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In Search of **Significance**

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Submitted in partial fulfilment of the requirements for the degree of Master in Landscape Architecture (Professional) in the Faculty of Engineering, Built in Environment and Information technology, University of Pretoria.

I further state that no part of this dissertation has already been or is currently being submitted for any such degree, diploma or other qualification.

I further state that this thesis is substantially my own work.

Pretoria, South Africa
2014

Baie dankie -

Johan Prinsloo
Graham Young
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Arthur Barker

Paige du Toit
Natasha Luarent

Ma en Pa
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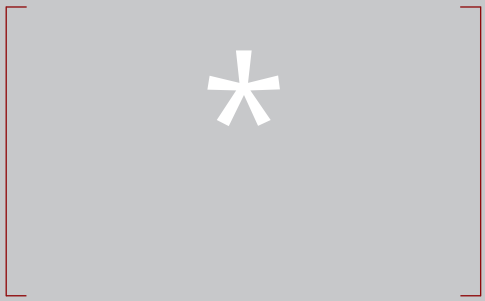
Morne Bester



Thesis Abstract

Skripsie Samevatting

This dissertation focuses on the redevelopment of the No. II Shaft Cullinan Compound, which lies in ruins. The compound is located at the Cullinan Diamond Mine, 40km east of the Pretoria CBD. The No. II Shaft Compound was used to house the enormous migrant workforce during the middle to late 1900s. It was closed down in 1973. In its derelict state it does not do justice to the memory of the workers who had to endure the hardships of the harsh working and living regime of the mine.

This dissertation advocates that meaning and significance are achieved in landscape design through the use of landscape narrative. The author argues that meaning neither resides in the landscape itself nor with the creator but with the mediation between user, the landscape and its elements.

The design intervention celebrates the unique historical significance of the compound system in general and specifically that of the No. II Shaft Cullinan Compound.

The landscape design aims at integrating and maintaining all layers of history – that which was, what is and what potentially can be. The design intervention celebrates the unique industrial heritage of the Cullinan No. II Shaft Compound through a process of heritage preservation, representation and integration with its surrounding context.

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This dissertation aims at establishing a method of communicating the story of the workers who lived, worked and died in the compound. The project designs a landscape narrative experience where the story of the workers of the compound is communicated to users when they visit the site. Communication of narrative is achieved through the use of landscape design mechanisms, like semiotics, metaphor and landscape rhetoric.

The design approaches the site as one of cultural and historical significance. The intervention acts as a mediator between the workers and history of the site, and the new contemporary layer of production and research.

The final stage of the design investigates the technical resolution of the design proposal.

Die verhandeling fokus op die herontwikkeling van die nr. ii skag van die Cullinan kampong wat tans 'n ruïne is. Die kampong is geleë by die Cullinan Diamantmyn 40 km oos van die Pretoria SBD. Die nr. II skag kampong is gebruik om die enorme getal trekarbeiders te huisves wat daar gewerk het vanaf middel tot laat 1900. Die kampong het in onbruik verval gedurende 1973. Die gebied is verwaarloos en doen oneer aan die nagedagtenis van die mynwerkers wat die ontbering van 'n harde lewe en moeilike werksomstandighede moes trotseer.

Die ontwerp vier die unieke historiese betekenis van die kampongstelsel in die algemeen en spesifiek ook die nr. II Cullinan kampong.

Die dissertasie poog om 'n metode tot stand te bring om die verhaal van die werkers wat daar geleef, gewerk en gesterf het, te kommunikeer. Wanneer besoekers daar aandoen, skep die projek 'n narratiewe landskap ervaring wat die storie vertel van die werkers van die kampong. Die ontwerp benader die terrein as 'n kulturele sowel as 'n historiese besienswaardigheid.

Die ingryping dien as bemiddeling tussen die geskiedenis van die terrein en die kontemporêre lae van produksie en navorsing.

Die veronderstelling dat betekenis in landskapontwerp bewerkstellig word deur die gebruik van 'n landskap narratief word deur hierdie verhandeling bepleit. Die outeur is van mening dat betekenis nie in die landskap self lê nie, en ook nie by die ontwerp daarvan nie, maar by die samekoms van die verbruiker, die landskap en sy elemente.

Die ontwerp van die landskap beoog die integrasie en handhawing van al die fasette van die geskiedenis-dit wat was, wat is en wat potensieel kan wees. Die unieke industriële erfenis van die nr. ii kampong word van nader beskou deur 'n proses van erfenisbewaring, hervoorstelling en integrasie.

Die finale ontwerpvoorstelling word dan deurgevoer tot tegniese ontwikkeling.

I
II

5 Design Approach

6 Technical Investigation

List of Illustrations

Definitions.

Landscape Narrative

"Narratives intersect with sites, accumulate as layers of history, organize sequences, and inhere in the very materials and processes of the landscape. In various ways, stories 'take place.'"
(Potteiger & Purinto 1998:6)

Meaning

That which is indented to be, or actually is, expressed, or indicated; signification; import; the three meanings of the word. 2. The end, purpose, or significance of something; what is the meaning of life? What is the meaning of this intrusion?
(Flexner 1970)

Significance

The quality of being worthy of attention; importance. The meaning to be found in words or events. Significance starts with the word sign for a reason. An item's significance is a sign of its importance. The significance of something can be implicit or explicit — meaning it can be clear or only known with a deeper understanding.
(Simpson 1989)

Migrant Worker

The term "migrant worker" refers to a person who is engaged or has been engaged in a remunerated activity in a State of which he or she is not a national
(International Labour Origination 2014)

Semiotics

Semiotics suggests that the object not only contains information, it also carries an emotional impact. Human senses catch the signal and then pull the impression to the brain which leads to a conclusion of subjective meanings that depend on the perspective of each audience.
(Desamba 2011)

Prologue

What happened here?
What was the cost?
Of an unsung story forgotten and lost

The pain and suffering cannot be seen - what was happening nor
what has been
What is this memory lurking in decay what makes my mind wonder and emotion stray?
It is a darkened past and memory hidden, of where the eye nor heart can see the forgotten.

What happened here? What was the cost?
Of an unsung story forgotten and lost

(Author, 2014)

1

Introduction

There is a tree in the middle of nowhere. And next to it is a big boulder, heavy and darkened by the sun. The tree and the boulder have been side by side for a long time. For precisely how long is uncertain. The wind blows through the leaves of the tree and the sunlight dances on the blackness of the boulder.

A passing traveller sits down against the tree to rest. On his way he saw row upon row of boulders in the fields. Their positioning and colour suggest that they were placed there by someone.
As he sits down he notices the boulder next to the tree. This one is different from the others. Bigger and much darker. He runs his fingers across the markings on the surface. He squints and tries to make sense of it. It is some kind of inscription. Upon closer inspection he can make out the text: 'The Battle of Westbury'.

The traveller looks over the boulder and across the field. Hundreds of boulders are scattered there. Each one gives the impression of being a soldier. In his mind he can see the men; he can hear the gunfire and he can feel their anguish.

He looks up at the tree, and the thick heavyset trunk vaguely reminds him of something. He is saddened by the loss of life. He realises that it reminds him of his father, who died in combat.

Neither the tree nor the boulder can speak, but each has a story to tell.

Author, 2014

Introduction

In the fictional scene above, the author tries to illustrate an interesting supposition. Personal interpretation and experience have the effect that each individual – when confronted with pieces of a narrative – will complete it in accordance with his own story. The traveller completes his unique story and this ultimately gives the place a sense of significance. The narrator in the story is represented by the elements in the landscape: the tree, the boulders and the wind. Each element provides a piece of the story and then ultimately forms part of the collective whole.

Every place has a story to tell. Most often, the tale is hidden and not immediately obvious. Different stories are told and different characters fulfil the roles. When the story of a place is told, the narrative is formed and shaped by the user. Every user is unique and the story unfolds differently with each user. The narrative must invariably be led in a certain direction, otherwise it gets lost. This element of leading the narrative will be discussed accordingly in this dissertation.
The plot and the scene are set by die various elements. It is the user who dictates the genre, the mood and the pace of the storytelling and, in doing so, becomes the narrator.

This dissertation will aim at establishing a method of communicating significance and story of a place through the use of landscape design mechanisms. This will lead to a deeper understanding of the place. The author aims to explore these different mechanisms and how they can be implemented into the design so that different parts ultimately form part of a bigger collective. The collective picture is eventually experienced, analysed and interpreted by the user.

The author fully understands and acknowledges that personal interpretation is unique to each individual and the resulting interpretation varies accordingly. This fact is especially relevant in the context of South Africa, with vast differences in socio-political backgrounds, cultures and beliefs. This, however, is the premise on which this dissertation operates: that it is the user that imbues the design with significance and that the significance of the site is the product of each user's unique circumstance and interpretation. This dissertation will further aim at proving that even though we all differ in experience by our various cultures, backgrounds and circumstances, there is still a commonality in the way our emotions are stimulated. It can happen through literature, architecture or any other element that evokes emotion.

The imminent problem that this dissertation will aim to address is the loss of heritage and degradation of sites that carry cultural significance. It will be a happy day when we can find appropriate design interventions that contribute to the history of a site and not subtract from it. These historic sites must be revealed as new places with new functions, while maintaining their authentic heritage.

This dissertation was completed in conjunction with two architects on the same site – namely, Natasha Laurent and Paige du Toit. Their architectural programmes include a textile production and research facility, and a food production and research facility respectively. The Cullinan compound framework forms part of a larger framework established by a group composed of an additional three architects. Their programme and design approach does not have an effect on this dissertation.

Background & context

1.2

"The mining industry without [African] labour is as brick would be without straw, or as it would be to imagine you could get milk without cows."
(Cited in Johnstone 1976:26)

The mining industry in South Africa is a direct contributor to the economic success of the country. It ultimately led to the opening of the establishment of the Johannesburg Stock Exchange in the late 1900s. Even at present, mining in South Africa accounts for a third of the country's market capitalisation. The mining industry contributes an average of 20% to South Africa's GDP.

Yet, very little is being done do convey the history of the men and women who worked the mines and who were the driving force behind the industry. The suppressive history of South Africa ensured that the story of the African native workers of these mines was not told. The history of their circumstances, how they lived, worked and died did not come to light.

The overall profitability of the mining sector in South Africa has long since been based on the reliance on the abundance of cheap labour recruited from South Africa and the sub-continent. The vast number of unskilled, underpaid workers had ensured maximum profitability of the mining sector in the late 19th century.

Acquiring large quantities of migrant workers was the first step toward profitability, but a bigger problem arose; where would these workers be housed, fed and controlled to do the bidding of the mines? This led to the formation of a unique form of migrant housing - the compound.

The history of the compound system is a key representative of an era of mining and suppression in South Africa. These compounds later became major flashpoints of violence during apartheid. Today, these mining compounds, unfortunately, fail to represent this era for the simple reason that their mere existence is under threat. Heritage is the source of identity. It defines where we come from, who we are and where we are heading. If important layers of our heritage are allowed to fade away, a part of our identity also fades away..

It was the abundant availability of agricultural land that first lured people to set up permanent residence in Cullinan. They cultivated maize and vegetables and farmed with livestock. It was only with the discovery of the first diamond in Cullinan that rapid industrialisation of the area ensued (Lincoln 2001:6).

The higher economic yield that diamonds offered quickly replaced agricultural practices in the region. Cullinan turned into a Diamond Town. With the establishment of the industry, new permanent structures quickly sprang up – commercial, residential, trade and retail buildings were planned and built in rapid succession. These construction components co-exist to this day with the diamond mine of Cullinan, and its survival depends on them.

The viability of continuing diamond mining at the Cullinan Mine is expected to come to an end within 48 years (Reyneke 2011). The eventual depletion of diamonds will lead to the complete closure of the mine and surrounding industry by 2061. The underground works at Cullinan are set to close as early as 2025 (Lincoln 2011).

1.3 Problem Statement

The historical significance and 'story' of the Cullinan compound site is not immediately accessible to the visitor of the site. As the site naturally decays, the heritage that the site holds is lost to future inhabitants.

1.4 Research Question

The purpose of this dissertation is to respond to the flowing key questions regarding meaning, significance and narrative in landscape architecture:

- - How can the narrative constitute a design that is meaningful and significant?
- - How can a story be communicated by means of landscape narrative?
- - How can the untold story of the workers of the No.II Shaft Compound be conveyed to the user through landscape design?
- - How can this theoretical approach to landscape design be incorporated into the new contemporary layer of site?

1.5 Thesis Statement

This study proposes that to convey the story of the workers of the Cullinan compound, landscape design needs to lead to the comprehension of the narrative. Narrative can be conveyed through landscape architectural design devices.

It is the culmination of landscape narrative, the intrinsic experiential value of the site and the user's interpretation that can lead to a design that carries significance and meaning.

1.6 Aims & Objectives

The aim of this dissertation will be to establish the ways in which landscape design can achieve significance through the use of landscape narrative. Furthermore, it will attempt to determine the role of the user in this process.

This can only be accomplished by determining the design devices which correlate with the theory of narrative and semiotics of landscape, which will be discussed accordingly in Chapter 2 of this dissertation.

It will further aim at establishing a design approach that is sensitive to the intrinsic heritage value of the site, communicating what needs to be communicated, and facilitating the new contemporary layer as set out in the framework, whilst paying homage to the historic sensitivity on-site.

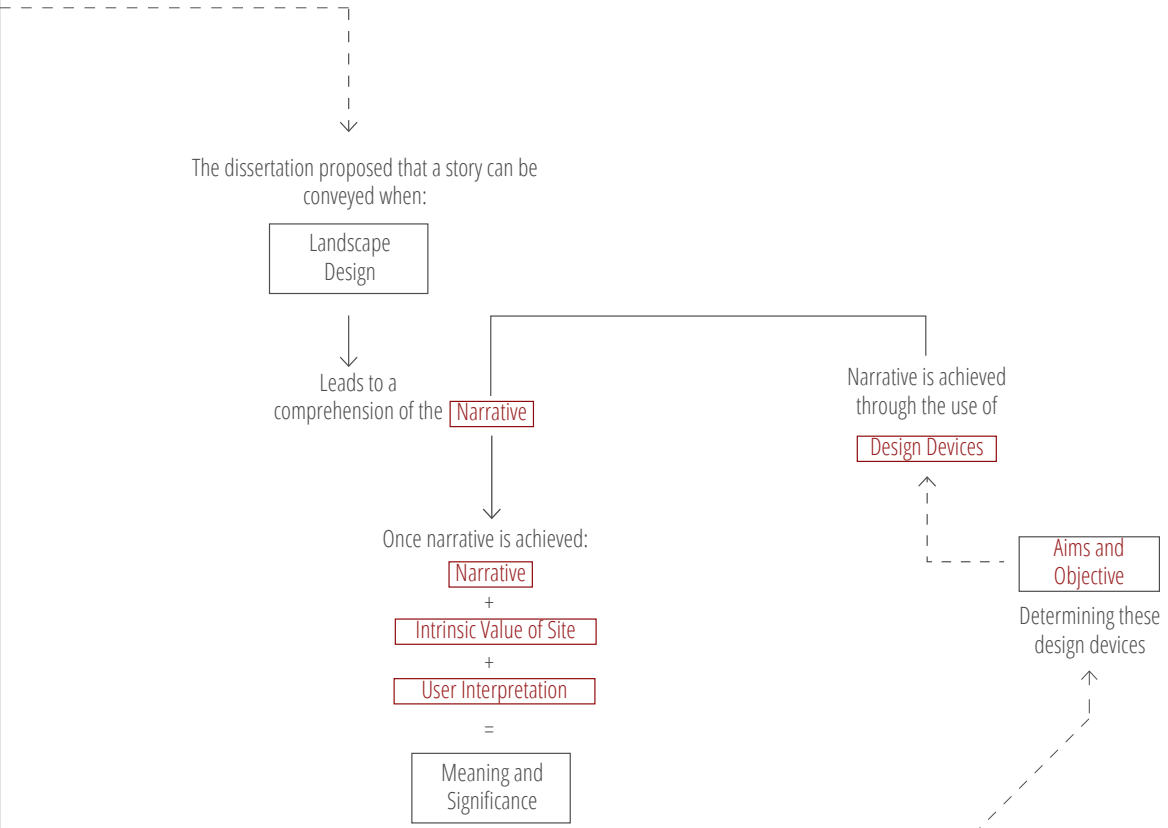


Figure:1_1. Thesis Statement diagram. This diagram illustrates the approach the author will take in this dissertation (Author 2014)

1.7 Post- Industrialisation

'...urban sprawl; redeveloping industrial sites; regenerating brownfield sites; sustainable construction; green space, and regenerating distressed neighborhoods. Somehow, all these challenges may be directly or indirectly connected with post-industrial land transformation processes.'
(ECCIREDI 2001)

Industrial decline, or de-industrialization as put by (Phalatse 2001), occurs when old labor intensive facilities are rationalized, mechanized, downsized or closed down and no efficient industries are operating to take the place of the old (Rhodes 1986).

Post-industrial economic restructuring over the last half-century in urban and urban fringe locations has resulted in a landscape with significant areas of unused and abandoned land that reduces the development potential and quality of life in affected areas (Handley 1996). This legacy is the result of the change from an economy dominated by the production of goods from raw materials, with industry located nearby, to an economy where the location of industry is primarily determined by the attractiveness of the environment and the ready availability of a workforce.

The presence of abandoned and derelict post-industrial sites in our landscapes is the result of current and former human land uses. Technological innovation, economic shifts and our over reliance on natural resources are often the culprits for desolate industrial sites.

As these landscapes become more and more disadvantaged and degraded environmental planners, developers and designers start to react to the shift. They seek for answers to resolve economic problems of these previous developed sites and search for development strategies and frameworks to transform them (Secchi 2007). New methods and frameworks make it increasingly clear that these post-industrial sites are undervalued and can contribute to urban redevelopment. The new interest in post-industrial sites is supported by the European Council for Construction Research, Development and Innovation (2001).

Industrial heritage

Industrial heritage did not have any formal documentation regarding its protection until 2003 with the introduction of the Nizhny Charter and later by the Monterrey Charter (Loures & Burley 2012). Heritage in general is usually divided into two categories, i.e. cultural and natural (ICOMOS 2008). Most of what is protected under the Heritage Act today, however, is more rare, spiritual and/or traditional. It is, however, increasingly acknowledged that heritage can no longer be associated only with monuments built before the eighteenth century. Recent monuments may no longer be seen as of inferior heritage value to that of older ones (Loures & Burley 2012).

Numerous regions and countries start to recognize that post-industrial sites carry an opportunity to create renewed landscapes. A vivid realization exists that if these sites were to be revitalized they not only contribute environmentally and ecologically, but embody social, economic as well as cultural values and opportunities. (Doick et al 2006).

'...from single and dualistic approaches and abstract, functional perspectives to knowledge that emphasises inclusiveness, connectivity, and implication.'
(Adam 1998:55).

The original approach to post-industrial revitalisation was mostly site-specific and redevelopment happened mainly for economic reasons. This mindset undervalued the importance of a contextual approach to re-development and did not achieve sustainable re-development. The approach has now moved towards a more inclusive, holistic approach. Focus falls on economic development, the needs of the public and cultural preservation (Loures & Burley 2012). Sites originally viewed as unwanted and unattractive places now become increasingly attractive. The reason for this is not only because of their proximity with infrastructure, its uniqueness of form and function, or their inherent potential. their attraction can be found in the fact that these sites are often the only land available for development. This gives rise to a mind shift regarding these sites and to the emergence of new approaches towards these derelict landscapes (Loures & Burley 2012).

1964

Venice Charter - International Charter for the Conservation and Restoration of Monuments and Sites, ICOMOS

States on article 1 that: *the concept of an historic monument embraces not only the single architectural work but also the urban or rural setting in which is found the evidence of a particular civilization, a significant development or an historic event. This applies not only to great works but also to more modest works of the past which have acquired cultural significance.*

1972

Paris Convention Concerning the Protection of the World Cultural and Natural Heritage, UNESCO

States in the 1st article of the DEFINITION OF THE CULTURAL AND NATURAL HERITAGE chapter that shall be considered as 'cultural heritage':

Sites: works of man or combines works of nature and man, and areas including archaeological sites are of outstanding universal value from the historical, aesthetic, ethmological or anthropological point of view.

1976

Recommendation concerning the Safeguard and Contemporary Role of Historic Areas, UNESCO

States on the 1st article of the DEFINITIONS chapter that (a): ' *Historic and architectural (including vernacular) areas shall be taken to mean any group of buildings, structures and open spaces including archaeological and paleonthological sites, constituting human settlements in an urban area or rural environment, the cohesion and value of which, from the archaeological, architectural, prehistoric, aesthetic or sociocultural point of view are recognized.*

1980

The Burra Charter, ICOMOS

States on article 1 that: *Cultural significance means aesthetic, historic, scientific, or social value of past, present, or future generations*

2000

Charter of Krakow - Principles for Conservation and Restoration of built Heritage, International Conference on Conservation

States in the preamble that: *each community, by means of its collective memory ans consciousness of its past, is responsible for the identification as well as the management of it's heritage. This cannot be defines in a fixed way. One can only define the way in which the heritage may be identified. Plurality is society entails a great diversity in heritage concepts as conceived by the entire community. The monument as individual elements of this heritage, are bearers of values, which may change in time. From this process of change, each community develops an awareness and consciousness of the need to look after the individual built elements as bearers of the own common heritage values.*

2003

Tizhny Tagil Charter for Industrial Heritage, ICOMOS

2006

Monterrey Charter for Industrial heritage Conservation, ICOMOS

Figure:1_2. Fig. 1. Information present in international charters and conferences regarding heritage and historic matters of post-industrial sites. Loures (2011)

1.8 Industrial sites case studies

The following are examples of post-industrial sites that have been revitalised. The focus of each of these case studies is to determine the approach taken in the revitalisation process and how the developers dealt with issues such as cultural preservation, representation, commutation and, finally, how they went about portraying these elements physically through design approach, construction and material use.

Duisburg Nord Landschaftpark – From a blast furnace plant to landscape park (Loures & Burley 2012)

Location:	Duisburg-Meiderich, Germany
Previous use:	Steel and coal production plant
Current use:	Landscape Park

Landschaftpark was a previously derelict industrial site that closed down in 1985, leaving the area significantly polluted. In 1991, Latz + Partner revitalised the industrial complex with the focus of healing the landscape and acknowledging the industrial past of the site, rather than rejecting it. The new design sought to associate itself with its past use, i.e. coal and steel production.

Memory and landscape experience is what encompasses the site. The project was based on the idea of landscape and memory and the writings of Sebastien Marot, Frances Yates, Robert Smithson, and Peter Latz regarding memory and design. A combination of nature and industry allowed for a design that combines various layers of history. The creators of the park aimed not at creating a completely new park, but rather attempted to celebrate the industrial past of the site by integrating the natural with the industrial, promoting sustainable development and aiming at maintaining the spirit of the place.

The project emphasised the importance of using relevant theoretical argument to inform design decisions in landscape design. The project portrays the way that various layers of history can be represented without diluting the spirit of place and maintaining the characteristics that make the site unique.

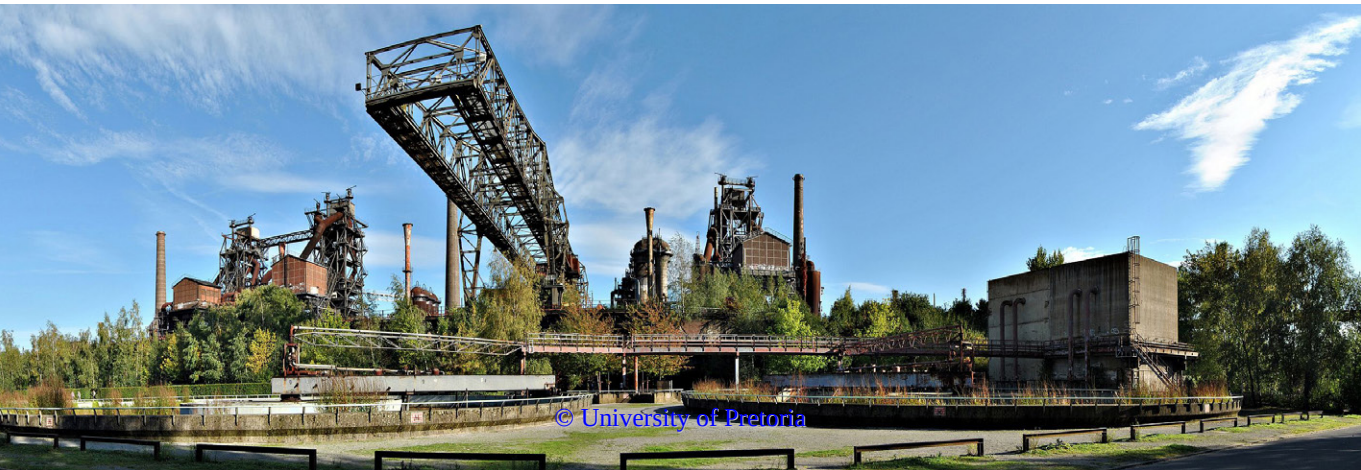


Figure:1_3. Duisburg Nord Landschaftpark (Landschaftspark.de, 2014)

Westergasfabriek

Multi-level participatio
(Loures & Burley 2012)

Location: Amsterdam, The Netherlands
Previous use: Gasworks
Current use: Cultural venue / Multi-functional green space

In the late 1960s, the discovery of natural gas in The Netherlands started the decline of coal-gas production facilities in the region. The Westergasfabriek was no exception. Built in 1884 at the western edge of the city of Amsterdam, the factory closed down in 1967. After the closure of the facility, it fulfilled a host of functions. It was once used as a tram depot and a train-washing yard. This was mainly due to its proximity to existing infrastructure.

In 1981 the site was officially rezoned as a recreational space. Its proximity to existing historical structure and to the city centre gave rise to its potential cultural re-use. Due to this, the space was not only required to function as a green space, but also as a location for open-air cultural events. Even whilst parts of the complex were still operational, the district council invited people to submit ideas for possible uses when the complex would eventually close down.
A long inclusive process was followed, with multiple levels of participation from the community and civil society. From a final of five submitted entries, the design of Kathryn Gustafson was chosen. She proposed a simple design that guaranteed various experiences in both time and space.

The design of Gustafson retained 222 of the buildings of the original gasworks company. Several different activities and functions are incorporated: cafés, clubs, galleries and cinemas. The very diverse approach by Gustafson to both site and context, as well as to the needs and desires of the public, presents a design with a strong narrative interpretation. The use of memory and communication of history in landscape play a major part.

The site is unique in its use of strong structure and subtle detailing. The ultimate effect is that each place has a very distinct character. This is achieved by using the industrial layout of the site, which is partially dismantled and fragmented.

The significance of this project is present in three layers. The first layer of the cultural, social and civic value of the site is connected to its initial perception by various residents, stakeholders and officials. The second has to do with the creative vision for the site to ensure that it is flexible and robust over time. The final layer is associated with the physical material and social qualities of the site.

Figure:1_4. Duisburg Nord Landschaftpark (Landschaftspark.de, 2014)

Critique

Both these case studies aimed at a design, which celebrates the industrial heritage of the site rather than change or mask it to the extent that it is no longer recognisable.

In the case study of Duisburg, the designer places special emphasis on the different layers that constitute the bigger collective of the history of site. The project's strong reliance on landscape theory is evident in the way that memory of place was conveyed to the user. The case study illustrates that all layers of history of a site need to be represented, and in doing so, not to dilute or undervalue any of them. It should be mentioned, however, that visitors to the site feel overwhelmed by the strong theoretical elements on-site. Over-bombardment of an approach has to the effect that it loses its power.

The example of Westergasfabriek is unique in that it had a multi-functional approach steering away from the previously common practice of uni-functional post-industrial design that Adam (1998:55) tells us about. Once again, one can see that the project was based on the theory of landscape and narrative – paying homage to the site's industrial past, celebrating it and making a once derelict site accessible to the public.

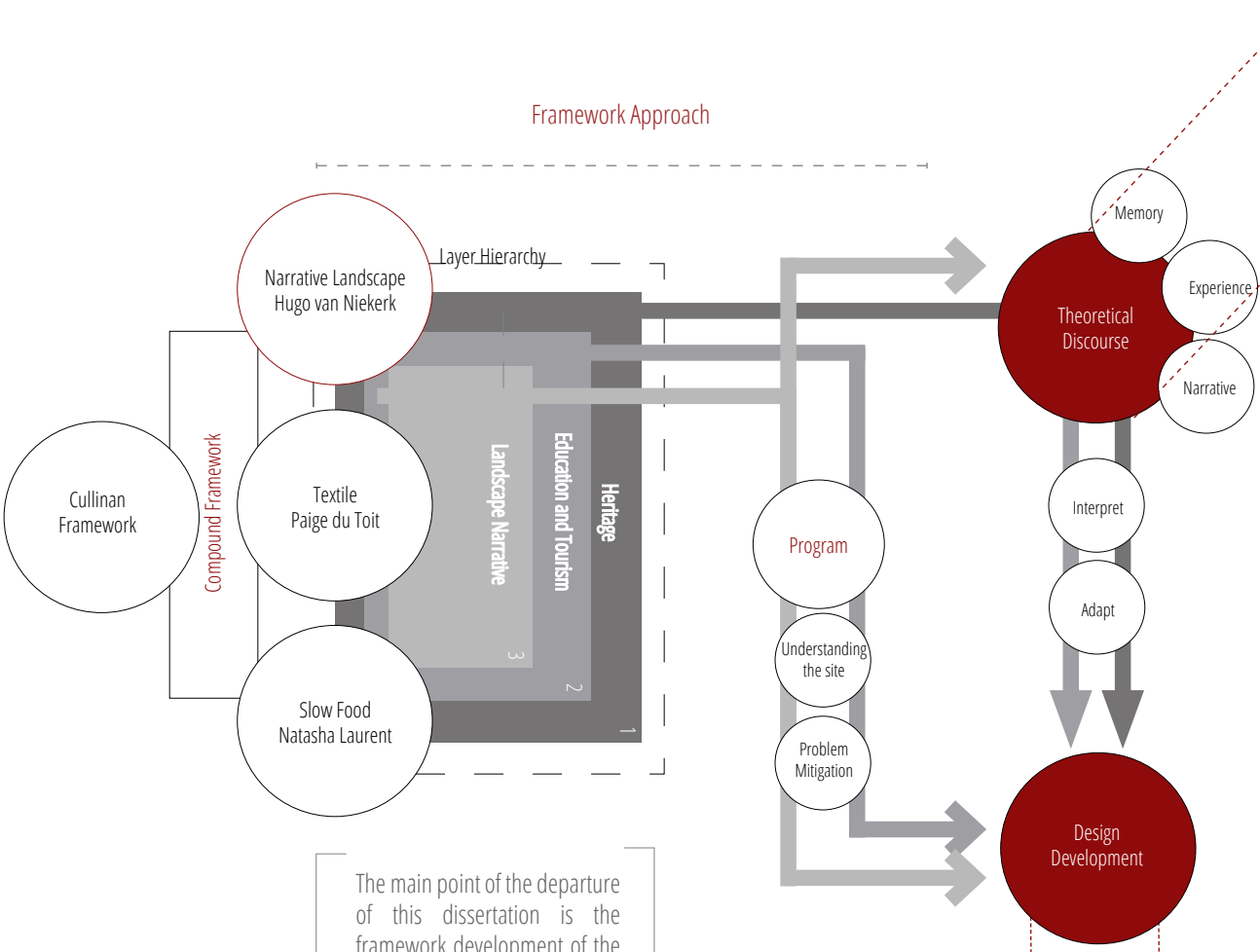
1.9 Assumptions and delimitations

This dissertation will be based on the following assumptions and delimitations. It is part of a larger framework of the Cullinan compound which, in turn, forms part of a bigger Cullinan framework. Decisions made during the framework exercise will be implemented in this dissertation and will be discussed accordingly in Chapter 3. Further decisions that will influence the dissertation are:

- Where necessary, the concept, footprints, heights and programmes of the new buildings on-site will be provided by architects. These form part of the bigger framework of the Cullinan compound.
- Agricultural selection for the use of food production, textile and research used on-site is up to the discretion of the architects, for it forms part of their programme.
- The first round accounts for the worker of the compound, but in the words of the author, for it was impossible to locate an individual who had actually lived and worked in the compound.
- Even though the Cullinan Mine is set to close in 80 years' time, this dissertation will be applicable to Cullinan compound site as it presently is, and being able to function independently from the larger Cullinan Mine framework.
- The water currently pumped out of the hole is of acceptable quality and quantity for the use of irrigation on-site.

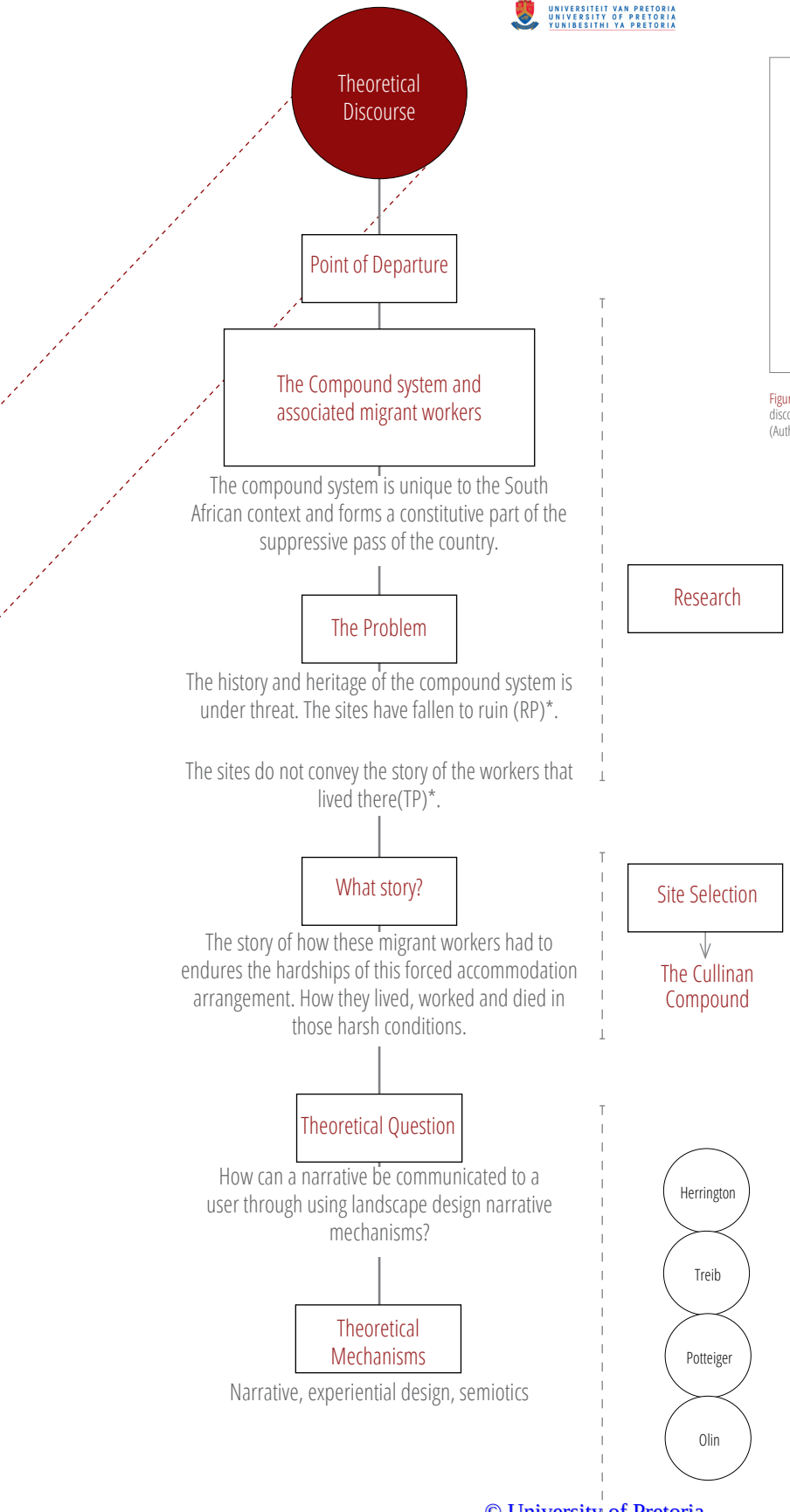
1.11 Methodology

This dissertation will address specific site problems of the landscape narrative and meaning through the analysis of appropriate theory and applicable case studies Figure:1_6 on page 23. Heritage legislation as well as local and international charters were used to guide the decision-making process in dealing with the historically significant site. Landscape design will be used at different levels to translate the theoretical investigation into tangible design solutions Figure:1_7 on page 24. Existing case studies, theoretical works on meaning and narrative of landscape as well as studies of images will be used as conductive material.



The main point of the departure of this dissertation is the framework development of the larger Cullinan mine complex and town, chapter three, and then the consequent Cullinan compound framework. From here the larger framework program is determined for the compound.

Figure:1_5. The design methodology and framework followed during this dissertation (Author,2014)



The premise of the theoretical discourse was based on the writings of Susan Herrington (2008), March Treib (2008), Matthew Potteiger (1998) and Laurie Olin (2008). Their writings on meaning, significance, memory and landscape narrative formed the basis of the theoretical

Figure:1_6. The theoretical discourse approach to dissertation (Author,2014)

There are three major design aims that inform the design decisions for this dissertation i.e. Communication of narrative as discussed in chapter two, preservation of heritage and conservation as discussed in chapter three and lastly facilitating the new contemporary layer as discussed in framework development in chapter three and design development in chapter four.

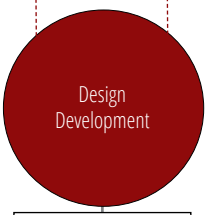


Figure:1_7. Design development process (Author,2014)

Design Aims

This design will aim towards the:

1 → Communication of Narrative

In chapter two of dissertation, theoretical mechanism will be investigated and discussed to determine landscape architectural devices to achieved communication of narrative. Thus narrative will be communicated through the use of:

Design Devices

Planting Strategy

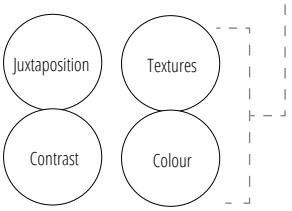
2 → Preservation of Heritage

The basis of the heritage approach for this dissertation is based on the *caution approach*. Doing as much as needed but as little as possible.

Re-use and Adaption

New vs. Old distinguished via:

Contrast



3 → Facilitate New Layer

New Program

- Tourism
- Textile and Food production Research (Architects)
- Re-creation
- Didactic Landscape
- Job Creation

2

Landscape Perception

Landscape perception

We can control vision more than we can control the other senses. Most of us rely on vision to know what is going on around us. But seeing and understanding are two different concepts. Similarly, landscape is produced by physical and cultural conditions. It cannot be fully understood in one glance. It must be understood holistically. It needs to be seen as an accumulation of observations, memory and context. Landscape and vision have strong connections with each other, as elegantly put by Denis Cosgrove:

"Landscape is a way of seeing"
Cosgrove (1998:6)

During the 1980s and 1990s with the appearance of numerous texts on vision, scholars began to question whether or not sight was early physiologically related. One group of scholars argued that vision was culturally determined and served as a link between sight, space and social order.

Post-structuralism theorists, in contrast, did not see sight as a contextual entity but rather relied on the structure of discourse itself. These scholars saw vision as a discursive system (proceeding by reasoning and argument rather than intuition).

'One of our deepest needs is for a sense of identity and belonging and a common denominator in this is human attachment to landscape and how we find identity in landscape and place. Landscape therefore is not simply what we see, but a way of seeing.'
(Schacter, 2008:1)

Jay Appelton (1975), a scholar in the field of environment and behaviour used vision as her point of departure. She based her research on the notion that landscape aesthetics stemmed from our pre-historic, evolutionary desires for sites that provided sight over game and protection from the elements. But this approach treated landscape solely as a visual experience and excluded the influence of the context and conditions.
These influences on vision, context and perception brought forth the question of 'the real'. Is what we see real? Or is it distorted by perceptions, comprehensions, interpretations and our own individual desires as implied by Harris and Ruggles in Sites Unseen (2007).

Harris and Ruggles' (2007) reference to 'vision is a prism for understanding and misunderstanding space' explains the way in which people see and interpret elements, both physiologically and contextually.

The nature of remembering and forgetting things

Landscape architects are often confronted with the notion of narrative of place and, consequently, memory of place. What an individual feels, experiences and remembers must be taken into consideration, as well as the intrinsic values that contribute to the overall experience of the user.
Schacter's (2008) piece on memory, 'Searching for Memory', addresses many issues pertaining to the experience of a user in a designed environment, even though the piece itself is far removed from the field of architecture.
In Schacter's (2008) research he refers to the French artist Sophie Calle and her experiment regarding memory. Frequent visitors to a museum are asked to recall details from a piece of art that has now been removed. Her results show that each person recalls something different – why is this? Why do our brains function so differently even though they seem to be so similar on an anatomical level? The 19th century professor Richard Semon (2008) provides us with a possible insight. In his work he has coined words to describe the different stages of remembering and recalling information. Ecphory is the process in which the brain is activated to recall information – but this only happens with a specific stimulus, i.e. a smell, a sight, a feeling. These different stimuli distinguish our remembering processes from one another. The process of remembering or forgetting is an elemental part of experiential design. When a person moves through a landscape and we as designers attempt to communicate a narrative to him, one that is lasting, we need to attempt to create an environment that will facilitate this.

As Schacter(2008) puts it –

'... encoding (process of remembering something) is a procedure transforming something a person sees, hears, thinks or feels into memory.'
(Schacter, 2008:19)

Centuries ago we remembered where the herd was in order to hunt, and how to prepare the meat so that we could survive during winter.

Today, I remember my favourite bench in the park
and the light through the

leaves.

Theoretical discourse

Meaning n. 1. That which is indented to be, or actually is, expressed, or indicated; signification; import; the three meanings of the word. 2. The end, purpose, or significance of something; what is the meaning of life? What is the meaning of this intrusion?
(The Random House Dictionary of the English language 1966:888)

The topic of meaning and significance in landscape has been furiously debated. Even the most prominent authors in the literature of meaning admit that there is no one true answer to the question of meaning in landscape. Meaning in Landscape Architecture & Gardens consists of four essays written about this very topic. In response to the book Jacky Bowring, associate professor of landscape architecture at the School of Landscape Architecture, Lincoln University, states that the intent of the essays are not to answer the question of meaning, but rather to lead to a discussion that will evoke further questions (Bowring 2012).
In turn, Susan Herrington takes up the baton and enters into the debate to defend the thesis by saying, 'yes, gardens and landscapes carry meaning'. Expanding the cognitive definition of meaning, Herrington proposes 'that sensory impressions and feelings are part of meaning' (Herrington 2008:212).

Treib (2011:126) in his essay – Must landscapes mean? – poses the very important question: 'Can landscape designers imbue design with meaning?' Or, as he puts it, '...can designers incorporate significance into the place at the time of realisation?'. He answers vehemently – no. He does, however, state that designers can initiate a process towards a reaction to a place that will carry significance.

Landscape designers can thus facilitate the progress towards adding significance to place. However, the designer himself cannot instil significance in a place. It is rather time, context and experience that imbue the design with significance. Treib (2008) states that significance is not the product of the maker (the designer) but rather the outcome of a process initiated by those who occupy the space, use it and ultimately interpret it.

'Like a patina, significance is acquired over time. And, like a patina, it emerges only when the conditions are right'
(Treib 2011:116).

Herrington takes a more scientific approach to the production of meaning in landscape. She looks at what neuroscience tells us about interpretation and understanding of stimuli. Emotive and rational thinking originate in the same part of the brain. Thus, it can be said that interpretation and emotive response go hand in hand. She does, however, warn against a probability: due to the different experiences of each person, background and interpretations can lead to varied interpretations that may delude the original inherent meaning (Herrington 2011:175).

Semiotics

The word semiotics originates from the field of ancient Greek medicine, where knowledge was acquired by observing the symptoms of the sick and then determining their illness. Today, the term semiotics has become all-embracing. Its application stretches across many areas of science, from bio-chemistry to ethology, communication and information theory (Jorgensen 1997).

It is especially relevant in design and architecture, where the environment is ever increasingly seen as a composition of signs. A sign is often described as something perceptible or physical that is representative of something imperceptible or non-physical. An important concept of a sign is that it consists of two sides: a form or expression, and a connected meaning. There is, furthermore, a third tier of this system which is of crucial importance – an interpreter. This is an individual that links points one and two together, as mentioned above. Without the interpreter, the connected meaning is lost (Jorgensen 1997:42).
'We may come across a scent which alerts us to the presence of a particular animal; we can tell from the dry fields what kind of weather we have had, and from the clouds what kind of weather we will have. In daily life we see signs all around us' (Jorgensen 1997:42).

Every object in our environment is charged with inherent meaning, unlocked by us via casual connections, conventions and superstition to name but a few, Figure:2_1.

It is in the field of semiotics that it is attempted to achieve a commonality between the fields of literature and landscape design. Semiotics looks at how meaning is generated in landscape by combining three central aspects of contemporary life, i.e. visual discourse, language and spatial practices (Jaworski & Thurlow 2010).

It is when landscape architecture is seen out of the perspective that design in It is when landscape architecture is seen out of perspective that design in landscape becomes a semiotic action. It is the designer who produces various 'statements' that will lead to a response by a future interpreter. If landscape architecture is viewed in this context, the elements in the landscape no longer only represent the mere building material, but rather constitute a repertoire imbued with expression, each with its own inherent meaning and connection. It is the use of semiotics that forms the basis of the design language for landscape architects – its equivalents being words in language.

The use of semiotic design in landscape is something that Olin is particularly interested in. He uses a different term for the process of associated meaning and object – landscape rhetoric.

Figure:2_1. We are confronted with semiotic object everyday. We have become so accustomed to using them that we do not realise we are using them everyday. (Author, 2014)

Landscape meaning – The rhetoric mechanism – Laurie Olin

Olin (2010:73) states that the most famous landscape architecture projects establish their meaning through the surrounding architecture and/or use of sculptures. Although Olin feels that meaning can only be accessible to those who indented the landscape to carry significance and share in the sentiment, only written text can truly communicate meaning. He expresses the opinion that meaning can possess deeper significance:

Olin (2008) uses rhetoric devices in the landscape that refer to certain things that are not present, while at the same time evoking a desired emotive or sensual response. This leads the viewer to a desired response. These devices lead and guide an audience towards a desired conclusion.

'Landscapes are not verbal constructions. But they can express certain things, can possess symbols, and refer to ideas, events, and objects extrinsic to their own elements and locus, and in certain circumstances be didactic and highly poetic.'
(Olin 2010:74)

The idea of rhetoric mechanisms is not to state the evident but to rather guide the user towards completing a thought (Olin 2010:76). The use of rhetoric is especially evident in architectural design as seen in Gothic cathedral design. The verticality of the chapel is a rhetoric device symbolising the soaring/rising of the spirit to the heavens. Olin shares Gillette's (2008) sentiment that there lurks danger in using this device, as the referent and the referee get confused with one another. This is especially true when using the most powerful rhetoric device, i.e. the metaphor. This poses a problem because individuals have their own interpretation of a metaphor. And the idea of interpretation is the very basis on which a metaphor operates.

'The incompleteness of a metaphor and the way the user acts upon it is important for the metaphor to work.'
(Olin 2010:59)

As circumstances change, so do metaphors. The spheres that influence our understanding and use of metaphors are influenced by, inter alia, changes in education and socio-political circumstance. As these spheres change, metaphors die, become clichéd or lose their original intent.

The word ***window*** once had a metaphorical meaning. It originated form the old Norse word vindauga; vind meaning wind and auga meaning eye. The literal interpretation would thus be wind-eyes or eyes of the house. (REF) Today the word is used without the knowledge of its original intended meaning.

Metaphors often become overused and, consequently, cliché. This is especially true in literature. Roses are red, violets are blue is a classic example of a line that once was novel. The words have now become a cliché to the point that people avoid using them.

When a metaphor becomes a cliché, it loses its power. Similarly, design clichés can have the same effect, and then the message is not communicated. In response to this problem, Treib (2011) suggests that young designers should look for alternative means of representation. They have to move away from the old and used-up ideas.

The problem with representation

Three problems exist with representation:
1 – Limitation of range
2 – Flexibility
3 – Syntax

1 Limitation of range

These rhetoric devices are representational elements. These elements contribute towards designs that have meaning, as set out in the definition of meaning in landscape on page X.
The struggle a designer faces when confronted with the idea of meaning and representation in landscape amounts to the limitations in design palette and tools at their disposal. Elements such as water, earth, walls, grading, trees and paving patterns are the vocabulary designers have at their disposal (Gillette 2011:143).

If this system of representation is compared to that of the written or spoken word, it is clear that it lacks the range of representation and vocabulary of the latter.
Perhaps the biggest challenge is that more often than not the represented and the representee get confused with each other. When something and the representation of that something coincide, the viewers are confused about what was, if any, the intent of the design or the inherent meaning.

2 Flexibility

The idea of combination of landscape vocabulary was put forward by Spirn (2011:144) when she writes about the language of landscape:

'Verbal and mathematical language, the word and formula, merely describe and interpret the world, for they are not the things they describe, but always one or more steps removed. In landscape, representation and reality fuse when a tree, path, or gate is invested with larger significance. In a sacred landscape, a path is seldom only a path, but a path where pilgrims reach a hilltop shire tracing a metaphorical and an actual journey.'
(Gillette 2011: 144)

Gillette contests this notion when she notes that is it the very fact that words are not fused. That is why they are so effective in conveying meaning. The fact that they are never the same as the thing they represent means that they can never be confused with one another. Landscape vocabulary thus has high interpretive value but low flexibility. On the other hand, the written and spoken word scores high on both (Gillette 2011:145).

Written or spoken words can be arranged in a series of different arrangements, each with a distinct meaning. Landscape rhetoric is limited. Furthermore, combining different elements of landscape vocabulary does not have has the same effect that sentence construction has. The physical nature of landscape vocabulary means that only one or two metaphors and rhetoric can be embedded in the landscape before it is saturated. This is not enough to provoke thought or lead arguments.

These one-liners, as put by Gillette, can point to a larger idea but cannot efficiently communicate complex ideas, notions or even meaning (Gillette 2011:144).

3

Syntax

According to Olin (2008:79), landscape designers have tools at their disposal to communicate fragmentation, dislocation, displacement and distortion, repetition, juxtaposition, contrast, open and closed, narrow and wide. This brings us to the last upper hand that written and spoken words have over landscape representation: syntax. Words can ultimately be organised to convey complex sentences. A compound sentence can easily convey numerous subjects and ideas. Unfortunately, in landscape design it is difficult, if not impossible, to convey more than one theme (Gillette 2011:144).

A further problem arises when considering that we all have different cultural and contextual backgrounds and frames of referencing. What a stream of water means to one person may mean something entirely different to the next. It is therefore complicated to use landscape rhetoric in communicating meaning to the user. The difficulty lies in contextualization and guidance whilst not removing the opportunity for interpretation and emotive response.

'Landscape has all the features of language. It contains the equivalent of words and parts of speech – patterns of shape, structure, material, formation, and function. All landscapes are combinations of these. Like the meanings of words, the meanings of landscape elements (water for example) are only potential until context shapes them. Rules of grammar govern and guide how landscapes are formed, some specific to places and their local dialects, other universal. Landscape is pragmatic, poetic, rhetorical, polemical. Landscape is scene of life, cultivated construction, carrier of meaning. It is a language.'
(Spirn 1998:15)

Gillette (2011) teaches us that landscape design elements cannot and will never be equal in power of communication to written word. The shortcoming in the use of landscape rhetoric and other mechanisms used to convey information is limited in power and almost always have to the effect that that which is communicated is flat and lacking in depth. The biggest problem perhaps is that opposed to written word, which is precise and direct with it's meaning and intent, landscape rhetoric seldom communicates what was indented.

Prominent authors in the study of landscape narrative and meaning are Potteiger & Purinto (1998). Their writings on landscape communication of narrative relates to the writings on landscape semiotics and rhetoric. Removing the designer as sole creator of meaning, and bestowing that purpose on the interpreter . This combination of user-interpretation and use of representative elements leads to their understanding of the term – open narrative landscapes.

The open narrative approach

Open vs. closed narrative

Common landscape narratives are usually highly scripted and controlled. Explicit reference to specific historical events is made. Specific persons or local emblems and features are used. This direct approach to landscape narrative starts to create a dialogue between design and user. This approach ultimately only operates on a superficial level and limits the significance of both narrative and landscape (Potteiger & Purinto 1986).

The intent of explicit storytelling in a landscape is to guide the user to experience what the designer had intended. The designer guides them along a pre-set path so that a specific story is communicated to the user. The problem with this approach is that the landscape is seen as if it once were a clean slate – void of the already inherent narrative of landscape inscribed by natural and man-made processes.

Popular media

The idea of open and closed narratives is most commonly found in the popular media. Closed narrative consists of a clear beginning, middle and end. With this approach, the creator is the sole narrator and it is only he that contributes to the meaning and understanding of the narrative. The plot is laid out in a way that the reaction is predictable and controllable. This type of narrative in media is referred to as linear narrative. The story unfolds chronologically.

Open narrative, on the other hand, does the opposite. The creator is secondary in the creation of the complete story. The creator will only lay the basis on which the story is told – the plot, the theme, the context and characters. The open narrative approach gives way to a 'loose reading' by the user. It is usually the ending that constitutes an open narrative; there is no explicit ending and the conclusion is left up to the viewers, leaving room for the narrative to be continued with a sequel. Quentin Tarantino's Pulp Fiction is a classic example of a non-linear open narrative film (Bateman & Bennete 2010:9).

It is similar with landscape narrative. The designer lays down the basis of the narrative that needs to be communicated. But the design is imbued with understanding and significance by the user. Like an open ending of a book or a film, it is up to the personal interpretation of the user to complete the story. In landscape, however, it is not only the ending that constitutes an open narrative. Numerous parts of the narrative are left open for interpretation (Potteiger & Purinto 1986).

'We come to know a place, because we know its stories.'
(Potteiger & Purinto 1998:6)

The realms of story telling

Potteiger and Purinto (1998) describe three realms of narrative within a landscape:

1- The story realm
2- The contextual realm
3- The discourse realm

1

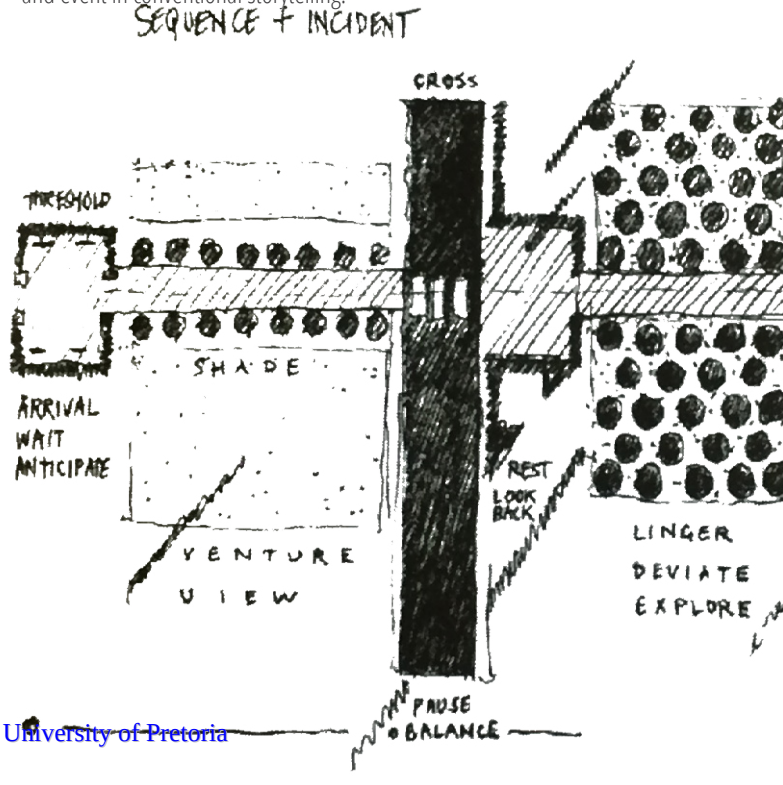
The story realm places emphasis on the story that the designer aims to communicate to a user. There is strict control of the content and narration. The landscape is approached as literal storytelling. Events that are present in traditional storytelling guide the process.

2

The contextual realm places the emphasis first and foremost on the interpretation of the user. Different contexts and points of view of the users ensure that the narrative does not follow a pre-set designer's path. It rather crosses boundaries. This type of narrative is open to multiple 'reading' or interpretations by the user. It is important to note that the creation of meaning now shifts from the author to the user.

3

The discourse realm aims to do quite the opposite. Instead of the landscape functioning as a gateway to memory and experience, the landscape acts as cultural amnesia. The site dissociates itself from any original meaning. Dee (2001) talks about sequencing and incident. The way the landscape is experienced by the user. This is comparable to plot line and event in conventional storytelling.



Summary

The use of closed narratives, like theme parks, theme restaurants and gated communities, totally removes the possibility of meaning being infused into the design. The diversity of voices within a landscape is displaced and silenced. Layers of history are distorted, erased completely and distinct boundaries are drawn between them (Potteiger & Purinto1998).

'Rather than explicit referring or controlling sequencing, the open narrative encourages the creation of multiple stories or interpretation, complex sequencing, which offer choice.'
(Potteiger & Purinto 1998:6)

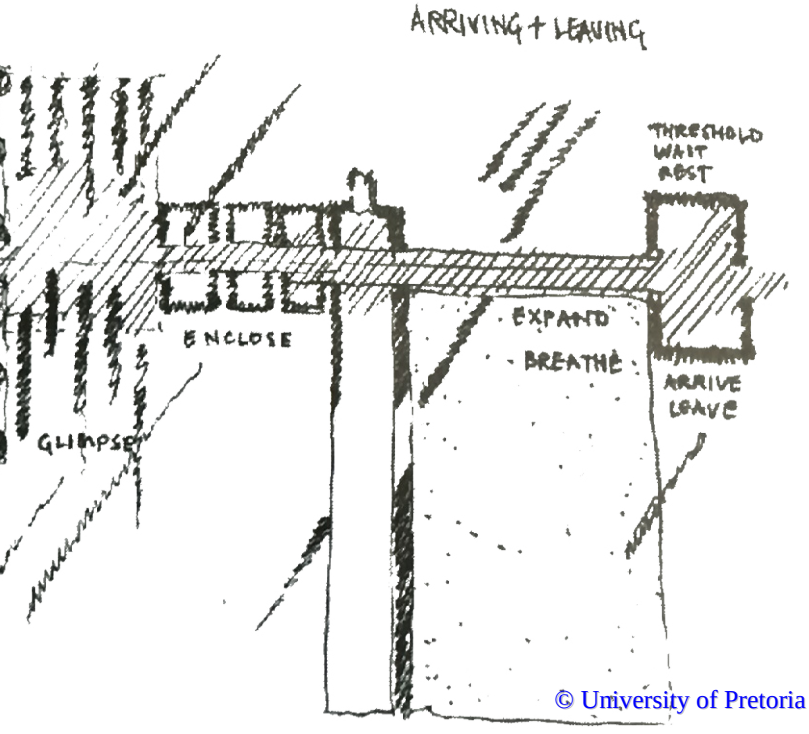


Figure:2_2. The combination of rhetoric or semiotic elements and landscape sequencing can be used to communicate to the user a specific narrative (Dee 2001:85)

The last hurdle

Gillette (2008), however, is highly critical of the approach that semiotics in landscape can lead to a deeper understanding. She contests that nothing can ever replace the efficiency of the written or spoken word and that gardens and landscapes cannot contain meaning. She points out the flaws and shortcomings of landscape representation and the inefficient way it communicates, as well as its lack of flexibility. The question is thus; can a solution be found that incorporates the open, interpretative approach of Treib (2008) and Olin (2008) in combination with the open narrative of Potteiger (1998), whilst still heeding the problems as set out by Gillette?

Perimeters of narrative

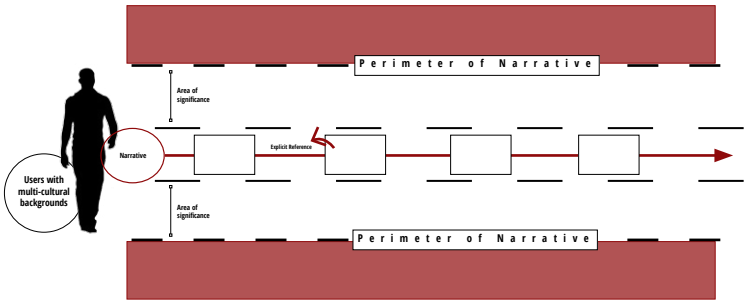
A design needs to be established to ensure that the narrative is communicated to the user – more importantly, the correct narrative. Drawing on the theory of Olin (2008), Treib (2008) and Potteiger (2008) there is a danger that the narrative is too direct and implicit. This leaves no room for interpretation and thus lacks depth and significance. On the other hand, Gillette (2008) warns us that the narrative can be too broad, with the effect that the narrative is watered down to a blurry mess that leaves the user confused.

This point is especially important when considering that the identified narrative needs to be a specific one. Even though the design of the dissertation aims towards personal interpretation and emotive response, the narrative needs to be guided by a regulation system. A system that ensures that:

- The narrative allows for interpretation and emotive response and thus carries significance.
- The narrative is grounded in context.
- The narrative is guided by a baseline narrative driver that keeps it moving in a desired direction.
- The narrative is 'regulated' to ensure that even though interpretation is allowed, it does not lose direction and confuse the user.

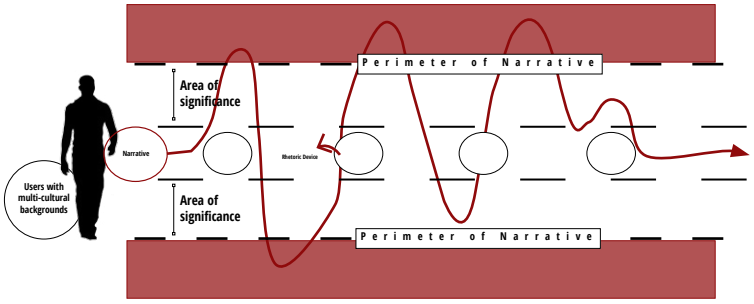
This regulation system is guided by a theoretical concept of the author's own invention, i.e. the perimeters of narrative. This system draws on the combination of the open narrative approach of Potteiger (2008), whilst heeding the warnings of Gillette (2008). This system aims at establishing a guideline towards communicating a narrative to the user with the use of semiotic devices, whilst taking into consideration that we live in a multi-cultural society, with different backgrounds and frames of reference. This guideline system is described in Figure:2_3 on page 39.

Closed Narrative
No use of Rhetorics
Explicit Story Telling



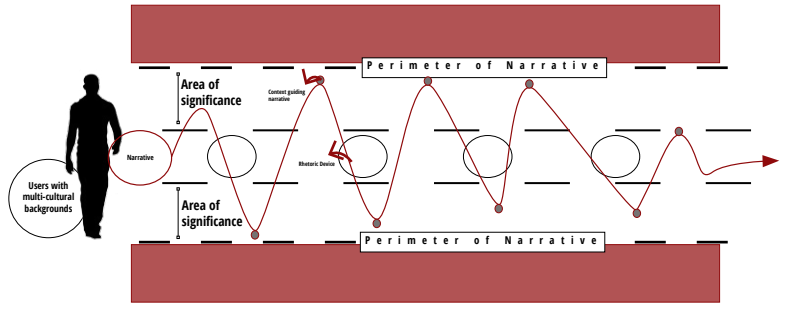
The use of explicit elements to convey the narrative has the effect that the narrative is communicated but the narrative line does not move into the area of significance. Because of this, the narrative has no room for interpretation and consequently the narrative does not carry significance. This form of narrative is a result of a design where the designer tries to imbue the design with meaning, rather than surrender that responsibility to the user.

Open Narrative
Use of Rhetorics
No Contextualization



Even though this narrative approach allows for the interpretation and emotive response by the user, the lack of context causes the story that move outside the perimeters of the narrative. The user experiences the rhetoric devices, but without context the devices do not form a cohesive whole.
This leaves the user confused as to what narrative is being communicated.

Open Narrative
Use of Rhetorics
Contextualization



This line of narrative moves within the area of significance, whilst still moving within the perimeters of the story. The result is a design where there is room for interpretation of the narrative, whilst ensuring that the specific narrative is communicated.
The user experiences the rhetoric devices in the landscape, together with the contextualisation provided. The context keeps the line of narrative within the desired perimeters and the users understand, in their own personal authority, the narrative that needs to be communicated.

Figure:2_3. Perimeters of narrative. The different approaches to landscape narrative

Summary

Design (building/landscape) cannot substitute text in the telling of history. It can, however, facilitate the process and progress towards deeper understanding and significance. The content conveyed to the user does not refer to the 'hows' and 'whens' of history, but rather to the intangible, like memory and experiences (the emotive).

Through an open narrative landscape approach, only where the users themselves add a constitutive part of their own experience, interpretation and memory to the design, can the design start to convey a glimmer of storytelling. The design success is highly dependent on the experience of the design and, subsequently, the interpretation and emotional connotation of the user.

con-clu-sion

Treib (2008) makes it clear that a designer can lay down the foundation for a deeper understanding that carries meaning, but it is the user that ultimately adds the significance. Potteiger's (1998) open narrative approach links with the thoughts of Treib (2008). An open narrative allows for interpretation, multiple authorship and has competing discourse. Olin (2008) agrees and adds that landscapes can be expressive and didactic. His idea of rhetoric mechanisms is not to state the evident, but rather to guide the user towards compelling thought. Semiotics enforces the statements made by Olin (2008), stating that the use of signs and representative elements in landscape architecture can guide a process towards deeper understanding and interpretation.

This dissertation advocates that meaning and significance can be achieved in landscape design through the use of semiotic elements. It is of the opinion that meaning does not reside in the landscape itself, nor with the creator but with the mediation between user, the landscape and its elements.

The author, however, acknowledges the shortcomings as stipulated by Gillette regarding the limitation of landscape representation and meaning. Thus the author proposes that a solution lies in the combination of various elements deducted from the readings above:

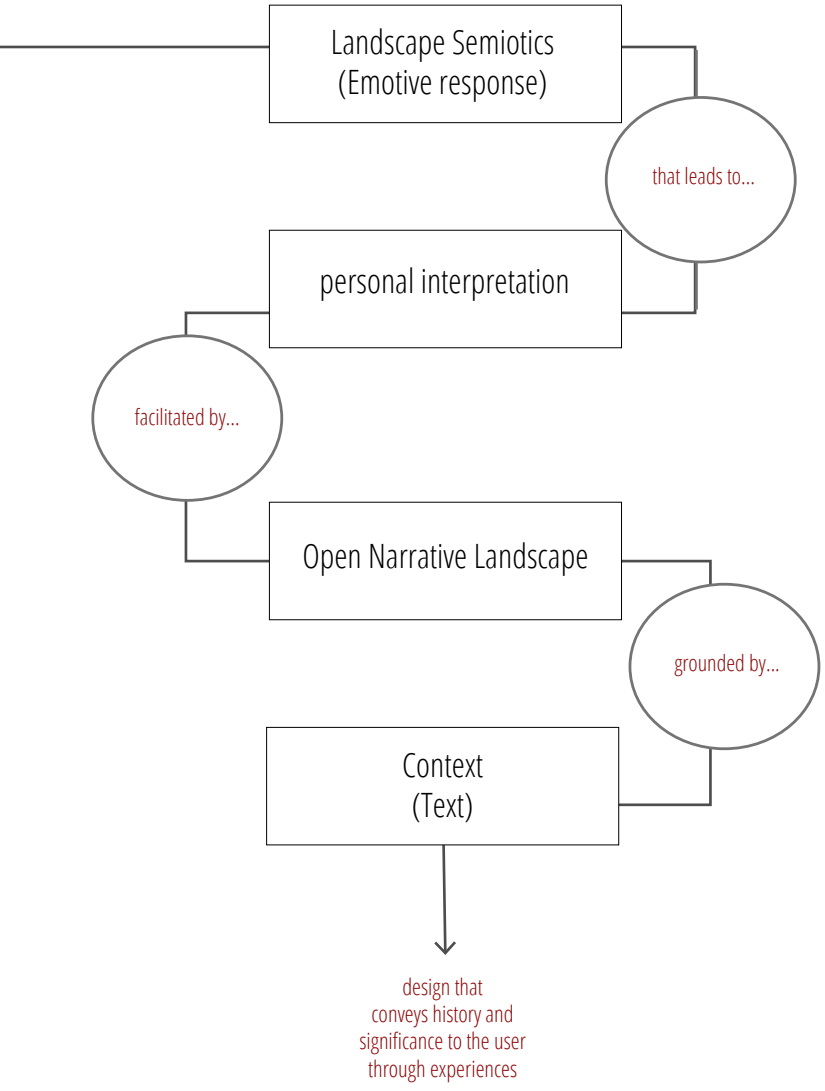


Figure:2_4. Theory conclusion diagram

Use landscape semiotics to facilitate and guide a narrative

Not only to communicate the narrative but also to do so within the parameters of what needs to be told. If the narrative is too broad and room for interpretation is too vast, then a disjointed, incomprehensible narrative is experienced and the user is left confused.

Allowing the user to interpret the elements in the landscape and to construct their own narrative:

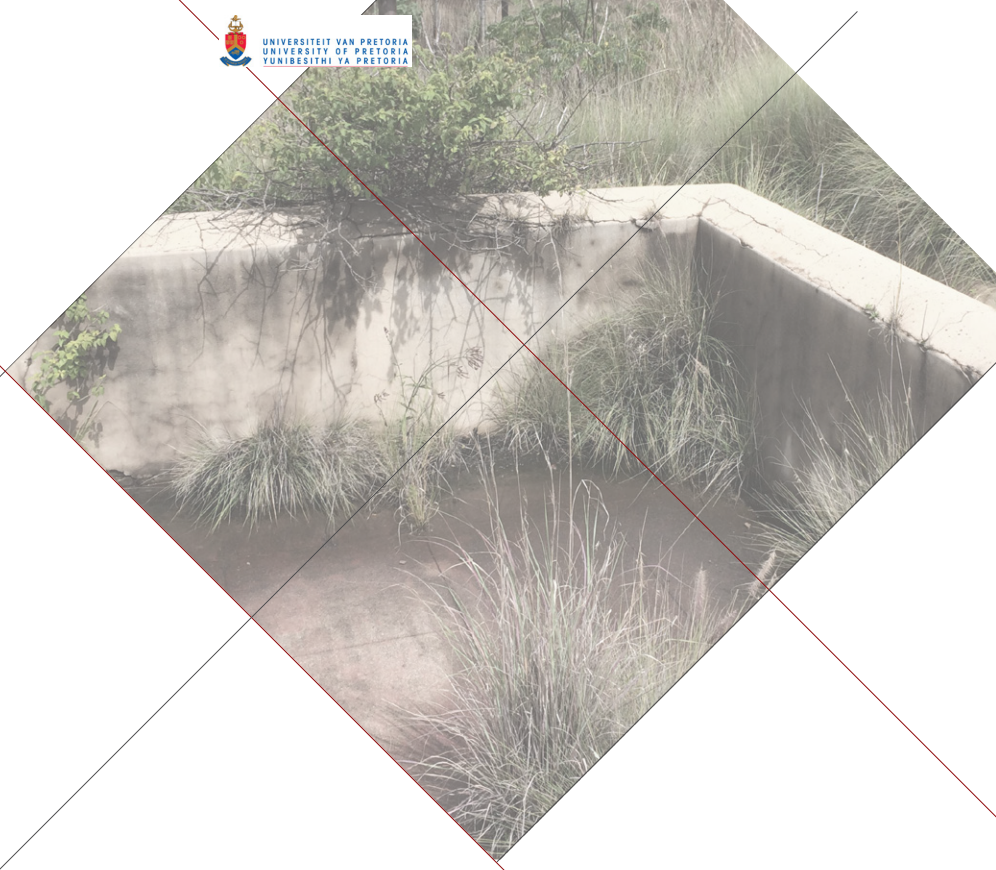
Ensure that the open narrative facilitates a process towards interpretation and deeper emotional understanding by the user.

Grounding the narrative and ensuring that the user is not left confused:

Through contextualisation (text) the user is given a background, something to ground the rhetoric elements and guide the narrative to the desired conclusion.

3

The compound



What happened here?
What was the cost?
Of an unsung story forgotten and lost

Upon first arrival

Once a person enters the site, they are immediately confronted with a sense of romantic decay. The overgrown vegetation and ruins create an almost mystical scene that reminds the visitor of scenes described in fairy tales - mysterious and threatening at the same time. The heavy-set buttressed walls and historic footprint within the picturesque surroundings contribute to this experience. But beyond the emotional connection a user makes, one is also met with a sense of history. Most of the historic footprints are still visible. Someone uninformed of the history of the site would experience this site as pleasurable and inviting. Only upon deeper investigation and understanding of the site does the user understand the hardships the workers had to endure whilst staying here. Only then does the romanticism of the site deteriorate as each element on site reminds of a troubled past.

The newest constructions (1950s) are the structures most intact but have also been subject to years of neglect and decay. Each chapter of history is represented on the site – be it through the ruins or through the overgrown pathways and derelict buildings. This chapter of representation of history, like all the others, is of equal importance in authentic representation of the heritage of the site.

The stark contrast of epochs is only noticeable upon deeper investigation into the site's history.

This palimpsest of history tells a story. But one has to ask – is this an authentic rendering of what happened here? If the first impression a person gets of the site is that of romanticism and intrigue, is it deluding the memory of hardship and suffering on the site? Without understanding what happened here, one might be deceived by the site's beauty, its intrinsic face value.

'I wonder what happened here.'

Figure:3_1. Conceptual collage. Illustrating all the different elements of the site that make it unique(Author 2014)

Figure:3_2. Areal photograph showing the location of the No. II shaft compound next t0 he the 'big hole' (Lincoln 2011)

Migrant workers and the emergence of the compound

"You will remove them, the natives, from the life of sloth and laziness, you will teach them the dignity of labour, and make them contribute to the prosperity of the State and give them some good return for our wise and good Government."
Cecil John Rhodes on the introduction of compounds.
(Nelsonmandela.org 2014)

The overall profitability of the mining sector in South Africa has long since been based on the reliance of the abundance of cheap labour recruited from South Africa and the sub-continent. The vast number of unskilled, underpaid workers has ensured maximum profitability of the mining sector in late the 1900s. Acquiring large numbers of migrant workers was the first step toward profitability. But an intricate problem arose. The workers had to be housed, fed and controlled to the satisfaction of the big mining houses. This led to the formation of a unique form of migrant housing. These housing units are described by Rex (1974:8) as 'a kind of bachelor barracks to which workers retire when off-shift to bunk beds in communal dormitories and receive their food in a specifically provided communal kitchen'. These units were first introduced at a Kimberley mine in 1885 and later adopted by the gold mining industry (Demissie 1998).

Migrant worker compounds were a key component in migrant worker regulation in the mining industry of South Africa. The compounds were tightly controlled and closed off from the outside world (Heleba 2007).

"...an institution which provided the framework for the total exploitation of black workers ... it was the compound, acting as the college of colonialism, that did much to rob Africans of their dignity and helped mould servile black personality on the compounds.'
(Van Onselen 1976:157)

The institutionalisation and reinforcement of migrant workers in the mining industry led to the formation of the pass law governing all African males. The passage of Act 22 and Act 23 in 1985 initially restricted the movement of African workers in the Transvaal. It was later consolidated in the Native Labour Regulation Act of 1911, which required fingerprints and registration certificates to be used as passes for all migrant workers.

'If thoroughly carried out, [it] cannot fail to effect a momentous change for the better of our social conditions in many ways. Its object is to cut all means of communication with the outside world, which has hitherto afforded the stable mining labourers so many facilities for disposing of his employer's property. He will henceforth never be outside the pale of his employer's authority. He will sleep and feed in the new and comfortable quarters provided for him and his fellows. He will march to his daily work in the mine and return in the evening to the place from whence he came; all his wants will be attended to by his employers.'
(Doxey 1963:33)

The need for large numbers of migrant workers in the mining industry led to the formation of centralised housing complexes near the mines (Demissie 1998). The primary purpose of the compound system was to reduce the wages of the migrant workers and force them to stay in the compound. By 1889, 100 000 native workers were required to work in the mines (www.nelsonmandela.org).

The institutionalisation and reinforcement of migrant workers in the mining industry led to the formation of the pass law governing all African males. The passage of Act 22 and Act 23 in 1985 initially restricted the movement of African workers in the Transvaal. It was later consolidated in the Native Labour Regulation Act of 1911, which required fingerprints and registration certificates to be used as passes for all migrant workers. This new act, however, was not effective enough to make the circulation of migrant workers viable.
The need for large numbers of migrant workers in the mining industry led to the formation of centralised housing complexes near the mines (Demissie 1998). The primary purpose of the compound system was to reduce the wages of the migrant workers and force them to stay in the compound.

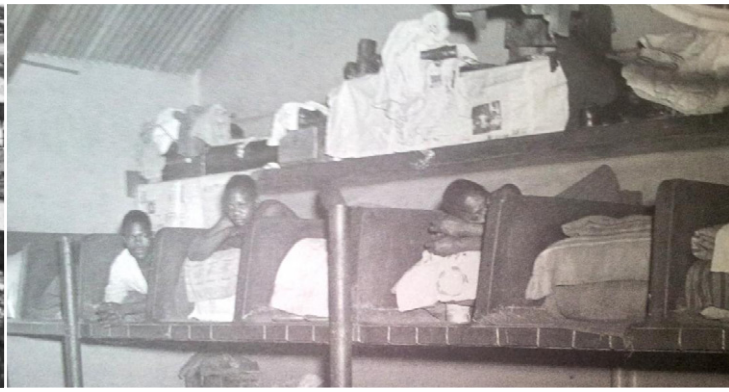


Figure:3_3. LEFT - Compound workers outside the Kimberley compound, 1990 (Turrell 1984).
Figure:3_4. MIDDLE - The Kimberley compound, 1990 (Turrell 1984).
Figure:3_5. RIGHT - The communal sleeping areas in the Kimberley compound. Up to 70 workers were house in one building in this manner. (Turrell 1984)

Prior to the establishment of mining compounds or open mining from 1871 to 1884, workers were permitted to spend their free time as they pleased. The compound system took away this freedom from the miners. They were now isolated in closed compounds, apart from the outside world. The first compound initialised by the De Beers group set the precedent and soon it found its way into the rest of the mining sector. Forcing miners to stay together in confined spaces ensured the ravenous

Figure:3_6. The communal washing and eating area, Kimberley compound. (Turrell 1984)

The compound system is truly unique to the South African context. The history of the compound system is a harsh reminder of the suppressive past of South Africa and forms an intrinsic part of the cultural heritage of the mining history of South Africa. Most of South Africa's compounds today form part of the greater post-industrial landscape. The intense personal nature of the compound system – how the workers lived, socialised and died – is what sets it apart from the functional history with which post-industrial landscapes are usually associated. For this reason, the compound should be viewed as a distinct entity apart from the larger context of post-industrial landscapes, but still part of the collective whole.

The pain and suffering cannot be seen - what was happening nor
what has been

Cullinan Compounds

The name 'Cullinan Diamond Mine' was only used after the renaming of the mine in 2003. It was formerly known as the 'Premier Mine'. The mine over its lifespan has been responsible for delivering some of the world's most prestigious diamonds, and boasts with stones that are considered the biggest in the world. The most famous is certainly the Cullinan diamond found in 1905 by Fred Wells. This 3024 3/4 diamond was named after the owner of the mine. The diamond was presented to King Edward to celebrate his 66th birthday. The stone was cut into 9 major gems and various smaller brilliants (Lincoln 2011:15).

Figure:3_7. TOP LEFT - Taken in the 1950's is portrays workers playing soccer next to the mine shaft on a soccer pitch constructed in the 1950's. None of these sport facilities still exist today (Lincoln 2011).
Figure:3_8. TOP MIDDLE - This archway was the entrance to the mine for the workers. It was built in 1957 This archway is now sealed off for it is dangerously close to the hole edge. This was the security checkpoint for miners entering and leaving the mine daily. It's decorative and well crated facade acted as 'showpiece' for the premier mine (Lincoln 2011).
Figure:3_9. BOTTOM - Remains of open air showers and ablutions used by the workers. These structures never had overhead covering (Lincoln 2011).

Number Two Shaft compounds conditions

The focus of this dissertation will be on the compounds and living quarters of the men that worked the mine. Specifically the conditions in the Number Two Shaft compounds. Before the mechanisation of the mine, finding ample supply of labourers to work and process the vast amount of material excavated from the mine was a big problem. Recruits from all over South Africa and neighbouring countries were commissioned to work the mines. Often as many as 15 000 workers were employed and accommodated in the compounds (Lincoln 2011:115).

Ethnic tension between workers led to segregation according to ethnic backgrounds in the compounds. The original compounds offer harsh living environments; outdoor washing- and eating facilities with no bunks to sleep in. The workers were closed off from the outside world and they had to cook and care for themselves (Lincoln 2011). These difficult living conditions were accompanied by disease and malnutrition – scurvy, gout and tuberculosis were just a few of the many ailments that plagued the mine workers. Overcrowding and insufficient clinic facilities further worsened the conditions. This was made evident by the report of Site Solutions (2004), stating that 'during 1908 the mortality rate amongst black workers reached such proportions that a medical board inquired into the mortality rate on the mine. The death rate amongst black workers on the Premier Mine was extremely high. Forty per thousand per annum died and 60% of these cases were due to pneumonia.'

During 1910 it was reported that washing amenities consisted of open air public showers and dip baths without any hot water. The same report stated that the water supply was contaminated and was probably the cause of many causes of disease outbreaks within the compound, Site Solutions (2004). Food preparation was left up to the workers. They had to supply their own food and bought produce from the compound shops. These shops ran at an enormous profit to the mine. As a result, the miners spent almost all their money on food from the compound shops. To make things worse, they had to prepare it in open-air cooking facilities that did not cater for inclement weather conditions Figure:3_9.

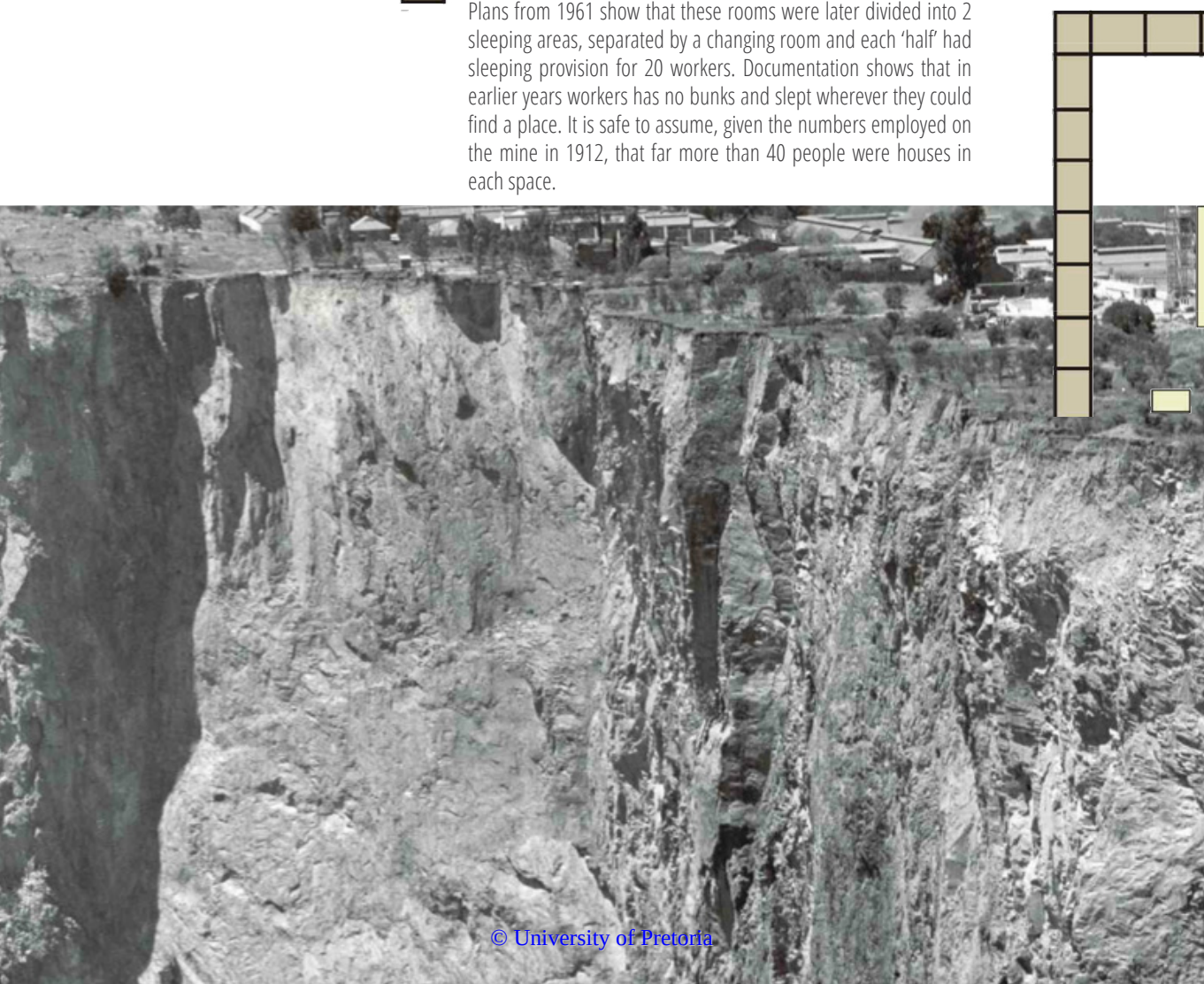
In 1950 the compounds were upgraded after some of the structures in the compound had fallen into ruin. These 1950 buildings are still present on-site and are in reasonable condition. Various improvements, like sports fields Figure:3_7, outdoor cinemas and bowling greens were added. Nevertheless, the compounds were closed in 1973. The existence of the Number 2 Shaft Compound Complex gives significant insight across the entire history of the mine. It is of irreplaceable value to the Cullinan Mine and South African heritage.

The plan in Figure:3_10, illustrates the area today know as the No. 2 Shaft Compound and shows that this compound was already quite extensive by 1912, when documentation shows that nearly 14 000 black workers were employed by the Premier Mine.

The No. 1A Compound and No. 4 Compound illustrated in "" on page 57, fell into ruin in later years, possibly due to mine closures and a decrease in production and increase mechanisation. This are was re-built in 1957. No 5 compound area was later an industrial hive. No. 1B extension seems to have remained in use until the compound closed.

Outdoor facilities included communal showers, utensils washing troughs, cooking facilities, blanket washing baths and water points. These, in 1912, were all open air. Photos taken at the opening of the hostel upgrades in 1957, show the newer facilities were built with roofs and half walls.

The larger rooms shown in Figure:3_10, were approx 170 sq m. Plans from 1961 show that these rooms were later divided into 2 sleeping areas, separated by a changing room and each 'half' had sleeping provision for 20 workers. Documentation shows that in earlier years workers has no bunks and slept wherever they could find a place. It is safe to assume, given the numbers employed on the mine in 1912, that far more than 40 people were houses in each space.



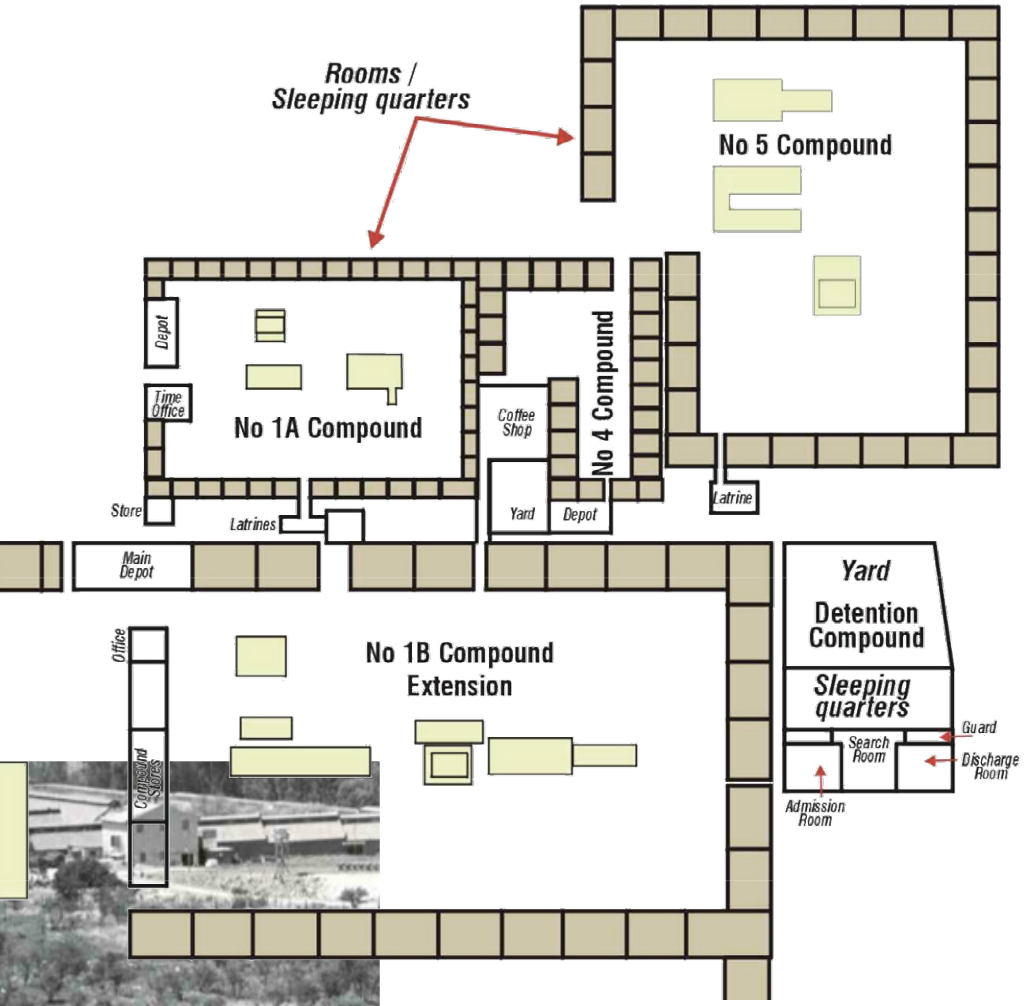


Figure:3_10. TOP - A diagram showing the layout of the compound and the positioning of the buildings in 1912. (Site Solutions 2004)
Figure:3_11. BOTTOM - The no.2 shaft compound visible on the edge of the hole. The hole cutback creeping toward the compound. Almost half of the compound site will be engulfed within the next 100 years (Lincoln 2011).

Figure:3_12. Aerial photo of the compound today, with the historic map of 1912, overlain in the top right corner (Lincoln 2011).

Today

Upon entering the site, the structures appear unstable and unsafe. Overgrown grass and rubble hamper movement. Mine security and control points at the entrances enforce isolation of the compound from the rest of the mine complex. These strict security measures in no way contribute to the appreciation of the rich history of the site. On the contrary, it further distances the user from the significance and context of the site. The narrative of the mine gets lost.

The buildings and related infrastructure all constitute ruins. Many of the buildings constructed on the infrastructure date back to the original commissioned infrastructure of the compound around 1904. In terms of what can be considered cultural material, only bits and pieces have survived. Unfortunately these remaining pieces have not been well preserved.

Prior to the report of Site Solutions (2004), the site had been cleared away and any pieces that could have been considered to have cultural value, had been removed.

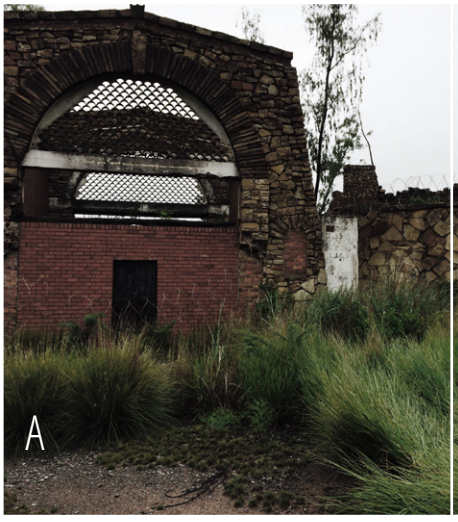


Figure:3_13. PREVIOUS PAGE - Cullinan compound Aerial shot (Lincoln 2011)

Figure:3_14. A - The historic entrance to the shaft. This was an access control point worked moved through on their way to and back from the shaft. (Author 2014)

Figure:3_15. B - The amphitheater still in good condition on site. Built in 19.. in an effort to better the circumstances of the miners. (Author 2014)

Figure:3_16. C - The no.II Shaft out side the compound on the southern edge of the Cullinan hole. This shaft is visible from anywhere inside the compound. (Author 2014)

Figure:3_17. D - The remnants of the arch entrance to compound four. This arch is the last remnant of that compound. (Author 2014)

Figure:3_18. E - The heavy buttressed wall running along the north-eastern edge of site.(Author 2014)

Figure:3_19. F - The remnants of the an open air bath the workers used as communal sanitation. The bath was also used as flee dip for the workers occasionally. (Author 2014)

COMPOUND 5

Behind Buttress wall, entry to compound 5 is situated in top left hand corner

BUTTRESSED WALL

The imposing buttressed wall lines the site on the western and southern side.

AMPHITHEATRE
Built during the 1950's
Where the mineworkers would watch movies projected from the small projector house.

UNTAMED NATURE
The surrounding wilderness has invaded the site.

Figure:3_20. Panorama shot of the compound. Notice how nature has reclaimed most of the site(Author, 2014)

What is this memory lurking in decay what makes
my mind wonder and emotion stray?
It is a darkened past and memory hidden, of where
the eye nor heart can see the forgotten.

What happened here? What was the cost?
Of an unsung story forgotten and lost

4

Framework

Framework

The framework for this dissertation is divided into two parts:
The first part consists of the larger framework devised for the larger Cullinan Mine complex. This includes Cullinan town, the operational Cullinan Mine and the Cullinan compound. The second part of the framework directly relates to the bigger, Figure:4_1, context of the compound in totality and is most applicable to this dissertation. Both frameworks are summarised next.

The framework examines the current condition of the larger Cullinan, which includes the No.II Shaft Compound. The findings are based on the assumption that the mine is to be decommissioned in 80 years' time. This will ultimately leave a collection of Kimberley-like hills, a slime dam and an enormous open-cast pit referred to by the locals as 'the hole'. Deep scars are visible in the landscape due to ongoing human activity over centuries. The surrounding pristine Marikana thorn bushveld, however, still bestows a certain sense of beauty.

The aim of the framework is to establish an appropriate response to the eventual closure of the Cullinan Mine. This includes rehabilitation and re-appropriation of the town, the mine and the compound.

The intention is to facilitate a process towards utilising the site to best portray its cultural heritage, whilst accommodating a new contemporary layer. The new layer includes the work of two architects, Natasha Laurant and Paige du Toit. The programme for the buildings includes small-scale research-based agriculture and small-scale production to support it. One side of the compound accommodates silk and hemp production, the other side organic fruit and vegetable growing. This dissertation forms part of the third tier of the compound framework: landscape architectural intervention. The spotlight falls on facilitating the architecture, whilst giving a voice to the history of the site through the use of landscape narrative techniques. The experience of the visitor is strongly emphasised. The introduced production and research in conjunction with the historical narrative are the main concerns.
Collectively the framework aims towards achieving the following:

- to determine the cultural and historic significance of the No.II Shaft Compound; and
- to determine the most appropriate method of accommodating the new contemporary layer.

Figure:4_1. Areal context of Cullinan (Lincol 2013)

4.1

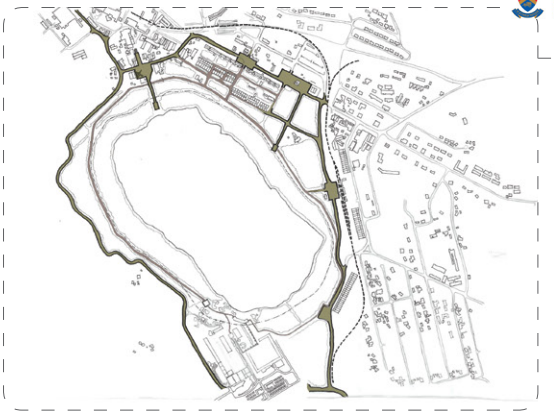
Cullinan envisioned

Cullinan is significant for its heritage tourism .It is popular as a sleepy town and a weekend getaway for residents of Gauteng's urban areas . It also serves as an agricultural hub and tourist node. This has t he potential to generate a new resilient means of income. The intention is to explore all these possibilities.

The aim of the framework is to address the subsequent decline in job creation and economis viability. The mine is a key economic sector and main source of local income .The closure of the mine diminishes this potential. The proposal aims at investigating a concept of resilience and regeneration by reintroducing craftsmanship .Such action uplift s the local community in order to ensure future economic development.

A by-product is the establishment of a connection between the tangible and intangible ecological components on the site . The disturbed ecological systems are addressed. This ensure s the protection of important industrial and cultural heritage , Figure:4_2.

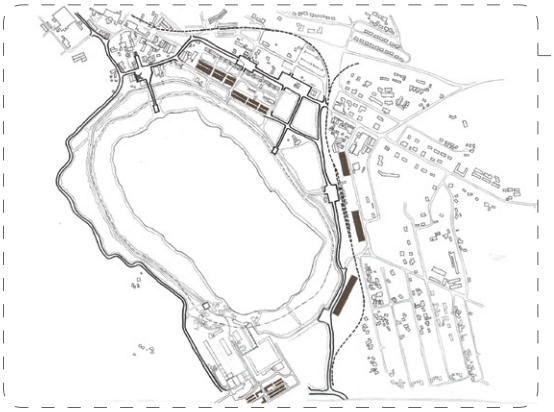
The framework aims at redefining the fragmented landscape of the existing town, mine, compound and surrounding wilderness.



PRIMARY AND SECONDARY ROUTES

Primary Route
Secondary Route

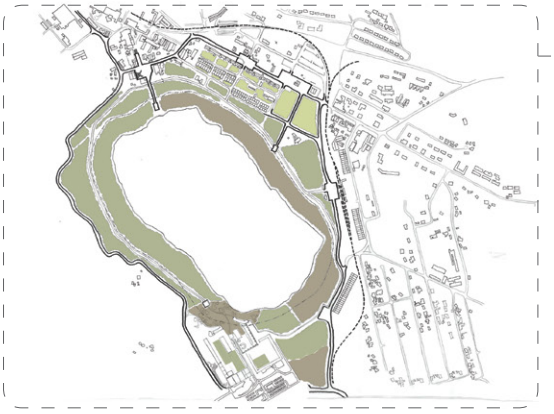
Description:
The Primary route focuses on connecting the decommissioned mine; the existing town and the old mining compounds. The route continues around the excavated hole allowing people to view the scar in the landscape from all angles. Along the primary route new public squares have been designed to define certain areas of the town and to create more of a pedestrian friendly route where shops and restaurants can spill out onto these spaces.
The Secondary Routes are then allocated closer to the hole. These routes are designed for pedestrians and bicycles. It allow people to meander around the hole to the different interventions and viewing points.



NEW DEVELOPMENT

New Development

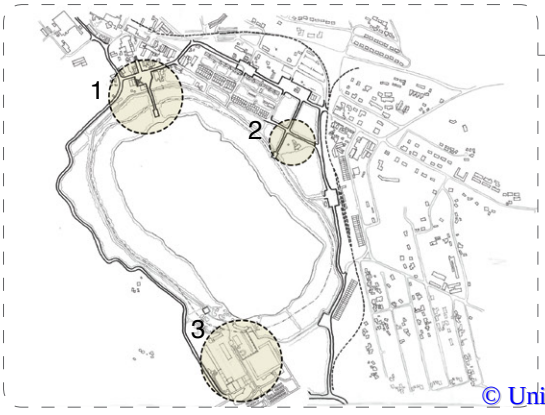
Description:
The new development throughout the town will mainly contain accommodation and facilities for agricultural based education.
This development is again centred around the scar in the landscape and provides a further connection between the town and mining compound



GREEN SPACES

Natural Bushveld
Productive land
Recreation space

Description:
The existing landscape has been developed into a productive landscape where all the new interventions plug into.
On the eastern side of the hole the natural bushveld has been retained with smaller sections of production closer to the town.
The main belt of productive landscape is allocated on the western side of the hole. This agriculture contains orchards, hemp, and vegetable farming.
Along Oak Avenue (the main street in town) new recreational green spaces have be designed for the new accommodation as well as a space for festivals and events.



SITE ALLOCATIONS

1 MINE: Walter Raubenheimer
Marcel Mattheus
2 TOWN: Nikita Edwards
3 COMPOUND: Natasha Laurent
Paige Du Toit
Hugo van Niekerk (landscape Architect)

Figure:4_2. Cullinan framework analysis, development strategy (Cullinan group, 2014)

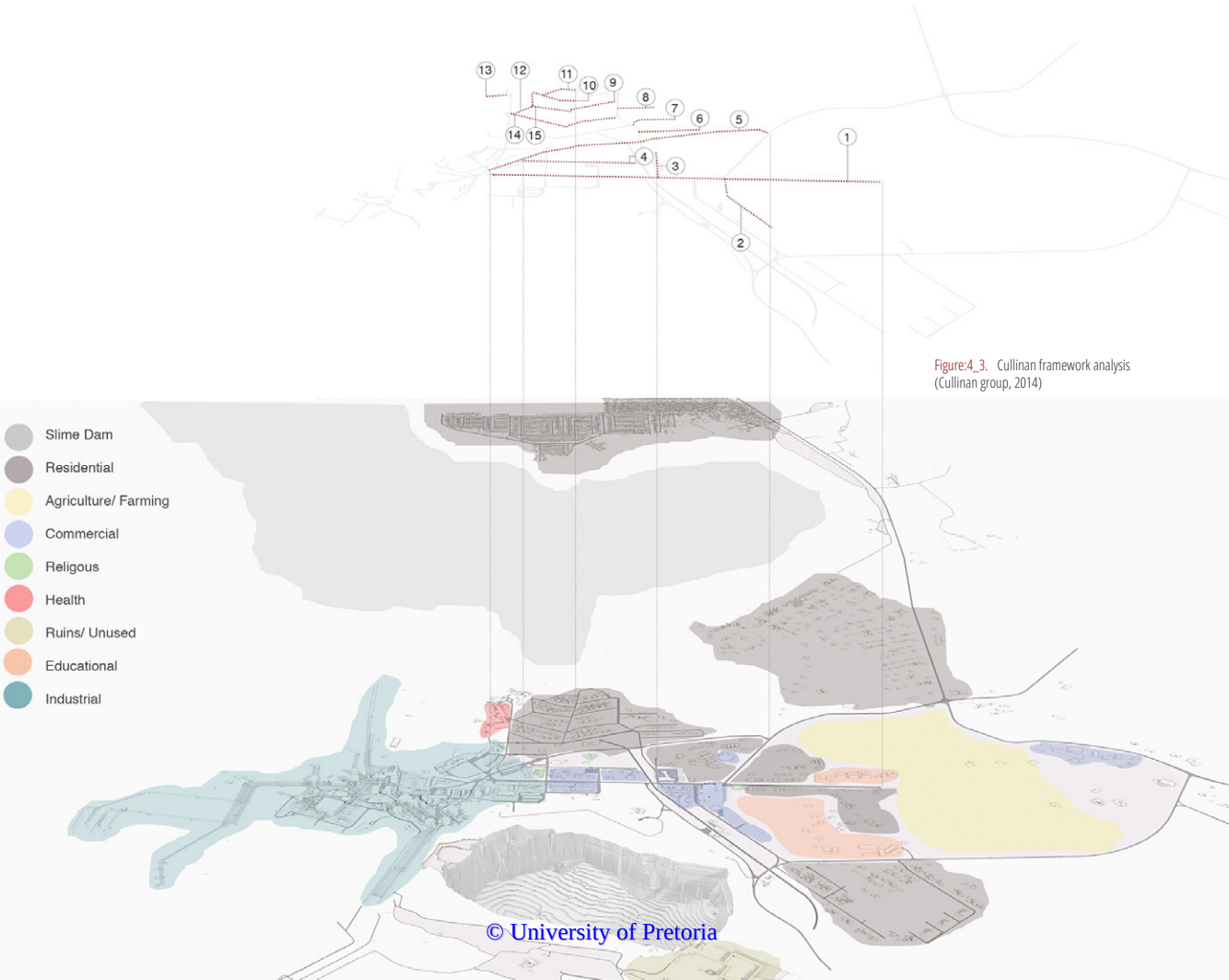


Figure:4_3. Cullinan framework analysis (Cullinan group, 2014)

Figure:4_4. Cullinan framework proposal. Development strategy for the Cullinan context. (Cullinan group, 2014)

AGRICULTURE 1

> Cullinan should become the core of the larger regional **agricultural hub** and a **new agricultural strip** should be introduced around the big hole to support **new local micro-industries related to agriculture**

TOURISM and HERITAGE 2

> The vision **will expose the heritage value** of Cullinan to society and use it as a source of **revenue and support** for the community
> Tourists will become a **market** for produced commodities
> The **large open pit should be retained** as is after mine closure as it is an **important part of Cullinan's narrative and also a major tourist attraction.**
The impact of the **instability of the hole** is recognized. A **new 'agricultural route' for tourists** is established around the hole **marking the 100 year breakline of the hole.**
Existing mine pumps used to currently dewater the hole will be used to remove water from the hole, when necessary, to support surrounding agriculture

LIGHT INDUSTRY 3

> Support those who have been trained in the community
> **Generate new income and resources in a resilient manner**
> In Cullinan, there potential to reuse old industrial buildings for new forms of production

ECOLOGICAL 4

> The **scarred landscape** consisting of mine dumps in the form of kimberlite trailing's and the slime dam needs to be **rehabilitated in order to prevent its negative effect on the ecology and industries (such as tourism and agriculture).**
> The plant species used for **rehabilitation and remediation** must not be invasive and must be able to establish a new habitat for endemic species and endangered species like the Rand Highveld Grassland vegetation type.

EDUCATION 5

> Support and educate the unemployed community and Refilwe
> **Resilience** is created **through complexity** of activities

THE VISION

- Proposed buildings
- Existing buildings of Heritage Significance
- Existing buildings
- Natural landscape
- Productive/Recreational Green Space
- Primary Spatial Structure
- Secondary Spatial Structure
- Existing Railway

4.2 The compound envisioned

Walking through the site, one is submersed in a narrative of understanding and discovering the lost, abandoned and deteriorating site. There is immediate confrontation with the beauty of the untamed nature and the ruined scattered landscape.

The compound has unfortunately lost its true identity. In its current state, there is no authentic portrayal of the site; neither of its associated history of hardship nor of its witness of suffering and death. The framework therefore aims towards uncovering the intangible narrative of the site. It aims towards overlaying the narrative with a productive landscape and research interventions that will facilitate towards the healing of the site and the memory. This dissertation proposes that healing can take place when the past is exposed and the story of those who lived, worked and died there is told. Through new skills and enrichment opportunities, the residents of Cullinan can work towards healing. This dissertation proposes that, after the eventual closing of the mine, the compound will provide a space to pay homage to the history and legacy of the compound, whilst achieving a functional purpose as well.

Compound Vision

Agriculture
For educational purposes and to supply the restaurant

Ruins re-appropriated by the insertion of new buildings
Reveal healing and the passing of time

Mulberry Orchids :
To feed the silk worms

Pilot projects

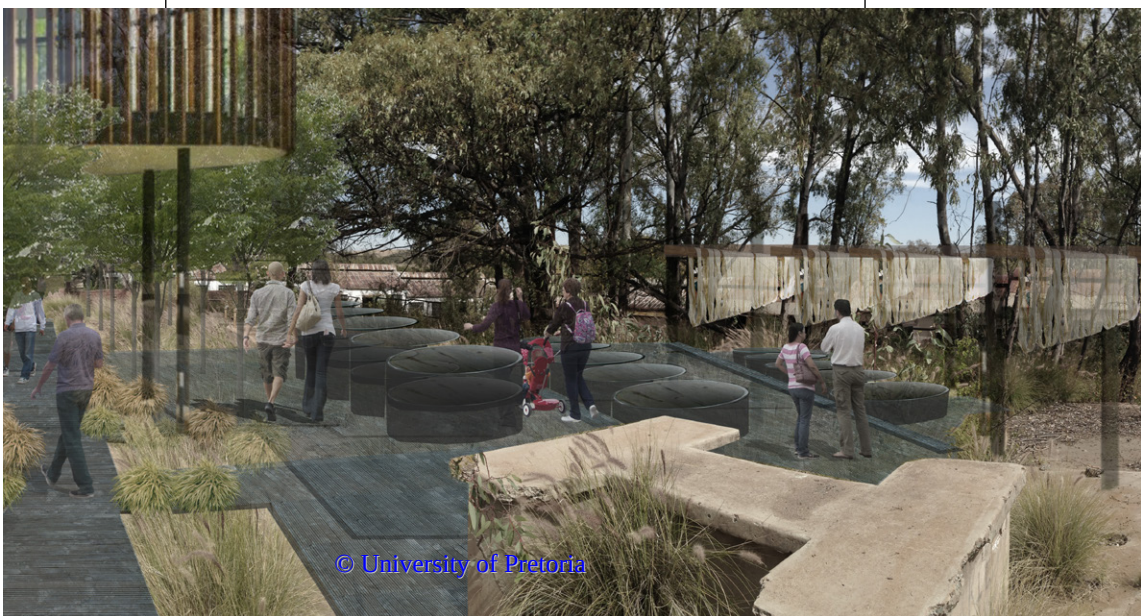
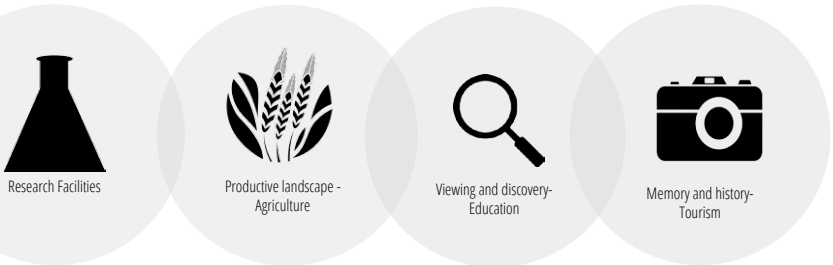
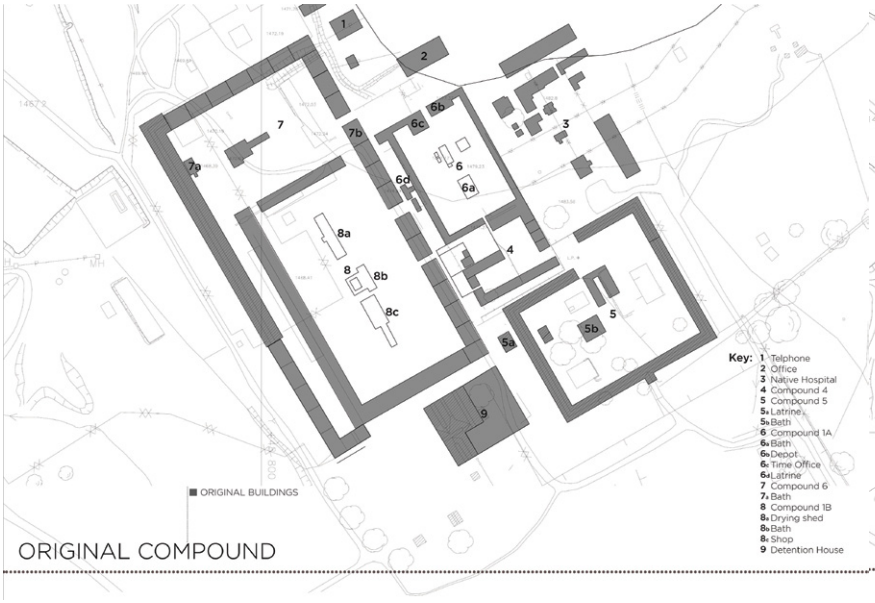


Figure:4_5. Compound envisioned. The different programs the site can potentially cater for (Compound group, 2014).

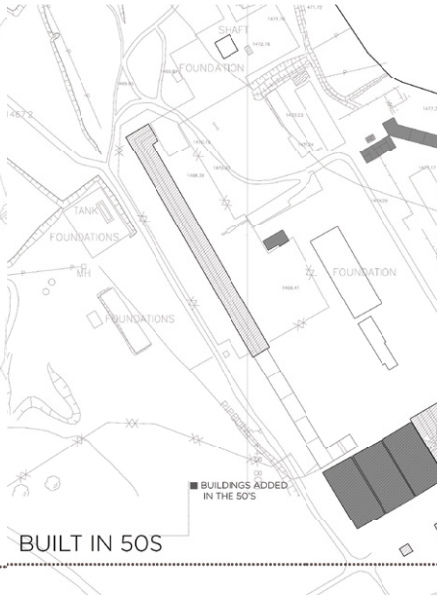


New Structure:
To facilitate the new functions

New walkways through history :
A mixture of old and new, to retain the memory of the past

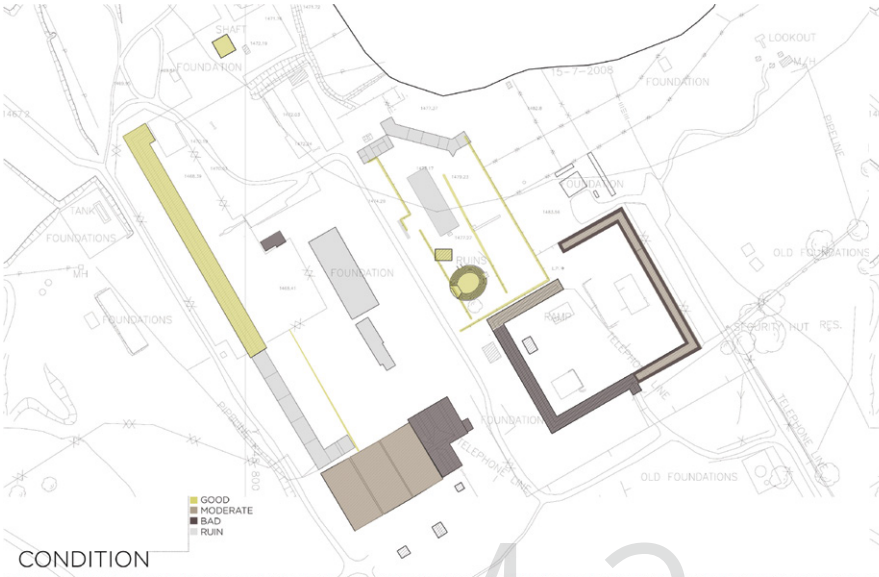


ORIGINAL COMPOUND

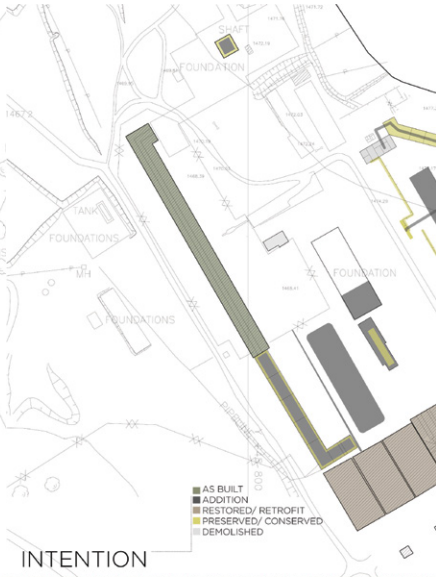


BUILT IN 50S

HERITAGE ASSESSMENT



CONDITION



INTENTION

HERITAGE ASSESSMENT

4.3

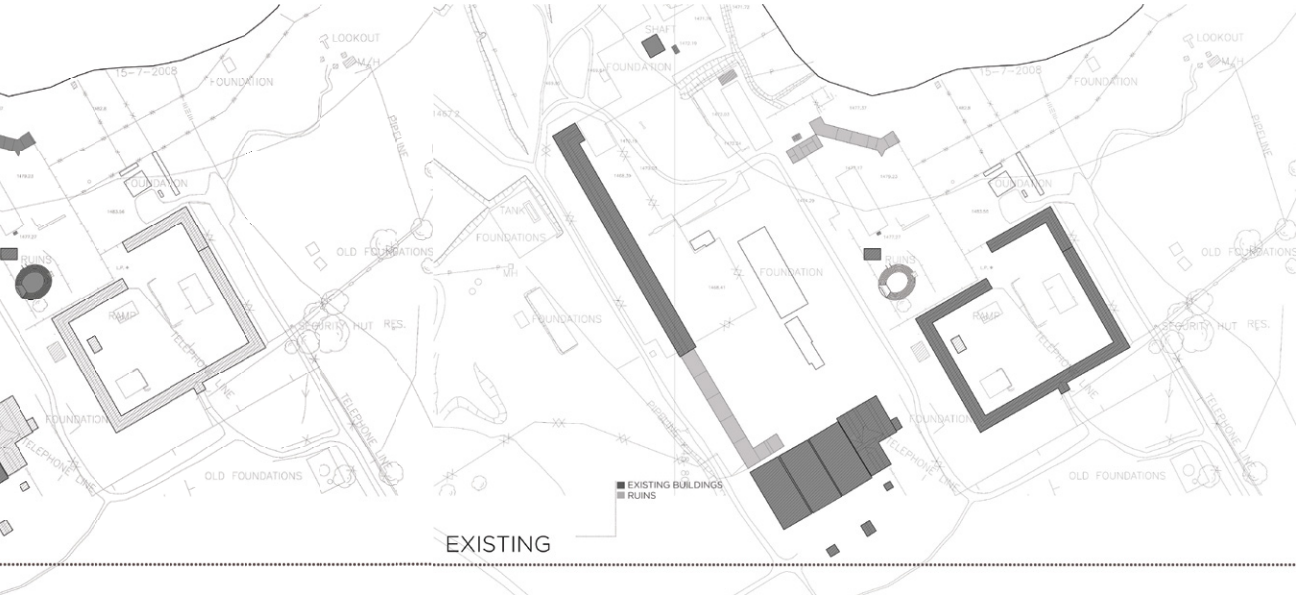


Figure:4_6. No.2 Shaft compound heritage assessment (Cullinan group, 2014)

4.4 Heritage Statement of significance

It is understood and acknowledged that the site carries significance, for it embodies the rich history of the larger Cullinan Mine complex. The Burra Charter process was followed in determining the statement of significance.

The Number 2 Shaft Compound is one of the last remaining structural remnants of history regarding the workers of the Cullinan Mine from a period dating from early to middle 20th century. The historic records of the compound are few and far between and are, more often than not, vague and inconsistent.
The mine is internationally recognised for mining immaculate diamonds in both quantity and quality. Therefore, it is only fitting that the history of the workers responsible for digging these specimens from the ground should be protected and celebrated.

The compound is imbued with cultural significance that has the capability of enriching future generations with the story and history of the site and the workers who lived there (ICOMOS 1999).

It should, however, be mentioned that the site in its present condition does not do justice to the authentic memory of the place. Time, weathering and looting has erased most of the historic fabric, leaving only traces of what once stood there. The cultural significance of the compound is embodied in the remaining historic fabric on-site, as well as in the setting and associated meaning of the elements on-site (ICOMOS 1999).

Upon visiting the site now, one could be misled by the untamed beauty of nature reclaiming the site with ruins scattered across the landscape – this does not effectively portray the inherent history of the site of suffering and hardship. However, the current state the site finds itself in now, one of decay and ruin, is a representative layer of history like all the others and carries equal importance “No.2 Shaft compound heritage assessment (Cullinan group, 2014)” on page 81.

The cultural significance of the site is embodied in the site itself – in the historic fabric, the use and associated meaning of the place, buildings and artefacts on-site (ICOMOS 2004). The compound is a manifestation of the uncelebrated people who contributed to the success of the Cullinan Mine. It is representative of the way in which the workers lived and socialised whilst working in the mine. It is testament to the hardships they had to endure whilst doing the bidding of the mine.

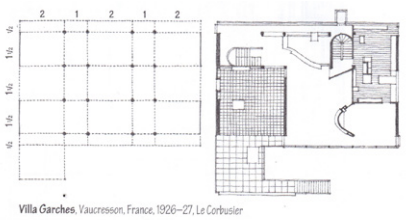
The cautious approach

The site should therefore reflect the true history of the mine and be allowed to reveal its difficult past. Conservation of the historic fabric and associated meanings requires a cautionary approach; changing as much as necessary but also as little as possible to still maintain the inherent value of the site (ICOMOS 1999).

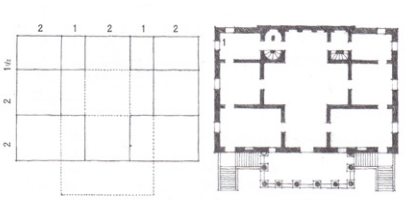
The desing response proposes the compound will receive a new contemporary layer that links with the large framework of the Cullinan Mine, which will aim at revitalising the area after the closure of the mine."Compound envisioned. The different programs the site can potentially cater for (Compound group, 2014)." on page 79. Thus, change and adaptation are inevitable. Change will be necessary in retaining the cultural significance of the compound, but should be guided by the cultural significance of the site to determine the appropriate areas of intervention (ICOMOS 1999).
The design/designer should play host to the rich layers of history the site possesses, communicating to visitors the hardships and suffering the miners had to endure. The cultural significance of many places is not readily apparent, and should be explained through interpretation. Interpretation should enhance understanding and enjoyment, and be culturally appropriate (ICOMOS 2004).

Only through a sophisticated and responsive design intervention will the heritage and integrity of the site be protected and represented in respect to all those who share in the rich history of Cullinan. It is our responsibility, as stewards of history, to use design to bring to light what the compound was, is and potentially can be.

4.5 The Grid



Villa Garches, Vaucresson, France, 1926–27, Le Corbusier



Villa Foscari, Malcontenta, Italy, 1558, Andrea Palladio

Through using various elements within the landscape and site, and extending their edges a grid system was established. This was done on the premise of what was ons site, what is and what potentially can be. The grid system drives decision making by communicating to the designer the inherent pattern on site .By looking and learning from this pattern reading the landscape becomes easier and informed decisions can be made. Using this information , crossing intersections were identified and a pattern was established.

The grid, Figure:4_7, led decision making for zoning and building placement. Elements that guided this process were - Walls and boundaries, historic footprints of buildings and structures on site, roads and access routes and finally existing buildings on site This was then used to establish a hierarchy system, nodes of importance, movements patterns and consequently a framework zoning diagram Figure:4_8.

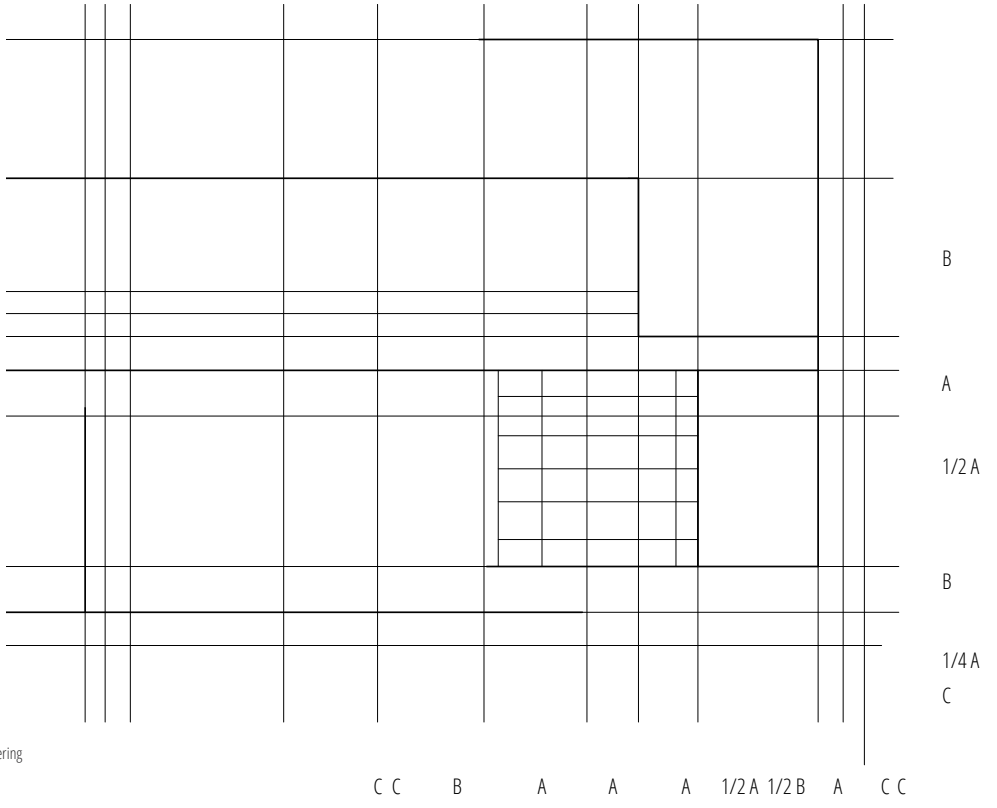


Figure:4_7. No.2 Shaft spatial ordering proposal (Cullinan group, 2014)

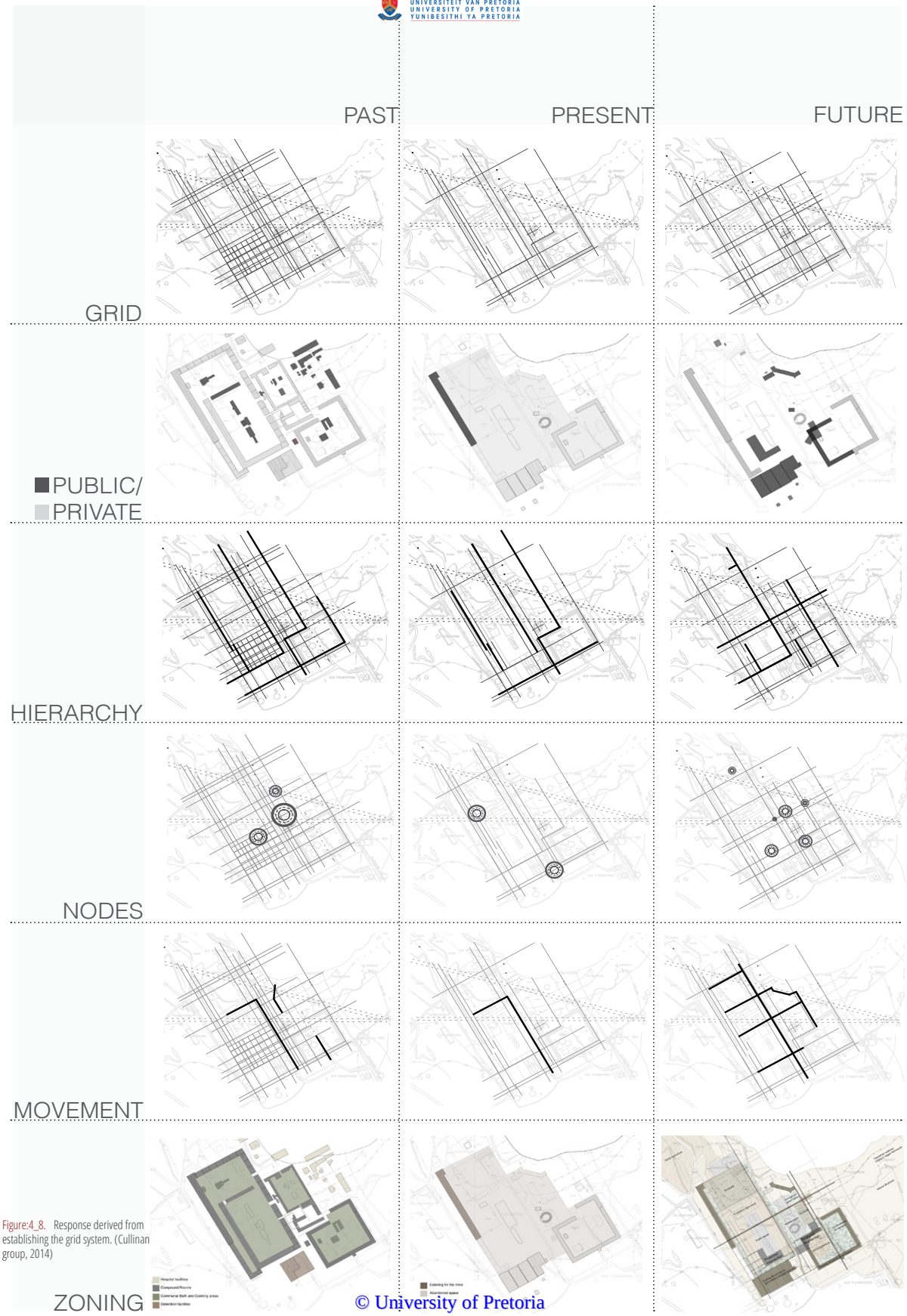


Figure:4_8. Response derived from establishing the grid system. (Cullinan group, 2014)

Compound framwork_Masterplan

4.7

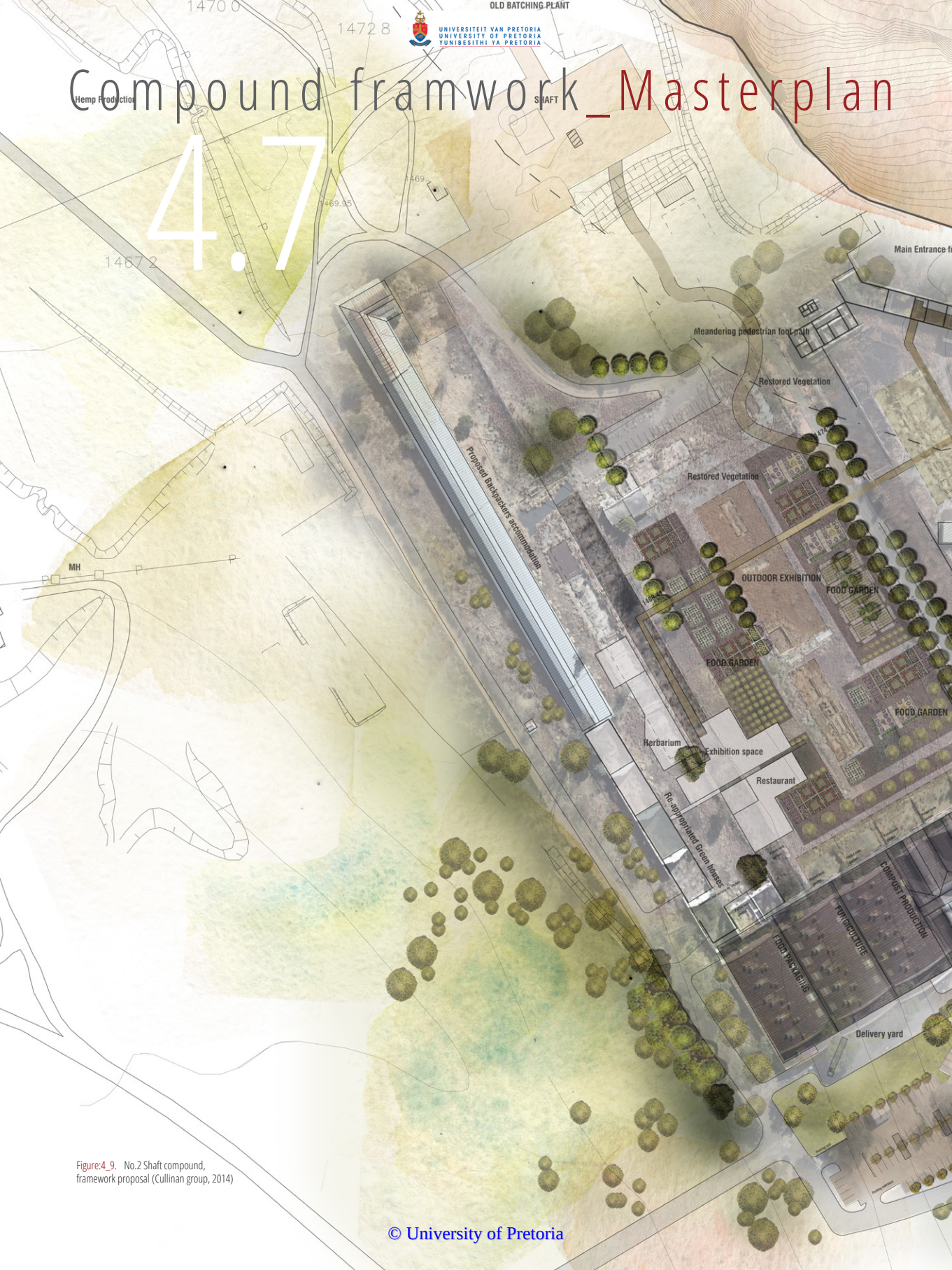
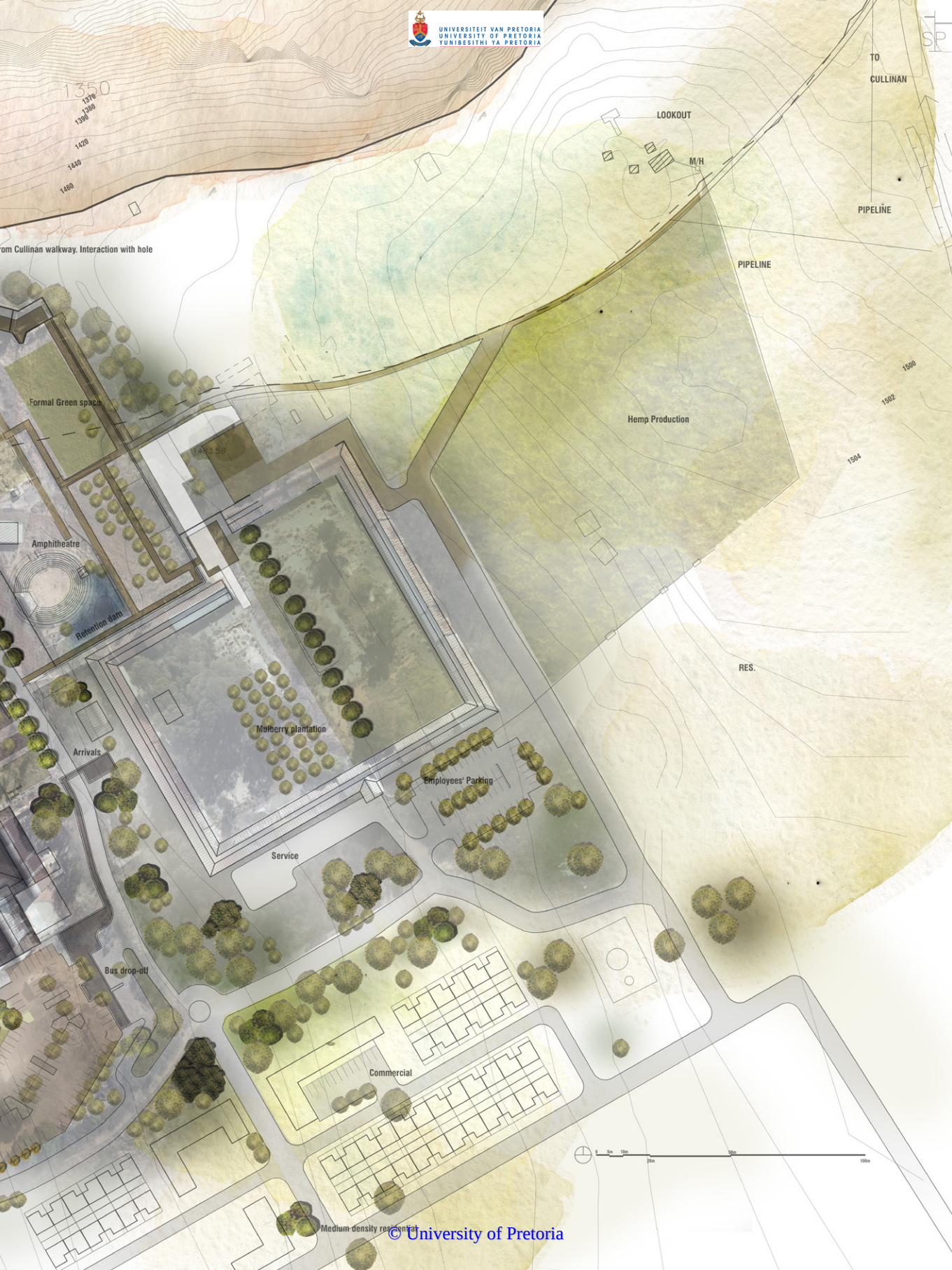
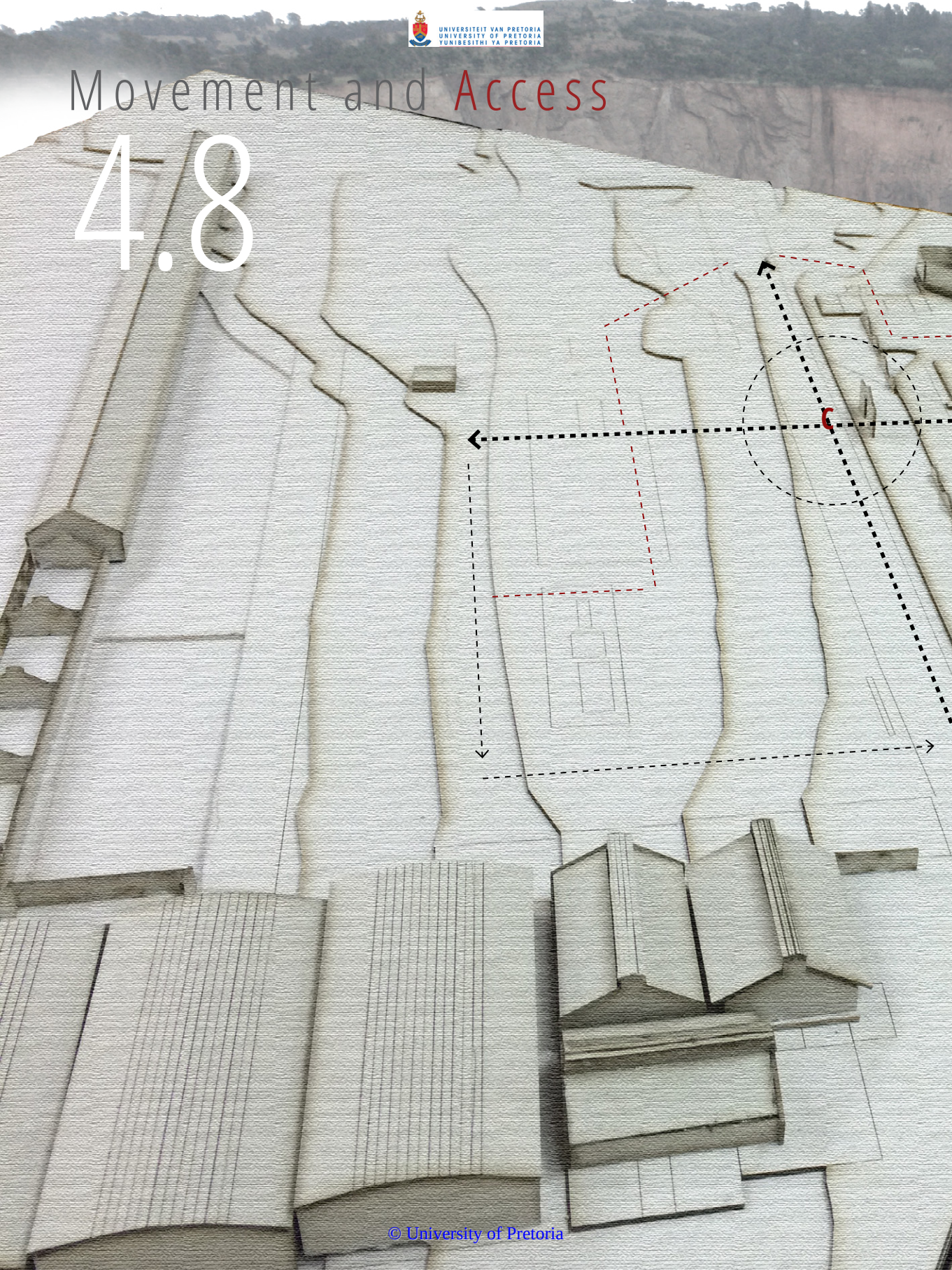


Figure:4_9. No.2 Shaft compound, framework proposal (Cullinan group, 2014)



Movement and Access

4.8



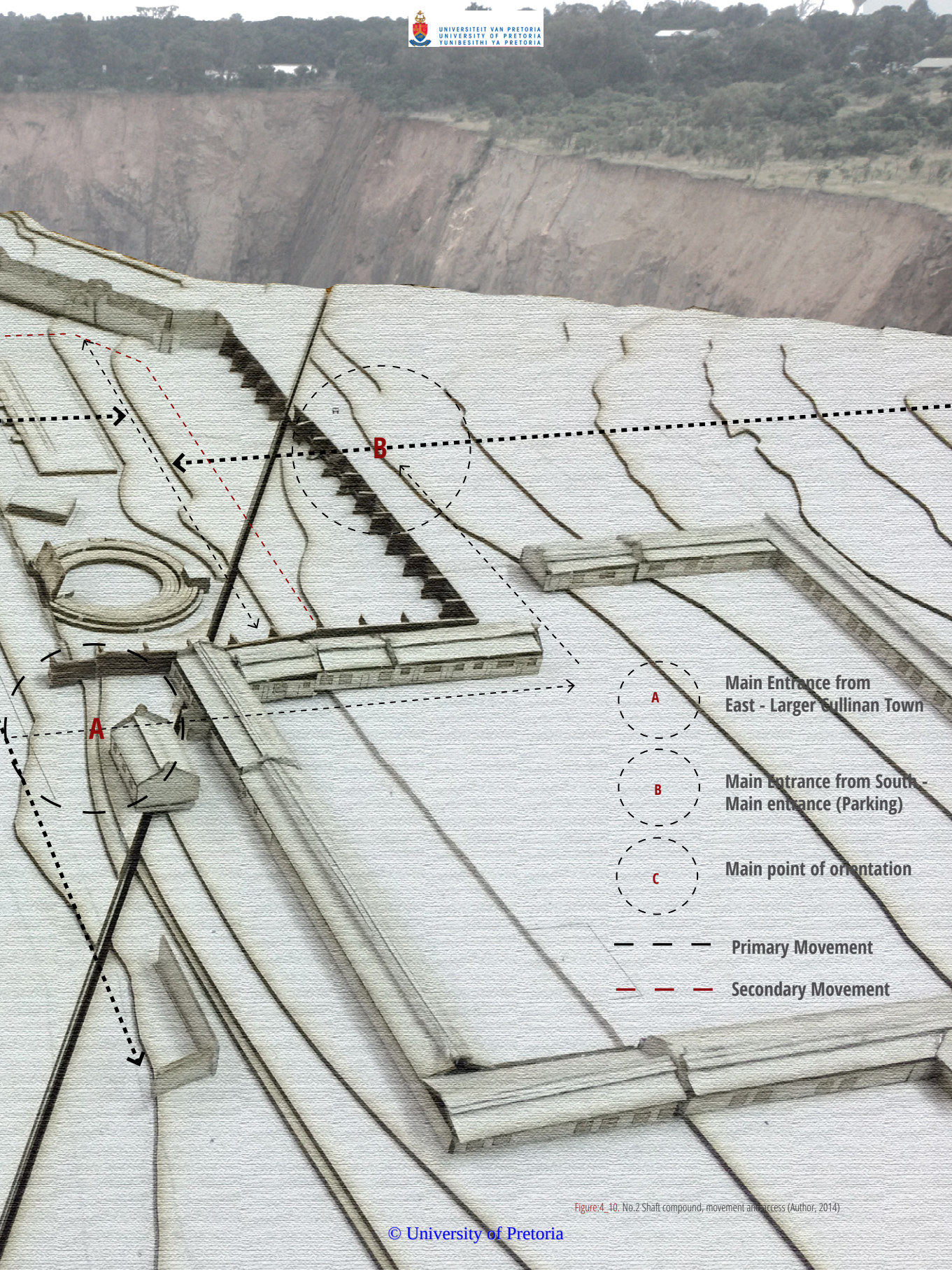


Figure:4_10. No.2 Shaft compound, movement and access (Author, 2014)

4.9 Proposal

The proposal for the compound has many facets. Its aim is a design that facilitates numerous layers. All these multiple layers are a response to the cultural significance of the site. The spatial ordering of the grid system established in No.2 Shaft spatial ordering proposal (Cullinan group, 2014:80) shows that the spatial ordering is based on the elements of significance on-site, as well as on natural and proposed elements. Through the decision-making process, appropriate places of development are identified. The site must function as a didactic landscape. It strives towards educating the public in the field of food production and research on the one hand and textile production and research on the other. The landscape design acts as mediator between the new contemporary layer and the intangible memory of place. No.2 Shaft compound, movement and access (Author, 2014:85) shows the main points of entrance and movement through the site proposed by the framework development.

Figure 4_11 on page 89 illustrates the vision of the landscape design. The landscape aims towards creating a narrative experience. This educates the user to the history of the site, and at the same time facilitates the visitor's recreational needs. Figure 4_8 on page 82 illustrates that the design aims at paying homage to the natural context in which the compound is situated. This includes rehabilitation of the damaged and protection of the existing natural fabric. The way in which the natural fabric invades the historic fabric is retained as far as possible. For this, too, is an important historic element of the site. Figure 3_18 on page 63

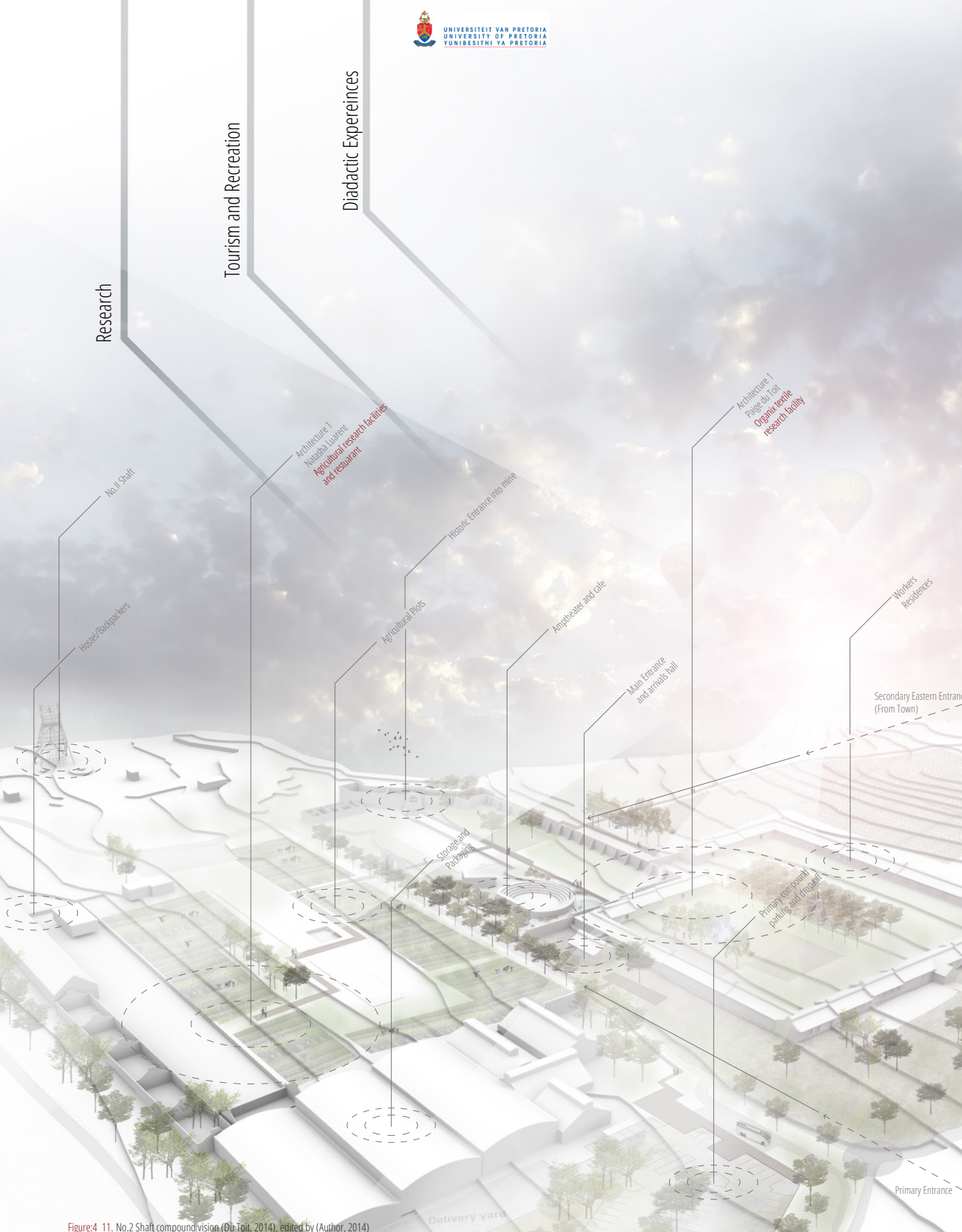


Figure:4_11. No.2 Shaft compound vision (Du Toit, 2014), edited by (Author, 2014)

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4.10

Celebration of the current layer of history

It is important to acknowledge that the chapter of history that the site at present represents (one of decay and ruin) is of equal importance and should be represented as such.

Old vs. New

Due to the site's cultural significance, the design needs to be clearly distinguishable from the old. This will also facilitate towards the effective communication of narrative.

Terra-Formation

Landscape vision

Movement and Access
This is not only important for logistic reasons on site. It will also form a central part of the landscape's narrative experience.

Contemplation and reflection
The narrative this dissertation aims to communicate is very emotional. It is therefore essential that the users are provided with ample opportunity to internalize what they experience.

Experiencing the inner working of site
The landscape is a didactic one. The food and textile production is adjacent to the landscape. This facilitates the exposure of the inner working of these facilities through various look-out and observation points within the landscape.

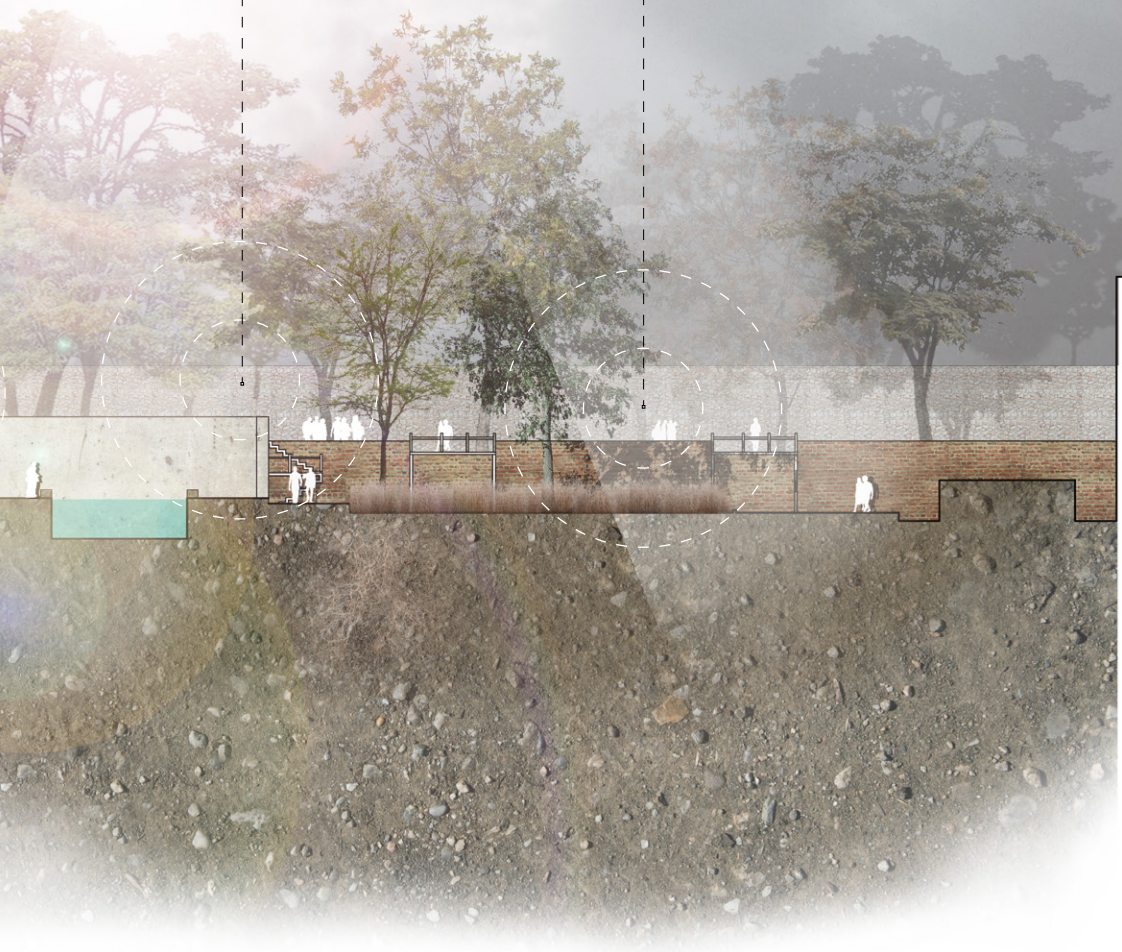

Figure:4_12. No.2 Shaft compound landscape vision (Author, 2014)

Exposed to the old

The palimpsest of history is evident throughout the site. The design will aim at exposing the user to the historic fabric, but not damaging it – 'doing as much as needed, but as little as possible'. The dissertation argues that bringing the user in close contact with the historic fabric will contribute to their understanding of the history of the site.

Axis

The historic movement patterns on-site were based on an axis system of movement, differentiating between primary and secondary route. The design will aim at maintaining this hierarchy system.

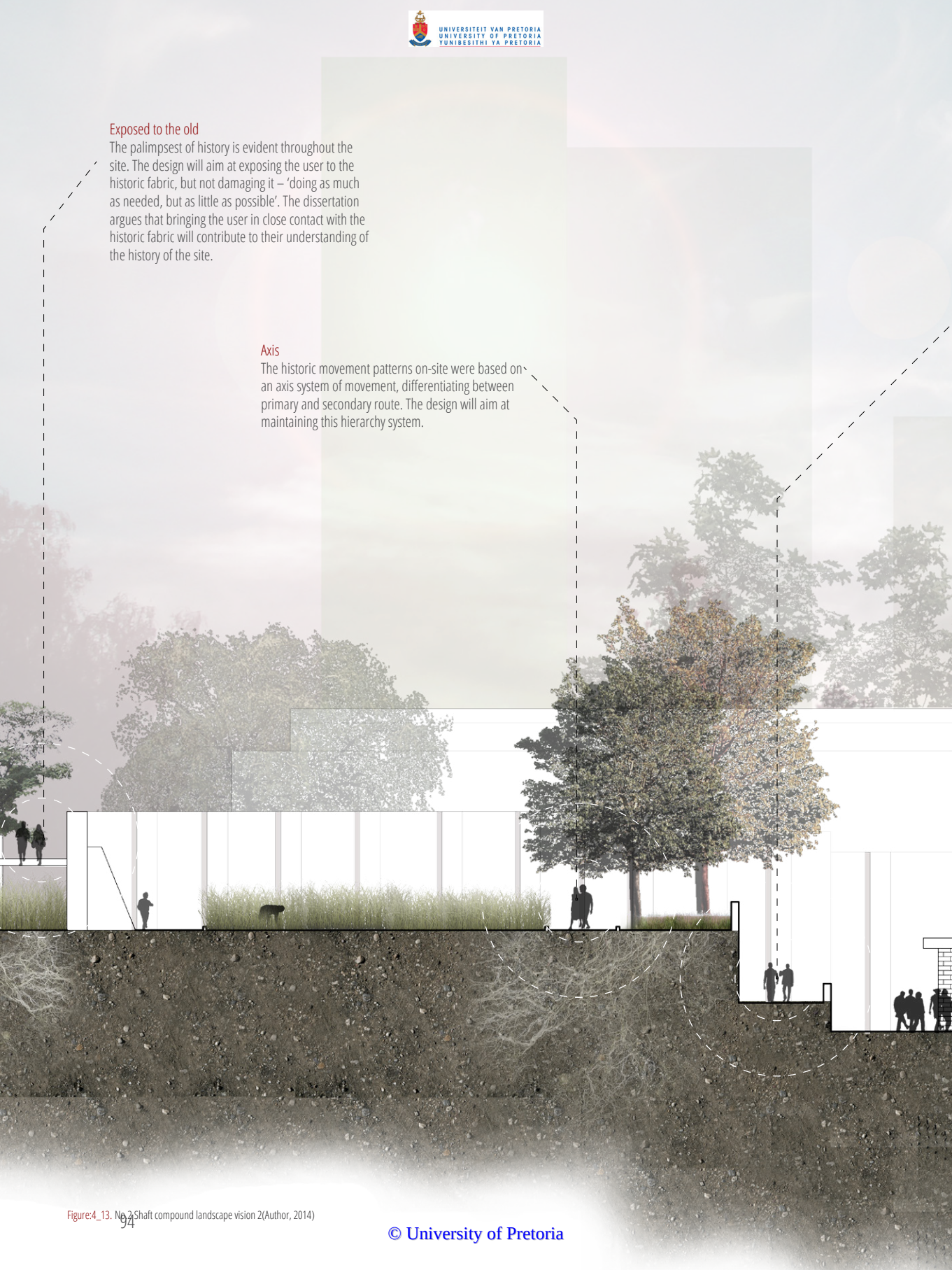

Figure:4_13. No 2 Shaft compound landscape vision 2(Author, 2014)

Up and Down

Level differentiation is a good way of creating spatial differentiation on-site. This is especially useful where narrative needs to be communicated.

Caution Approach

Using raised walkways throughout the site is useful where historic fabric needs to preserved. Also, it is a good method of exposing the users to the functionality of site by leading them through the research and production facilities.