



An investigation of restorative and experiential theories, applied within an open space framework for the Hospital Hill as a place that could benefit public health.

a development proposal for regeneration: **THE HOSPITAL HILL**

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by Heleen Pretorius

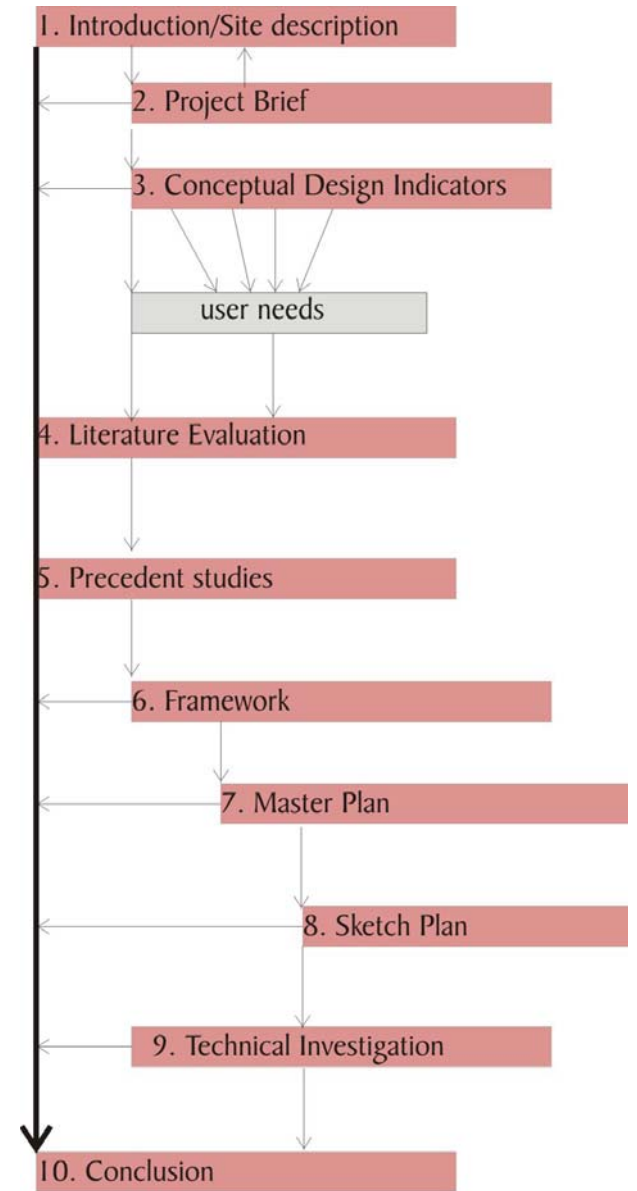
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“...almost meaningless to ask how to design an experiential landscape in a conventional sense because a part of it resides in the life patterns and psychological activity of individuals and groups and this is outside the realm of conventional approaches to design. Instead it may be more meaningful to talk about trying to create the conditions within which experiential opportunity can be optimised.”

Thwaites, K and Simkins, I (2007):114





EXECUTIVE SUMMARY

The Hospital Hill is characterised by illegibility, under-utilised space and lack of circulation control. Hospital Hill contains the Medical campuses of the University of Pretoria, as well as the Tshwane District Hospital. The Tshwane District Hospital is in the process of being upgraded to a Regional Hospital. This upgrade has profound implications on spatial organisation within the Hospital Hill Precinct and relationships between institutions and users.

This design aims to improve the spatial connectivity between the Tshwane Regional Hospital and the Campuses of the University of Pretoria through the application of a series of open spaces for the benefit of public health.

The hypothesis was tested and applied through the following methodology:

- Analysis of site specific design indicators
- Compilation of a user profile
- Literature
- Investigation of theories of restorative benefit and the experiential landscape to determine characteristics of an environment that *could* be beneficial to public health
- Precedents and previous studies

An open space development framework was compiled for the Hospital Hill. The Master Plan area focused specifically on the interface between the campuses of the University of Pretoria and the Tshwane Regional Hospital.

Dr. Savage Plaza was identified as the most important activity node of the Hospital Hill. This area was developed up to Sketch Plan design, applying some of the principles identified in the theory, to argue for the development of open spaces with the potential to benefit public health.

The Technical Investigation involved the development of a maintenance strategy for the open spaces. It includes the details of the hydrological systems applied at the Dr. Savage Plaza (stormwater detention feature, erratic fountain). Street furniture and edge details were investigated.



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GLOSSARY OF TERMS

Actualisation: The final layer in Maslow's (1964) hierarchy of needs. Achieving actualisation is dependent on satisfying the lower levels of needs, including physiological need, needs for safety, love and belonging; esteem, cognitive and aesthetic needs. Actualisation involves achieving one's true potential, by *"becoming everything one is capable of becoming."*

Area: "A subjectively significant realm engendering a sense of coherence and containment." (Thwaites and Simkins, 2007)

Attention restoration: Public health vs. therapeutic application of restorative environment. Recovery from everyday fatigue caused by the urban environment, and restoration of the capacity known as direct attention.

Bio-physical environment: Components of the environment that relate to topography, geology, hydrology, fauna and flora within the context of the Hospital Hill Precinct.

Centre: Subjectively significant location engendering a sense of here-ness and proximity (Thwaites and Simkins, 2007)

Complexity: An individual involvement variable that influences the visual preference of an individual towards an environment (Kaplan, 1975)

Coherence: The visual consistency of a sequential experience of an individual as he moves through a series of spaces.

Direction: "Subjectively significant continuity engendering a sense of there-ness and future possibility." (Thwaites and Simkins, 2007)

Ephemeral: Transient effects caused by contrasts in nature, for example sun to shade, wet to dry and changes caused by seasonal effects. Ephemeral qualities are believed to aid in restorative benefit.

Environment: The sense of place of the Hospital Hill Precinct that is the result of an intricate and changing relationship between bio-physical, physical-built and socio-cultural environments.

Extent: An environment is of favourable extent to an individual when what the individual wants to do corresponds with what the space has to offer (Hunziker et al., 2007).

Fascination: Effortless attention that stimulates feelings of wonderment, but should not require concentration. Soft fascination often correlates with restorative sensations.

Health: ".....is not the mere absence of illness, but means physical, social and mental well being (Mercer, 1975 according to World Health Organization)."

Imageability: Quality of a physical object, which gives an observer a strong, vivid image (Lynch, 1960)

Human-environment relationship: "This holistic, mutually defining human-environment relationship is thus one of continuous, dynamic and evolutionary change, driven by the activity of people expressed through where it happens." (Thwaites et al., 2007)



Legibility: “the ease with which [the city’s] parts can be recognized and can be organized into a coherent pattern” (Lynch, 1960: 2-3).

Open space: Areas predominantly free of building that provide ecological, socio-economic and place-making functions at all scales of the metropolitan area (Tshwane Open Space Framework, 2005).

Physical-built environment: The “figure” component of the figure-ground relationship within the context of the Hospital Hill Precinct.

Public health: The treatment of attention depletion of the urban individual through the availability of spaces with the ability to be restorative to a compatible individual, results in attention restoration and improves the ability of the general public to function within the urban environment.

Preferred environment: An environment that people can organise perceptually and also become involved with. (Kaplan, 1975)

Regeneration: The altering of existing spaces to such an extent that it results in an improved

relationship between components of the social-cultural, natural and physical-built environment.

Restoration: “the process of renewing physical, psychological and social capabilities diminished in ongoing efforts to meet adaptive demands.” (Hartig, 2004).

Restorative: used in a general sense to explore the potential of outdoor settings in towns and cities to provide a general sensation of revival or renewal, mitigating the stress and mental fatigue which can arise from prolonged exposure to some aspects of urban environments (Thwaites et al., 2005)

Restorative landscape: Environments with higher degree of four factors consisting of coherence, complexity, legibility and mystery are more preferred by people. It installs a sense of being away, extent, fascination, compatibility. This theory emphasises that if the four properties within a landscape are strong enough, it could be called a restorative environment (Huang, 1995).

Restorative perception: The higher the preference (of the user) towards an environment,

the higher the restorative perception of the environment.

Transition: “Subjectively significant point or area of change engendering a sense of transformation in mood, atmosphere or function.” (Thwaites and Simkins, 2007)

Socio-cultural environment: Another component of the environment that is in relationship with the bio-physical and physical-built environments within the context of the Hospital Hill.

Visual preference: Two information and two involvement variables are applicable: legibility and spatial definition are important informational variables; complexity and mystery are described as the two involvement variables. (Kaplan 1975)

Under-utilised space: The “figure” component of the figure-ground relationship, where the space contributes to the fragmentation, or is isolated, inaccessible or not being used to its full potential.



LIST OF ABBREVIATIONS

CBD: Central Business District
CDTA: Centre, Direction, Transition, Area
CTMM: City of Tshwane Metropolitan Municipality
P.A.H: Pretoria Academic Hospital
T.R.H: Tshwane Regional Hospital
T.D.H: Tshwane District Hospital
T.R.H.M: Tshwane Regional Hospital Master Plan
SAHRA: South African Heritage Resources Agency
U.P: University of Pretoria

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