

**CONTRIBUTIONS OF THE BUILT HEALTH-CARE ENVIRONMENT
TO EFFECTIVE TREATMENT AND RECOVERY:
A Proposed Community Hospital for Addiction and Mental Health in
Durban**

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A dissertation submitted to the Faculty of Humanities, Development and Social Sciences, University of KwaZulu-Natal, in partial fulfilment of the requirements for the degree of Master of Architecture.

Durban 2010

**“With each generation, designing the optimum mental health-care facility presents a
unique set of challenges”**

John Bentley Mays

DECLARATION:

I hereby declare that this document is my own unaided work. It is for submission to the School of Architecture, Planning and Housing, University of KwaZulu-Natal, Durban, in partial fulfilment of the requirements for the degree of Master of Architecture. It has not been submitted before, for any degree or examination, at any other educational institution.

ACKNOWLEDGEMENTS:

There are many people who have, in some way, contributed to this study. However, I would especially like to thank the following individuals, who selflessly gave of their time in the interest of guiding me through this process, and without whom I could not have achieved my goal:

My supervisor, Mr. Majahamahle Mthethwa – thank you for always preventing me from wandering off my intended path, and enabling me stay focussed on my objectives. I could not have communicated my ideas adequately without your valuable input.

Our academic coordinator, Mr. Phillipe Yavo, assistant academic coordinator Mr. Isaac Levy, and Professor Derek Wang – thank you for your patience and tireless efforts during the past year.

Mr. Ivor Daniel and Mr. Tony Wilson – thank you for your efforts to help me despite having absolutely no obligation to do so. I feel greatly indebted to you both.

Dr. Jonathan Burns, Dr. Colin Levisohn, Mrs. Carol do Toit, Mr. Vernon Goss, and Mr. Sam Pillay – thank you for selflessly giving of your time. Your professional input has been invaluable to my research.

My parents, Dr. Albert Lawrence Ussher and Mrs. Ingrid Linnea Ussher – thank you for your support and guidance throughout the years. It has been especially valuable to me during this process.

DEDICATION:

This dissertation is dedicated to my parents, Dr. Albert Lawrence Ussher and Mrs. Ingrid Linnea Ussher, who have always been so incredibly generous and supportive of my studies.

ABSTRACT:

This study was intended to determine the architectural characteristics of a built environment that makes a positive contribution to the effective treatment of addictions and associated mental illnesses. Buildings affect people both physically and psychologically: Architects and interior designers create retail spaces that increase sales, restaurants that stimulate appetite and offices that maximise productivity. But do they design mental health-care facilities that improve treatment and recovery? Surely, given the nature of its function, this building typology is the most deserving of attention with regard to the subject of ‘environmental psychology’.

On the contrary however, mental health-care has a history of inadequacy when it comes to the buildings that have been constructed to facilitate it: During the middle of the twentieth century – particularly in Great Britain and the United States of America – state ‘mental asylums’ housed hundreds of people in oppressive, inhumane buildings, remote from their communities. Derelict asylums bear testimony to the ‘de-institutionalism’ movement that followed, favouring out-patient care in the community context. On the other hand however, homeless, destitute addicts and mentally ill individuals tell of the shortcomings of community-based care. Current medical insights have now led to a new concept of ‘balanced-care’, which calls for the integration of in-patient and out-patient treatment. This new approach provides an opportunity for architects to re-define the mental health-care facility – to humanise the institution and create treatment environments that contribute positively to recovery.

The purpose of this study was therefore to establish a sound understanding of the unique needs of this particular user group, to interpret the implications of these needs with regard to the design of the treatment environment, and to assess the appropriateness of existing facilities in terms of these findings. The research was carried out by way of consultation with local mental health-care professionals, a review of existing literature on the subject, and relevant precedent and case studies. The outcome was a set of principles and criteria to inform the design of a new addiction and mental health clinic in Durban.

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PART ONE:

BACKGROUND RESEARCH

CHAPTER 1:
INTRODUCTION

1.1 INTRODUCTION

1.1.1 Background:

Buildings reflect the beliefs and aspirations of the people who create them. As public understanding regarding various subjects changes over time, so too does the architecture designed to facilitate these subjects. The location and design of mental health-care facilities is a particularly good example of how changes in understanding and policy affect changes in architecture: From the remote, forbidding ‘mental asylums’ of the pre-1950’s to the community-based clinics of the ‘de-institutionalism’ era.

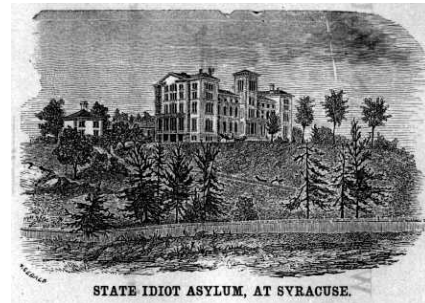


Figure 1 – Public attitudes towards mental health in the past – ‘State Idiot Asylum’, Syracuse, New York, USA 1855 (<http://library.upstate.edu>: 2010).

The issue at hand however, is that architecture does not merely reflect human thoughts and attitudes – more importantly, it also influences them: Dutch architect Aldo van Eyck, who identified architecture with whatever it can affect in human terms (Team 10, 1962: 87) declared: “First, man creates environment, and environment, in its turn, influences man” (Team 10, 1962: 24). Few would deny that as human beings, we are significantly affected, both physically and mentally, by our surroundings, whether natural or built – the subject of environmental psychology has been researched and documented for decades. Surely then, buildings constructed specifically to facilitate care for the mentally ill have a particularly important role to play in this regard. According to the director of SANCA Durban, Mrs. Carol du Toit (pers. comm. 12/05/2010), even the best medical professionals cannot provide adequate care in an inappropriate treatment environment. Unfortunately however, the suitability of built environments for mental health-care has always been a global problem.

There seem to be many contributing factors to this inadequacy. According to McCurry, Nanda, and Pati (2009: 116), health-care architecture in general is often neglected when it comes to important design considerations, such as the psychological effects of environmental aesthetics. Another factor is that since understanding of mental illness and its treatment has changed so dramatically over the past century, the designs of most facilities are based on what is now superseded professional consensus regarding the very processes that they are supposed to facilitate. Another significant part of the problem is that many facilities, especially addiction treatment clinics, are in fact not purpose-designed at all, but re-used buildings, such as schools and houses. It is because of the combination of many factors like these that many mental health-care facilities in South Africa, as in other parts of the world, are totally inappropriate environments for effective care delivery. So, what is an appropriate treatment environment? Surely it is one that responds to the unique needs of the mentally ill.

1.1.2 Motivation for the Study:

The South African Government's *Mental Health Care Act No. 17 of 2002* recognises that "health is a state of physical, mental, and social well-being" and that "there is a need to promote the provision of mental health-care services in a manner which promotes the maximum mental well-being of users of mental health-care services and the communities in which they reside".

Prior to 2002, South African legislation such as the *Mental Health Act No. 18 of 1973* reinforced the "alienation, stigmatisation and disempowerment of mentally ill patients in South Africa" (Burns 2008: 46). The 2002 act, however, with its core principles of human rights, decentralisation and integration of mental health care at primary, secondary and tertiary levels of delivery; and its focus on care, treatment and rehabilitation, is more in keeping with the accepted standards throughout the rest of the world (Burns 2008: 47). However, Burns points out that as was the case in the United States of America and the United Kingdom, the ideals set out by new legislation are often not easily achieved. He identifies the inadequacies of the built environment as one of the main reasons for South Africa battling to live up to its own legislation: "Mental health-care has been sorely neglected in South Africa, and transformation of the services requires political leadership and adequate funding" (2008: 48).

These inadequacies are both quantitative and qualitative – The need is not merely for more facilities, but more appropriate ones. Current treatment methods such as 'balanced care' and the 'integrated treatment model' require a new type of facility in which to provide care for the mentally ill. However, while guidelines regarding the management of treatment facilities are plentiful, recommendations regarding their design are desperately needed.

1.2 DEFINITION OF THE PROBLEM, AIMS AND OBJECTIVES

1.2.1 Definition of the Problem:

While the transformation of services in South Africa may not be possible without political leadership and adequate funding, it requires more than that. It is imperative that the requirements of modern mental health-care in terms of the built environment are identified, so that actual recommendations regarding the location and design of future developments can be made.

1.2.2 Aims:

The fundamental aim of this study is to establish a set of architectural principles and guidelines by which to design appropriate, responsive and sustainable mental health-care facilities in present-day South Africa.

1.2.3 Objectives:

- Investigate and analyse the history of the relationship between public attitudes towards the mentally ill, and the built environments that have been constructed to facilitate their care.

- Develop an understanding of the nature of mental illness and the current treatment methods that are to be accommodated.
- Identify the fundamental needs of the patients in treatment, and also the needs of their care givers, families and fellow members of their communities.
- Interpret the implications of these needs in terms of the built environments that are appropriate for treatment and recovery, as well as for positively affecting public understanding regarding mental illness.
- Consider the recommendations of health-care professionals, social workers, architects, and patients regarding the architectural and planning requirements of modern mental health-care facilities, both globally and in South Africa.
- Examine and evaluate existing architectural responses to these requirements by way of relevant precedent and case studies.
- Apply the findings to the formulation of a set of design criteria, principles and guidelines for mental health-care architecture in present-day South Africa.
- Demonstrate these concepts through the design of a model building.

1.3 SETTING OUT THE SCOPE

1.3.1 Delimitation of Research Problem:

It is not proposed that this study will show that architecture can solve the social issue of addiction and mental illness in South Africa, but rather that it can make a positive contribution to it. Therefore, this study is not aimed at generating any medical or other non-architectural recommendations or conclusions of any kind – it is the role of health-care professionals to study mental illness, devise new treatment strategies, and determine the demand for new facilities. The architect's task is to apply the outcomes of such study to the process of design.

The premise, upon which this study is based, is that the location and design of a building has the potential to positively or negatively influence its occupants and the activities that they carry out within and around it. Therefore, this study is intended to demonstrate the value of appropriate architectural design to a social issue such as mental health-care, and to propose recommendations regarding the design of the environments in which care is provided.

1.3.2 Definitions of Terms:

- **Addiction:** A mental illness whereby a person is unable to discontinue a particular act despite knowledge of its negative effects to their health and quality of life.
- **Asylum:** This word has developed a split meaning – One is: An inviolable refuge, as in 'political asylum'. The other is: An institution for the care of mentally ill individuals, developed in the United Kingdom during the nineteenth century, as in 'mental asylum'

(Hodgson, 2008). Unless otherwise noted, it is with the latter meaning that the word is used in this dissertation.

- ***Co-morbidity:*** While the medical term ‘morbidity’ refers to a diseased state, ‘co-morbidity’ refers to the co-existence of two or more diseased states.
- ***Dual Diagnosis:*** The co-morbid condition of a person who suffers from both addiction and another mental illness, particularly when both are severe and aggravating to one another.
- ***fMRI:*** ‘Functional magnetic resonance imaging’ – a type of neuro-imaging that measures changes in blood flow related to neural activity in the brain and spinal cord.
- ***Humanise:*** To make humane, kind or gentle.
- ***In-patient:*** Treatment provided to patients while they are resident at the facility.
- ***Integrated Treatment:*** Model for the treatment of dually-diagnosed patients’ addiction and mental illness simultaneously, by the same care givers and at the same place.
- ***Methamphetamine:*** A highly addictive illicit stimulant known colloquially in South Africa as ‘tik’.
- ***Out-patient:*** Treatment provided on a regular basis to patients who are not resident at the facility.
- ***Primary Health-Care:*** The first point of contact between a patient and the health-care system, which can be accessed by the public directly and without prior referral.
- ***Therapeutic Community:*** A participative, group-based approach to long-term mental illness and addiction, in which treatment comes in the form of social support from care providers and fellow patients.
- ***Symbiosis:*** In biology, symbiosis is the term given to the relationship between two or more organisms living together for the benefit of either one of them (commensalism), or all of them (mutualism), sometimes even to the detriment of the other or others (parasitism). Outside of biology, the term is generally understood as a relationship that benefits all parties concerned, as in mutualism. It is with this lay meaning that the word is used in this study.

1.3.3 Stating the Assumptions:

As mentioned previously, the subject of this study is essentially architectural – recommendations regarding treatment methods and other medical issues are the responsibility of health-care professionals. However, conclusions of an architectural nature must be based on such medical recommendations. Since there is seldom total unanimity in the medical community regarding details pertaining to the nature of mental illness and its treatment methods, for the purpose of this study, assumptions have had to be made. Specifically, based on the overwhelming

evidence in support of the Integrated Treatment Model and the Balanced-Care approach, it will be assumed that they are indeed the most appropriate, effective methods of treatment.

1.3.4 Hypothesis:

It is proposed that by studying the nature of mental health-care and the built environments that have been constructed to facilitate it, it can be shown that current medical understanding demands new, more appropriate treatment environments. More specifically, facilities that offer concurrent treatment of both addiction and mental disorders in a community context are necessary for the provision of adequate mental health-care. Most importantly, it is only by understanding and responding to the unique human needs of the patients, that architects will be able to design more appropriate built environments in which care for the mentally ill can be provided.

1.3.5 Key Questions and Issues:

- What are the core needs of the mentally ill individual or recovering addict?
- What does current professional consensus regarding mental health-care provision in South Africa suggest about the type of buildings that are needed to facilitate it?
- Can architecture contribute positively to this social issue?
- How can the built environment aid recovery?
- What is the meaning of a ‘therapeutic environment’?
- To what extent can a building have a direct psychological effect on its occupants?
- How else can the environment contribute, such as by influencing social behaviour?
- How can the building contribute to this social issue in other ways, such as by aiding education and awareness of addiction and mental illness?
- What physical context is most appropriate for the centre to facilitate the treatment and re-integration of patients back into society?
- How can a building’s location and architectural language help not only to reflect new professional attitudes towards the mentally ill, but also to address stigma and positively affect the attitudes of the public?

1.3.4 THEORETICAL FRAMEWORK:

Conceptualising a ‘Therapeutic Environment’

The word ‘asylum’ evokes ideas of the custodial containment of the mentally ill and of insensitive, inhumane institutions offering little or no care. Public criticism of the asylum as a jail-like institution of oppression and offence to human rights, coupled with new public understanding of the important role of family and the community in the recovery process, ultimately led to the de-institutionalism movement in many parts of the world from about 1950 (Joseph, Kearns and Moon,

2006: 134). Nowadays, the popular approach, and that of South Africa, is to focus on providing care in the community.

However, the associations that people make with the word ‘asylum’ appear to be due to the reputation that ‘mental asylums’ have acquired over time, and not as a result of the meaning of the word itself. According to Charles Hodgson (2008) the word ‘asylum’ stemmed from the ancient Greek legal term for ‘right of seizure’ – *sulon*. *A-sulon* therefore meant ‘no right of seizure’. This is why we understand that a refugee might seek ‘asylum’ in a church. *A-sulon* made it into the English language via Latin as ‘asylum’ in about 1400. Since then, it continued to be used generally as ‘any place of refuge’, until the mid-eighteenth century, when it began to be used specifically as ‘a place of refuge for people suffering from some sort of medical ailment, including mental illness. But as Hodgson puts it, “When a person is mentally ill, there is sometimes a fine line between putting them in an institution to protect them, and putting them in an institution to protect everyone else”. He explains that it was this involuntary committal of patients, as well as the unpleasant, inhumane and even abusive treatment of the mentally ill within these ‘mental asylums’ that caused the meaning of the word to split. It certainly is ironic that a building typology that is named after the concept of sanctuary and refuge now represents a place of inhumane, involuntary confinement and maltreatment.

The international transformation to the community-based approach has generally been accompanied by the vilification of the asylum model and any characteristic associated with it. In *Selling the Private Asylum: Therapeutic Landscapes and the (re)Valorisation of Confinement in the Era of Community Care*, Joseph, Kearns and Moon (2006: 134) cite Gleeson’s contention (2001) that “The implicit historic binary construct of *asylum:good, community:bad* has since been recast as *asylum:bad, community:good*”. But they find this ironic, given that the small-scale residential components of contemporary community care initiatives often take on a custodial form reminiscent of the asylums they have replaced (2006: 134). While referring specifically to care in the private sector, Joseph *et al* argue that seclusion and concealment “are, to some extent, attractions for a client base that is, largely, admitted on a voluntary basis”. This claim was seconded by the director of Riverview Manor Specialist Clinic, Mr. Vernon Goss (pers. comm. 20/05/2010). Joseph *et al* claim that the attitudes of the general public towards the asylum are hegemonic in nature, and that many of the problems associated with this kind of facility are in fact management related (2006: 133).

There is currently an emerging body of literature calling for a re-evaluation of the original intentions of the asylum model as a place of protection and nurture. Joseph *et al* cite Gesler (1992): “...the move away from asylum care was accompanied by a general perception that the asylum had ‘failed’ as a treatment modality for people with mental health problems. This verdict in turn reminds us that the original conception of the asylum had been, in part, positive and therapeutic, as well as profoundly geographic. It sought to promote the recovery of mental health

by the removal of the 'client' from the stresses of everyday life, through confinement in an ordered, harmonious and calming place of sanctuary – what might nowadays be termed a *therapeutic landscape*" (2006: 131). Joseph *et al* point out that there are still asylum-type institutions, particularly in the private sector, free from state governance which calls for non-residential community-based care, and that these facilities' financial independence and long-term survival suggests that there is still a significant public demand for asylum-type care. In *Architecture Signifying Social Control: The Restoration of Asylums in Mental Health Care?* (2000), Hazelton and Morrall even predict a re-birth of asylum-based mental health-care in Australia and the United Kingdom.

Joseph *et al* draw on Gesler's (1992) idea of a 'therapeutic landscape': "Places or settings that have a reputation for healing founded in a combination of factors including historical precedent, natural attributes and symbolic association". They contend that the asylum model offered the opportunity to provide such a place: "Whatever their shortcomings in practice, asylums appear, at least in part, to be predicated on such ideas - Park-like grounds, seclusion and healing through removal from society and exposure to the positive properties of particular places were deeply embodied in traditional notions of asylum as a care delivery modality", and suggest that "The goal of this strategy was to create a more convivial and therapeutic setting for the over-stressed mind in which the confusing chaos of the contemporary city was countered by the perceived stability and tranquillity of the rural and quasi-rural settings offered by asylums" (2000: 134).

John Mays (2007: 55) also contends that the asylum typology was indeed founded on sound principles. He explains that this treatment model was developed in the early nineteenth century by what was then a "new psychiatric elite" in Britain and North America, who were appalled by the former regime of "chaining the 'mad' in dangerous prisons and filthy dungeons". They called for "a new hospital architecture to express the spirit of the times: open to fresh air and sunlight, in peaceful rural settings, from which cruelty and neglect had been banished in favour of good diet, sensible recreation and humane, individual care of the mentally ill". According to Mays, John George Howard's 'Lunatic Asylum' which opened in 1850 on Canada's CAMH site in Toronto, "promised to be a great architectural incarnation of this new idea in psychiatry". However, early optimism about Howard's asylum was ultimately dimmed by overcrowding and the eventual realisation that mental illness was "more intractable and insidious than the earlier generation of 'fresh-air psychiatrists' had believed". By the 1970's, Howard's asylum was generally hated by patients, doctors and ordinary Torontonians, to whom it had come to symbolise the atrocious aspects of psychiatric care that most people associate with 'mental asylums' today. Its demolition was completed in 1976 during the de-institutionalism movement (2007: 55).

The reality though, is that the failure of the asylum typology is not only because of poor management – the buildings themselves were totally inappropriate treatment environments. One

only needs to briefly observe the forbidding, hostile looking exteriors and inhumane, institutional interiors of these buildings to realise that, irrespective of their beautiful rural settings, their designs were horribly inappropriate, and that the architecture of these places also contributed to the demise of this treatment model. So can the ideals of sanctuary, nurture, protection, and therapeutic environments, which were supposed to underlie the asylum typology, be adopted in the context of contemporary mental health-care, by a more appropriate and responsive architecture? Can architects create contemporary treatment facilities that are places of true ‘asylum’, and a genuinely ‘therapeutic environments’?

This concept of a ‘therapeutic environment’, on which the location and design of mental health-care institutions has historically been superficially predicated, falls into the well documented and highly debated field of environmental psychology, which involves the relationship between a person’s state of mind and their physical environment. Factors such as natural light, colour, fresh air, and a visual contact with water and nature are commonly cited attributes of a ‘healing environment’. But considering the failure of the asylum typology, architects have to thoroughly investigate what the concept of a ‘therapeutic environment’ really means: What architectural characteristics can actually contribute positively to the treatment and recovery of the mentally ill?

Surely the effect that the mental health-care environment has on its occupants goes far beyond universally relevant factors such as sensory contact with elements such as nature, noise, texture, light and colour? Although deserving of consideration, these environmental qualities are not, on their own, going to cause a mentally ill person to recover. Perhaps far more important are the specific design considerations pertaining to the building’s ability to facilitate the fundamental behavioural processes, both active and passive, of treatment and recovery itself. Buildings are not just seen and touched – they are experienced, and they affect human emotions and behaviour. Therefore, the true characteristics of a ‘therapeutic environment’ can only be defined by first identifying and interpreting the fundamental needs of the end users – the mentally ill individuals.

As a case in point, Howard’s asylum was replaced by four dormitory-like treatment units, which were much admired when they were completed. Both patients and staff expressed delight with the facilities’ comfort, beauty and modernity, compared to Howard’s building’s atmosphere of hopelessness, its resemblance to a jail and its depressing effect on their feelings. However, these buildings too are now to be brought to the ground, as part of the current CAMH re-development project, because, according to the director and CEO of the CAMH they “are unacceptable in the twenty-first century of health-care; they are cramped, undignified, disrespectful of the needs of the individual, and hardly inspiring of hope” (Mays, 2007: 56).

The failure of architects to recognise and respond to the needs of the user is not a new problem, and is certainly not limited to health-care buildings. In reaction to the course that modern architecture in the mid-twentieth century was taking, certain influential architects such as Aldo van

Eyck and other members of the 'Team 10' group, including Herman Hertzberger, became outspoken about the failure of the architecture of the time to satisfy its core purpose – to respond to human needs: “It’s all so obvious: we must evolve a richer tool – a more effective way of approach – to solve the environmental problems our period poses today. These problems will not remain the same, but they concern the same man, and that is our cue” (van Eyck, 1959: 22).

All architecture should be founded on the simple objective of responding to the specific human needs particular user groups, but in the case of mental health-care facilities, where the individuals are vulnerable and their needs unique, this principle should underpin the entire design process – it is the key to designing built environments that make a positive contribution to treatment and recovery.

1.5 RESEARCH METHODS AND MATERIALS

1.5.1 Research Methods:

While the subject of this dissertation is fundamentally that of architectural design, research regarding mental illness and health care was conducted for the purpose of application to the subject of architecture. Also, it is important to note that while the study is ultimately intended to inform the design of an in-patient treatment facility specifically for addiction and associated mental illnesses, the subject needed to be researched in the broader context of mental health-care architecture generally and historically. This research was conducted in two distinct stages:

Stage 1: The first objective of the study was to understand the nature of addiction and mental illness, the treatment and recovery processes, and most importantly, the needs of the patients. This was achieved by way of secondary research, because, as discussed previously, the purpose of this study is not to yield conclusions of a medical nature. Of course, certain assumptions have had to be made, because the vast body of medical knowledge consists of many conflicting schools of thought.

Stage 2: The second objective was to interpret the architectural implications of the first stage of the research. This was itself conducted in two stages: Firstly, through secondary research, in the form of reviews of built work and relevant theoretical literature. Secondly, primary research was conducted, in the form of case studies, which provided an important opportunity to observe and evaluate the application of the principles that were derived from the literature review and precedent studies. A vital component of the case studies involved interviews with the staff of mental health care facilities.

1.5.2 Research Materials:

Stage 1: The first stage of the research was begun with a thorough background study of addiction and mental illness, its treatment methods – both historically and today – and the current status of mental health-care in South Africa. This was done by way of secondary research, predominantly in the form of a literature review, which included government publications such as the *Mental Health Care Act of 2002*.

Once the background study was complete, a more thorough investigation of the needs of the mentally ill was conducted, by way of a review of the literature as well as personal communication with local mental health-care professionals, such as the chief specialist and deputy head of the Department of Psychiatry at the Nelson Mandela School of Medicine, Dr. Jonathan Burns, who has also authored literature on the topic of mental health-care in South Africa, and Mrs. Carol du Toit, who is the director of SANCA Durban.

Stage 2: The second stage, which concerned the architectural interpretations of the findings, was also conducted by way of both secondary and primary research. The former involved the reviewing of theoretical writings and published reviews of existing relevant projects. In some cases, these two overlapped, as was the case with Aldo van Eyck's theoretical work *The Medicine of Reciprocity* and his built project, the Orphanage in Amsterdam, for which it was written. These overlapping media were extremely useful, as they provided the valuable opportunity to analyse the application of theory to architectural design. The latter was carried out in the form of case studies of existing facilities, and were supplemented by personal communication with the professionals who were either responsible for their construction, or providing care within them. This communication made it possible to assess the buildings' success in terms of their intended purposes.

An important component of this part of the research concerned the subject of environmental psychology. Given the scale and complexity of this subject, it would be totally unfeasible to conduct a thorough review of all the literature. Furthermore, even if this was possible, it would not necessarily yield concrete conclusions. For instance, in David Canter's book, *Psychology for Architects* (1974), he explains how different experimental methods used to test a single relationship yielded completely different results, because of the complexity of the many factors involved. It would therefore be incorrect to accept as fact the findings of a particular empirical study. In light of this, the approach taken was to pursue secondary sources in which the findings of several or ideally many empirical studies were reviewed, and the trends documented. For example, in *Neuro-aesthetics and Healthcare Design* (2008), McCurry, Nanda and Pati review the findings of various studies regarding the relationships between visual stimuli and the state of mind, in the interest of providing beneficial information specifically to architects and health-care designers. This was considered to be a more valuable source than publications documenting the particular findings of one scholar's empirical research.

CHAPTER 2:

The Problem in Context – Background, Current Treatment Methods and Architectural Implications

2.1 INTRODUCTION

Architecture is about people – it is a process of responding to the needs of individuals and communities through the design of their built environments. Therefore, the first step in the process is to understand the needs of the people for whom a particular building is intended. This is particularly important when these needs are complex and poorly understood by the general public, as is the case with mental health-care. In order to define the most appropriate treatment environment, we must understand the nature of the problem itself, as well as the nature of the current treatment models.

2.2 MENTAL ILLNESS AND ADDICTION

As stated in the *Mental Health Care Act of 2002*, health is both physical and mental. But while most people are comfortable seeing a medical practitioner for a bodily ailment, many are reluctant to seek psychiatric treatment. Mental illness is a historically taboo subject, and as such, its prevalence is underestimated by the general public – According to the World Health Organisation (Thornicroft; Tansella 2003: 4), mental disorders are responsible for about 12-15% of the world's total disability – more than cardiovascular diseases, and twice as much as cancer. The South African Stress and Health Study (SAMJ 2008) reported a 30.3% lifetime prevalence of mental disorders among South Africans. This effectively means that almost a third of the country's population will suffer from mental illness at some point in their lives.

Addiction is also a poorly understood topic, especially in South Africa (du Toit, pers. comm. 08/10/2008). Most people think of it only as a dependency on alcohol or another type of drug. However, addiction is itself a type of mental illness, whereby a person is dependent on a mood altering substance, or on a mood altering behaviour, and includes gambling, sex, shopping, and the internet. It is important to acknowledge that addiction is a disease rather than a moral failing. This was understood as far back as 1950 by the American Medical Association (Lemonick; Park 2007: 26). Eating disorders such as anorexia and bulimia nervosa are now also understood to be types of addiction.



Figure 2 – Addiction is a mental illness, not a moral failure, and sufferers should be cared for like any other member of society (www.soylibreencristo.com: 2010).



Figure 3 – Addiction is not limited to substance abuse, and eating disorders are commonly treated in addiction clinics (www.hypnotherapist.org: 2010)

Like mental illness generally, the effect that addiction has on our society is for the most part, grossly underestimated by the general public. Addiction destroys not only the lives of the people who suffer from it, but also the lives of their relatives and loved ones. It is a global crisis, but unfortunately, according to the chairman of the Addiction Action Campaign, Mr. W. H. Whitfield, South Africa is currently achieving one of the lowest success rates for substance abuse treatment in the world



Figure 4 – The latest substance of abuse in South Africa is the anti-retroviral Ephavirenz which is usually smoked with marijuana (www.thabojaiyesimi.org: 2010).

(2008: 14). Professor Charles Parry who head's the Medical Research Council's Addiction Research Unit, (cited by Whitfield, 2008: 29) believes that there are more South Africans living with undiagnosed addiction than there are people living with HIV/AIDS. According to a study in 2003 by Cassim, Matzopoulos and Seedat (cited by Whitfield, 2008: 31), in 46% of all the non-natural causes of death in South Africa, a blood alcohol content exceeding the legal driving limit is found. Addiction also contributes significantly to violence, theft, and the transmission of diseases, particularly HIV/AIDS, especially since South Africa is now suffering from an anti-retroviral abuse epidemic.

Perhaps the most frightening fact about addiction is the poor success rates of its treatment. Dr. Martin Paulus, cited by Lemonick and Park (2007: 26) states that "You have a better chance to do well after many types of cancer than you do have of recovering from methamphetamine dependence". Addiction is considered a chronic disease, which means that it is treated, not cured. This is a key to understanding the ongoing needs of recovering addicts.

2.3 A GENERAL HISTORY OF MENTAL HEALTH-CARE

As mentioned in chapter one, the attitudes of both medical professionals and the general public towards mental illness has changed dramatically throughout history, particularly during the last century. These changes have caused huge shifts in policy and treatment methods, which in turn have caused significant changes in the types of built environments in which care has been provided. By understanding the history of mental health-care, and its relationship with architecture, designers are better equipped to interpret the architectural implications of the current models of care for the mentally ill.

It is not possible to trace mental health-care architecture very far back in history. Staudt (2006: 23) explains that this is because psychiatric illness has historically been attributed to a wide variety of non-medical causes, and as such, has not always had buildings designed specifically for its treatment: In ancient times, treatment was carried out at places of worship. In some societies, the mentally ill were perceived as being at the mercy of good or evil powers. In ancient Greece,

epilepsy was regarded as a sacred illness, while in Islam, the ‘fool’ enjoyed an esteemed position. During the Christian Middle Ages, satanic influences were to blame, and so exorcism was deemed to be the appropriate method of treatment (Staudt, 2006: 23). While various superstitious beliefs do of course still prevail, mental illness has come to be recognised by the global medical community as a clinical condition, and care has been provided in three basic periods:

- **The rise of the asylum and traditional hospital care.**
- **De-institutionalisation and the community-based approach.**
- **The appearance of balanced care.**

2.3.1 The Rise of the Asylum:

Asylums were the first publicly funded buildings designed specifically to accommodate the care of the mentally ill (Taylor, 1991). According to Thornicroft and Tansella (2003: 6), this period generally occurred between 1880 and 1950 in many economically developed countries, but construction began as early as 1840 in England and Wales (Taylor, 1991: 45).

Asylums were typically large institutions, physically remote from the population they served. The location and oppressive, forbidding architecture of these buildings reflects the societal attitudes towards mental illness during the period in which they were constructed – People generally did not sympathise with the mentally ill like they do today, but rather sought to remove them from society. Asylums often offered little more than the “custodial containment of members of society who were deemed to be insane, mad, or even just abnormal” (Thornicroft; Tansella 2003: 6), and are often more reminiscent of prisons than places of care and nurture. Over the years they grew in size, from an average capacity of three hundred patients in the late 1840’s to over one thousand by the early 1900’s (Taylor, 1991: 45).

This approach was criticised by many, including Michael Foucault, who, in *Madness and Civilisation – A History of Insanity in the Age of Reason* (1967), quotes Dostoevsky: “It is not by confining one’s neighbour that one is convinced of one’s own sanity”. Foucault traced the history of the discriminative segregation of society back to the exclusion of lepers in biblical times and especially during the middle-ages in Europe. He argued that after the disappearance of leprosy, “poor vagabonds, criminals, and ‘deranged minds’ would take the place of the leper” (1967: 5). Foucault’s vision of the human race was one that stressed difference rather than common elements (Sim; van Loon, 2004: 95).



Figure 5 - Typical ‘mental asylum’
Matteawan State Hospital, Beacon, New York
(www.chrispaynephoto.com: 2010)

Despite the ultimate failure of the asylum model, in some countries, especially those that are less developed economically, almost all mental health services are still provided through asylum care (Thornicroft; Tansella, 2003: 6).

2.3.2 De-institutionalisation and the Community-Based Approach:

From about 1950, due to evident shortcomings in the asylum model, the de-institutionalisation of patients began in many countries, with a new focus on care provision in the context of the community. Perhaps the most significant problem with the asylum was the negative effect it had on patients, including progressive loss of life skills and the development of “deficit symptoms” or “institutionalism” (Wing; Brown, cited by Thornicroft; Tansella, 2003: 6). Other concerns were the abusive treatment of patients, isolation of the institutions and their staff, poor management, and inadequate quality control. Acting Regional Advisor for Mental Health for the World Health Organisation’s Regional Office for Europe, Dr. Matthijs Muijen, cited by Thornicroft and Tansella (2003: 6) stated that “Community mental health services are needed to provide care to people with mental disorders in the communities where they live and work. These services should replace outdated psychiatric asylums which remove sufferers from society, increase stigma and do not provide cost-effective care” (2005). The de-institutionalisation process, which left asylum buildings throughout the United Kingdom and United States of America totally abandoned, involved the following three main components (Thornicroft; Tansella, 2003: 6):

- Preventing inappropriate mental hospital admissions by providing care in community facilities.
- Discharging long-term institutional patients who have received adequate preparation for reintegration into society.
- Establishing and maintaining community support systems for patients who are not institutionalised.

2.3.3 The Emergence of ‘Balanced Care’:

While community-based care has been widely accepted by medical professionals throughout the world, it is not without its own set of problems, and, importantly, its success is subject to certain conditions being met – the de-institutionalism of mentally ill people requires adequate preparation in terms of community-based services. For example, during the 1960’s in the United States, large numbers of patients were discharged from psychiatric institutions without such necessary preparation, and many ended up homeless or in prison (Robbins *et al*, 1984, cited by Burns 2008: 48).

Also relevant, is the unavoidable reality that for a variety of reasons, certain mental illnesses require in-patient care, and indeed even temporary confinement, be it voluntary or involuntary. Such issues have contributed to a new concept of ‘balanced care’. This approach

acknowledges the need for aspects of both previous models, and incorporates a range of community-based services within the local setting, while relying on the hospital as backup. The intention of this approach is to provide all the benefits of hospital care while avoiding its negative aspects (Thornicroft; Tansella, 2003: 7).

The ‘balanced care’ model has clear architectural implications: Much like how the asylum model called for remote, large-scale, mass housing structures, while the community-based care model required almost no in-patient accommodation at all, so ‘balanced care’ demands, in addition to community clinics and general hospitals, small-scaled facilities, which offer both in-patient and out-patient care, in the local community context.

2.4 CO-MORBIDITY AND THE NEED FOR INTEGRATED TREATMENT

‘Dual-diagnosis’ is the medical term used to describe the co-morbid condition of a person who suffers from a mental illness as well as a substance dependency disorder. In the 2002 United States National Survey on Drug Use and Health, it was found that the prevalence of mental illness was more than twice as likely among individuals who used illicit drugs during the year preceding the study, than in those who did not (Gwinnel; Adamec, 2006: 106). This is because of two main contributing factors: The first is that susceptibility to psychological disorders may indicate a pre-disposition to addiction or that individuals may turn to drugs because of their underlying psychological problem. The second and converse reason is that substance abuse can cause mental illness (Evans; Sullivan, 1990: 21). In order to acknowledge the nature of this condition and particularly the difficulty in treating it, one must recognise that despite the strong connections between them, addiction and general mental illness are distinguishable conditions, and that many people are found to suffer from only one of them.

Because of this fact, finding adequate treatment for the ‘dual diagnosis’ patients is extremely difficult: Most treatment centres deal with either mental illness or addiction, but not with both (Gwinnel; Adamec, 2006: 107). The implication of this is that a patient who is diagnosed as both bipolar and alcoholic for example, may be refused treatment at a mental health facility because he or she is not sober, yet also be refused treatment at a substance abuse centre, because of his or her mental condition or inability to discontinue anti-depressant medication (Van Wolmer; Davis, 2003: 246).

A preliminary review of the literature regarding dual diagnosis suggests that the global prevalence of this condition is becoming increasingly acknowledged. According to Mrs. Carol du Toit (2008: 9) of SANCA Durban, one of their most significant challenges is the “significant increase in the number of dual diagnosis admissions”. Numerous studies have been conducted worldwide in an effort to ascertain the level of prevalence: According to Kenneth Minkoff (1993:

131), the data collected in these studies suggests that the prevalence of dual diagnosis is so high, that it “must be considered an expectation, rather than an exception”.

2.4.1 The ‘Integrated Treatment Model’ for Dually-Diagnosed Individuals:

A review of the literature regarding the treatment of substance abuse reveals a number of different models currently being implemented throughout the world. According to Evans and Sullivan (1990: 21), “No approach to the treatment of chemical dependency totally dominates the field.” The treatment of mental disorders is no clearer, particularly because of the wide variety of mental illnesses. This lack of consensus regarding the treatment of these two illnesses individually, means that the ideal model of treatment for a patient suffering from them both is extremely difficult to define, and is therefore debated among medical professionals.

Historically, there are three main models of treatment for this condition: ‘Sequential Treatment’ tackles one of the issues before the other. ‘Parallel Treatment’ deals with both illnesses simultaneously, but by separate professionals. These two methods are based upon the outdated idea that there are clear boundaries between different disorders: Reforms began in the United States during the late 1980’s (Van Wolmer; Davis, 2003: 248), and the ‘Integrated Treatment Model’, which involves the simultaneous treatment of both conditions by one professional or group of professionals was developed (Afuwape, 2003: 15). According to Mueser and Noordsy (1998: 311), it is “widely accepted that dually diagnosed individuals require interventions that simultaneously address both their mental illnesses and their substance abuse disorders”. Van Wolmer and Davis agree, stating that, “One of the most important system changes for a person needing help with co-existing disorders is the development of the Integrated Treatment Program” (2003: 253). Accepting that the Integrated Treatment Model is the most effective method, the implication is that centres that offer concurrent treatment of both diseases are necessary for the provision of adequate mental health-care. However, according to du Toit (pers. comm. 08/10/2008), Durban does not have one adequate facility that specialises in the treatment of co-morbid conditions, and that many sufferers undergo a lifelong battle of recovery and relapse as a result of this. This was seconded by Dr. J Burns (pers. comm. 23/04/2010).

2.5 IDENTIFYING THE ARCHITECTURAL REQUIREMENTS OF ‘INTEGRATED TREATMENT’ ‘BALANCED-CARE’

Considering the overwhelming support for the integrated treatment of dually diagnosed individuals, especially in the context of balanced-care, it is clear that a new type of building is needed to facilitate the clinical treatment of both addiction and mental disorders simultaneously, and in a community setting. The next step is therefore the task of identifying the architectural

characteristics and qualities that are necessary for such a building typology to effectively facilitate the treatment and recovery process.

The problem is one of reconciling conflicting priorities through design: The ‘de-institutionalism’ movement and the ‘community-based’ care approach both tend to vilify the ‘outdated’ model of the ‘mental asylum’, calling for integrative care in the community. However, the more recent ‘balanced-care’ approach and the ‘integrated treatment model’ both require in-patient treatment and acknowledge the need for isolation as part of the recovery and reintegration process. This adds another dimension to the previously discussed arguments in support of the potential benefits of the ‘outdated’ asylum model: Under certain circumstances, particularly addiction and especially dual-diagnosis, individuals require confinement – in some cases, even involuntary confinement. This effectively means a coming together of two traditionally conflicting schools of thought: On one hand, patients need to be committed to in-patient care and be isolated from society temporarily. On the other, care needs to be provided in an integrative manner in the context of the local community. The fundamental architectural issue is therefore the need to reconcile these conflicting priorities through design.

The simultaneous treatment of addiction and mental health requires a unique spatial environment that can facilitate integrated in-patient treatment in a community context. Designing such a building will present challenges over and above those associated with purely psychiatric or purely addiction treatment centres. For example, numerous studies have demonstrated that mentally ill patients who are substance abusers have more self-destructive, violent, disruptive, and criminal behaviour than those who are not (Minkoff, 1993:131). The task of designing such a facility will also present challenges over and above those of either an out-patient community clinic on one hand, or an in-patient asylum-type building located in a rural setting. Therefore, it is imperative that this study addresses the unique needs of dually diagnosed individuals, and evaluates the architectural implications of these needs. Similarly, it is important that the positive and negative aspects of both previous approaches towards treatment are analysed in the interest of integrating them through sound planning and design.

Recent understanding of mental illness and its treatment methods reveals important architectural implications: Both the historical asylum and the more modern community-based clinic are inadequate treatment environments, even if they are provided in combination. Balanced-care for the mentally ill requires facilities in which the benefits of both previous models are reconciled, in which the negative aspects of both are either resolved or avoided, and in which the needs of addicts and mentally ill people, as we now understand them, are responded to in the most appropriate manner possible.

CHAPTER 3:

Interpreting the Architectural Implications of the Users' Needs

3.1 INTRODUCTION

The inadequacies of both the asylum model and the community-based approach suggest the need for a new type of facility in which to provide care. In terms of typology, this is an in-patient treatment facility in the urban, community context, and importantly, it is one that responds to the unique needs of its users.

In this chapter, the key issues pertaining to the design of modern mental health-care facilities in terms of these needs are discussed. Some of the patients' needs simply require the provision of certain elements, while others have direct implications on the design of the environment. It is these issues that are especially relevant to this study.

3.1.1 The Conflicting Needs of the Mentally Ill:

This study is intended to show that the process of designing a building should begin with a thorough examination of the needs of the end user. In many cases, these needs can be understood fairly easily by the architect, because, as an 'ordinary' member of society, he or she can relate, at least to some extent, to the people being catered for. Furthermore, in many projects, the client is the end user, and so his or her needs can be explicitly explained to the architect. However, in certain circumstances, the task of developing this understanding is much more difficult. Regarding the mentally ill for example, human needs cannot be adequately understood by a layman. In fact, not even the end users themselves are entirely aware of what their needs are. For example, because addicts have a tendency to withdraw and become isolated, they might well express their perceived need to be alone and have a private bedroom, while a professional care giver would insist that they require a built environment that encourages them to interact with one another, and therefore might stipulate shared bedrooms and a necessity. Therefore, the needs of the mentally ill can be best attested to by the medical professionals who care for them.

During the course of this study, various medical professionals and publications were consulted in order for the required understanding of the patients' needs to be developed. What they revealed is that the many needs of the mentally ill are unique and often contradictory. For example, patients sometimes need to be temporarily confined, either voluntarily or involuntarily, but at the same time, they need to feel free, and that they have chosen to recover. Similarly, individuals who require long-term in-patient care need to be integrated with their local community, but they also have a right to privacy and anonymity, and require supervision. The contradictory nature of the needs of these individuals poses a significant challenge to an architect who has been assigned the task of designing a building to facilitate their treatment and recovery.

This chapter covers in detail, the architectural implications of the needs of the mentally ill, as derived directly from the research, by way of personal communication with mental health care professionals and consultation with the existing body of literature on the subject. An overview of

these needs is provided below. Each of the needs summarised are based directly on several sources consulted, for which individual references are provided in the subsequent sections of this chapter, in which the needs are discussed in more detail and in terms of their influence on the built environment.

3.1.2 Overview of Patients' Needs:

Psychological/emotional needs:

- A sense of self-worth.
 - To belong and feel like a part of something.
 - To feel respected and dignified – like a person.
- To feel encouraged and motivated about treatment and recovery.
 - Positive.
 - Inspired.
 - Uplifted.
 - Excited.
 - Supported.
- To have a sense of responsibility.
 - To feel willing about recovery, which should be seen as a choice.
 - To take responsibility for their recovery and well-being.
 - To feel free, despite being in confinement.
 - To have a sense of control.
 - To feel independent, despite being observed.
- To re-discover sober recreation.
 - To re-kindle healthy interests and hobbies/past-times.
 - To prepare for abstinence under pressure after re-integration.

Behavioural Needs:

- Social skills.
 - Ability to interact without influence of substance or behaviour of addiction.
 - Overcome shyness and intimidation.
 - Ability to interact in formal therapy.
 - Ability to interact in an informal unstructured context.
 - Confidence to open up and learn to share, both physically and emotionally.
- Healthy relationships.
 - With other patients.
 - With family and friends.
 - With re-integrated individuals.

- The active involvement of friends and family in their recovery.
 - For patients themselves.
 - For families (co-dependence).
- Privacy.
 - Ability to control it.
 - Anonymity.
 - To have solitude at times.
 - From public and visitors.

Environmental needs:

- To have access to the outdoors.
 - Sport.
 - Exercise.
 - Therapeutic natural settings and elements such as nature.
- A ‘normalised’ treatment environment.
 - Non-clinical/institutional.
 - Not ‘hospital-like’.
 - Warm.
 - Friendly.
 - Inviting.
 - Familiar.
 - Homely.
 - Humane.
 - Comfortable.
 - Dignified.
 - Respectful.
- To have a degree of control over their environment.
 - Autonomy.
 - Personalise.
- To be part of the local community while in treatment – not totally isolated.
- To feel inspired and uplifted by the environment.

Safety and Security needs:

- To be safe:
 - From suicide.
 - From violence.
 - From external influence.
- To be discouraged/prevented from absconding.

- To be observed.

Other Issues/considerations:

- Stigma.
 - Image of the building.
 - Location of the building.
- Symbiosis of functions.
 - Evidence-based training.
 - Education.
 - Awareness.
 - After-care.

The fact that the needs of the mentally ill are often contradictory to one another could be seen as a problem. However, Aldo van Eyck – influenced by the ‘twin phenomenon’ of the Dogon people – identified not only that almost everything in the world has an opposite, but that things are only what they are because of their opposite. He named this concept, the ‘duo phenomenon’ – part-whole, unity-diversity, large-small, mass-space, change-constancy, motion-rest, and individual-collective. Van Eyck despised the fact that many architects see these opposites as ‘alternatives’ to be separated. He was concerned with their complementary nature – the way they related to one another. He argued that architects should not be pre-occupied with separating ‘false alternatives’, but with providing the ‘in-between’ realm – for instance, the space between inside and outside, where one can experience the transition between the two. This attitude towards opposites is relevant to the conflicting needs of the mentally ill.

In addition to this specific theory, van Eyck’s general attitude about human needs in architecture is extremely important to this topic, particularly with regard to the underlying need to ‘de-institutionalise’ and humanise the mental health-care facility: “It’s getting cold again over here – and always when it does I start thinking about how to warm up architecture, how to make it lodge around us. After all, people buy clothes and shoes the right size and know when the fit feels good! It’s time we invented the built thing that fits them – us.” (van Eyck, 1959: 21).

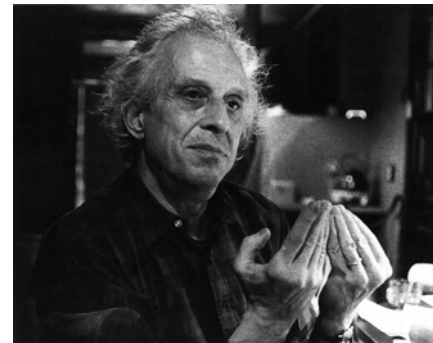


Figure 6 – Aldo van Eyck’s ideas about reconciling conflicting user needs through design are key to this topic (Ligtelijn: 1999: 2)

3.2 CHARACTERISTICS OF A ‘THERAPEUTIC ENVIRONMENT’

3.2.1 Environmental Psychology:

The topic of environmental psychology is certainly not limited to health-care or architecture, let alone both – The effects of a person’s immediate environment, either natural or built, has been a subject of intense academic interest and research for decades, led by professional psychologists such as David Canter. Such scholars have reported significant findings. For instance, Christopher Day reports that improved office environments can increase employee productivity by 15%, while improved hospital environments can reduce treatment times by up to 21%, and reduce class ‘A’ analgesic use by up to 59% (Day, 1990: 1).

The fact that there is some relationship between the mental condition and the environment is perhaps obvious. After all, who would disagree that the physical environment can affect mood, at least to some degree, in one way or another? What is far less clear however, are the details of this relationship. Since it involves a detailed understanding of the mysterious human brain, strong consensus regarding conclusions drawn from the findings of the vast body of research is yet to emerge, or at least to last. For example, the distinctive lime green paint colour, which has become a stereotype for hospital buildings, was once accepted all over the world for its ‘definite’ calming effect on patients, but now seems to have lost support amongst both health-care professionals and designers.

Furthermore, even when consensus regarding a certain finding is reached, its ability to be applied with confidence directly to the design of built health-care environments is far from certain. For instance, in *Neuro-aesthetics and Healthcare Design* (2008), McCurry, Nanda and Pati review the findings of some of the most important recent studies regarding the relationships between visual stimuli and the state of mind, in the interest of providing beneficial information specifically to architects and health-care designers. Yet, despite overwhelming evidence in support of the value of certain elements and characteristics in health-care design, which will be discussed later in this chapter, the authors note that “It would be naive, however, to presume that the literature of today or of the immediate future could provide formulas for how to elicit specific aesthetic responses by means of design”. This, they explain, is largely due to the un-natural context of the fMRI scanners in which subjects are usually tested, as well as to the exclusion of factors such as the emotional states of the subjects at the time of the tests (2008: 128). Nevertheless, in their review, McCurry *et al* do make some important observations. Without detailing the specific methodology of the individual studies themselves, the most important observations are as follows:

The reviewed studies reveal a strong correlation between visual stimuli and the activation of the different parts of the brain that are responsible for certain emotions (2008: 121). In other words, appreciation of aesthetic qualities is more than a case of either liking something or not – it was actually shown to be a contributing factor to a person’s mood. The authors also note that

evaluation of visual stimuli takes place sub-consciously, and so without actually being asked to judge a stimulus such as an object or environment in terms of its aesthetic qualities, people are still affected emotionally by such stimuli (2008: 121). This is extremely relevant to architectural design, because whereas one must actively look at a work of art in order to be affected by it, one cannot avoid experiencing architecture, without avoiding entering the building at all of course. Furthermore, McCurry *et al* note that emotional responses to visual stimuli can cause a notable reduction in stress and improved recovery (2008: 124). These observations are, potentially, extremely relevant to architects, particularly those designing mental health-care facilities: “The evidence that visual stimuli undergo by default an evaluation process in the brain, even when not prompted; that responses to visual stimuli may be immediate and emotional; and that aesthetics can be a source of pleasure that can mitigate the stress of a health-care environment, all have significant implications for architectural design” (2008: 129).

A major shortcoming of the reviewed studies in terms of their relevance to architectural design is that they were conducted by means of two-dimensional visual stimuli, particularly artworks – it would be impossible to expose a person to the spatial qualities of a building while they are in an fMRI scanner. Despite this though, McCurry *et al* contest that if perception of the aesthetic qualities of images can evoke a stress-mitigating emotional response, then so can that of architectural form and space (2008: 130).

Another extremely relevant trend observed in the studies was the relationship between conscious appreciation and sub-conscious stimulation of the ‘pleasure centres’ of the brain. When the subjects were asked to voice their opinion regarding the beauty of the image presented to them, their judgements tied closely, albeit not surprisingly, to the positive impact exerted on their brains. For example, artists or art enthusiasts were shown to benefit more significantly from emotionally provocative images, whereas laymen responded more positively to mundane images that made them feel relaxed. This poses a major problem to anyone trying to interpret the findings architecturally: the issue of subjectivity. This relationship between personal taste and psychological effect suggests the need to objectify ‘beauty’. Since psychological responses to visual stimuli often correspond to subjective opinion, which varies among different individuals, architects need to identify specifically, those factors which are universally effective. It also suggests that designers need to create buildings in which the occupants have some degree of control over their immediate environment. For example, because visual contact with nature has been shown to be almost universally beneficial, public areas could be designed to facilitate this contact, whereas since certain colours have been shown to have contrasting effects among different individuals, patients could be able to choose the colour of a wall or dividing screen in their bedroom. The element of choice and control is in fact an important environmental issue of its own, and will be discussed later in this chapter.

When thinking about environmental psychology, it is perhaps easy to fall into the trap of considering only those environmental factors that can supposedly ‘heal’ or at least contribute positively, in some direct way, to recovery. But often it is not so much about implementing positives as it is about avoiding negatives – after all, perhaps the most purely ‘therapeutic’ environment is a totally natural setting, with no building at all. Architects need to think not just about how their building can be healing, but how it can avoid being harmful. Christopher Day describes his own experience of this idea: “In good health, I have taken my son to hospital clinics, but, after sitting for hours in rectangular grid patterned, vinyl-smelling, fluorescent-lit, over-heated corridors, felt only half alive” (1990: 4).

When renowned architectural critic Charles Jencks took his now late wife Maggie to a British hospital for cancer care, he was horrified by the stressfulness of the experience due to the nature of the treatment environment, which instead of being comforting and reassuring, they found intimidating and hostile. The experience led him to establish the Maggie Foundation, which is dedicated to providing quality cancer care in appropriate built environments throughout the United Kingdom. Some of the world’s most famous contemporary architects, such as Frank Gehry and Zaha Hadid have designed Maggie Centres, focusing on the role of the building in the care-giving process. While the McCurry *et al* stress the fact that the studies done to date represent “the tip of the iceberg”, the following potentially relevant factors were shown to have a universally beneficial effect, and are therefore worth taking note of:



Figure 7 – Maggie’s Centre Dundee, by Frank Gehry
(www.worldarchitecturenews.com: 2010).

3.2.2 Proportion and Scale:

In a study by Di Dio, Macaluso and Rizzolatti in 2007 (cited by McCurry *et al*, 2008: 120), it was concluded that objective parameters of art, such as the golden proportion, have a positive psychological effect. However, the study assessed the influence of two-dimensional proportion. Three dimensional scale – volume – however, is a whole other issue, and has obvious psychological implications. Compare the overwhelming affect of St. Paul’s Cathedral to a small room with a low ceiling – the space created by buildings has unequivocal emotional effects

Depending on the situation, both large volumes and small spaces can be beneficial. For instance, Christopher Alexander explains how lower ceilings make space more intimate, and therefore more conducive to social interaction. He compares the appropriateness of high ceilings to spaces for large numbers of people, who are perhaps moving rapidly, to the appropriateness of low ceilings at the edges of such spaces, where people should be encouraged to linger, at shops and cafes for example.

Perhaps then, in a therapy space, where a group of individuals are encouraged to open up, a large volume will mitigate the feeling of pressure and confinement, whereas at the entrances to bedrooms, a lower ceiling will help to create a more intimate space – one that encourages informal interaction between two or three individuals.



Figure 8 – Christopher Alexander's diagrammatic sections showing the appropriateness of different room-scale scales for different activities (Alexander, 1977: 496).

Rudolph Steiner's kindergartens are a good example of this idea put into practice. The volume of the classroom is appropriate for a group, while the alcove in the background, despite being a part of the main space, is better suited to the more intimate activities of one or two children playing. Even the niche for toys and the window are at an appropriate height and scale for that situation.

Another of Alexander's ideas is the 'building complex': Instead of the many spaces of a large development being contained by a colossal, monolithic building, they should be expressed in terms of their individuality, as a complex of buildings. He argues that many modern buildings are entirely un-responsive to human scale, and that they are totally intimidating and oppressive as a result. In an environment that caters for mentally vulnerable people, this idea is especially relevant.

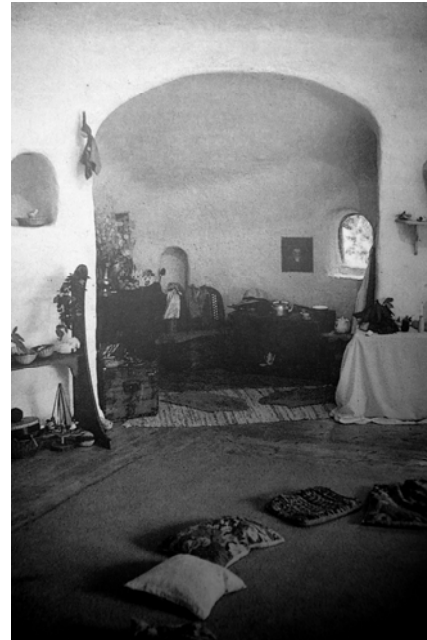


Figure 9 – Rudolph Steiner's kindergartens were designed to allocate scale of space according to specific needs (Day, 1990: 112).

Alexander's opinion regarding the mental suitability of human scale in the built environment is not unfounded speculation – he cites a 1970 study by the Environmental Analysis Group, Vancouver (Preliminary Program for Massing Studies, Document 5: Visitor Survey) which assessed the reactions of visitors to public service buildings in Vancouver. Subjects visited two types of public service building – old, three-storey buildings and large, modern buildings. Their reactions with regard to service satisfaction differed completely: After visiting the old, small-scaled buildings, the subjects generally reported friendly, competent staff, and were often able to remember their names and appearances. After visiting the large, modern buildings on the other hand, they reported personal qualities infrequently, focusing more on the appearance of the physical environment and

equipment. In other words, their experience was de-personalised in the monolithic structures. Subjects also complained about the ‘general atmosphere’ of the modern buildings, without being able to be more specific – revealing that monolithic structures just “feel wrong” (Alexander, 1977: 470). Christopher Day argues that architects themselves think of architecture in terms of how it looks, particularly from the outside, instead of how it is experienced, from the inside. He notes that architectural publications, especially magazines, tend to focus on external images of unpopulated buildings as objects, rather than pictures which portray the buildings as places for people (1990: 4).

3.2.3 Rectilinear and Organic Forms:

In a study by Bar and Neta (2007, cited by McCurry *et al*, 2008: 122), curved forms were shown to evoke a more stress-mitigating response than hard-edged rectilinear ones. This was hypothesized to be due to the human brain’s sub-conscious recognition of anything that may be potentially harmful. In other words, humans have a primordial, instinctive fear of objects that could be dangerous. Of course, nobody actually ‘fears’ a sharp cornered part of a building – rather, they have a slight sub-conscious response. This finding is of course debatable. Rasmussen explains how people perceive round forms as having been created from a soft, malleable substance, whereas sharp-edged ones seem to have been cut or moulded, and therefore appear to be hard, unforgiving and unnatural (1959: 20).

In the built environment specifically, curved contours could also be more appropriate than rectilinear forms simply because orthogonal shapes are possibly more likely to appear ‘institutional’ and imposing than more organic ones. On one hand, this could be explained in terms of association – because institutional buildings are generally monolithic and orthogonal, people are likely to recognise the institutional nature of the facility more if it looks and feels like others of the same typology. Perhaps then, a curvilinear building is more stress-mitigating because it avoids having those ‘institutional’ connotations. Surely though, there is more to this issue. Perhaps it is about the ambiguity of organic forms, particularly in plan. For instance, rectilinear forms tend to dictate how one circulates, navigates and experiences space – there is only one route through a dead-straight corridor, and a person is either on one side or the other of a right-angled corner. On the other hand,



Figure 11 – The rectilinear form of Wandsworth Recovery Centre (www.worldarchitecturenews.com: 2010).



Figure 10 – The organic forms of the Maharashtra Addiction Centre in Pune (Architecture + Design, 2001: 44).

a corridor that swells outside openings encourages people to pause and interact informally, and a curved corner invites the individual across its threshold in a gradual manner. Of course, one could argue that such mechanisms need not be curvilinear – for instance, a widening in a corridor could be orthogonal, and a gradual corner could be faceted. Somehow though, there is a certain looseness and informality about curved lines in architecture that seems appropriate to this typology. Perhaps it is that simply that in nature, forms are not cubic, and that organic forms seem less foreign. It could have something to do with how a curvilinear building harmonises with nature, but then again, one of the most referenced examples of organic architecture is the completely orthogonal Falling Waters by Frank Lloyd-Wright, because of its harmonic relationship with its natural context.

It is important for architects to appreciate that in some situations, rectilinear plans and forms are appropriate, while in other situations, curvilinear ones are. It should not be a case of deciding before-hand and committing to employing one or the other exclusively. For instance, a group therapy room, which caters for a number of people sitting in a circular configuration, might best be circular. On the other hand, a bedroom, which needs to be furnished with several beds, would probably be best if rectangular. What is important in the case of a mental health-care facility is that the architect communicates a sense of informality, spontaneity and freedom within the building, and at all costs, avoids the typically clinical, institutional atmosphere that is typical of health-care facilities.

3.2.4 Contact with Nature:

Roger Ulrich, who studied the correlation between patient view and recovery time, considered every tree leaf visible from a hospital window worth its weight in gold (Day, 1990: 2). In the studies reviewed by McCurry *et al*, subjects responded positively to images depicting natural settings, particularly with an open foreground and a high depth of field (Ulrich, Linden and Eltinge, 1993, cited by McCurry *et al*, 2008: 123). This phenomenon has been explained by Ulrich in terms of evolutionary theory: “...acquiring a capacity for restorative response to certain non-threatening natural contents and configurations had major advantages for evolving humans, who may lack such preparedness for most urban or built contents” (Ulrich *et al*, 1991, cited by McCurry *et al* 2008: 123). Whatever one believes about human origins and natural history, it is an undeniable fact that we humans have created our often stressful modern built environments from a natural world to which we are biologically suited. The implication therefore, is that built environments that facilitate a close contact with nature, by way



Figure 12 – Care-givers often conduct therapy sessions outdoors, so as to take advantage of the therapeutic properties of nature (source unknown).

of views, green court-yards and pocket gardens for example, are well suited to mental health-care (2008: 131).

Kenilworth Clinic is a private addiction and mental health facility, in Kenilworth, Cape Town. Despite its urban context, and the fact that it is a re-used building, the facility has been successfully adapted in order to generate a natural, 'therapeutic' environment, reminiscent of a much more rural setting. The pedestrian access from the car park to the main entrance is engulfed by vegetation, which has been allowed to grow in a natural way, unlike the typically manicured gardens of the area. The result is that at least some of the advantages of a rural setting have been introduced to this completely urban one, and with great effect too.

The natural feel of the property can also be experienced from the inside of the building. Figure 14 is taken from inside the reception area, looking back in the opposite direction to the previous image. Natural light, dappled by the foliage, penetrates the space. In fact, despite its urban context, this entrance foyer feels more connected to nature than the reception area at Riverview Manor, which is located in the picturesque natural setting of the Drakensberg.

There is of course a difference between a building's context and its relationship with that context. As the typical asylum buildings illustrated, being located in a rural setting does not mean that a building facilitates a close relationship between its occupants and the natural environment. There are various ways that the architecture can contribute to this relationship. For instance, Alexander recommends that buildings be kept long and narrow, arranged in court-yard configurations, and circulated by arcades at the buildings' edges, as opposed to by double-loaded corridors within the building. While there are other important advantages to this arrangement, the arcades serve as an intermediary space, between inside



Figure 13 - Main entrance to Kenilworth Clinic via dense vegetation (author, 2008).

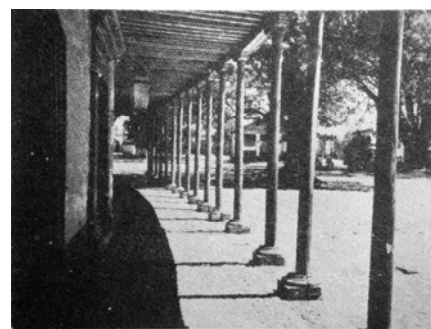
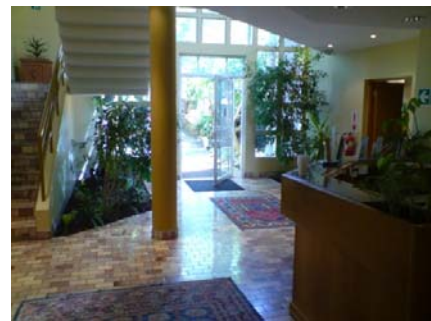


Figure 15 – Circulation arcades act as intermediary spaces, and help to bring occupants into contact with the outdoors (Alexander, 1977: 583).

and outside. Long, thin buildings are also easy to supply with natural light and fresh air, and ensure that no occupant is ever far from an opening to the outdoors.

3.2.5 Natural Light:

The psychological value of natural light in health-care environments has been accepted by architects since at least the 1930's. For example, in 1935, Williams designed the Pioneer Health Centre in London with cruciform columns supporting the floors so that the number of internal walls could be reduced, thereby permitting much natural light. With the same intention, Lubetkin employed glass bricks and a solarium when he designed the Finsbury Health Centre, also in London, in 1938 (Goode (Ed.), 2009: 404). Figure 16 illustrates how the psychiatric department at St. Georges Hospital in Stockholm has been designed so that the wards are exposed to the views and as much natural light as possible.

The treatment spaces at Kenilworth Clinic are also flooded with natural light, and one is acutely aware of the vegetation through which the light passes on its way into the space. The result at Kenilworth Clinic is that while the context is distinctly urban, the treatment spaces themselves, where patients spend a large portion of their time, boast the beneficial qualities offered by a more rural 'therapeutic landscape', as opposed to the scenario whereby the facility, despite being located in a spectacular natural setting, does not engage with its surroundings at all, as was often the case with the old 'mental asylums', and unfortunately, some modern facilities.

Both Alexander and Day argue that the beneficial properties of natural light are not just quantitative, but qualitative – and both argue that natural light should ideally be admitted to a room via at least two windows on different walls, allowing for an interplay of light within the space, and thereby giving life to the room. It could be



Figure 16 – The psychiatric department at St. Georges Hospital in Stockholm maximises pa exposure to natural light (author, 2010)



Figure 17 – The treatment spaces at Kenilworth Clinic in Cape Town are flooded with natural light (author, 2008).

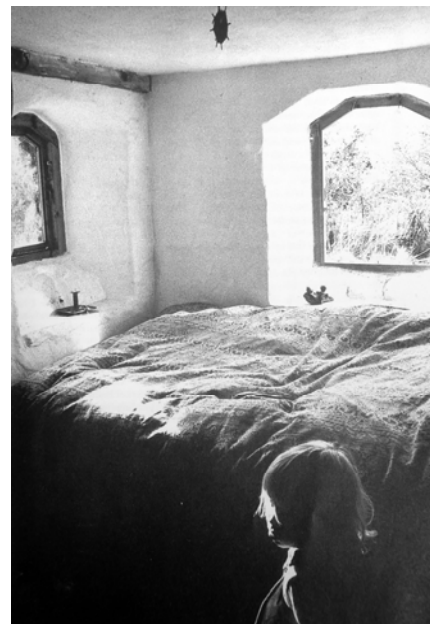


Figure 18 – Light from two windows on different walls brings life to a space (Day, 1990: 17)

assumed that this arrangement also contributes positively to the feeling of claustrophobia within a small space, and as discussed later in this section, it is important for social reasons too. In addition to the benefits of natural lighting within the spaces of the building, it is important that the outdoor spaces are flooded with direct sunlight. A landscaped court-yard will be a complete failure if it is drowning in shadow during the winter months, and the building itself will be cold. Therefore building orientation, like in all projects, is an important consideration.

3.2.6 Familiarity:

As discussed previously, visual stimuli that are consciously preferred by subjects also have a positive psychological effect. A study by Fisher *et al* (2008) was interpreted by McCurry *et al* (2008: 125) as also showing a strong correlation between what is preferred and what is familiar. This finding is particularly relevant to the case for a ‘normalised’ health-care environment, which will be discussed later in this chapter.

3.2.7 Perceptions of Openness and Clarity:

McCurry *et al* suggest that “spatial gestures” such as open-ended corridors and “views to pocket gardens” may help to create “an inspiring, uplifting space” (2008: 131). Their recommendations seem to concern the need to humanise the mental health care facility, which is another issue that will be discussed later.

The architectural implications of this factor are potentially numerous. Alexander explains for example, that all court-yard spaces should have a clear exit, and should not be entirely contained. He explains this in terms of the theory of defensible space: People tend to feel comfortable with their back to something, so that they are aware of their environment in its entirety, especially the ‘way out’. On the other hand, people feel uncomfortable when they have their back to an open space. The natural reason for this is obvious – people have defensive instinct. But in an environment where the occupants are essentially confined, possibly even against their will, this is a particularly important design consideration.



Figure 19 – Treatment spaces that overlook outdoor space are more suitable than visually contained ones (www.headintherightdirection.com: 2010).

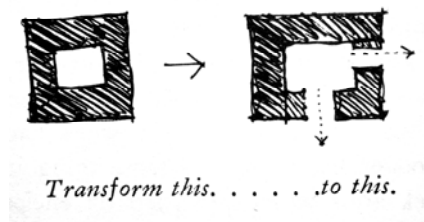


Figure 20 – The outdoor spaces that buildings define should also express a degree of openness (Alexander, 1977: 522).

3.2.8 Legibility and Wayfinding:

When Jencks and his wife visited the British hospital the legibility of the health-care environment was a particular problem for them. Instead of being made to feel relaxed and encouraged, they found the experience to be daunting and stressful. In *A Pattern Language*, Christopher Alexander discusses how people experience the built environment, and what is interesting is that while the subject of his book is not explicitly environmental psychology, he constantly considers how buildings make



Figure 21 – A clear “overview of services” helps to create an environment that is legible, and therefore stress-mitigating (Alexander, 1977: 500).

people feel: “In many modern building complexes the problem of disorientation is acute. People have no idea where they are, and they experience considerable mental stress as a result” (1977: 481). Alexander explains how an illegible building demands mental attention from its occupants – the individual will eventually find the right room, but he or she shouldn’t have to be thinking so hard about finding it. A legible building on the other hand, leaves the individual free to ponder, daydream, or talk to someone else while navigating the building. The first example is a mentally and emotionally unhealthy building, while the second is a healthy one.

3.2.9 Conclusions and Implications

Natural settings offer a quiet, peaceful environment in which to heal. Perhaps not everything about the therapeutic properties of nature are its physical elements, such as trees that one can see, and grass that one can touch. There are also associated benefits – qualities that are inevitable in, but independent of, natural, rural settings. Peace and quiet for instance, is a one of the many beneficial aspects of such environments, but that does not mean that it cannot be achieved in an urban context. The results summarised above are not surprising – they suggest that the most psychologically beneficial environmental characteristics are all related to what is natural – natural as in nature, and natural as in ‘normal’. In fact, ironically, they could be interpreted as reminiscent of the attributes described by advocates of the outdated asylum model, with its supposedly peaceful, natural settings. The challenge today however, is that treatment environments with qualities conducive to a ‘therapeutic environment’ need to be provided in a totally different context to the rural settings of the historical asylums – they need to be located in urban communities. The general need to provide places of privacy, peace and quiet in the modern urban environment was tackled by Serge Chermayeff and Christopher Alexander in *Community and Privacy: Towards a New Architecture of Humanism*, in which they declare that “Designed environments will be successful only if they respond to the most crucial pressures of our time. This means that they must resolve the problems created by often useless mobility, the ceaseless

sounds and noises of communication and machinery, and the dissolution of the tranquillity and independence known to earlier cultures” (1966: 109).

Whatever the details of their results, all of the studies covered by McCurry *et al* show a strong correlation between sensory stimuli and the human mind, suggesting that architects are obliged to carefully consider the emotional and psychological effects of the buildings they design: “Entrusting a secondary – or perhaps negligible – role to the poetic form might represent a missed opportunity to develop holistic therapeutic experiences” (2008: 130). This idea suggests that artistic expression on the part of the architect, is an important aspect of designing psychologically responsive buildings. In Rudolph Steiner’s words, “There is as much lying and crime in the world as there is lack of art” (Day, 1990: 4). While the environmental characteristics will certainly not themselves be able to heal, they will be able to contribute to the patients’ state of mind – the psychological context in which treatment is received. McCurry *et al* conclude that while a building may satisfy all of the requisite “functional adjacencies, clinical pathways and safe design concepts”, it may still be a “soulless, intimidating factory for treating sickness that reinforces people’s fear and leaves them feeling cold and empty”, as opposed to an “inspiring, uplifting space” (2008: 131). What they are suggesting is that the treatment facility needs to welcome and encourage patients; make them feel comfortable and relaxed; communicate to them the caring nature of the medical professionals; and reassure them of their own dignity and self worth. Especially considering the failures of the asylum as a recovery environment, this suggests a desperate need to humanise the institution.

3.3 HUMANISING THE MENTAL HEALTH CARE FACILITY

According to the director and C.E.O. of the Centre for Addiction and Mental Health in Toronto, Dr. Paul Garfinkel (cited by Mays 2009: 54), “People need to be treated in a respectful, dignified, holistic manner that sometimes requires them to be confined in a hospital, either voluntarily or involuntarily”.

While the poor reputation of the historical asylum model is largely due to the manner in which it was usually carried out, the architecture too was cold, hostile, uninviting and entirely inhumane. However, the need to humanise mental health care facilities is not just an issue of conscience – it is directly related to the effectiveness of the environment as a care delivery modality. For instance, unlike a purely physical ailment, a person’s mental recovery is, to a large extent, dependent on their attitude towards treatment – if they feel unhappy about being at the facility, they are unlikely to be positively participant in their own recovery.



Figure 22 – Bathtubs, Oregon State Hospital, Oregon, USA
(www.chrispaynephoto.com: 2010).

Humanising the institution is not about superficial issues such as the quality of finishes – rather, it is about understanding the specific emotional needs of the individuals and designing the building in response to these needs:

3.3.1 Dignity of the Mentally Ill:

Somatic ailments seem to be almost totally accepted by society, but psychological problems, especially addiction, are often seen unsympathetically as some kind of failure. The words people use are dead giveaways to their discriminative attitudes – terms such as “crazy” “nutty”, and “mad”. Nowadays such terminology is generally limited to private conversations, but it was not very long ago that mental hospitals were officially called ‘idiot asylums’ and ‘lunatic asylums’, and patients were unashamedly called ‘inmates’, referred to by number. It is not surprising therefore, that people are often reluctant to seek mental health-care – it could after all mean admitting to being ‘insane’ or ‘cuckoo’. A key need of the patient is therefore to be made to feel like a dignified, autonomous human being. Mrs. Carol du Toit stresses that the first step towards recovery is the restoration of a sense of respect, self-worth and individuality (pers. comm. 12/05/2010). The treatment environment has the potential to speak volumes about the level of respect that society and the staff have for the mentally ill individual, and it is therefore a design consideration of significant importance.



Figure 23 – Jail-like corridors of the typical ‘mental asylum’
(www.chrispaynephoto.com: 2010).

3.3.2 Normalising the Treatment Environment:

One of the most important outcomes of the study of environmental psychology was the effect of the familiar. Subjects showed far lower stress levels when presented with familiar items than when presented with unfamiliar ones. The typical clinical hospital environment is certainly not familiar, and is generally considered by medical professionals to be detrimental to the mind-set of the patients: “The objective in mental hospitals and health centres is to eliminate their institutional appearance as much as possible.” (Manke, 1987: 97). In order for patients to be receptive to therapy, they need to be comfortable and relaxed in their surroundings (du Toit, pers. comm.



Figure 24 – Disrespect for patients’ individuality reflected in the treatment environment – Hudson River State Hospital, New York, USA
(www.chrispaynephoto.com: 2010).

12/05/2010). Therefore, the need to normalise the treatment environment is vital to the success of the facility.

Perhaps it is not as much about the benefits of a ‘normal’ environment, as it is about avoiding the negative effects of an abnormal one. For example, institutional buildings such as hospitals, can be intimidating places, and therefore contribute significantly to patients’ stress levels. At the Finsbury Health Centre in London, which was designed by Lubetkin in 1938, the absence of a traditional reception desk and waiting room was designed to “create a relaxing and unthreatening environment” (Goode (Ed), 2009: 404).

Mrs. Carol du Toit also expresses the need to ‘normalise’ the mental health-care facility, and stresses that the patients should not perceive the facility as a ‘hospital’ at all. This suggests a possible new meaning of the word ‘de-institutionalise’. At SANCA Lulama in Durban, which is an adapted building, she and her staff have taken various measures to make the environment as ‘non-clinical’ as possible. For example, the nurses do not wear uniform, and a fish tank in the foyer area is intended to create a more ‘home-like’ atmosphere. She agrees with the conclusion in the previous section regarding the lack of consensus about the beneficial effects of specific colours, but does suggest that the use of colour generally can help to create a cheerful, warm and inviting environment (pers. comm. 12/05/2010).

The need to humanise the institution is supported by Herman Hertzberger, who, in designing ‘De Drie Hoven’, which is a housing complex for elderly people who are either physically or mentally disabled, did everything he could to avoid a typical hospital atmosphere. For example, he felt that despite the fact that the patients’ lives are heavily dependent on the nursing and sanitary facilities, the living quarters are not dominated by them (Suckle, 1980: 58).

3.3.3 Expressing Recovery as a Choice and Mitigating the Sense of Confinement

The reason that the ‘home-like’ nature of the environment is so important is that a key concept in the treatment of addiction is the idea of ‘rock bottom’ and the ‘will to recover’: This means that the success of psychological recovery, especially addiction treatment, is largely dependent on the patients’ perception of recovery as a choice that they have made, as opposed to something that they have been forced or even merely pressurised into by someone else. Modern mental health-care facilities are not some kind of jail, as many uninformed people believe. Specialists in the field note a marked difference between the success rates of addicts who have chosen to seek treatment, and those who have been pressured by others into doing so (McIntosh; Menell, pers. comm. 06/03/2008). In other words, successful treatment requires a positive attitude towards the process. This attitude is affected by the nature of the treatment environment. Du Toit states categorically that the efforts of the therapist to restore a person’s psychological well-being is all but impossible in some of the inhumane buildings that they are expected to provide care in (pers. comm. 12/05/2010).

As discussed previously, Alexander suggests that buildings should be arranged so that they define what he calls ‘positive outdoor space’, and that the buildings are circulated on their inner edge, by an intermediary space – half-inside, half-outside. This idea is applicable to the issue of the patients’ sense of confinement, because instead of navigating the treatment environment internally, through narrow, artificially lit and mechanically-ventilated corridors, patients could access different spaces via a semi-outdoor space in which they are in contact with the natural environment, fresh air and natural light. This means that they are able to spend more time outdoors. Even if it is for a minute or two as they move from one activity to the next, this break from the internal environment could be extremely beneficial.

It was also mentioned that these court-yard spaces should not be totally enclosed, but should show at least one clear way out. This idea could be dealt with in another way too: The edge of the building that defines the outdoor space could be articulated or even perforated so that the sense of confinement that it generates is actually manipulated by the rhythm of its inner edge. For example, another of Alexander’s patterns is the ‘half-hidden garden’. This idea suggests that in housing, gardens at the rear of the property tend to be too private, while gardens between the house and the street are too public. He suggests that the garden should rather partially reveal itself at the side of the house, possibly even be incorporated into the main entrance, allowing for a dialogue between the private and public realms. This idea is relevant for its social implications, but it is also particularly useful because it suggests a way to define the outdoor spaces of the treatment facility in a soft and subtle manner.

3.3.4 Safety and Security

Providing health care for the mentally ill has certain realities, particularly regarding safety and security. As acknowledged by the ‘balanced care’ model, “...psychiatry often involves the treatment of people against their will, who are indeed often deprived of their freedom” (Staudt, 2006: 23). The care environment has to protect against various safety risks, such as suicide, self-harm, violence, negative external influences and escape. It also must facilitate the meticulous observation of patients by medical staff.



Figure 25 – Crude, insensitive security measures - Trenton State Hospital, New Jersey, USA.
(www.chrispaynephoto.com: 2010).

However, the ill-considered, crude implementation of such safety measures are likely to contribute to a built environment that is not conducive to effective treatment and recovery. As discussed previously, the need to provide a humane, normalised environment is of paramount importance. Also, one of the most notable positive factors of environmental psychology has been shown to be that which is familiar. Therefore, constant visual reminders of a patient’s abnormal

state, suicidal tendencies and confinement on the other hand, are likely to disrupt positive development and mitigate or hinder progress. As mentioned in the previous section, patients need to be participant in their own recovery – they must want to get better. Therefore, their environment should represent emphasise freedom, not their confinement.

A major role of the architect is therefore to design the mental health facility to optimise patient safety and security, as well as to maximise the observational duty of the care givers, in a manner that is sensitive to the emotionally vulnerable state of the patients who inhabit the building. For example, the architect of the Christus St. Joseph Villa Marian Centre in Salt Lake City incorporated “many protective elements in what otherwise appears to be a cosy lodge with a fireplace and reasonably comfortable rooms” (Pace, date unknown: 59). This facility includes a variety of effective yet subtle safety precautions. The ceilings are high, lessening the impression of confinement, while also minimising risk, and the light fittings have vandal-proof coverings. Access to potentially dangerous areas such as the kitchen are carefully controlled, and items that could be used as weapons, such as furniture, are fixed in place. Absolutely no parts of the building can be looped around with rope or a belt - even draperies are hung with pop-off clips on breakaway curtain rods. Wardrobes are similarly considered, offering only shelves for folded clothing. In the bathroom, grab bars have had solid plates fitted below them. The toilet roll spindle requires a key for removal, and the mirrors are stainless steel. High-strength safety glass is used for all glazing.

The architect must consider all safety risks, and deal with them in a discreet, subtle manner. For instance, instead of crude security bars, windows could be able to be opened only slightly, and the building could be kept to a maximum of two stories. The built environment must be one that emphasises the positivity, not negativity.

3.4 PRIVACY: Recognising Isolation as a Part of the Reintegration Process and Creating Privacy in a Community Context

Privacy is an important issue in many human environments, but it is a particularly sensitive one in the context of mental health-care. Patients require privacy from each other, staff, and most importantly, members of the public, especially visitors. It is a very complex issue, deeply enmeshed with other important factors such as the observation requirements of staff, and the need for a sense of control on the part of the patients. Also, the required degree of privacy varies, depending on the nature of the situation. For example, people who are being treated for addiction are usually forced to share bedrooms, as their illness survives on dissolved social support structures and secrecy – to them, too much privacy from one another could be detrimental to their recovery. On the other hand, there are instances where too little privacy is also a problem, especially from non-patients, such as members of the community outside the facility, and visitors inside. For

example, the presence of one patient's visitors in the building should not jeopardise another patient's right to anonymity.

The privacy issue is further complicated by the context factor. While South Africa has adopted community-based care as the preferred method of providing mental health care, the more modern balanced-care approach, especially with regard to addiction treatment, accepts the need for the hospitalisation and even confinement of patients, depending on the severity of their condition. Considering this, there is an obvious conflict between the needs of community integration and patient privacy: The building needs to ensure privacy and a degree of isolation, but must also be located in, and facilitate interaction with, the local community. Designers of in-patient mental health-care facilities in urban settings do not have the luxury of an already private, peaceful environment, as would be available in a remote, rural location.

Therefore, such buildings require the carefully considered hierarchical progression from the most public spaces, to the most private. This need, although not specifically for health care environments, is discussed by Chermayeff and Alexander: "In the man-made environment the anatomy of urbanism should be organised at two levels. First, the numberless kinds of experience need to be translated into distinctly articulated and appropriately structured physical zones. Second, these separate zones must be organized in relation to their intensity of effect on one another, in hierarchies, according to their magnitude and quality" (1966: 118). This recommendation of a structured progression from public spaces to private ones is particularly relevant to the problem of providing spaces that are sensitive to patients' needs for privacy despite being in an interactive, community environment.

An in-patient mental health-care facility in an urban setting will inevitably include domains ranging from very public, such as the reception and family spaces, to extremely private, in the form of consultation rooms, bedrooms and bathrooms. Chermayeff and Alexander (1966: 141) explain the importance of the unique nature of the different zones, as well as the connections between them: "Whatever the precise size and number of domains, the individual integrity of each must be preserved, and the hierarchy of each must be influenced to a great extent by the connections between domains".

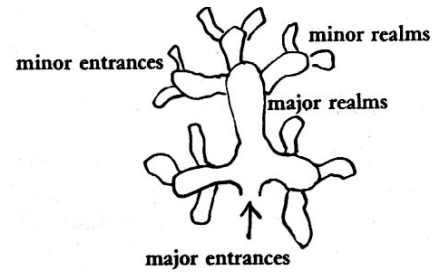


Figure 26 – Gradients from public to private
(Alexander, 1977: 484).

3.5 TERRITORY AND CONTROL IN A COMMUNAL ENVIRONMENT

Autonomy and a sense of control are important needs of the mentally ill individual. While certain privacy issues are required to be dictated to them, others should be up to them, particularly when it comes to the sharing of spaces such as bedrooms and bathrooms. As discussed, one patient's right to privacy should not be compromised by another's actions. For example, an individual in their bedroom should be visually obscured from the public domain even when their room-mate opens the door to a visitor.

Achieving a sense of control involves both freedom on the part of the occupant to choose their position or route within the environment, as well as their ability to actively control it to some degree. Herman Hertzberger is renowned for his theory that, rather than being handed over entirely complete, buildings should provide a physical framework to be 'filled in' by inhabitants according to their needs. 'De Drie Hoven' is one such example. Like people suffering from addiction and other mental illnesses, these individuals are vulnerable, and they have unique needs, therefore requiring special consideration.



Figure 27 - Hertzberger's 'incomplete' buildings are intended to invite the individual to have an active role in their environment (Suckle, 1980: 60).

Hertzberger's intense preoccupation with the individuals and the relationship they have with their environment is clearly demonstrated in this building, which invites its inhabitants into an active role in their environment and also helps them to establish relationships (Suckle, 1980: 58). Of course, the degree of incompleteness is entirely dependent on the circumstances, but nevertheless, the fundamental intention of providing an environment that is as suitable for the individual as possible, is particularly relevant to the mentally ill, who, as discussed, benefit from being given a sense of responsibility and control.

Some may argue that it might not always be appropriate for vulnerable people such as the mentally ill to have such control, but De Drie Hoven was designed for people who are both elderly and mentally disabled. Hertzberger's argument regarding this point was that the usual environments provided for these people were predicated on the common opinion that everything should be done for them instead of by them, which only adds to their passiveness, rather than "stimulating them to use any degree of validity they still possess" (Suckle, 1980: 58).



Figure 28 – Patients are encouraged to customise personal space – Riverview Manor Specialist Clinic (author, 2010).

Since addicts are encouraged to take responsibility for themselves, this philosophy is appropriate to them too. According to du Toit, satisfying the patients' need for a sense of control could be as simple as having the ability to take ownership of their part of the shared bedroom – She recommends that each patient has their own corner of the room, with their own window to open, and their own wall to personalise (pers. comm 28/08/2010). For instance, figure 29 shows how children's bunk-beds can be made into a home of their own by having individual windows, deeply set so as to serve as shelves for personal items (Day, 1990). The goal of the architect should be to create personal territory within the public domain, and to create environments that express the individuality of every occupant: "Every client, occupant, user, even those not yet born, is an individual, a human person, not a feeling-less statistic to be packaged. They need their own places as houses for the soul, not as boxes for the body" (Day, 1990).

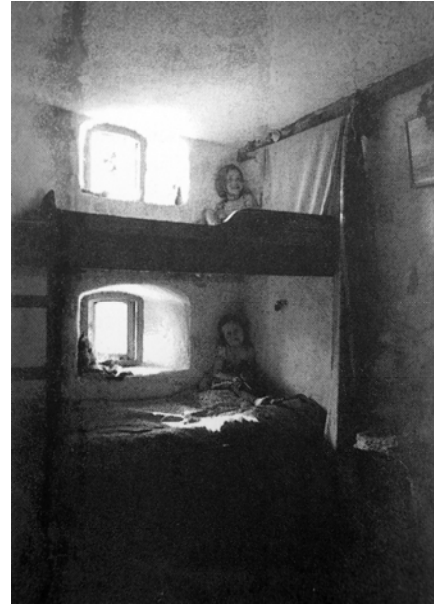


Figure 29 – The creation of private territory and a sense of ownership and control within the public domain (Day, 1990: 146).

3.6 FACILITATING SOCIAL INTERACTION: Creating a Sense of Community in the Isolated Environment

While ensuring patients' privacy from the outside world is vital, creating a sense of community within the institution is also crucial. In addition to the patient's need to feel a sense of belonging, this is because the promotion of healthy relationships is a key factor in the recovery of the mentally ill. This is particularly true of addiction treatment, because a major consequence and cause of addiction is the dissolution of relationships with family and friends – it is a disease fuelled by isolation and secrecy. As such, a common thread between almost all treatment models is the concept of an inter-personal support structure – Family, friends, care givers, and especially fellow addicts – what is known as medically as social milieu therapy, but is perhaps best described by the traditional South African concept of 'ubuntu' – a philosophy that stresses the importance of support for fellow human beings. It is therefore imperative that although the development of social and communicative skills is to a large extent the responsibility



Figure 30 – It is imperative that the environment fosters a spirit of 'ubuntu' among the patients (<http://blog.mlive.com>: 2010).

of the therapist, the built environment should be one that facilitates this development, as opposed to hinders it.

3.6.1 Encouraging Social Interaction Outside of Formal Therapy Times:

Treatment programs usually involve a full timetable with many intense structured therapy sessions, in which patients are encouraged to communicate openly with one another – trained medical professionals are equipped with the skills to assist patients in re-establishing healthy relationships. However, the important role of social interaction goes far beyond the formal, structured group therapy sessions.



Figure 31 – The environment should encourage informal interaction, which is an important part of recovery (du Toit, 2008).

Carol du Toit (pers. comm. 12/05/2010) points out the importance of unstructured social interaction in this regard. She explains that in order to be successfully re-integrated, patients must learn to socialise outside of the formal therapy environment. It is all very well being able to communicate in a structured therapy session, but real life situations are what these individuals are really being prepared for. Furthermore, a sense of belonging, as well as the establishment of friendships and a social support structure is dependent on such informal interaction between individuals. These friendships also play a vital supportive role after treatment, once the patient has been re-integrated into society. This has significant architectural implications – without the influence of the therapist, the environment is the only real factor. It must therefore facilitate, and indeed even encourage passive interaction – patients should be provided with opportunities to socialise spontaneously. For instance, the circulation routes should be more than mere connections between highly specialised spaces – they should themselves be an important social space, with alcoves and cloisters at nodes and junctions, where people can interact informally.

In contrast, for example, the traditional asylum building, with its typically long, straight corridors in bedroom wings offer no such opportunities. There are no intermediate spaces, which could act not only as buffers between one level of privacy and another, but could also serve as spaces that host such spontaneous interaction between patients: “Once one realises that the joints between domains are themselves physical elements of no less importance, one can see that it is actually these elements that give the plan its hierarchical structure” (Chermayeff; Alexander, 1966: 118).

The importance of informal interaction also goes beyond the development of social skills in terms of communication and relationship building – patients are required to re-discover the pleasures of life without their addictive behaviour. Since their lives have become completely consumed by their habit, they benefit greatly from re-kindling healthier past interests, such as

hobbies, arts and sports. The fundamental goal is that they learn to appreciate fulfilling and rewarding activities without drugs or alcohol, so that they are equipped with the skills to abstain once they are re-integrated into society, where they will be exposed to those risks again. At SANCA Lulama in Durban for example, the patients are encouraged to engage in typical social activities, such as 'braais', without alcohol or drugs. This means that the treatment environment should not be designed such that it merely accommodates specialised treatment activities. Rather, it should be a flexible environment, where un-specified activities have opportunities to take place. This idea is central to Hertzberger's design philosophy, but it does not have to be about providing an incomplete framework structure. It could simply be about how the different spaces relate to one another. For instance, spaces such as the gym, games room and patients' lounge should open onto a green court-yard, so that together, they form a whole that is conducive to healthy social activity, while spaces for more academic activities would be suitably placed on the first floor. This point is perhaps more about the inclusion of certain spaces, rather the actual design of them, but will nevertheless be an important consideration during the design process.

3.6.2 The Individual within the Group:

The issue of social interaction is particularly complex when it applies to recovering addicts and other mentally ill individuals. As discussed, people who are recovering from addiction are often required to re-learn the skills of socialising without the influence of their substance, of abuse, which in some cases, is something that they have not done in many years. This means that they are often extremely shy, and can be intimidated by the group, especially during their first few days at a treatment facility. In this case, simply forcing them to enter public spaces abruptly would be intimidating and certainly not conducive to their development of social skills. Illustrating the sensitivity of this issue, new patients at SANCA Lulama in Durban are not received in the main foyer area, but are taken straight to the duty room via a rear entrance.

Hertzberger's 'De Drie Hoven' is an excellent example of a built environment that was designed with the needs of the individual within the group in mind. Because of their limited mental and physical abilities, it is generally not possible for the inhabitants of De Drie Hoven to go into the local town, so Hertzberger attempted to bring the town to them. His intention was to create an environment in which the individuals – who often tend to



Figure 32 – Circulation routes are treated as 'streets', offering various opportunities for spontaneous interaction to the residents as they move through the building (Suckle, 1980: 59).



Figure 33 – Hertzberger's 'De Drie Hoven', an environment that responds to the needs of the users (Suckle, 1980: 59).

withdraw due to their age and condition – have a wide range of options in terms of communication and social interaction. Hertzberger's mentor, Aldo van Eyck, commanded, "Make of each house a small city, and of each city a large house" (Ligtelijn, 1999: 17), but what did he mean? He is appealing to architects to respond to the natural patterns of human life – to cater for spontaneity and the 'in-between', and to stop trying to separate different spaces with clean-cut impenetrable barriers, but rather to acknowledge the relationships between different spaces by treating large scale buildings as collections of smaller units, and small units as part of a bigger whole, much like Alexander's idea of a 'building complex'. Van Eyck criticised the fact that so many modern architects of his time failed to articulate multiplicity and to provide the 'in-between' spaces: "Architects have left no cracks and crevices this time. They expelled all sense of place. Fearful as they are of the wrong occasion, the unpremeditated event, the spontaneous act, unscheduled gaiety or violence, unpredictable danger round the corner. They have made a flat surface of everything so that no microbes can survive the civic vacuum cleaner; turned a building into an additive sequence of pretty surfaces with nothing but emptiness on both sides" (Smithson, 1962: 44). Van Eyck is addressing the nature of spaces – their scale and their unique characters, but particularly, how they relate to one another – the fact that their own nature is only so because of the nature of those other spaces to which they relate. He was concerned with the spaces between spaces: "Instead the transition must be articulated by means of defined in-between spaces which include simultaneous awareness of what is significant on either side" (1962: 104). This idea is clearly employed by Hertzberger in the design of De Drie Hoven: For example, all of the bedroom units are situated along wide passageways which are treated like the streets of a city. In fact, he even referred to this type of space as an 'internal street'. Each unit has its own porch, with a window overlooking the 'street', so that the individual can choose to be somewhere in-between the public and private realms, as opposed to being forced to choose between two 'false alternatives', to use van Eyck's term. The front doors are made up of two separate panels – stable-doors essentially – so that the occupants can open only the top half, enabling them to open their homes informally, inviting social interaction and making them feel a part of the community. Compare this to the common arrangement of private units separated from public space only by a door that is either totally open or totally closed, and via a corridor that serves absolutely no purpose other than as a circulation route.

As would be the case in a well functioning city, the 'streets' offer many opportunities to make casual contact with others. The several floors adjoining the 'street' have many small roof terraces, which are in turn adjacent to



Figure 34 At the centre of Hertzberger's 'internal street' plan is the 'village green', which hosts various social activities (Suckle, 1980: 60).

communal living rooms, each of which serve private individual living units. Hertzberger treats the circulation route as an important living space of its own, as opposed to a human highway. The communal spaces which open onto the internal street encourage socialising, as residents accidentally come into contact with one another as they move from one part of the environment to another. The central meeting space is even nicknamed ‘the village green’, and is much like a town square, accommodating communal activities such as fashion shows, concerts and religious services. In contrast to this most public of spaces, there are also more intimate places for activities such as drinking coffee and playing cards. This ‘indoor city’ also has amenities such as shops, a laundry, a bar, a library, a billiards room, a hairdresser, a bank, a giro branch and a hobby room (Suckle, 1980: 61).

It is interesting to observe how when this need is not catered for adequately by their built environment, elderly people actually step in and alter it themselves. Figure 35 illustrates how the occupants of this apartment in Durban have furnished and decorated the landing outside their front door, in an effort to soften the abrupt transition between the public and private realms. The two chairs afford the occupants the opportunity for informal, spontaneous interaction with other residents of the building, without actually having to invite them in. In fact, these chairs are often used by the two occupants of this unit themselves, when they could easily sit together inside their apartment or on their private balcony. Clearly, they feel a need to be part of the community – to socialise casually and spontaneously, without formal arrangements. This scenario illustrates that Hertzberger’s recognition of this particular human need is indeed entirely valid.



Figure 35 – Social needs demonstrated by a ‘make-shift’ internal porch (author, 2010).

The individual and the group are two polarities which Hertzberger’s colleague and mentor, Aldo van Eyck identified as ‘false alternatives’. His ideas about reconciling these ‘twin phenomena’ are very well demonstrated by his orphanage in Amsterdam. The project is particularly relevant to this topic because it deals with a vulnerable population group.

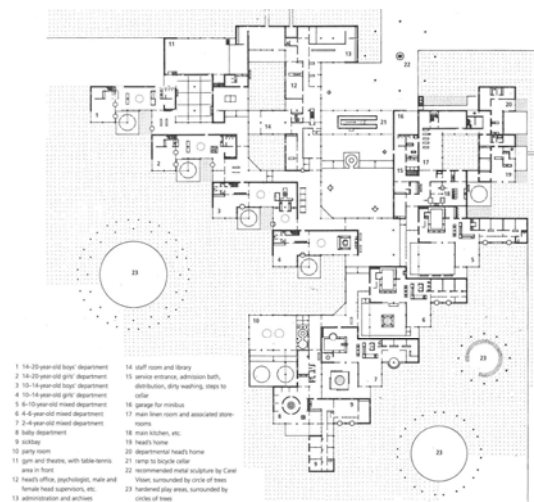
The orphanage is perhaps one of Aldo van Eyck’s most significant works. He was clearly preoccupied with the needs of the users – individual and collective – so this project provided the ideal opportunity to apply his ideas about people to design. The building houses 125 orphans,



ranging in age from only a few months to around twenty years. Van Eyck recognised that unlike ordinary children, these ones are ‘unprotected’ and therefore required special consideration and care. In addition to demonstrating the architectural reconciliation of conflicting user needs, the orphanage is particularly relevant because of its theoretical underpinning, which clearly influenced Hertzberger’s housing for the elderly.

Just like De Drie Hoven, this building is based on the ‘internal street’. Van Eyck recognised that due to the nature and scale of the project, he needed to reconcile the positive attributes of a centralised scheme, with the ‘false alternative’ of a completely de-centralised one. In this project, the ‘twin-phenomenon’ of the individual and the collective was van Eyck’s primary concern: “The plan attempts to provide a built framework – to set the stage – for the twin phenomenon of the individual and the collective without resorting to arbitrary accentuation of either one at the expense of the other” (Ligtelijn, 1999: 88). At this point, it is worth re-iterating that ‘twin phenomena’ cannot be split into separate polarities without forfeiting the essence of what they are. For example, the group is only a group because it is made up of individuals, and conversely, the individual is only unique because it is part of the group. This observation indicated the necessity to reconcile – in architectural terms – the idea of unity with that of diversity – in other words, by achieving one by means of the other. Van Eyck tackled the task of reconciling the conflicting needs of the individual and the group through the architectural reciprocity of unity-diversity and part-whole. Van Eyck achieved the reconciliation of unity and diversity by arranging the living units in a complex dispersed pattern, but drawing them together with the ‘internal street’, much like Hertzberger did at De Drie Hoven. In his words, “The idea was to persuade it to become both ‘house’ and ‘city’; a city-like house and a house-like city” (Ligtelijn, 1999: 89). His theories arrive at the conclusion that spaces should not be separated in terms of their differences, thereby accentuating these differences, but should be connected by ‘in-between’ spaces, facilitating relationships between opposites, thereby enhancing their true meaning.

The idea of the ‘in-between’ spaces is taken further in this project, in that the procession into the building takes place gradually. This is because van Eyck recognised the anxiety caused by abrupt transition, especially in vulnerable individuals such as children, particularly orphans. In light of this, the orphanage is connected to the public domain by a large open square – a transition space between outside and inside. This is in stark contrast to the typical asylum building, in which



the transition between the very rural environment and the overwhelming, intimidating building was facilitated insensitively by a defined entrance of which one was either on one side or the other. This is extremely relevant to the design of mental health-care facilities, because, like orphans, these individuals are also intimidated by the group, and are usually very apprehensive about entering the treatment facility. Making the arrival as easy as possible is therefore an important first step in the long and difficult recovery process.

3.6.3 Instilling a Sense of Belonging

Another similarity between orphans and addicts is their absence of a sense of belonging. For different reasons, both lack adequate social support structures, and suffer from feelings of loneliness and neglect. Van Eyck recognised that it is human to tarry, and that leaving home or even coming home can be uncomfortable experiences, concluding that “The job of the planner is to provide a built homecoming for all, to sustain a feeling of belonging” (Ligtelijn, 1999: 89). The importance of this sense of belonging had been re-iterated by several mental health-care professionals, such as Burns (pers. comm. 23/04/2010) and du Toit (pers. comm. 12/05/2010). To achieve this, van Eyck developed the ‘internal street’ so that it invited children to interact and move from one area to another. His strategy was to provide an inviting, stimulating, exciting connecting element, so that the children interact spontaneously, as opposed to in a premeditated manner. In contrast to a series of specialised spaces connected by a dedicated circulation route, the orphanage was conceived of as “a configuration of intermediary places clearly defined” (Ligtelijn, 1999: 89). Van Eyck’s intention was to articulate the transition through the building by way of defined intermediate spaces, in which the individual has simultaneous awareness of what is significant on either side. For him, the ‘in-between space’ is a common ground, reconciling conflicting polarities (Ligtelijn, 1999: 89).

Van Eyck followed the concept of the internal street further – he wanted the children to behave in this environment as they would outside. So, the materials used to create this ‘internal street’ are the same as those used for real streets outside – the only difference being that the children have a roof over their heads instead of the sky. The idea was that this hardy, outdoor



Figure 38 – Two boys entering the orphanage via the intermediary square – a transition space between the outside world and that within (Ligtelijn, 1999: 92).



Figure 39 – Van Eyck employed localised lighting to create variety, in an effort to mitigate the typical institutional atmosphere (Ligtelijn, 1999: 93).

feeling environment would encourage them to behave spontaneously and vigorously. Even the lighting is like that of street lights, unashamedly creating the inconsistency of bright and dull areas. Different open courtyards and patios connect to the street and to the more private spaces. The finishes of the 'internal street' are hardy and durable. In complete contrast to this, the intimate, more private spaces within the departments themselves are soft and nurturing. Van Eyck poetically described this contrast: "In the interior street, the walls are like those outside – rough, brown and powerful, like the outside of a coconut; whilst in the departments they are white, smooth and soft, like the milky inside of the same coconut. Two kinds of protection: a winter coat with a soft silky lining on the inside close to the body, heavy rough tweed on the outside where it touches the world – the elements and other people" (Ligtelijn, 1999: 89). While these ideas are not directly applicable to mental health care facilities, they are relevant because they demonstrate the extent to which architects should be thinking about the needs of the users when designing buildings.

3.6.4 Managing Interaction with Members of the Community

The process of reintegrating an individual back into society is a gradual one. It is not acceptable for a patient to move from the sanctuary of the facility straight back to the streets of the city. A sadly common scenario is that of the individual who thrives in the sanctuary of the treatment environment, but is totally ill-equipped to deal with the pressures of the 'real world', such as peer pressure, and therefore relapses soon after they have been re-integrated. Therefore, an important way of preparing recovering addicts for re-integration is by allowing them to interact with members of the general public, especially those who could potentially influence them negatively, such as their old friends.

On the other hand, it is also beneficial for patients to interact with outsiders who are potentially positive influences, such as individuals who have already been successfully reintegrated. Such interaction is in fact mutually beneficial. Addiction is a chronic disease, and addicts are said to be recovering, not recovered, for the rest of their lives. Their life-long sobriety depends on a rigorous after-care program, and are often weaned back into normal life, though secondary and tertiary treatment programs. According to Lemonick (2007: 26), it has been shown that the twenty percent success rate of patients treated for addiction over a set period of time can be doubled to forty percent if the treatment is ongoing.

After-care often involves symbiotic interaction between patients in primary care and successfully re-integrated ones. This mutually beneficial relationship is also true for education and preventative care – both the recovering addict and the vulnerable youth can benefit greatly from supervised interaction. The building therefore needs to facilitate this gradual re-integration process, as well as to engage with the community on an after-care and preventative treatment level, all the while ensuring a private sanctuary for patients who are still in primary care.

This need to cater for interaction with outsiders therefore requires a structured ‘middle’ space, in between the public domain and the privacy of the treatment facility, where patients and the public can interact, under the observation of the staff. The level of interaction of course also varies depending on the patients’ level of progress. Importantly, the management of this kind of activity is crucial – patients need to be carefully observed at all times: “Everything is to be within sight and ear-shot” (du Toit, pers. comm. 12/05/2010). As discussed in terms of safety and security, these control measures need to be discreet, as the patients’ sense of responsibility and autonomy is also crucial to their recovery.

3.6 PUBLIC STIGMA TOWARDS MENTAL ILLNESS

Public stigma surrounding mental illness is an extremely important issue, because the fundamental purpose of treatment is to reintegrate sufferers back into society. Successful reintegration is subject to the condition of the patient as well as the attitudes of the community to which they are returning. Following years of negative public perceptions of mental health, it is vitally important that the building achieves two things:

- Reflect the beliefs and aspirations of government as outlined in the *Mental Health Care Act of 2002*.
- Challenge the public’s perceptions of the institution and the nature of mental health care generally.

Treatment facilities should reflect the fact that “mental health-care today has emerged from the shadows of shame and denial” (Pearse, 1999: 138). In *Not on Our Street: Community Attitudes to Mental Health* (1982), Dear and Taylor contend that the reaction of the local community in its role as host is fundamental to the success of community-based care: “Rejection of the mentally ill by local residents is likely to undermine any therapeutic benefit of being part of a ‘normal’ environment. As a result, an understanding of community response to the mentally ill and to the facilities which serve them is required for decisions about the planning and location of such facilities”. The building – its location and its design – have an important role to play with regard to public understanding of mental health-care. The issue is further complicated by the fact that modern balanced care requires treatment facilities to be in the context of the local community. There is a risk that people who need help will be reluctant to seek it due to their fear of their problem becoming public knowledge. In many cultures, addiction and mental illness are still viewed superstitiously and unsympathetically. This therefore ties the stigma issue to the privacy factor. Joseph *et al* (2006: 133-134) argue that these cultural sentiments are partly because of the public image of the historic asylum. They point out that because of the negative connotations associated with the asylum building typology, many people who need institutional care might be inclined not to seek it, and that the image of the building is therefore imperative: “The architecture

of asylums, the quality of their grounds and the variety of their facilities are key manifestations of the image-making necessary to maintain a ‘client’ base”.

3.6.1 Location of the Facility:

The location of the facility is an important factor when considering the impact it can potentially have on public stigma. For example, institutions in remote locations, while they might have other advantages, could increase public stigma by re-enforcing the idea of discriminatively removing mentally ill individuals from society and isolating them in remote locations. While it is likely that the construction of a mental health-care facility in an urban environment would cause public outcry from local residents (Burns; du Toit, pers. comm. 2010), especially prospective neighbours of the new development, this is only so because of their own attitudes, which should be challenged. On the other hand, simply locating this type of building in an inappropriate urban context would probably worsen the situation. This means that in addition to the architecture of the building doing its part to sensitise the general public about the need to integrate people with mental problems into normal community life, the site has to be very carefully selected, so that the objective of challenging public stigma does not in fact worsen it. Perhaps for example, a site adjacent to an existing general health-care clinic would be more suitable in terms of stigma – as well as other issues – than one in amongst houses.

3.6.2 The Image of the Building:

Another consideration of significant importance is the imagery of the building. If members of a community are suddenly confronted with the reality that another nineteenth-century ‘mental asylum’ is to be constructed in their neighbourhood, they are probably going to resist. However, if they are greeted by a beautiful building that is discreet and domestic in scale, their surprise that it is indeed a mental health-care facility might indeed cause them to re-consider their preconceptions.

3.7 SYMBIOTIC INTEGRATION OF FUNCTIONS

Integration is not just about mixing, it’s about relationships. Accommodating various functions or activities in a single building is one thing – Facilitating a symbiotic relationship between them is another.

The research has shown that a modern facility should be holistic – treating the community as a whole, in addition to the individual patients, and also providing ‘preventative care’. It needs to cater for a degree of engagement with outsiders – members of the local community – on various levels. Family and friends are encouraged to participate in patients’ recovery, and adolescent members of the community should be able to be educated about issues such as mental health and addiction.

Also, the facility also has to accommodate staff members, such as social workers, nurses, doctors, psychiatrists, psychologists and occupational therapists. Some of these people are senior, while others are trainees. The quality of their work environment is also a crucial factor in the delivery of effective care, especially because their role involves establishing long-term personal relationships with the patients. High staff turnover would therefore be particularly detrimental to the provision of care.

But it is not just about catering for a variety of activities – the building has an essential role in facilitating the relationships between the various functions of the facility. For instance, in stand-alone facilities, all of the required professionals need to be accommodated, even if they only provide an intermittent service, such as a general practitioner. On the other hand, if the building was designed as an extension of an existing general health-care facility, then services could be shared.

3.8 ADAPTABILITY

The dialogue between mental health-care and architecture during the last one-and-a-half centuries reveals a history of dramatic transitions from one extreme to another. One result of this is that the two have often been completely out of synchronisation with one another – care is often provided in inappropriate treatment environments that were designed for the previous ‘outdated’ approach. Another result has been the demolition and abandonment of many ‘superseded’ building typologies.

An appreciation of the history of this erratic relationship reveals important architectural implications for the future – are the present beliefs also a passing fad? How sure are we that our new ‘appropriate’ structures will not also be torn down or abandoned in the not-too-distant future? If we accept that we cannot be sure about the answers to these questions, we must ask another: How can we design facilities that can adapt to change?

Buildings can be adaptable in two ways. Firstly, they can be designed so that they can easily be altered physically, to suit a different function. Secondly, they can be designed with change in mind, so that they can suit a variety of functions without having to be physically altered. Hertzberger supports this idea of ‘polyvalent space’ – defining it as “One form that can be put to different uses without having to undergo changes itself, so that minimal flexibility can still produce an optimal solution (1991: 147).

3.9 SITE SELECTION

The selection of an ideal site for a new treatment facility is complex, because of conflicting priorities – two different needs: On one hand, the facility needs to be located so that it can cater for those who need it most; on the other, it needs to be situated in an environment that will be well

suited to its purpose of facilitating the integrated treatment of people with co-occurring addictions and mental disorders. Unfortunately, these two requirements are somewhat contradictory: Since South Africa does not have one treatment facility specifically for the specialised treatment of dually-diagnosed patients, the best place for such a centre would be in close proximity to an established psychiatric hospital. Such a facility would foster a symbiotic relationship between the two services, in the interest of developing the treatment models for dual-diagnosis specifically. The implication of this is that the facility should be located in the urban environment, where large hospitals with psychiatric departments exist. However, according to Mrs. Carol du Toit (pers. comm. 2010/06/21), there is currently a large amount of criticism of the fact that almost all treatment facilities in South Africa cater for the urban population, while the rural and peri-urban areas that are home to a large portion of the population, are almost completely un-serviced in this regard. Furthermore, many peri-urban areas such as KwaDabeka and Chatsworth are currently enduring a serious substance abuse epidemic.

Adding to this problem is the economic factor. Addiction treatment facilities can generally be categorised into two distinct groups: Private facilities, which usually cater exclusively for economically empowered people, and as such are self-sustaining; and government-funded facilities, which form part of the public health-care service. Private facilities rely on their paying patient base to survive, and are therefore usually located either in wealthy urban environments, such as Kenilworth Clinic in Cape Town, or in remote, exclusive locations, such as Riverview Manor in Underberg. Of course, a private centre would not be economically feasible if situated in a poor, peri-urban township of Durban. These areas therefore rely on government-funded public health-care to address addiction and mental illness. Also, while wealthy users of private facilities are able to travel to receive care, those who rely on public services are not – they need to have access to care in their communities.

These conflicting needs therefore require that before a site can be selected, the priorities need to be defined, and that the exact typology of the facility is established. On the basis that one option offers the opportunity to provide a specialised service to a population who already have access to care, while the other option offers the opportunity to care for a large portion of society who are in desperate need, and who at present, have no access to addiction and mental health-care care whatsoever, it is concluded that a site in a peri-urban township community should be selected. Although these two scenarios are different, they are by no means without overlap: For example, while a peri-urban site may not provide the opportunity for the facility to be located next to a large general hospital with a psychiatric ward, it could allow the new centre to be adjacent to a community health clinic or, ideally, a community health centre, which is an intermediary between the clinic and the hospital. The factors that have to be considered, when assessing the suitability of potential sites, are as follows:

- **Patient Population:** This requirement is related to that of accessibility. As a specialist service, this type of facility will only be feasible if it can cater for a large enough patient population. While exclusive, private facilities are not limited by their physical proximity to the patient population, as some wealthy people travel half-way across the world to receive the care they want, public facilities must be near to the people they serve.
- **Accessibility:** The site needs to be easily accessible to a large number of people, almost all of whom rely on public transport. This need extends beyond that of the patients themselves, and to their friends and families, who are an integral part of the recovery process. In particular, the site also needs to be easily accessible from Durban, so that consulting medical staff who are likely to be based in the city, can commute to provide care on a daily or weekly basis (du Toit, pers. comm. 21/06/2010). Accessibility is affected by two main factors – proximity to the target population and transport infrastructure. Better accessibility translates into a larger patient population catchment area.
- **Community Context:** The facility needs to provide care in the local community context. It is vital that patients recover in the environment into which they are to be reintegrated, and not in a foreign, remote one. This is in the interest of their own preparedness for life after treatment, as well as in the interest of educating the members of the society to which they belong – it is the community as a whole, not just the individual, that is to be treated. In addition to this, the location of the facility relative to the community environment directly effects the gradual reintegration and aftercare of patients, which are both important aspects of the recovery process.
- **Residential Nature:** One of the most important outcomes of the research is that of the need to provide care in a comfortable, normalised, home-like environment. It seems reasonable to assume that the realisation of this goal is, to a large extent, dependent on the nature of the context in which the facility is situated. For example, a friendly, residential neighbourhood will be more appropriate than an industrial or commercial area in this regard.
- **Proximity to General and Psychiatric Health Care:** Although addiction treatment facilities are often stand-alone independent facilities, close proximity to other medical services such as hospitals and clinics allows for sharing of services, especially medical staff, which improves financial sustainability, as well as more efficient service delivery. This was illustrated clearly by the alternative option of locating the development in an urban environment, where such services are abundant. In addition to dually-diagnosed individuals requiring specialist psychiatric care, patients also require general medical care, particularly considering the duration of in-patient care and the high prevalence of somatic

health issues related to addiction. Close proximity to hospitals and clinics also allows for a smooth transition from acute care such as detoxification to longer-term rehabilitation.

- **Access to Outdoor Space and/or Natural Settings:** While the facility should be integrated into the community environment, the research has revealed that the benefits of ‘therapeutic’ natural settings and open outdoor space are also important. The implication is therefore that sites adjacent to ‘green spaces’ such as public parks are appropriate locations, as are sites that allow for such a ‘green spaces’ to be created by the building.
- **Proximity to Social/Cultural Venues:** Since the purpose of the facility is to re-integrate the individual back into society in a controlled, guided manner, the site should be close to public places where patients can engage with the public, such as by displaying artworks, attending public events, and playing sport. This is also in keeping with the need to promote the patients’ appreciation of sober, healthy recreation and social activities.
- **Revitalisation of the Area:** In addition to being appropriate, the site should require development. In other words, a site which is ideal, but is currently being successfully utilised for another purpose, should not be considered appropriate. Alexander refers to this idea as ‘site repair’. Conversely, a slightly less ideal site, but which is in desperate need of revitalisation, would be appropriate.
- **Safety:** The site should be conducive to a safe environment for the patients, staff, and members of the local community. According to du Toit (pers. comm. 2010/06/21) this safety is three-fold: Patients require a degree of safety from negative influences such as drug dealers; Patients also require protection from general crime, particularly because they are vulnerable; The reality that the development has the potential to effect the safety of the community also has implications in terms of site selection.

CHAPTER 4:

Key Precedent Studies

4.1 INTRODUCTION

The selected precedent studies in this chapter are based on the key issues discussed in the previous section – they are not intended to be descriptive accounts of relevant projects, or to serve as analyses of the buildings in their entirety for that matter. Moreover, their purpose is to identify other designers' recognition of, and response to, the needs of the users, both individual and collective, as established in the preceding study. Therefore, the buildings reviewed in this chapter are not necessarily current or of the exact same typology. Rather, they have been deemed to be relevant because they serve as appropriate examples of architectural responses to the needs of the individual.

Also, some have been chosen particularly because they are recent projects, and therefore represent the required building typology and location of a modern-day treatment centre, in terms of the latest medical knowledge. These examples, such as the Centre for Addiction and Mental Health in Toronto, need not necessarily be investigated in terms of their details, but rather in terms of the architects' and planners' general approach that they reflect.

Each of the three projects discussed in this chapter represent a different typology – all of which contribute to the formulation of a new type of treatment facility. The Centre for Addiction and Mental Health in Toronto is a great example of the extent to which addiction and mental health-care facilities can be integrated with each other and with the urban fabric of the built environment. Padua Psychiatric Clinic in Boekel and the De-Addiction Centre in Pune are examples of specifically psychiatric and addiction treatment facilities respectively, in which the needs of the users, as discussed in the previous chapter, have been responded to in their designs. The purpose of each precedent study is to demonstrate the application of theory and research to actual building design, and together the three selected examples help to inform a new typology.

4.2 URBAN INTEGRATION OF MENTAL HEALTH-CARE FACILITIES:

The Centre for Addiction and Mental Health (CAMH) Re-Development Project, Toronto, Canada.

Architects: The C3 Community Care Consortium: Kuwabara Payne McKenna Blumberg Architects; Montgomery Sisam Architects and Kearns Mancini Architects

The re-development of the Centre for Addiction and Mental Health in Toronto, Canada, is an extremely relevant typological example, because it represents an innovative, contemporary architectural response to the latest medical knowledge concerning mental health – It is “right at the cutting edge”, according to director and CEO Dr. Paul Garfinkel (Mays, 2007: 54). It embodies the latest treatment models such as ‘balanced care’ and the ‘integrated treatment model’ for dually diagnosed individuals, and tackles head-on the fundamental issues at hand, such as the societal integration of the mentally ill, dignity, and public stigma towards the subject. In particular, the manner in which the facility is enmeshed with the fabric of the urban environment is representative of current attitudes regarding care provision.



Figure 40 – Artist’s rendering of the C3 proposal for the CAMH redevelopment project, illustrating integration of the treatment facilities with the urban fabric of the city (Mays, 2007: 54)

The CAMH is the largest mental health and addiction treatment and research facility in Canada (World Architecture News, 2009). The re-development project, envisioned by CAMH in 1998, is a \$382-million re-creation of Toronto's historic Centre for Addiction and Mental Health, on a scale unprecedented in the country's psychiatric history (Mays, 2007: 54). However, while the scale and complexity of the CAMH make it unique, the architectural ambitions of the project are what make it



Figure 41 – The CAMH site prior to the redevelopment project (Mays, 2007: 56).

remarkable and relevant to this study: “To purge from the site all reminders of psychiatry’s often dark past, and to translate into steel, brick and streetscape the most advanced contemporary thought about the nature of mental illness and its treatment” (Mays, 2007: 54). The vision was to create a “...welcoming ‘urban village’: weaving together new cutting-edge CAMH facilities with shops, residences, businesses, parks and through-streets to create an inclusive, healing community (CAMH 2010) – the goal to fully integrate mental health into the community, in order to challenge public stigma and provide a more ‘normalised’ treatment environment for patients, and to revitalise the neighbourhood in the process” (World Architecture News, 2009). According to CAMH (2010), the project, which is still under construction, will:

- Deliver a new model of care and provide a healthy environment that promotes recovery.
- Bring together the best research, clinical, education, health promotion and policy experts in one place to change the future of mental health and addictions.
- Revitalize the city by opening up the site and creating an inclusive new nine block neighbourhood that benefits all.
- Change attitudes by breaking down barriers to eliminate stigma.

Divided into three stages, the completed development will include the following facilities, in addition to other non-CAMH services:

Phase 1 – Completed April 2008:

- In-patient addiction treatment facility
- Transitional ‘alternative milieu’ in-patient addiction treatment facility
- Out-patient addiction treatment facility

Phase 2 – Began 2010:

- Realisation of the ‘urban village’
- Intergenerational Wellness Centre
- CAMH Gateway Building
- Utilities and Parking Building

Phase 3 – to be Completed 2018:

- Centre for Discovery and Knowledge Exchange
- Schizophrenia Program Client Care Building
- Mixed-use community buildings

4.2.1 Humanising and Normalising the Treatment Environment

Dr. Garfinkel expresses emphatically the need for patients to be treated in a respectful, dignified, holistic manner, especially since they are sometimes required to be confined, either voluntarily or involuntarily. He attributes the general deterioration of psychiatric treatment environments largely on the ‘biological reductionism’ of the past thirty years – in which more emphasis has been placed on medication than therapy – and explains that his team wanted to make the hospital a more ‘home-like’ setting, just as one would want in a normal community. To this end, the mental health-care facilities are inter-woven with the rest of the city’s urban fabric. In fact, individual buildings themselves are divided between CAMH and non-CAMH occupancy, further dissolving the divide between the mentally ill and the rest of society.

Importantly, Garfinkel is clear about the fact that a more familiar, humane environment is not just a moral and ethical obligation, but that it is actually conducive to better treatment outcomes: “The more we normalise the hospital stay, in keeping with safety and security, the better it is for the person’s recovery, and ultimate reintegration” (Mays, 2007: 54). He explains that normalising the environment encompasses various design considerations, ranging from the treatment of the facility as an integrated ‘urban village’, like the rest of the city, to the nature of the treatment spaces themselves (Mays, 2007: 54).

4.2.2 Urban Integration of the Treatment Environment

According to the CAMH re-development master plan by George Dark and Frank Lewinberg of the Toronto firm ‘Urban Strategies’, which won the city of Toronto’s Architecture and Urban Design Award in 2005 for the CAMH project, the twenty-seven acre site, which was once enclosed by a forbidding perimeter wall, is being divided into nine city blocks by extensions of the existing streets. On these blocks will be medium-rise buildings – mostly court-yard type – which will house both CAMH and non-CAMH facilities, such as grocery stores, a health club, cafes, scientific institutes, laboratories and private residences, thereby further enmeshing mental health-care with the community.



Figure 42 – The patient-run ‘Out of this World Cafe’ is intended to aid integration of the mentally ill into the community (CAMH 2010).

The goal is to harmonise the new developments with the neighbourhood's urban fabric of small shops, restaurants, galleries, apartments and homes. In the interest of integrating the mentally ill into the community, this concept is even taken to the point of providing amenities that are both CAMH and non-CAMH – for example, there are patient-run public services, such as the 'Out of this World Cafe', shown in figure 42. The Urban Strategies team also paid particular attention to the scale of the proposed buildings, so as to integrate the development with its surroundings as harmoniously as possible (City of Toronto Architecture and Urban Design Awards, 2005).

The strategy of scattering the treatment environments amidst the non-CAMH spaces is intended to simultaneously integrate the mentally ill and dissolve the public stigma of the traditional 'mental asylum'. One of the architects, Terry Montgomery, cited by Mays (2007: 55), makes clear their radical approach: "We are taking a pioneering approach, trying to pull out of the traditional hospital model". He explains that their strategy of integration was implemented in the external treatment of the buildings, by trying to mute the visual difference between CAMH facilities and non-CAMH facilities, and including architectural elements that typify the buildings of the surrounding environment, such as the recognisable face-brick, bay-windows and porches. The architects' hope is that the future buildings on the newly planned site will be different, depending on when they are built, thereby further increasing the 'mix-match' nature of the development.



Figure 43 – CAMH re-development master plan by Urban Strategies, showing sub-division of the site by extensions of the existing streets, and allocation of the new sites to both hospital and non-hospital uses (Mays, 2007: 57).

4.2.3 Facilitating the Process of Re-integration

One of the most important outcomes of the study has been the fact that the process of re-integration is a gradual one, and that after-care plays a vital role in maintaining the life-long recovery of addicts. The CAMH development has been designed specifically to cater for this gradual, on-going recovery process. For example, in addition to the primary in-patient treatment facilities, the first phase of the development includes a four-storey building for out-patient care, as well as three buildings designed to cater for 'alternative milieu', for patients who have progressed past the acute care stage of treatment, but who still require in-patient care.



Figure 44 – CAD rendering of the transitional 'alternative milieu' treatment facilities for addiction – 3 in-patient 'apartment-type' buildings, left; and an out-patient facility, right (Mays, 2007: 57)

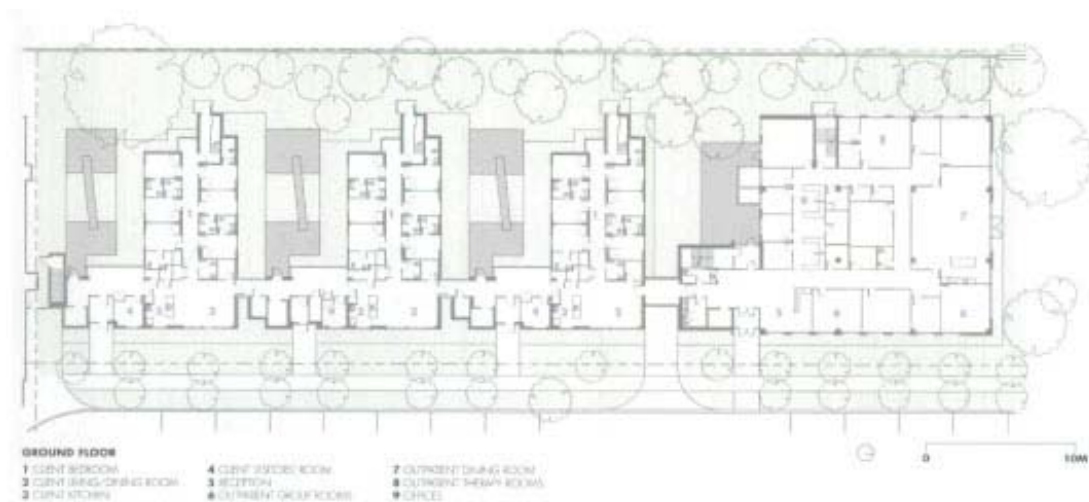


Figure 45 – Ground floor plan – these buildings accommodate transitional 'alternative milieu' treatment, for patients who have progressed beyond the acute stage of the illness, but still require in-patient care (Mays, 2007: 55).

The three low-rise buildings on the left are designed to accommodate twenty four patients each, and are designed to be 'apartment-like' in nature. The building on the right houses out-patient care – as discussed previously, after-care is a vital part of an addict's life-long journey of recovery. Together, they facilitate the gradual process of re-integration. According to World Architecture News (2009), the key to the success of the facility is the creation of a 'home-like' environment that is filled with ample natural light and views to the outdoors, as well as the intimate social milieu that is created by the grouping of six clients on each of the four floors, as opposed to larger scaled, more institutional accommodation. Although each patient has a private room and

toilet – which is often intentionally not done because of the addict’s need to practice sharing – they do utilise communal living and dining spaces.

4.2.4 Adaptability

The previous section highlighted the erratic nature of societal and medical attitudes towards mental health care over the past two centuries. The CAMH precinct in Toronto is unique because it has been home to the architectural manifestations of changing attitudes since Howard’s asylum was opened on the site in 1850. In chapter one, mention was made of the four buildings that were constructed in its place in 1976, under the de-institutionalism movement. Now, they too are doomed for demolition, in favour of the new re-development project.

In light of the history of the site, Mays asked Dr. Garfinkel the question: “What makes CAMH sure that they are not casting into brick and mortar merely the newest fad in psychiatry in the cycle of ‘breakthroughs’ and disappointments that has been ongoing since the early nineteenth century?” (2007: 56). Garfinkel’s answer was that they are not sure – he acknowledged that what is needed in 2010 may well not be what is needed in 2040. Their brief to the planners and architects was to design a flexible built environment – “architecturally generic structures, undedicated to a single use dictated by current medical ideas” (Mays, 2007: 56). Of course the success of this objective can only be properly assessed once the buildings have in fact been successfully re-adapted.

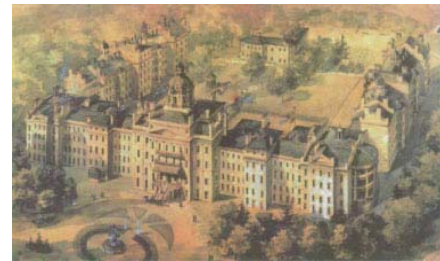


Figure 46 – An 1890 ink drawing by W. J. Thompson of Howard’s ‘Provincial Lunatic Asylum’
(Mays, 2007: 55)



Figure 47 – Massing diagrams illustrating destruction of the four 1970’s cruciform buildings, which replaced Howard’s asylum and themselves represented the latest attitudes of their day
(Mays, 2007: 56)

4.2.5 Evaluating and Criticising the CAMH

Since most of the CAMH development is still no more than a proposal, evaluation of its success in practice is not possible. Indeed, the project has been faced with significant resistance from certain members of the public, including patients, businesses and private opponents, some of whom formed a coalition that took their concerns before the Ontario Municipal Board (OMB). In addition to complaints about the CAMH’s poor communication with the public regarding the proposed project, there have also been certain concerns regarding the design of the development itself.

In particular, the division of the site by the extension of existing streets has been criticised by some members of the medical community. Dr. Patricia Cavanagh, a psychiatrist who is familiar with the CAMH, criticises it because of the “loss of an old-fashioned sense of asylum” (Mays, 2007: 56). It is worth noting that her use of the word ‘asylum’ reveals its original meaning as a place of refuge and sanctuary – support for the concept of ‘asylum’ does not indicate support for the ‘mental asylum’ building typology and treatment model of the pre-1950’s. She feels that the site used to provide a place of sanctuary for the mentally ill – where they felt totally accepted. Her argument is that many of these people, who to the ‘man in the street’ are visibly severely ill, are stigmatised predominantly because of their strange behaviour, and that insensitively enmeshing their environment with that of the rest of the city could actually be detrimental to both the patients themselves and the stigmas of the general public. This is an interesting counterpoint to the argument that isolation of the mentally ill is the cause of public stigmas.

Another criticism is that the inclusion of over-scaled non-CAMH facilities, such as a fifty-thousand square-foot grocery store, are financially motivated, and are not entirely based on the best interests of the mentally ill. The site’s location within Toronto means that it is extremely valuable land, and Mays cites corporate lawyer representing the coalition of activists, Peter Aziz: “CAMH is quite prepared to sell out the neighbourhood for a fast buck” (2007: 57). While consequent legal procedures resulted in the CAMH adopting a more transparent approach, and the reduction of the size of the grocery store, Aziz thinks the measures taken are a “sham” (Mays, 2007: 57).

After a thorough review of the project, Mays agreed that while he did not suspect any “skulduggery” on the part of CAMH, he did perceive an “air of mystery about the development”, claiming that not even the administrators of the project, or the architects, could tell him exactly what would be built, and where, over the next ten years. He is concerned that while the planned development is approximately fifty percent non-CAMH, the task of attracting commercial and institutional tenants may prove to be a daunting one indeed.

While time will determine the success of the CAMH re-development project, it is nevertheless a cutting-edge example of the impact of modern medical knowledge and opinions on the built environment. It is in stark contrast to both of the typical building typologies of the asylum era and the community-based care period of the last century. Whether this bold experiment succeeds or not, it will continue to provide valuable information to the developers, planners and architects of future mental health care facilities.

4.3 MINIMISING THE SENSE OF CONFINEMENT:

Padua Psychiatric Clinic, Boekel, Netherlands.

Architect: Aldo and Hannie van Eyck.

Aldo van Eyck's preoccupation with the needs of the individual have already been identified as a key underlying issue in modern mental health-care architecture, so his psychiatric clinic in Boekel provides a very appropriate opportunity to assess the implementation of his ideas in a typologically relevant built work. It is also particularly useful because van Eyck identified and grappled with some of the same key issues that were identified in the preceding chapters, especially the issue of mitigating the sense of confinement within the facility.



Figure 48 – Padua Psychiatric Clinic, by Aldo and Hannie van Eyck (Ligtelijn, 1999: 211)

4.3.1 Confinement – Creating a Feeling of Freedom

In many ways, the needs of the mentally ill are very different from the needs of others, and the requirement of confinement – temporary or permanent, voluntary or involuntary – is one such difference. It presents a serious challenge to any architect concerned with the needs and rights of people. In van Eyck's words (Ligtelijn, 1999: 210), it “posed questions for which, so it seemed at first, architecture has no acceptable answer. A building one cannot even leave or enter is a cruel paradox.”

Due to the varying degrees of confinement required by different types and severities of mental illness, the development is divided into three separate buildings – the two smaller ones provide partial confinement, hence their open ‘L’ shape; the larger building offers complete confinement, by way of an arrangement of four “closed circuits” (Ligtelijn, 1999: 210). Van Eyck responds to the issue of confinement by

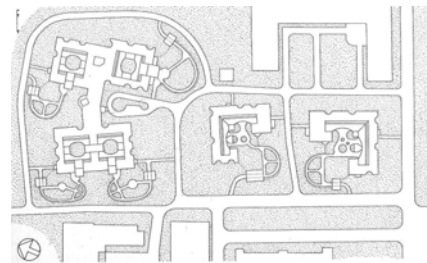
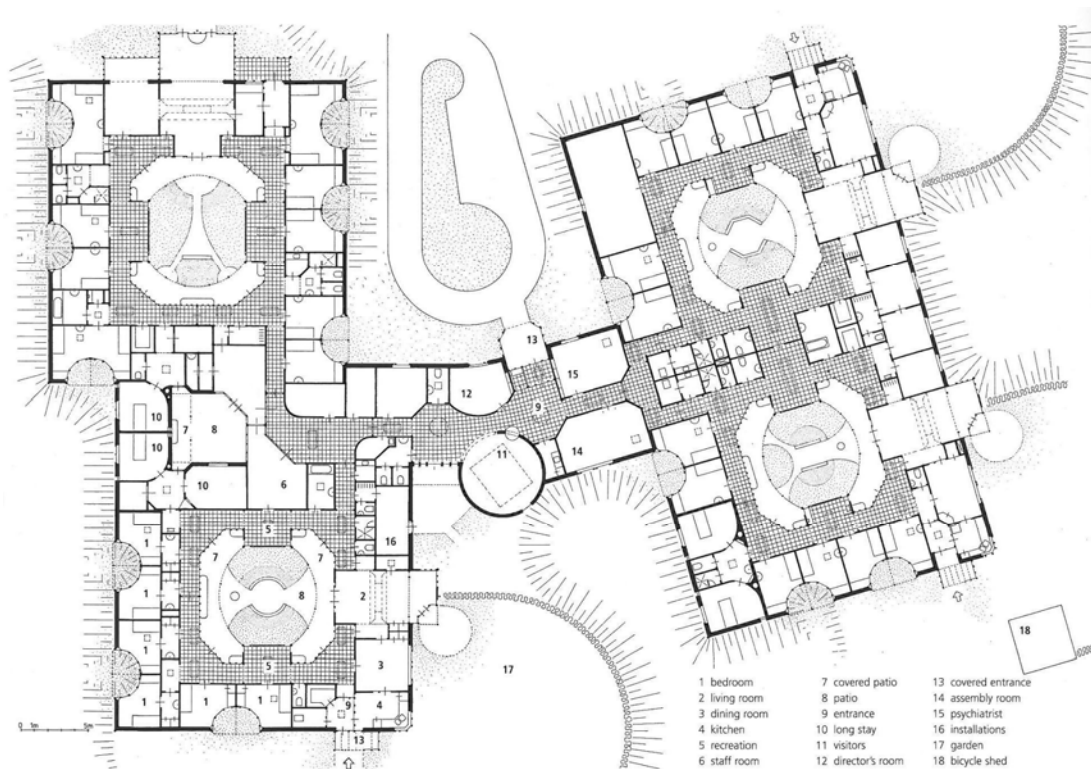


Figure 49 - Site plan showing ‘closed circuit’ plan for complete confinement, left; and open ‘L’ shape plan for partial confinement, right (Ligtelijn, 1999: 210).

addressing the nature and sequence of the interior spaces, as opposed to relying purely on barriers such as doors: “Accessibility as a notion not entirely dependent on ‘doors’ provided a lead out of the problem” (Ligtelijn, 1999: 210). Accepting that the courtyard spaces are the only outdoor area within the permitted domain of the patients, Van Eyck sought to mitigate the negative effects of complete enclosure by linking these spaces visually to the outside world. This was achieved by using the living and dining rooms as transparent visual connecting element between the outdoor spaces within, and those outside the facility. The desired effect of this formal device was emphasised by treating the living and dining rooms differently to the rest of the building – while the majority of the structure is brick and concrete, with a flat roof, they are built entirely of wood, with higher, pitched roofs. They also protrude into the courtyard space and beyond the rest of the building’s skin into the outdoor domain, so as to emphasise their connective role, and draw attention away from the more containing elements of the building.



The scale of the building and the volumes of the interior spaces is another subtle way the van Eyck has tried to evoke a feeling of freedom in the patients at this clinic. The section below reveals how the design of the roof gives the building a non-intimidating, human scale when experienced from within the courtyard. This also reduces the perception of confinement within this enclosure, and maximises sunlight. On the other hand, the roof sloping upwards over the

communal, social spaces such as the dining room and the living room renders them lofty and spacious. This idea was suggested in the section on scale and proportion in chapter three.

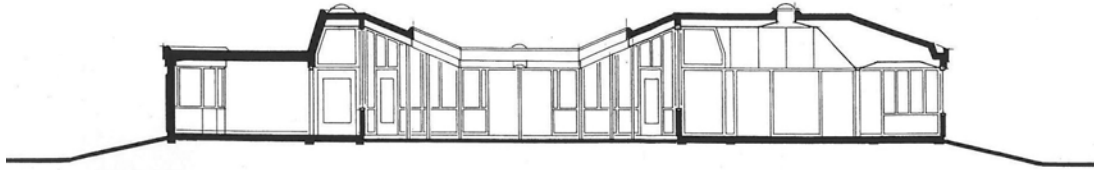


Figure 51 – Section showing use of scale and volumes to minimise the patients' perception of confinement (Ligtelijn, 1999: 212).

4.3.2 Maximising Contact with Nature

Acknowledging the importance of visual contact with nature, or at least the outdoors, van Eyck employed the 'incomplete rectangle'. The bedrooms were designed with a 'missing quadrant' – replaced instead by an intrusion of the outdoor space. The intention was to enable the interior space of the room to hold some of the exterior space within it, and was taken further by treating this 'missing quadrant' as a controllable intermediate space between inside and outside. This was achieved by occupying the space with arched metal structures upon which foliage can grow, to a greater or lesser extent, as per the preference of the patient. In this way, van Eyck has also granted the patient a valuable opportunity to feel a sense of control over his or her immediate environment – another important requirement identified previously. An additional benefit of this idea is that it affords more length and width to the bedrooms, which were to be of a fixed floor area. This, together with their unique shape, contributes to the breaking down of what van Eyck refers to as 'cell stigma' (Ligtelijn, 1999: 212).

One fairly negative aspect of this 'incomplete rectangle' however, is that when used on adjacent rooms, it impacts negatively on privacy, as patients can look across at one another. Perhaps this was intentional. Of course curtains could help the situation, but their intervention means that patients are forced to trade one beneficial element – natural light, for another – their privacy. The foliage on the arched metal structures is also a possible solution to the privacy issue, but it is also

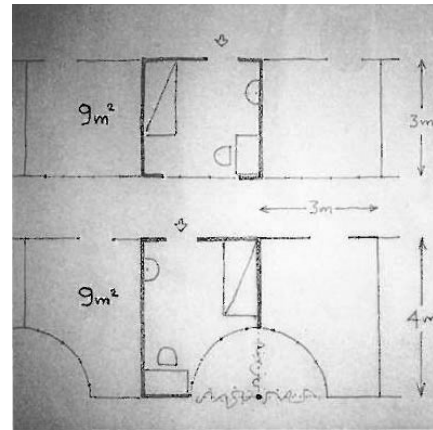


Figure 52 – Concept sketch by van Eyck showing 'missing quadrant' allowing the exterior space to enter the bedroom (Ligtelijn, 1999: 213).



Figure 53 – Adjacent 'missing quadrants', possibly compromising patients' privacy (Ligtelijn, 1999: 213)

patient-controllable, so again, a patient would need to choose between two beneficial elements.

4.3.3 Dealing with Safety and Security Appropriately

The Padua Psychiatric Clinic also demonstrates van Eyck's awareness of the need to reconcile conflicting user needs in subtle and discreet ways. Such conflicts, as discussed in the previous chapter, are particularly abundant among the mentally ill. The issue of safety and security is one of them, as it should be ensured without compromising other important needs such as dignity, the feeling of freedom, and a visual connection to the outdoors.

Van Eyck addresses the contradictory need for security by separating the mechanisms of lighting from those of ventilation. In the corners of the rooms, air is admitted via vertical panels, which are too narrow to escape through, whereas the glass panels of the windows themselves do not open, enabling them to be extremely large, and thereby allowing plenty of natural light as well as panoramic views of the natural environment outside.

4.3.4 Manipulating Natural Light

As discussed previously, natural light is one of the most beneficial environmental factors directly affecting people's emotions. In addition to the large windows of the patients' rooms, van Eyck used other mechanisms for admitting as much natural light into the building as possible. For instance, skylights flood the communal areas with sunlight, and glass is used to separate zones so that light passes between them.



Figure 54 – Sky-lights and glass walling elements used to maximise the psychologically beneficial effect of natural light (Ligtelijn, 1999: 214).

4.4 INTEGRATING THE BUILDING WITH A NATURAL ENVIRONMENT:

Maharashtra Addiction Treatment Centre, Pune, India

Architect: Beri Architects and Engineers

The Maharashtra Addiction Treatment Centre is a facility for the treatment of addiction in Pune, India, and was completed in 1999. It is particularly relevant because of its specific 'addiction treatment' typology, as well as the fact that it was purpose-designed based on specific environmental requirements set out by the client. The architects' intention, as illustrated by their sketch below, was to create an uplifting environment that is conducive to healing, and confronted some of the same questions those identified in this study (A+D, Sep-Oct 2001: 43):



- Can architecture contribute to the healing process?
- Can architecture be therapeutic?
- Can it help in bringing man closer to nature, to its beauty and harmony?
- Can it enhance human interaction and reduce alienation?
- Can the quality of our outer space have this potential to modify our inner psychological space?



Figure 55 – Transparent main entrance of the addiction treatment centre in Pune, with un-interrupted visual access straight through the building (Architecture + Design, Sep-Oct 2001: 43).

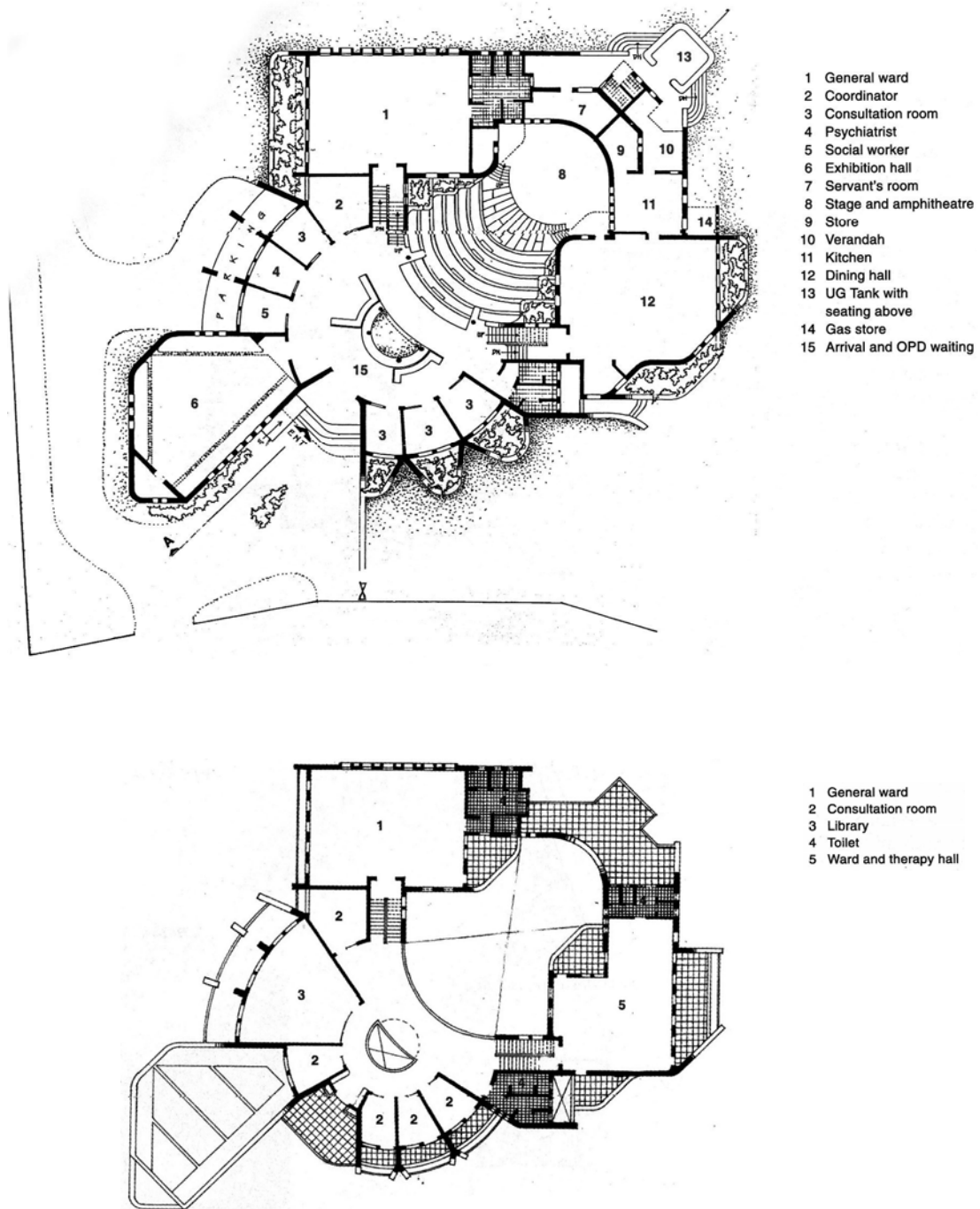


Figure 56 – Ground Floor Plan (top) and First Floor Plan (bottom) (Architecture + Design, Sep-Oct 2001: 44)

4.4.1 The Role of the Building in Facilitating Social Interaction

The clients wish was to give the addict, who comes from a fragmented world of isolation and alienation, a different world of social dialogue, healing and hope, as well as creative pursuits and games – a world in which they would be encouraged to overcome their illness.

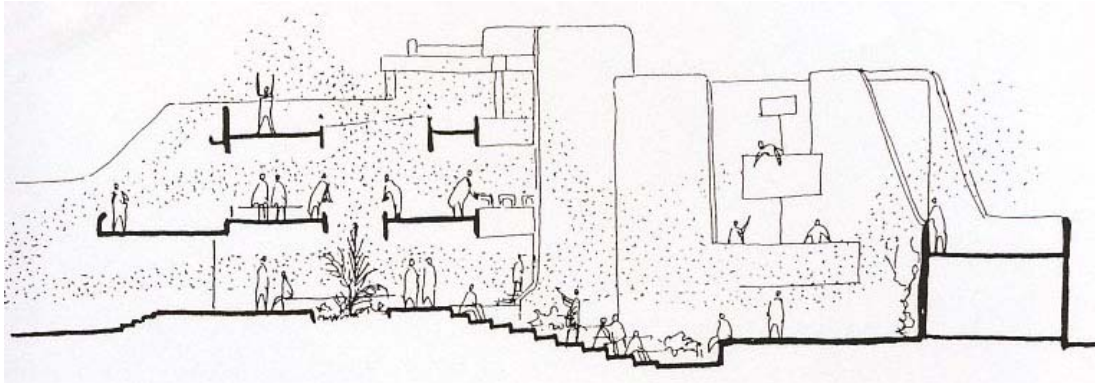


Figure 57 – Sketch section illustrating communicative possibilities within the building – a design measure intended to create an environment convivial to social interaction (Architecture + Design, Sep-Oct 2001, 43).

The architects attempted to encourage social interaction by maximising visual and aural connections within the environment – transparent elements, cut-outs, terraced balconies and plenty of seating were all included as means for facilitating socialising, as was the central landscaped amphitheatre, which was intended to allow people to interact outside, while still remaining under close observation. This area was also intended to cater for group therapy sessions and entertainment, as well as to bind the various other components of the building together in a social hub, thereby creating a “much needed sense of belonging” (A+D, Sep-Oct 2001: 44) – an important user need yielded by various sources in this study.



Figure 58 – Realisation of the architects' concept for facilitating social interaction (Architecture + Design, Sep-Oct 2001: 44).

4.4.2 Reconciling Conflicting User Needs – Control and Freedom

The architects were required by the client to strike a balance between a sense of freedom and the required level of control of the patients by staff. They tackled this by employing transparency as an expression of freedom, and also as a means of increasing physical and visual interaction. The main entrance is transparent, contrasting the stereotypical forbidding institution entrance. This transparency and openness permits members of staff to monitor the patients.

4.4.3 Bringing Nature into the Built Environment

In an attempt to capitalise on the beneficial psychological effects of a visual contact with nature, Beri, Karambalkar and Nadaph used natural materials and references as much as possible – natural stone and organic forms, with plants and creepers engulfing the building. Although the effect of this approach may not have been proven, the architects intended it to contribute to a “natural, therapeutic ambience” (Architecture + Design, Sep-Oct 2001: 43).

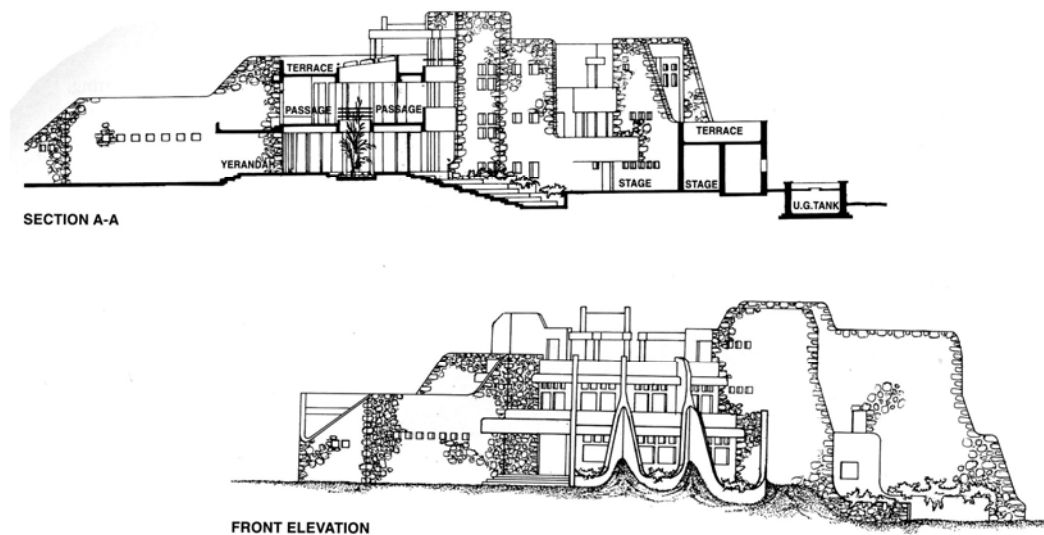


Figure 59 – Section and elevation showing architects’ effort to employ natural materials, organic forms and enmeshment with vegetation, so as to maximise the beneficial psychological effects of a close contact with nature (Architecture + Design, Sep-Oct 2001: 44).

4.4 CONCLUSION

The three selected precedent studies show how the focus on user needs can be applied in varying ways and contexts. Rather than providing templates for future designs, they demonstrate how the architect should approach the design process. Despite their different typologies, all three examples represent environments that have been designed with the unique needs of the mentally ill individual in mind.

CHAPTER 5:
Key Case Study

5.1 INTRODUCTION

In a study of this nature, the key case study provides an opportunity to conduct empirical research in the form of a detailed evaluation of an existing treatment facility, in terms of the key issues established in the preceding research. Throughout the study, references have been made to other buildings that were visited as part of the research, such as SANCA Lulama in Durban, Kenilworth Clinic in Cape Town, and St. Georges Psychiatric Hospital in Stockholm. These facilities served as examples of specific design considerations in the context of the issue at hand. The purpose of the key case study however, is to assess the performance of a single built environment holistically – in terms of all the issues that have been discussed.

A major problem concerning this building typology is the lack of appropriate examples. This is partly because, as discussed in Chapter One, very few treatment centres for addiction and mental health in South Africa are actually purpose-designed. They are most often adapted buildings, such as schools and large houses, which means that they do not offer a suitable opportunity to assess the designer's architectural response to the subject matter. Another reason is that the findings of the study suggest a relatively new type of facility altogether – one that responds to the 'balanced care' approach. In South Africa, there are many private specialist addiction treatment clinics and there are also numerous public psychiatric hospitals, but there are no appropriate examples of community-based in-patient treatment clinics for addiction and mental illness.

In light of this problem, the most appropriate example available has been chosen. Although the selected building does not represent an exact typological example of what is needed, it certainly does provide the opportunity to identify and analyse specific environmental factors in terms of the research. Indeed, some of these factors may be negative ones, but recognition of their shortcomings is perhaps even more valuable than merely admiring an ideal solution. It is therefore imperative that the case study is conducted as a critical analysis.

The assessment of the relevant example was carried out empirically, in the form of first-hand observation and analysis of the built environment, which was supplemented with feedback from the professionals who provide care in the facility and who briefed the architect during the design process.

5.2 RESPONDING TO THE NEEDS OF A PARTICULAR USER GROUP:

Riverview Manor Specialist Clinic, Underberg, South Africa.

5.2.1 Introduction:

Riverview Manor Specialist Clinic is a private in-patient treatment facility for twenty-eight patients, and is located in Underberg, KwaZulu-Natal, South Africa. While it is not a community-based clinic, it is particularly useful as a case study because, while the majority of the facilities in the country are adapted buildings, it was purpose-designed and built as an in-patient treatment centre for addiction and mental health. Opened in 1999, it is also a fairly recent project, adding further value to its relevance.

The late architect, Dot Black, was briefed by the director of Riverview Manor, Mr. Vernon Goss, who requested a “five-star facility, but not a hotel” (Goss, pers. comm. 20/05/2010). The facility provides an ideal opportunity to examine a functioning treatment environment in terms of the key issues identified in the preceding chapters of this study, and also in terms of the brief set out by the client. In some cases, this facility addresses these issues successfully, while in others, it does not – both of these circumstances are valuable to this study.



Figure 60 – Riverview Manor Specialist Clinic – Original general practitioner’s building on the left; original general hospital in the middle; new purpose-built centre for addiction and mental health on the right (author, 2010).

5.2.2 Physical Context

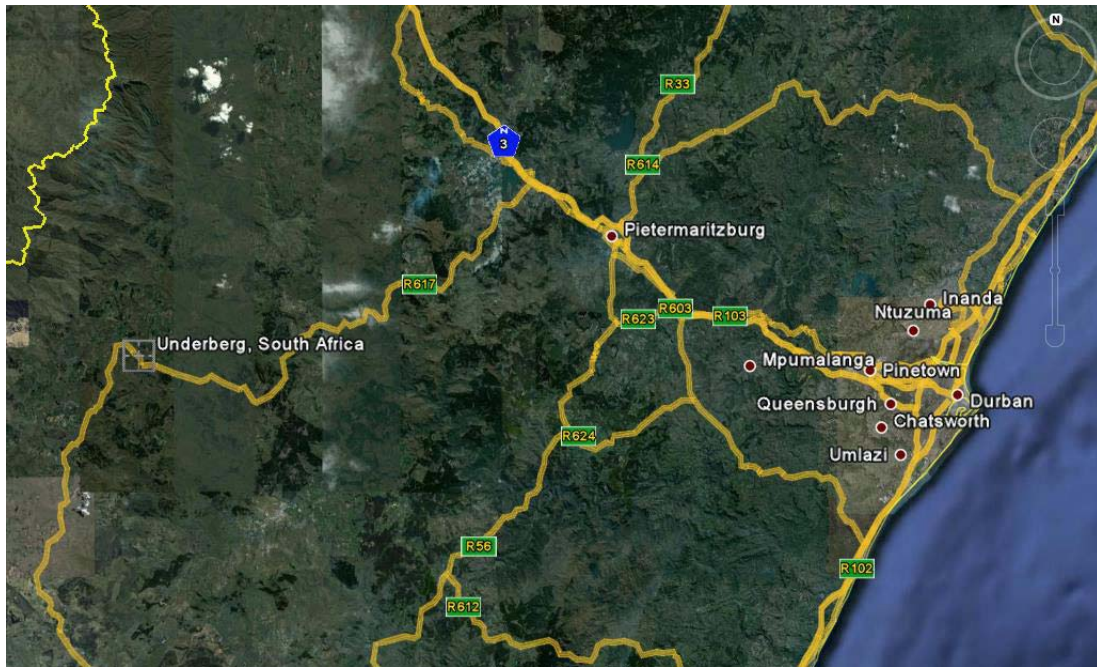


Figure 61 – Riverview Manor is situated in the picturesque farming town of Underberg, which is approximately 250km from Durban by road (Google Earth 19/05/2010).



Figure 62 – The facility is comprised of two independent but cooperating organisations - a general medical doctor's practice and the Riverview Manor Specialist Clinic, which has spectacular views over the Umzimkhulu River valley and the Drakensberg Mountains beyond (Google Earth 19/05/2010).

5.2.3 Schedule of Accommodation and Floor Plans

- **Patients' Bedrooms:**
 - Executive Suites 2
 - Single Bed Wards 3
 - Two Bed (High Care) 1
 - Three Bed Wards 4
 - Four Bed Wards 3
 - **Total Beds 31**
- **Patients' Recreation/Living:**
 - Patients' Lounge 1
 - Gym/Exercise 1
 - Recreation/Crafts 1
 - Outdoor Area 1
 - Swimming Pool 1
 - Gazebo 1
- **Communal Spaces:**
 - Dining Room 1
 - Sun Lounge 1
 - Waiting Rooms 1
 - Bathrooms 6
- **Treatment Spaces:**
 - Group Therapy 3
 - Consultation Rooms 10
 - Duty Room 1
 - High Observation 1
- **Administrative Spaces:**
 - Receptions 2
 - Administration Office 1
 - Manager's Office 1

- **Services and Stores:**

○ Kitchen	1
○ Scullery	1
○ Tea Kitchen	1
○ Workshop	1
○ Laundry	1
○ Maintenance	1
○ Linen Store	1
○ Sluice	2
○ Laboratory	1
○ Store	2
○ Luggage Room	1
○ Main Stair	1
○ Lift	1
○ Fire Escapes	2

- **Staff Spaces:**

○ Staff Lounge	1
○ Staff Toilets	1



Figure 64 – First Floor Plan – not to scale (Black, 1999, ed. by author, 2010).

5.2.4 Location:

The Concept of a ‘Therapeutic Landscape’:

Based on the age-old idea of a ‘therapeutic landscape’ – on which the locations of the historic asylums of the nineteenth century were predicated – Riverview Manor is situated in the picturesque countryside town of Underberg, in KwaZulu-Natal, on a two-hundred acre plot, bordered by the Umzimkhulu River. Mr. Goss refers to the “old-fashioned idea of going to the mountains to recover” (pers. comm. 20/05/2010). Without assessing the validity of such motivation, one cannot deny the peaceful tranquillity of the area, and so, it seems totally

reasonable that such settings are assumed by many to be favourable environments for the treatment of addiction. Another reason for the selection of this site is that the natural environment affords patients the ability to develop an appreciation for wholesome, healthy recreation (Goss, pers. comm. 20/05/2010), which, as established, is a key step in their recovery process



Figure 65 – A gazebo used for group therapy overlooks the picturesque Drakensberg mountains – an effort to capitalise on this ‘therapeutic landscape’ (author, 2010).

Other Advantages of a Remote Location:

A remote, rural location such as Underberg offers other advantages in addition to its ‘therapeutic’ effects. It also ensures that the patients are dislocated from the specific social influences that have contributed negatively to their condition, particularly in the case of addiction. Remote environments such as this also offer extreme privacy and confidentiality, as the likelihood of patients encountering somebody who knows them is very small indeed. In fact, according to Goss (pers. comm. 20/05/2010), this is one of the reasons that Riverview Manor attracts so many patients from areas much further away than Durban – approximately forty percent of the patients are from outside of South Africa. This extreme privacy has its own set of positive effects – for example, it means that they can feel more free to expose themselves by leaving the building itself, and are generally more relaxed and receptive to treatment as a result.

Problems Regarding Social Integration and Family Participation:

While Underberg does indeed seem to be the ideal location in terms of a natural ‘therapeutic landscape’ and patient privacy, it does pose certain problems related to other important issues. Riverview Manor is a private, exclusive facility. The patients, who are referred to as ‘clients’, are generally wealthy, upper-middle-class individuals, and to them, being treated in an exclusive, luxury retreat is a priority. For the forty percent of patients who come from outside of South Africa, close proximity to the urban community is totally irrelevant, and for those from Durban and surrounding areas, the two-and-a-half hour drive to the facility is not a problem – their

friends and families usually have the means to visit the centre easily – perhaps even staying overnight in luxury accommodation in Underberg or nearby Himeville. For the average member of society however, Riverview Manor could be seen as being very poorly suited, for a number of reasons:

- Two-and-a-half hours from Durban by car, accessing the facility in the first place would be a problem for most people.
- Participation of family and friends in the treatment program is made extremely difficult by the remoteness of the facility.
- Patients are not treated in their normal everyday context, and some feel that this could negatively affect their readiness to cope with the ‘real world’ after treatment. This issue is however debated by mental health-care professionals.
- A gradual re-integration back into society and facilitation of after-care are impossible. Patients who are treated at facilities such as Riverview Manor rely on half-way houses and other forms of tertiary care to aid their re-integration process.
- Engagement with the community on an educational level is also not possible, other than with the residents of Underberg itself of course.
- The remote location of the facility could be perceived to contribute negatively to the problem of public stigma.

The problems identified above are of course a compromise for the many advantages of the location. The professional care providers such as Mr. Goss, who chose this remote location, accept that these issues are a fair price to pay for the beneficial attributes of the private, ‘therapeutic’ setting of Underberg, especially considering the nature of the population that the facility caters for. Indeed, some of the issues are not perceived to be problems at all – for example, the organisation does not aim to engage with education or community awareness, so its inability to do so effectively because of its location is irrelevant. However, while there is a significant demand for the remote ‘Riverview Manor typology’ in the private sector, factors such as those outlined above require that public treatment facilities be located in the urban context of the community.

Lack of Physical and Sensory Connection with the Natural Environment:

There is no doubt that in terms of the idea of a ‘therapeutic environment’, Underberg is an ideal location for a facility such as this. However, the building does not adequately take advantage of this beautiful natural setting. Double-loaded corridors mean that only half of the rooms have access to the views over the Umzimkhulu valley, and



Figure 66 – Punched openings are the only means of experiencing the spectacular natural environment
(www.riverviewmanor.co.za. 2010).

even they are only granted one or two of the punched openings that dominate the elevations. While moving through the building, one is almost unaware of the spectacular setting, and one has to consciously approach one of the windows to appreciate the views. It seems to be an unfortunate missed opportunity – the built environment does not engage with the natural environment. There is no real dialogue between inside and outside – none of van Eyck’s ‘in-between’ spaces, in which one is acutely aware of what is available on either side, or Alexander’s circulation arcades, which would allow the occupants to circulate the building in a semi-outdoor space.

Furthermore, the building has no enclosed outdoors areas, such as court-yards, in which the patients can freely enjoy the natural setting while still within the confines of the built environment and under the supervision of the staff. In fact, one of the major social outdoor areas is on the side of the building with no views at all. Even the only structured outdoor area, which includes a swimming pool, is visually disconnected from the spectacular vistas of the Umzimkhulu valley. A mere shade-cloth fence serves as a buffer between this area and a Nestle factory on the adjacent site. Missed opportunities such as these suggest that the value of the location in terms of a ‘therapeutic environment’ should be reconsidered.



Figure 67 – Main structured outdoor area – disconnected from the ‘therapeutic’ natural landscape (author, 2010).

5.2.5 Symbiotic Integration of Functions

Before the construction of the specialist clinic in 1998 and 1999, the original building on the site served as a general practitioner’s consultation rooms and a small general hospital ward, which are shown in pink. The old hospital ward now serves as a link between the old building and the new specialist treatment facility, which is the largest building, shown in blue in the adjacent diagram.

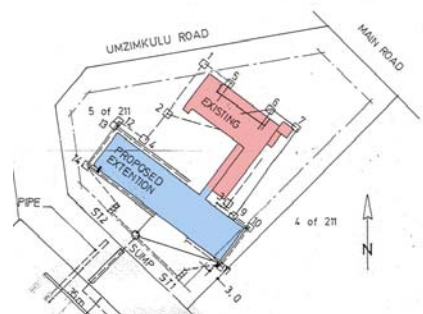


Figure 68 – Site plan showing new specialist clinic added to medical practice and general hospital (Black, 1999)

The original building is still occupied by an independent general practitioner, but the development as a whole facilitates a symbiotic relationship between the two organisations. This symbiotic relationship is important in addiction treatment centres, because the usual condition of the patients and the size of the group do not usually warrant a full-time, dedicated general practitioner.



Figure 69 – Original building occupied by private medical practitioner (author, 2010).

The symbiotic relationship between the general medical practice and the specialist clinic is facilitated effectively by the built environment. Upon arrival, one is free to access the doctor's rooms, without even being aware of the existence of the addiction treatment centre behind it. The specialist clinic can be accessed by vehicle or on foot, via a security gate. The route of access is clear, yet discreet, and works well because anyone wishing to visit the facility does so in a premeditated manner. While the public access the two facilities separately, they are internally connected, and facilitate a mutually beneficial relationship between the two organisations.



Figure 70 – Controlled gate to specialist clinic behind doctor's rooms (author, 2010).

5.2.6 Humanising and 'Normalising' the Treatment Environment

The need to provide a humane, 'normalised' and dignified environment for care provision has been a recurrent theme throughout this study. At Riverview Manor, the management team is clearly aware of this need, and has made an obvious effort to make the environment as 'home-like' as possible. The architect seems to have also made a genuine, but unfortunately, perhaps superficial effort to create a 'homely' building.

Externally, and in the more public interior spaces, the building succeeds in expressing an inviting, welcoming message, but it seems to be less successful in terms of responding to the patterns of daily life, as well as in terms of minimising a clinical, hospital-like atmosphere within the residential and treatment spaces themselves. Mr. Goss confirmed that his instruction to the architect was to create an inviting building that offered a high level of comfort to his clients, while at the same time, maintaining an "atmosphere of medical care" – he insists that patients need to feel like that they are in a treatment facility, and not in a five-star hotel (pers. comm. 20/05/2010). Perhaps then, some of the issues that have been identified as faults were in fact intentional.

Externally, the building is typically 'house-like' in appearance, with gabled porticos and pseudo-dormer roofs reflecting the 'Natal Verandah House' architecture of the original building opposite it. The architect appears to have deliberately designed a building that conforms to the layman's stereotypical notion of a house – either in an effort to reflect the existing building, or in an attempt to avoid a visibly hospital-like building.



Figure 71 – Main entrance to the new treatment facility (author, 2010).

Inside too, there are obvious house-like features: The reception desk overlooks a cosy lounge with a fire-place and spectacular views over the Umzimkhulu River valley and the majestic Drakensberg Mountains. Manageress of the clinic, Mrs. Terry Wilson, attests to the welcoming and comforting effect that this space has on new-comers (pers. comm. 18/05/2010). Indeed, the space has a distinctly domestic feel – very different from a typical hospital waiting room.



Figure 72 – ‘Home-like’ lounge
(www.riverviewmanor.co.za, 2010)

However, the welcoming, homely qualities are, on the whole, limited to those spaces with which one comes into contact upon arriving at the clinic. A short walk deeper into the domains of the therapy and living spaces reveals a completely different treatment of the built environment. On the two main floors, long, unarticulated, hospital-like corridors, double loaded with bedrooms and lit only by fire-escapes at the ends are the sole connecting elements throughout the building. These spaces fail to, in van Eyck’s words, “...govern multiplicity creatively, to humanise number by means of articulation and configuration...” (Team 10, 1962: 100). So clinical are these spaces, that the management staff have added free-standing bookshelves, which are more an effort to improve the atmosphere of the space than to store books (Wilson, pers. comm. 18/05/2010). This is telling, because irrespective of whether or not the architect was encouraged to maintain a clinical atmosphere, the environment has subsequently been altered in an effort to make it less so, which suggests that if the architect has responded appropriately to instructions, then the brief itself was incorrect.



Figure 73 – A free-standing bookshelf is an attempt to humanise the long, lifeless double-loaded corridors
(author, 2010).

On the lower ground floor the situation is even worse. Perhaps this treatment of circulation space would be acceptable if it was servicing storage areas, but the last door on the right in figure 74 is in fact one of the main group therapy rooms and the two before it are consultation rooms. In the architects’ defence however, it must be noted that this lower ground floor was originally designed to be staff quarters, not therapy spaces. Since construction in 1999, the building has undergone several alterations and re-allocations of spaces to the various functional requirements. Also, due to the steep gradient of the site,



Figure 74 – Lower-ground floor adapted from staff quarters to offices and therapy spaces - passage to group therapy room at the end
(author, 2010).

the left hand wall is a retaining structure. Nevertheless, in a facility that should motivate and inspire patients, foster a positive attitude towards the treatment process, and encourage social interaction, this kind of journey to a group therapy session is totally inappropriate.

5.2.7 Privacy

As declared by Mr. Goss, privacy is extremely important to patients, especially with respect to their confidentiality. Of course, it would be impossible to have complete privacy within the facility, but that is not the issue – patients require privacy from outsiders. This is one of the main reasons for facilities like this being located in remote areas, and also for some individuals seeking treatment far from their own homes.

However, while Riverview Manor is ideally located in terms of privacy, it is not ideally designed in this regard. While appreciating that public access is controlled at the main entrance gate, this measure does not warrant insensitivity towards privacy within the property. The event of outsiders visiting the facility without the prior knowledge of the patients appears to be a reality, and



Figure 75 – A social area directly adjacent to the main entrance (author, 2010).

the juxtaposition of a patients' socialising area and the main entrance to the building seems to be a strange contradiction to the emphasis placed by management on patient confidentiality. Furthermore, it could certainly be intimidating to new-comers – as explained by Mrs. Du Toit, who, at SANCA Lulama in Durban, has had to resort to bringing new patients into the building through a secondary entrance. Of course, the patients who occupy an exposed area – such as the one pictured – choose to do so, but then again, there is no similar alternative in a more private part of the property.

Another important privacy-related consideration is that of privacy within the building itself. While it is not possible for patients to have confidentiality with regard to other patients and staff within the facility, this by no means indicates that the relationships between the more public spaces and the private ones need not be considered.



Figure 76 – Entrances to bedrooms offer no intimacy gradient or control of privacy (author, 2010).

Privacy, anonymity and confidentiality are all very different things. For example, the treatment of the entrances to the bedrooms is a particular weakness in this building, especially considering the fact that these spaces are shared by up to four individuals. There is absolutely no intermediate space between the very public passage and the bedrooms, which are very private spaces, and this is worsened by the placement of the door and its handling. The privacy of one patient in his or her own bedroom is entirely subject to the movements of others

to and from the space. For example, if one patient wishes to leave the bedroom, another, who may be naked or in bed, is completely exposed to the public realm of the corridor. This also means that there is no opportunity for the door to be left slightly ajar, without compromising patients' privacy. This has negative implications socially, because it means that the individuals need to choose between two extremes – either completely exposed, or entirely disconnected. There is no option to be somewhere in-between.

This failure to acknowledge the reciprocity of perceived 'false alternatives' and the value of transitional 'in-between' spaces is precisely what Aldo van Eyck protested to when he appealed to architects to consider the meaning of a door: "What is a door? A flat surface with hinges and a lock constituting a hard terrifying borderline? When you pass through a door like that are you not divided? Split in two – perhaps you no longer notice!" (1962: 95). He declared that, rather than separating spaces of different natures abruptly, architects should acknowledge the nature of human behaviour by designing spaces between spaces – gradual transitions between one extreme and another: "Architecture must extend 'the narrow borderline', persuade it to loop into a realm – an articulated in-between realm." (van Eyck, 1962: 99); "Provide that space, articulate the in-between" (van Eyck, 1962: 101). This need is also one of Alexander's 'patterns', which he calls "Entrance Transition". He explains its value not just in terms of privacy and social opportunity, but with regard to the actual experience of transition from a behavioural state or mindset appropriate for one space, to one that is right for another different space. In a way, he argues that the transition space prepares a person for a change in place.

In light of this, it is worth recalling Hertzberger's housing for elderly persons, 'De Drie Hoven', in which he paid careful attention to the entrances to the private units, treating each one as a space in its own right – a kind of indoor porch. Van Eyck's 'Principle of Reciprocity' is about the dialogue between polarities – that one is dependent on the other. He would surely be horrified by the abrupt entrances to the bedrooms at Riverview Manor: While the design of the doors does allow for ease of observation without opening the door, there is no reason that this could not still be achieved in a more articulated entrance area.

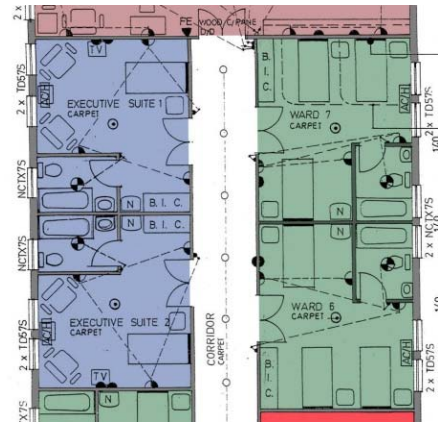


Figure 77 – Partial floor plan showing poor treatment of entrances to wards (Black, 199, ed. by author).



Figure 78 – Crude entrances to bedrooms – no privacy and no 'in-between' space (author, 2010).

5.2.8 Facilitating Social Interaction

The lack of ‘in-between’ spaces at Riverview Manor goes beyond the entrances to the bedrooms. In fact, the planning in general does not respond to the natural patterns of human behaviour. Rather, the different spaces in the building exist in isolation, connected to one another by a lifeless human highway – the long, unarticulated double-loaded corridor.

To illustrate the point, during free time on a rainy day, a patient could have two options – to be in their bedroom, alone or in the company of one or two room-mates, or to make the premeditated journey down the length of the building to the patients’ lounge. This patient would have to make a conscious decision about their social activity. Compare this scenario to van Eyck’s orphanage, where the children’s bedrooms open onto intermediary squares, where perhaps a handful of other children are at play. These spaces in turn open onto the ‘internal street’, which is a hive of activity. In this environment, a child who is in their bedroom may be alone, while still in contact with others – visually and aurally – and yet still in control of his or her privacy.

Similarly, in Hertzberger’s housing for the elderly, individuals have the option of sitting on the porch of their private unit – neither here nor there – not actively engaged with the group, but a part of it nonetheless. At Riverview Manor, there are no opportunities for spontaneous interaction. The spaces of the building are clearly defined and separated from one another – a patient is either in the lounge or not; either in a bedroom or not. It is true that due to the nature of the treatment program, the patients do in fact lead a very structured life during their stay, moving swiftly from one activity to the next, without much time to meander casually through the building. However, perhaps it would be beneficial to arrange a cluster of bedrooms around a communal area. This space could be used casually or for group therapy, thereby possibly making group therapy a way of life rather than an isolated, structured treatment session.

In addition to there being no connections between the patients bedrooms and the recreational spaces, there are also very few connections between the different recreational spaces themselves. For example, the patients’ main indoor social space is on the opposite end of the building to their main outdoor social space. This is indeed far worse than being adjacent to one another but inappropriately separated. The building is directly controlling the way its inhabitants live, which is exactly the opposite of what should be the case – architects should respond to natural human behaviour by designing spaces that facilitates it instead of controlling it.

5.2.9 Safety and Security

Safety and security is an area where Riverview Manor is successful. The built environment is brilliantly deceptive regarding the measures that have been taken to protect patients against suicide and self-harm – a risk that is taken very seriously by Mr. Goss (pers. comm. 20/05/2010). In terms of escape, patients are not forcefully confined, and are only required to sign themselves out should they wish to leave. This approach is taken because of the emphasis that is

placed on the patients will to recover and their participation in the process. Suicide on the other hand must be consciously prevented.

Because the building is three storeys high on the south facade, it is imperative that the large windows cannot open wide enough for an adult person to get through – minors are not admitted to this facility. Because the window panes themselves are very large, one gets the impression that they can open more than they actually can, and the staff make sure not to point this safety measure out to the patients (Goss, pers. comm. 20/05/2010). This illustrates the importance being discreet and subtle when it comes to safety and security. The building is also surveyed twenty-four hours per day by closed-circuit television cameras, and, as mentioned previously, all bedroom doors have small observation windows, over which an opaque curtain hangs until it is used by staff.

In another attempt to make the environment safer, the managers of Riverview Manor have absorbed one of the bedrooms into the central duty room, so that patients who are particularly vulnerable can reside under close observation. Access to this space is through the duty room itself, so the nurse on duty has full control over the movements of such individuals. This measure also means that the high care room has an intermediate space between it and the public corridor, affording the vulnerable individual more privacy.



Figure 79 – Large windows with narrow openings to prevent suicide and escape (author, 2010).

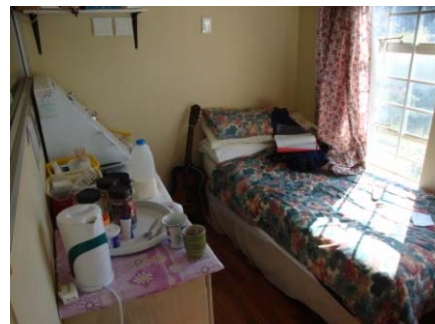


Figure 80 – High care ward for particularly vulnerable individuals (author, 2010).

CHAPTER 6:
Conclusions and Recommendations

6.1 CONCLUSIONS

The most important conclusion that can be drawn from this study is one that gives rise to all of the others: Architecture is the process of responding to human needs through the design of the built environment. Buildings themselves do not cure illnesses, but they do have the potential to either assist treatment and recovery, or hinder it. Environmental psychology is not merely about selecting the most universally ‘therapeutic’ colours, forms and textures, but about understanding the social and behavioural needs of the people who will use the environment. If these needs are properly understood, then they can be interpreted in architectural terms, and only then it is possible to create successful buildings – in terms of mental health care, buildings that make a positive contribution to treatment and recovery. In summary, the research has shown that the built environment can affect the provision of mental health-care in the following ways:

- The building can affect the patients’ sense of self-worth, their attitudes towards recovery and their receptiveness to treatment, as soon as they arrive at the facility.
- The patient’s environment, both natural and built, has the potential to directly influence their stress levels and general mental well-being. While this does not mean that the building alone can heal, it does mean that it can make a significant contribution to the healing process, either positively or negatively.
- The arrangement of, and relationships between, the spaces in the building have a profound bearing on the patterns of social interaction on which the recovery process is founded.
- The location and the design of a mental health care facility determine the extent to which the patient’s family and friends are able to participate in the treatment process, which is an important part of recovery and reintegration, for all of the parties concerned.
- The location and the design of the building also have the potential to influence public stigma. Since the success of a patient’s re-integration into society is partially determined by the attitudes of the members of the community into which they are to return, and so stigma actually affects recovery itself.
- The design of the facility can also make a positive contribution to mental health-care by facilitating a symbiotic relationship between treatment, research and education – by aiding the development of medical understanding and helping to treat by prevention.
- The quality of the working environment can also affect staff turnover, which in turn affects the patients’ outcomes, because treatment is founded on patient-therapist relationships.
- The design of the facility can affect patients’ privacy, which is a key requirement, particularly in an urban context. Furthermore, the building can also affect the patients’ ability to control their privacy, which has various implications, on their autonomy and social patterns for example.

- The treatment environment has the potential to facilitate contact with the therapeutic properties of nature.

6.2 RECOMMENDATIONS

The potential contributions noted above are all extremely valuable, but their worth will only be realised if they can be translated into actual recommendations in terms of architectural design. Based on the outcomes of the research, particularly those of the precedent and case studies, the following recommendations are made to architects faced with the task of designing a modern treatment centre for addiction and mental health in South Africa, and will be implemented in Part Two of this study, in which a model treatment facility will be designed.

- The treatment facility should not be intimidating, but rather be perceived by the patients as hospitable and inviting.
- Every effort should be made to ensure that the environment is humane, and that it conveys a message of respect, dignity and hope to the mentally ill.
- Similarly, it should communicate to the patients the benevolent nature of the care providers and their organisation in general, so that the patient's receptiveness to treatment is maximised.
- The quality of the building – both outside and inside – should be distinctly non-clinical and non-institutional in character. Rather, it should be loose, informal and domestic in nature, soft in form and human in scale.
- The environment should minimise the patients' sense of confinement.
- The quality of the environment should be inspiring, uplifting and motivating – encouraging a positive attitude towards recovery.
- The building and its context should constitute a 'therapeutic environment': It should, as much as possible, facilitate a close contact with nature or natural elements, such as vegetation, water, open space and fresh air.
- While specific colours are not recommended, neither is the total lack of colour altogether. Colour should be used generally to create a cheerful, non-clinical environment.
- The building should facilitate social interaction by providing a spatial framework for the natural patterns of the human behaviour – it should not dictate behaviour by compartmentalising and separating different spaces and preventing dialogue between them. Rather, it should provide transitional 'in-between' spaces and opportunities for choice and spontaneity.
- The building should be located in an urban, sub-urban or peri-urban environment, so that patients can receive care in the context of their community, enabling family participation and gradual re-integration into society.

- The building itself should also be designed to facilitate family participation and gradual re-integration – location is not the only factor in this regard.
- The different functional requirements of the facility – treatment, research and education – should be integrated with one another, so as to facilitate a symbiotic relationship between them.
- The building must ensure patients’ privacy, especially in an urban context. Furthermore, the environment must provide gradients of privacy – transitional spaces – so that the patients have control over their desired level of privacy, and do not achieve it at the expense of something else, such as social interaction. For example, a patient should be able to achieve privacy by moving into a more private realm, and not only by employing a harsh barrier such as a door.
- Based on the historically inconsistent nature of mental health-care, the building should be able to adapt to future developments in terms of medical knowledge and current treatment methods.
- The location and the imagery of the building should challenge public stigma, by re-defining people’s stereotypical ideas about mental health-care facilities.

It is possible that during the complex process of designing a community-based in-patient addiction treatment facility, which forms Part Two of this study, other mechanisms by which to maximise the positive effect that the building can have on mental health-care provision will be explored, particularly with regard to a specific physical context. However, as long as the focus remains on responding to human needs throughout the design process, the result will be a built environment that makes a significant, positive contribution to effective treatment and recovery.

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