This chapter gives an overview of this dissertation's structure and design intent.
Background

The Vision for 2010 and beyond, envisages Hatfield as a multi-functional socially responsive urban node of Pretoria. This vision is fueled by current urban injections like the Hatfield Gautrain Station, the upgrade of existing Metrorail stations and the emergence of numerous contemporary up-market residential developments. According to the Hatfield Metropolitan Core Urban Development framework (City of Tshwane, 2007) the Gautrain, Metrorail and supporting BRT (Bus Rapid Transit) interceptor routes will form the backbone to uphold and direct future development.

In the residential sector, investors have seized the opportunity for up-market developments, but the spread and scope of these projects should be managed properly. In Dewer and Uitenbogard’s (Dewer & Uitenbogaardt, 1991) Manifesto for change in South African cities, they affirm the importance of urban spatial structuring and order.

Therefore the necessity to initiate a primary layer of urban order becomes evident, for this generates opportunities and integrates the activities around this system. The concern is to capitalize on urban opportunities by focusing on the development of good urban structure, as opposed to just more infrastructure.

Key objectives

- Integrate land-use and transportation
- Encourage mixed land-use developments
- Integrate land-use with social needs
- Promote cultural and urban activities
- Create a Foci of civic identity
- Construct quality public urban space
- TOD (Transport orientated development)

Problems areas

- Lack of quality urban open space
- Lack of defined precinct identity
- Lack of meeting, dwelling, working, visiting, walking and entertainment spaces
- Lack of through routes and destination spaces
- Insufficient public Security strategies

Opportunities

- Develop Activity spine along track connecting Festival, Hilda and Gautrain station
- Restore Urban fabric: Establish a link across train track
- Enhance urban identity, character and legibility
- Promote informal meeting & recreation spaces for social interaction
- Promote Day/night activities
Site abstract

The site is located on the city block between Festival, Hilda, Burnett and Arcadia Street where the Metro rail splits the urban fabric into two fragments. The site proposed is situated on the northern segment parallel to the railway opposite Rissik station. The property belongs to SA Railways and is managed by Intersite. Intersite has a vision to develop and densify the urban fabric around these station precincts and is currently engaged in research on an international scale to identify potential programming and intervention strategies. They envisage the area around Rissik station is to be a vibrant urban node with a multi-layered program that promotes public interaction and provide a canvas for social activities.

The design proposal will explore the following:

- Creative resource node – location
- Dynamic interface for social expression
- Establish connectivity to immediate urban context
- Vibrant multi-functional destination space
- Spatial & functional interdependency of cross-pollinating interventions

Urban Analogy

The spinal system in the body has many functions, but primarily as transportation conduit for information and for giving the body proper structure to perform its daily activities. If the spine cannot perform these essential functions, the whole bodily operation breaks down. The spinal system also sustains secondary activities along the route by ensuring the efficient movement of information, while structuring the rest of the activities feeding into it.

The Gautrain Rapid rail link station functional area guidelines (City of Tshwane: 2003:4-7)

identified the area parallel to the track as a potential activity zone. The urban design intervention therefore suggests the development of a pedestrian activity spine between Rissik station and the Hatfield Gautrain station, thus capitalizing on the proximity of these urban-energy generators. This system of social spaces backed by responsive urban interventions will form the central ordering system for social activities and provide an interface for interaction. On an urban level, this movement flow of people, goods and capital acts as the glue which holds the system together, and integrates the Hatfield core as a whole.

The real world problem

1. The site is complex. The southern edge is flanked by the Metro-rail railway line. Historically railway lines have been a cause of division within the urban fabric, and here it is no different. Therefore, on a practical and psychological level it is needed to overcome this divide and reconnect the segmented urban fabric.

2. The era of an independent mono-functional building is drawing to a close. More and more buildings that intend to facilitate communal functions are turning into white elephants used only on occasion by the select few. The emerging urban environment therefore necessitates buildings that respond to the requirements of the urban environment with a flexible, multi-layered program and shared amenities. This dissertation proposes an urban art workshop. A workshop consists of a variety of components that mutually contribute to the success of the whole. Each of the layers help to sustain the building to fulfill a wider purpose.

Research goal

The objective of this dissertation is to explore ‘Contextual’ architecture in light. On a theoretical level this dissertation explores the role of light in architecture, and on a functional level, the complexity of an urban building that responds appropriately to context.
Research questions

What is an appropriate response to the urban context?

- What are the essential components of the urban fabric?
- What measure of implementation strategies is needed to facilitate the urban vision?
- How is the program generated by societal needs?

- What is the role of light in architecture?
  - What is our relationship to architecture?
  - What is our relationship to light?
  - What is light’s relationship to architecture?
  - How does architecture respond to light?

Definition of terms

Context – Urban fabric, site, program, societal needs, environment, genius loci, vision

Assumptions

- That the implementation strategies suggested will be implemented
- That the Hatfield Gautrain station will be a bustling transportation node with 46 500 feet moving through it per day.

Delimitations

- The study will not engage in an investigation regarding an aesthetical and historical exploration of critical regionalism.

Theoretical Abstract

Architecture today is misunderstood. This statement does not engage in the tectonic, programmatic, systemic or contextual aspects of the art, but involves the presence of architectural meaning and experience. Therefore this depravity does not apply to the general public alone, but also to us, the architects. If we don’t understand architecture, how could we begin to understand our relation to it? I believe that this is because much of today’s architecture doesn’t have the tools to reveal itself.

In most religions there is a spiritual significance to light. In the Christian faith, scriptures reveals our relationship to light. The Gospel of John 12:35b says: “walk while ye have the light, lest darkness come upon you: for he that walketh in darkness knoweth not whither he goeth”. In the context of the scriptures, man orientates himself in this world by way of light/God (1 John 1:5 – God is light, and in Him is no darkness). This is where he finds his identity and how he understands his existence. If Light (nature and character of God, whole being) is not present, he cannot understand living, nor find meaningful discourse in it.

In Silence and Light Louis Kahn(2005) says that with Architecture, the religion is light, it is the giver of all presence, it gives room to the day and brings the season into the room. In our existence that we skillfully conduct amid the biosphere and the first heaven, the matter of architecture and light is very significant. Everyone understands light on a subconscious level; it is ingrained in our composition. Light was created as a precondition for life. Louis Kahn (Silence and Light, 2005) states that everything is spent light, even our bodies.