

CHAPTER

1

We need to give each other the space to grow, to be ourselves, to exercise our diversity. We need to give each other space so that we may both give and receive such beautiful things as ideas, openness, dignity, joy, healing, and inclusion.
(De Pree, 1989)



BACKGROUND & CONTEXT

South Africa is well known around the world for its wide variety of health care services. However, the health care system in South Africa stands far apart from countries like Australia when it comes to the quality of care provided for people once they have been discharged from the hospital that has investigated, diagnosed and treated them.

What happens to these patients once they have had their operations and are no longer allowed to remain a patient in the hospital? Many patients still require ongoing specialised nursing or rehabilitative care after their hospitalization and this generally requires care at a lower cost than a hospital would provide. The patients, medical aids and the hospitals cannot afford to keep patients in the hospital for an extended period of up to three months. The patient cannot afford the high cost of hospitalization, the medical aids are extremely cost conscious (they would save up to 40% on the costs if such facilities were adopted) and hospitals need to have beds available for the next patient who may be having an operation and thus bringing in more money.

Designers of sub-acute facilities therefore need to investigate the current trend occurring around the world (and in the initial stages of discussion in the South African health care industry) of step-down / sub-acute facilities where 'therapeutic environments' are created that the health care profession can utilise. These facilities would allow for a higher quality of professional care & nursing for patients, however at a much lower cost to the patient, medical aids and hospitals.

Until now, South Africa has provided very few 'sub-acute' facilities that care for patients after they have been in hospital and which provide the correct medical care. Old age homes are often found advertising their frail care units as such facilities, however they are not equipped to deal with the medical needs of the patients.

According to Riaan van der Watt, a consultant to the Gauteng DoH, there are a number of registered sub-acute facilities in Pretoria, however few of them comply with the standards as set out in the DoH guidelines, and are more along the lines of frail care facilities and not sub-acute facilities (Van Der Watt, 2010). The DoH is therefore trying to make the requirements for such facilities more available to the public so that better quality sub-acute facilities are designed in South Africa.

Hospitals are often dreary, monotonous places to be in, and for a patient that is not completely mobile, to be 'stuck' in such a facility for up to three months could be unpleasant. Therefore, not only is there a need for a better building typology suited to sub-acute facilities, but also the design of more therapeutic environments which have rich architectural and spatial qualities. This way of thinking should be adopted to avoid the design of yet another 'hospital-like' environment.

A sub-acute facility should be linked to a hospital where the hospital can discharge the patients directly into the care of the sub-acute facility. It is proposed that the sub-acute facility be linked to Louis Pasteur Private Hospital within the Pretoria CBD (see fig. 1.1 & 1.2).

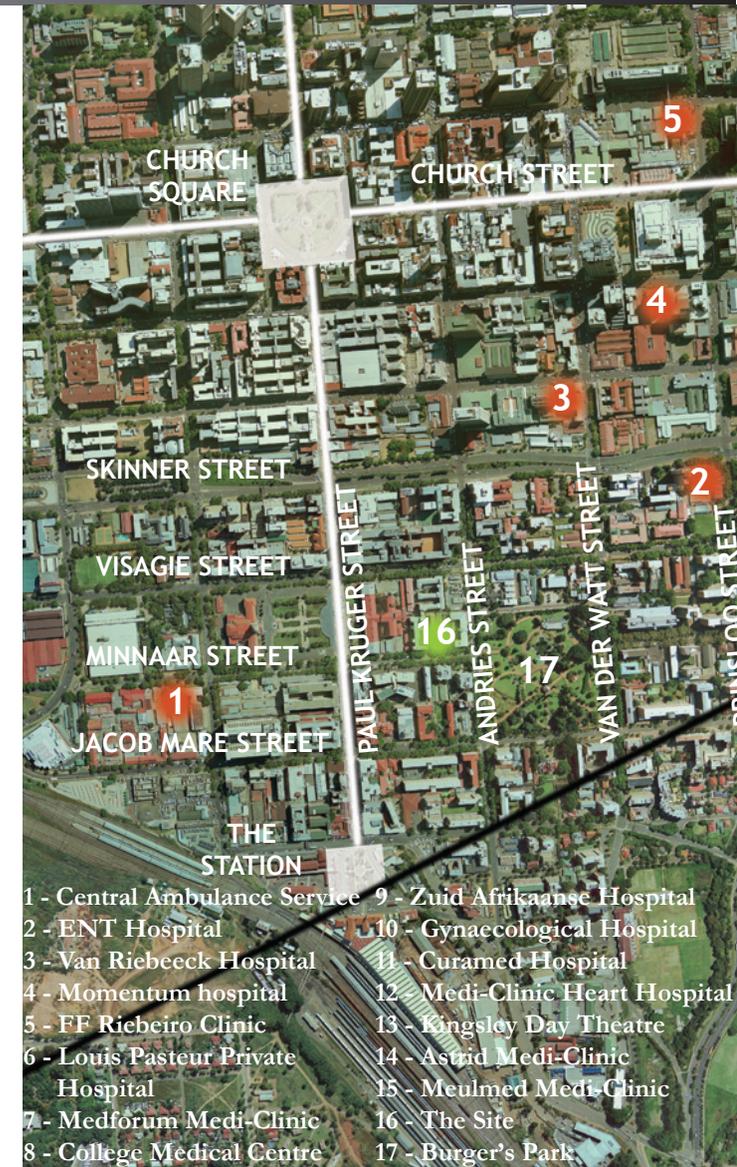


fig. 1.1 Aerial photograph of Pretoria CBD showing the hospitals in the area and site location

fig. 1.2 Aerial photograph of the site



fig. 1.1

Louis Pasteur Private Hospital has a variety of specialties it deals with, however it provides very little rehabilitation after the primary care is given. Due to the fact that the sub-acute facility requires the design of a therapeutic environment, it is necessary to position the facility out of the excessively busy and noisy CBD and rather provide the facility further south in the Burgers Park region of the city. This area is well maintained, readily utilized and plays host to numerous new residential developments as well as receiving continuous efforts to upgrade the streets for both vehicles and pedestrians. The site is close enough to Louis Pasteur Private Hospital where doctors will easily be able to continue their

rounds past the sub-acute facility. It is also well situated only two blocks east of the central ambulance service should any emergencies occur on the premises requiring transport back to Louis Pasteur Private Hospital.

As the site is on the perimeter of Burgers Park, the patients at the sub-acute facility could utilise the park on a daily basis for both relaxation and social gatherings. The site is also in close proximity to the train station and taxi drop-off/pick-up points, which become important for patients at the sub-acute facility who may not be able to drive yet.



fig. 1.2

AIMS, OBJECTIVES & DESIGN PROBLEMS

AIMS & OBJECTIVES

The aim of this study is to investigate the design of a therapeutic environment to accommodate the long term care of patients after they have been treated in a hospital, and while they are in the process of a full recovery, and in so doing, create a new architectural typology for sub-acute facilities in South Africa.

The study and design project will promote the therapeutic care of patients, and the creation of such environments and will therefore contribute to the way in which such facilities are designed in the future as well as the level of therapeutic care provided for in the health sector in South Africa.

Sub-acute facilities are a growing need in South Africa, and important facts need to be considered when designing such facilities, as the patients could be there for up to three months away from their homes and comfort zones. The sub-acute facility should therefore:

- Investigate and test new ways to create therapeutic environments.
- Act as a model for the new typology of sub-acute facilities in South Africa.
- Strengthen the spatial legibility within the environment to create an architecture accessible to all.
- Create a hierarchy of spaces in which public, private and semi-private spaces can be established between patients, staff and the public.

DESIGN PROBLEMS

The development of sub-acute facilities is a fairly new concept in the South African medical field. Often facilities of this nature that house patients for long periods of time end up being lifeless, dull environments that do not accelerate the healing of patients (Carpman & Grant, 1993:4).

Designers need, therefore, to rethink the way in which medical facilities, such as sub-acute facilities, are designed. These designs should incorporate the idea of therapeutic environments that will, at the end of the day create a healthier setting for patients to recover in.

Unfortunately, the few sub-acute facilities that exist in South Africa are, according to the DoH, “not up to standard” (Gauteng Department of Health, 2008:6) and are very hospital-like in appearance. It will be imperative to visit the existing South African sub-acute facilities to investigate how these could become therapeutic environments. Similar facilities in other countries will also need to be studied and then compared to the statutory requirements of the South African DoH.



fig. 1.3



fig. 1.4

CLIENT, BRIEF & RESEARCH QUESTIONS

CLIENT

PRIMARY CLIENT

The main client will be the investors who will pay for the initial building of the facility as well as for its upkeep. In this case, the main client will be the Hospital Board at Louis Pasteur Private Hospital as the facility will become a 'step-down' facility directly from their care. The board consists of a joint venture between Bonitas Medical Aid Fund and the doctors and founders of the hospital. The partners share the joint vision to "strive for excellence and to render Service Excellence...with a Smile" (Louis Pasteur Website, 2010), with their slogan being "Quality for you".

SECONDARY CLIENT

The secondary client for the sub-acute facility will be the patients and staff that will utilize and run the facility. The target market patients are those within the middle income bracket of the population as well as those of a lower income that may have health plans from working at a government, institutional, or corporate company that provides such health care benefits. The patients, managerial staff, as well as the operational staff will be using the building on a daily basis and care must be taken to provide for their needs and requirements in the facility.

BRIEF

The provision of a sub-acute facility and therapeutic environment within the city of Pretoria that will be linked to Louis Pasteur Private Hospital. The facility needs to provide 24 hour care as well as cater for daily rounds to

be made by doctors from Louis Pasteur Private Hospital, and therefore should be situated relatively close to the hospital. Accommodation for patients within the facility will need to be provided for. However, no accommodation for the nursing staff will need to be provided for as the area has a rich diversity of residential development. Investigation will need to be done as to whether or not to provide accommodation for patients' families.

The specific rehabilitation needs of the patients will need to be provided for on various levels. Louis Pasteur Private Hospital is a hospital that caters for various medical and surgical needs for patients in Pretoria as well as for those as far as Mpumalanga, North West and even beyond the borders of South Africa. The hospital however is renowned for their cardio-thoracic, neuro- and orthopaedic surgery and the sub-acute facility should principally cater for these types of recovery.

The ground floor of the facility that opens onto the street will need to incorporate an interactive environment, accessible to both patients and the public who pass by the site and utilise Burgers Park. The creation of more activity on the street edge of the facility is important to create a social interaction between the patients and the community. Burgers Park is to be used as a green open space for the patients as well as the public who currently occupy the park to reiterate the connection between the public and the facility and not to isolate the facility as an island within the city.

RESEARCH QUESTIONS

With consideration to all that has been expressed up to this point, the following research questions have been posed as a guideline towards the final solution:

- What is a sub-acute facility and what is its relevance in South Africa in 2010?
- What are the South African statutory requirements for a sub-acute facility, and how can we learn from other countries and existing South African models?
- How can an architectural intervention become a therapeutic environment for patients to recover in?
- How can an environment designed to house people with post-operative ailments be created within the city of Pretoria where they will be safe and comfortable to live?
- How can an individual user become part of the architecture and experience & understand the environment on a personal level?



fig. 1.5

METHODOLOGY, ASSUMPTIONS & DELIMITATIONS

RESEARCH METHODOLOGY

The research methods used to collect, synthesise, and create architectural solutions from in this study originate from two places:

1 - QUANTITATIVE RESEARCH METHODOLOGY

a - Data collection

This involves the collection, analysis and further research of relevant statistics, factual documents, statutory requirements and existing frameworks for the research area.

b - Context analysis

This consists of time spent at/near the site analyzing the existing state of the site, observing people's behaviour in the area and observing existing scenarios. This is recorded through photographing, drawing and documenting the events or physical features first hand.

c - Interviews

This includes personal interviews with architectural professionals who work in similar fields, representatives from the DoH, consultants to the DoH, and individuals that currently work at such facilities, who all provide valuable information to incorporate for the efficient and functional design of such a facility.

d - Programme

This involves the research into what type of features are necessary in order to provide for the brief and programme of the building.

e - Economic theories

This includes the study of “disruptive innovation” whereby sub-acute facilities are highlighted as a building typology that is readily required in the health care industry.

2 - QUALITATIVE RESEARCH METHODOLOGY

a - Normative position

This involves the creation of a ‘norm’ that will be focused on throughout the study, that of creating a therapeutic environment for patients in the sub-acute facility.

b - Architectural theories

This includes theories related to the creation of therapeutic environments, as well as theories that focus on creating an architecturally rich environment like “Pattern Language”, and finally theories related to the design of institutional settings.

c - Precedent studies

This includes buildings as precedents that relate to the theoretical and environmental issues and requirements necessary to create a therapeutic environment and the new building typology. It also includes good and bad existing models of such facilities from South Africa and other countries to be compared as functional precedents.

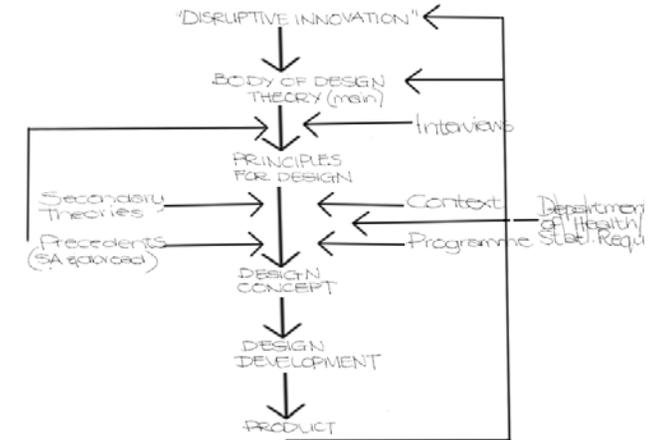


fig. 1.6

ASSUMPTIONS & DELIMITATIONS

Due to time constraints, the focus of the study and the programme of a sub-acute facility, the following are either assumed or delimited:

1 - It is assumed that the proposals presented in the urban framework are acceptable and applicable.

2 - It is assumed that erf 1/3279, 238 Minnaar Street, Pretoria will be rezoned to allow institutional use of the site.

3 - It is assumed that a license for a sub-acute facility has been awarded in the vicinity of Burgers Park to the primary client from the Gauteng DoH.

4 - The study will be focused on the design of a sub-acute facility for after care from cardio-thoracic, neuro- and orthopaedic surgery.

5 - The study will not have a main focus on psychiatric rehabilitation for mentally challenged individuals; however it will have a focus on the mental well-being of the rehabilitation patients mentioned in point 4.

STRUCTURE OF THE STUDY

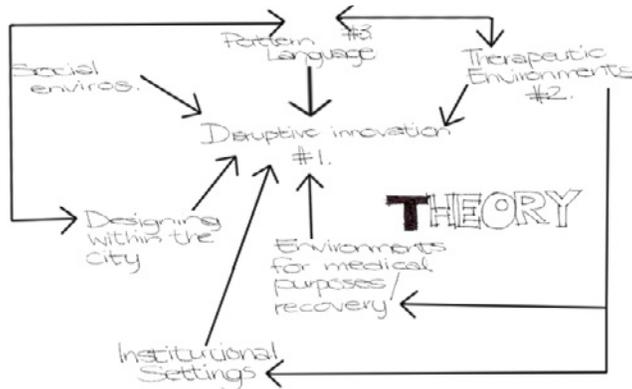


fig. 1.7

STRUCTURE OF THE STUDY

The study begins by outlining the background and context of the design proposal as well as highlighting the site that will be used. Thereafter, the aims and objectives are further elaborated on as well as the design problems identified. Hereafter, the client and the brief are announced and from this research questions, methodology, assumptions and delimitations are identified to support the above.

In Chapter 2, the theory behind creating a layered therapeutic environment is explored. This is achieved through the research into various theories and literature studies that relate to creating environments of healing and growth.

In Chapter 3, elaboration as to what exactly a sub-acute facility is, its relevance in SA and any statutory requirements for such a facility are expressed to familiarize the

reader with the typology and provide information with regards to the programme of the building. With the above in mind, a site accommodation schedule for the facility is developed.

Chapter 4 focuses on the context that the facility is in. The context is firstly explored on the various scales that affect the facility and is followed by a contextual analysis of the study area around the site. Existing urban design frameworks are then explored and the ideas synthesized to form a new group urban design framework. From here, research and investigation around the site is carried out to explore and identify the design driving influences that are found on the chosen site.

In Chapter 5, the development of an architectural concept relating to the creation of a place that accommodates the healing process is explored and begins to develop into a possible variety of architectural forms.

Chapter 6 explores the design development of the proposal, showing the integration of the items highlighted in the earlier chapters, and showing how all the information has been accumulated to inform the design decisions made throughout the project resulting in a set of sketch plans.

In Chapter 7, the sketch plans mentioned above are further manipulated through technical exploration, highlighting the intentions which have been followed through the entire project. A technical aesthetic is firstly identified which familiarizes the reader with the overall

intentions that the design has identified. Hereafter various technological aspects are identified and the solutions to any queries provided, such as: facility function relating to form, this form being expressed through a specific tectonic solution, use of environmental control and finally any supportive services required in the facility are identified and solutions briefly expressed. All of these eventually leading to the final product of a set of technical drawings.

Finally, in Chapter 8, a conclusion drawing on all the information and exploration throughout the document will be summarized, expressing solutions and recommendations.

It should be noted that each chapter has its own introductory and concluding paragraph which sums up the design intentions and ideas for that particular chapter. The body of the text between these two paragraphs will expand on the ideas highlighted in these sections.

It should also be noted that there is no 'precedents' chapter. This is because all precedents will be located before the conclusion of the relevant chapter where the precedents related to the specific topic will be expressed, indicating its relevance to the solution.