



# INTRODUCTION



## 1.1. THE PROBLEM IN CONTEXT

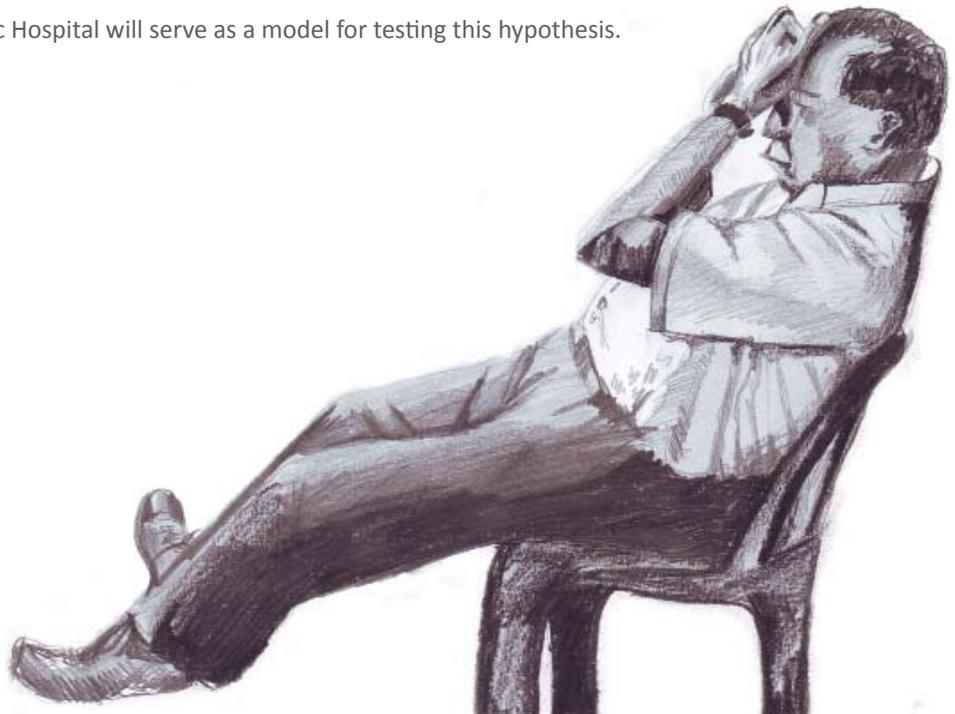
Mental illness is argued to be one of the world's greatest public health epidemics and therefore has an undisputed significance regarding the social and economical health of society. According to Torrey & Miller (2001:IX), the historical occurrence of mental illnesses consistently increased over the past few centuries. Statistics indicate that the number of cases tripled over the course of the 19th century and consistently increased since then. In Accordance, the World Health Organization (WHO) estimates that 450 million people worldwide currently suffer from mental illnesses with South African studies revealing that one in five people suffer from life altering mental disorders locally (Dlamini: 2006).

This manifested rise in occurrence of mental illnesses could arguably be attributed to many contemporary and fluctuating situations. These situations include those evident in the physical environment as well as the social environment, the latter of which alludes to altered perceptions and attitudes regarding mental illnesses and the way they are treated. Environmental psychology can therefore be identified as a field in which it becomes possible to focus on the interplay between people and their surroundings by stressing the profound influences that physical and metaphysical environments have on the mental health of society members.

The confinement of patients to mental institution reflects a stigmatised perception held by society regarding these illnesses, which in turn leads to mulish candidates refraining from seeking appropriate treatment (Dlamini:2006). This stigmatization subsequently has a negative impact on a patient's ability to facilitate the emotional healing process.

In addition to the treatment on offer by these places of healing, a cheerful outdoor environments that facilitate public contact as well as engagement with nature, have the potential to enhance the emotional healing process. Landscape Architecture is therefore identified as a plausible field in which the influences of the physical and social environment on mental health can be explored.

Weskoppies Psychiatric Hospital will serve as a model for testing this hypothesis.



## 1.2. INTRODUCTION TO SITE

Weskoppies is a government owned psychiatric institution which offers treatment for a variety of mental illnesses. The hospital is identified as one of the largest mental health facilities in South Africa with approximately 1400 beds, capable of accommodating roughly 5000 annual admissions and 5200 outpatients per annum.

### 1.2.1. HISTORICAL CONTEXT

The inaugural buildings date back to 1892 and are thus identified as having historical significance. As was the norm for that period in time, an Enlightened approach towards mental treatment was followed by the hospital. This approach involved limiting the confinement of patients, while providing work opportunities and various forms of outdoor activities in addition to recreation. The arguable success of this approach was evident in the amount of patients who passed through the institution. However, a lack of resources would later prove to be a limiting factor of the enlightened approach during the Anglo Boer war and subsequently never truly reinstated (Plug & Roos, 1992:219). Situated in the “Old Botanical Garden” of Pretoria, the site provides the ideal setting for a therapeutic outdoor environment while this inherent potential remains largely untapped.

### 1.2.2. PHYSICAL CONTEXT

Weskoppies is situated 2km west of Pretoria railway station, just south of Pilditch Athletic stadium in Pretoria West. The campus is within a 2km radius of several cultural monuments which includes the newly built Freedom Park and the Voortrekker Monument on Skanskop. The railway and industrial zone at the northern edge completely isolates the campus from the city (fig.1.5). The 149-hectare campus contains 274 permanent buildings while vast underutilized open spaces remain. The view of the Langeberge to the South reiterates the natural tranquillity of the immediate natural landscapes.

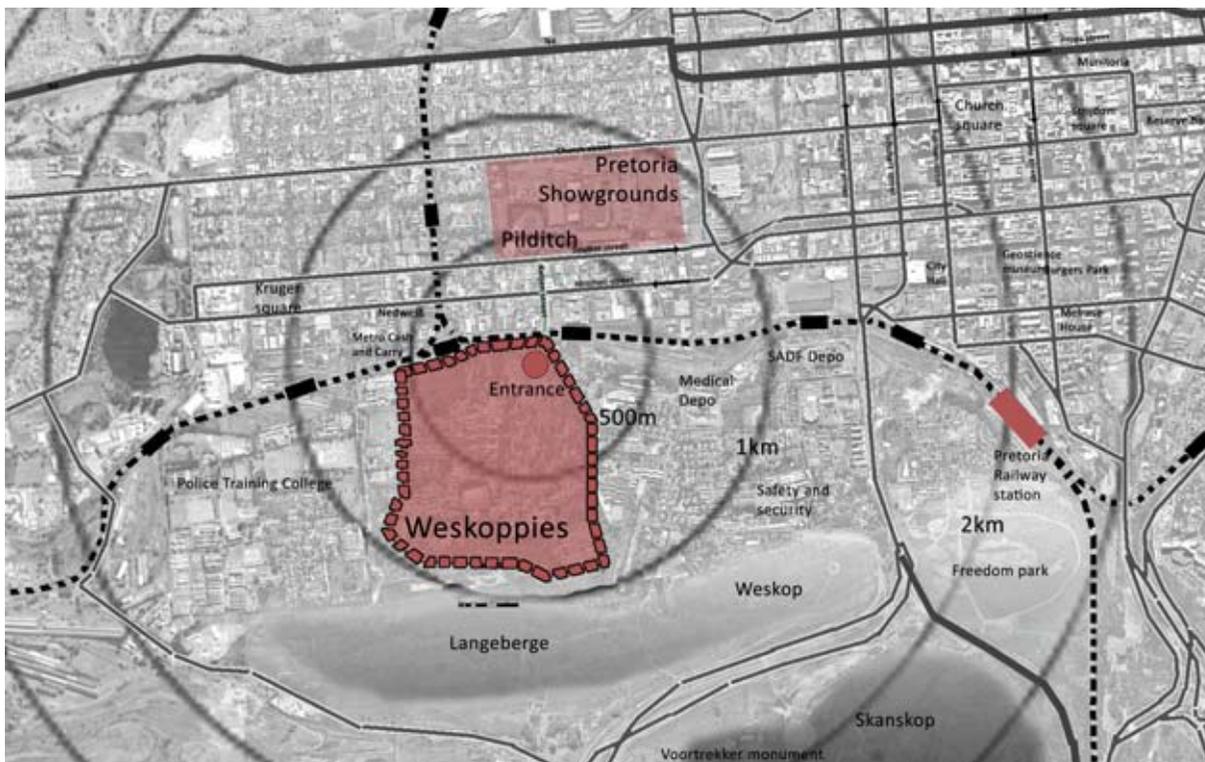


Figure 1.5: Location of Weskoppies with Pretoria show grounds situated within 500mm on the north, Pretoria Railway Station 2km east and the Langeberge on the south. (Author 2009)

### 1.2.3. SOCIAL CONTEXT

Weskoppies is hidden in an industrial area with no exposure to general public and while most residents of Pretoria know what Weskoppies are about, very few can state that they have caught even as much as a glimpse of the actual campus. The surrounding area is characterized by long established industrial businesses which has seen very little or any revival in recent years resulting in the area being relatively "un-personal" and "cold" with none the old charm that characterize many of Pretoria's other older suburbs.

## 1.3. PROJECT MOTIVATION

It is arguable that mental illnesses have a negative impact on the economy of South Africa. Direct expenditures include treatment and rehabilitation costs whilst indirect costs include loss in productivity, safety risks, increased staff turnover and suicide amongst others. A healing outdoor environment can possibly facilitate the decrease of identified problems by improving the amount of patients who pass through the institution while minimizing the chance of relapse after institutionalization.

As is becoming evident, the need for more research on the subject matter is crucial to understanding how current situations may be improved. Within the previously mentioned disciplines of Environmental Psychology and Environmental Design, the focus has historically been mostly on hospital interiors rather than outdoor spaces that could actually facilitate emotional healing more effectively. Few researchers have addressed the possible link between outdoor environments and mental health and the lack of supporting literature further augments the potential (Sachs, 1999:248).

The importance of Weskoppies as a precinct lies in its significance in the context of South Africa. As previously mentioned, the hospital is one of the largest psychiatric hospitals in the country and has played a significant role in South African history and psychology. It was the first psychiatric hospital in South Africa to follow an Enlightened approach to the treatment of mentally ill individuals. An appropriate open space proposal can help to regain what Weskoppies once was: 'a beautiful building, very healthily situated in large gardens and cultivated fields' (Plug & Roos, 1992:219).

According to Kaplan & Kaplan (1989), contact with nature can help people come to terms with their views of themselves and the world. Activities where patients, staff and visitors engage with each other and nature can develop a feeling of responsibility and connectedness to the natural environment, which can result in healthier emotional conditions and ultimately even more responsible behaviour towards natural systems.

## 1.4. PROBLEM IDENTIFICATION

### PROBLEM STATEMENT

How can the outdoor environment enhance and facilitate the psychological healing process?

### HYPOTHESIS

The physical design of the outdoor environment can improve the social environment and thereby enhance the psychological healing process.

## RESEARCH QUESTIONS

- How** can Landscape Architecture assist in improving the social and physical environment of the mentally ill?
- What** effect does the physical outdoor environment have on mental health?
- What** is the effect of the social environment on mental health?
- Why** is contact with nature beneficial to emotional healing?
- How** can the design of outdoor environments enhance the healing properties of nature?
- What** role can a Landscape Architecture have in changing negative perceptions about mental illness?

### 1.4.1 CHALLENGES

A dramatic change in environment could cause stress and be disorientating to the institutionalized individual. If the hospital environment is unsuitable, environmental stress could have negative implications on the patient and possibly lead to deterioration of the mental condition. Listed below are challenges specific but not limited to Weskoppies.

#### STIGMATIZATION

Publicity on Weskoppies is generally limited to isolated incidents inherent to such an institution. The fact that regular mention is made in the press to psychiatric evaluation for legal proceeding further compound this issue which result in a unfair generalization (refer to fig 2.3). For the person experiencing this prejudice it can result in various negative reactions such as; a hesitance to seek the necessary treatment, poor social adjustment, a feeling of hopelessness, low self worth and isolation.

An outdoor environment with a positive identity that accommodates uplifting activities and unique experiences for both the public and Weskoppies patients can result in positive publicity and positive public perceptions about the institution. This could also help to remove stigmatization that exist due to a lack of knowledge and understanding.

#### ISOLATION

Institutionalization often results in the patient losing his/her sense of belonging, purposefulness and connectedness to the bigger picture. All of these are key to maintaining a healthy human spirit. Weskoppies patients are physically isolated from the rest of society due to the railway and industrial zone that cuts Weskoppies off from the city. Interviews with various Weskoppies patients by the author indicated that many institutionalized patients lose track of date and time. Some patients are unaware of how much time has passed since being institutionalized. This can result in an inability for patients to cope with life outside the hospital boundaries due to a lack of support and understanding from the community.

The outdoor environment should be designed to emphasize the time and season. Appropriate integration between patients and the public can restore a sense of belonging, connectedness and purpose.

#### TREATMENT AND MEDICINE

Contemporary treatments of mental illnesses mostly focus on drugs that keep patients stable. The physical and spiritual well being of the patients are often neglected. Dependence on medication could result in a feeling of helplessness and a lost sense of control. Drowsiness is evidently a common side effect of most of these medications, as patients at Weskoppies tend to enjoy sleeping on the lawn during the day.

Comfortable outdoor sleeping areas can provide the medicated patient with the necessary rest without being confined to the building interior. Physical and spiritual wellbeing can be addressed through engagement with nature and activities.

#### UNEMPLOYMENT

Unemployment after institutionalization results in the relapse of many patients after rehabilitation. Job creation at Weskoppies could aid the rehabilitation process and establish a sense of independence, purpose, self worth and responsibility that plays an integral role in the psychological healing process.

**Connectedness** as used by the author refers to a patient's involvement in interpersonal relationships as well as his/her physical surrounding and more specifically nature. Once these two aspects are in balance a person becomes connected and his/her connectedness is measured with reference to the maturity of the respective relationships. It is argued that if a patient is in a state of connectedness it will enhance the recovery process

## 1.4.2 AIMS

To create a therapeutic outdoor environment, Landscape Architecture should propose solutions that facilitate the process of healing (Marcus, 1999:87).

### The open space system will aim to:

- Assist in the de-stigmatization of mental institutions by hosting uplifting activities and unique experiences for visitors and patients alike through a landscape with a positive character.
- Counteract the isolation of Weskoppies by increasing contact between patients and public.
- Create an outdoor environment that assists in restoring a sense of time, belonging, purpose and independence.
- Provide places for rest and contemplation.
- Provide job opportunities for both patients and the surrounding community.

## 1.5. CLIENT

### 1.5.1. SERVICE PROVIDER

#### Facility Management Unit

The Facility Management Unit (FMU) serves as a representative of the Department of Health and the hospital acting as the managing agent of the facility. The FMU is responsible for the repairs, maintenance and improvement of infrastructure, horticultural services and general maintenance of the hospital environment (Weskoppies 2009:4) The design is therefore proposed for the FMU as the client and possible future implementer.

### 1.5.2. USER

A healing environment should result in a positive memorable experience for all stakeholders.

#### Patients

Therapeutic settings can yield measurable improvements in mentally ill patients. These include speed of recovery, anxiety experienced and medication required (Martin 2002:83).

#### Variety of students, staff, public, visitors

The World Health Organization is increasingly recognizing that health should be viewed holistically and the key issue should be maintenance of well being (Stoneham 1997:23). A healing outdoor experience with positive social and physical activities will also serve as a preventative measure for mental illness and change perceptions of Weskoppies and its patients

## 1.6. DESIGN PROCESS

### The hypothesis will be tested utilizing the following process (refer to fig. 1.6):

The theoretical study will aim to answer the research questions stated 1.4.3. Through literature research, observations and interviews, a historic, physical and social context analysis was done for Weskoppies. Design guidelines were generated through a synthesis of the theoretical and contextual research. The aim of these guidelines was to inform the design decision-making process guide the design at every level (Porter, 2004:22). The design guidelines informed the development of an open space framework which serves as a guide for developing the outdoor environment at Weskoppies to have healing potential. It also informed the design of a sketch plan for an appropriate area in the open space framework that will serve as a catalyst for the rest of the site. This will attempt to illustrate a healing outdoor environment on a more intimate scale. The technical resolution will include material choices and technical details for the most prominent structures on the sketch plan design.

## 1.7. LIMITATIONS AND ASSUMPTIONS

The author is not formally trained or professionally experienced in the fields of psychology or psychiatry. Hence it is considered difficult for a designer to have an in depth understanding into the state of mind of the mental patient as this in itself is the subject of extensive study and education. For this reason the problem was viewed from the study of literature, observations and interviews with psychiatrists, psychologists and nurses to establish the design guidelines which will inform the design decision-making process.

For the purpose of this study it is important to differentiate between 'healing' and 'cure'. The author does not attempt to cure mental illness or replace the role of medication, but attempts to reduce stress and facilitate healing by proposing an outdoor setting that supports and compliments the medicinal treatment and wellbeing of the mentally ill patients.

The study excludes the maximum-security section on the southern hill. Patients at the maximum security section include court ordered patients sent for a 30 day observation period to determine whether they are fit to stand trial. The section also includes patients that are a danger to themselves and society and their conditions range from extreme mental illness, aggression and risk of absconding.

For the safety of all patients it is vitally important to ensure that a fair degree of access control is maintained throughout the precinct. The railway line can be extremely dangerous for patients with suicidal tendencies or lack of judgment.

Figure 1.6: Diagram illustrating the design process as described in 1.6 (Author 2009)

