

CHAPTER FOUR: THE CHARACTER OF CULTURAL LANDSCAPES IN SOUTH AFRICA

4.1 Sub-problem Three - How can cultural landscapes within the South African context be characterised?

The literature search addresses various ways in which South African landscapes can be characterised.

4.1.1. Understanding characterisation.

A central question is whether man (humans) should be considered a part of nature (landscape) or creatures apart. This relationship has been explored in literature in exhaustive detail. During the Renaissance nature was considered a system of resources which man could modify and transform as he pleased.¹⁴⁵ With growing scientific control over the world, the view that nature was subservient to man became predominant and was not only absorbed into western capitalist society but expanded to Russia and China in the decades after World War Two.¹⁴⁶ However, opposition to this rather cavalier view had already begun in the 18th-century, and later in 1864 the first work detailing the affects of man's destructiveness, G.P. Marsh's *Man and Nature*¹⁴⁷ was published. Marsh drew attention in his book to the crucial fact that nature in its original state, as man inherited it, was not able to support civilisation. Marsh's views did not receive wide attention again until the 1960s when a discernible political and philosophical ideology which has been loosely termed the "environmental movement" emerged. After humans saw the earth from space for the first time there was a global change in the attitude of humans towards the earth and its fragility.

Fernández-Armesto¹⁴⁸ suggests a system of classification for civilisations. He says that civilisations can be described according to their geographic locations and the landscape within which they live (environment). Fernández-Armesto gives four principle reasons for classifying civilisations according to environment.¹⁴⁹ These are:

- a. *First it represents a change of perspective by comparison with the usual angles of approach. Because every new vantage point extends vision.*
- b. *Second , environment - although driven by boundaries which are matters of*

¹⁴⁵ Jellicoe & Jellicoe. 1995. p 154-163

¹⁴⁶ Jellicoe & Jellicoe. 1995. p 320-321

¹⁴⁷ Marsh. 1864. 1965, 1974

¹⁴⁸ Fernández-Armesto. 2001. p. 31

¹⁴⁹ Fernández-Armesto. 2001. p. 35

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subjective judgement - is real and objective: rain and sand, heat and cold, forest and ice can be seen or felt and their intensity measured. Other methods of classification result in rankings determined by the beholder's sympathies.

- c. *Thirdly, because civilisation was coined in the 18th century Europe in the course of men's attempts to distance themselves from the rest of nature - a project of self-domestication.*
- d. *Finally, because the very act of classifying civilisations environmentally reveals truths: that they are neither determined nor uninfluenced by environment, that civilisations start in a specific environment but can sometimes conquer, colonise, or cross others, and the people of diverse provenance have excelled as civilisers in different conditions*

These four classifications may be relevant to autochthonous conditions, but to characterise landscape one has to understand how people perceive and use landscapes. For example, to characterise a landscape for its mining potential is quite different from characterising it for recreational potential or scenic character. To "characterise" means to describe or portray the particular qualities, features, or traits.¹⁵⁰ As a guideline for use, we can look towards J.B Jackson¹⁵¹ who in founding the journal "Landscape" (1951), the trade magazine dedicated to landscape interpretation, took as a guiding principle the notion that landscape is to be read and interpreted according to function rather than merely appraised visually. Mere seeing was deemed less important than understanding landscapes as lived-in places. Real comprehension grew from awareness of function in the identification of cultural, social, economic, and political contexts.

It is thus necessary to understand the interrelated components that constitute a particular landscape before one can successfully characterise it. For the purpose of this thesis the components of how people relate to the landscape are divided into five broad categories as mainly deduced from Smith¹⁵², and will be dealt with under each heading.

- a. People observing - thus visual perception
- b. People growing or breeding - thus agricultural crop production or animal husbandry
- c. People conquering or defending - thus protection or defence
- d. People living - thus human settlement, ancillary uses and recreation
- e. People digging or mining - thus extraction of resources and deposition of waste

¹⁵⁰ Guralnik 1980.

¹⁵¹ Jakle. 1987.p.x

¹⁵² Smith. 1992

4.1.2. Visual perception

In considering the aesthetics of landscape, the challenge lies in how people experience the relationship between their lives and the world of biophysical processes. When the biophysical environment is recognised as patterns, continuity, complexity, elaboration and variations, it is cognitively pleasing to humans. Plato and Socrates¹⁵³, first debated beauty and aesthetics based on questions of their day. Harmonics and the relationship between music and mathematics - later described as aesthetics - were understood and explained by Plato. It was not until 1790 that the philosopher Alexander Baumgarten¹⁵⁴ coined the term "aesthetics" from the Greek term 'aisthetikos' meaning 'sensory perception'. Landwehr¹⁵⁵ defines aesthetic appreciation as

the accounting for any environment-behaviour relationship in terms of beauty -

thus aesthetic appreciation can also be of everyday environments, whether these are biophysical or urban landscapes.

Our ability to appreciate beauty (*truth* as indicated by Plato) originates in our parents' gene pool. However, we quickly define our sense of "self" and of "home" by what we see - we live through our eyes, and we build personal preferences by imaging. Hillman¹⁵⁶ ties ideas to seeing and then states that

all ways of an enlightened soul... arise from the psyche's need for vision.

Thus for us to sense, understand or appreciate we need to form an idea regarding the concept or we need to see it. Wim Wenders¹⁵⁷ says that:

unfortunately, with age we learn to forget the knowledge of our childhood, which evoked emotion, associations, ideas and stories.

Maybe we do not lose the qualities of our childhood, but that they are transposed to a subconscious level. We have become conditioned to the world of adults and lost the spontaneity of our childhood. However, because our seeing and appreciating relate to a chemical, and thus biological composition we continue to draw on those qualities obtained as children, when we judge the aesthetic value of something or someone.

Current perceptions and functions of landscapes may vary significantly as discussed by Fiedeldey and his associates¹⁵⁸ at the University of Pretoria. Their environmental psychology work gives the clearest indication of South African's current perceptions of their environments. They state that in South Africa, with its heterogeneous society, both distinct and subtle differences in experiencing the environment can be expected between socio-

¹⁵³ Cooper. 1997.

¹⁵⁴ Eaton. 1988.

¹⁵⁵ Landwehr. 1990.

¹⁵⁶ Hillman. 1989. p. 55

¹⁵⁷ Wenders. 1992.

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economic and cultural groupings. They say that the rich respective mixture of Western, Eastern, and African cosmologies in South Africa is likely to contribute to a mosaic of ways in which people relate to the environment.

During the 1997 study by Fiedeldey and his associates¹⁵⁹, data were gathered from four different language groups (English, Zulu, Southern Sotho, and Afrikaans) in the Gauteng province by means of the Perception and Assessment of Global Environmental Change (PAGEC) questionnaire. This questionnaire had been used in the United States, Germany, Russia, India, Turkey and Nigeria in similar studies, (dates unknown). The questionnaire consists of 19 structured and 21 unstructured or open-ended questions and deals with issues such as:

- a. the meaning of the concept 'environment',
- b. perceived environmental change,
- c. perceived environmental problems,
- d. environmental information acquisition,
- e. environmental concern,
- f. environmental policy making,
- g. environmental and development issues, and
- h. environmental values.

Some of the findings of the South African study were that the concept "environment" remains a primarily physical environment in the minds of most respondents in the sample, and particularly a biophysical physical environment. However, some results indicate that the environment is also understood to be a social concept, although significantly less so. The majority of respondents do not appear to see the environment as being of intrinsic value. Indications of the importance of a care taking relationship appear to be based on the benefit of such a relationship for people, rather than for the person-environment system. A hierarchical, rather than eco-centric, structure still seems to underlie this reasoning, with the biophysical environment seen as subservient to humankind.

A study of the potentially significant differences between the various cultural groupings in South Africa in relation to world-views, language use and language meanings and their daily life experiences also have methodological implications. Not only does the method, therefore, have to fit the problem; it also has to fit the specific group or subgroup from which data are required. This refers to the requirement of context specificity and context sensitivity.

¹⁵⁸ Fiedeldey, Craffert, Fiedeldey-van Dyk, Marais, van Staden, Willers, 1997.

¹⁵⁹ Fiedeldey, Craffert, Fiedeldey-van Dyk, Marais, van Staden, Willers, 1997.

The research group led by Fiedeldey¹⁶⁰ further concluded that because the environment represents various psychological values for humans, a further investigation to understand the patterns of environmental distinctions that South Africans draw, the context in which they learn to draw such distinctions, and the value that such distinctions have for them would prove useful.

In an earlier study of the relationship of humans to their (biophysical and/or man-made) environment, Fiedeldey¹⁶¹ reviews the most salient findings from psychological research on human perception and aesthetic appreciation of outdoor environments. Within the paper culture is identified as an attribute of the environment. The study states that:

certain attributes and characteristics of landscapes that enhance aesthetic evaluations of a given environment can be identified and measured

(for example the importance of the presence of water, biophysical elements, the context of cultural features, agricultural elements, landform, land use and other.)

Without re-investigating the field of aesthetic appreciation and the relationship between culture and aesthetics, it is important to note how aesthetic appreciation is defined. It should however, be noted that cultural landscapes are clearly not only aesthetic landscapes but also that in understanding the aesthetic attraction of landscapes one may begin to identify all the aspects of attraction to land.

The complexity of the visual field is not measured directly, but through a human perception "filter". Kaplan and Kaplan's¹⁶² work is typical of this approach and has suggested strong relationships between perceived beauty and complexity within a theoretical framework of human information processing. Furthermore, Bishop and Leahy,¹⁶³ as discussed by Fiedeldey, employed simple computer algorithms to develop measures of visual complexity. The resulting number values were compared with judgements of perceived scenic beauty, but without any clear conclusion.

The links between visual complexity, ecological diversity and perceived beauty have been discussed but little empirical work has looked at those relationships. Visual preference surveys (VPS) first developed in the United States by Nelessen¹⁶⁴ at Rutgers University combines these aspects to determine the preferences of individuals towards a particular

¹⁶⁰ Fiedeldey, Craffert, Fiedeldey-van Dyk, Marais, van Staden, Willers, 1997

¹⁶¹ Fiedeldey. 1995

¹⁶² Kaplan & Kaplan. 1982.

¹⁶³ Fiedeldey. 1995.

¹⁶⁴ Nelessen. 1997.

landscape.

Several models of scenic quality are based on an assumed correlation between visual complexity and increasing aesthetic quality (for example Daniel and Vining, 1983; Zube, Sell, and Taylor, 1982). Development of these models was influenced by relationships in ecology, especially the diversity=stability relationship described by terrestrial ecologists, which proposed that increasing ecological diversity is correlated with increasing stability, and hence with environmental quality.

A study completed by James A. Lynch and Randy H. Gimblett¹⁶⁵ at Ball State University used the 'Information Processing Model' proposed by Kaplan and Kaplan (1982) to test their model. The model they developed looked at validating a refined definition of mystery and developed a quantitative procedure for predicting and mapping mystery in the rural Indiana landscape. Ninety (90) colour slides of rural landscape scenery were presented to twenty-six (26) respondents who rated each photograph on a five point scale for the aspect of mystery. Multi-Dimensional Scaling (MDS) was used to confirm both the degree of mystery in the photographs and the dimensions affecting the perception of mystery. Landscape composition classes were used to discover the interrelationships of the mystery dimensions and the physical landscape variables affecting their perception. These perceived variables were subsequently used to establish physical landscape measures for mapping the four dimensions of mystery. They reported that the results of the research strongly supported the Kaplan's 'Information Processing Model' as a reliable, comprehensive theoretical foundation for improving landscape assessment procedures.

The latest information that could be found on the subject is a model similar to that of Nelessen. Brian Orland, Edward Weidemann, Larissa Larsen, and Paul Radja¹⁶⁶ designed a model to compare human perceptions of scenic beauty, human perceptions of visual complexity, and machine measurements of visual complexity.

They concluded that more research is needed. They firstly found that while the computer measurements appear to be valid, they remain unsure about what ought to be measured to capture the visual differences that trigger human subjective responses. Secondly, it was disturbing to them that while perceived complexity seems so consistently related to perceived beauty, the measure bears no relationship to the image-based physical measurement. If there is an absence of a commonly used conception of scenic complexity are human respondents not simply doing what they are used to doing - rating their

¹⁶⁵ Lynch, Gimblett, 1992. pp. 453-471.

¹⁶⁶ Orland, Weidemann, Larsen, Radja, 1997

underlying preference for the scenes?

4.1.3. Agricultural - animal husbandry and crop production.

Until colonisation (dominance of a monetary unit based economic system) by Westerners who quickly took a "guardian" or "master-servant" role towards African inhabitants, the local people grew their own crops and bred their own animals. The provision of food has been one of the cornerstones of the community and the responsibility of the group towards themselves, regardless of their being hunters, gatherers, herders or farmers. Sometimes thieving between tribes were practiced as a display of superiority. Agriculture in Africa has been slow in changing and has remained largely subsistence agriculture of low intensity with a symbiotic relationship between agriculturists and herders. To this day, some people in Africa are sedentary while others have remained nomadic.

Andrew B. Smith¹⁶⁷ begins with his book *Pastoralism in Africa*, discussing the relationship of man to the land. He says that the complexities of relationship of man to the land and animals underline the importance of an ecological relationship in prehistory. He gives an historical account of the development of pastoralism in Africa and its adaptation to the open grassland, which covers large parts of the continent.

When looking to pre-colonial times, one may see the agricultural landscape divided into interrelated functional units according to who use similar resources, such as hunter/ collector, herder/ fisher or agriculturist/ herders. Herders will use the same resources as hunter/ foragers but will have the additional benefit of a sustained yield in the form of meat and milk from their domestic herds, leaving a layered evidence of use on the landscape.

In understanding the effective use of the resources, Smith¹⁶⁸ indicates that pastoralism has been the most effective means of resource exploitation and land uses in the grassland of Africa. He says that collecting is ultimately more efficient than hunting, pastoralism more efficient than either of them, and agriculture, although input costs of field preparation are high, will ultimately outperform all other survival strategies. Both hunting and gathering have definitive yield limits. The potential yield is seen as being higher for gathering than for hunting because the standing biomass of animal populations is but a fraction of the standing biomass of plants.

With regard to bucolic changes in South Africa, the expansion from East Africa of the pastoral way of life had to await a change in climate and accompanying environmental

¹⁶⁷ Smith, 1992. p. xii

¹⁶⁸ Smith, 1992 p.9

conditions. This occurred with a decrease in rainfall sometime after 4500 BP. The result of this was a south-westward retreat of the savannah woodland and thus the tsetse breeding habitat. The fire-based ecosystem of the present pastoral people commenced simultaneously. It is interesting to note that this change did not necessarily mean that the tribes in southern Africa changed from hunters to herders. The mechanism by which this change occurred in southern Africa is not known. Smith says that given a choice, hunters will not become herders.¹⁶⁹ The more common occurrence, for a group that does not succeed in becoming an independent food-producing community, is a shift towards a master-servant relationship and, ultimately, assimilation as low class members.

The spread of iron-using people into southern Africa was the mechanism for the earliest appearance of domestic stock and ceramics south of the Zambesi River. Smith suggests that although we are not sure how this occurred, we can be sure that the relationship between agropastoralists and indigenous hunter/foragers was crucial. At least three possible sources of domestic stock and ceramics have been proposed, resulting in a confusion about which segments of the migrating populations were moving southwards. Smith proposes¹⁷⁰ that the most viable suggestion for the spread of domestic animals southward, is the connection that was established between eastern Africa and southern Africa. This movement coincides with the iron-using people spreading into the land already occupied by the San, and the exchange of flocks of small stock. This is significant since it explains why the earliest domesticated animals found further south in Namibia and the Cape were sheep. Wilson says¹⁷¹ that the importance of sheep in ritual, supports the view that the Khoikhoi may have been shepherds before they were cattle herders. Although some of them had cattle well before 1488, when Europeans first encountered them, cattle herders had not lived for many generations before that in the Western Cape, though shepherds doubtless did so.

The adaptive strategies of early African pastoralism were based, as today, on the fluctuating environmental conditions of the grasslands. The widespread evidence of herding societies in areas currently devoid of sufficient vegetation to support grazing animals suggests that conditions for pastoralism were better in the past than today. With grazing and feeding the animals, watering the animals is a major part of any herder's work, particularly in the dry season. During the dry season underground water supplies are tapped by wells, some of them as deep as fifty (50) metres. This means using the animals for draught to draw water. The water is shed into troughs for the animals to drink. A number

¹⁶⁹ Smith, 1992 p. 82

¹⁷⁰ Smith, 1992 p. 83

¹⁷¹ Smith, 1992 p 97

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of families will share ownership of both the well and pulley system. This means that access to the water is only by consent of the corporate group which has a pulley.

In some areas where foreign aid has built mechanised boreholes, water is pumped continuously. This allows many more animals to be easily watered, but at the same time increases the population density close to the borehole with concomitant over-grazing of the pasture, resulting in a negative impact on the environment and a breakdown of social structure. For example, those owning a pulley lose their social power.

Even today, the main pastoral production areas are related to rainfall, vegetation cover, soil conditions and various diseases, as well as the distribution of tsetse fly, which is the vectors for *trypanosomiasis*, an infection fatal to cattle and small stock. This means that the upper limits of rainfall in these areas would be between 500-700mm, since this is the minimum precipitation necessary to support the tsetse fly and the lower limits around 100mm.

Another consideration that has only recently been identified is that of the relationship between carrying capacity and soil nutrients. Bell¹⁷² studied the nutrient status of various African soils, and suggested that the soils derived from volcanic rock, like those supporting the grasslands of East Africa, are superior in nutritional quality to those soils derived from metamorphic rock, such as granite. Bell also notices that those areas of high nutrient soils within a high rainfall belt resulting in an area that has low plant biomass due to the increase in animal biomass. This may have resulted in a more sedentary lifestyle for the pastoralists, who do not need to move their camps very often. This fact explains why the Cape pastoralists were required to be considerably mobile to compensate for the low soil nutrients status of the area in order to maintain herd quality and milk production.

In the same manner poor soil conditions influenced the settlement patterns of the Iron-Age farmers. They settled the high *Themeda* grasslands of northern South Africa and the area between the Vaal and Orange Rivers only in the 13th century, while they had already much earlier, in the 3rd century, occupied the lower-elevation bushveld and lowveld areas.¹⁷³ This may reflect the lesser importance of cattle to the early Iron-Age peoples or, alternatively, the lack of wood for smelting iron, important to these agricultural peoples.

The growing of crops came late in the history of African agriculture. To understand the agricultural emphasis on milk and meat and the reluctance to the eating of grain in the African diets, one can look at consumption rates and availability of these food sources.

¹⁷² Bell. 1982. p. 193-216

¹⁷³ Smith. 1992. p.135

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Studies regarding the calorie requirements of a rural family in Africa pointed out that the average family of six, one male, one female three children and one surviving parent require 13,200 kcal and 230 gm. protein. This requirement can be met with the equivalent of 18.5 litres of milk, 8.5 kg of meat and 3.8 kg millet.¹⁷⁴ The growing of or the harvesting of seeds, millet, sorghum, grain and maize from cultivated or naturally growing plants is not as important as having milk and meat. A change in diet, from a meat-focussed diet to plant materials as food source occurs mostly during harvest times when plant-based food is abundant, and when newly-born animals need their mothers milk, and during times of drought when grain that was stored from the previous yearly harvest can be consumed.

The ecosystems and landscape around the Cape started changing drastically with the practice of permanent settlement of the European colonists. Not only did they cause considerable disruption in the territorial use of land in the south western Cape, they turned their cattle out to permanently graze the same field, then too in much larger numbers than once grazed there in the time of the Khoi.¹⁷⁵ The over-grazing caused the gradual replacement of grasses and herbs in the Karoo by unpalatable *Elytropappus rhinocerotis* or rhinoceros bush (renosterbos). The traditional pastures of the local herdsman were being usurped, so putting pressure on resources. The larger the Dutch herds the more pasture was needed and of course, European ideas of land ownership meant that of exclusive rights of use at the expense of traditional ideas where pastures was either held in common or used serially.¹⁷⁶

The pastoral people of the Southern Africa have endured massive colonial impact over the past three centuries which has, in some cases caused their virtual disappearance as settlers of European extraction usurped their lands and livelihood. The relationship between aboriginal and colonists has to be understood to grasp the current conditions of the Africa pastoralism. Initially the colonists exploited valuable raw material; however, once settlements were established and long-term occupation of the coastal areas started in earnest; the life of the aboriginal people was drastically altered, even into the end of the 20th century the colonial experience continued. In the 1970s and 1980s serious drought conditions affected all of the rural people of Africa, be they farmers or herders. And although these pastoralists should be adapted to these drought conditions as caused by the regular long-term cycle of climactic events, the aid programmes altered the agricultural and social structures with devastating results. The aid programs have been attempts to "improve" African herding systems. These projects have almost all been defined within

¹⁷⁴ Smith. 1980. pp. 467-487.

¹⁷⁵ Smith. 1992. p. 196

¹⁷⁶ Smith. 1992. p. 205

"efficient" western models that stress private ownership of land and stock. Such ranch models, while perhaps appropriate to agribusiness in North America and Australia, have been destructive to African ideas of community and commonage.¹⁷⁷

4.1.4. Protection or defence - Landscape territoriality

Attention-drawing land characteristics are undoubtedly, part of our biological inheritance from when man played the role of hunter in a hostile environment. Appleton¹⁷⁸ has explored this notion. For man the hunter, seeing without being seen was the essence of life. He required both prospect, the unimpeded opportunity to see, and refuge, opportunity to hide. Modern man, according to Appleton, has inherited these visual needs and although he no longer needs them for survival, incorporates them into landscape visualisation, especially the quest for scenery. Appleton¹⁷⁹ writes:

the removal of urgent necessity does not put an end to the machinery which evolved to cope with the environment, rather it frees the machinery to achieve different objectives which themselves are constantly changing with aspirations of caprices of society.

Appleton¹⁸⁰ sees territoriality as a component of power, and not only as a means of creating and maintaining social order, it is a device to create and maintain much of the geographic context through which we experience the world and give it meaning.

One theory of territoriality holds that societies that do not have formal hierarchy, economic losses, and other types of institutionalised differences would use territoriality differently to those that do. Sack¹⁸¹ suggest that relatively non-hierarchical societies similar to the original Chippewa were common before the rise of civilisation and some persist to this day in varying forms in the remoter reaches of the world. He further discusses the connection between autochthonous people and the place they occupy, and says that this relationship becomes extremely intimate, not only because of familiarity and dependence but also because people come to think of themselves and the place as organically and even spiritually linked. Their geographic domain may be either the entire area they occupy or only special and localised places. In either case, the land is often believed to be inhabited by the spirit of the ancestors or their gods may have given to them a geographic place in the world. Belief in the inhabitation of the land by the spirit of ancestors and the mythical bestowal of the land to the people is one reason why it is likely that if the community were

¹⁷⁷ Smith. 1992 p xiii

¹⁷⁸ Appleton. 1975 p 37

¹⁷⁹ Appleton. 1975

¹⁸⁰ Sack. 1986 p 219

¹⁸¹ Sack. 1986 p 53

to assert territorial control over the land, they would be doing so through the social definition of territory.¹⁸²

Appleton¹⁸³ expands on the concept of territoriality in a discussion on the concept of refuge and prospect and the way it is symbolised. Applying this idea to the experience of landscape, we see that environmental objects can symbolise hazards, prospects, refuges, and other such abstractions, at different levels of symbolism. He says that when we talk of the hazard we may mean, on the one hand, a crocodile, a bush fire or a human enemy or on the other hand, simply a feeling of exposure to an unidentifiable or even an imaginary and perhaps non-existent threat. He explains further, when discussing a prospect, we may mean, on the one hand that we can see from an observation post spatially selected or even construct a view of a piece of country in which there may or may not be some potential threat. Or, on the other hand, simply the sense of not being shut in, such as may be experienced, for instance, when one looks upwards at a bright sky. Alternatively, he says that¹⁸⁴:

when we talk of a refuge we may mean, on the one hand, a hiding place screening us from a hostile observer, or a cottage sheltering us from the real adversities of the weather or, on the other, this sense of being enclosed, overshadowed, protected by some ineffective barrier, such as a cloud, against an unidentified and perhaps highly imaginary source of danger.

4.1.5. Human settlement, ancillary uses and recreation

4.1.5.1 Owning the landscape.

Laurens van der Post in *The Lost World of the Kalahari*¹⁸⁵ refers to the Western or European way that has been one of "Calvinistic" conviction and tied to values of possession and other material issues. The idea of possession forms and has formed the focus of Western conservation philosophy. Capitalism helps turn places into commodities. It helps us to see the earth's surface as spatial framework in which events are contingent and temporarily located. Sack¹⁸⁶ supports this notion, and says that capitalism's need for accumulation and growth makes change paramount and, geographically, change means a fluid relationship between things and space.

Another phenomenon of human settlement is naming or labelling a place as having a certain identity. European place names are usually a reflection of historic ties, the family or

¹⁸² Sack. 1986 p 58

¹⁸³ Appleton. 1975 p 82

¹⁸⁴ Appleton. 1975

¹⁸⁵ van der Post. 1958. p 40

¹⁸⁶ Sack. 1986. p.48

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clan inhabiting a place, perception of its character, or the use of such as place. Seddon¹⁸⁷ discussed this aspect and it becomes clear that Europeans in Australia did not record objectively – they invented names and places to conform to the European needs and expectations, whereas, aborigines named every feature on the land. Aboriginal names clearly delineate the former occupation of the land and the depth of their association with that land. Europeans may experience and observe the sense of place or the features, but for the aborigines, prominent landscape forms are often the ones incorporated into the myths which help to make the place culturally alive.

In *The Songlines*, Bruce Chatwin¹⁸⁸ describes the Aboriginal philosophy of native Australians. He says that: they have an earthbound philosophy.

The earth gave life to a man; gave him food, language and intelligence; and the earth took him back when he died. To wound the earth is to wound yourself, and if others wound the earth they are wounding you.

The Dreamtime and Songlines of the Aborigine, is their connection to the earth. 'A song' he says¹⁸⁹

was both a map and a direction-finder, providing that you knew the song you could always find your way across country.

He goes further explaining the Songlines¹⁹⁰.

Song is a kind of passport and meal-ticket.' By singing the world into existence, the Ancestors had been poets in the original sense, meaning creation. No Aboriginal could conceive that the created world was in any way imperfect. His religious life had a single aim: to keep it the way it was and should be. The man that went 'Walkabout' was making a ritual journey. He trod in the footprints of his ancestors. He sang the ancestor's stanzas without changing a word or note- and so recreated the Creation. Aborigines could not believe the country existed until they could see and sing it - just as in the Dreamtime, the country had not existed until the Ancestors sang it.

Chatwin explains the ownership of land in the following manner:¹⁹¹

The trade route is the Songline. Because songs not things, are the principle medium of exchange. Trading in things is the secondary consequence of trading in song. Before the whites came, no Australian was landless, since everyone inherited, as his or her own private property, a stretch of the Ancestor's song and the stretch of country over which the song passed. A man's verses were his title

¹⁸⁷ Seddon. 1997. p 24

¹⁸⁸ Chatwin. 1987 p 11

¹⁸⁹ Chatwin. 1987 p 11

¹⁹⁰ Chatwin. 1987 p 13-28

¹⁹¹ Chatwin. 1987p 57

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deed s to territory. He could lend them to others. He could borrow other verses in return. The one thing he couldn't do was sell or get rid of them

Although Chatwin was merely an observer in a foreign land as a traveller from England, his observations are descriptive and presented with a keep sense of the truth. These observations and can be confirmed by several more academic sources such as the Australian Science, Technology and Engineering Council studies¹⁹², the Australian Environmental Defender's Office¹⁹³, and Hart¹⁹⁴.

4.1.5.2 Reading the landscape.

A further exploration is that of the landscape as language. Krampen¹⁹⁵ observes that all languages are made of words and all words are signs, therefore, all things made up of signs are languages. Thus the landscape is seen to stand as a language in its own right. It stands as a "to whom it may concern" message with its own syntax - the relationship of signs among themselves; semantic - the relationship of signs to object; and pragmatic - the relationship of signs to the user.

Anne Whiston Spirn, former Head of Department of Landscape Architecture, at the University of Pennsylvania, has focussed her life's work on landscape as language. In her book *The Language of Landscape* she says that¹⁹⁶:

The language of landscape is our native language. Landscape was the original dwelling; humans evolved among plants and animals, under the sky, upon the earth, near water

She also states that landscape has all the features of language. It contains the equivalent of words and parts of speech - patterns of shape, structure, material, formation and function, meaning of landscape elements is only potential until context shape them.

She is concerned in the main with the world population's inability to manage the earth. In her search for a solution she studies the value of landscape for people. She says that¹⁹⁷, the power to read, tell, and design landscape is one of the greatest human talents.

It enabled our ancestors to spread from warm savannahs to cool, shady forests and even to cold, open tundra. But the ability to transform landscape beyond the capacity to comprehend it, threatens human existence.

¹⁹² ASTEC 1997.

¹⁹³ Environmental Defender's Office Ltd. 2000

¹⁹⁴ Hart. 2001

¹⁹⁵ Krampen. 1987. p 14

¹⁹⁶ Whiston Spirn. 1998

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Whiston Spirn¹⁹⁸ continues to discuss the relationship of people to the biophysical. She says: that every nation has its "native" nature, worked by physical and mental labour into landscapes, with which its people identify. To authors from Cicero to Marx, "first nature" represents a nature unaltered by the human labour that yields the "second nature". The Latin word "natura, naturans" refer to the given - biophysically occurring material, forms and phenomena - and "natura/naturata" to those reworked by human hands. Cicero¹⁹⁹ wrote;

we sow corn, we plant trees, we fertilise the soil by irrigation we confine the rivers and straighten or divert their courses. In short by means of our hands we try to create a second nature within the natural world.

This is the cultural landscape - the second nature.

Others indicate a far greater relationship between man and the land. Edward O Wilson²⁰⁰ calls this phenomenon "biophilia", which he describes as the innate tendency to focus on life and lifelike processes. These are all western views, however, in a study completed by Fiedelvey as discussed under item 2 of this Chapter, his findings were similar among Gauteng - South Africa, urban black people. In his studies he found that the majority of respondents do not appear to see the environment as being of intrinsic value.

4.1.5.3 Cultural imposition on the landscape.

With specific reference to cultural expression, Whiston Spirn²⁰¹ discusses stories, actions and other intangible qualities that shape human relationship with landscape. She says that:

landscape stories have common themes across cultures, such as

- a. *struggle for survival,*
- b. *the character of human society (the relations of individuals to family, deities, state or corporation)*
- c. *the nature of nature and the place of humans within it;*
- d. *where things come from and how specific places came to be (stories of origin and creation- of mountains and rivers, and flowers and humans).*

She goes further to explain that process²⁰², as a deliberate act by a conscious being is a means to an end. All human processes are cultural, deliberate means by which humans sustain them, adapt to their environment, and relate to one another. Most basic are those processes essential for survival of individual and species:

- a. physical - moving, exchanging, sensing, reproducing, growing, and decaying:

¹⁹⁷ Whiston Spirn. 1998. p 25

¹⁹⁸ Whiston Spirn. 1998 p. 31

¹⁹⁹ Whiston Spirn, 1998

²⁰⁰ Wilson. 1984 p 1

²⁰¹ Wilson. 1984 p 49

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- b. social - identifying, communicating, making/building, trading, playing, learning, competing and fighting;
- c. spiritual - dreaming and worship.

Human habitats must satisfy these basic human processes.

Different cultures occupying the same landscape at different times often embrace the same significant landscape feature such as high points and siting of churches in England, sacred springs and Christian shrines in Ireland, and aboriginal sites such as Uluru (Ayre's Rock).²⁰³ Similarly, many Japanese cities are built on the rice fields of former villages, and contemporary urban form often reflects that earlier structure of fields and village.²⁰⁴ City blocks may reflect the shape and size of the rice fields they replaced. Rice fields are the reminders of the origin of the Japanese measuring system, the basis for dimensions for room and house. The tan, a standard measure of land, was originally the area needed to produce rice to feed a family of four to five people for one year. Before the seventh century, the size of one tan depended upon the land's productivity; after the seventh century, the tan became a standard size, three hundred tsubos; one tsubo is the size of a tatami. Traditional Japanese rooms are modular compositions of varying numbers of tatami, a mattress that is woven from a reed that covers the rice stalk padding inside. The bowl of rice, a tatami mat, a room, a house and the block on which they are situated, all are related; all parts of a whole felt or sensed, but not seen in a single glance.

4.1.5.4 Landscape as biophysical entity - need for conservation.

Heackel²⁰⁵ coined the word ecology in 1850 from "oikos" (house) and "logos" (study) to identify the study of living organisms in relation to their environments. In the last one hundred and forty years the subject has expanded from its small beginnings to cover all aspects of the biophysical environment and the relationship of the organisms within it, to each other and to their surroundings. Once people began to understand the biophysical qualities of the landscape and the effect people have on these qualities the need for conserving some area of space for posterity and the following generations grew stronger. Conservation as a land use under human management and control became fashionable at first as a political ploy and later as a requirement from the citizenry. Furthermore, the conservation movement grew out of the New Romantic philosophy which held "Kultur"²⁰⁶ to be more valuable than economics or politics, it rejected foreign, scientific and democratic ways of thinking in favour of ideas and emotions more deeply rooted in the German lands

²⁰² Whiston Spirn. 1998

²⁰³ Wilson. 1984 p 159

²⁰⁴ Whiston Spirn. 1998 p 167

²⁰⁵ Bradshaw, Goode, Thorpe. 1986 p 15.

²⁰⁶ Muthesius. 1981 p. 37

and peoples.

In 1992, more than one hundred heads of state and government, and delegates from one hundred and seventy countries, attended the United Nations Conference on Environment and Development²⁰⁷. Held in Rio de Janeiro, Brazil, this historic event was the culmination of twenty-five years of international research and development on the scientific basis for rational use and conservation of the biosphere. It began in 1968, when three hundred and twenty-six experts from around the world convened at UNESCO's headquarters in Paris for a conference to lay the foundations. This was the first major international event where scientists and other experts collaborated on research for the rational use and conservation of the biosphere (UNESCO 1970). An important historic event in itself, the Food and Agricultural Organisation (FAO), the World Health Organisation (WHO), the International Biological Program, and the International Union for Conservation of Nature and Biophysical Resources, supported UNESCO in this initiative.

A key outcome of the 1968 conference was agreement that a new, integrated approach to preventing or managing environmental degradation was urgently needed. Participants agreed that the rational use and conservation of the biosphere required a cultural model based on ecological approaches to resource use and conservation management. Called "environmental conservation" this paradigm involves a fundamentally different approach and framework to nature conservation. Unlike nature conservation, where the attempt is to separate people from nature, environmental conservation recognises that human activity and environmental resources are inseparable. It requires conservation and development to be integrated ecologically into multiple land use systems, not spatially separated into segregated zones. It is based on the UNESCO 1970²⁰⁸ ecological theory that there is no fundamental difference between biophysical, wild or modified, semi-biophysical or developed, domesticated or purely artificial vegetation. The laws governing these ecosystems are identical.

In South Africa, the National Parks Board under the Department of Environmental Affairs and Tourism, administers the national biophysical heritage.

A brochure, published as a Conservation Initiative by the National Parks Board²⁰⁹ makes the following statements:

- a. *National Parks focus on the conservation of large biophysical ecosystems and bio-diversity for the benefit of people and other forms of life.*

²⁰⁷ <http://unesco.org/general/eng/about/env.htm> 15/05/01 13h40

²⁰⁸ <http://maorinews.com/karere/comment/colonial.htm> 15/05/01 5:42:26 PM

²⁰⁹ South African National Parks. 2000

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- b. *As a form of land use parks must be embedded in their regional ecological and cultural environment.*
- c. *South Africa's National Park system needs to be expanded to fully embrace the diversity of the country's ecological and cultural heritage. It is to establish a new lead.*
- d. *South African National Parks plans to achieve this through a conservation initiative, which will be holistic, combining African cultural perspectives on environmental values with the traditional western approach to conservation.*
- e. *The Master Plan will use GIS technology to make a countrywide assessment, based on the merging of three essential values: biological diversity, cultural character and quality of life.*
- f. *The results of the assessment will not only help to identify regions where new national parks are needed, but will indicate the worth and potential of existing national parks.*
- g. *These conclusions will also contribute to the total range of management strategies applied in the national parks.*

These statements are supported by the transformation that the national parks system in South Africa is undergoing. The organisation is engaged in a process that aims to position the national parks to align themselves with and embrace the new vision and values of South African society, free from the legacies of colonisation and apartheid²¹⁰. A new vision is founded in the recognition that the African land ethic developed through history and that it represents the African vision of biophysical resources. This vision culminates in the conservation of biodiversity, in the utilisation of the cultural richness and providing a quality of life for associated communities. It is currently proposed by the National Parks Board that this African vision be combined with the traditional western approach to conservation. Dladla²¹¹ suggested that the new vision is focused on a non consumptive aesthetic that is derived from a scientific approach so as to provide effective and efficient land uses for conservation of biophysical and cultural resources.

Landscapes of the national park systems may have high ecological value. However the protected system may also have an aesthetic value linked to the visual nature of the protected ecological or cultural landscapes. It is not only the scenic attributes that make landscape aesthetically pleasing, but also the visual expression of functioning ecological and cultural systems expressed through the distribution of patterns and processes. The

²¹⁰ Dladla. 1998

²¹¹ Dladla. 1998

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aesthetics of a region are of utmost importance in the tourism form of land use. It forms the cornerstone of the wilderness concept, landscapes that appear to be unaffected by the presence of humans.

4.1.6. Extraction of resources and deposition of waste.

Materials used from the landscape have predominantly been for construction of living quarters, improvement of living standards, or mined minerals and gemstones for adornment or trade.

Clay pots, stone bowls, grass mats, and timber stakes are all items that are indications of the bucolic life style of the peoples of South Africa. With regard to materials for housing, Hough²¹² points out that differences arising from fashion, materials, and craftsmanship are numerous and can be seen everywhere in the rural landscape. However, the design, decoration, and construction of the house is a response to local materials, therefore, building crafts developed distinctive regional forms. Once someone had devised a decorative feature, a neighbour would copy it.

Fisher, Le Roux and Maree²¹³ list materials that have been used in South African construction in their book *Architecture of the Transvaal*. Some of these are: thatch, timber, clay, mud, leaves, dung, seeds, pits, glass, gold, stone, blood, pigment, bone, grass, reeds, peat, iron, sand, and copper. Some of the current day construction methods can be linked back to traditional methods, materials and skills that have been passed on from one generation to another.

We may also be fairly certain that if aluminium siding, concrete block, or corrugated iron had been available in the twelfth century it would have been used, the probability of which is demonstrated in the adaptation to problems of shelter in the shanty town that surround most third-world cities.

The availability of materials has always been a basic determinant of form; encouraging or preventing solutions for built environments that, in the absence of universally available materials, differ from place to place.

To understand the magnitude of waste disposal it is best to understand the broader issues in this regard. Those directly addressing the use and abuse of eco-systems are now names

²¹² Hough. 1992. p. 42 -47

²¹³ Fisher, Le Roux, with Maree. 1999.

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with which to ally. At first Rachel Carson²¹⁴, writing *Silent Spring* in 1962 cemented the new environmentalism, and with it brought to the attention of the world the unmanaged use and consequences of pesticides, insecticides, herbicides, detergents, DDT, chemical and poisons of all kinds. Although her work presented not theory, but reality, it was instrumental in the launch of the awareness of human influence on the environment, and is considered one of the landmark books of the twentieth century.

Secondly, Ian McHarg, the Scottish American, who changed the profession of landscape architecture from designers interested in nature to planners of nature and designers of nature. Broadly, McHarg's theories describe two conditions in his well-publicised book, *Design with Nature*. He says:²¹⁵

It is quite simple – there are two conditions, one "syntropic" – fitness, health and another "entropic" – misfitting morbidity and death. The oscillation between these states contains a thermodynamic imperative. All systems are subjected to the necessity of finding the fittest available environment adapting it and themselves to make it more fitting. A fit environment is defined as that where the maximum needs of a user are provided by the environment as found, requiring the least work of adaptation.

Apart from permanent destruction due to extraction or removal of non-renewable resources, waste deposition has caused the greatest changes to the biophysical environment. Russell²¹⁶ lists a diversity of human impact that can predominantly be linked to extraction and disposal.

- a. *Pyrophytic plants develop to withstand the increase of fire activity since 1 to 1.5 million years ago – evidence at Swartkrans.*
- b. *Transportation and introduction of plant species among continents - i.e. bluegum to SA*
- c. *Transportation and introduction of insect and animal species among continents - i.e. rabbits to the UK*
- d. *Exploitation of valuable and extensive resources in the forests.*
- e. *Erosion due to clear cutting of forests.*
- f. *Agriculture – introduction of non-native species, salination due to over fertilizing, cutting of trees, rearranging hydrology, extraction and abstraction of ground water, introduction of pesticides and herbicides, eutrophication, soil depletion.*

²¹⁴ Carson. 1962

²¹⁵ McHarg. 1969 and 1992

²¹⁶ Russell. 1997

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- g. *Process of domestication of plants and animals – meat, milk, hides and wool., monoculture maize and wheat. Increase in population.*
- h. *Human settlement patterns – dividing up the land – rectilinear designs, political boundaries bisecting biomes.*
- i. *Use of wire to fence properties and thus interference with migration routes.*
- j. *Conflict – Wars – excessive use of resources such as timber, saturation of soil by chemicals and scrapnel.*
- k. *Transportation routes – dividing large land parcels, rerouting stormwater, preventing migration of small mammals, amphibians, railroads required large amounts of timber, caused increase of fire around line and made inaccessible areas of the country accessible.*
- l. *Introduction of permanent housing and the conglomeration of cities – needing graveyards, waste dumps, roads and paved surfaces- increasing runoff and decreasing infiltration of water.*
- m. *Sedimentation of hydrological systems and siltation of lakes and rivers. Acidification of lakes and rivers.*
- n. *Emission of excessive quantities of dust and smoke particles into the air – causing acid rain, respiratory problems in humans and animals.*

These descriptions are focussed on the western influences and fall short of discussing tribal or aboriginal effects on the land. Utilisation and alteration of the biophysical landscape by humans over time is Africa's heritage. On a continent where nature can be as unforgiving as generous, the settlement patterns, the arrangements of the communities, and the general way of life impacted on the biophysical landscape that shaped the cultural patterns of the African continent. Sowell²¹⁷ describes why the continent of Africa is relatively uninhabitable in western terms, and why the countries along the coast of Africa are the only ones that could prosper economically. He explains that the geographical form, which rises from a narrow escarpment along the eastern coast, gives rise to rivers that are unnavigable because of the resulting high and strong rapids thereby preventing the easy spread of trade inland.

Environmental auditing and ecological economics are fields reckoning with the costs of extraction of resources and the disposal into the biophysical environment. Ecological economists²¹⁸ speak of "natural capital", "human capital" and/or "cultural capital", and "manufactured capital" when categorising the different kinds of stock that produce the range of ecological and economic goods and services used by the human economy. These

²¹⁷ Sowell. 1994. p 13

²¹⁸ Berkes, Folke. 1994 p 129

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three forms of capital are interdependent and to a large degree complementary.

According to Berkes et.al. natural (biophysical) capital consists of three major sub-types:

- a. *non-renewable resources such as oil, coal, and minerals that are extracted from the ecosystems,*
- b. *renewable resources such as fish, wood, drinking water, that are produced and maintained by the processes of the ecosystems, and*
- c. *environmental services, such as maintenance of the quality of the atmosphere, climate, operations of the hydrological cycle including flood controls, and drinking water supply, waste assimilation, recycling of nutrients, generation of soils, pollination of crops, provision of food from the sea, and the maintenance of a vast genetic library.*

Ecological economists²¹⁹ argue that biophysical capital is increasingly becoming the limiting factor for further development. Therefore to maintain a stream of income, the biophysical capital must be maintained. For the first time biophysical resources are given a commodity value other than simply ownership. That which is held in common, such as clean air, now has economic value. Several organisations, such as the Community Based Natural Resource Management Network²²⁰ (CBNRM), in particular the International Association for the Study of Common Property (IASCP)²²¹ make it their business to track and report on the use of, and value of what they call "the common property, which include resources such as fresh air through to ocean fish.

4.1.7. Contested Landscapes

The idea of a homogeneous cultural landscape filled with universal values is questioned by those who, in the past, were marginalized and excluded from the frame of reference which sustained such a concept. The traditional and indigenous peoples of those landscapes today contest historical values and meaning of landscapes, which could be attributed to western conservation philosophies.

Drawing on both literary theory and cultural studies, many contemporary cultural and historical geographers have begun to examine the meanings assigned to the cultural landscape²²². For the geographers, culture has come to be understood as:

a way of life encompassing ideas, attitudes, languages, practices, institutions and structures of power and a whole range of cultural practices: artistic forms, texts,

²¹⁹ Janson, Hammer, Folke, Costanza, 1944 p. 5

²²⁰ <http://www.cbnrm.net/10/14/01 12:45:05>

²²¹ <http://www.Indiana.edu/iascp/>

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*canons, architecture, mass-produced commodities and so forth*²²³

Whelan discusses the contemporary historical geography reflection of the theoretical shifts that have taken place in the humanities and social sciences. She states that much recent work reveals a preoccupation with questions of power and meaning. She²²⁴ is of the opinion that a more interpretative approach to the study of the cultural landscape has emerged and the (urban) landscape has come to be approached through the guise of a range of metaphors such as landscape as text and the iconography of landscape. She states that:²²⁵

While the (urban) landscape can be read as a complex, contested and symbolic power system it is important to recognise that some landscapes are more overtly symbolic than others, depending on the context in which they are shaped.

The Cultural Landscape Resource Unit²²⁶ under the leadership of Prof. Helen Armstrong and in collaboration with others at Queensland University of Technology in Brisbane Australia, has been studying the Queensland cultural landscape as contested terrain. They have realized that the significance of cultural landscapes cannot easily be defined. In a discussion document of the unit the following statement is found:

The concept of cultural landscape enables us to balance the traditional focus on discrete heritage elements with a broader concern with the diversity and dynamism of the wider human environment. The management of such places raises challenges for contemporary practice. Cultural landscapes are never "complete" and unchanging: the process of landscape making continues with the everyday priorities and decisions of those who own, use, control, value and contest the land.

The unit lists four issues of particular concern regarding the Queensland natural landscapes²²⁷: These are:

- a. *There are divergent values associated with Queensland's natural landscapes ranging from tropical rainforests to arid deserts; each of which has deep cultural significance for Aboriginal and Torres Strait Islander communities. These landscapes also have significance for the non-Aboriginal peoples of Australia.*
- b. *There are vast pastoral leases and forest reserves as well as areas of mineral extraction which contain historical relics of the 19th and early 20th centuries. Current land uses are creating strongly contested values about*

²²² Whelan. 1997

²²³ Grossberg, Nelson Treichler. 1992 p 1-16

²²⁴ Whelan. 1997 p 12

²²⁵ Whelan. 1997 p 12

²²⁶ <http://www.dbe.bee.qut.edu.au/research/CLRU/> 5/01/02 2:01:04 PM

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these places, including Indigenous Land Titles.

- c. *The cultural landscapes from the mid 19th century to the present time reflect the contributions of different voluntary migrants to Australia. There are also the involuntary migrants, the South Sea Islanders, who have made a particular contribution to the cultural landscapes of Queensland.*
- d. *There are conflicting approaches to the management of heritage landscapes including the strong push by natural heritage lobbies to restore landscapes to a former 'natural' state, thus removing evidence of human activities.*

As stated by the Australian Environmental Defender's Office²²⁸, heritage, or cultural landscapes can be part of the natural or built environment. Heritage management involves conserving items and places that are culturally significant, that have aesthetic, historic, scientific or social value for present and future generations. Because heritage is an anthropocentric, or 'human centred' concept the cultural significance may be contested or defined by more than one stakeholder or group. Recognition of these differences in the management of the cultural landscapes is crucial.

4.1.8. Characteristics of culture.

In his book *On Human Nature*, Wilson²²⁹ lists the characteristics as identified by George P. Murdock that he states have been recorded to history and ethnography in every culture. These characteristics provide us with a dear understanding of the uniformity of cultures and at the same time these terms indicate the differences among them. Although these practices or customs are presented as being universal, their application is radically different from one culture to another. It is possible to either qualify or quantify each of these characteristics of a community and, therefore, it is possible to use these in a descriptive manner to establish the character of the cultural landscapes or culture of a community. It is noted though that mostly tangible characteristics with a few intangible characteristics are listed. Others such as singing, story telling, and dancing, are missing from the list. The explanation may be that these practices may not occur in all communities. The more likely explanation is that their form of expression in one community may not be recognised by another. The characteristics are presented in Table Three.

²²⁷ <http://www.dbe.bee.qut.edu.au/research/CLRU/> 5/01/02 2:01:04 PM

²²⁸ Environmental Defender's Office Ltd 2000

²²⁹ Wilson. 1978, 1995, 2000

Table Three. Characteristics of culture as recorded by Murdock²³⁰

Age -grading	Ethno-botany	Joking	Property rights
Athletics	Etiquette	Kin groups	Propitiation of super
Bodily adornment	Faith healing	Kinship nomenclature	natural things
Calendar	Family feasting	Language	Puberty customs
Cleanliness	Folklore	Law	Religious ritual
Community organisation	Fire making	Luck superstitions	Residence rules
Cosmology	Food taboos	Magic	Sexual restrictions
Co-operative labour	Funeral rights	Marriage	Sports
Courtship	Games	Mealtimes	Soul concepts
Dancing	Gestures	Medicine Trade	Status differentiation
Decorative arts	Gift giving	Obstetrics	Surgery
Divination	Government	Penal sanctions	Training
Division of labour	Greetings	Personal names	Tool making
Dream interpretation	Hair styles	Population policy	Visiting
Education	Hospitality	Postnatal care	Weaving
Eschatology	Incest taboos	Pregnancy	Weather control
Ethics	Inheritance rules		

These characteristics provide us with a dear understanding of the uniformity of cultures and at the same time these terms indicate the differences among them. Although these practices or customs are presented as being universal, their application is radically different from one culture to another. It is possible to either qualify or quantify each of these characteristics of a community and therefore it is possible to use these in a descriptive manner to establish the character of the cultural landscapes or culture of a community. It is noted though that mostly tangible characteristics with a few intangible characteristics are listed. Others such as singing, story telling, and trancing, are missing from the list. The explanation may be that these practices may not occur in all communities. The more likely explanation is that their form of expression in one community may not be recognised by another.

4.1.9 Conclusion to Sub-problem Three literature search

South African landscapes can be characterised but are clearly varied based on the environmental background of people and for which function or use the action is required. It is possible to understand how people perceive and use landscapes, but again this can only be successful if all possible combinations are applied. At the heart of the landscape characterisation however, are cultural values and beliefs relating to the biophysical character and how they are expressed in particular landscapes and environments. Treating land as private property, for example, ubiquitous in European industrial societies, is a grave and continuing offence to many indigenous peoples²³¹

4.1.9.1 Visual perception

In terms of visual perception three theories are noteworthy for this study:

Fiedeldey et. al. concludes in his first study that: The concept "environment" remains a

²³⁰ Murdock. 1978 p 12

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primarily physical environment in the minds of most respondents in the sample, and particularly a biophysical environment. In a further study he indicates that the complexity of a landscape is of paramount importance in how respondents grade that landscape. Qualities that comprise this complexity of the landscape if it is to be considered valuable is listed by him as:

- a. the importance of the presence of water;
- b. biophysical elements;
- c. the context of cultural features;
- d. agricultural elements;
- e. landform;
- f. land use.

Nelessen²³² a professor at Rutgers and then later the team of Brian Orland,²³³ expand the studies that establish links between visual complexity, ecological diversity and perceived beauty. The Orland team uses a computer model to measure the qualitative in terms of:

- a. edge magnitude and frequency,
- b. rate of change and gradient,
- c. patch size and frequency, and
- d. the fractal dimensions of a landscape.

This premise flows from the assumptions of the model that states that there are two main approaches to measurement:

- a. the qualitative complexity measurement that is derived from human judgement and
- b. the quantitative complexity measurement that is derived from physical measurement.

Jalke²³⁴ sums up several other studies and suggests that a series of theorems may be posited as universals as a means for testing the generals in landscape visualisation:

- a. *Theorem one: People seek prospect and refuse as a basic framework for landscape visualisation.*
- b. *Theorem two: A landscape is seen to have character through discovery of its detail.*
- c. *Theorem three: Landscapes are viewed as pictorial compositions.*
- d. *Theorem four: Visual images of landscape contribute to geographical awareness through cognitive mapping. '*

²³¹ Haikai Tane. 2000

²³² Nieleesen. 1997

²³³ Orland 1997

4.1.9.2 Agriculture - animal husbandry and crop production.

The literature indicates that during pre-colonial times, one could see the agricultural landscape divided into interrelated functional units, such as hunting/ collecting, herder/ fisher or agricultural/ herders, who use similar resources. The literature points out that pastoralism has been an effective life-sustaining practice in Africa. The importance of cattle as a status symbol and a cash crop is emphasised. The use of goat, sheep, and camel for milk and the use of sheep and goats for meat is discussed. The growing of grain, millet, shorgum, and maize as staple food is listed as less important in times when meat is in abundance.

The various reasons why certain people and events occurred at specific places and times due to soil or climatic conditions, tribal conflicts, or resource scarcity, are also discussed. Finally, the understanding of the land as a common resource to be managed and shared by all is clearly described. The conflict that arose from this practice, in stark opposition to that of the colonials settling on the land is also clearly articulated.

More so, the evidence of indigenous people and their livestock on the land has value not only for the direct management capabilities, but also as a tourism attraction. This unwritten relationship between the indigenous landscape and its people is recognised by few, and has remained largely unrecorded.

4.1.9.3 Protection of defence - landscape territoriality

The literature indicates the aspects of protection and defence is in essence derived from the need for territoriality. Sack²³⁵ says that:

territoriality as a component of power, is not only a means of creating and maintaining order, it is a device to create and maintain much of the geographic context through which we experience the world and give it meaning.

Five important facets of social organisation can be listed as present in all communities that express their territoriality. These are:

- a. Specialisation - which refers to the division of labour
- b. Standardisation - which refers to the extent of procedural regularity in the organisation,
- c. Formalisation - which refers to the use of documentation for job definition and communication
- d. Centralisation - which refers to the locus of authority in the organisation

²³⁴ Jakle. 1987 p 167

²³⁵ Sack, 1986. p 219

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- e. Configuration - which refers to the shape of authority and hierarchy and can often, be summarised by span of control.

4.1.9.4 Human settlement, ancillary uses and recreation.

All peoples do not clearly share the idea that one may own a piece of the landscape. The need of capitalism's for accumulation and growth makes change paramount and, geographically, change means a fluid relationship between things and space.²³⁶ The aboriginal shares the land with the community and all within the community benefit from the resources on the land.

Humans assign meaning to certain parts of the landscape. Again a difference exists between the western way of assigning meaning and the autochthonous way of assigning or giving meaning. Anne Whiston Spirn²³⁷ describes the landscape as being a language.

The language of landscape is our native language. Landscape was the original dwelling; humans evolved among plants and animals, under the sky, upon the earth, near water.

Cultural impositions on the landscape vary over time and remnants of these occupations remain on the land layered in the soils or under new settlements. The occupation of land has to date excluded the conservation of the biophysical environment as an option. Conservation has to date been seen as a non-consumptive exercise away from the people who will destroy it.

Although UNESCO made its declaration thirty years ago, it is only in recent times that international thinking is beginning to incorporate conservation in all spheres of the environment: social, economic and biophysical. Unlike the practices within nature conservation that attempts to separate people from the biophysical (nature), environmental conservation recognise that human activities and environmental resources are inseparable. It requires conservation and development to be integrated ecologically into multiple land use systems, not spatially separated into segregated zones. It is based on the UNESCO 1970²³⁸ ecological theory that:

there is no fundamental difference between biophysical, wild or modified, semi-biophysical or developed, domesticated or purely artificial vegetation. The laws governing these ecosystems are identical.

²³⁶ Sack. 1986 p 48

²³⁷ Whiston Spirn. 1998

²³⁸ <http://maorinews.com/karere/comment/colonial.htm> 5/15/01 5:42:26 PM

4.1.9.5 Extraction of resources

Material use and evidence of manufacturing, mining and trading can be linked to specific times in the history of the people of South Africa. It is evident from the literature that found objects can be dated and enough evidence exist that most of the objects can be identified, dated and the origin determined.

Sustainable use of resources is discussed in every environmental forum and institution. The awareness of people as to their impact on the biophysical environment is becoming more evident as methods are being developed to more accurately measure changes in the overall environment. Ecological economists argue that biophysical capital is increasingly becoming the limiting factor for further development. Therefore, to maintain a stream of income, the biophysical capital must be maintained.

There are many terms that can be used to describe the relationship of culture to the land. Words such as character, identity, genius loci, spirit, and ecosystem come to mind. Whatever it can be described as, in the end the resource – visual, biophysical, agricultural, cultural, or the combination of these have a tangible value that must be recognised in order for it to be managed.

4.1.9.6 Contested Landscapes.

The historical values and meaning of landscapes attributed to western conservation philosophies are contested by the traditional and indigenous peoples of those landscapes. The meanings, whether traditional or Western, are dependent on the context within which the values or the meanings are shaped. Defining the significance of cultural landscapes is not easy due to the requirement to balance the traditional values of the landscapes with the contemporary focus. It should be further considered that landscapes are always changing, but the critical aspect is to recognize the differences.

4.1.9.7 Characteristics of culture.

The characteristics as identified by George P. Murdock,²³⁹ provide us with the initial descriptive terms to identify the similarities and differences in cultures. To be used in a South African systematics for cultural landscapes, the list can be expanded from these terms that occur in every culture known and ethnography, to terms known to occur in South African cultures.

²³⁹ Murdock. 1978 p21

4.2 Addressing hypothesis three - The South Africa cultural landscapes have characteristics that can be systematised.

In addressing hypothesis three, three examples are reviewed against aspects of culture from the literature. From the reviews a unique representative record of current South African cultural landscapes is established. The examples are selected from different geographical locations to test whether the characteristics identified in the literature are representative of South African conditions, and to show how South African landscapes are currently being characterised in studies that are using existing available methods. One study represents the early history of South Africa in an archaeological documentation of a site that has been studied and documented since 1933. The second study represents the combination of biophysical and social ecologies. The third study is an urban site that represents important symbolic and political history of current South Africa. The proposed case studies are the following:

Table Four: Case studies reviewed for this study

Aspect	Locality
Autochthonous/ Archaeological	Mapungubwe in the far Limpopo Province
Biophysical/cultural Conservation Area	Augrabies Falls National Park in the Northern Cape
Urban Colonial	Johannesburg Fort in Gauteng urban area.

4.2.1 Case Study One - Mapungubwe.

Meyer 1998 describes the history and process of research and documentation of Mapungubwe. He indicates²⁴⁰ that in the bushveld environment of the central Limpopo River Valley, the stratified deposits of the settlement site and Greefswald contained evidence of the physical remains of prehistoric farmers and the material possessions, the distinct phases of the settlement sequence, and a human subsistence history of more than a 1000 years.

Meyer²⁴¹ further discusses that the Greefswald archaeological project developed through several phases into a specialised interdisciplinary research and heritage management project. The human remains, settlement features and cultural artefacts found in large-scale excavations during phase one of the project in the 1930s attracted world-wide interest and led to the later phases of the project. During the 1950s and 1960s the small-scale stratigraphic study of phase two of the Greefswald project exposed the highly detailed and intricate nature of the stratified site deposits, which contributed largely to the emphasis on stratigraphic research during phase three of the project. Since 1970, an interdisciplinary

²⁴⁰ Meyer. 1998 p 266

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research of phase three of the Greefswald archaeological project of the University of Pretoria has involved specialists and postgraduate students of the University of Pretoria as well as from other institutions.

The day-to-day research and conservation activities in the ongoing project involved the recording and interpretation of the numerous individual site features, material possessions and physical remains of the humans that lived out their lives in communal existence. In a broader perspective, the archaeological sites on Greefswald and their cultural heritage are valued as sources of evidence of human interaction with a prehistoric natural environment, and as evidence of significant development in the shaping of African society.

Mapungubwe and the K2 Greefswald terrain is one of the best-documented archaeological sites in South Africa. For this reason, it is used as a case study, for which the documentation was summarised into topics in order to identify possible shortcomings and additions that may be required to complete a cultural landscape systematics.

4.2.1.1 Research and documented topics.

Table Five. Summary of terminology and supportive literature describing Mapungubwe.

a. Current conditions and opinions.	
Land Claims	Thulamela (a nearby community) has become the centre of numerous interests, which are being held together by intensive negotiation, and the expectation of profit from tourism. First, there are the potentially conflicting land claims from local Tsonga and Venda groups who lived nearby until fairly recently. ²⁴²
Tourism archaeology	Proactive negotiations between them and the Parks Board have led to a fragile agreement over access and ongoing involvement in the development of the site as an open-air museum in accordance with the Parks Board's wishes to promote archaeology for tourism. Second, Pretoria's National Cultural History Museum, the legal repository of the excavated material, is no longer in the same province as the site, which is in the new Northern Province. Discussions aimed at ensuring that the archaeological remains stay in the Northern Province have highlighted the fact that the more spectacular gold objects excavated in the 1930s at Mapungubwe have been locked in a safe at Pretoria University all these years. ²⁴³
Informing	Thulamela is a significant archaeological discovery, with huge potential for informing the public about the distant past. In themselves the observations from this site are not unique; they confirm what has long been known from sites such as Mapungubwe, Great Zimbabwe, and other walled elite residences in Botswana, South Africa, Zimbabwe and Mozambique. If the importance of these sites have not been appreciated by the public, archaeologists are not to blame. The finds from Thulamela have not revolutionised our history. ²⁴⁴
Dates of discoveries	Roger Summers, an archaeologist in Zimbabwe in the 1960s, wrote in <i>Ancient Ruins and Vanished Civilisations of Southern Africa</i> (1971): Basil Davidson, in <i>Africa, History of a Continent</i> , could state as late as 1972: Further south again, beyond the Limpopo, the same kind of progress from early to mature Iron Age systems occurred with the so-called Mapungubwe Culture during the thirteenth or fourteenth century. Its peoples took over the settlements of earlier Iron Age populations - established here in the Transvaal between AD 700 and 1000 - and built a new state (an outlier of the Zimbabwe Culture) of which little is

²⁴¹ Meyer. 1998. p 266

²⁴² Miller. 1996.

²⁴³ Miller. 1996.

²⁴⁴ Miller 1996

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	<p>known in detail.</p> <p>But better dates and greater understanding were emerging. Peter S. Garlake, an excavator in Zimbabwe at the time, wrote in <i>Great Zimbabwe</i> (1973): It is even possible that further investigations will show that the distinctions between the first Leopard's Kopje [Limpopo-oriented society] and Zimbabwe people cannot be upheld and that they are culturally identical.²⁴⁵</p>
Inspirations to others	<p>The second category of Walter Battiss's work embraces his conceptualised Figures and Rocks, Monomatapa, Mapungubwe, The People of the Rocks, Rock Artists, etc. Here the demands of the idea impose an even firmer discipline upon his animated brush. Although this aspect of his work includes some riotous colour compositions with narrative detail freely inscribed, graffiti-like, into the juicy paint, it is characterised by meaningful content and a compositional strength that is the unlaboured outcome of his more facile exercises.</p> <p>Battiss usually employed the most complex of his structural designs in these semi-abstract statements: the relationship between intersecting vertical and horizontal elements becomes much more intricate; unexpected contrasts in scale create optical tension and psychological drama; and colour, which is always more decorative than factual, becomes here entirely subjective.²⁴⁶</p>
b. History	
Chronology	<p>In the 1990s, it is easy to forget the difficulties faced by archaeologists and historians before carbon dating became an essential technique. It was still possible, just twenty five years ago, for there to be complicated arguments about the dates of the stone-walled trading towns in central southern Africa. Zimbabwe was seen, with reason, to be the original source of the great wealth and organisation of an empire with links to the ocean.²⁴⁷</p> <p>Iron Age archaeology in South Africa expanded significantly during the 1970's. The expansion involved major fieldwork projects in Natal, the Transvaal, and the Eastern Cape, resulting in the establishment of a chronology of Iron Age settlements starting from the first millennium AD. Mapungubwe and K2 were then placed two centuries earlier than Zimbabwe.²⁴⁸</p>
History of those that followed.	<p>The cultural contents of the sites were identified as the settlement remains of prominent indigenous Iron Age communities with a subsistence economy, based on mixed farming and trade with foreigners via the East coast of Africa. After Mapungubwe Hill was abandoned, the surrounding Limpopo valley was not deserted as has previously been thought, but small Iron Age communities settled in the Greefswald environment on several occasions during the next few centuries.²⁴⁹</p>
Possible extinction	<p>Tom Huffman has described, in <i>Southern Bantu Settlement Patterns</i> (1986), how hilltop towns evolved during the pre-Zimbabwean Limpopo trading period, declined with their exhaustion and were revived again because of military pressures after the Nguni <i>mfecane</i>. Comparisons between medieval Mapungubwe and 19th century Kaditshwene illustrate this.²⁵⁰</p>
History of place	<p>Archaeology in South Africa faces its own problems, largely the consequence of its divergent history following the introduction of apartheid. Although South Africa has an internationally recognised tradition of archaeological research, its framing within an education structure organised by race and racial exclusion has resulted in an almost complete divide between the practice of archaeology and popular engagement with the past (Hall 1984, 1988, 1990). South Africa shares none of the national enthusiasm of Egypt, Nigeria or Zimbabwe for the archaeology of its past, comparatively few black students study archaeology in South African universities and there are very few professional archaeologists who are black (Hall 1999). The contrast is evident in the responses to archaeology's heritage to the north and south of the Limpopo River. To the north, Great Zimbabwe is renowned both as national symbol and now as World Heritage Site. To the south Mapungubwe, the twelfth century town that was precursor to Great Zimbabwe, stands isolated at the South African border, unknown even to local inhabitants.</p> <p>This opens a second set of opportunities for archaeology in Africa – Cultural Resource Management. Whether funded by international agencies or by governments responding to the possibilities in their cultural heritage, archaeologists are increasingly finding opportunities in commercial or development-related projects. This trend brings with it a set of well known problems that include potential conflicts of interest and the difficulty of research beyond mitigation.</p> <p>What are the common features of these future directions? Whether public intellectuals working with local communities, or cultural resource managers working for international agencies or commercial interests, archaeologists of the new millennium will need to be effective communicators and sensitive to the politics</p>

²⁴⁵ Chapter 18

²⁴⁶ http://www.art.co.za/artist/walter_battiss/cv.htm 10/06/01 13:55

²⁴⁷ Miller 1996

²⁴⁸ Meyer. 1998. p. 31

²⁴⁹ Meyer. 1998 p. 2

²⁵⁰ Chapter 18

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	<p>of their points of engagement. And here lies the hope of avoiding the contradictions of the past. There is little future prospect for the sort of practice that isolated archaeologists from their publics in the name of science, allowing the colonial myths of earlier centuries to become the media images of popular literature and media. Whether this brings the further marginalization and decline of Africa that is Manuel Castells' gloomy prediction or Thabo Mbeki's 'African Renaissance' is in the hands of those who will make the history of the future.²⁵¹</p> <p>Martin Hall Centre for African Studies University of Cape Town</p>
c. Environmental conditions	
Geographic location	The two sites at which these artefacts were discovered, Mapungubwe and K2, are situated on the farm Greefswald near the confluence of the Shashe and Limpopo rivers. They are the most important and best known Iron Age sites in South Africa and are two of the most important cultural monuments in Africa. ²⁵²
Bio-physical threats	The river routes from the interior of southern Africa to the Mozambique coast had to be used for exactly the same reasons that they were used in East Africa. During the summer months, the lowveld flanking the ocean teemed with tsetse fly and mosquito borne disease affecting man and domestic beast and during the dry and healthy winter, there was no surface water away from the few major rivers. The immediate objective for sea traders wishing to make contact with a society with organised miners and metal smiths would have been the middle reaches of the Limpopo where rich deposits of iron and copper were worked within easy distance at Phalaborwa and Messina. There were traces of gold there too, and enquiries and incentives must have led traders onward to where gold was more readily available westwards and northwards of Mapungubwe. ²⁵³
Geographical detail	John Campbell, a missionary writing in 1820, described Kaditshwene. It was then a fine stone town of more than 10,000 people on a flat-topped tableland in the western Transvaal and one of several which still flourished. ²⁵⁴
d. Ruling structure	
Governing pattern	Mapungubwe is a cliff-begird tableland on the South African side of the Limpopo River a short distance to the east of its junction with the Shashi where Zimbabwe, Botswana and South Africa meet. Before World War II, investigation began into the stone ruins on the top of the tableland and other remains in the surrounding valley. Subsequent periodic archaeological exploration revealed that two communities had lived there contemporaneously in a feudal society. Amongst artefacts buried in élite graves were imported glass beads and locally-made gold wire, gold beads, other artefacts and gold-are now plated carved wood objects including a rhinoceros: a 'golden rhino'. ²⁵⁵
Related governing systems	<p>There is another town dominated by a fortified hilltop in the Mashatu Game Reserve, which lies on the Botswana side of the Limpopo between the Shashi and Motloutse Rivers. Approaching from the north, a long narrow tableland rears up from the plain. On the flat top, there are well-constructed stone defensive walls with neat courses made from carefully masoned stone. I met a Canadian professor of archaeology surveying in July 1983 and he described what was there. On the summit there were traces of a number of terraces for circular huts as well as the defensive walls. Below were hundreds of hut circles. Carbon dates of about 950 AD had been obtained and maybe 10,000 people had lived there at one time or another. Later settlements up to the 19th century overlaid the original town. He pointed across the plain to another gaunt mountain with vertical rock walls. 'That was inhabited, and others, but surveying will have to wait for another time.' On the southern side, there was a line across the valley where the archaeologists had dug an exploration trench. At the end of the valley there was green grass and a clump of trees with fleshy leaves that signalled the position of a perennial spring. It was the source of water that made that place habitable. It was another 'Mapungubwe'. The people who lived there centuries before Great Zimbabwe were numerous and had a powerful political system extending far beyond one isolated town.</p> <p>Across the Motloutse River, there are other ancient stone towns from the same era, at the cusp of the Iron-age divide. Huffman told me that it could be generally accepted that at about 10-1100 AD there were a series of kingdoms along the Limpopo and into today's Botswana at that latitude which belonged to the same culture group but had separated into different political entities: kingdoms or dynasties. The source of their economic power was principally mining and trades with metals and their artefacts.²⁵⁶</p>
Cultural links	In June 1996, the National Parks Board of South Africa, through the medium of a documentary series on SABCTV, announced the forthcoming public opening of a remarkable Late Iron Age town they have called Thulamela, situated in the northern part of the Park near the Pafuri gate and not far from the Limpopo. It is another remarkable stone town that could arguably rival Great Zimbabwe as a tourist attraction. Historically, it has great importance, further confirming the existence of a line of sophisticated towns along the Limpopo and into Botswana, based on mining and trading, as far as the Kalahari. The

²⁵¹ <http://www.meg.uct.ac.za/martin/timeless.htm> 10/06/01 13:57

²⁵² <http://www.up.ac.za/publications/tukkie/mpungubwe.htm> 10/06/01 11:07

²⁵³ Chapter 18

²⁵⁴ Chapter 18

²⁵⁵ Chapter 18

²⁵⁶ Chapter 18

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	cultural links are clear; there is a chiefly residence on an eminence and the king was also a spiritual leader dominating a crocodile totem cult (derived from the Limpopo), evidence of a matriarchal structure (indicating a mixed west-east Bantu-speaking origin), a separate but powerful stronghold of the king's wives and all surrounded by the stone walls of family or clan communal residences. A conservative estimate of the population of Thulamela proper is 2,000 but I would guess that it was much greater in the surrounding urban and dependent agricultural complex. ²⁵⁷
Related settlements	<p>On 7th August 1996, the press released more detail of Thulamela, particularly the spectacular news that archaeologist Sydney Miller had commenced excavating two royal graves with gold ornaments dating from about 1550 AD. Clearly, Thulamela was contemporary to Mapungubwe and part of the Limpopo cultural and trading system but had not reached its peak of development and sophistication until after the fall of Great Zimbabwe. Obvious speculation follows that Thulamela existed as an important but minor tribal centre for several centuries because of its significant geography [it stands on a typical flat-topped hill with the Luvuvhu River close by] and sprung to greater importance when an offshoot of the Zimbabwean dynasty came to occupy it after 1450.</p> <p>Excavation at Thulamela began in 1993 and has proceeded with close consultation with the community surrounding the area. Whereas Mapungubwe, Great Zimbabwe, Khami and a number of other stone towns in this zone were ravaged by treasure-seekers and excavated over a long period during which techniques were often crude and still being developed, Thulamela is being treated with the highly professional methods of the 1990s with no apparent earlier disturbance. It is a remarkable archaeological site and many anthropological and historical insights are being obtained.</p> <p>The Royal graves excavated by Miller have already provided much valuable material for leisured interpretation. For example, it was found that the king, who has been symbolically named Ingwe, might have been stabbed by a sharp instrument from the front before being entombed. Miller has suggested that this be according to a tradition that when a leader was perceived to have spiritually failed because of natural disasters or was incompetent because of health or age, he was ritually murdered to make way for new blood. It would seem that King 'Ingwe' was the last ruler of Thulamela before it was abandoned about 1650.²⁵⁸</p>
Slaves	These 'viehposts' are in charge of their slaves, called Vaalpens. They are the Bushmen of the country kept in subjection by the Bechuana tribe, and are a very harmless and quiet people. ²⁵⁹
e. Settlements	
Life styles	The gold funerary objects found on some of the graves at the site, presumed to be those of a chief, his sister (who represented the female side of the kingdom) and his brother (who would have been an advisor) have attracted much attention over the past few years. These objects include the gold rhinoceros, as well as a gold bowl and sceptre, and will form part of the permanent exhibition. ²⁶⁰
Settlement pattern	10th century. In the upper reaches of the Limpopo River a settlement called Mapungubwe was formed. It was based on the <i>nyika</i> system, which is a group of households under the authority of a chief. It is the earliest known settlement featuring stone enclosures, or <i>zimbabwes</i> . ²⁶¹
Settlement layout	<p>Every house was surrounded, at a convenient distance, by a good circular wall. Some were plastered on the outside and painted yellow. One we observed painted red and yellow with some taste. The yard within the enclosure belonging to each house was laid with clay, made as level as a floor, and swept clean, which made it look neat and comfortable.</p> <p>The interior of their huts and yards outside where they cook, which are surrounded by a high fence made of sticks, are kept remarkably clean and tidy, and their iron utensils also receive the best of attention.²⁶²</p>
Domestic animals	The faunal evidence from Mapungubwe archaeological complex indicated that this community depended on their herds and flocks for most of the meat in their diet and that hunting, snaring, and gathering supplemented this meat to a relatively small degree. ²⁶³
f. Social Patterns	
	The networks based at Mapungubwe and Great Zimbabwe also maintained connections with the East

²⁵⁷ Chapter 18²⁵⁸ Chapter 18²⁵⁹ Chapter 18²⁶⁰ <http://www.up.ac.za/publications/tukkie/mpungubwe.htm> 10/06/01 11:07²⁶¹ Chronology of History²⁶² Chapter 18.²⁶³ Voigt.1983 p 132

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	<p>African coast. For here, along a coastline stretching from southern Somalia all the way to Mozambique, another remarkable African civilisation -- that of the Swahili -- developed from about the 8th century. Moving from their original homeland in northern coastal Kenya, Swahili-speaking seafarers ventured south along the coast, pausing at islands, inlets and sheltered beaches to establish fishing villages that would eventually grow into important trading ports. Between 1000 and 1500 AD, as the trading networks of southern Africa began to send their products to the Indian Ocean coast, the Swahili towns grew larger and much more wealthy. They served as commercial entrepôts, attracting products (especially gold and ivory) which would then be sold to Arabian merchants for a variety of prized imports, including cotton cloth, Persian glass beads, and Chinese porcelain. In this way, the Swahili cities became the linchpin between eastern and southern Africa and the Asian trade networks that extended from the Mediterranean to China.²⁶⁴</p>
Relationships	<p>What about the archaeology? The archaeological realities risk being drowned in a flood of nationalistic fervour and journalistic hype. Thulamela has been described as a 'mountain fastness' sporting the remains of an 'armoury' and a 'high school for teenagers', evidence of an 'ancient civilisation' presided over by a 'divine king'. The reality is somewhat more prosaic. Thulamela is a typical hilltop site, one of many in the Limpopo drainage area excavated by archaeologists during the past fifty years. It is strategically located in fairly flat country near the confluence of the Luvuvhu and Limpopo Rivers. According to Sidney Miller, it was inhabited from about the 13th to the 16th centuries AD by people with cultural links to the inhabitants of Mapungubwe and Great Zimbabwe. The hill-top core of the site now boasts the reconstructed stone-walled domestic and court enclosures, making up the residence of the locally powerful and wealthy chief, surrounded by possibly some 1500 of his immediate subjects living around the hill.</p> <p>Thulamela is an important archaeological site because it clearly relates to the earlier hilltop site of Mapungubwe further west and to contemporaneous Great Zimbabwe to the north. Thulamela has the advantage of being relatively small, and controlled partial excavation of the former pristine site by professional archaeologists has revealed a wealth of detail about the elite inhabitants, in a fairly short space of time. This is exciting to archaeologists and journalists alike, who often have diverging perspectives on the presentation and interpretation of the excavated finds.²⁶⁵</p>
Social standing	<p>These were the settlement sites of subsistence farming communities of apparent high social rank who lived in this region from approximately AD1000 to AD1300. These sites were proclaimed national monuments during the 1980s due to their archaeological and cultural wealth and significance, as well as their historical importance. A core collection of artefacts was proclaimed a national heritage during 1997.²⁶⁶</p>
Expansion	<p>13-15th century. The Bantu speakers set up a network of kingdoms in southern Africa. The most famous was the Shona Empire, called Zimbabwe, which was located between the Zambezi and the Limpopo River. The region's economy was rooted on cattle (seasonal pasturage between the Zimbabwe plateau and the surrounding Mozambican lowlands), agriculture, and the development of local industries such as the mining of gold, copper and iron, and the development of salt pans and potting industries. The historical monuments, the stone enclosures of <i>Great Zimbabwe</i>, are today's heritage of the political and economic domination of the civilisation of <i>Great Zimbabwe</i> over the region. The city of Sofala (south of today's Beira) was described in a written report in the 10th century by an Arab writer, al-Mas'udi, long before the arrival of the Portuguese. Sofala developed as a trade centre for gold, and was a city of warehouses and trade between East Africa and India.</p> <p>The <i>zimbabwe</i> heritage in southern Mozambique is the settlement at Manekweni, about 50 kilometres from the Indian Ocean. Manekweni was a centre for cattle ranging, agriculture and gold trade between the 12th and the 18th centuries.²⁶⁷</p>
g. Living conditions	
Farming	<p>Subsistence practices supported the growing Iron Age population and its developing social structures. On Greefswald, the site location, settlement remains, remains of agro-pastoral products, traded glass beads, fragments of ivory, gold, and Iron Age artefacts found in the archaeologically rich deposits of the site reflected the dependence of the site inhabitants on their own particular natural environment.</p> <p>The dramatic increase in mixed farming, together with increased trade in gold and ivory, during the five hundred year period from 800 AD to 1300 AD was followed by a five hundred year period of apparently less active farming and trade from 1300 AD to 1800 AD. This decline may be ascribed to the influence of fluctuating environmental conditions similar to those of the historically known fluctuation in tsetse fly</p>

²⁶⁴ Giblin, <http://www.zyama.com/lowa/Africa%20History.htm> 10/06/01 11:58

²⁶⁵ Miller 1996

²⁶⁶ <http://www.up.ac.za/publications/tukkie/mpungubwe.htm> 10/06/01 11:07

²⁶⁷ Chronology of history. 2001

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	<p>infestation, malaria and conditions of high rainfall or drought in the area during the 19th and 20th-century.²⁶⁸</p> <p>For some time before 1970 it was already obvious that the communities on K2 and Mapungubwe were subsistence farmers, typical of the southern African Iron Age.²⁶⁹</p>
Wealth	<p>The Bechuana throughout South Central Africa possess wagons, and have spans of oxen and everything complete like the colonists... [They] are far more beneficial and useful in the country than the Boers. They are outstripping them in civilisation, and if they had white skins, would be looked upon as a superior race. The culture which descended from Mapungubwe, Great Zimbabwe and Thulamela was still flourishing along the Limpopo in the late 19th century. There are vestiges of it in the late 20th century despite all the pressures placed on it.²⁷⁰</p>
h. Trade & Skills	
Material use	<p>Large numbers of beads made of glass, ostrich eggshell, bone, metal, pottery, shells of snails, and fresh water mussels, and cowrie shells were found in earlier excavations.</p> <p>Artefacts made of bone and ivory were reported by previous archaeologists.</p> <p>Stone artefacts previously observed on the Greefswald site varied from mortar stones, rubbing and hammer stones and Stone Age flake artefacts.</p> <p>While the gold artefacts from Mapungubwe fired the imagination, the ceramic artefacts also attracted much attention.²⁷¹</p> <p>Not only was the pottery an important part of the everyday life of the Greefswald people, but the study of it by the archaeologists who came later was invaluable in reconstructing the way of life, site chronologies and the site distribution patterns of the past.²⁷²</p>
Artistry	<p>Ceramic figurines of humans and animals were made. Human figurines with an elongated shape and stump for head, arms and legs appear to be typical of K2, although at least one of the figurines has been found at Mapungubwe.²⁷³</p>
Construction methods.	<p>The stratigraphic research concentrated on detail recording of site stratification, stratigraphic sequence and site features such as built structures of wood, clay, gravel, stone or any other material including those features that were removed during excavation.²⁷⁴</p>
Regional trade	<p>Similar inter-regional networks of trade and political authority existed in southern Africa. One regional system, centred on Mapungubwe, a site located south of the Limpopo River in modern South Africa, maintained trade contacts between the Indian Ocean coast, where Mapungubwe obtained glass beads and other Asian products, and pastoral communities of the eastern Kalahari Desert, where it found the products of cattle-keepers. As its wealth and power increased after 900 AD, Mapungubwe developed a social elite which, as a sign of its status, occupied hill tops and built high stone walls to distinguish its space from that of the common people who lived on lower ground.²⁷⁵</p>
Mining	<p>These developments would later be elaborated at Great Zimbabwe, a site in present-day Zimbabwe. Great Zimbabwe became important at about the time Mapungubwe was declining in the early 1200s. Like Mapungubwe, it was apparently a Centre of both political authority and long distance trade. Its rulers appear to have controlled the export of gold to Indian Ocean ports in modern-day Mozambique and Tanzania. Drawing on the tradition of social signification from Mapungubwe, its rulers built imposing structures, apparently to symbolise their political and religious authority. Yet, we must doubt that this process of creating centres of authority and networks of trade proceeded without dispute and disagreement, for we know that at the shrines where Zimbabweans venerated their ancestral spirits, spirit mediums gave voice to grievances against political leaders who threatened the autonomy of local communities.²⁷⁶</p>
Products	<p>The archaeological collection that will form part of this exhibition includes a variety of materials such as pottery, glass beads, gold, copper, iron, bone and ivory artefacts, as well as animal and human skeletal remains.²⁷⁷</p>
Mining skills	<p>Metallurgical skills, developed in the mining and processing of iron, copper, tin and gold, promoted regional trade and craft specialisation. At several archaeological sites, such as Mapungubwe and Thulamela in the Limpopo Valley, there is evidence of sophisticated political and material cultures, based</p>

²⁶⁸ Meyer. 1998. p 3.

²⁶⁹ Meyer. 1998 p 29

²⁷⁰ Chapter 18.

²⁷¹ Meyer. 1998. p.29

²⁷² Meyer. 1998. p.195

²⁷³ Meyer. 1998. p.214

²⁷⁴ Meyer 1998. p.29

²⁷⁵ Giblin. 2001

²⁷⁶ Giblin. 2001

²⁷⁷ <http://www.up.ac.za/publications/tukkie/mpungubwe.htm> 10/06/01 11:07

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	in part on contact with the East African trading economy. These cultures, which were part of a broader African civilisation, predate European encroachment by several centuries. ²⁷⁸
Trade Routes	Paul Sinclair in <i>Chibuene - an Early Trading Site in Southern Mozambique</i> (1982) wrote: Finds from Chibuene demonstrate conclusively that southern Mozambique came within the early trading networks. They bear out the suggestion that the coastal settlements south of the Save River maintained links to the north. The finds from Chibuene further suggest a possible point of entry for commodities that affected the early Iron Age societies and those of the Kutama tradition of the Zimbabwe plateau and the Limpopo valley. Trade routes with the interior along the river highways of the Zambezi, Save and Limpopo Rivers must have been well established, however minimal their use was at that time. Probably there were specialist clans who undertook one or two journeys a year during the healthy winter season ²⁷⁹
Trade	Absolute evidence of trade with the Indian Ocean was established by the presence of imported glazed ceramics and glass beads. Whether sea traders themselves visited Mapungubwe cannot be proven and it could be surmised that all the trading was carried out through middlemen in a chain down the Limpopo that ended at the coast. The first contacts for commercial gold and ivory were done by word of mouth through an existing chain of copper, iron and cattle traders, but it seems inconceivable that over the two or three centuries that Mapungubwe functioned as a feudal town, growing in wealth and stature, that Arabs, Indians and Swahilis did not have sufficient curiosity and spirit of adventure to travel to the sources of gold and ivory. ²⁸⁰
Trade links	Great Zimbabwe was always seen as the capital of a Civilisation that had been developed by people coming from the north who settled in that hospitable land of healthy high plateau and within reach of rich mineral deposits. Sofala was the known entrepôt with a natural route, via the Save River and its tributary the Lundi, to Great Zimbabwe and its associated towns on the Zimbabwean plateau. In the historical record, the Zambezi was a pathway for Swahili and then Portuguese traders to northern Zimbabwe and Zambia. However, Mapungubwe was on the Limpopo with no apparent easy access to Sofala. The idea of medieval sea trading stations as far south as Chibuene and Inhambane en route to the Limpopo was not seriously considered until the 1980s. ²⁸¹
i. Traditions	
Burial traditions	The child was buried in a flexed position on the right side, with its front facing north-east and the face of the skull oriented towards the north. The scapula of a big animal such as a cow had been placed above the child's head. The skeleton also had small, red-brown trade glass beads around its pelvis. ²⁸²
Mystique	The mystique of gold has fired the imaginations of journalists and caught the attention of the public (and no doubt illicit treasure hunters all over the Northern Province). The tensions around land, gold, and tourism will become increasingly interesting as the realities of long-term development of the area tax the carefully crafted alliances between the National Parks Board, the Northern Forum (consisting of leaders from the Tsonga and Venda communities), the National Monuments Council, the Northern Province government, and Gold Fields Foundation, the sponsors of the project. ²⁸³
Adornments	The discovery of the Mapungubwe ruins caused speculation when it was publicised, but it was always overshadowed by the medieval Zimbabwean culture and empire, particularly the stone ruins of spectacular Great Zimbabwe. There are a great number of stone ruins all over southern Africa and Mapungubwe was just one of these Late Iron Age sites from the last thousand years. But the particular paradox of the 'golden rhino' and other artefacts at Mapungubwe was understood for years as some eccentric outlying frontier town attached to the wealth of gold mining and craftsmanship in Zimbabwe. Late Iron Age Bantu-speaking people apparently had no use for gold. They were cattle-oriented semi-nomadic people; gold is soft and heavy will not alloy to make a harder material and was useless to them. Without the stimulus of external trade, fine-quality gold working should not have occurred. ²⁸⁴
Rituals	The Arab chronicler, Masudi (947 AD), when describing the people of the interior of southern Africa stated that if a chief, or <i>Waqilimi</i> , failed his people, he was ritually murdered. This indicates that not only were Arabs and Swahilis in contact with the Limpopo culture at that time, but that the traditions were well-entrenched and lasted at least for 700 years. The notorious murder of King Shaka of the Zulus by his half brothers in 1824 should be re-interpreted in the light of this evidence. Shaka had by then caused misery and chaos in his kingdom by his excesses following the death of his mother, there was a drought cycle and an army had been defeated in a raid on the Gaza Kingdom of southern Mozambique. ²⁸⁵

²⁷⁸ <http://www.gov.za/yearbook/history.htm>. <http://www.emilyadi.com/history.htm> 10/06/01 13:36

²⁷⁹ Chapter 18

²⁸⁰ Chapter 18.

²⁸¹ Chapter 18.

²⁸² Meyer. 1998.p 111

²⁸³ Miller 1996.

²⁸⁴ Chapter 18.

²⁸⁵ Chapter 18.

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Descendants	The modern Venda-speaking people who inhabit the region south of the Limpopo are considered to be the direct inheritors of the eastern Limpopo culture. They have similarities to, and some differences from, the modern Shona-speaking peoples who generally descend from the Zimbabwean Empire north of the Limpopo. Photographs from the late 19th century of Venda towns show a remarkable coincidence of neat stone-walled communal areas which have clear resemblance to Thulamela, Mapungubwe, the later Zimbabwean ruins, and 19th century Tswana-speaking towns within reach of the western Limpopo several hundred kilometres away. Thulamela lies near the modern mining complex at Messina and gold wire and beaten gold were found there. ²⁸⁶
Values	For me, the 'golden rhino' of Mapungubwe is a particular symbol of the cultural confrontation between ageless African peoples who never valued gold and the civilisations of the northern hemisphere who had murdered and waged wars to possess it for thousands of years. It is notable that when Great Zimbabwe was abandoned in the 15th century, large quantities of worked gold were left behind. When the people moved after the collapse of the local environment under prolonged pressure, they did not carry their gold away. Subsequent Shona occupiers of the ruins had no interest in the abandoned gold. R.N. Hall and W.G. Neal, writing in 1904, described the quantities of gold found in Zimbabwean ruins at that time and the several typical manufactures: wire in several thickness made up in various styles of bangles, bound on ceremonial wooden objects, woven together into 'basketwork' and the finest used as thread in cotton cloth; gold beads of various sizes often etched with Zimbabwean symbols and designs; beaten gold to cover wooden artefacts and sculptures (such as the 'golden rhino' of Mapungubwe); gold tacks for fixing beaten gold; ferrules for the ends of ceremonial staffs; and fine plating on copper, bronze or iron ceremonial weapons or implements. ²⁸⁷
Symbolism	Only recently has it been established that fortress towns like the archaeologically undeveloped site I visited and Mapungubwe with its symbolic 'golden rhino' preceded Great Zimbabwe and the great imperial complex created by Bantu-speaking people. Other sites such as Thulamela were occupied both before and after Great Zimbabwe. Some estimates reckon a population of 20,000 at Great Zimbabwe at its peak, with all the necessary organisation and protocol of a tightly controlled and complex urban capital of a grand feudal state directly influencing people over maybe 250,000 square kilometres. ²⁸⁸
Ancestors	In 1977, Prof. Tom Huffman was suggesting that Zimbabwe may have been founded by people from the south-east who brought knowledge of ocean trade with them to found Mapungubwe and the other Limpopo-based towns, before moving north into Zimbabwe where gold was more prolific and accessible. The dates were now more-or-less certain and it was becoming accepted that Mapungubwe was a forerunner of Zimbabwe. Ocean trading related to gold and ivory began on the Limpopo long before the foundation of Great Zimbabwe. Huffman's hypothesis of a specific migration carrying the concept of trade was difficult to prove, but what was sure was that, as early as the 9th-10th century at Mapungubwe on the Limpopo, a structured feudal society emerged coincident to the acquisition of wealth and its accumulation through trade. Maybe, one can simply see what happened as a movement of ideas and information, perhaps carried by a few outstanding entrepreneurs or a dominating élite clan. An infusion of people towards the novelty of the developing Limpopo River structures followed, and Huffman has pointed out elsewhere that this is illustrated in the archaeological record. ²⁸⁹
Habits	They are very expert in metal, melting the ore for the manufacture of ornaments, assegais, Kaffir picks and such things, as they require. They also make very neat mantles, karosses and other kinds of materials for the women, the men being the tailors and dressmakers for the tribe. Time being no object, their work is beautifully executed. ²⁹⁰
Music	They are also very fond of music; they make various kinds of instruments that produce pleasing sounds. ²⁹¹

4.2.1.2 Findings and recommendation from Dr. A Meyer²⁹²

- a. There is a pressing need for an accurate and detailed database on the

²⁸⁶ Chapter 18.

²⁸⁷ Chapter 18.

²⁸⁸ Chapter 18.

²⁸⁹ Chapter 18.

²⁹⁰ Chapter 18.

²⁹¹ Chapter 18.

²⁹² Meyer. 1998

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archaeological sites and their cultural contents to facilitate basic research and theoretical explanation, as well as management programmes.

- b. Both the universal and unique characteristics of the Iron Age cultural remains of Greefswald and their relationship with the environment must be identified, studied and interpreted within the local, historical, geographical and temporal context of Greefswald. An interdisciplinary approach to research into the management of these cultural resources in relation to the environment is required to ensure a meaningful research.
- c. The chronology and sequence of so-called 'Hottentot' and 'Bantu' groups need to be clarified.²⁹³
- d. The settlement sites of small communities and evidence from the everyday life of community members are considered to be an important part of the current Greefswald research and conservation programme. The relationship between the Greefswald communities and their natural environment is seen as a necessary research theme in support of the study, of the settlement, and subsistence patterns of communities in regional context.²⁹⁴
- e. At Mapungubwe, future main research concerns are
 - i. the context and significance of the stone walls within the settlement sequence and settlement pattern,
 - ii. the nature and significance of the apparent post-stone wall phase in the settlement sequence,
 - iii. the relationship of Mapungubwe with nearby and related settlements,
 - iv. the social status of the site inhabitants,
 - v. the possible relationship between Mapungubwe and historically known population groups, and
 - vi. an explanation for confirmation of what happened to the specific population group after termination of the settlement at Mapungubwe.²⁹⁵
- f. The project should in the future provide for specialist management programmes with regard to the conservation and sustainable use of the sites, collections and archive records. A policy and legal framework for heritage management is currently being mobilised at national and local level in South Africa, and is already aimed at involving sites that specifically include Mapungubwe and K2, as well as heritage collections such as the Greefswald collection.
- g. The interest should be extended to include the total history and cultural heritage of the region. Most of this cultural heritage lies in the small living sites of the ordinary

²⁹³ Meyer. 1998 p. 29

²⁹⁴ Meyer. 1998 p. 37

²⁹⁵ Meyer. 1998 p. 267

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people and the material evidence of everyday life. The future is the responsibility of researchers, conservationist, teachers, cultural resource manager's and of the public.²⁹⁶

4.2.2 Case Study Two - Augrabies Falls National Park

The Augrabies Falls National Park Project formed part of the pilot project programme funded by the Danish Cooperation for Environment and Development (DANCED). The project consists of two components, namely, the Cultural Resource Management (CRM) plan and the sister project of community-based cultural tourism development. Of the two, the Cultural Resource Management Plan is the document known to contain the documentation or systematics for the Augrabies Falls National Park (AFNP), and thus the only one reviewed.

The study area consists of three main areas, namely the Augrabies Falls National Park, Riemvasmaak, and the adjacent areas of Marchand, Augrabies, Alheit, Noudonsies and commercial farms in the vicinity. The cultural mapping for the Augrabies Falls National Park was completed in March 2001 and encompassed a cultural inventory and evaluation process for the site. The study focussed on the pragmatics of monitoring for evaluation of the historic resources. These were

- a. conservation to include condition, vulnerability, accessibility, frequency of access:
- b. significance (value) to include historical, scientific, emotional, religious, unique, and contextual: and
- c. utilisation to include scientific, tourism, education, historic and land claims.

As a methodology, existing cultural resource information was consulted. It included discussions with community participants, South African National Parks staff members, as well as an in-depth literature study and field surveys. The unknown resources of the study were located by means of cultural resource survey of all relevant areas. See Chapter Two for an explanation of the Cultural Resources Management program of the South African National Parks.

All archaeological and historical sites were documented using a standard ADRC documentation form, whereas the other resources were documented using acceptable documentation techniques. A geographic information system (GIS) was used to represent the distribution or database containing all information relating to historic and archaeological

²⁹⁶ Meyer. 1998 p. 267.

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sites. All cultural resources were evaluated in terms of conservation, utilisation, monitoring and significance.

The output for the project include a Cultural Resource (CR) inventory, management plan, geographic information system database and maps, Cultural Resource Management workshops as well as the small display on the cultural resources found in the area.

The cultural resource inventories included both tangible and intangible resources. The tangible component included archaeological and historical sites, one hundred and ten sites from the park and forty-nine sites from the adjacent area, traditional domed huts, other traditional houses, traditional dress as well as arts and crafts. Myths and legends such as the Water Snake, traditional games, dance, music, and storytelling were compiled in intangible resource inventories.²⁹⁷

The management plan is based on two very important aspects, namely conservation and sustainable utilisation. Recommendations regarding these two features were made for all the resources from the inventories. To ensure the continuation of conservation management, monitoring programme was also formulated for the archaeological and historical resources from within the park.

4.2.2.1 Research and documented topics.²⁹⁸

Table Six. Summary of terminology and supportive literature describing Augrabies Falls National Park.

a. Current conditions and opinions.	
Informing	In an effort to locate more cairns, Alan Morris and A.B. Smith undertook a survey in 1980 of the same area on the Orange River where Dreyer and Meiring had earlier undertaken their research. These excavations were not aimed at increasing the skeletal material for the area, but were undertaken in an effort to supplement the meagre information provided by the excavations of Dreyer and Meiring
Threats	The site can be classified under potential threat, since it appears as if alluvial and erosion activity takes place during the rainy season.
b. History	
Chronology	Although a number of associated archaeological sites have been found, and some even excavated, but very little is known about the early Stone Age years. A MSA3 site on the farm T'Boop near Brandvlei, has been dated to at least 37400 to 600 BP.
History of those that followed.	During the 1890s the harsh environmental conditions of the Northern Cape came pointedly to the fore, with many farmers struggling to survive. Locust pests, drought and disease ravaged the area of Namaqualand and Bushmanland, culminating with an extremely severe drought. When this drought was followed by the destructive Rinderpest epidemic, many farmers found themselves bankrupt and destitute.
Possible extinction	In this regard, Beaumont & Morris mentions that the disruption of the Einiqua way of life along the banks of the Orange River can be attributed to an increase in commando activity (banditry) as well as an influx of outsiders to the area. It would seem that the Einiqua inhabitants had either been killed or driven away.
c. Environmental conditions	
Geographic location	The ancestors of modern humans have inhabited the areas joining the Orange River since the Early Stone Age. The location of site also provides the information on their way of life, in almost all the sites from southern Africa have been found the bottom of rallies ended in woodland. In other words the human ancestors invariably establish themselves near good water resources.

²⁹⁷ South African National Parks 2001.p. i.

²⁹⁸ South African National Parks 2001. Appendix D and E.

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Bio-physical threats	The dry climatic phase that followed caused the foragers to return to the more favourable environmental conditions on the riverbanks.
Geographical detail	Unlike the Early Stone Age the Middle Stone Age people also establish themselves in various different habitats and localities, from caves to open sites, from the top of mountains to the bottom of valleys.
d. Ruling structure	
Cultural links	Based on historical evidence from the late 18th century, it is believed that the San hunter-gatherer and the Khoi pastoralists seem to have had largely peaceful coexistence.
Related settlements	Though the relationships between the hunter-gatherers and the foragers during the late 1700s seem to be devoid of any conflict, it certainly was not the case between the different herder groups. The conflict between these groups were in most part, based on stock trading activities
e. Settlements	
Life styles	Apart from keeping of livestock, the Namnykoa people also fished from the river with the use of fish traps, which they made from Karee wood, and built game trapping pits or kaysi to hunt the many game species to be found on the banks of the river. The Namnykoa also cultivated dagga and collected plant foods.
Settlement pattern	These Middle Stone Age human beings seem to have grouped themselves into close knit forager groups, who actively hunted, but also gatheedr plant food. The Swedish deserter, Hendrik Jacob Wikar, came across at least two Europeans who were farming in the region, namely Jacobus Bierman on the river and Albert Meyburg further downstream. Jacobus Bierman has been granted grazing rights by the Dutch colonial authorities from Cape some years earlier. Many of the Hottentot in the area became unsatisfied with the treatment received from the authority and settled and established missions such as Pella and De Tuin.
Settlement layout	A third village was located a little higher up the river. In all, these villages consisted of approximately 40 huts, and being pastoralists, 300 sheep, and goats, and 150 cattle were counted among the villages
Domestic animals	It would appear as if the environmental conditions along the river banks allow year round habitation by herders, while the island offered protection from stock raiders. Only during exceptional rainy periods would the herders move away from the river.
f. Social Patterns	
Networks	
Relationships	These Middle Stone Age human beings seem to have group themselves into close knit forager groups, who actively hunted, but also gathered plant food.
g. Living conditions	
Farming	Doornfontein industry sites possess few formal tools, are located close to the river and can be associated with herding activities.
Food	The almost complete lack of preserved organic material such as plant remains means that very little is known about diet of the early humans. Experimental studies undertaken on a typical hand axe seemed to suggest that it was most often unsuited for the butchering of large animals such as hippopotamus and elephants.
Housing	The matjieshuisse are extremely well suited to the hard, dry climate of the study area and Northern Cape. During the summer stems and culms from which the mats of the houses are built, shrinks, allowing gaps to appear. As a result, wind can enter the interior of their homes and cool it down. In winter, the stems expand, thereby shutting out the cold winds and rain. The matjieshuisse are also very well suited to nomadic way of life, in that it can easily be packed up and moved. The nomadic lifestyle was characteristic of the herder groups inhabiting the study area for many centuries. Matjieshuisse are certainly not the only traditional homes found in the study area. One another example is the so-called Kokerboomhuis, which is a rectangular house constructed of the wooden parts obtained from the quiver tree. The roof of the house is usually thatched with grass. Due to the extremely flammable nature of the dry quiver tree wood, both interior and exterior of the house is smeared with clay. Clay is used because it takes better to wood than dung does. The walls of the house are sprinkled with water during periods of excessive heat.
h. Trade & Skills	
Material use	Ivory, ceramics, pottery, wood
Artistry	They made bowls from wood, and possessed vessels in the form of coarse earthenware. Although they did not work in iron, they obtained knives and metal implements from the Bechaunas and the Boers. Two upper grinding stone were also recovered during the surface collection, with one being dimpled, and the other stone appearing to be very similar to the stone scrapers used in leather working activities.
Construction methods.	Wikar observed ten 'mat huts' on the island with five or six people living in each hut. One of the first documented references for matjieshuisse comes from Sir Henry Middleton, who, on 14 July 1604, described the houses he saw at the Cape as being made up of crooked sticks set in the ground with mats cast over them.
Mining	Zoovoorbij consists of an archaeological deposit within a cave, and an associated specularite mine nearby. Historic settlement of Xhubuxnap. The foundations of rectangular structures are visible. This single circular stone-built closure has also been found. It is very possible that the site can be associated with

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	the historic tungsten mine from Koelmanskop.
Products	Archaeological research indicates that since 2000 BP, the Ceramic Later Stone Age from the region has had two distinct manifestation. The sites contain potsherds and earthenware.
Trade Routes	It can be assumed the European ivory hunters had been traversing the river for long before the seventeenth hundreds initialising an era of contact between European and Later Stone Age inhabitants of the Orange River.
Trade	The !Kora appeared to have alliances with the Griqua, further east, from whom they obtained firearms.
Trade links	The presence of glass beads and metal pieces in the assemblage from Droëgrond, seem to indicate the existence of trade and external contacts during the 16 th century.
i. Traditions	
Burial traditions	The most interesting observation made by Gordon here, is the many stone cairns, indicated by him to be graves, including that of a chieftain.
Mystique	It soon became evident that almost all the stakeholder communities are well familiar with the Water Snake, but also with another of the mythic Great Snakes, referred to as the Dassieadder.
Adornments	The Late Stone Age artefacts assemblage consists of worked stone pieces, pieces of specularite, pendants made from mica, bone, ostrich eggshell beads and fragments, undecorated potsherds...
Rituals	Camel thorn Tree on the banks of a non-perennial river. This tree is called tree of treason. According to community members the magistrate of the district used to hold their meetings under the tree.
Clothing	At least two different forms of traditional costume can be found within the study area. The first of these is the traditional dress of the Nama-speaking peoples, and consists of colourful dresses with white apron in front and white headscarves. The traditional dress is often worn during the traditional ceremonies. The second form of traditional dress observed in the study area is that of the Xhosa-speaking people. According to community participants the traditional dress worn by the Xhosa from the study area, which is still worn during special ceremonies and events, is comprised of a headdress, a red blanket worn around the shoulders, a skirt and a small apron, and beads. The faces are coloured for decoration.
Symbolism	A recent rock engraving of a motif very similar to the symbol used for mining.
Habits	Quiver tree with manmade holes in its trunk. The second hole from the bottom contains a flat stone. According to Mr. Eli Visser, all these holes once had stones in them, and were used by the Bushmen who had placed the stones in the holes to form a ladder. This ladder was then used to ascend the tree with the intention of storing game and venison up the branches, away from the predators and scavengers.
Medicine	Leaves on placed on the wound as a dressing. Before application the leaves are smeared with fat. Warmed leaves are placed on the head as treatment for headaches. Warmed leaves are placed on the throat to relieve pains there. Leaves are placed in the shoes to treat painful feet..
Games	Traditional games and forms of recreation represent another cultural resource that is often ignored during management strategies. However, in certain places the utilisation of traditional culturally based games has achieved some significance. The traditional game from the study area is called the 'grondkaart' or soil map. It would appear as if the game is no longer played, and it seems that only a few elderly individuals still have the knowledge of playing the game. Although an effort was made to document the rules of the game, time constraints did not allow for this documentation to be undertaken.
Story telling	The telling of stories is an age old art form that is rapidly disappearing. Very little knowledge exists as to the level and extent of story telling as a cultural feature from the study area.
Music	The Stapedans when performed traditionally, is often accompanied by music played on guitarist, accordions and harmonicas. Musical instruments from the study area include conventional guitars, the 'baas' which is a musical instrument consisting of a drum with this single string across, harmonicas, violins and accordions.
Dance	Apart from arts and crafts performance is probably one in the most visible and popular ways of cultural resource utilisation. The number of cultural resources based on performance has been identified. Of these, the Nama Stapedans are the more most important. Traditional dancing is cultural manifestation that is clearly and certainly familiar to most of the study area and especially in Riemvasmaak. Traditionally, these dances are performed at special functions and events, such as at weddings and coming of age ceremonies for girls.. Traditional clothing is also frequently worn.

4.2.2.2 Documentation and recommendation of findings.

The methodology or systematics employed to document and recommend management of cultural resources at the Augrabies Falls National Park consisted of 5 main steps²⁹⁹.

- a. The first step consisted of consulting existing cultural resource information.
- b. The second step consisted of cultural resource survey that included the national park and adjacent areas.

²⁹⁹ South African National Parks 2001.p. 4-1 to 4-11

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- c. The third step involved the documentation of cultural resources.
- d. The fourth step involved the capturing of information in a geographic information system.
- e. The final step included the evaluation of cultural resources that was completed in four sub-steps. The first one evaluating cultural resources for monitoring. The second step was evaluating cultural resources for utilisation, the third step was evaluating cultural resources for significance or value and the final step was the evaluation of cultural resources for conservation. See Appendix Fourteen for the methodology used for the Augrabies Cultural Resource Management Plan.

4.2.2.3 Management of the cultural resources of the Augrabies Falls National Park.

Management of the Augrabies Falls National Park cultural resources consist of six interrelated aspects.

- a. The first is an inventory; with an objective to locate, document and evaluate all archaeological, cultural and heritage manifestations found within the study area.
- b. The second aspect is conservation with the objective to ensure the preservation of cultural resources found within the study area.
- c. The third aspect is monitoring with an objective to evaluate the condition of cultural resources over time in an effort to ensure their protection.
- d. The fourth is to produce a geographic information system with the objective of the promotion in use of GIS is by the South African National Parks in the management of cultural resources.
- e. The fifth aspect is the utilisation of cultural resources from within the study area in a sustainable and responsible manner, to the benefit of those concerned. It is the opinion of the South African National Parks that utilisation represents one of the two main building blocks of cultural resource management, the other being conservation. Whenever the utilisation of cultural resources is concerned, it is exceedingly important that it be undertaken in a responsible and sustainable manner, and with the least possible detrimental effect on the resource itself. Such utilisation must also always be managed within the regulations and confines of relevant legislation.
- f. The sixth and final aspect is scientific research is to establish a strategy for the management of scientific research of cultural resources from within the study area. Although the scientific utilisation of resources is very important, archaeological research often involves excavation, which is an irreversible destructive activity, albeit very informative. In an effort to manage this form of resource utilisation, a

number of guidelines is being developed.³⁰⁰

4.2.2.4 Summary of findings in Cultural Resource Management Report.

Recommendations were made under each site documentation sheet. Most of the recommendations address the monitoring and documentation of the site, however, a few noteworthy comments are herewith listed as indications of shortcomings under current conditions.

- a. Guidelines for scientific research to be undertaken
- b. Signboards must be erected on a culturally 'sterile' piece of land.
- c. As the site represents one of the four main historic settlements of Melkbosrant at the time of the removal, it is exceedingly important in terms of land claims. It can therefore also be regarded as highly sensitive and should not be utilised by the SANP for other purposes without proper consultation and consent from the Melkbosrant representatives.
- d. The aesthetic quality of the site would make it well-suited for utilisation of education and interpretation purposes. Such utilisation can of course be combined with scientific research, in that school groups and the visitors can be allowed to visit the excavation. Because, as human remains are involved, this kind of utilisation must always be undertaken with the necessary sensitivity and respect.

The following conservation recommendations are made in the document:

- a. Full documentation of the site, including photographic documentation, tracing, site maps, and miscellaneous site related information such as the topographical nature of the site, geology, associated artefacts, et cetera.
- b. The construction of an elevated boardwalk to cross over the site will allow visitors to view and photograph the rock art, at the same time prevent any accidental or intentional damage to the art.
- c. An introductory signpost must be erected some distance from the site, outlining the importance of the sites. This signpost can possibly be erected at the spot where the foot-trail to the site starts.
- d. Possibilities of utilising the traditional building skills and knowledge of community members are very good. Some examples for the utilisation of traditional houses could be included.
- e. Utilisation of legends and myths of Great Snakes from the study area can possibly be done in similar fashion to the utilisation of this snake legend of the Zambezi River in Zimbabwe. Here, and especially at Victoria Falls, an industry has been

³⁰⁰ South African National Parks 2001 p. 9-1to9-9

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built around the legend of River Snake known as the Nyami Nyami. Curios, souvenirs and art pieces depicting the snake, are made by local community members and sold to tourists.

4.2.3 Old Fort - Johannesburg.

A survey report on the now defunct prison in Hillbrow, Johannesburg, known as the Old Fort, was commissioned by the South African Heritage Resource Agency (SAHRA) and funded by the Department of Arts, Culture, Science and Technology (DACST). The survey was undertaken in view of the planned construction of the new Constitutional Court of the Republic of South Africa. The construction is planned on the site of the so-called Awaiting Trial building. The idea is not to re-use the old Fort (built in 1898) for any other propose than a museum facility. The consulting company Mindwalks, was requested to conduct a survey of the historical and symbolic significance of the Constitution Hill Precinct in Johannesburg. The survey was commissioned to inform the development of a conservation management policy for the whole Constitutional Hill Precinct. Such a policy was necessitated by the proposed development and restoration of the site.

According to the requirements of the brief, the survey of the historical and symbolic significance was to be guided by the Australian ICOMOS charter of '*Places of Cultural Significance*', known as The Burra Charter. Given this requirement, articles of the Burra Charter pertaining to historical research were continuously kept in mind whilst conducting the research and compiling the report. The following aspects were identified as areas of research for the report:³⁰¹

- a. An audit of secondary sources,
- b. relevant research of the documentary material found,
- c. an analysis of the register of the former Johannesburg Prison that was located and consulted at the archives of the Diepkloof Prison, and
- d. an oral history project.

4.2.3.1 Research and documented topics³⁰²

Table Seven: Summary of terminology and supportive literature describing The Fort.

a. Current conditions and opinions.	
<i>Genius Loci</i>	It is from the sense of place that one can start assessing <i>genius loci</i> , spirit of the place. Making a statement of genius loci is the first demand of the Burra Charter process. From this basic statement the rest of the assessment of significance follows. The Fort is a statement and place about the struggle for human rights and recognition of basic human existence, a symbol of persistence and a place where people were imprisoned because they opposed a system forced on them.

³⁰¹ Brink. 2000.

³⁰² All quotes taken from Brink 2000.

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Meaning	Ultimately a historical site or building is more than the sum of its parts, more than a landscape or arrangement of brick and mortar, it is through the construction of 'place' in the individual, group, or national consciousness and imagination that the constantly evolving meaning, value and long term significance of a place can be most richly appreciated.
b. History	
Chronology	We were well aware that we would not be writing the traditional chronological history, but had to survey an as yet unwritten history, which would only become accessible if it was presented chronologically. A chronological reading also allows us to trace the gradual emergence of the Fort as a symbolic significant site, as accounts accumulate and cluster around events or periods of particular significance. For example, the particular prominent and symbolic association is that between the Fort and the 1956 Treason trial.
History of those that followed.	In a sense it seems clear that it had a significant impact on individual lives and memories, as well as suggesting that the Fort had a significant impact within the context of South Africa's rich legacy of political literature. The Fort is as revealed through the eyes of those who have passed through its gates as something of a crucible of political experience, where the paths of political activist from all walks of life cross one another.
History of place	Representations of the Fort can be traced across an entire century. Built in 1898 by the Boer government of the Transvaal Republic to defend Johannesburg against the British. The young war correspondent Winston Churchill had been held here during the South African War. It remained the city's main prison during the 1980s.
c. Environmental conditions	
Geographic location	The fort is located on Hospital Hill looking towards the south. The castle on the hill, built to intimidate the 'Uitlander' population working in the gold mines.
Bio-physical threats	It was dark, the lights were dim, the windows high against the wall with burglar bars on the outside.
d. Ruling structure	
Legal Structure	The Natives Act no 67 of 1952 made it illegal not to have a pass. Failure to present the 'dompas' on demand led to arrest appearance in a Bantu Commissioner's Court and the inevitable prison sentence - 2 weeks in prison and/or a 10 pound fine. Between 1975 and 1984 it is recorded that 1.9 million people were arrested for pass law offences.
Governing pattern	There were always 'Bosses' that were in control of the cells. The bosses were gang members.
Related governing systems	The 'bosses' had underlings who collected and worked for them. The gangs were prominent at the Fort as it they are every other prison.
Related facilities	The arrested people were kept at the Fort for a short while, it was mainly a transfer facility. Other prisons were used for long term prisoners.
Gender	Just as imprisonment in the Fort was vastly different for different race groups, so the experience of women was often very different to those of their male counterparts. The degrading condition of African women prisoners at the Fort described in detail by Winnie Mandela, and others. Not only were women expected to do women's work such as doing the prisons laundry and subjected to series of humiliating rituals on an every day basis, but fundamental requirement such as underwear or tampons were often denied them.
e. Settlements	
Defence	Once Johannesburg had been handed over, the British occupied and made extensive use of Fort. The Fort was strategically placed and the British used for the lookout for raiding Boer soldiers. Weapons that were confiscated from Boers were taken to the Fort and destroyed there. The Fort was also used as soldier's barracks. Part of the Fort was set aside for military government and the military court.
Life styles	Everybody slept on the floor. The new ones slept near the toilets. The other in the middle, the 'bosses' slept near the door, or gate.
Settlement pattern	By 1911 penal institutions were classified as follows: convict prisons, prison hospitals, local jails, road camps, farm colonies, work colonies, and refuse homes, reformatories and inebriate reformatories.
Settlement layout	In the 18th and 19th-century monastic ideas of isolation and penitence had a marked influence on the design of prisons, both in Great Britain and elsewhere in the world. It was generally felt that suffering should be combined with reform and the prisoners should be placed in individual cells, solitary confinements to reflect on their sins and never see or speak to fellow prisoners, but be visited only by the prison chaplain other religious person or prison visitors.
f. Social Patterns	
Children Age groups	There was a constant flow of babies and they were kept separately at night with their mothers and during the day in a sort of crèche with the older prisoners in a hospital cell. Mothers were allowed to keep the babies until the age of two. Older prisoners took care of them during the day while mothers were working.
Punishment	The phrase 'creating a disturbance' occurs frequently in the offences perpetrated by prisoners. From the types of punishment given, one can infer that means that some kind of fight had broken out. It must be noted that fighting in prison by prisoners can quickly spiral into something far more dangerous, namely

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	riot. Punishment was meted out to both white and black prisoners and ranged from corporal punishment to be placed in the stock, or given hard labour.
Relationships	It is not to say that other gangs were not violent, simply that violence is part of the 28's identity in a way that is not true for the other gangs. They used formalised sex between older men and young boys in which the boys play the part of wives. The boys clean, sew and cook. Homosexuality in this form does not always constitute a permanent change in sexual orientation for the persons involved, both parties might well be conventionally married at other points in their lives. Instead this arrangement constitutes sexual conveniences and sexual submission in a system which resembles that of present mining compounds and prisons throughout the world.
Social standing	The similarities in many of the descriptions of the rituals and patterns of life at the Fort are interesting in that they suggest the power of the 'rites of passage' that political prisoners were expected to undergo, for example, the terrifying journey in the kwela kwela to an unknown destination. Furthermore induction into prison life at the Fort, accompanied by disorientation, alienation and confusion, attempting to cling onto your dignity and self-worth in this dehumanising space.
g. Living conditions	
Daily activities	Within the jail, each prisoner had a set of duties, cleaning duties of varying degrees of intensity and length of time depending on whether they were awaiting trial or hard labour prisoners. In the past, the idea had at least existed that certain categories of work were limited to the hard labour prisoners. Awaiting trial prisoners apparently did no more than 1 1/2 hours work a day, cleaning their own cells and scrubbing and polishing passages.
Ablution	Some cells had open showers and toilets at one end, screened by a wall. Toilets were in the corner. It was often an open flushing pit, with no seat. A tap and a concrete wash basin were located outside the cell. The bosses and their underlings washed first.
Eating	Food was distributed into a dish and a mug. No utensils were allowed. Prisoners ate with their hands.
h. Trade & Skills	
Training	Social programmes such as literacy did not work at the Fort. The prisoners were there only for a short period. Woman prisoners did the laundry.
Material use	
Artistry	All prisoners who were not allowed to work were given a large number of jobs within the Fort. These tasks included shoemaking, tailoring, carpentry and cutting firewood. Mail bags and pouches for the Postal Service were repaired. Laundry and the manufacture of prison clothing were also the task in the women's jail.
Construction methods.	It would seem, that the development of prison design and architecture did not keep up with the progress in legislation or other changes in society's perception of inmates of these institutions. For at least the last 300 years prison architecture and basic design according to which prisons were built had not changed a great deal. A number of basic prototype designs was more often than not repeated with slight modifications, whether or not the building actually adequately fulfilled its function.
Trade	Cigarettes were the main currency inside the prison.
i. Traditions	
Clothing	The majority of prisoners were awaiting trial. They would be taken in at night and keep their clothing until the trial. Other prisoners received clothing. The women were issued with a blue denim dress and pinafore, a headscarf, shoes, socks and underwear.
Taboos.	Sexual activity
Adornments	Tattoos were a sign of gang initiation.
Rituals	Overall, the routine according to which the prisoners, male and female were arrested, transported to the Fort, their reception, the first night spent in the cells, the daily routines did not differ greatly.
Symbolism	The Fort was in people's minds specifically designed to be a place of torture, a place of bondage and a place of death.
Music	New prisoners had to sing the new song to the bosses. Sometimes the woman would sing. They would hear the warder sign and they would join in.

4.2.3.2 Systematics employed to document and recommend management of findings.

The methodology or systematics employed to document and recommend management of cultural resources at the Old Fort, consisted of the documentation of available information and the presentation thereof.³⁰³

- a. Conventional historical research included archival research and review of printed secondary and primary material to compile the conventional chronological history of

³⁰³ Brink. 2000 p 10-11

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the Fort from its inception to its closure. Oral history was documented by conventional methods of oral historical interviews along with market research and sociological survey methods. This was achieved with personal interviews, questionnaires, and telephone interviews. Two IT programs were written for the project to facilitate working with information gleaned from the research. Presentation of the search is in the form of a written document, maps and photographs. A history of the Fort from 1893 to 1983 was also completed that includes an overview of the penal system in South Africa and the history of the Fort during that time.³⁰⁴

- b. The research team mentions that the Burra Charter urges heritage practitioners to become more objective and rational. Rather than to assert that, for example, that 'everyone knows, a place is significant', practitioners should attempt to build the rational argument about and for the significance of an important place. The Burra Charter lays down clear guidelines according to which significance should be defined. In this process the Charter recognises that history shows the needs of the present, that focuses attention on the fact that places and people which have been largely forgotten, who were significant in the past can possibly become significant again in the future. In addition, the Charter promotes a much more sensitive approach in determining significance at local, regional, national and at an international level. Significance is no longer determined merely by the association of the great with a place, but by the association of groups of ordinary people with places of cultural significance as equally if not more important. For the sake of clarity and reference, the document was organised with direct reference to the relevant articles of the Charter. These are:
 - i. The cultural significance of the Fort,
Burra Charter Article 1.2
Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present and future generations. Places may have a range of values for different individuals and groups. Cultural significance may change as a result of continuing history of place. Understanding of cultural significance may change as a result of new information.
 - ii. The fabric of the Fort.
Burra Charter Article 1.3
Fabric means all the physical material of place including components, fixtures, content and objects. Fabric includes building interiors and subsurface remains, as well as excavated material.

³⁰⁴ Brink 2000 p. 7-9

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- iii. The association people and/or groups have with the Fort.
Burra Charter Article 1.15
Associations means special connections exist between people and a place. Association may include social or spiritual value and cultural responsibilities for a place.
- iv. The nature and range of meaning of the place - the genius loci of the Fort.
Burra Charter Article 1.16
Meanings denote what a place signifies, indicates, evokes or expresses. Meanings generally relate to intangible aspects such as symbolic qualities and memories.
- v. The interpretation of significance, meaning and associations of the place.³⁰⁵

Table Eight. Interpreted meanings as suggested by The Burra Charter as explained in the Fort Report.

Cultural Significance	Fabric	Association	Meaning
Historic i.e. 100 years of occupation - political and social	Material aspects i.e. Door keys Cell Doors	Political i.e. Long-term imprisonment Solitary confinement Globally recognised	Genus loci i.e. Different to white and black community. Powerful image.
Scientific i.e. Discipline of penology. Design of penal institutions	Symbolism of power i.e. Blankets Cigarettes, tobacco.	Non-political i.e. Apartheid legislation Criminal prisoners Woman beer brewers	Black people i.e. Place of death. Place of bondage. Place not fit for a human being. Place of hell. Place of torture.
Social i.e. Prisoners Families, friends. Warders.	Spaces i.e. Reception Awaiting Trial block Basement Visitors section.	Manual labour i.e. Work groups for construction and maintenance work.	White people Mostly military connotation during the Republican years
Spiritual i.e. Involving religious practice. Religion as an intrinsic part of penal system		Gangsters i.e. 28's Gang organised along military lines.	Invisible place Hidden between the high rise buildings and neighbourhoods. Prisoners enter through the tunnel in the mountain.
		Warders i.e. Black and white Difficult situations Difficult to guard Dangerous	

- c. The challenge to the researchers was to document the history of the building and not the history of the individual persons that were imprisoned in the building. It was decided to apply anthropological paradigms, knowing people that is being interviewed and having a personal relationship with them. This provided the interviewer with an opportunity to become acquainted with interviewees but more

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so to follow lines of referrals. To overcome inaccurate descriptions of place, site visits, maps and drawings were used to refresh the memories of the interviewees.³⁰⁶

- d. Additional documentation and interpretations were completed according to supplemental guidelines as discovered during the research process.
- i. The report states that Semple Kerr suggests a further evaluation of significance, which was used in the research.
 - The past development and use of the place.
 - The context of the changes, including comparison with contemporary development and similar types of plans.
 - Any other aspects, quality or association which will form a useful basis for the assessment of significance:³⁰⁷
 - ii. Semple Kerr offers suggestions on how criteria should be selected to determine and assess significance. He suggests three degrees of significance that was used with regard to research on the Fort.
 - The ability to demonstrate significance is accompanied by the question whether places or components provide evidence that demonstrates philosophy, custom, taste, design, usage, process, technique, material or association with events or persons.
 - The associational links for which there is no surviving physical evidence.
 - Formal or aesthetic qualities.³⁰⁸
 - iii. Kerr provides a number of useful guidelines in assessing the degree of significance. These are, whether an example is:
 - Seminal - the Fort is reasonably significant as an example of how to build a prison.
 - Intact - sections of the Fort have been demolished and others altered.
 - Representative - the Fort is significant as an example of randomly selected penal architecture. The manner in which prisoners were treated is also representative of prisons throughout South Africa for a century.
 - Rare - the Fort is not particularly rare, since the buildings are similar to complexes that form part of a long tradition of western prisons. Treatment of prisoners were similar to other prisons and thus also representative and not rare. (Making an evaluation of "Rare" must include a scale factor indicating whether the place is rare locally, regionally or nationally)
 - Climactic - the Fort is on several levels not climactic. It was never the focus

³⁰⁵ Brink 2000 p. 10-11

³⁰⁶ Brink 2000.

³⁰⁷ Kerr. 1996

³⁰⁸ Kerr. 1996

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or location of major prison uprisings, neither was it the long-term prison for any political or other prisoners, although people like Gandhi, Nelson Mandela, Genl de Wet, and other political prisoners were at the Fort for short periods of time.³⁰⁹

- iv. In assessment of the degree of significance in associational links, Semple Kerr maintains that the following considerations are crucial:
 - The level of importance of the associated events or persons to the locality of the nation.
 - The level of intimacy and duration of the association.
 - The extent in which evidence of the association survives, either in physical evidence at the place, or as evidence of impact of the place, on people or persons, literature and events.
 - Intactness, or evocative quality of the place and its setting relative to the period of association.
- v. The report finally list another seven categories of significance as suggested by Semple Kerr. These are:
 - exceptional significance.
 - considerable significance.
 - some significance.
 - local significance.
 - not consider or not relevant.
 - an intrusive element.
 - something that impairs heritage value.

4.2.3.3 Management of the Fort.

The South African Heritage Resources Agency in collaboration with the Johannesburg Development Agency: City of Johannesburg are in the process to complete a conservation management plan for the Constitutional Hill Precinct.

4.2.4 Comparison of recorded aspects of culture.

The aspects of culture as identified in the three case studies can be combined into a representative list that could begin to inform the decision-making process and systematics regarding cultural landscapes. This comparison is a culmination of the methodology and the understanding from the research into a novel meshing towards an implementable systematics for South African cultural landscapes.

³⁰⁹ Kerr. 1996

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Table Nine. Comparison of recorded aspects of culture.

	Murdock's list	Mapungubwe	Augrabies	Old Fort	Common List
1	Age grading			Children	Age groups
2		Ancestors			Ancestors
3	Athletics				Athletics
4	Sports				Sports
5	Bodily adornment	Adornments	Adornments	Adornments	Bodily adornment
6	Calendar	Chronology	Chronology	Chronology	Chronology
7	Cleanliness			Ablution	Cleanliness
8			Clothing	Clothing	Clothing
9	Community organisation				Community organisation
10		Construction methods.	Construction methods	Construction methods.	Construction methods.
11	Co-operative Labour		Networks		Co-operative Labour
12	Cosmology				Cosmology
13	Courtship	Relationships	Relationships	Relationships	Relationships
14	Dancing		Dance		Dance
15		Descendants		Descendants	Descendants
16	Decorative arts	Artistry	Artistry	Artistry	Artistry
17				Defence	Defence
18	Divination				Divination
19	Division of labour			Daily activities	Division of labour
20		Domestic animals	Domestic animals		Domestic animals
21	Dream interpretation				Dream interpretation
22	Education				Education
23	Eschatology				Eschatology
24	Ethics	Values			Ethics
25	Ethno-botany				Ethno-botany
26	Etiquette	Life styles	Life styles	Life styles	Life styles
27	Faith healing				Faith healing
28	Family feasting		Food	Food	Food
29		Farming	Farming		Farming
30	Fire making				Fire making
31	Folklore		Story telling		Story telling
32	Food taboos				Food taboos
33	Funeral rites	Burial traditions	Burial traditions		Funeral rites
34	Games		Games		Games
35	Gestures				Gestures
36				Gender	Gender
37				<i>Genius Loci</i>	<i>Genius Loci</i>
38	Gift giving				Gift giving
39	Government	Governing systems		Governing pattern	Government
40	Greetings				Greetings
41	Hair styles				Hair styles
42		Habits	Habits		Habits
43	Hospitality				Hospitality
44	Hygiene				Hygiene
45	Incest taboos				Incest taboos
46	Inheritance rules				Inheritance rules
47	Joking				Joking
48	Kin groups	Related settlements	Related settlements		Related settlements
49	Kinship nomenclature				Kinship nomenclature
50	Language				Language
51	Law			Legal Structure	Legal Structure
52	Luck superstition				Luck superstition
53	Magic	Mystique	Mystique		Mystique
54	Marriage				Marriage
55	Mealtimes				Mealtimes
56				Meaning	Meaning
57	Medicine		Medicine		Medicine
58		Music	Music	Music	Music

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59	Obstetrics				Obstetrics
60	Penal sanctions				Penal sanctions
61	Personal names				Personal names
62	Population policy				Population policy
63	Postnatal care				Postnatal care
64	Pregnancy				Pregnancy
65	Property rights	Land Claims			Property rights
66	Propitiations of supernatural things				Propitiations of supernatural things
67	Puberty customs				Puberty customs
68				Punishment	Punishment
69	Religious rituals				Religious rituals
70	Residence rules	Settlement layout	Housing	Settlement pattern	Settlement pattern
71		Rituals	Rituals	Rituals	Rituals
72	Sexual restrictions			Taboos	Sexual restrictions
73		Slaves			Slaves
74	Soul concepts				Soul concepts
75	Status differentiation	Social standing		Social standing	Social standing
76		Symbolism	Symbolism	Symbolism	Symbolism
77	Surgery				Surgery
78			Threats		Threats
79	Tool making				Tool making
80	Trade	Regional trade	Trade	Trade	Trade
81	Training			Training	Training
82	Visiting	Cultural links	Cultural links		Cultural links
83		Wealth			Wealth
84	Weaving				Weaving
85	Weather control				Weather control

4.2.4.1 South African literature.

The cultures of South Africa have a strong oral tradition. The people did not read and write until the colonists came to the Cape. Dancing, singing, talking and drawing were the major forms of communication in the southern part of Africa. Today these songs and stories are being recorded and these African myths, legends and stories (literature) provide a rich source and evidence of daily living.

Although the National Heritage Resources Act recognises in the preamble³¹⁰ that oral traditions have been neglected and states:

It (the Act) facilitates healing and material and symbolic restitution and it promotes new and previously neglected research into our rich oral traditions and customs.

and it provides us with a definition of ³¹¹"living heritage" to mean:

the intangible aspects of inherited culture, and may include-

- (a) cultural tradition;*
- (b) oral history;*
- (c) performance;*
- (d) ritual;*
- (e) popular memory;*
- (f) skills and techniques;*

³¹⁰ National Heritage Resources Act. No 25 of 1999. Preamble.

³¹¹ National Heritage Resources Act. No 25 of 1999 Definitions. Section 2(xxi)

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(g) indigenous knowledge systems; and

(h) the holistic approach to nature, society and social relationships:

and it includes³¹²:

places to which oral traditions are attached or which are associated with living heritage;

the Act neglects to be distinctively outreaching on this important intangible heritage.

This study shows that it is of critical importance to recognise these intangible indigenous resources as part of the heritage of South Africa. A selection of South African literature³¹³ represents tales of animals, birds, fish, reptiles and insects; places and events; rituals and death; rivers and waterfalls; sacred things and life's joys and sorrows. The list of terms below are summarised to indicate these topics. Topics previously identified under the case studies are not repeated.

Table 10. List of terms from literature.

86-89	Performance	Head coverings	Elderly	Dates of discoveries
90-93	Wildlife	Weaponry	War	Inspiration to others
94-97	Bio-physical features	Transportation	Rites of Passage	History of place
98-101	Bravery	Struggles	Supernatural beings	Geographic location
102-105	Water	Beliefs	Recording events	Bio-physical threats
106-109	Hunting	Communications	Currency	Possible extinction
110-113	Technology	Writing	Drink	Expansion
114-117	Travelling	Alphabet	Utensils	Material use
118-121	Storage	Superstition	Household	Mining
122-125	Waste	Suicides	Furniture	Products
126-128		Singing	Fabrics	

4.3 Resolution of Hypothesis Three.

The literature provides a comprehensive background of how to characterise cultural landscapes and the elements in a landscape to which humans relate. Those aspects that were found and identified proved to be appropriate characteristics for South African cultural landscapes. The research was linked to this knowledge and evaluations were completed as to how three South African case studies match this knowledge or how they fall short. The research proved that the South African landscapes can be characterised. The three studies that were reviewed indicated that although each has a different focus, similar characteristics could be extrapolated from the documentation. In addition, popular reading and literature was scanned for additional substantiation and identification of evidence. It can thus be concluded that both the literature and the research support the hypothesis. The following chapter will attempt to develop the requirements for an applicable method towards the systematics for cultural landscapes.

³¹² National Heritage Resources Act. No 25 of 1999 Chapter 1 Part 1 Section 3(2)(b)

³¹³ Gray. 2000, Gray. 1985, Hilton-Barber, Coetzee, Roux. 1998