Plant) at Kolmanskop, c.1913](image)

(Dr. Gabi Schneider)

The electricity supply was crucial in overcoming another logistical challenge: the supply of water for diamond recovery processes. Initially, water had to be physically transported to the diamond fields by rail. However by 1911, the KBG had built a pump station with a daily capacity of 1000m$^3$ at Elisabethbucht on the coast. A 125mm pipeline transported the sea water from the bay over 30km to a large reservoir at Kolmanskuppe. This reservoir not only provided the plant with sufficient water, but also served residents of the town as a public swimming pool.

$^{30}$The plant at the Fiskusblock was similarly developed but never came into operation due to outbreak WWI.
Figure 10: Machinery and Equipment inside the Centralwäsche
(Album Herta Schneider, 1921)

Figure 11: The Lüderitz Power Station, 1912
(Luderitzbucht Museum)

Figure 12: Machine Hall inside Lüderitz Power Station, 1912
(Luderitzbucht Museum)
Drinking water was originally shipped from Cape Town to Lüderitzbucht and then had to be transported by rail to Kolmanskop (Schneider, 2009, p. 42). However from 1913 onwards, drinking water was supplemented by water from the spring at Garub and transported to the diamond fields by rail (Schneider, 2009, p. 110).

Comparison between the later survey (Figure 4) and original survey drawing of the town (Figure 3) shows how much of the footprint had already been established prior to the outbreak of WWI in what amounted to a relatively short time period of six years. According to Schneider, even electrical and telephone networks were well established by the end of 1911 and fire hydrants are also indicted on the plan.

Initial make-shift shacks were quickly replaced by solid houses constructed in reinforced-mortar, stone and brick. The German professional mining personnel were housed on the upper slopes of the rocky incline and despite the inhospitable environment; these imposing single and double-story residences were built to reflect the latest in German architectural style and design. The six houses form a strong group and have survived to this day, standing proudly on the uppermost contour and overlooking the surrounding desert.

Local building materials were not available and therefore all materials, pre-fabricated structures, doors, windows and finishes had to be imported from Germany. They have the sense of having been magically ‘dropped’ into the harsh desert environment and lend the town its distinct and appealing character which is so at odds with the surrounding location.

Comparatively little has been written about the housing of the 3 400 Ovambo contract workers and 2 500 Cape Coloureds employed on the diamond fields prior to WWI, see (Corbett, 1999, p. 55) (Schoeman & Kohl, 2004, p. 31). It would appear that generally the mine-workers were housed close to the diggings, and places of work, rather than within the town itself which served only the upper and lower management levels and as headquarters of mining operations (own observation). The remains of the old compound can still be identified close to the Centralwäsche, however the buildings are not accessible to the public and little has been documented of their origins or the living conditions therein.

The early survey plan (Figure 3) indicates a small kasino (entertainment building) and lazarett (hospital) located on the southern edge of the town. The key indicates these were simple corrugated iron buildings and they have not survived. A second hospital for ‘native’ workers is located on its own, east of the settlement, not far from Kolmanskop Station and was also constructed in corrugated iron.

31 Further information on the contract labour system can be found in Schneider (pp 113-114, & p.192)
Figure 13: Personnel Housing, Kolmanskop (c.1928)
The teacher’s residence, built by the KBG, is shown in the foreground. photo taken from Noli, *Desert Diamonds*, p.48

Figure 14: Mine Manager's Residence (c.1928)
photo taken from Noli, *Desert Diamonds*, p.50

Figure 15: Remains of Old Compound close to Centralwäsche
The interior view of the ‘bunkhouse’, built by CDM after amalgamation of diamond interests, gives some idea of workers’ living conditions. (Clint Epstein, 2008)
A police station, established as early as 1908, is shown in the vicinity of the Kolmanskuppe railway station. The Schlachterei (butchery) and Bäckerei (bakery) were also originally located strategically close to the main transport hub.

The stores and workshops at the bottom edge of the town were large corrugated iron structures, surrounded by an extensive network of railway tracks which trail off south toward the diamond fields and the Centralwäsche. This privately-owned narrow-gauge (60cm) railway line was completed in 1909. It ran from Kolmanskuppe, down the coast to a point some 6.5kms south of Elisabethbucht, with a branch of the track leading into Elisabethbucht itself. The railway line was extended in 1911, finally reaching a total length of 70kms (Schneider, 2009, p. 42). (See Figure 17)

Initially early railway transport was not motorised, but consisted of coco-pans which were drawn by mules. After the line was extended, the distance could no longer be handled by mules and locomotives were introduced. Steam locomotives were found to require too much water (an extremely precious resource in the desert) so the KBG commissioned the development of the unique benzole-electric locomotive (Schneider, 2009, p. 45). Hence by the outbreak of war in 1914, the railway line from Kolmanskuppe to Elisabethbucht had been entirely electrified and was serviced by electric locomotives manufactured in Germany (Bravenboer & Rusch, 1997, p. 186).

![Figure 16: The Benzole-Electric Locomotive used on the Diamond Fields](https://example.com/figure16)

At the outbreak of WWI, all mining activities at Kolmanskuppe ceased. For strategic reasons, the Germans partly destroyed the Centralwäsche and the water pipeline between Elisabethbucht and Kolmanskuppe. The Owambo contract workers were

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32 Police stations were “strategically situated at waterholes and landing places so as to control the movement of people and diamonds as effectively as possible.” (Schneider, 2009, p. 103)
Figure 17: Railway Map of the South-West African Diamond Fields
(taken from Bravenboer & Rusch, The First 100 Years of State Railways in Namibia, p.321)
transported home on special trains and the Cape Coloured workers were sent back to the Cape on ships.

The German forces were outnumbered by South African troops and retreated north along the railway line. Hostilities within the colony were concluded quickly when the Germans surrendered at Khorab and a peace treaty was consequently signed on 9 July 1915. Subsequently limited production was started up again at Kolmanskuppe in mid-1916 but due to the uncertain political situation, with martial law still in effect, no further expansion or investment took place.

4.3 Kolmanskop (1920 – 1956)

CDM and the Consolidation of Mining Interests

South-West Africa was declared a mandated territory of the League of Nations under the Treaty of Versailles on 28 June 1919. The Union of South Africa was appointed to administer South-West Africa as a Class C mandate in 1920.

Fearing the expropriation of their diamond interests, the Lüderitzbucht producers looked to merge their investments with South African concerns (Schneider, 2009, p. 122). In 1920, the Consolidated Diamond Mines of South-West Africa Ltd. (CDM) was established. The company’s board comprised five nominees of the Anglo American Corporation of South Africa Ltd. and four members representing the Lüderitzbucht producer: August Stauch, Walter Bredow, Dr. Erich Lübbert and Carl Weiss. A further agreement was signed between the Lüderitzbuchtler Eltrizitätsgesellschaft and CDM regarding the supply of electricity to the diamond fields.

In 1929, Ernest Oppenheimer succeeded Charles Hull as Chairperson of CDM and in the same year was appointed Chairperson of De Beers Consolidated Mines. De Beers bought CDM from the Anglo American Diamond Corporation in 1930, thereby “setting the stage for De Beers’ exclusive control of the diamond industry in SWA for the next 60 years” (Schneider, 2009, p. 129).

Having consolidated the various different diamond concerns, CDM’s next task was to consolidate the various different operations on the diamond fields which amounted to an extensive area of 32 000km² - with an existing labour force of almost 3000 people! The company maintained a head office in Lüderitz and established branches at Kolmanskop, Elizabeth Bay, Pomona and Bogenfels (Schneider, 2009, p. 128).

Despite the change in ownership; the day-to-day running of Kolmanskop remained much the same once production resumed in 1922. This is primarily due to the fact that the original German employees were retained along with their experience, skills and local mining-knowledge. Stauch’s former-director, Hans Hörlein, was appointed
General Manager and Leonhard Kolle resumed his post as plant manager (Schoeman & Kohl, 2004, p. 33). A strong hierarchical structure was established among the European personnel with a clear distinction between white-collar professionals and the blue-collar artisans.

After WWI the South African government did not permit the employment of workers from the Cape. Therefore CDM recruited contract labour exclusively from Owamboland in the north (Schneider, 2009, p. 113). Approximately 800 contract workers lived in a segregated compound to the south-east of Kolmanskop with its own hospital. The recruitment of Owambo labour on the mines by CDM was the start of a relationship that continues to the present day. Corbett notes that the long-term effect of the activities of diamond mining has had, and continues to have, far-reaching implications for the Owambo people (Corbett, 1999, p. 55). Money earned on the diamond fields continues to support families and villages in the north. However not all Owambos come from the same tribe or village. The origins of Owambo solidarity are to be found in early resistance and political movements that go hand-in-hand with labour union activities (Carstens, 2001, p. 108). The Owamboland People’s Organisation (OPO) was formed in the early 1950s. The body was renamed the South West African People’s Organisation (SWAPO) in 1960. SWAPO was a committed ‘national liberation movement’ and today is the ruling party in a democratic and independent Namibia.

CDM undertook significant improvements to the Centralwäsche. The daily capacity of the processing plant was increased to 3 000m$^3$ per day with an additional smaller plant erected to treat exploration samples. A brick factory was established to recycle the discarded material into building bricks, many of which were used to build the village at Elizabeth Bay mine to the south.

Similarly, the Lüderitz Power Station underwent major refurbishment in 1926 to become the most modern of its kind in southern Africa. Under the private ownership of CDM, it continued to supply electricity to the diamond fields as well as to the towns of Lüderitz and Kolmanskop.\textsuperscript{33}

Kolmanskop was established as headquarters to the privately owned railway network on the diamond fields. In 1927 the main line to Elizabeth Bay was upgraded to 25kg tracks and similar improvements were undertaken on the Elizabeth Bay - Pomona line in 1930. Although ancillary railways were abandoned in 1931, the main railway

\textsuperscript{33} On its withdrawal from the area, CDM handed the Power Station over to the Lüderitz Municipality free of charge on 1\textsuperscript{st} July 1944. Thereafter the Municipality took on responsibility for local power supply. (Schoedder & Strack, Luderitz Historical Building Survey, 1984)
line between Kolmanskop and Pomona continued to function as the only logistical supply route to the south.\textsuperscript{34}

A new 4 500m\textsuperscript{2} workshop and 3 000m\textsuperscript{2} magazine store were constructed on the lower boundary of the town. The structural iron frames were imported directly from Germany and the brick infill made locally. These buildings housed the best technology for the time and were linked directly into the extensive electrified railway network, which proved an efficient means of transport on the diamond fields facilitated increased mining and production.

Figure 18: Interior View of Mines Store, Kolmanskop (1934)  
(Album Herta Schneider)

Figure 19: Haus Schneider, Germany (left) & Haus Schneider, Namibia (right)  
Despite distance and extremes of climate, the architecture appears remarkably similar.  
(Album Herta Schneider, c.1930)

\textsuperscript{34} The railway line stopped at Pomona, and from there, materials had to be transported across the desert to Oranjemund in 10t diesel trucks.
After WWI, the living conditions of blue-collar artisans were significantly improved. The existing wooden housing, known as Koppelpontoks, was augmented by additional solid brick houses in 1926. These were built within the residential area of Kolmanskop on the lower slope and stretching south. Houses were also built adjacent to the Centralwäsche, where a second small residential settlement was soon established. As before the war, all building materials including the wooden doors, window frames, furniture and fittings had to be imported directly from Germany. (Figure 19.)

A new school was built in 1926 and the hospital was modernised and enlarged. Kolmanskop remained very much a company town, and both were privately owned and managed by CDM. The hospital is notable for having installed the first X-ray machine in Southern Africa.

In terms of amenities, residents continued to be provided with free electricity and water. A commercial street was established with a privately-owned butchery, general store, soda factory and bakery which had a Senking oven and was fully mechanised. Somewhat incongruously, even ice was able be manufactured in the desert, as a by-product of the butcher’s cold-storage facility, and was delivered once a week - free of charge - to each household. Garages were provided as cars began to arrive and streets were compacted with a loam-type material making them easier to traverse, although the trolley system continued to run through the town.

“The small German expatriate community at Kolmanskuppe reflected domestic German society at the time . . . the life of the inhabitants reflected that of their counterparts back home in Germany, and the wives of the mining officials wore imported dresses from Europe, according to the latest fashions.”

(Schneider, 2009, p. 136)

The Kasino / Turnhalle complex was constructed in 1927 in the centre of the town. The pre-fabricated steel frame was imported from Germany and locally produced bricks were used as infill. The Kasino represented the social heart of the town; housing a hall, cinema, gymnasium, two messes, a kitchen, bar, club rooms and a Kegelbahn (skittle alley) in the basement.

The ability of the town to foster a high degree of community spirit and social activity is attributed to its relative isolation. On its completion in 1928, the building represented the heyday of Kolmanskop’s economic activity. However the hall was also the last significant development before the onset of the once vibrant town’s sad decline.
Figure 20: Children play in the Kolmanskop School Yard (1928)
(Album Herta Schneider)

Figure 21: General Dealer, Kolmanskop (1925)
(Sam Cohen Library, Swakopmund)

Figure 22: General Dealer, Kolmanskop (1928)
(Margariethe Giertz)
Just two years later, in April 1930, production was stopped abruptly as the effects of the Great Depression took hold. The Centralwäsche was put on a care and maintenance regime with the intention of resuming operations once mining was considered profitable again. However, this was not to be and the remaining contract workers were dismissed and transported home to northern Namibia in 1934.

Figure 23: The newly completed Turnhalle and Kasino Complex (c.1928)
(Sam Cohen Library, Swakopmund)

Figure 24: Social Evening at the Kegelbahn, Kolmanskop (c.1929)
(Album Herta Schneider)

Prompted by the discovery of far richer diamond deposits in the southern Sperrgebiet, CDM transferred its headquarters from Kolmanskop to the Orange River Mouth in 1941. The workshop was dismantled and re-erected in the new CDM company town of Oranjemund. 35 The clock-tower, which once proudly stood in front of the Kolmanskop administrative offices, was similarly dismantled and re-erected in front of the newly built Oranjemund Primary School.

35 Note that this workshop still serves as the central mines store in Oranjemund today.
With the closure of the Centralwäsche, the town and all surrounding infrastructure ceased to serve any real economic purpose and was quickly rendered redundant. However the hospital supplemented basic healthcare available in Oranjemund and the railway system continued to serve as the central supply centre to the south. However after completion of the Oppenheimer Bridge in 1951, which linked Oranjemund to the harbour town of Port Nolloth, the Kolmanskop storage depot was no longer required. The supply route was closed and the northern diamond fields abandoned. In 1956 the last residents left Kolmanskop and the hospital closed its doors.

4.4 Kolmanskop Ghost Town (1956 – Present)

*Museum and Development of Tourism Attraction*

At the time of its closure, it would appear that no value was placed on Kolmanskop’s historical or socio-cultural aspects and no thought was given to conservation issues or, in the words of Schoeman, the “potential of its industrial history and tourism possibilities”. (Schoeman & Kohl, 2004, p. 40) This is exemplified in the removal of all accessible steel and much of the railway tracks in the 1960s. Even the main plant of the Centralwäsche were blown up and dismantled for scrap. (Noli, 2010, p. 57)

The first effort toward the formation of a conservation plan was taken only 23 years later, in February 1979, when CDM took the decision to develop Kolmanskop as a museum. Architect Walter Peters was appointed to advise CDM on the issue and “reported with a brochure in Oranjemund in September of that year.”

The proposal presented an economic life-line to near-by Lüderitz, which was also fast becoming a ghost town at the time. (The withdrawal of CDM from the area in 1944 also prompted that town’s steady decline both economically and physically. By 1979, Lüderitz was in a dire state economically.) The establishment of the Lüderitzbucht Stiftung in 1981 and the renewal of CDM’s local mining interests at Elizabeth Bay in 1983, led to a phased strategy of conservation and tourism development which was designed to coincide with the 75th anniversary celebrations of the first diamond discovery.

The work that CDM undertook at Kolmanskop in the 1980’s should be understood as a small part of this grand project and up-swell of community interest in its heritage.

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36 Walter Peters is a South African-based architect and conservationist knowledgeable on the subject of Namibia’s colonial architecture. His PhD. thesis “Baukunst in Südwestafrika 1884-1914” was published in 1981. (John Meinert: Windhoek)
38 Peters *et al* (1979: 107)
39 Personal Communication: Crispin Clay (March 2009)
and related economic potential. The strategy included the 1979 Lüderitz and Environs Conservation Study by the architectural students at the University of Natal under the guidance of Walter Peters; CDM’s development of the Kolmanskop Museum under the guidance of Edda Schoedder; and the Lüderitz Historical Buildings Survey conducted by Edda Schoedder and Peter Strack under the auspices of the Namibian Institute of Architects.

Peters’ view was that besides its unusual location, “Kolmans was of little interest at the time of conception and its appeal and rarity value lay in the fact that the town had taken on an entirely new character. It was therefore proposed that the existing fabric be conserved in a 'state of arrested decay.'” The buildings were surveyed by architect Edda Schoedder and certain conservation works were carried out from 1980-1982 under her guidance.

Guided tours were permitted from 1980 but the town only officially opened its doors as a tourist attraction in 1990 after descendants of several previous employees had pressed for this to happen. (Luderitzbucht Museum, 2008)

Namibia achieved independence in 1990 and as a result, in 1994, CDM was replaced by Namdeb, an equal partnership between the Namibian Government and De Beers Centenary AG.

A local and privately owned company, Ghost Town Tours, was awarded the concession to manage Kolmanskop as a tourist attraction in 2002. The company still manages the property and conducts daily tours on behalf of Namdeb, who remain custodians of the property under the present mining licence conditions.

There has been little change or development of ‘Kolmanskop Ghost Town’ since its inception as a museum in the late 1980s and tours have been conducted largely along the lines of what was instituted almost 30 years ago. Despite some on-going maintenance, a marked deterioration has been noted in the building fabric. Nevertheless the site continues to capture the imagination of movie-makers, visitors and photographers.

Recently the Namdeb Foundation was established as a corporate social investment vehicle with the role of identifying opportunities to support both the Karas Region and contract labour communities in the North. The support of heritage-related tourism initiatives is perceived as one such opportunity, and hence the company has renewed its interest in the preservation and restoration of Kolmanskop with emphasis on development of the town’s economic and tourism potential.

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40 Personal Communication: Walter Peters (21.02.2009)
41 Personal Communication: Trygve Cooper (21.07.2010), Howard Head (09.08.2010)
42 Personal Communication: Ophelia Netta, Namdeb Foundation (11.08.2010)
While it may be true that today the buildings of the long-dead desert town of Kolmanskop are only a shell of their former self, they do, however, like seashells washed up on the beach, evoke a myriad of emotions through kaleidoscope mood inflections set off by the day’s changing light and that eternal polish of swirling sand.

Gino Noli, from foreword to Kolmanskop, Past and Present, p.6

CHAPTER 5

5.0 DEFINITION OF THE STUDY AREA AND ITS COMPONENT PARTS
Figure 25: Kolmanskop Context Plan
(N Alexander with underlay downloaded from Google Earth 2010)
Figure 26: Annotated Diagram of ‘Kolmanskop Ghost Town’
(N Alexander with underlay downloaded from Google Earth 2010)
Figure 27: Annotated Diagram of 'Native' Hospital and Compound
(N. Alexander with underlay downloaded from Google Earth 2010)
Figure 28: Annotated Diagram of Centralwäsche
(N Alexander with underlay downloaded from Google Earth 2010)
The remains of Kolmanskop are situated 10 km outside of Lüderitz at the north-west corner of the Sperrgebiet National Park. The abandoned mining-town sits defiantly on the rocky outcrop, overlooking the wind-swept desert. The ruins are highly visible and easily accessible from the national road, only 500m away.

The study area is not limited to the present Ghost Town itself, but comprises a total area of approximately 15km² and includes (1) Kolmanskop Ghost Town, (2) the compound and ‘native’ hospital approximately 0.5km to the east, and (3) the remains of the Centralwäsche and old compound approximately 2kms to the south of the residential area or ‘ghost town.’

5.1 Kolmanskop Ghost Town / Area 01 (Figure 26)

![Figure 29: Panoramic View of Kolmanskop Ghost Town](image)
The mine manager’s house is on the right of the picture, while workshops and commercial buildings are located in the foreground. (N Alexander, 2010)

Although the surviving remnants of the original mining settlement are entirely authentic - on closer inspection, Kolmanskop Ghost Town is very different in both atmosphere and appearance to the original. Firstly the town is completely uninhabited, serving absolutely no purpose other than tourism; secondly, the buildings are in haphazard and varying states of disrepair; and thirdly, the encroachment of desert sand has established a delicate balance between the built and natural environments - in some places engulfing buildings completely.

The hierarchical layout and structure remains readily apparent. The Jugendstil villas dating back to the early 1910-14 and built to house management personal, are arranged around the upper contours of the raised rock outcrop. Housing of the blue-collar artisans is located on the lower contours of the outcrop to the south. The group of commercial buildings form a strong linear group along the bottom edge of the town, while the double-volume recreation hall remains the focus of the town in terms of scale forming a tourist hub from which tours and visitor activities are co-ordinated.

An odd assortment of workshops, storage sheds and an old transformer building are located outside of the tourist site alongside the bottom boundary. These buildings
are grouped around what remains of the private mining railway which once continued south toward the Centralwäsche, with off-shoots to mining operations at Elizabeth Bay and Bogenfels. Little of the railway line has survived and many of the original stores have been partially demolished and larger prefabricated steel structures dismantled altogether and re-erected in Oranjemund. The structures that remain house the security checkpoint for Elizabeth Bay mine and the remainder are used for storage.

Tourist activity is focused on the recreation hall. The Kasino complex has been completely restored and now houses a visitor’s centre, coffee shop, curio shop, diamond-selling room and museum displays. Guided tours are conducted from the building daily at 9.30am and 11.00am in both English and German. The tour concentrates on the hall, old kegelbahn⁴³ and commercial buildings. Thereafter visitors are encouraged to make their own explorations of the site, and are welcome to wander freely in and out of the abandoned ruins.

![Figure 30: Kolmanskop, National Geographic](https://nationalgeo.com/)

(Chris Gray, 2002)

Although some of these buildings have been cleared of sand and displays installed, the majority are derelict. Antique baths lie exposed among the dunes and half-broken roofs allow sun to penetrate interiors in an eternal dance of light and shadow. The principal furnishings are sand-dunes which intrude through open doors and

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⁴³ A bowling alley where a German form of skittles is played. This Kegelbahn was built in 1928 and is still fully functional, although it has been preserved as a museum exhibit and no longer serves any social or recreational purpose.
broken windows, lending the town a unique and ethereal atmosphere. They add a novelty and unforeseen edge which goes a long way to enhancing the visitor experience. The photo above (Figure 30) is taken from a National Geographic article and the accompanying caption reads as follows:

**Kolmanskop, Namibia.** Kolmanskop is an abandoned diamond mine near the coast. The “ghost” town has several residences and barrack-type accommodations, as well as the remains of a few commercial establishments. Today the town is a photographer’s dream come true. One cannot spend enough time taking in all the photographic opportunities. For this photograph I had to crawl through a small opening in a window and have my friend pass my camera gear into me.

Chris Gray


Kolmanskop Ghost Town is entirely fenced and un-authorised entry into the surrounding *Sperrgebiet* is strictly prohibited under the conditions of the Namibian Diamond Act. The Ghost Town and present tourist activity is constrained by this boundary. However this thesis is conserved with the values around industrial heritage and therefore the study area extends further, well beyond the fence, to incorporate the ‘native’ hospital, compounds and remains of the Centralwäsche (or mining plant) to the south.

### 5.2 ‘Native’ Hospital and Compound / Area 2 (Figure 27)

![Figure 31](image)

**Figure 31: View toward Omtanda, ‘Native’ Hospital and the Compound**

(N Alexander, 2010)

The ‘native’ hospital and compound is indicated on the 1929 CDM survey plan, (Figure 4) and it is therefore assumed they date back to the early 1920s and were probably constructed by CDM, (own observation). The buildings no longer serve any purpose and neither is the author aware of any restoration or conservation work carried out on the ruined buildings to date. Although the ruins are clearly visible across from the Ghost Town; they were not included in the original museum
proposal. At that time they were not considered to be of architectural merit, and therefore lacking in any value. However the author notes that questions have been raised as to their social and historical value and this renewed interest in the living conditions and treatment of contract workers was raised several times during the interview process.

The buildings remain inaccessible due to the prohibitive restrictions of the Namibian Diamond Act and further research is necessary in order to explain and understand their true value. Nevertheless, in the meantime, the Act has inadvertently effected their conservation because apart from the destructive force of natural elements, the buildings remain largely preserved in their authentic state.

Beyond the compound are other elements in the landscape which must still be thoroughly researched and explored. The old rubbish dump may well be considered a valuable resource of archaeological knowledge and the old abattoir is also of interest. An old graveyard is located close-by. The inscriptions on the tombstones date back to 1917 but because of its inaccessibility, relatively little of this history is known and without more research it is impossible to relate back to any holistic interpretation of Kolmanskop.

The building to the north (Omtanda) appears to have been built more recently as it is not indicated on Bremmer’s 1929 survey (Figure 4). Although its history is unknown, it was completely restored by Namdeb’s security department in 2006 and is now used by Namdeb and MET as an environmental and education centre. The building is located within the restricted area and therefore also subject to controlled access.

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44 Personal Communication: Clint Ebstein (18.09.2010)
45 Personal Communication: Ophelia Netta (11.08.2010)
The original railway line connecting Lüderitz to Aus, along which Zacharias Lewala made his stupendous find, has long since fallen into disrepair and disuse. Presently extensive construction works are under way to rebuild the railway line along the original route. Unfortunately none of the original fabric remains (including the old Kolmanskuppe railway station) however it is possible that one day trains will make their way past Kolmanskop once again, on their journey to and from Lüderitz.

5.3 Centralwäsche, Processing and Recovery Plant / Area 3 / (Figure 28)

According to Schneider, diamond mining at Kolmanskop reached its peak in the 1920s when the mining technology applied at the recovery plant, or Centralwäsche, was comparable to the highest world standards (Schneider, 2009, p. 130). The prefabricated steel structure, imported directly from Germany, loomed four storeys high and housed a highly efficient and technologically advanced plant. Sadly, the structure was blasted open and harvested for scrap metal in the 1960s. All that remains of the industrial building is a lonely end wall with two side walls, standing bleakly exposed to the elements, somewhat like a film-set cut-out.

However, the partially demolished structure does not stand isolated in the desert but is surrounded by several industrial ruins and a network of railway tracks which are evidence of the highly efficient industrial processes that operated in such remote and inhospitable conditions. The adjacent tailings dump stands testimony to what was achieved here at Kolmanskop in the short space of two decades.

Unfortunately most of the technology and machines these buildings once housed have been removed or plundered over the years, however some remnants of the mining production process remain. A row of classifiers lie half buried in the sand. These hand-operated machines were fundamental to the early mining process. Gravel was shovelled into the classifier and the drum was rotated by hand. The
separated gravels were then collected and placed in a sieve within a Plietz Jig and lowered into water. A pulsing motion forced the heavier objects into the middle on the bottom of the sieve. Finally this concentrate was sorted by hand to extract the diamonds. Today they lie half-buried in sand with little thought to their potential significance. (Figure 36)

The miners lived close to their place of work, in the shadow of the large mechanised plant. By the late 1920s, a small settlement was established here, where artisans lived with their families. Unfortunately only a few of these houses remain.

Owambo contract workers were housed in the compound buildings just south-east of the Centralwäsche. These barrack-type structures with their concrete bunks have survived in a partially ruined state and are a reminder of the harsh working and living conditions of the early mining industry. However their full history and social significance must still be properly researched.

The impact of mining activity has left a dramatically altered landscape which can be clearly viewed on the Google Earth image. The fragile desert is not easily wiped clean, and it is still possible to make out the route of the old railway tracks that served the diamond fields to the south, transporting diamondiferous gravels to the central processing plant. However this part of the story remains hidden within the Sperrgebiet and many remain unaware of these valuable remnants of early 20th century industrial history.
Figure 34: Remains of the Centralwäsche, Kolmanskop
(Clint Ebstein, 2007)

Figure 35: Workers with Classifiers in Operation

Figure 36: Classifiers Abandoned in the Desert, Centralwäsche
(Clint Ebstein, 2007)
“Heritage sites must be understood in relation to their contexts – in other words, holistically. One cannot fully understand a site without understanding its contexts which, perforce, extend beyond the site itself both literally and conceptually.”

(Mason, 2002, p. 14)

CHAPTER 6

6.0 DISCUSSION OF VALUE CONTEXTS
In terms of the Burra Charter, *cultural significance* is embodied in the *place* itself: its fabric, setting, use, associations, meanings, records, related places and related objects. Article 1.2 goes on to state that places may have a range of values for different individuals or groups. (Australia ICOMOS, 1999) Similarly, the World Heritage Convention puts forward that cultural heritage resources may be associated with different values depending on the context, and thus their treatment may differ from place to place. (Feilden & Jokiletho, 1993, p. 12)

In particular, extrinsic values depend on particular cultural, intellectual, historical and psychological frames of reference held by particular groups or individuals. (Lipe, 1984, p. 2) By *frames of reference*, Lipe is essentially referring to *contexts* which he elaborates as follows: economy, aesthetic standards, traditional and common knowledge, and formal research. These *value contexts* interact with, and influence, one another and the values associated with them. More importantly they are specific to time and place and therefore subject to change. (Lipe, 1984, p. 2)

In this chapter I intend to discuss four contexts which have influence on societal response, and hence the values placed on the resource in question. These are as follows: Geographic and Physical Context, Legislative Context, Socio-Economic Context and the Socio-Cultural / Political Context.

### 6.1 Geographical and Physical Context

*For that in the wildest parts of one of the most desolate and useless tracts of land on Earth, bare surfaces of rock should in places as thickly be studded with lustrous gems as are the showcases of a jeweller's window, surely puts to shame even the celebrated legend of Sinbad the sailor. It is almost as if Nature, conscious of her injustice to this portion of the African Continent, had added the diamonds as an afterthought by way of making amends*

Percy Wagner, Geologist (1914) from “The Diamond Fields of Southern Africa” / as quoted in (Schneider, 2009, p. 7)

The *Sperrgebiet* (Diamond Area No.1) lies within the southern region of the Namib Desert. The 26,000km² area is bounded by the Orange River to the south and the Atlantic Ocean in the west. It is just over 300km at its longest and no more than 100km wide. (Pallett, 1995, p. 6)

The Namib is one of the oldest deserts in the world and despite the innocuousness that its name implies; the area is rich in plant and animal life with a surprising variety of different landscapes, together with a wealth of fossil, archaeological and historical
Figure 37: Map of Namibia showing Context of Sperrgebiet
sites. In fact, the Sperrgebiet National Park, declared in 2008, is regarded as one of the world's top 25 biodiversity hotspots.\(^{46}\)

Archaeological evidence, in the form of Early, Middle and Later Stone Age sites, point to intermittent, possibly continuous human occupation of the Sperrgebiet for the last 300,000 years. Modern occupation of the Sperrgebiet has been marked by exploitation of natural resources, beginning with the guano trade in the 1840s, whaling in the late 1800s, diamond mining since 1908 and commercial fishing off the coast since the mid 1900s. (Pallett, 1995, p. 7)

The Orange River on the southern boundary provides a lifeline to the arid and wind-swept region. And it is this ancient water course, together with a vigorous coastline and strong prevailing winds that have combined to create the world's greatest diamond placer\(^{47}\) in a most un-expected location and in un-anticipated richness of reserves.

Diamond deposits occur in kimberlite; a volcanic rock which erupted to the earth's surface via kimberlite pipes (or vertical conduits) during the Cretaceous period 500 to 65 million years ago. Across southern Africa, these intermittent explosions bore a rich cargo of diamonds. The kimberlites, once exposed to the earth's surface, weathered and under natural erosion, released a valuable cargo of diamonds into surrounding river systems.

The Orange River was transformed from a slow meandering water-course into a raging torrent approximately 60 million years ago when Southern Africa underwent a major uplift resulting in the incision of the river bed. Only then was the river capable of transporting larger gravels, together with the erosion-resistant diamonds, over the 1,000km from their source; depositing them into the Atlantic Ocean.

From here, the combination of vigorous wave action and a high energy aeolian (wind-borne) system redistributed the stones northwards along the shore and in wind-driven deposits inland, scattering the diamonds across the surface of the ancient desert in a manner that Noli compares to the “crushed nuts on top of a multi-layered cake”. (Noli, 2010, p. 99) The diamonds represent expensive ‘frosting, as according to Schneider, only the ‘fittest’ stones survived the treacherous journey, with the result that 95% of all Namibian production is gem quality.\(^{48}\) (Schneider, 2009, p. 7)

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46 See *Sandpaper* (Issue 13) December 2008, p. 1
47 A deposit of sand or gravel containing particles of valuable minerals, (*Oxford Compact English Dictionary*).
48 By comparison, the average gem-stone grade of a kimberlite pipe is only 25-35 %
The Namib is renowned as one of the highest energy aeolian systems on earth. The linear, north-south valleys are swept by winds exceeding 100km/hr (Schneider, 2009, p. 8) and wind-driven sand marches remorselessly across the desert in the form of barchan (or wandering) dunes. Levinson describes the prevailing southerly wind as “a restless sculptor, continually destroying and remoulding with captious artistry.” (Levinson, 2009, p. 35)

![Figure 38: Aerial view of the Orange River Mouth](image)


![Figure 39: Linear Dunes and Vigorous Coastline](image)

The wind effectively ‘winnows’ the diamonds so that “a distinctive pattern of diamond distribution is created over time that displays a remarkable degree of sorting, with progressively smaller diamonds occurring towards the north.” (Corbett, 1999, p. 44)

Higher concentrations of minerals are deposited in the valleys. Over time, the weaker accompanying minerals are worn away resulting in high concentrations of diamondiferous gravels. Old prospecting records show one sample site of 25m x 1m produced 1700 diamonds! And therefore it is unsurprising that the first diamond discovery in 1908 - close to Kolmanskop - occurred within one of these rich aeolian deposits. (Corbett, 1999, p. 44) (Schneider, 2009, p. 8)

Figure 40: Surfaces of Dolomite Worn Smooth by Wind-driven Sand
(J Jacob, taken from Corbett, ‘Diamond Beaches: A History of Oranjemund’, p.21)

The small town\footnote{In 1984, the population of Lüderitz had dwindled to 5000 but 2007 figures indicate the population to be approximately 15 137 (see Geo-names Geographical Database).} of Lüderitz is the closest urban settlement to the heritage site, just 10km to the west of Kolmanskop in an otherwise isolated and remote landscape. Lüderitz is literally the end of the road and the visitor is greeted by a surreal mirage comprised of a haphazard collection of German colonial buildings, neatly arranged around a natural harbour and rocky landscape with the Atlantic Ocean forming a dramatic backdrop.

Lüderitz was established as a trading post as early as 1884, but ever since the discovery of the first diamond in 1908, the town’s fate and fortunes have been intimately entwined with that of Kolmanskop and the surrounding Sperrgebiet. Hence the town’s historic fabric mirrors that of Kolmanskop due to the significant development that took place there consequent to the diamond boom. However, by comparison to its close neighbour, Lüderitz has continued to function as a living town and is therefore better preserved although inevitably has also been exposed to more change.
At present, the Sperrgebiet National Park, Kolmanskop and Lüderitz are perceived and managed as entirely separate entities. The desert landscape has been carved up by the mining licence area boundaries. Any opportunity of through roads and linkages has been rendered impossible due to security concerns and much of the landscape is inaccessible and remains shrouded in secrecy.

I argue that the Sperrgebiet should in fact be regarded as a single industrial landscape comprising a unique natural environment, the historic mining towns linked by what remains of their power and railway networks, as well as the current mining activities along the coastline at Elizabeth Bay, Bogenfels and MA1, together with the urban settlements of Lüderitz and Oranjemund.

By recognising the historic narrative which forms a continuous link between the historic landscape and today’s modern activity in and around the Sperrgebiet, we will be able to better understand and interpret the meaning of Kolmanskop and its importance as a heritage resource.

6.2 Legislative Context

Diamond mining and the Sperrgebiet National Park are inseparably linked, and are a perfect example of the fact that mining can actually benefit nature conservation. Had it not been for the world’s richest alluvial diamond deposit, which occurs along the shores of the Sperrgebiet, the area would certainly not have enjoyed its strictly protected status, and thereby remained a pristine wilderness

Hon. Erkki Nghimtina, MP – Minister of Mines and Energy

50 As quoted in Sandpaper (Issue 13) December 2008, p.5
Figure 42: Diagram of Mining Licence Areas
(MRD Namdeb, 2010)
Although Kolmanskop is generally recognised as a heritage resource in principle, and marketed as such, it has not been listed as a heritage site under the applicable legislation and to date, no nomination has been put forward. The National Heritage Act No.27 of 2004 does not afford any general protection to buildings older than 50 years which occur outside of a declared conservation area and therefore at present the site is afforded no protection under the applicable heritage legislation. This status similarly applies to several other historic and abandoned mining towns within the Sperrgebiet itself.

Nevertheless, in the absence of any heritage legislation, Kolmanskop has been largely conserved since its inception as an open museum in 1983. This is mainly attributable to strict access controls imposed by the Namibian Diamond Act and the role that Namdeb (formerly CDM) have played in the custodianship of the site.

Kolmanskop falls outside of the Lüderitz Municipal Area and is firmly located within the boundaries of the Sperrgebiet National Park. The park was declared as such in 2008 to mark the centenary of the first diamond discovery in Namibia and the subsequent proclamation of the Sperrgebiet. It represents a collaborative effort between the Ministry of Environment and Tourism (MET), the Ministry of Mines and Energy (MME) and the Ministry of Lands and Resettlement (MLR). Although the majority of the park is a conserved natural landscape under the jurisdiction of the Ministry of Environment and Tourism, intense mining activity continues along the Atlantic coastal edge and on the banks of the Orange River to the south.

Kolmanskop Ghost Town is located within the Elizabeth Bay Mining Licence Area (No.45). The mining licence is issued by the MME under the Diamond Act No.13 of 1999. Therefore the jurisdiction and management of the site remains under the authority of the MME together with Namdeb as licence holder and present custodian. It should be noted that Namdeb Diamond Corporation (Pty) Ltd. (previously known as CDM (Pty) Ltd.) has held the mining and prospecting licences in the area since 1919 - a time span of more than 90 years.

Ghost Town Tours is a private Lüderitz-based company, contracted by Namdeb to operate, conduct tours and manage Kolmanskop Ghost Town on their behalf. The company has held the agreement with Namdeb since 2002. The public component and activities are clearly defined by Namdeb and access to the greater area, including the native hospital, compound and Centralwäschere, is strictly prohibited without a MME permit, issued under Section 52 of the Diamond Act.
This author is not aware of a formal Heritage Management Plan for Kolmanskop or any other mining town within the Sperrgebiet.\textsuperscript{51} Decisions appear to be made on an ad-hoc basis by Namdeb with little consultation, if any, of the various interested parties and possible stakeholders, for example the National Heritage Council of Namibia.\textsuperscript{52}

The present mining licence agreement between MME and Namdeb will remain in place until 2020 but Namdeb’s long term intention is to establish a trust to manage and run Kolmanskop Ghost Town for the interest and benefit of all stakeholders.\textsuperscript{53} This proposal faces two enormous challenges:

- The first is to define the boundaries of the heritage resource and to it extract it from the mining licence area and the Sperrgebiet National Park. This will raise questions of ownership which at present remain unclear, with a variety of parties staking an interest or claim to the site.

- The second is how to resolve the different interests and concerns of that diverse range of stakeholders, namely: the Ministry of Mines and Energy, the Ministry of Environment and Tourism, the Ministry of Lands and Resettlement, the National Heritage Council, the Museums Association of Namibia, Namdeb, the Lüderitz Town Council, the Karas Regional Council, as well as local business people, tourism operators and citizens.

6.3 Socio-Economic Context

The world’s largest diamond placer deposit, consisting almost entirely of gem-quality stones, occurs in Namibia. Consequently, the country has developed into one of the leading diamond-mining countries in the world, and its importance for the gem diamond trade cannot be over-emphasised. For more than a century, human endeavour and technological innovation have played a leading role in diamond mining in Namibia, and have shaped the country’s economy and society like no other sector of the Namibian mining industry.

Dr. Gabi Schneider, from Statement of Significance: Kolmanskop (2008)

Just as South Africa’s industrial identity is firmly based on the mineral extraction industries; (Worth, 2004, p. 2) so is it true of Namibia - where mining has contributed to the economic history and development of the country. It is therefore regarded as an important component of the nation’s heritage.

\textsuperscript{51} This includes the mining sites of Elizabeth Bay, Pomona and Bogenfels.

\textsuperscript{52} Personal Communication: Dr. Gabi Schneider (10.09.2010)

\textsuperscript{53} Personal Communication: Ophelia Netta (11.08.2010)
Worth identifies that in the United Kingdom, the concept of the Industrial Revolution continues to inform national identity and national pride. This is in contrast to the situation in South Africa (and similarly, Namibia) where mining heritage is often interpreted as a symbol of economic power, political power and oppression.\(^{54}\) (Worth, 2004, p. 2)

Yet regardless of a dubious and clouded history, Namdeb’s current mining operations are firmly established on the foundation of the early German settlers, and later CDM, who pioneered the industrial revolution that occurred in the Namib Desert at the turn of the century. Since gaining independence in 1990, diamond mining has remained a central industry in Namibia. In 2006 diamonds accounted for 70% of Namibia’s mineral exports in US dollar terms. In 2007 diamonds contributed 12.4% to Namibia’s GDP, and 15.9% in 2008.\(^{55}\)

The original resource washed out through the Orange River mouth is estimated to be some 3 000 million carats. Production to date in Namibia and South Africa amounts to just under 200 million carats, leaving a balance of some 2 800 million carats of undiscovered treasures. (Schneider, 2009, p. 8) Most of these are believed to be lying undiscovered on the marine bed; therefore the future of Namibian diamond-mining is seen in its off-shore deposits.

Having said this, it is important to emphasise that it is unlikely on-shore mining will cease completely any time soon. Due to mining improvements and technological innovation; land-based operations may well continue into the future and surpass present predictions. In the meantime, the development of tourism in combination with environmental conservation has been identified as a means of ensuring a sustainable future for the Sperrgebiet. For the foreseeable future, mining and conservation must work hand-in-hand which poses its own challenges in terms of conservation, rehabilitation, security control and access.

It is interesting to observe that although diamond mining plays an important role in the Namibian economy; the Karas Region in which the Sperrgebiet and Kolmanskop is located, is one of the least developed and poorest regions in Namibia. Ever since the discovery of the first diamond and the subsequent establishment of mining operations close by; the fortunes of Lüderitz have been intricately bound with that of Kolmanskop and the surrounding Sperrgebiet. Although industries such as cray-fishing, deep-sea fishing and mari-culture have been introduced into the local

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\(^{54}\) One could argue that these issues are tied into the current nationalism of mining debate in South Africa.

\(^{55}\) According to figures issued by US State Department on [www.state.gov](http://www.state.gov) accessed on 14.06.2010
economy, tourism is regarded as one of the fundamental pillars towards ensuring economic viability.

However Lüderitz is largely isolated by the surrounding mining licence areas which limit access and effectively position the town at the end of a 100km cul-de-sac along with the dubious reputation of a harsh and windy climate to deter the most intrepid traveller.

The nearby Kolmanskop Ghost Town presents a lifeline to the struggling community of Lüderitz. The tourist attraction is identified as the main reason visitors choose to make the detour when visiting southern Namibia. In fact, the current opening times at Kolmanskop Ghost Town are carefully arranged to ensure that visitors spend at least one night in nearby Lüderitz, rather than simply driving in and directly out again.  

Namdeb regards Kolmanskop as part of their corporate heritage and wish to leave a positive legacy in terms of their social responsibility program. The support of alternative industries to mining, such as tourism, is seen as one of its key initiatives and the appropriate development of Kolmanskop Ghost Town is at present a principle focus.

However, to date very little direct economic benefit is perceived by the wider local community of Lüderitz. Issues of ownership, restricted access, cost of development and alternative access points need to be addressed in order to ensure the conservation of a heritage that will be of economic benefit to the community as a whole; instead of perpetuating a mining legacy which is of perceived benefit to only a few.

6.4 Socio-Cultural and Socio-Political Context

Despite evidence of early human habitation in the form of early- to late-stone age sites; the Sperrgebiet is generally perceived as a pristine and barren environment with no permanently established population prior to the discovery of diamonds.

Since the early days of mining production, Namibia has undergone some major changes in its political history, which in turn have had an impact on its socio-cultural context. The annexation of German South West Africa led to a protracted war between the colonial power and local tribes. By 1907, a large number of indigenous people had lost their lives and Germany introduced racial segregation, which

56 Personal Communication: Howard Head, Ghost Town Tours (10.08.2010)
57 Personal Communication: Ophelia Netta, Namdeb Foundation (11.08.2010)
according to Corbett, marked the beginning of harsh labour laws on the diamond mines. (Corbett, 1999, p. 15)

The German diamond-mining period was in fact extremely short-lived from the first discovery in 1908 to the outbreak of WWI in 1914. After losing the war, Germany renounced its rights to all colonial possessions in 1919 and South-West Africa became the mandated territory of the Union of South Africa under the terms of the Treaty of Versailles.

This development did not have a significant impact on the day-to-day operation of the diamond fields due to the private purchase of all German interests by Ernest Oppenheimer’s Anglo American Corporation, and establishment of CDM, in 1919. The highly skilled German management was retained; therefore Kolmanskop’s society continued to reflect a German culture and social tastes of the time.

The fundamental shift appears to have taken place as a result of the Great Depression in 1930 when all production at Kolmanskop ceased. It was never resumed and in 1941 CDM transferred its headquarters to the newly-erected company town of Oranjemund at the mouth of the Orange River. It would appear that this is where the clean break took place – a new and modern town was established, and the old abandoned to history and fate.

After a protracted war of resistance, against the South African mandate, Namibia achieved independence on 21 March 1990. Consequently CDM was transformed into the Namdeb Diamond Corporation in 1994 as an equal partnership between the new Namibian Government and De Beers Centenary AG.

Namdeb, and its fore-runner CDM, have continued to hold the mining licences in the Sperrgebiet since 1919 – a time span of over 90 years. Therefore despite seismic shifts in social and political orientations beyond its boundaries, the Sperrgebiet has remained restricted to outsiders, remote to the majority of Namibians and shrouded in secrecy for more than a century.

Kolmanskop presents an interesting heritage case study as it exists as a ghost town, the original claimants largely ‘ghosts’ themselves or else too removed to care. From its earliest days, Kolmanskop’s labour force was recruited from Owamboland in the north. Workers were confined to the ‘native compound’ and once their term of service was completed, they were sent home.\(^{58}\) Therefore although generations of Namibians have been pressed into service on the diamond fields, local memory and

\(^{58}\) This is still the case in Oranjemund, which is operated as a closed company town and where Namdeb continues to recruit contract labour from the north to this day.
knowledge remains poor with little continuity between generations. In a similar manner the German community has also been dispersed, although some do still reside close by in Lüderitz, many have passed on or have left the area all together.

One aspect of Kolmanskop remarked upon, but not entirely understood, is that no church or religious building was ever built within the town. It is interesting because it means that there is no fixed structure or symbol to establish a permanent focus or link with a dispersed community. Further, no significant social links or structures appear to exist between Oranjemund and Lüderitz, the one a closed company town and the other an independent and disenfranchised community, yet both share the same history and both continue to exert a claim on Kolmanskop.

Without social recordings, and in the absence of a legitimate stakeholder community, the knowledge base exists largely within museum exhibits, photographs and historic narrative. The majority of this historical research has focussed on the original German community and comparatively little is known of the industrial history, the technological workings of the mine, or the histories of the ‘invisible’ people who laboured there. Clearly further research is necessary to present a balanced and fully representational history.

If the definition of heritage is that which is passed on to the next generation, then who will step forward as beneficiaries of Kolmanskop? Will it remain a relic of Germany’s colonial past? Or will it be regarded as a Namibian heritage? And how can a better understanding of the different meanings and values help direct this opportunity for reconciliation?
CHAPTER 7

7.0 EXPRESSION OF VALUES AS THEY PERTAIN TO KOLMANSKOP
7.1 Identifying a Typology of Values

With reference to international best practice; questions of authenticity and the assessment of cultural significance are considered the two fundamental criteria to guide appropriate decision-making in terms of heritage resource management.  

Mason’s opines that “values are embedded in culture and social relations which are ever in flux” (Mason, 2002, p. 14); and it follows that the assessment of value is extremely difficult due to the many different associations and articulations of heritage value, its changeable nature and the difference in assessment by different stakeholders.

Historical value and aesthetic value are traditionally recognised and used within the conservation field. In Namibia, these are two of the fundamental criteria used to establish what is ‘worthy’ of conservation. However with broad international adoption of the Burra Charter, which calls for broader consultation of stakeholders and interested parties, new values have been introduced to the field of heritage such as social value and economic value. There is high potential for conflict and overlap due to the multiplicity and increasing complexity of cultural values which have already been shown to be specific to time and place.

Mason recommends the establishment of a value typology that can guide research and inform methodologies to be employed. By breaking the assessment of significance down into a composite set of different values, one can avoid the pitfalls of too much emphasis on one value only, or else a blanket statement of significance, that only touches on some values - and ignores others completely (Mason, 2002).

For the purposes of this study, value data has been obtained from a diverse range of sources which includes interviews, personal observation, historical research and the assessment of value contexts. The diagram below, (Figure 43) identifies the different types of value as they emerged from the research process. The typology provides a framework for the discussion of values as they pertain to Kolmanskop.

Authenticity is regarded as a crucial aspect in the assessment of heritage resources and is therefore depicted at the centre of the diagram. (The notion of authenticity will

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59 For example, both the Burra Charter (1999) and the World Heritage Agreement advocates this approach.
60 Under the Namibian heritage legislation; nomination of a heritage place is based on an assessment of significance in which the place should fulfil one of the following values: Historical, Architectural, Scientific or Archaological / Paleontological (Nomination for Declaration of a Heritage Object or Place in terms of Section 29(1) of the National Heritage Act (Act No.27 of 2004)
61 The sources and methodology are discussed in detail under Chapter 3 / Methodology.
be fully discussed in the next section.) Both cultural and economic values are set within a contextual framework, depicted by the outer wheel of the diagram. The different cultural and economic value types are indicated within the central sphere. The seven categories don’t necessarily refer to definitive and separate values, but in some cases are simply alternative ways of understanding and labelling the same. Mason describes this difference as “residing in the very different conceptual frameworks and methodologies used to articulate them” (Mason, 2002). The value typology serves as a simple tool for the breakdown and discussion of value but the interlocking spheres remind us of the contingency of value and the necessity to understand the resource holistically in terms of its overall significance.

Figure 43: Diagram of Value Typologies as they pertain to Kolmanskop
(N Alexander, 2010)

7.2 Discussion of Authenticity

Authenticity is at the core of traditional conservation practice. The English definition of ‘authentic’ is simply genuine or of undisputed origin. The word is derived from the Greek authentikos, meaning principal or genuine.62 Feilden and Jokiletho identify authenticity as a crucial aspect in the assessment of heritage resources (Feilden & Jokiletho, 1993, p. 16). Further, Mason states that the notion of authenticity has influence over the way we perceive and value heritage. For example “if one can

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62 Definition as per Oxford Compact English Dictionary
prove authenticity of material, historical value is indelibly established” (Mason, 2002, p. 13).

The Nara document, which is considered the authoritative document on issues surrounding authenticity,\(^{63}\) states the following: firstly, authenticity is an essential element in defining, assessing and monitoring cultural heritage; and secondly, authenticity should be evaluated within the applicable cultural context (Quaghebeur, 2000, p. 39).

Authenticity is not regarded as a value in itself. Rather it is ascribed to a heritage resource, usually within a specific context, and influences how that resource is perceived and valued.

In order to qualify as a World Heritage Site, a heritage resource must maintain its integrity with respect to four different types of authenticity: authenticity in design; authenticity in material; authenticity in workmanship and authenticity in setting (Feilden & Jokiletho, 1993).

Of the above criteria, authenticity of material is generally considered of most importance and in turn has direct influence on historical value, age-value and aesthetic value. Material authenticity can be simply interpreted in terms of the original integrity (as it was created) or alternatively, “as that resource has evolved through its historical timeline”. Feilden and Jokiletho state that in the case of a heritage resource, its historical authenticity should generally reflect the significant phases of its historical timeline from creation, up to the present and include its perception in the present time (Feilden & Jokiletho, 1993, p. 17).

Kolmanskop was built between 1908–1928 for the purposes of providing shelter, infrastructure and services for the associated mining activity that at that time was projected to have a life-span of 50 years. In fact, the word ‘town’ is misleading, as Kolmanskop never functioned as such. The homes, commercial buildings, hospital and school were all privately owned and managed as part of the mining infrastructure. So when the focus of mining activity shifted south, the buildings were simply abandoned and there was no reason to develop the site further or look for alternative use. As a result, the material authenticity is good and the site retains a high degree of its original material integrity. The setting itself is consistent with the original situation. The surrounding desert remains in a natural state and mining activity has continued in the area, thereby enhancing the experience as something that is genuine and in keeping with the original character.

\(^{63}\) ICOMOS Nara Document on Authenticity (1994)
Yet Peters points out as early as 1979 that “the continuous exposure to sun and wind had resulted in the original town taking on a completely new character as a ghost of its former glory” (Peters, 1979). Peters’ assessment of significance focussed principally on this new character. Therefore the adoption of a Romantic Conservation approach, which advocated the preservation of the ruin, was deemed to be an appropriate course of action on the institution of the museum in the early 1980s. Emphasis was on the picturesque, which is far from consistent with the original industrial character.

In terms of Feilden and Jokiletho’s historic timeline, we are therefore dealing with both Kolmanskop, ‘the mining town’ and Kolmanskop, ‘the ghost town’ – both are arguably authentic in material and setting. One is the authentic workmanship of mining and industrial processes, the other the authentic workmanship of the natural elements. Both have placed an indelible stamp on the place and are indicative of its evolvement, lending the place a distinct and unique character.

Generally there appears to be a reluctance to tackle any restoration work at risk of “jeopardizing the authenticity of the resource by replacement of original elements and addition of new elements”, see (Feilden & Jokiletho, 1993, p. 17). Even the removal of sand from floors and doorways has been debated and criticised. The mine manager’s residence is frequently raised as an example in this regard, where the building’s material integrity has been restored at the expense of its authenticity and hence age and historical value was rendered worthless.64

This leads us to the discussion of values as they pertain to Kolmanskop and the identification of what is considered fundamental to the site’s unique and special character. What values qualify the site as a tourist attraction and does the site retain enough cultural value to also qualify as an industrial heritage site?

7.3 Discussion of Cultural Significance

7.3.1 Age and Rarity Value

The example of the mine manager’s house raises the issue of age value which contributes significantly to the nostalgic aura surrounding heritage objects. Ruskin (1819-1900) believed that “age in itself contributed to beauty; the marks of age could thus be seen as an essential element in an object, that could only be considered ‘mature’ in its beauty after several centuries” (Jokilehto, 1999, p. 175) Put simply, buildings are valued simply because they are old. The bumps, nicks and scratches are evidence of this condition - forming a tangible link between past and present.

64 Refer to discussion in Noli, G. ‘Desert Diamonds’, 2010
However this begs the questions: when does a work of architecture cease to be a building and become a ruin? And at what point is a ruin reduced to a pile of rubble? In two interviews, the level of degradation and loss over the last decade was noted with some regret. Some of the buildings at Kolmanskop are more than 100 years old, and others have been partially destroyed (e.g. Centralwäsche), prompting the need to re-evaluate whether the simple conservation approach is still appropriate or whether an approach of historical restoration should be considered.

Illustrative of the value placed on age and the passing of time; is that without exception, significant developments at Kolmanskop have taken place to coincide with important age milestones. For example, the museum was inaugurated 75 years after the first diamond discovery, and the centenary in 2008 sparked renewed interest and a flurry of activity surrounding the Sperrgebiet. This has resulted in the proclamation of the Sperrgebiet National Park and the revitalisation of Kolmanskop as a tourist site under the auspices of the Namdeb Foundation.

Rarity value is understood to refer to the uniqueness or representativeness of the heritage resource. In the case of Kolmanskop, this is regarded as high because Kolmanskop is associated with the first diamond discovery in Namibia and therefore a symbol of the very beginning of Namibia's diamond industry. (The fact that diamond mining remains such an important part of the Namibian economy; means that this history still has resonance in the present time and in turn contributes to the site's economic significance.)

Two contingent locational factors also play an important role in the site's rarity value: firstly; although the town is not the only relic of industrial heritage in the Sperrgebiet National Park, it remains the only one that is easily accessible and open to the public and secondly; due to its close proximity to the living town of Lüderitz, the economic potential of the site has been realised and consequently it has been better conserved than similar industrial sites located in the Sperrgebiet and which remain shrouded in a veil of secrecy.

7.3.2 Historical Value

Historical value lies at the root of the notion of heritage. Heritage resources are able to serve as tangible links to the past, in a way that written or narrative histories do not. Lipe attributes this to the durability of artefacts, structures, and landscapes that

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65 Personal Communication: Trygve Cooper (21.07.2010), Howard Head (10.08.2010)
66 Personal Communication: Luffe & Iris Drukke (09.08.2010) / Councillor Toivo Namabala (10.09.2010)
67 Personal Communication: Dieter Noli (21.07.2010)
lend themselves to society’s need for continuity and transmission of cultural information across time. (Lipe, 1984)

When asked to arrange values in order of importance, several of the interviewees felt that historical value ranked highest due to the educational value of the site. Lipe uses the term ‘informational value’ instead of ‘historical value’, because heritage resources serve as sources of information about the past. Lipe is approaching value assessment from the discipline of archaeology, but the same thinking applies to other forms of research; for example social studies or architectural surveys.

Olga Levinson’s historical account of Stauch’s life and times was published in 1983. The book describes the history of the Sperrgebiet through a largely biographical account of August Stauch and his times. Hence, the account is distinctly biased toward a representation of the German pioneering spirit. The blurb on the back jacket reads as follows:

_This is the story of a lonely railway employee at one of the most desolate and godforsaken outposts on earth, who stumbled across diamonds in the desert which became the richest source of these gems in the world. It is a human and poignant story that has never been fully told._

(Levinson, 2009)

The museum was established in the early 1980s and appears to have drawn extensively from this record. Kolmanskop’s German history and character, along with the Jugendstil architecture, has long been emphasised at the expense of other histories and values. In a dramatically changed and altered post-independence society, one question would be whether such an approach - seeped in a colonial nostalgia - is still appropriate. What may be good for business unfortunately appears to undermine the heritage value of the site and its ability to perform as a place of reconciliation and redress.

Shepherd warns against the tendency toward heritage becoming “a merely sentimental attachment to the past, without the rigour and steel that come from comprehending history in its full complexity, or facing up to the horrors of the past” (Shepherd, 2008, p. 123). This led me to consider what other lessons can be gleaned from Kolmanskop - and could they prove valuable in a post-independence Namibia?

68 Personal Communication: Ophelia Netta [11.08.2010], Giel du Toit [10.08.2010], Marion Schekle [09.08.2010], Dr. Gabi Schneider [10.09.2010], Inge Ipinge [09.08.2010]
69 Daily tours are still conducted in both English and German, indicative of the fact that German tourists comprise a significant portion of annual visitor numbers to Kolmanskop.
Firstly social histories tell us more about how people lived and worked under harsh and inhospitable conditions. To date, historical research has focussed on the German management staff. Social enquiry should be extended to artisans and contract workers. The history of the contract labour system is a fundamental aspect of the diamond mining history that has up to now been largely ignored. These histories have relevance in present Namibian society which attempts to understand and redefine itself in a post-colonial and democratic state.

Secondly, further research is required into mining history and processes to enable a proper and holistic understanding of the industrial heritage. The relics of the industrial revolution that occurred in this part of the Namib Desert may be interpreted as symbols of oppression or of hope. They not only tell us about the past, but are audible in the present as they continue to be improved, refined and developed to provide revenue to a young democracy.  

And importantly, the economic history needs to be further researched and explained. Bearing in mind that the history of Kolmanskop is intertwined with the story of colonial oppression, two world wars, the struggle for independence and finally liberation - how has a single mineral resource been able to transform a society and liberate a country? The economic significance of the site extends far beyond its immediate context toward a national heritage that has resonance on a global scale.

Heritage departs from the discipline of history in that it is able to shuttle back and forth between past and present. Although heritage resources are of the past, they are identified, defined and used in the present with the view toward transmitting them to future generations. (Shepherd, 2008, p. 117)

Recognition of the importance of historic value will place emphasis on the need for further historical research. This will enable the site to be addressed holistically and so fulfil the site’s heritage potential; “offering a language through which to discuss contested issues of culture, identity and citizenship in the post-colony even as it determines and delimits this discussion in some ways” (Shepherd, 2008, p. 17)

7.3.3 Symbolic Value

Mathew Hart’s book ‘Diamond’ explains how for centuries diamonds have symbolised wealth, prestige and love. Yet at the same time are also interpreted as symbols of deceit, monopoly and war. Contributing to the allure is an industry

70 Note that a new and modern plant was inaugurated at Elizabeth Bay Mine in 2006, not far from the abandoned CDM mining operations.

71 See Schneider (pp,120-121 & 252-255) for further discussion of economic history, and its impact on an international scale.
shrouded in secrecy and the diamond trade remains one of the world’s most mysterious businesses (Hart, 2002). As a diamond-town, Kolmanskop holds a romantic allure which reflects these paradoxes. As one interviewee commented, diamonds are a lot more attractive and interesting than coal!  

Heritage resources are used as powerful symbols in the present and Kolmanskop is no exception. The fundamental association which confirms Kolmanskop’s importance over similar sites in the Sperrgebiet is that its history is synonymous with the discovery of the first diamond in Namibia. It has been referred to as the ‘mother’ from whom all things were given life. Whether this discovery is attributed to Zacharias Lewala, a disenfranchised coloured railway worker, or August Stauch, the German Bahnmeister, or whether it is recognised as a collaborative effort between the two men . . . these three examples are indicative of the conflict inherent in discussions of symbolic value.

Kolmanskop is perceived by some as a symbol of German culture, efficiency and power, others have described the ghost town as the “slowly sinking flagship of the heyday of German colonial might” (Noli, 2010, p. 59) Indeed, symbolic value can be mobilised positively or negatively and therefore can be manipulated to suit current socio-political contexts - hence the term political value is sometimes also used. The Namibian Heritage Act promotes the concept of a heritage for all. What universal symbols are relevant to Kolmanskop and can be promoted to foster national pride and common interest? In this regard, several ideas emerged during the interview process and are listed below:

- Kolmanskop is representative of the human pioneering spirit, symbolic of man’s struggle against the natural elements and the awe-inspiring power of nature.
- Kolmanskop is a symbol of both despair and hope. On the one hand it is associated with extreme hardship and poverty – on the other it is recognised as a significant source of wealth and prosperity. This paradox should be understood and acknowledged.
- Kolmanskop survives as a symbol of the ability of a single mineral resource to transform a society and liberate a country.  

72 Personal Communication: Trygve Cooper, (21.07.2010)  
73 Personal Communication: Councillor Toivo Nambala, (10.09.2010)  
74 Personal Communication: Marion Schekle (09.08.2010)  
75 This statement refers specifically to the context of Namibia, although the significant impact on Germany with reference to the economic wealth that was generated in that country prior to WWI has also had significant and far-reaching impacts. By the same token, value to the
Kolmanskop is an illustration of human achievement and technological innovation right up to present day, where diamond mining continues in the surrounding licence area in a joint partnership between De Beers and the Namibian Government.

These universal symbols cut through the either-or debate and add value to the site ensuring that it has relevance and meaning in the current socio-cultural and socio-economic contexts. By motivating symbolic value toward fostering national pride and common interest; Kolmanskop is able to function as a true heritage site – and not just a tourist attraction.

7.3.4 Social Value

Social value acknowledges the ability of a heritage resource to enable and facilitate social connections and networks (Mason, 2002). Therefore it is also commonly understood as ‘place attachment’ or ‘cultural affiliation’. Social value was considered the least important value by the participants interviewed. This is not surprising and the reasons for it have been broadly outlined under the discussion of socio-economic context. In summary, the problems are as follows:

- Because the site falls within a mining licence area; access to Kolmanskop is strictly controlled and there is no form of public or private ownership.

- Kolmanskop has never served as a permanent settlement; therefore the former population is dispersed and the closest living community is Lüderitz, located 10km away.

- The current management and operation of Kolmanskop Ghost Town excludes neighbouring Lüderitz from any direct economic benefit and hence surrounding communities have been marginalised.

Yet to say that the abandoned site is unable to serve any social or functional use is incorrect; and it has certainly not always been the case. In 1988, the 500-year anniversary of the planting of the Dias Cross was celebrated in the Festivity Hall of the Casino building and was attended by 300 guests. Subsequently the hall was used for various festivities and New Year’s balls. (Schoeman & Kohl, 2004, p. 40). The hall remains fully functional and is famed for its acoustic qualities, yet it is now several years since any function or re-union has taken place within its walls.

South African Apartheid Government and establishment of the De Beers diamond empire might also be taken into account.
Similarly the *Kegelbahn* on the ground floor is still in full working order but lies dormant as a museum exhibit. The fully functional nine-pin bowling alley serves no social function other than the occasional game reserved for corporate entertainment of Namdeb management and guests. By contrast, the German version of skittles is still played in Lüderitz every Monday and Thursday night on a similar German bowling alley and provides a social focus for the community.

By relegating the site to the past in form of ‘ghost town’ and museum, the former community has been marginalised and links severed. Economic value has taken precedence over the town’s potential to act as social focus for all those involved in the history and development of the Namibian diamond fields. Former residents and their descendents are only invited back as paying guests. The town itself is in ruins and presented in such a way that is at odds with how people remember it. Instead, the dispersed community remains tentatively linked through entries in school, hospital and employment records. Their stories survive as detailed entries into the visitor book – yet the vast majority remain shadowy outlines and nameless.

“My grandmother and grandfather lived and worked here for 37 years. My father grew up here and did his apprenticeship in the Kolmanskop Mine. We (as children) spent most of our school holidays in Kolmanskop playing in the old buildings. My grandfather was the last white person to leave Kolmanskop in the late 50s. He used to look after the power station. The only other white people that stayed here when we were children was the Station Master and his wife. The visit has brought back fond memories to me. And I wish Kolmanskop a long recovery from being a Ghost Town.”

![Figure 44: Visitor Book Entry, 17.08.2000](Photo N Alexander, Kolmanskop Museum, 2010)

Recently a local Lüderitz resident, Giel du Toit - with family links to Kolmanskop - initiated his own research into the social histories of some of the artisans and their families. His work is displayed in the museum along with the original CDM exhibits. Such research will go some way to promoting the social value of the site and perhaps renew interest and potential in the social value of Kolmanskop.

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76 Personal Communication: Giel du Toit (11.08.2010)
In consideration of social value, the principal question is to whom does Kolmanskop belong? Is it Namdeb (as successor to Stauch’s KBG and CDM), the Ministry of Minerals and Energy (as land-owner), the Ministry of Environment and Tourism (as custodians of the Sperrgebiet National Park) or is it the nearby community of Lüderitz? And what prioritises one claim over another?

Technological and social histories are the two most important components of industrial heritage. Without knowledge of the industrial processes or of the people that worked there, the buildings survive as little more than empty shells, devoid of any meaning or significance.

Without a champion for the cause, Kolmanskop is found lacking in any cultural affiliation. Therefore it leans more toward tourist attraction than heritage resource. Clearly further research is necessary and social values should be promoted if there is any hope of restoring this balance.

7.3.5 Aesthetic Value

Aesthetic value is the most personal and individualistic of the socio-cultural value types (Mason, 2002). It relies on visual impact and an emotional response. Although this response is experienced on a very personal level; Lipe comments on how
aesthetic appreciation is conditioned and mediated by culture and social practice (Lipe, 1984).

Figure 46: Fashion Shoot, Kolmanskop
(Johan Wilke, from Rooi Rose, December 2007, pp.83 & 76)

Aesthetic value is associated to architectural significance and appreciation of art. Such concepts are not traditionally identified with industrial heritage, but Kolmanskop presents an exception in this regard. The houses built for management personnel, the recreation hall and even the commercial buildings reflect an important moment in architectural history which is consistent with the art nouveau movement which took hold of Europe at the turn of the century and was exemplified in the German *Jugendstil* movement. The buildings are excellent examples of this building type, complete with decorative mouldings and painted murals surviving in the most unlikely of locations.

Worth argues that in the South African tradition, conservation assessments are largely carried out by practising architects who “use architectural and other aesthetic criteria for establishing what is worthy of conservation” (Quaghebeur, 2000, p. 37). This was very much the case of Kolmanskop where the conservation report put forward by Peters in 1979, focussed mainly on what was considered architecturally significant with regard to the site. The industrial significance, which relies on other criteria such as technological important and social heritage, was excluded from the museum site and largely ignored.
For example the workers’ compound, considered utilitarian and of little architectural merit, has been excluded completely from the site along with its historic and social value. The Centralwäsche, in its ruined and gutted state, is considered lacking in aesthetic integrity and therefore has been discarded along with its technological value.

As referred to under the discussion of authenticity, the conservation approach adopted at Kolmanskop is consistent with the conservation theories of the Romantic Conservation movement and was based on the perceived high value of the town’s aesthetic character. The encroaching sand, wind and marks of age have lent Kolmanskop an otherworldly and ethereal character which has been so effectively captured in the photographs of Helga Kohl (Schoeman & Kohl, 2004).

![Figure 47: Plate 8, Baker’s House (Helga Kohl)](from Schoeman & Kohl, ‘Kolmanskop, Past and Present’, p.58)

Complicating the issue; this aesthetic value has been translated into a valuable commodity through the introduction of photo permits, movie hire and fashion shoots. Kolmanskop is marketed as a ‘ghost town’ inspiring evocative imagery and promising novelty to tourists and holiday-makers. In post-modern society which is so responsive to mass media and marketing imagery this becomes a powerful marketing force. Yet this commodified version of aesthetic value is increasingly at odds with the historic value and precludes the informational, symbolic and social values of the site. The visitor is left questioning, is there perhaps more to Kolmanskop than meets the eye?
7.3.6 Economic Value

Economic value has become a powerful determinant in every aspect of the decision-making process, due to the tendency of the modern world to reduce all cost and benefits to monetary terms (Lipe, 1984). Nevertheless, it should be noted that there is a certain degree of overlap between socio-cultural and socio-economic value, the main difference being in how they are assessed and measured.

![Kolmanskop - Year to date Paying Visitors](image_url)

**Figure 48: Visitor Numbers, Kolmanskop Ghost Town**
(Ghost Town Tours, 2010)

The most applicable value in this case is ‘use value’ which refers to the ability of the resource to serve a present-day need (Lipe, 1984). Use value has four potential sources of revenue: tourism, commerce, use and amenities. After historic value; economic value was widely believed to be the most important value by the respondents and was generally understood within the framework of tourism and the goods and services that flow from such opportunity.77

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77 Personal Communication: Howard Head (10.08.2010), Luffe & Iris Drukke (10.08.2010), Trygve Copper (21.07.2010), Councillor Toivo Nambala (10.09.2010)
Tourism is perceived as the fastest growing industry sector in Namibia. According to Howard Head, manager of Ghost Town Tours, Kolmanskop’s turnover accounts for 80% of the tourist economy of Lüderitz and receives 30 000 – 35 000 visitors annually. Therefore the care and conservation of the resource is not only important but represents important economic potential for the greater area.

There is a sense that at present all other values are being channelled through these economic criteria. For example; socio-cultural values that support the bottom line are emphasised (e.g. aesthetic value) while others are discarded (e.g. social value). Further, it is notable that since the site was inaugurated as a museum in 1983, very little historical research or expert studies have been undertaken yet meanwhile, economic potential has been extensively developed with the addition of a coffee shop and diamond selling room.

The graph, (Figure 48) provides an overview of visitor numbers since 2002. Visitor numbers peak at certain times of the year, namely European holidays in August – October, and South African school holidays July – August. The tremendous spike in June 2010 is accounted for by the extended South African school holidays due to the hosting of the FIFA 2010 World Cup in that country. It is illustrative of a highly profitable business venture which comprises the coffee shop, diamond selling room and daily tours which are conducted in English and in German.

One interviewee commented that although he felt economic value was of importance at Kolmanskop, its full potential had not yet been realised. At present the operation of the site as a tourist venture is perceived by some as self-serving and of benefit to only Namdeb and its concession holders. The neighbouring community of Lüderitz receive only trickle-down benefits. It is my opinion that this sentiment is compounded by the reputation of secrecy and exploitation which has been perpetuated within the diamond industry.

This is not to say that economic value is entirely negative, for example one way of addressing these issues might be to switch from a profit-value to a cost-benefit approach. The balance between economic value and socio-cultural values must be restored in order to ensure a sustainable economic future that doesn’t just address notions of tourism - but restores Kolmanskop back to the very notion of heritage itself.

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78 Personal Communication: Councillor Toivo Nambala (10.09.2010)
79 Personal Communication: Howard Head (10.08.2010)
80 Personal Communication: Cicely Head, Ghost Town Tours (10.08.2010)
81 Personal Communication: Giel du Toit (11.08.2010)
82 Personal Communication: Marion Schekle (09.08.2010)
CHAPTER 8
8.0 ASSESSMENT AND CONCLUSION
The case study at Kolmanskop illustrates the underlying tensions, and potential for dissonance, between notions of ‘tourism’ and ‘heritage’. The results of the survey show a strong support for economic value on the one side and historical value on the other. The remaining values fall somewhere in between, and are channelled in one or other direction, according to which pole exerts the dominant force.\(^\text{83}\)

With regard to definitions of industrial heritage, it is problematic that both technological and social values are perceived as having least importance among those surveyed. Technological and social significance has gradually been de-valued through marginalisation, neglect and lack of proper research. However it is worth bearing in mind, that they are not entirely lost and that cultural values can be promoted through interpretation, presentation and academic research.

![Figure 49: Entry Permit to Kolmanskop Ghost Town](image)

**Figure 49: Entry Permit to Kolmanskop Ghost Town**

What is the ‘Diamond Legacy’ and who stands to inherit?

(Ghost Town Tours, 2010)

Under Namibian legislation, Kolmanskop is not listed as a heritage place and therefore is excluded from the National Estate. In terms of ‘valuing’ the resource; there is a clear distinction between insiders and outsiders. The survey reveals that within the surrounding community, no real claimants exist. Decisions are made on an ad-hoc basis and primarily based on economic criteria with little understanding of cultural value or consultation of community interest.

This situation is aggravated by contextual factors with regard to the legislative, socio-political and socio-economic contexts. The case study at Kolmanskop clearly

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\(^{83}\) For example, historical value was initially emphasised in order to motivate for the instigation of the museum project. However, once accomplished, the economic value takes precedence in the development of the site for tourism concerns.
illustrates the strong relationship between context and societal response to the shaping of value. It also reveals the challenges inherent in heritage management, particularly with regard to management of heritage in the post-colonial context.

The skeleton (Figure 49) brandishes a sign promising “The Diamond Legacy.” What is this legacy? Who are the inheritors? And how can it be used to face the realities of our past as well as our future?

In answer to the key question of this thesis; it appears that at present Kolmanskop is regarded as tourist attraction rather than industrial heritage resource. Yet the true value of Kolmanskop resides in its acknowledgement and recognition as a primary site of industrial heritage in a post-colonial and democratic Namibia. In the opinion of this author, the principal problems hampering this potential are as the follows:

- At present, Kolmanskop exists as the construction of a German colonial and imperialist identity at the expense of artisan and Ovambo ‘underclasses’.

- Heritage values have been mobilised almost exclusively toward private enterprise and economic gain.

- And in efforts to appeal to foreign tourists, the site presents a colonial nostalgia that has little relevance to the surrounding community and primary inheritors in an independent Namibia.

Tunbridge and Ashworth indentify the need for a tourism industry more equitably balanced in terms of beneficiaries and development opportunity in order to resolve the dissonance between heritage and tourism. (Tunbridge & Ashworth, 1996, p. 247)

Through promotion of technological and social value, Kolmanskop has potential to assume relevance within the post-colonial context of democratic Namibia as an industrial heritage resource. By so doing, Kolmanskop will be able to fulfil its heritage potential as a place of ‘contestation and negotiation’ (see Shepherd, 2008); so helping to reconcile Namibia’s mining heritage within Namibian society and allowing its inheritors to take ownership of the place as a National Heritage site.

In identifying key principles implicit to the idea of management of resources for sustainable development, Tunbridge and Ashworth identify that resources should be valued for more than their immediate use in an economic productive system. Further, to ensure attainment of output equities, balances should be struck between

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84 This might be achieved through interpretation, presentation and academic research as well as extensive consultation and work-shopping interested parties and the surrounding community.
economic sectors, social groups, special political entities and above all, human generations (Tunbridge & Ashworth, 1996).

Recognition of Kolmanskop as an industrial heritage site will ensure its continued relevance and sustainability as part of the National Estate of Namibia. It will also raise conservation awareness of not only the natural environment, but also the industrial landscape, of the Spergebiet National Park. Such an integrated approach should include the associated towns of Lüderitz and Oranjemund, thereby putting forward a development plan for the entire region, which strikes a balance between the promotion of cultural heritage and sustainable tourism.
9.0 LIST OF SOURCES


### 9.1 ARCHIVAL SOURCES

Album Herta Schneider (Private Collection of Marion Schekle)

Kolmanskop Museum

Lüderitz Museum

Mineral Resources Department, Namdeb (Oranjemund)

National Archive of Namibia, Windhoek

Oranjemund Museum

Sam Cohen Library, Swakopmund
<table>
<thead>
<tr>
<th>DATE</th>
<th>INDIVIDUAL, ORGANISATION &amp; EMAIL</th>
<th>INTEREST OR INVOLVEMENT AT KOLMANSKOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.08.2010</td>
<td>Ophelia Netta</td>
<td>The Namdeb Foundation is a Corporate Social Investment Vehicle. The support of heritage and the conservation/ restoration of Kolmanskop is seen as a way of ensuring support for the Karas Region and labour servicing communities of the North. Namdeb has a long affiliation with KK through its predecessor CDM.</td>
</tr>
<tr>
<td>09.08.2010</td>
<td>Howard Head / Ghost Town Tours, Luderitz</td>
<td>Presently holds concession to conduct tours of Kolmanskop on behalf of Namdeb. The company ensures the smooth operation of tours and events within the mining licence area, on behalf of Namdeb. Therefore no direct involvement with Kolmanskop but similarly involved in tourism opportunities presented by the industrial heritage of the Sperrgebiet.</td>
</tr>
<tr>
<td>09.08.2010</td>
<td>Lufie &amp; Iris Druke / Coastways Tours, Luderitz</td>
<td>Presently holds concession to operate tours to Pomona and Bogenfels, which are located within the mining licence area, on behalf of Namdeb. Therefore no direct involvement with Kolmanskop but similarly involved in tourism opportunities presented by the industrial heritage of the Sperrgebiet.</td>
</tr>
<tr>
<td>10.08.2010</td>
<td>Giei du Toit / House No.7 Gallery, Kolmanskop</td>
<td>Manages an art gallery and photography studio from Kolmanskop Ghost Town on agreement with Namdeb. Father worked at KK from 1931-1939, and returned 1943-1952. Giei presently involved in research into social histories of families that worked on the diamond fields.</td>
</tr>
<tr>
<td>09.08.2010</td>
<td>Marion Schell / Luderitz Safaris and Tours, Luderitz</td>
<td>Third generation 'Buchler' (born Weiss) with a special interest in the preservation and up-keep of Kolmanskop as a tourist attraction with emphasis on its historical importance.</td>
</tr>
<tr>
<td>PENDING</td>
<td>Samson Mulonga, Keetmanshoop / Strengthening the Protected Area Network</td>
<td>SKEP is a project initiated by the Ministry of Environment and Tourism to provide management support for the Sperrgebiet National Park</td>
</tr>
<tr>
<td>21.07.2010</td>
<td>Tryve Cooper, Senior Warden / Sperrgebiet National Park, Oranjemund</td>
<td>Kolmanskop is situated at entrance to the Sperrgebiet National Park and incorporates the Oaita Environmental Centre. It is proposed that a MET Park Info Centre will also be located within Kolmanskop itself which serves as an entrance to the park.</td>
</tr>
<tr>
<td>21.07.2010</td>
<td>Dieter Noli / Archaeologist, Cape Town / Oranjemund</td>
<td>Contracted by Namdeb to study the archeology of the Sperrgebiet since 1995 and spent two years working full-time at Kolmanskop conducting tours therefore good knowledge of the site.</td>
</tr>
<tr>
<td>10.09.2010</td>
<td>Dr. Gabi Schneider / National Heritage Council of Namibia</td>
<td>Economic geologist and member of the Namibian Heritage Council. Dr. Schneider has published a book on the diamond mines of Namibia which was published in 2009, the centennial year of the declaration of the Sperrgebiet.</td>
</tr>
<tr>
<td>PENDING</td>
<td>Jeremy Silvester / Museums Association of Namibia</td>
<td>Mr. Silvester is familiar with the towns of Luderitz and Kolmanskop. He has consulted to Namdeb regarding the appropriate development of Kolmanskop Ghost Town and the MAN presently provides support to the NHC in the compilation of the National Heritage Register.</td>
</tr>
<tr>
<td>10.09.2010</td>
<td>Councillor Toivo Nambara / Karas Regional Council, Oranjemund</td>
<td>Regional Councillor for the Karas Region of Namibia. Councillor Nambara started working for CDM in 1968 and therefore has a long association with the company and is therefore familiar with the history of both towns (Kolmanskop and Oranjemund).</td>
</tr>
<tr>
<td>09.08.2010</td>
<td>CEO, Inge Ipinge / Luderitz Town Council, Luderitz</td>
<td>Although Kolmanskop falls outside of the Luderitz Municipality area, its development as a heritage site is seen as important to the economic development and support of tourism in Luderitz.</td>
</tr>
</tbody>
</table>
APPENDIX B: DEMOGRAPHIC DATA SHEET

DEMOGRAPHIC DATA INFORMATION SHEET

Name: 
Date:  

Age:  Below 25 / 26 – 45 / 46 – 65 / Over 65

Company or Organisation: 
Address: 

Contact Nos: 
Email Address: 

State your interest in Kolmanskop: 
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

Do you regard yourself as an insider / outsider? Are you are empowered to make decisions about the site and briefly explain your involvement and responsibilities? 
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
APPENDIX C: INTERVIEW QUESTIONS

KOLMANSKOP: ASSESSMENT OF SIGNIFICANCE / QUESTIONNAIRE

1. Would you describe Kolmanskop as a ‘ghost’ town or a ‘living’ town?
   - Please briefly explain your answer?

2. The following values are usually associated with heritage sites, and are used to determine levels of significance:
   ✓ Historical / Educational Value
   ✓ Aesthetic Value
   ✓ Social Value
   ✓ Technological / Scientific Value
   ✓ Ecological Value
   ✓ Economic Value

   With regard to Kolmanskop,
   - Are there any values which in your opinion do not belong on this list?
   - What do you consider the most important value – and why?
   - What do you consider the least important value – and why?

3. The following are not included in the “Kolmanskop Ghost Town” experience and these areas are presently inaccessible to visitors:
   ✓ The Centralwasche (old plant) and ‘native’ compound to the south.
   ✓ The ‘native’ hospital and associated buildings to the east.
   ✓ The warehouses, workshop and transformer building running alongside the entrance road to the east.
   ✓ The original Kolmanskop Station and disused railway lines / networks.

   - Do you think any of these areas should be specifically included in the site? - And why?
   - Do you think any of these areas should be specifically excluded from the site? - And why?
4. For you personally, briefly list the key aspects that contribute to Kolmanskop’s unique character and sense of place?

Of the above, what aspect of Kolmanskop do you feel should be conserved as a matter of priority, and passed on to the next generation for their benefit?

5. ‘Kolmanskop Ghost Town’ is located very close to the ‘Living Town’ of Lüderitz:

- Does Kolmanskop’s proximity to Lüderitz enhance or diminish the values of the place? Or is it seen as independent?
- In your opinion, does the proposed development of the Lüderitz Power Station have any relationship or bearing on Kolmanskop? If so, then how?

6. Kolmanskop is also located within the Sperrgebiet National Park:

- Does the context of the Sperrgebiet National Park enhance or diminish the values of Kolmanskop? Or is it seen as independent?
- Do you regard the mining towns of Kolmanskop, Elizabeth Bay and Pomona as part of the same system, or should they be treated independently of one another?
- Do you promote the present treatment of ‘Kolmanskop Ghost Town’ as a good precedent, or would you treat those other towns differently?
- If differently, then briefly describe what other uses do you imagine for this heritage?

7. Do you regard the present challenges facing Oranjemund as part of the same story as that of Kolmanskop – or should it be regarded as part of a different history entirely?
APPENDIX D: MAPPING OF VALUE DATA
APPENDIX E: EXAMPLE OF ANNOTATED INTERVIEW SHEET

NOTE: EDUCATION IMPERATIVE — PEOPLE ONLY VALUE WHAT THEY UNDERSTAND AND KNOW.

KOLMANSKOP: ASSESSMENT OF SIGNIFICANCE / QUESTIONNAIRE

1. Would you describe Kolmanskop as a ‘ghost’ town or a ‘living’ town? Right now, a ghost town — challenge is to convert it to a ‘living’ legacy — of interest to tourists, can never be turned back into a living town again in true sense of the word.

- Please briefly explain your answer?

2. The following values are usually associated with heritage sites, and are used to determine levels of significance:

- Historical / Educational Value
- Aesthetic Value
- Social Value
- Technological / Scientific Value
- Ecological Value
- Economic Value

With regard to Kolmanskop:

- Are there any values which in your opinion do not belong on this list? All important — but further research needed.
- What do you consider the most important value — and why? Historical / Education (that is what you are trying to drive)
- What do you consider the least important value — and why? Very difficult to say.
- the one you last — that have you never been affected

3. The following are not included in the “Kolmanskop Ghost Town” experience and these areas are presently inaccessible to visitors:

- The Centralwashe (old plant) and ‘native’ compound to the south — very little left — “mining licence holders — need op- ahead from mining — disposal — security issues”
- The ‘native’ hospital and associated buildings to the east — in ruins (hospitals)
- The warehouses, workshop and transformer building — running alongside the entrance road to the east.
- The original Kolmanskop Station and disused railway lines / networks / ticket office & gate (main entrance is at the field school)
- Do you think any of these areas should be specifically included in the site? And why?
- Do you think any of these areas should be specifically excluded from the site? And why?

4. For you personally, briefly list the key aspects that contribute to Kolmanskop’s unique character and sense of place?

Nicola Alexander, Dissertation Research Project

July – August 2010 / Page 1 of 2
• Tech/Scientific: Stake (Plant Interest) but effort needs to be made to expand knowledge based on research.

• Ecological: Measure and value of environment tree into KN/SLP.

• Economic: also very important - need to hit right balance ... should achieve positive economic impact for LIChEte by addressing tourism opportunities. (Add value and also need to consider SLP).
5. Of the above, what aspect of Kolmanskop do you feel should be conserved as a matter of priority, and passed on to the next generation for their benefit?

6. 'Kolmanskop Ghost Town' is located very close to the 'Living Town' of Luderitz:
   - Does Kolmanskop's proximity to Luderitz enhance or diminish the values of the place? Or is it seen as independent?
   - In your opinion, does the proposed development of the Luderitz Power Station have any relationship or bearing on Kolmanskop? If so, then how?

7. Kolmanskop is also located within the Sperrgebiet National Park:
   - Does the context of the Sperrgebiet National Park enhance or diminish the values of Kolmanskop? Or is it seen as independent?

8. Do you promote the present treatment of 'Kolmanskop Ghost Town' as a good precedent, or would you treat those other towns differently?
   - If differently, then briefly describe what other use do you imagine for this heritage?

8. Do you regard the present challenges facing Oranjemund as part of the same story as that of Kolmanskop — or should it be regarded as part of a different history entirely?

   - Magic of 'KK prewar/first diamond
   - Second different era: pre-independence/post-independence. C. developed differently and went on from that time.
APPENDIX F:

THE NIZHNY TAGIL CHARTER FOR THE INDUSTRIAL HERITAGE, 2003
The Nizhny Tagil Charter for the Industrial Heritage
The International Committee for the Conservation of the Industrial Heritage (TICCIH)
17 July, 2003

TICCIH is the world organisation representing industrial heritage and is special adviser to ICOMOS on industrial heritage. The text of this charter was passed by the assembled delegates at the triennial National Assembly of TICCIH held in Moscow on 17 July, 2003.

Preamble

The earliest periods of human history are defined by the archaeological evidence for fundamental changes in the ways in which people made objects, and the importance of conserving and studying the evidence of these changes is universally accepted. From the Middle Ages, innovations in Europe in the use of energy and in trade and commerce led to a change towards the end of the 18th century just as profound as that between the Neolithic and Bronze Ages, with developments in the social, technical and economic circumstances of manufacturing sufficiently rapid and profound to be called a revolution. The Industrial Revolution was the beginning of a historical phenomenon that has affected an ever-greater part of the human population, as well as all the other forms of life on our planet, and that continues to the present day.

The material evidence of these profound changes is of universal human value, and the importance of the study and conservation of this evidence must be recognised. The delegates assembled for the 2003 TICCIH Congress in Russia wish therefore to assert that the buildings and structures built for industrial activities, the processes and tools used within them and the towns and landscapes in which they are located, along with all their other tangible and intangible manifestations, are of fundamental importance. They should be studied, their history should be taught, their meaning and significance should be probed and made clear for everyone, and the most significant and characteristic examples should be identified, protected and maintained, in accordance with the spirit of the Venice Charter, for the use and benefit of today and of the future.

1 The ICOMOS ‘Venice Charter for the Conservation and Restoration of Monuments and Sites’, 1964

1. Definition of industrial heritage

Industrial heritage consists of the remains of industrial culture which are of historical, technological, social, architectural or scientific value. These remains consist of buildings and machinery, workshops, mills and factories, mines and sites for
processing and refining, warehouses and stores, places where energy is generated, transmitted and used, transport and all its infrastructure, as well as places used for social activities related to industry such as housing, religious worship or education. Industrial archaeology is an interdisciplinary method of studying all the evidence, material and immaterial, of documents, artefacts, stratigraphy and structures, human settlements and natural and urban landscapes, created for or by industrial processes. It makes use of those methods of investigation that are most suitable to increase understanding of the industrial past and present.

The historical period of principal interest extends forward from the beginning of the Industrial Revolution in the second half of the eighteenth century up to and including the present day, while also examining its earlier pre-industrial and proto-industrial roots. In addition it draws on the study of work and working techniques encompassed by the history of technology.

2. Values of industrial heritage

i. The industrial heritage is the evidence of activities which had and continue to have profound historical consequences. The motives for protecting the industrial heritage are based on the universal value of this evidence, rather than on the singularity of unique sites.

ii. The industrial heritage is of social value as part of the record of the lives of ordinary men and women, and as such it provides an important sense of identity. It is of technological and scientific value in the history of manufacturing, engineering, construction, and it may have considerable aesthetic value for the quality of its architecture, design or planning.

iii. These values are intrinsic to the site itself, its fabric, components, machinery and setting, in the industrial landscape, in written documentation, and also in the intangible records of industry contained in human memories and customs.

iv. Rarity, in terms of the survival of particular processes, site typologies or landscapes, adds particular value and should be carefully assessed. Early or pioneering examples are of especial value.

For convenience, 'sites' will be taken to mean landscapes, complexes, buildings, structures and machines unless these terms are used in a more specific way.

3. The importance of identification, recording and research
i. Every territory should identify, record and protect the industrial remains that it wants to preserve for future generations.

ii. Surveys of areas and of different industrial typologies should identify the extent of the industrial heritage. Using this information, inventories should be created of all the sites that have been identified. They should be devised to be easily searchable and should be freely accessible to the public. Computerisation and on-line access are valuable objectives.

iii. Recording is a fundamental part of the study of industrial heritage. A full record of the physical features and condition of a site should be made and placed in a public archive before any interventions are made. Much information can be gained if recording is carried out before a process or site has ceased operation. Records should include descriptions, drawings, photographs and video film of moving objects, with references to supporting documentation. Peoples’ memories are a unique and irreplaceable resource which should also be recorded when they are available.

iv. Archaeological investigation of historic industrial sites is a fundamental technique for their study. It should be carried out to the same high standards as that of sites from other historical or cultural periods.

v. Programmes of historical research are needed to support policies for the protection of the industrial heritage. Because of the interdependency of many industrial activities, international studies can help identify sites and types of sites of world importance.

vi. The criteria for assessing industrial buildings should be defined and published so as to achieve general public acceptance of rational and consistent standards. On the basis of appropriate research, these criteria should be used to identify the most important surviving landscapes, settlements, sites, typologies, buildings, structures, machines and processes.

vii. Those sites and structures that are identified as important should be protected by legal measures that are sufficiently strong to ensure the conservation of their significance. The World Heritage List of UNESCO should give due recognition to the tremendous impact that industrialisation has had on human culture.

viii. The value of significant sites should be defined and guidelines for future interventions established. Any legal, administrative and financial measures that are necessary to maintain their value should be put in place.
ix. Sites that are at risk should be identified so that appropriate measures can be taken to reduce that risk and facilitate suitable schemes for repairing or re-using them.

x. International co-operation is a particularly appropriate approach to the conservation of the industrial heritage through co-ordinated initiatives and sharing resources. Compatible criteria should be developed to compile international inventories and databases.

4. Legal protection

I. The industrial heritage should be seen as an integral part of the cultural heritage in general. Nevertheless, its legal protection should take into account the special nature of the industrial heritage. It should be capable of protecting plant and machinery, below-ground elements, standing structures, complexes and ensembles of buildings, and industrial landscapes. Areas of industrial waste should be considered for their potential archaeological as well as ecological value.

II. Programmes for the conservation of the industrial heritage should be integrated into policies for economic development and into regional and national planning.

III. The most important sites should be fully protected and no interventions allowed that compromise their historical integrity or the authenticity of their fabric. Sympathetic adaptation and re-use may be an appropriate and a cost-effective way of ensuring the survival of industrial buildings, and should be encouraged by appropriate legal controls, technical advice, tax incentives and grants.

IV. Industrial communities which are threatened by rapid structural change should be supported by central and local government authorities. Potential threats to the industrial heritage from such changes should be anticipated and plans prepared to avoid the need for emergency actions.

V. Procedures should be established for responding quickly to the closure of important industrial sites to prevent the removal or destruction of significant elements. The competent authorities should have statutory powers to intervene when necessary to protect important threatened sites.

VI. Government should have specialist advisory bodies that can give independent advice on questions relating to the protection and conservation of industrial heritage, and their opinions should be sought on all important cases.
VII. Every effort should be made to ensure the consultation and participation of local communities in the protection and conservation of their local industrial heritage.

VIII. Associations and societies of volunteers have an important role in identifying sites, promoting public participation in industrial conservation and disseminating information and research, and as such are indispensable actors in the theatre of industrial heritage.

5. Maintenance and conservation

I. Conservation of the industrial heritage depends on preserving functional integrity, and interventions to an industrial site should therefore aim to maintain this as far as possible. The value and authenticity of an industrial site may be greatly reduced if machinery or components are removed, or if subsidiary elements which form part of a whole site are destroyed.

II. The conservation of industrial sites requires a thorough knowledge of the purpose or purposes to which they were put, and of the various industrial processes which may have taken place there. These may have changed over time, but all former uses should be examined and assessed.

III. Preservation in situ should always be given priority consideration. Dismantling and relocating a building or structure are only acceptable when the destruction of the site is required by overwhelming economic or social needs.

IV. The adaptation of an industrial site to a new use to ensure its conservation is usually acceptable except in the case of sites of especial historical significance. New uses should respect the significant material and maintain original patterns of circulation and activity, and should be compatible as much as possible with the original or principal use. An area that interprets the former use is recommended.

V. Continuing to adapt and use industrial buildings avoids wasting energy and contributes to sustainable development. Industrial heritage can have an important role in the economic regeneration of decayed or declining areas. The continuity that re-use implies may provide psychological stability for communities facing the sudden end a long-standing sources of employment.

VI. Interventions should be reversible and have a minimal impact. Any unavoidable changes should be documented and significant elements that are removed should be recorded and stored safely. Many industrial processes confer a patina that is integral to the integrity and interest of the site.
VII. Reconstruction, or returning to a previous known state, should be considered an exceptional intervention and one which is only appropriate if it benefits the integrity of the whole site, or in the case of the destruction of a major site by violence.

VIII. The human skills involved in many old or obsolete industrial processes are a critically important resource whose loss may be irreplaceable. They need to be carefully recorded and transmitted to younger generations.

IX. Preservation of documentary records, company archives, building plans, as well as sample specimens of industrial products should be encouraged.

6. Education and training

I. Specialist professional training in the methodological, theoretical and historical aspects of industrial heritage should be taught at technical and university levels.

II. Specific educational material about the industrial past and its heritage should be produced by and for students at primary and secondary level.

7. Presentation and interpretation

I. Public interest and affection for the industrial heritage and appreciation of its values are the surest ways to conserve it. Public authorities should actively explain the meaning and value of industrial sites through publications, exhibitions, television, the Internet and other media, by providing sustainable access to important sites and by promoting tourism in industrial areas.

II. Specialist industrial and technical museums and conserved industrial sites are both important means of protecting and interpreting the industrial heritage.

III. Regional and international routes of industrial heritage can highlight the continual transfer of industrial technology and the large-scale movement of people that can be caused by it.

Eusebi Casanelles
President TICCIH

Eugene Logunov
TICCIH XII International Congress
Nizhny Tagil, 2003