The Landscape: A didactic Poem

'Tis still one principle thro' all extends,
And leads thro' different ways to different
ends.
Whate'er its essence, or whate'er its name,
Whate'er its modes, 'tis still the same:
'Tis just congruity of parts combin'd,
To please the sense, and satisfy the mind
But cautiously will taste its stores reveal;
Its greatest art is to conceal;
To lead, with secret guile, the prying sight
To where component parts may best unite
And form one beauteous, nicely blended
whole
To charm the eye and captivate the soul
Whatever foremost glitters to the eye,
Should near the middle of the Landscape lie;-
Such as the stagnant pool, or rippling stream,
That foams and sparkles in the sun's bright
beam;
Not to attract the unskilful gazer's sight,
But to concentrate, and disperse the light;
To show the clear reflection of the day,
And dart through hanging trees the refluent
ray;

(Richard, 1794: 46-50)

THEORETICAL DISCOURSE

03

This chapter describes the theoretical investigation of the research study, and key concepts of the site and design. Case studies are discussed after a relevant theme.

3.1 Introduction

"Cultural geographers, calling upon a collective body of study that extends back well over half a century, interpret ordinary landscapes by first looking at the world around them; in their eyes meaning congeals in setting, dwelling; and use — and not alone from the designer's intention." (Treib, 1995: 89) Landscape architects attempt to instil their designs with significance by referring to such conditions as existing natural forms or to the historic aspects of the site. (Treib, 1995: 89) There is more to the idea of giving meaning to a landscape than mearly looking at the history or natural forms, which will be discussed in this chapter. How does one keep a balance between the existing natural , -historical and the intentions of the designer?

Amos Rapoport and Robert E. Kantor (1967) identified what they believed to be the problem with many a contemporary architecture and urban design. They argue that it has become too simplified and cleaned up, that the visitor will experience everything, in this case, the landscape has to offer, at a glance. With the simplification many of the meanings and possibilities have been eliminated. This loss leads to a loss of interest — there is nothing to divert or to keep one's attention as a result of lowered rates of perceptual inputs. Amos Rapoport and Robert E. Kantor (1967) says that "We may visualize a range of perceptual input from sensory deprivation (monotony) to sensory saturation (chaos). In the case of the former, there is not enough to observe, to select, to organize; there is an excess of order. In the latter, there is too much to observe, there is no relation between the elements, so that one is overwhelmed by multiplicity. In between, there is an optimal perceptual rate (an 'ideal') which enables one to explore, to unfold gradually, to see, to give meaning to the environment. One needs to move back and forth—either physically or with one's eye and mind—not taking it all in at a glance. If there is no ambiguity, the eye is attracted only once and interest is lost. If all is designed and settled, there is no opportunity to bring one's own values to the forms..." (Rapoport & Kantor, 1967: 210)

The aim of this research is to display what is authentic of Wonderboom fort. It might be that the pleasure and satisfaction to be derived from a ruin is perhaps not as great as that experienced in a historic house and it is certainly different in kind, but the carpets, furniture and pictures were actually a distraction from the building itself, while the ruin is the harsh architectural reality thrust upon us. According to Thompson (1981) the variations displayed in the ruin's history is perhaps a truer reflection of the brutal course of events over several generations "than countless portraits of figures in doublets and hose, wigs, top hats and tailcoats." (Thompson, 1981: 74)

This chapter will discuss the theory under investigation through different approaches and views to help the reader to, ultimately, understand how a landscape can give meaning to a place, and how to communicate the cultural values, history and heritage to the visitor. It will also become clear how the different approaches add to this landscape

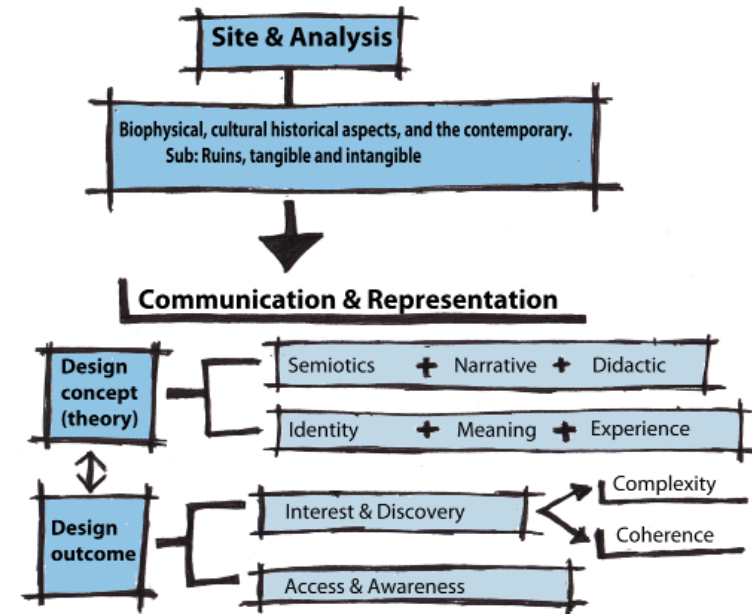## 3.2 Literary investigation of core theoretical concepts

Fig. 9: Diagram indicating the different themes that can be deduce from the theory. (Author, 2011)

communication to bring about a completely different experience. If one refers back to the research question, it asks the question of how can a design narrative create awareness of the cultural and biophysical aspects of a site? These aspects will be discussed in detail in chapter 4. These cultural and biophysical aspects refer to the history and heritage of the Wonderboom Nature Reserve, and to create awareness one needs to answer the question of communication. How do you communicate the history and heritage to people?

3.2.1 Communication and representation: Semiotics

Semiotics is one of the three critical theoretical currents in the landscape profession, (Howett 1987: 108), which in proposing analogies between language and architecture has forced a fresh understanding of the expressive meanings of built form and the devices of architectural communication — sign systems are as critical to the designer of landscapes as the natural systems are.

Semiotics can be used as a communication tool. According to Preucel (2006) Semiotics can be defined as "the field, multidisciplinary in coverage and international in scope, de-

voted to the study of the innate capacity of humans to produce and understand signs." What are signs? Signs according to Preucel (2006) are such things as ideas, words, images, sounds, and objects that are directly implicated in the **communicative process**. Semiotics, therefore, investigates sign systems and the modes of **representation** that humans use to convey their emotions, ideas, and life experiences.

Preucel (2006) states that the focus changed from the 'sentence' to the 'text' and its 'context', and from 'grammar' to 'discourse' in linguistics. The same happended in social semiotics the focus changed from the 'sign' to the way people use semiotic 'resources' both to produce communicative artefacts and events and to interpret them.

You will notice that Pruecel called it social semiotics. According to him social semiotics moves the focuses on how people regulate the use of semiotic resources – again, in the context of specific social practices and institutions, and in different ways and to different degrees. Preucel (2006) argues that social semiotics is there for "opening our eyes and ears and other senses to the richness and complexity of semiotic production and interpretation, and to social intervention, to the discovery of new semiotic resources and new ways of using existing semiotic resources."

The term social semiotics in the book of Preucel (2006), is not pure theory and should always engage with a theory, for example social theory. The following terms will be discussed to clarrify the meaning of social semiotics and how to implement the theory.

Semiotic resource

Pruecel (2006) argues that the grammar of a language is not a code, not a set of rules for producing correct sentences, but a 'resource for making meanings'. Preucel (2006) takes it further, and extends the idea of 'grammar' of other semiotic modes, and define semiotic resources as the **actions and artefacts we use to communicate**, whether they are produced physiologically (with our vocal apparatus; with the muscles we use to create facial expressions and gestures, etc. – or by means of technologies – with pen, ink and paper; with computer hardware and software; with fabrics, scissors and sewing machines, etc. Communication by means of physical elements can be included in this definition.)

According to Preucel (2006: 2), traditionally they were called 'signs'. "For instance, a frown would be a sign of disapproval, the colour red a sign of danger, and so on. Signs were said to be the union of a signifier – an observable form such as a certain facial expression, or a certain colour – and a signified – a meaning such as disapproval or danger. The sign was considered the fundamental concept of semiotics." Preucel (2006: 2) prefers to use the term 'resources', because it avoids the impression that 'what a sign stands for' is somehow pre-given, and not affected by its use.

In social semiotics resources are, according to Preucel (2006: 3-4), "signifiers, observable actions and objects that have been drawn into the domain of social communication and that have a theoretical semiotic potential constituted by al their past uses and all their potential uses and an actual semiotic potential constituted by those past uses that are known to and considered relevant by the users of the resource, and by such potential uses as might be uncovered by the users on the basis of their specific needs and interests. Such uses take place in a social context, and this context may either have rules or best practices that regulate how specific semiotic resources can be used, or leave the users relatively free in their use of the resource."

Preucel (2006: 4) provides some principles to semiotic resources, namely;
- Semiotic resources are not restricted to speech and writing and picture making.
- Almost everything we do or make can be done or made in different ways and therefore allows, at least in principle, the articulation of different social and cultural meanings. Walking could be an example. ("Through the way we walk, we express who we are, what we are doing, how we want others to relate to us, and so on" Preucel (2006: 4))

Preucel (2006: 5) argues that when a given type of physical activity or a given type of material artefact constitutes, a semiotic resource is established, it becomes possible to describe its semiotic potential. In this case semiotic potential is its potential for making meaning according to Preucel (2006: 5) – for example, 'what kinds of walking can we observe, and what kinds of meanings can be made with them?'

Semiotic potential

"Studying the semiotic potential of a given semiotic resource is studying how that resource has been, is, and can be used for purpouses of communication, it is drawing up an inventory of past and present and maybe also future resources and their uses." (Preucel, 2006: 5-6)

Semiotics in this study can be defined as the manner in which to communicate and represent emotions, ideas, and life experiences through different aspects (on site) or approaches like narrative and didactic. To define the semiotic resources, for example; the fort (ruin), historic artefacts, shapes and forms which stimulte memory of past events, colour and textures etc. in your design to discover the semiotic potential, as was previously discussed.

Certain meanings are attached to certain nostalgic ideas. Howett (1987) mentioned the unconcious nostalgia for a simpler way of life. People identify this simpler life with 'rural America' in the argument of Howett, but in this case it will be the longing of people to live in the suburbs, close to nature. This underlying need can also be described as biophilia which can be defined as an innately emotional affiliation of human beings to other

living organisms. The subconscious need for people to connect to nature. (Wilson, 1984). This unconcious nostalgia is in direct contrast to our idea of city life. Howett (1987) implies that the suburban landscape communicates to us that its winding roads and tree-dappled lawns say 'country,' say 'retreat from the city,' and say it deliberately. Howett (1987) also uses the example of a steel and glass tower placed in the middle of a suburban neighbourhood. It would 'read' all wrong to us, and we would object to its presence in that context. To use another example, Sonfist's 'Time Landscape' discussed by Howett, the artist wants to "make the city-dwellers who see his wooded landscape aware of a past environment that time has erased but history has not. It is part of their own history, suddenly made real and present to them in the work." (Howett, 1987: 112)

To conclude, how you communicate is very important. Semiotics can be used as a communicative tool in the landscape and, in this case, at Wonderboom Nature Reserve.

Certain 'semiotic resources' can be used in the landscape to create meaning. The visitor can discover its potential as everyone may observe the semiotic potential differently because of their different needs, interests and situations. These 'semiotic resources' placed in the landscape can, in this case, cater for a wide range of people.

The opportunity is there to reveal 'semiotic potential' to effectively communicate the heritage and history of Wonderboom Nature Reserve.

Ways in which information can be communicated by using semiotics will be discussed and explored under heading 3.2.2 what is a narrative in terms of design and 3.2.3 what is didactic design?

3.2.2 How can narrative be used in design communication?

Porter defines narrative, he says a "[n]arrative is a spoken or visual commentary, account or story of unfolding, connected events or experiences. Narrative is a form of communication...Narrative also concerns transformation— a story unfolding until its meaning brings revelation." (Porter, 2004: p101-102)

A narrative in terms of design, is to communicate the design by using a story telling approach.

The approach of Rem Koolhaas (Porter, 2004: 102) to his buildings can be taken further into a narrative design with an approach to landscape architecture, in which the physical design will be communicated and experienced in a story telling manner, a narrative. Where the entrance of the the landscape is the introduction to your story - in this case the communication of the heritage and history of the Wonderboom Nature Reserve.- The introduction to everything which will unfold as the visitor moves further into the landscape and experiences how the narrative unfolds itself. The introduction

should reveal the complexity of the site, so that the visitor remains interested. With the movement through the landscape the 'plot' unfolds. This entails a journey full of 'mini-climaxes' - similar to what one finds in movies - which will lead to the ultimate 'climax' or denouement. Events, activities etc. become the mini climaxes which play with the senses and the need to explore further. In the case of a landscape it is not necessary for it to end. The visitor decides when it ends...

These 'mini climaxes' and main climaxes will be communicated with a semiotic approach, with the use of 'semiotic resources' and the 'semiotic potential' of the site and elements, which can create meaning through experience.

3.2.3 How can didactics be used in design communication?

According to the Oxford dictionary, didactic means; "Intended to teach, particularly in having moral instruction as an ulterior to be patronising." (Concise Oxford English Dictionary, 2008: 398) The term didactic will be used in this study to refer to one of the approaches of the research study as a means to communicate history, and in this instance, didactic will mean to teach the people about the significance and history/heritage of the study area to ensure educational value to the public and tourists.

Treib suggests that "[t]he didactic approach dictates that forms should tell us, in fact instruct us, about the natural workings or history of the place". "The didactic is usually more overt in its intentions", "not only should we consult the genius about its basis, but our resultant project should render an exegesis on what the genius told us." (Treib, 1995: 95) According to Treib, "[a] didactic landscape is supposedly an aesthetic textbook on natural, or in some cases, urban processes." (Treib, 1995: 95-96)

The following can be deduced from Treib's suggestions of a didactic approach (Treib, 1995):

- Forms should be used in a design to inform us about the natural systems in our envionment, and
- Forms should instruct us about the history of the place.
- The didactic approach's intentions are usually shown more openly, it is clearly visible.
- The designer should consult the genius of the place, get to the base of everything and then interpret and explain clearly in his design what the genius is.
- The landscape is an aesthetic textbook on natural and urban processes and history of the place.

To come to the importance of a didactic design approach in the Wonderboom Nature Reserve. Through the didactic approach one can analyse the natural systems present in the nature reserve and through form one can teach the visitor about all the natural

systems, the same with the place history, through form, for example the use of the Iron Age circle enclosure form, in the landscape one stimulates the memory of the visitor of the past events and create awareness about these past civilisations.

Nothing in the design should be hidden, but rather shown openly to instruct the visitor. For instance hydrolic structures in the landscape etc.

In the case of the genius of the place, it should be investigated and known, and communicated through the design. To understand the term genius better, the term will be discussed in some detail with reference to the nature reserve.

Genius of the Place

According to Treib, "[t]he presence of the genius is a bit more obvious in the undisturbed land, but there is precious little of that around these days; the genius is hardly unaffected by change in atmosphere and climate. Still, the genius provides major support for landscape design and its rationalisation today. Technically, studies of vegetation, hydrology, soil conditions, and the like are indeed the basis of design. But do these suggest a significant form for the design? If there is a stand of oaks, do you plant more oaks? Or should the stand be complimented by another species that, even to the untrained eye, appears to be foreign to the site? So much of landscape architecture in the past has been created to overcome what the genius of the place offered the "unimproved" land – for example - by bringing water to the dessert." (Treib, 1995: 93)

In the case of this research the genuis loci of the Wonderboom Nature Reserve is the fact that this area was always seen as a place of refuge, escape. Our human ancestors came to this place for refuge and stayed here most probably because of the abundance of food, shelter and water. The Voortrekkers found escape in this area, from the early origins of Pretoria the Voortrekkers come to Wonderboom to get away from the 'city', and now even today the people go to this reserve to get out of the city. This site remained, through all the ages, a place of refuge and shelter. It now forms a sanctuary, like an island surrounded by urban development.

The Wonderboom Nature Reserve also serves as security, with its mountain ridge, people also used it to secure Pretoria, by fortifying the mountain ridges.

The historic nature of this site is therefore a place to escape to, a sanctuary, a refuge.

Lastly, the landscape as an aesthetic textbook. In the case of the Wonderboom Nature Reserve design development, one must see the landscape as a textbook full of chapters, which can become activities, which at the same time teaches the visitor. It can be in the form of semiotics, or natural or cultural aspects existing on site.

To conclude, the landscape teaches, but at the same time tells a story, and through a narrative all the events/activities are connected to form a whole. This can be defined as a didactive narrative of a landscape.
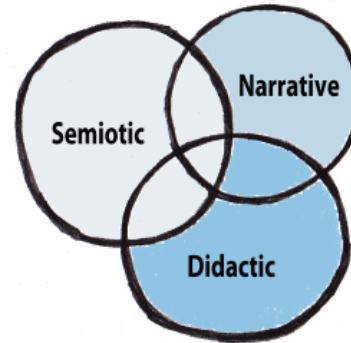

Fig. 10: Diagram indicating the interconnected relationship between semiotics, narrative and didactic design. (Author, 2011)

Summary of design communication and representation

Semiotics, narrative and didactic can be seen as communication tools. Narrative design and didactic design would be the means throughwhich, in this case, a landscape be communicated. In the manner of a story which at the same time teaches the visitors. 'Semiotic resources' will be used in this didactic narrative to communicate the heritage and history of the cultural and biophysical aspects of the site and provide meaning to that which is communicated. Refer to fig. 10.

The possible 'semiotic resources' will be discussed in detail in the design development chapter.

All three approaches create meaning in a landscape. It gives it complexity and order.

Case study 1:

The following case study will look at semiotic, didactic and narrative design approaches.

Freedom Park, Pretoria
Client: Freedom Park Trust
Designers: Newtown Landscape Architects, Bagale, Green inc, Momo Landscape
*   Architects joint venture*
Completion: 2007

Freedom park was designed to commemorate those who have paid the ultimate price for freedom. This is done with a vast wall. An eternal flame paying tribute to the unknown and unsung heroes and heroines. Part of Freedom park is a gallery dedicated to the legends of humanity, a symbolic resting place for those who have died. A didactic narrative approach to the design tells the story of Southern Africa's 3.6 billion years of history. (Freedom Park, n.d)

According to the webpage: the struggle for humanity and freedom is the core theme embedded in the Park and symbolises the universal connections among South Africans of all backgrounds and ages. These connections are expressed through the elements that constitute Freedom Park, namely; Isivivane, S'khumbuto, Moshate, Mveledzo, Uitspanplek, //hapo, Pan African Archives, Tiva, Vhuawelo. In the following discussion of these elements used in the landscape it is eminant that 'semiotic resources' are used continuously to communicate the design. (Freedom Park, n.d)
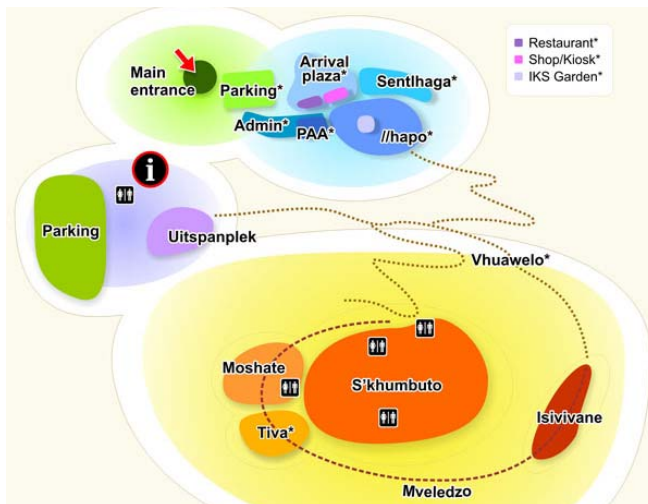
Illus. 26: Map of Freedom Park, showing conceptually and not to scale where all the elements are located. (Freedom Park, n.d)

From the following it will be clear that different elements are used in the design to communicate or symbolise rituals, events, customs, beliefs, memory and history.

The following elements in the park will be discussed, where the designer made use of semiotics, didactic and narrative approaches. This is to explore ways in which one can communicate events, history etc. by means of a story which also teaches the user some important aspects and history.

Isivivane - great example of a semiotic approach

Illus. 27: A view of the resting place of the spirits. (Freedom Park, n.d.)

The Isivivane element in the park is located on the eastern side of the hill. Isivivane is the resting place for the spirits of those who died in the struggles for humanity and freedom.

"The concept of Isivivane is derived from the word 'viva', which means 'to come together in a group'. It can also be interpreted as 'commitment to solidarity' and 'unity of purpouse'. An accumulated heap of stones (beacons), called Isivivane, was believed to bring good fortune to long-distance travelers by paying homage to the landscape and all that it contains." (Freedom Park, n.d) The designer understands the 'semiotic resource' of past and present to create meaning.

Lesaka within Isivivane

In this instance boulders are used as a 'semiotic resource' to symbolise the provinces. To construct Isivivane, the nine provinces of South Africa were asked to provide a boulder from a place within the province with historical significance.

Along with a boulder representing national government and a boulder representing the international community, these boulders were used to construct the Lesaka – the burial ground where the spirits of those who died in the struggles for humanity and freedom have been laid to rest. To emphasise cleansing and purity, the centre of the Lesaka is shrouded in mist. (Freedom Park, n.d).

Lekgotla within Isivivane - example of narrative

In some African traditions, important matters are discussed in the presence of ancestors, and the Lekgotla at Isivivane allows for such discussions to take place. It consists of a semi-circular seating area constructed around a Umlahlankosi tree. (Freedom Park, n.d) This tells a story of culture's traditions.

Illus. 28: A view of Lekgotla. (Freedom Park, n.d.)

They took every element used in the design, into consideration. Everything has a connection to the past, or custom which was used, for instance the water, which symbolises healing and cleansing. It can be said that the elements are used as 'semiotic resources', which stimulate the memory or the meaning of the place.

S'khumbuto

Illus. 29: A view of S'khumbuto - memorial to commemorate major conflicts in SA and a wall of names (Freedom Park, n.d.)

S'khumbuto is a memorial that commemorates the major conflicts that shaped South Africa.(Freedom Park, n.d)

The concept of S'khumbuto is drawn from siSwati nomenclature and signifies a place of remembrance for those who have died and also a place for invoking their assistance in current and future affairs.(Freedom Park, n.d)

S'khumbuto comprises of a number of elements, namely; wall of names (which is an example of semiotics, to use a wall with inscribed names of the people who suffered in wars and slavery - symbol of those no longer with us. The use of technology comes forth with a virtual wall accessible via touch screen to get more information of the names.), amphitheatre, sanctuary, eternal flame (also a semiotic approach to the design; the fire symbolises eternity), gallery of leaders and lastly reeds.

//Hapo - is a great example of didactic narrative approach to design

The narrative approach comes in with the design of the //hapo, which is an interactive exhibition space where the story of Southern Africa, dating back 3.6 billion years, will unfold in narrative and visual form.(Freedom Park, n.d.).

There are specific times in the day when the story will be told.

"The name //hapo means 'dream', which has been drawn from a Khoi proverb "//hapo ge //hapo tama /haohasib dis tamas ka i bo" that translates into "A dream is not a dream until it is shared by the entire community."" (Freedom Park, n.d.).

Illus.30: Copper cladded buildings to imitate boulders, are the live exhibition spaces for the narrative to play off (Freedom Park, n.d.)

"Within //hapo, the history of our region is brought to life as each story is revealed in layers, creating a sense of wonderment and curiosity. It is a place where the historical, cultural and spiritual past of South Africa comes alive – a place where people are able to reach a new understanding of a complex past, explore the diversity that is South Africa and create shared dreams for the future." (Freedom Park, n.d.)

The permanent exhibitions are structured around social spaces that allow for live interpretation, performance and storytelling. The exhibitions will include a selection of cultural and historical objects that can be handled, discussed or used, transforming the visitor from a spectator to a participant.(Freedom Park, n.d.)

The history unfolds in seven epochs (eras), namely; the earth, ancestors, people, resistance and colonisation, industrialisation and urbanisation, nationalisms and struggle nation building and continent building. (Freedom Park, n.d.).

"By relaying the history of our region from an African perspective, we dip into the deep wells of African indigenous knowledge as well as reservoirs of contemporary western scientific knowledge. //hapo is therefore a fusion of African knowledge and western scientific knowledge that tells us what happened here, on the southern tip of the African continent."(Freedom Park, n.d.).

Case Study 2:

Ellis Park Precinct, Johannesburg
Client: Johannesburg Development Agency
*Designers: Newtown Landscape Architects*
Completion: for 2010

Ellis Park Precinct is an example of a semiotic approach to design. The design symbolise and celebrate the location where the past Jukskei River flowed through Johannesburg. It is celebrated with a long water feature , with spouts along the semi dry paved strip. At the end of the water feature line is a small cascade. This provides for a calming water sound along with the sound of the water spouts.

Great consideration was taken with regards to the movement on the precinct and diagonal pathways across the water feature.

To conclude, the water feature provides for the symbol to instruct/ teach of the past river. The water feature are used as 'semiotic resource' to create meaning potential and to stimulate the memory of the past.

The importance of this case study to the Wonderboom Nature Reserve, is to illustrate different ways in which one can communicate past events. One can communicate past events via forms, shapes etc as well.
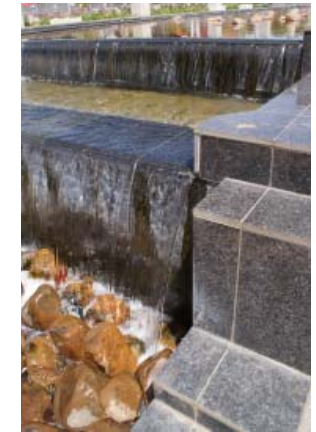
Illus. 31: The small cascade at the end of the water feature (Author, 2011)

Illus. 32: The dry water paved strip and the pedestrian walkways crossing it. Notice the rhythm of the lighting structures and street furniture elements which provide unity in the landscape. (Author, 2011)

3.2.4 How can identity of place be strengthened?

The oxford dictionary defines identity as, "the fact of being who or what a person or thing is" (Concise Oxford Dictionary, 2008: 707) The characteristics determining this, as 'modifiers' serving to establish the identity of the owner. These 'modifiers' can refer to certain events over a period of time. These isolated events are combined by the people themselves to form a narrative of who they are and who they are not. This constitutes their identity.

With regards to Wonderboom Nature Reserve, the 'events' must be highlighted to be combined, to form a story. This results in the formation of an identity for the site.

3.2.4.1 How can experience strengthen place identity?

"Experience of architecture falls in two categories of response: sensuality and aesthetics. The sensual experience results from the manner in which we see and touch, while, being less concerned with the sensate, the aesthetic experience is more dependent upon and affected by processes of thought. Therefore, our experience of environment seeks two fundamental responses: delight for our senses and also the need to respond to inherited memories of habitat." (Porter, 2004: p60)

Phenomenology is a term which can also be used to describe experience. Phenomenology is "an approach that concentrates on the study of consciousness and the objects of direct experience." (Concise Oxford English Dictionary, 2008: 1075-6)

Porter defines phenomenology "...based on a belief in subjective immediate sensory data as the only reality, and then that reality is only a reality for the particular individual involved. Each experience initiates a new ultimate outcome that did not exist before." (Porter, 2004: p60)

In this study phenomenology will refer to the unique experience of each visitor, to the site. It will refer to the objects in the landscape and how one will experience it through your immediate conscious sight and touch.

Environmental psychology, is one of the three theoretical currents, as stated by Howett (Howett, 1987: 108). This includes the work of such geographers as Yi-Fu Tuan, who speculate on the nature of place experience and the profound conscious and preconscious bonds that make us respond in specific ways to various environments." (Howett, 1987: 108)

According to Howett, environmental psychology is "[t]o speak of ways in which landscapes can communicate values shared by our culture, meanings whose discovery is part of our aesthetic response to the places we inhabit or encounter" (Howett, 1987: 109-16)

Phenomenology is focussed on the individual experience and environmental psychology is focussed on typical (groups) ways of experience.

In the case of of Wonderboom Nature Reserve, experience will be created as stated above, but also through different approaches to some element or acitvity/artefact. This will ensure interest and discovery in the landscape. These approaches will be discussed under 3.2.6 meaning in the landscape. These events stimulate experience and different manners of approaching these elements in the landscape provide for strengthening the identity of place as well as the people.

3.2.4.2 How can meaning strengthen identity?
3.2.4.2.1 Three Dimensions of Meaning

Robert Thayer (1994), explained with an example how he and his friend experienced coming across an airplane wreckage one day, while they were hiking. They experienced three basic significant levels of human intrusion on the landscape, namely;

1. Perceptual,
2. Functional, and
3. Symbolic

"Attracted initially to a visual stimulus set off from its context, we first perceived the stimulus as 'technological' and human-made without knowing its function. Later, we recognized the function, and finally, made some symbolic connections." (Thayer, 1994: 105) Refer to fig 11, which illustrates these levels of intrusion but based on Wonderboom Nature Reserve.

Thayer (1994) argues that by developing this framework of the three dimensions "is to suggest that each dimension contributes, both individually and perhaps synergistically, to a participant's effective response to a particular utilitarian or technological landscape, and that by examining each dimension separately and more closely, we can learn much about how we react to the technologically influenced landscapes that form the context of our daily [South African] existence." (Thayer, 1994: 105)

In the case of Thayer and his companion, they approached the airplane wreckage in a linear fashion, therefore, their experience of each dimension was sequential. If, for instance, Thayer and his companion had stumbled upon the wreckage suddenly, they might have experienced all levels simultaneously. Thayer states that, "[w]hether the experience of complex levels of landscape meaning is linear (i.e., information processing) or simultaneous (e.g., Gestalt) and whether the perceptual, functional, and symbolic levels act independently one or another of the interactive, interdependent manner is
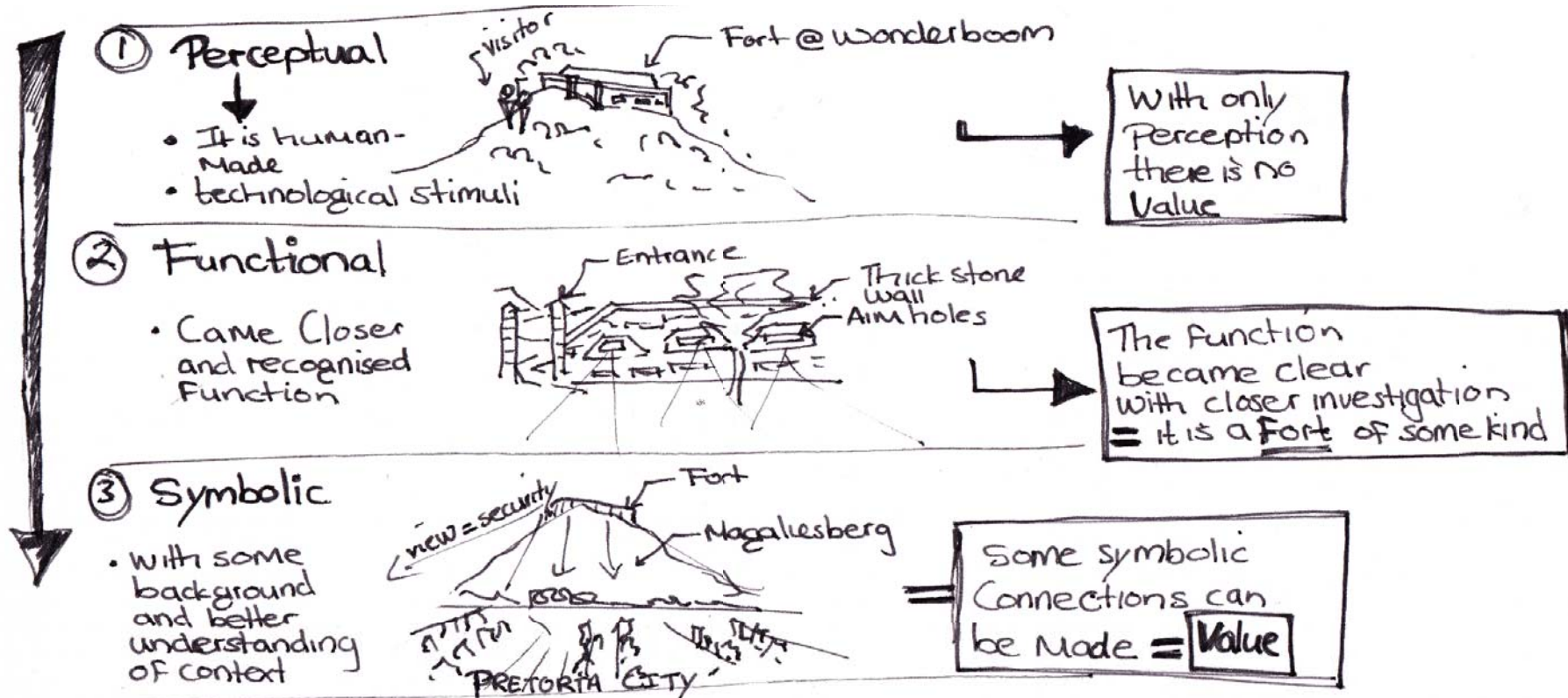
Fig 11: An illustration by the author to explain Thayer's three levels of intrusion. (Author, 2011)

unclear. However, I am convinced that humans evaluate the three meaning dimensions according to inner 'positive – negative' scales or operative procedures.

In short, each meaning dimension or significance level contributes something to overall affective or emotional response, be it negative or positive." (Thayer, 1994: 105)

3.2.4.2 .2 Meaning in environmental design

Joseph Grange gives three principles which should be kept in mind when a designer looks at an environment.

1. First, things are meanings, not material objects.
2. Second, these meanings are nodal points of expression that open out into a field of relationships.
3. Third, the goal of environmental design is to knot together these concentrations of meaning so that the participant can experience the radical unity that binds these different qualities. (Grange, 1985: 113)

3.2.4.2.3 The meaning of the fort at Wonderboom Nature Reserve.

The Wonderboom Nature Reserve can be seen as a sanctuary, a refuge, because it is in its nature to provide security, shelter and a place people can escape to when they want to get away from the city. It has been the function of this area since our ancestors migrated to the Magaliesberg, during the Voortrekker era and even now people still use it for that.

Refuge, according to the oxford dictionary, refers to "a place or state of safety from danger or trouble" (Concise Oxford Dictionary, 2008: 1209) In this case it will also refer to a place away from the city (danger), thus it becomes a sanctuary.

The Oxford dictionary describes sanctuary as "a place of refuge or safety." (Concise Oxford Dictionary, 2008: 1272) and a nature reserve is also described as a sanctuary, in the sense that it is where unwanted animals or injured animals are cared for. Sanctuary is also a spiritual place.

To conclude:

People approach objects differently and for that reason one needs to accommodate for that. These two approaches mentioned by Thayer, namely linear or simultaneous, can be used in the approach of Wonderboom Nature Reserve. Different approaches can be established to create different experiences. For example, the Wonderboom tree can be seen all at once, but the fort on top of the mountain becomes a linear approach with a sense of discovery. The visitor will in some instances perceive the object presented to them without the functional and symbolic meaning, and as they progress in discovering this object of interest, they will come to understand the symbol and function. The visitor will also, in some instances, be confronted with the entire object presented to them and experience symbol, perceptions and function all at once.

The different activities (existing and proposed) in the nature reserve can be seen as nodal points of meaning, which are connected through a narrative. This can be seen as a field of relationships. These nodes of meaning which can be created in the design would in turn create experiences which forms the identity of place and person.
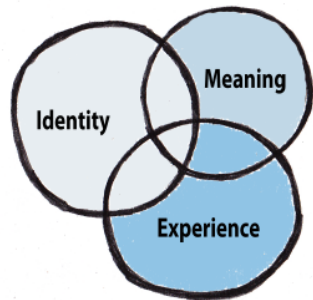

Fig 12: The interconnected relationships between identity, experience and meaning.(Author, 2011)

Summary

This section can be seen as the second theme, with the first theme being semiotic, narrative and didactic approaches.

A series of events and experiences can be regarded as 'modifiers' which establish the identity of a person. Events/activities or themes in a landscape are connected through a narrative to result in identity formation of the site.

By accommodating for both categories of response; sensuality (in which we see and touch) and aesthetics (dependent and affected by process of thought), the design need to respond by providing delight for our senses and also to the inherited memories of our habitat, this in turn create different experiences.

The two approaches, namely; linear (sequential) and suddenly is how one will experience the three dimensions of meaning, namely: functional, symbolic and perception.

Meaning can create a sense of reference and belonging (identity) for the Wonderboom Nature Reserve. The existing meaning is that of a refuge/sanctuary. Meanings related to the objects and different experiences created by objects in the landscape can results into identity growth of the site for the people.

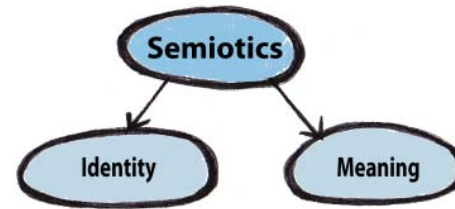## 3.2.7 How do you create interest and discovery in the landscape?

Fig. 13: The relationship between semiotics, identity and meaning. (Author, 2011)

A quick reference to the previous two themes will help with the understanding of interest and discovery in the landscape.

'Semiotic resources' can be used to give meaning to the landscape or object as well as providing identity to the site and the visitors. Refer to the previous themes.
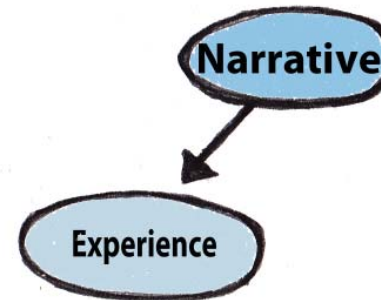

Fig. 14: The relationship between narrative and experience. (Author, 2011)

A narrative results in a chain of events, activities or objects placed in the landscape to communicate a story. These nodes can me linked with walkways. Semiotics is used as a tool to communicate the heritage and history of the site and to create meaning in the landscape and to the objects placed in the landscape. This narrative can also be approached by means of didactic design. This approach brings an educational factor into the narrative and teaches the visitor. This teaching might be done in different ways. The narrative as a whole creates experience in the landscape. How people approach an object also provides for the experience. The different elements/objects in the landscape, their orientation and arrangement ensures for experience and the creation of identity. Refer to fig. 13 and fig.14 to see the relationship between the two themes.

3.2.7.1 Interest and discovery

According to Dee (2001: 17) there are four qualities in a landscape which influence peoples experience of the landscape. These qualities are mystery, legibility, complexity and coherence. With these four qualities intact in the design one will be able to create interest and discovery in the landscape, and with that provide for users experience and identity growth.
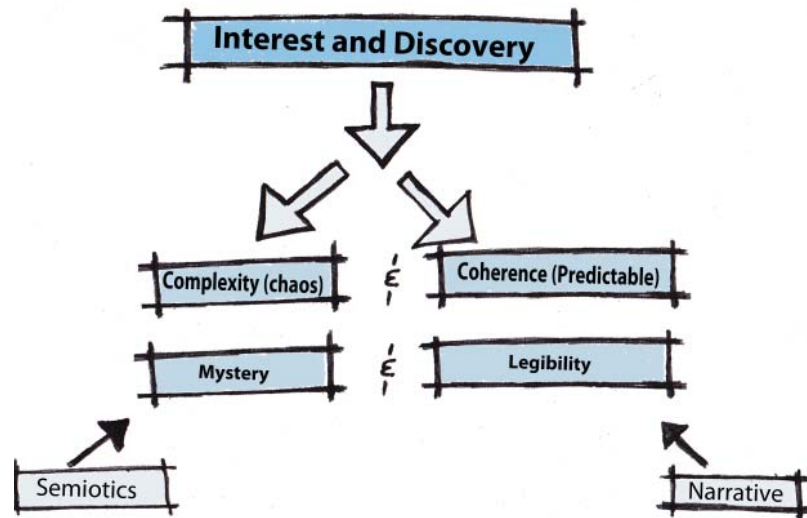
Fig. 15: Discovery and interest can be created through a balance in complexity and coherence in design. (Author, 2011)

Legibility refers to how easily an environment can be 'read' or 'made sense' of to enable people to understand and know what to expect in the landscape. Mystery describes the quality of an environment that encourages people to discover more about the place; to 'engage with it' according to Dee (2001: 17). Coherence refers to the order of a place; how well it 'fits together' to create a unity/whole. Complexity refers to the diversity and richness of elements within a place.

According to Dee (2001:17) all of theses qualities are simultaneously required in order for people to fully enjoy and respond to places.

Figure 15 refers to the two main qualities, namely; complexity and coherence which can provide for discovery and interest in the landscape. This can be achieved by using semiotics to create meaning and complexity and a narrative to create coherence, order in the landscape. A narrative will ensure that the landscape will be legible and follow a sequence of events. Mystery will be created through means of arrangement of activities, and the different approaches the visitor will experience when walking through the landscape.

To further ensure complexity and coherence in the landscape one need to understand the principle of unity with diversity in the form and detail of landscape. This visual characteristic can ensure to capture the visitors interest and at the same time provide for his experience. A person experience things by the means of his senses, touch, feel, smell, taste, see and hear.

According to Dee (2001: 18) the need for people to make sense of the order of places requires a certain degree of unity of form, elements and detail. Unity can be achieved by means of the following: through repetition, use of specific geometry, and a limited 'palette' of materials.

Dee (2001: 18) states that a landscape that is unified but lacks diversity can be considered monotonous. The diversity in landscape according to Dee (2001:18) refers to difference in form, elements and detail. To balance unity and diversity is the ideal goal in any landscape, and the ideal goal in the design development of Wonderboom Nature Reserve.
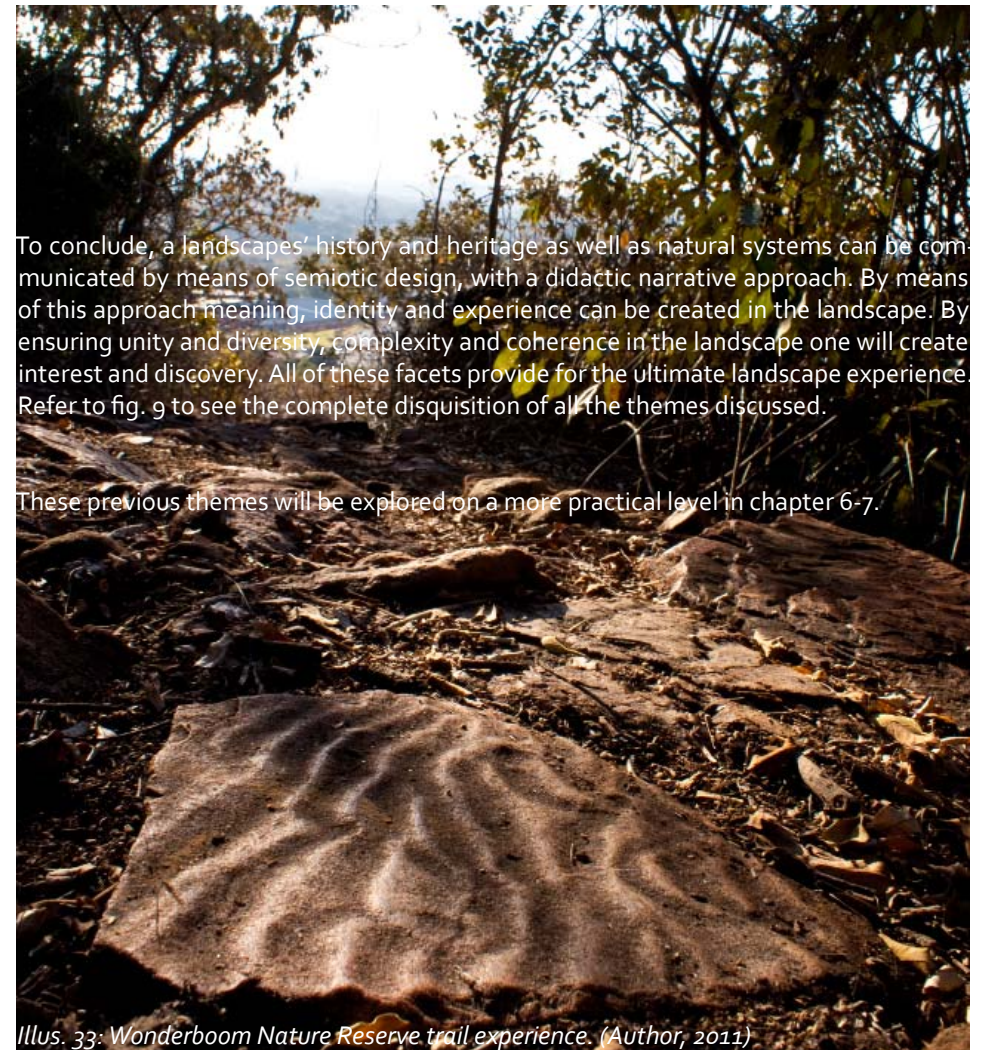
To conclude, a landscapes' history and heritage as well as natural systems can be communicated by means of semiotic design, with a didactic narrative approach. By means of this approach meaning, identity and experience can be created in the landscape. By ensuring unity and diversity, complexity and coherence in the landscape one will create interest and discovery. All of these facets provide for the ultimate landscape experience. Refer to fig. 9 to see the complete disquisition of all the themes discussed.

These previous themes will be explored on a more practical level in chapter 6-7.

Illus. 33: Wonderboom Nature Reserve trail experience. (Author, 2011)

3.2.8 How can access be created?

Access becomes very important with respect to the approach of the site. What will the visitor experience? To what extent would the design give access to certain areas, artifacts etc.? To create access in the design as design resolution will be discussed in more detail in chapter 6 & 7. Access to the different heritage sites is limited and in some cases non existing. Through the design access to the different heritage sites can be provided.

3.2.8.1 What is access?

Access is defined as "the means or opportunity to approach or enter a place."(Concise Oxford English Dictionary, 2008: 07) And something which is accessible, is something one is able to access, whether it be physical or mental.

3.2.8.2 Different ways of providing access:

1. Visual access
2. Physical access

3.2.8.2.1 Visual access

The visitor would only have visual access to something. This means that you will not be able to touch it or experience it by walking through, on or under it. One can provide for visual access from a distance, or one can bring the viewer closer, but not within reach of the element, view, artefact etc. The visual access can be obscured, or open. Interest can be created if a view is only halfway accessible from a certain point.

3.2.8.2.2 Physical access

The visitor can physically access the Wonderboom Nature Reserve in this case. The nature reserve is made more accessible through design solutions, for instance, the entrance to the nature reserve is made more visible from the road, the entrance to the fort for the proposed bus shuttle is reconstructed with new road lanes to regulate the traffic flow, and make it easier for people to turn into the entrance from the busy Voortrekker road.

Physical access is provided to the landscape, elements, artefacts etc. The visitor can experience every corner of the space or artefact. One can touch, smell, taste the element or artefact. You can move through, over and under the structure.

One can also regulate the means of access, to enable the visitor to touch the artefact or element, but you cannot move through it etc.

3.2.9 How can awareness be created?

3.2.9.1 What is awareness?

Awareness is "having the knowledge or perception of a situation or fact." (Concise Oxford Dictionary, 2008: 91)

3.2.9.2 Awareness can be created by the following:

Refer to figure 16, results from the questionaire which was conducted. These results indicate ways in which the people come to know about the Wonderboom Nature reserve.

Different ways the people come to know about the Wonderboom Nature Reserve
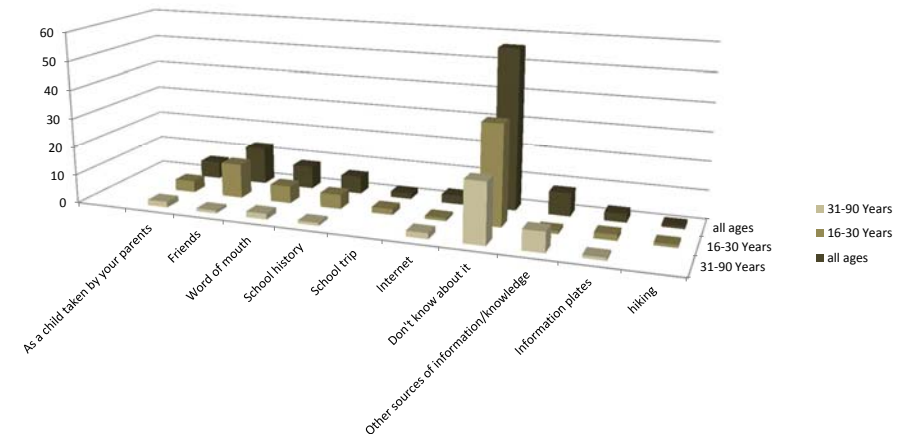

Fig. 16: Different ways by which people became aware of the Wonderboom Nature Reserve. (Author, 2011)

Awareness can be created by the following:

1. **In Person,**
    *   Word of mouth
    *   Prior knowledge or experience
    *   Emotion
    *   Questionaires

2. **The Media/ technology,**
    *   Phone (geocaching)
    *   Internet
    *   Radio

- Television
- Newspapers

3. Visual (physically on site),
- Sound (real or immitated)
- Kinetics (structures in the landscape)
- Posters
- Information plates
- Lights
- Signage
- Activities

4. Physical (visitor participant on site),
- Monthly exclusive activities/events (star gazing, moon walks etc.)
- Yearly architectural competitions (temporary pavilion structures)
- Artefacts and exhibitions

Examples of precedents:

Illus. 34: The World Trade Centre's ghost towers, to commemorate what was there, and remind the people what happened on 9 September 2001. (Mossad, 2009)

Refer to illus 34. The use of lighting can create a sense of awareness. This was accomplished with the World Trade Centre ghost towers. Two flood lights shine staight up from the exact location where the previous Trade Centres were before the terrorist attack in 2001. It is clearly visible from a distance and there is no way of missing this spectacular view, it is almost as if awareness is forced upon the viewer/people.

The 'reeds' at freedom park is a great example of ensuring awareness amongst the people living in Pretoria as well as people all over the world who see and hear about it.

These 'reeds' is a sculpture of ascending steel poles. With almost 200 reeds, the tallest measuring 32 metres in height, and small lights on top of each pole ensures visibility of Freedom Park from all around the capital city, night and day. (Freedom Park, n.d.) Refer to illus. 35

Illus. 35: A view of Lekgotla. (Freedom Park, n.d.)

Illus.36: Lionshead in Cape Town; picturesque full moon. (Delport, 2011)

Refer to Illus.36. The fullmoon walk up Lionshead mountain in Cape Town. This is a great example of events which will attract visitors during the night time and ensures for some interesting stories to tell friends. This will create awareness.

There are also the moonlight markets at the Pretoria botanical garden, which attract a lot of people each month.

3.2.9.3 Different manners of Awareness:

1. Senses
2. Physically
3. Mentally

3.2.9.4 Awareness can be created of the following:

The following aspects mentioned below were deduced from the site analysis. The aspects which the public needs to be made aware of were identified as:

1. Biophysical phenomena, in this case, the Wonderboom tree
2. Fauna and flora
3. Topography and geology
4. Cultural aspects, such as the wonderboompoort fort and artefacts.
5. History and historical eras, for instance the Stone Age and Iron Age, the war and the Pre-stone Age era.
6. Important cultural celebrations, in this case the Day-of-the-Vow, the Transvaal Ndebele tribe, and the Union of Pretoria.

3.2.9.5 Awareness to different degrees:

1. General awareness
2. In-depth awareness

3.2.9.5.1 General awareness

One can see the objects in the landscape and the visitor knows about it. Objects in this case refer to any design intervention or examples mentioned in 3.2.9.4.

3.2.9.5.2 In depth awareness

The visitor is made aware of the object in every way. The visitor gets intensely aware of the object/landscape. Visually, physically and mentally etc. The visitor almost becomes part of the landscape in every way. Object in this case also refers to the examples mentioned in 3.2.9.4.

3.2.9.6 Awareness to different classes of people:

Refer to the questionaire analysis and visitor's book year table in chapter 1.

The following classes were distinguishable:
1. School children
2. Education oriented people
3. Specialists in certain fields of study
4. Nature lovers
5. Outdoor people
6. Socialising people

The abovementioned classes were obtained from a questionaire analysis, by looking at who visits the nature reserve and for what reason.

It was found that some people come to socialise (braai and be with family and friends). In the results it was clear that different age groups visited the reserve. For instance primary school, older school kids, young adults, adults and pensioners. There were people who were more education oriented. They want to obtain more knowledge and they read the information plates. Some people would visit the reserve to go hiking, be close to nature and see the animals etc. Others still, come for the natural aspects of the site.

Summary

Access can be created on different levels, namely visual access and physical access. This access can be of the people toward the elements and artefacts in the landscape as well as the access of people to the Wonderboom Nature Reserve itself. Accessibility can be improved in cases where access is difficult or impossible. For example the entrance to the fort from Voortrekkerweg.

Awareness can be created in different manners, namely; senses, mentally and physically by means of the following; in person, the media/technology, visual (physically on site), and physically (visitor participant on site. It can be to a different degree of intensity, namely; general awareness and in depth awareness, for a variety of classes of people, namely; school children, education oriented people, specialists in certain fields of study, nature lovers, outdoor people, socialising people.

3.3 Further investigation into key concepts of the site and design

3.3.1 The Tangible and Intangible

Liana Muller (2008) investigated the intangible and tangible landscapes from an anthropological perspective, which gives her study a unique dimension. This research will investigate the relationship between landscape and culture, or landscape and memory.

According to Scazzosi in Muller (2008: 1), "There is currently a global movement towards a unified vision of landscape, focussing on the integration of culture and nature and incorporating the conservation of the identities of people and places". But with this honourable notion, within the development industry in South Africa, the concept and realities of preserving intangible heritage is still misunderstood, with the role of memory and meaning of place largely ignored in conservation policies. (Muller, 2008: 1)

Muller stated that, "[t]hrough qualitative anthropological fieldwork methods it became possible to access its intangible aspects. These intangible values of meaning, memory, lived experience and attachment, in relation to people's connection to locality and landscape, were then traced back to the tangible fabric of place."

"It could be stated that landscape and memory are fundamentally interconnected through the intangible dimension. Both are part of a continuum and both are equally susceptible to change." (Muller, 2008: 16)

3.3.2 Ruins

The word ruin can mean a lot of different things for different people; to some the word can already indicate a derelict building or structure etc.

When is something a ruin, in what stage of deterioration should a place be to be called a ruin? One can get different states and phases of ruin. A derelict building can be explained as a building which is not in use anymore and some deterioration has started to take place. The Oxford dictionary explains derelict as a building "in a very poor condition as a result of disuse and neglect." The word ruin is described in the Oxford dictionary as "physical destruction or collapse" or "a dramatic decline; a downfall."

Thomson describes a ruin as the "roofless shell of a building or structure", after a building became derelict and deteriorated to a roofless shell. "The shell may stand to roof height or exist only as a foundation (or even merely as an archaeological fossil in the subsoil), but it is clearly sharply distinguished from a roofed structure which provides shelter and is in some sense usable." (Thompson, 1981: 9)

What is interesting of the four remaining fortifications of Pretoria is that all the forts are in a different phase of ruin. (Refer to illus. 37) *Fort Schanskop* (1897), Krupp of Germany (n.d) — is in perfect condition after it has been restored and reconstructed. In this instance, this fort is restored to a monumental museum structure, more for the aesthetic than the original function and atmosphere. — *Fort Klapperkop (1898)* on the other hand is also in perfect condition, the only difference is that fort Klapperkop was restored to the original structure. *Wonderboom fort* (1897) was used as guide to reconstruct fort Klapperkop. *Wonderboom fort* is in a state of deterioration. The fort is the original structure with no previous restoration. This makes the fort significant. The fort is in a state of deterioration, but all the walls are still standing to provide the evidence of the past. Lastly is *West fort* (1897-1898), Leon Grunberg and Sam léon (n.d), Pretoria, South Africa — the fort is in a state of extreme deterioration. Not much is left of the fort structure except the impressive entrance. These ruins can be seen as great examples of ruins, as described by Thomson.

The interesting fact which can be deduced from these four examples is that the one in the best condition and full restoration is the fort which is most accessible and most visited by tourists. This fort is Fort Schanskop. The same goes for Fort Klapperkop. Wonderboom fort, is less accessible especially by car and people in general are not aware of the existance of this fort. The fort is located on the Magaliesberg in a nature reserve. The only access to the fort for visitors at this stage is by foot up the mountain. This results in more and quicker deterioration of the structure which was once unbreakable. West Fort on the other hand is in a degree of total destruction. The fort is also very difficult to access, no definite clear route leads to the fort. It is almost as if you do not know where the fort is; you will not be able to get to it. No one goes to that fort, except if you are doing research, because very few people are aware of that magnificent fort ruin.

In these instances it becomes clear that accessibility and awareness are two key factors of keeping, in this case, a fort ruin from deteriorating. Some development is needed to ensure the ongoing awareness and memory of these structures.

The four phases of ruin (restored to aesthetic monumental structure, restored to original structure, left as a ruin slowly deteriorating with some maintenance and lastly total destruction as a result of no awareness, access or maintenance) is an excellent example of how the Wonderboom fort would look if it would be restored to its original past structure or if it's left to deteriorate with now maintenance, access or awareness. (Refer to illus. 37) Should it be restored, or should one leave the genius of the place as is? The rationale behind the proposed intervention will become clear in the folllowing pages.

Illus. 37: The different phases of ruin as mentioned before, from the left; Fort Schanskop, Fort Klapperkop, Wonderboom Fort and West Fort. (Author, 2011)

3.3.2.1 Why the destruction of ruins?

It is perhaps a debatable point whether natural erosion or human interference is the major agent of destruction.

Fire and pillage may create ruins, but deliberate levelling and quarrying for the reuse of stone or brick are probably a ruin's main enemies. The blockhouses in Gauteng, South Africa were stripped of their corrugated iron, and the stone bases were left for ruin by the British after the Anglo Boer war.

According to Thomson, the denser the population, the more likelihood there is of interference, and similarly it follows that the sparser the population the less the interference with ruins in the area. (Thompson, 1981: 9) Evidence of this can be found in the four fortifications of Pretoria as discussed previously.

The other agents of destruction are the natural effects of climate and vegetation, the two being closely related. According to Thomson: another factor is the varying degree of resistance of the passive materials of which the ruins have been constructed to withstand these destructive forces. (Thompson, 1981: 9)

Off all the factors mentioned only one can be controlled by legislation, and that is human interference. It can be prevented or reduced by prohibitory laws. Such laws and charters will be discussed later in this dissertation. Sadly, the laws and charters cannot prevent erosion and collapses caused by climate and vegetation, and these continue to effect most ruins. The only difference to be made by legislation with regards to the ruins is to preserve them and take them into their care.

Thomson believes that ruins have a finite life, and thus by preserving it one may increase its deterioration by removing the protective debris from the base of the ruin, this may hasten its erosion, but on the other hand, it is important that during this finite life we are using the ruin by rendering it intelligible to the visitor, both for pleasure and instruction/

education. (Thompson, 1981: 10)

Ruins are very emotionally evocative as we know, ruins speak of past events and times, which can now only be known through education and memory. "There is no general study, no periodical to which one can turn for an account of this work, and indeed much of it has now passed beyond living memory." (Thompson, 1981: 7)

3.3.2.2 What is to be done with ruins?

Should ruins be left in peace as they are, or should one attempt to restore the ruin to its original state or only preserve it in its current state of deterioration?

The term preservation means to "maintain in its original or existing state" (Concise Oxford dictionary, 2008: 1135), and to restore (restoration) in this research essay means to reconstruct the ruin to its original state.

We often try to restore what has been previously destroyed, or what is in ruin. Perhaps, for example, a stream which was culverted and buried is restored to its 'original' state, or for instance fort Klapperkop was restored to its 'original' state by Anton van Vollenhoven — "of course, it really isn't; everything has changed around it" (Treib, 1995: 95). And in some cases even the genius loci is lost.

It is important to remember that there was no question of preservation in the Romantic or Picturesque attitude towards a ruin, according to Thompson, in his book *ruins: their preservation and display*. He states that the ruin was there to stimulate and excite the onlooker; whatever increased the theatrical effect —ivy or moonlight—was desirable to heighten the sensation. (Thompson, 1981: 15)

William Gilpin in his journey down the Wye in 1770 said of *Tintern Abbey* (1131) (a picturesque ruin): "More picturesque it certainly would have been if the area, unadorned, had been left with its rough fragments scattered round; and bold was the hand that

removed them; yet as the outside of the ruin, which is the chief object of picturesque curiosity, is still left in all its wild and native rudeness; we excuse—perhaps we approve—the neatness that is introduced within." (Gilpin, 1782: 32-35)

Gilpin described the vegetation growing in the abbey in detail, because in his eyes it enhanced it. Thus the vegetation growing later in the ruins can enhance the view and experience of the ruin, it brings a sense of mystery to the place.

Illus. 38: Tintern Abbey (1131), Tintern, Monmouthshire, Wales. (Tintern Abbey, 2010)

According to Thompson, many ruins in the picturesque era suffered from selective demolition "where the remains were not visible from the house or in a vista. The pleasure could as well be derived from an artificial ruin, a folly, as a real one. The ruin became like a toy in the landowner's park." (Thompson, 1981: 15) It was only with the dawn of the romanticism that a sense of sympathy arose towards the medieval remains. (Thompson, 1981: 17) It is interesting how people see things differently, to some "[h]istory became an image to be dusted off and applied to any current proposal as a means to validate it [,]" (Treib, 1995: 90) and to others ruins can be seen as sacred.

Romantic or non-Romantic attitudes towards ruins plays an important role in the human experience of ruins. Even the most down-to-earth person can feel his imagination stirred by a ruin, and as Thompson stated that that is the visitor's main source of pleasure and satisfaction. (Thompson, 1981: 17) For that reason only, it would be best to leave ruins as they are, the deterioration of a ruin is part of its attraction.

Thompson stated that, "if there are other conditions, such as moonlight or thick vegetation, then the imagination produces quite a different state of mind." (Thompson, 1981: 17) He mentioned his visit to the nineteenth-century, neo-Gothic Bayon's Manor, Lincolnshire, when it was derelict but before it was demolished. Thompson described the dripping from leaves over this 'castle' which produced a most eerie experience.

"The pleasure of a ruin is to stimulate our imagination and reconstruct in our mind's eye the structure in its original state. The better we understand the ruin (common sense or, if necessary, archaeology), the better the imaginative reconstruction. If it requires ivy and moonlight or the occasional fall of a stone to stimulate excitement, then this is probably a form of self-dramatisation and a different, more theatrical, experience. The boundary between the two is blurred, and the Romantic tends to flit from one side to another." (Thompson, 1981: 17)

Why can a ruin not simply be left alone to preserve itself? In some cases for a ruin to be appreciated it needs to be preserved and protected to some extent, even though it is not desirable in all instances, but preservation gives ruins value in the fact that people can start to take note of them and the history which they present the evidence of. The preserver aims to secure what remains and to render what he thinks intelligible both to himself and to the onlooker that he is going to invite to the site, according to Thompson. Intelligibility is the foundation of the whole operation of preservation and display. (Thompson, 1981: 22)

Why interfere with a ruin at all, especially when a ruin is more evocative in its present condition. Ruins are deteriorating all the time, and it is only possible to halt this deterioration on a practical or economic level in a minority of cases by direct intervention which in any case cannot stop erosion from happening.

According to Thompson, you only restore or reconstructs a ruin where it is structurally necessary. (Thompson, 1981: 25) Wonderboom fort will in no means be restored to its original state.

Illus. 39: Example of restoration. Fort Klapperkop (1898) , restoration done by Anton van Vollenhoven (Author, 2011)

In some cases the representation, in this case, meaning the replacement of a missing feature by an unmistakably modern substitute. This term was defined by Thompson. "The theory is that by using a modern substitute, such as concrete kerbing for a missing wall or recessed and rendered brickwork to fill a void in a wall, one does not beg the question of missing windows and doors. There may be structural reasons for its use, but more often than not it is required for rational display." (Thompson, 1981: 25)

In this research the focus lies in using ruins as ruins. "…if the purpose of a ruin is to remind us of some activity in the past, an entirely discordant modern use can defeat that purpuose." (Thompson, 1981: 58)

3.3.2.3 Representation?

Representation refers to places where the ruin may not be restored, but where for structural or display reasons one cannot leave a void. In this case a modern substitute will be employed but it will be identifiable as such by the onlooker. The modern material will be chosen in such a way that it will be in harmony with the original ruin.
A common case is where there is a need to represent the shape or position of earlier buildings that have preceded the visible ones on the site and are important for their history. For example Co.Durham: the position of buildings of different dates marked out in the later cloister, refer to illus. 40.

Illus. 40: Jarrow, Co.Durham: the position of buildings of different date marked out in the later cloister, through different paving strips. (Robpattison's photostream, 2009)

3.3.2.4 Are ruins important in today's African society, and if so why?

In some sense it is important to not only leave the ruin as it is, but to preserve it in the sense that visitors can enjoy and appreciate the value the ruins bring. Ruins can be seen as the remains of evidence. According to Thompson the ruin can be regarded as a document which can tell us a great deal about its history if we have eyes to see and understand. The remains may be fragmented, but from slight traces, for instance at Wonderboom fort, Pretoria, South Africa traces such as steel brackets indicating the fixing of the windows here and the door there, or a hole in the floor can suggest something else such as water storage etc—a picture can now be formed in the mind's eye of the original building, in this example, the fort. Thompson stated that, "It will be appreciated at once that the preservation is that much more informative if this kind of evidence is kept and wherever possible left exposed for the discerning eye to see." (Thompson, 1981: 21)

We cannot go with the stance that "[t]he received body of historical landscape architecture was taken as meaningless because its significance belonged to other places and other times." (Treib, 1995: 90) This stance is problematic. The significance of the place is because of the evidence it gives of the historic events; that is what gives it meaning and importance, not the other way around.

3.3.2.5 Display

In this case the term display refers to the way in which the ruin is presented to the visitor.

A ruin can be extremely difficult to understand—especially when it is a large structure—without the historical and comparative knowledge that the ordinary visitor lacks.

The display of a ruin can be divided into two distinct categories: requirements to satisfy the physical needs of the visitor and requirements to satisfy his intellectual needs. The first covers a wide range of matters from toilet facilities to bridges, while the second is mostly, although not limited to, a matter of publications. But also the way in which the signage and information on site is implemented. (Thompson, 1981: 30)

The approach to the ruin is important. In this case it can be a linear approach, which will be a sequential experience of the ruin or it may be a sudden experience where everything is revealed at once.

According to Thompson, at the ruin itself the impression made upon the visitor will be influenced by its surroundings (Thompson, 1981: 30) and that is true in all cases.

For the display of a ruin, where there were existing trees growing, these are usually retained and can considerably enhance its appearance. Trees growing in the structure

must be removed because it can damage the structure even further.

It is important to maintain the area surrounding the ruin, for instance mow the lawn to ensure that people can still move freely around and through the ruin.

Illus. 41: An example of grass that has overgrown the ruin. This makes it difficult for the visitor to appreciate the ruin or to walk freely on the site. (Author, 2011)

It can be true that for some people a ruin can be very bewildering. Thompson describes it that, "The purely accidental shapes that have survived, the puzzling presence of face here but only core there, the complete absence of floors and roofs showing quite unfamiliar aspects of a building, the lack of plaster and exposure of harsh stonework; all these factors combine to present the ruin to the visitor in a somewhat brutal and enigmatic light. There are not the pictures, carpets and furniture of a historic house to wonder at, which was perhaps the main motive of the visit, but instead the rather bleak scene of a manicured ruin in a large expanse of lawn." (Thompson, 1981: 31)

It takes a lot of concentrated effort to have the appreciation for the ruin as required. It is difficult to understand everything of the ruin, even though it creates the mistery behind it. Step one to understanding the ruin would be to grasp sufficient understanding of the ground-plan to identify one's position and thus orient oneself in relation to the other buildings. To help provide this information plans can be displayed on boards and remains can be labelled. The second step in understanding the ruin would be to attempt, in the mind's eye, to restore to the fragmentary remains the roofs, floors and glazing of the original buildings.(Thompson, 1981: 31)
According to Thompson, the most satisfying experiences to be gained from a ruin can derive from the close correlation between a written source and the greater understanding of its construction that this gives. (Thompson, 1981: 32) The greater the familiarity of the public with the subject, the easier they find the remains to understand.

In exhibiting a ruin, the following can be done to further enhance the experience and understanding of the ruin. Diagrams, photocopies of documents, plans, photographs, can be used on information boards. At Wonderboom fort glass information boards will be fixed onto the existing wall. The visitor will move through the arches with the displays on either side.

There is in an exhibition of this kind, a conscious attempt to instruct, which might be regarded as a form of adult education, a conscious and didactic design approach. This opens up the whole subject of the use of ruins for education. This value of education brings justification in the value of displaying and conserving ruins.

There are different ways in which the display and experience of the ruins or heritage site can be enhanced. One of these ways is the use of lighting. Thompson mentioned two types of lighting, which are floodlighting or *son et lumière.* The first he describes as the one which is widely employed, particularly on ruins in an urban setting. It gives pleasure to the onlooker and perhaps interest to the town without harming the fabric and may, indeed, attract attention to the monuments. The *son et lumière* is discribed as lighting with music, which is more difficult to apply. This measure was used for châteaux in France. They apply lighting combined with loudspeakers playing Gregorian chant. (Thompson, 1981: 32)

Liliesleaf farm (1963), GreenInc. (2001), Johannesburg, South Africa; Illustrations 42-45, is a farm in the outer suburb of Johannesburg. Nelson Mandela hid there during the liberation struggle in 1963. This farm is now a museum in commemoration of that. These illustrations show different manners in which the museum was displayed to the visitor.

Illus. 42: A simple landscape done in such a way that nothing distracts the visitor from the old buildings or the layout of the museum. (Author, 2011)

Illus. 43: SIgnage boards are positioned at certain places in the landscape to inform the visitor if something is not clear in the display. All the original buildings are kept on site, with a few additional buildings to enhance the visitor's experience such as the restaurant etc. (Author, 2011)

Illus. 45 below: The use of photographs, plans, models, and tour guides enhance the visitor's experience and understanding of what has happened during the struggle. Below is the model of the entire landscape/museum. (Author, 2011)

Illus. 44: The designer even made use of a water feature, with the date of the struggle designed into that. This emphasises the important date, and directs the visitor's attention to that fact. (Author, 2011)

The topography profoundly influences the impression a ruin makes on the mind of the viewer. In these cases it is the natural formation of the ground that plays the main role, but in others it may be the long-since altered landscape. In the case of Wonderboom fort, it is the magnificent Magaliesberg mountain ridge with its enchanting view.

Thompson regards gardens as a special case. According to him, a garden beside a ruin can look incongruous since it implies active occupation, but there may be circumstances when it is justified. (Thompson, 1981: 32)

By displaying the ruin, it can perform its function as a reminder, a monument in truth.

3.3.2.6 Interpretation

How does one set out about understanding the ruin when confronted with it? "There are two main ways of doing this: by looking at the remains themselves and by going to the library to find out what other people have written about them." (Thompson, 1981: 85) Ruins can be seen as frozen evidence from the past and the unending changes that kept on going through the years. These informational pieces left behind can inform us about the society that erected it.

Tompson argues that "[t]he best basis for understanding a ruin is therefore a wide knowledge of other structures of the same period, whether ruined or not, since the mind is consciously or unconsciously making comparisons, and the larger the stock upon which it is possible to draw, the more reliable the result is likely to be." (Thompson, 1981: 86)

"The nature of the written evidence, or lack of it, will have a considerable influence on our attitude towards the ruin." (Thompson, 1981: 87)

3.3.2.7 Conclusion

People didn't restore ruins in the romantic or picturesque era, they used it to stimulate and excite the onlooker. The moonlight, plants etc. heightens the experience of the ruin, if you take it away the excitement will be gone with it. Plants bring a sense of mystery.

Wonderboom fort ruin speaks of past events and times, it is very emotionally evocative. If it would be restored, that imagination of a visitor of what might have been will be lost together with the genius of the place.

The intention for the Wonderboom Nature Reserve is to stimulate the imagination of the visitor, so that he reconstructs the structure in his mind's eye to its original state. To ensure that people do not find it difficult to imagine, a better understanding of the ruin will be provided through 'semiotic resources' - which can be information plates, or a small model or signs and symbols.

The fort will be preserved in such a way that people will get the chance to take note of it and the history which it presents the evidence of. If at all the design intervention will be done in an intelligible way to teach and instruct the onlooker, and to enrich the experience of the ruin/place.

It is clear from the interpretation of ruins, that the more knowledge one has, the more appreciation and understanding one will have for the ruin. This is why awareness of the Wonderboom fort is so important as well as the education of the history and of the ruin itself. (Didactic approach as discussed earlier)

The examples and suggestions mentioned under display:
1. Satisfy the intellectual (signage and information on site) and physical (facilities) needs of the visitor
2. Display the ruin in such a way that the visitor will experience a linear approach to the fort
3. Sensitive to its surroundings
4. Vegetation growing in and around the fort ruin can be considered to enhance the appearance of the fort ruin.
5. Any trees growing in the fort which can harm the structure of the ruin should be removed
6. Use of lighting to enhance the ruin's appearance at night, create mystery and atmosphere as well as awareness

These examples will be considered in the display of the fort as well as more contemporary methods.

The case studies 3, 4 &5 are examples of how other architects and landscape architects dealt with ruins.

Case Study 3:

Verona Castle called Castelvecchio, Venice (1956-)

Castelvecchio was designed by Carlo Scarpa (1906 – 1978), he was an Italian architect, influenced by the materials, landscape and the history of Venetian culture, and Japan. Carlo Scarpa, was well known for his ability to integrate historic features into modern designs.

Illus. 47: Castelvecchio ruin, changed into a museum by Carlo Scarpa. (Anniforscia, 2008)

The Castelvecchio dates back to the 14th century and it was built for the Scaligeri family, who ruled over Verona during the Middle Ages. (Famous architect, 2011)

The castle was built more like a medieval fortress to protect the family from their enemies in Venice and also from popular uprisings, complete with a moat, a drawbridge, and a fortified bridge at the back that would allow the Scaligeris to escape in case of attack. (Famous architect, 2011)

The Castelvecchio was changed into an art museum, while one can explore the different rooms in the castle, the visitor is aware of these amazing views of the Adige River and Ponte Scaligero. (Famous architect, 2011)

It is evident in the Castelvecchio Museum, Verona (1956-) how Carlo Scarpa approached the ancient building very delicately. In this design the "floor patterns and materials interact to form a tactile play of pliant versus hard surfaces." (Famous architect, 2011)

Illus. 48: Scarpa distinctly separates the old from his new installations. (Magdarc, 2010)

The new is separated from the old by revealing joints and spatial slots that function as miniature conceptual "moats," according to the Famous architect webpage, and each work of art is held up to view by a stand or a bracket that is almost human in its anthropomorphic configuration. (Famous architect, 2011)
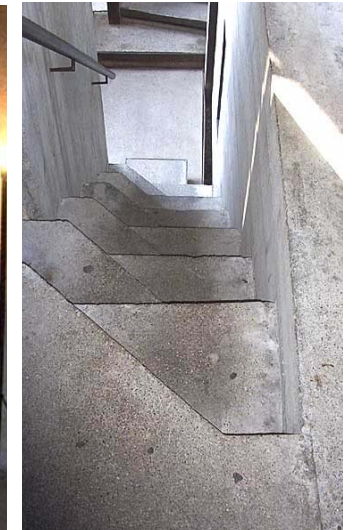

Illus. 49: A new walkway, clearly distinguisable from the old castle. (Anniforscia, 2008)

Illus. 50: Scarpa's use of modern materials to create a platform for the artwork in the museum. (Anniforscia, 2008)
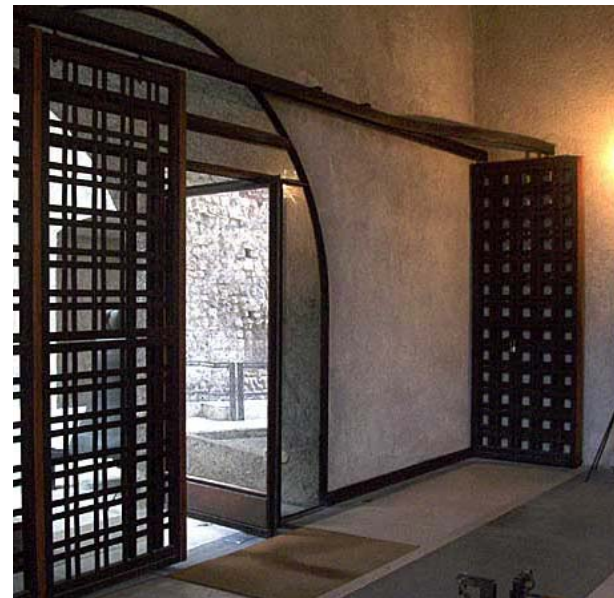
Illus. 51: Ornate metal lattice door designed by Carlo Scarpa. (Anniforscia, 2008)

Illus.52: Weathered staircase in the Castelvecchio Museum — Verona, Italy. (Anniforscia, 2008)

Case Study 4:

Jerusalem Archaeological Park, Jerusalem

Jon Seligman and Gideon Avni, were the IAA archaeologists responsible for the area, together with Ulrik Plesner. Michael Turner was involved in the landscape design.

The designer made use of plants to distinguish between different time eras ruin walls. This makes the legibility and understanding of the place to the visitor clearer. The new pathways are integrated with the old, but one can clearly distinguish between the old and the new. Refer to fig 57.

Refer to fig. 55 & 58. The new roofed structure are placed in the old courtyard area, which was used as a multifunctional space. Now with the new roof structure it provides for the same function as in the olden days, and with that celebrating what was there with the new.

Pathways are added within the ruins, one can distinguish between the ruins and the pathway. In the case of a threshold between the old path and a new path entering the visitors centre, the designer made use of a different material to indicate the transformation. A timber boardwalk is placed between the ruins but are elevated not to intrude on the history and heritage.

The visitor centre, is designed in such away that one is made aware of the archaeology approach to ruins. In the centre, the entire place is paved with stones with stone walls used as deviders.

Information is communicated via information plates linked to earphones at the ruins. A timeline, maps etc. in the visitor centre provide for additional information.

With regard to the Wonderboom Nature Reserve this can be seen as an excellent example of a landscape intervention between ruins. One can use planting to communicate the time difference and spaces. Old functions can be celebrated with new structures without taking away some of the places' character. Information can be provided in different manners as well as new technology for instance the earphones with information on can be implemented. There must be a clear indication of what is old and what is new, and how one would let the visitors go about the ruin, in regards with walkways, awareness and accessibility, etc.

Illus. 55: The use of planting is clear to devide ruins from each other or to distinguish different time eras structures. Repetition is also created with the planting to ensure for unity in the landscape. Different plant textures are used do provide for diversity in the landscape. (Baker,2011)

Illus. 56: View of the ruin wall structures which differ in time eras, this was communicated by means of planting. (Baker,2011)

Illus. 57: Different manners in which the designer approaches the site pedestrian movement, with a clear indication of what is old and new. (Baker,2011)

Illus. 58: View of the new multifunctional area which celebrate the old function of the place. (Baker,2011)

Case study 5:

Castelo de Silves, Portugal

Located at the highest point in town, Silves Castle once formed part of the wall that encircled the city. It was also an important defence when it was the capital and residence of the Moorish kings of the al-Garb.

Steeped in history, the castle has 11 towers, some of which have been modified over the centuries, and a set of sandstone walls that have remained virtually intact. A 60 metre-deep well can be found inside the building, as well as a set of vaulted cisterns that still supply the town with water. (Whatsonwhen, 2011)

The castle also hosts events throughout the year.

This case study is a wonderful example of how other places deal with their ruins. In this case the designer reconstructs some parts of the towers, to provide the visitor with a better understanding. One can clearly distinguish between the old structure and that which was added on. The Castle de Silves was consructed in the 1100's. Fig. 62 &64.

Fig. 59. The designer made use of a model to explain the larger context of the site. Only parts of the ruin was excavated. Pathways were constructed between the ruin walls, slightly elevated from the ground. The visitor is brought close to the ruin but the visitor cannot walk between the ruins outside of the walkways. Handrails were constructed onto the defence wall. Refer to fig. 62

A circular shaped garden was constructed with a small amphitheatre. Information boards were placed at strategic points to inform the visitor of the place's history. Everywhere where people walk one finds elevated timber boardwalkds. Fig.60 & 61

Illus. 59: Model used to represent the existing site (Gryffenberg,2010)

Illus. 60: Elevated boardwalks which go over the ruins. (Gryffenberg,2010)

Illus. 61: View within the water reservior. Elevated glass boardwalks are used to take the visitor inside the reservoir and over the old flooring. The glass ensure a clear view of what goes on underneath. Glass signage is used to communicat the history. (Gryffenberg,2010)

Illus. 62: One of the towers. The new material added to the old structure is easily distinguishable as well as the handrail. (Gryffenberg,2010)

Illus. 63: The city ruins within the castle wall, which were excavated and left as they were. Signage placed at these ruin structure walls. (Gryffenberg,2010)

Illus. 64: The castle wall structure. (Gryffenberg,2010)

Illus. 65: The landscape intervention with ampnitheatre. (Gryffenberg,2010)

3.4 Conclusion

How can a design narrative create awareness of the cultural and biophysical aspects of a site?

In terms of the theory, for the design to create awareness of the biophysical and cultural aspects of the site the nature of the design proposal should be a didactive narrative that would create interest and discovery and through experience strengthen the local identity. And by doing so the cultural and biophysical aspects of the site is communicated.

Semiotics can be used as a 'resource' to create and communicate meaning. Semiotics investigates sign systems and modes of representation to convey emotion, ideas and life experiences. It is the actions and artefacts we use to communicate.

The semiotic 'potential' would be the potential meaning which that specific semiotic 'resource' provides. (Examples of semiotic resources and their potential meaning will be explored in chapter 6)

1. What are the cultural and biophysical aspects of Wonderboom Nature Reserve? (The same aspects to be explored in Chapter 5: site analysis)

Biophysical aspects:

- Grassland and savannah biome
- Magaliesberg geology
- Wonderboom tree
- Caves
- Fauna and flora
- Apies river
- Protected nature area

Cultural aspects:

- Wonderboompoort fort (ruin)
- Wonderboom tree
- Historical features
- Stone Age sites
- Iron Age sites
- Day-of-the-Vow remnants
- Man-made waterfall

2. What is a narrative in terms of design?

Communicating the design by using a story telling approach which is concerned with the transformation of Wonderboom nature Reserve - a story which will unfolds its connected events and experiences until its meaning brings revelation. The narrative in terms of design brings unity and coherence and a definite sequence of events.

Introduction (entrance and arrival) - Plot (events and experiences) - To main climax (Wonderboom tree and Wonderboom fort)

3. What is didactic design?

Design to teach. Forms should be used to inform and instruct the visitor about natural processes, history and heritage. In the design the approach's intentions can be clearly seen, thus everything is shown clearly and deliberately. The genius of the place is clearly visible in the design. The design/landscape 'read' as a textbook.

4. How can identity be created?

In person: A series of events and experiences can be regarded as 'modifiers' which establish the identity of a person.
Of site: 'Events' / activities or themes are connected through a narrative to result in identity strengthening of the site.

5. How can experience be created that will also strengthen the identity of place?

By accommodating for both categories of response, namely; sensuality (in which we see and touch) and aesthetics (dependent and affected by process of thought). The design needs to respond by providing delight for our senses and also to the inherited memories of habitat. Design with the two approaches in mind, namely; linear and sudden approach to create different experiences.

6. How do you create interest and discovery in the landscape?

The four qualities in the landscape, namely; mystery, legibility, complexity (through semiotics) and coherence (through narrative), with unity (of form, elements and detail) and diversity (in different forms, elements and detail) one will ensure interest and discovery.

7. How do you create access?

By designing for access, and improve the manner in which the visitor experiences the landscape. Access can be created in different ways, namely; visual access (one can see, but not touch), and physical access (one can touch, move through, under and over it). The designer can obscure views, direct views and prevent the visitor to go closer etc.

8. How do you create awareness of a site?

Awareness can be created in different manners, namely; senses, mentally and physically by means of the following; in person, the media/technology, visual (physically on site), and physically (visitor participant on site). It can be to a different degree of intensity, namely; general awareness and in depth awareness, for a variety of classes of people, namely; School children, education oriented people, specialists in certain fields of study, nature lovers, outdoor people, and socialising people.

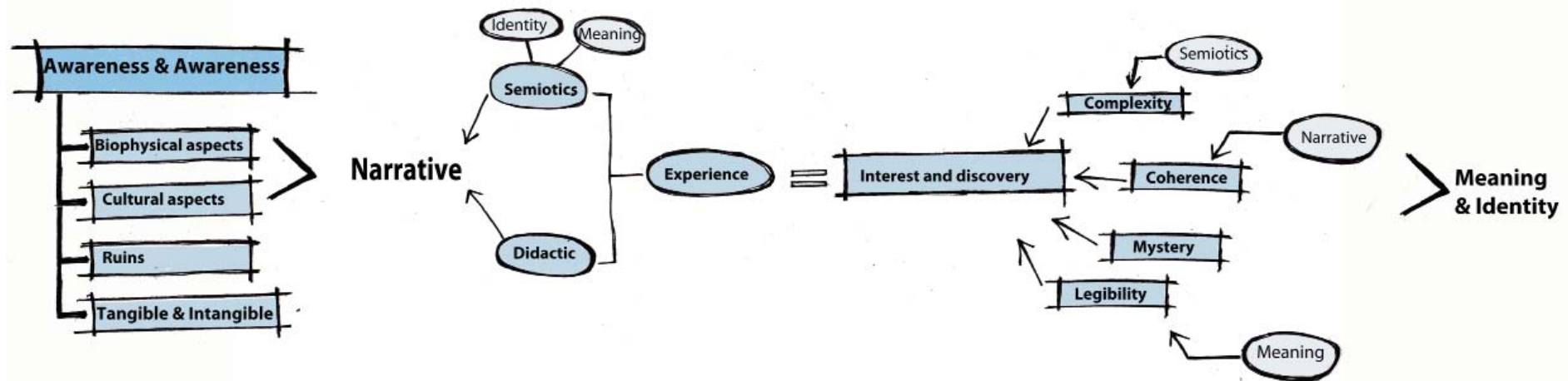It is clear that all of the above are necessary to communicate heritage and history. Fig.17

Fig.17: Links between theoretical topics. (Author: 2011)

Figure 17 sums up the conclusion of this study, and illustrate the conclusion graphically which is stated in this chapter.

With regard to the Wonderboom fort ruin, it will not be restored to its original state, because everything around it has already changed. It will be reserved in its current state of deterioration, and kept as a ruin, because one's imagination is stirred by the ruin, and it provides pleasure and satisfaction. For that reason only, it would be best to leave ruins as they are, the deterioration of a ruin is part of its attraction.

Wonderboom fort ruin speaks of past events and times, it is very emotionally evocative. If it would be restored, that imagination of a visitor of what might have been will be lost together with the genius of the place.

The intention for the Wonderboom Nature Reserve is to stimulate the imagination of the visitor, so that he reconstructs the structure in his mind's eye to its original state. To ensure that people do not find it difficult to imagine, a better understanding of the ruin will be provided through 'semiotic resources' - which can be information plates, or a small model or signs and symbols etc.

The fort will be preserved in such a way that people will get the chance to take note of it and the history which it presents the evidence of. If at all the design intervention will be done in an intelligible way to teach and instruct the onlooker, and to enrich the experience of the ruin/place.

By displaying the ruin, it can perform its function as a reminder, a monument in truth.

Each theme ended with a case study which was relevant to that specific theme. It served as an example of what had been done before with regard to the theme or topic.

This theoretical conclusion will serve as guidelines in the design development. These theoretical aspects will be further explored into physical design solutions in chapter 6 - 7.