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A Centre for Design: Catalyst for Urban Regeneration in Salt River, Cape Town

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This dissertation is presented as part fulfillment of the degree of Master of Architecture [Professional] in the School of Architecture, Planning and Geomatics, University of Cape Town

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ABSTRACT

Our cities are plagued by "lost spaces," left over as a result of the modern movement and extensive mobility routes. These spaces result in negative areas of the city, and are associated with vagrants, pollution and crime, rendering the area and its surroundings unsafe and undesirable. This dissertation shows how, by means of acknowledging, considering and reprogramming space these areas can be reconsidered to be positive places. The aim of this dissertation is to address the architectural problem of neglected space and show how, through revitalisation and insertion of functions and programs which respond to site, historical context and culture, the inherent potential of a space can be unveiled. The design and research develops a theoretically informed and sustainable approach to regenerating "lost space" and convert it into a positive architectural experience of place.
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1. INTRODUCTION

My project is located in Salt River, Cape Town. In particular, I am considering the "lost" and left over spaces as a result of the modern movement and mobility routes, such as the buffer space around highways as well as underneath them. Currently, these are considered negative spaces, mostly used for illegally disregarding waste and occupied by vagrants and criminals. As a result, the existing fabric has turned its back on these spaces, making them and their surrounding areas unsafe and undesirable. I am proposing to investigate how one can invert this perception and reconsider these areas to be positive spaces. This can be achieved through the revitalisation and insertion of functions and programs which would stimulate activities within the spaces.

The architectural problem of neglected "in-between" space, both on the scale of the city and the interiors of buildings, has always intrigued me. The importance of acknowledging, considering and reprogramming the "in-between" has formed the basis of my research this year. As an entry point into my research I explored the theories of transitional thresholds through the work of various architects.

This document is made up of three main sections; my theoretical underpinnings form the first section, followed by the project development in which the process of the specific site selection is illustrated. The third and final part of the document entails my design process describing my intervention. The development is recorded in the form of sketches, diagrams, models and photographs.
CONCERN
Left over / "lost space" in the city
As a result of the automobile, the modern movement
Negative and unused space

THE "IN-BETWEEN" THEORY

1. CHRISTOPHER ALEXANDER
   - concept of the lock
2. ALDO VAN EYCK
   - the ‘twin phenomena’ and the ‘in-between’
3. HERMAN HERTZBERGER
   - the threshold

Figure 2.1 - Diagram illustrating the work process of the theoretical investigation (Author, 2013).
2. THEORETICAL UNDERPINNINGS

I started off this year with a great interest in the area of Salt River, Cape Town. The area is closely linked to Woodstock and Observatory. Its built fabric is fine-grained, coherent and has a strong architectural character. This area, which was once home to the largest textile industry in the Western Cape, is currently in a state of urban decay. Vacant, dilapidated buildings make up the majority of the street scene, leaving the area unattractive and unsafe. The nature of the area and its built fabric led me to an investigation of public space specifically in the form of streets. In my initial investigation I unpacked the "in-between" concepts discussed by three theorists, with regards to the space being able to mediate between the public street and the private building in order to allow the user to actively engage with both. My conclusions, drawn from my research, relate to a certain kind of experiential approach to architecture which deals with transitions, creating spaces of threshold which allows for connection between two areas of difference. The main concept drawn from my research is emotive space, embodying a sense of place through sensory experiential qualities in architecture. However, as my project developed I was led into research regarding the origin and theoretical as well as critical response to negative or "lost space" through "multiplication of objects and the neglect of fabrics" (Carmona, 2010: 79). The freestanding buildings in parks, as proposed by the modernist movement, left the residual spaces empty and, unless well designed, became unusable and merely occupied by the objects standing within them.

This led to a disjointed urban block system without streets and squares for public interaction; essentially a series of formless types of spaces. Lefebvre (1991:303) argued that the outcome was a "fracture of space" ... a disordering of elements wrenched from each other in such a way that the urban fabric itself - the street, the city - is also torn apart.

It can be said with relative certainty that the built environment has a determining influence on human behaviour and, as a result, is the medium for and the outcome of social process and change. Therefore, "It is being increasingly recognized internationally that significant improvements to the spatial quality and social performance of urban settlements demand a return to the design of street and public spaces as opposed to roads and parking lots." (Todeschini & Dewar, 1981)

In South Africa densification is further encouraged both by the City of Cape Town's Densification Strategy, which is aimed at doubling the city's density and by the Central City Development Strategy in which the aim is to bring 100 000 people into the city within the next 10 years. When this happens it will result in a substantial decrease in private space available to the individual household. As a result emphasis needs to be placed on public spaces of which streets make up the largest part.

Precedent has shown that in many cases there is a direct link between the quality of public space and the performance of its greater community. The public spaces are the places where people engage formally and informally with the city or town and thus experience it. In a sense they are the extension of the living room, in which the social, cultural and economic fabric are tied together. Creating positive space for these interactions to occur is therefore important.

THRESHOLD

In response to the problems caused by modernism, the idea of the "in-between" space came about. The importance of which was realised by numerous architects who developed various definitions and concepts relating to the idea. The analyses of which led to the exploration of four dimensions of the "in-between" concept: space, time, environment and human. Firstly, due to the fragmentation of space and the neglect of fabrics" [Carmona, 2010: 91]. The freestanding buildings in parks, as proposed by the modernist movement, left the residual spaces empty and, unless well designed, became unusable and merely occupied by the objects standing within them.

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THE STREET

"Think of a city and what comes to mind? Its streets. If a city's streets looks interesting, the city looks interesting; if they look dull, the city looks dull."  
Jane Jacobs (1961:37)

Pedestrian movement is related to the concept of streets as social spaces where economic, social and cultural exchanges and transitions occur. Car-based movement, on the other hand, is purely for circulation to get from point A to point B. When travel was mainly by foot or horse-drawn carriage there was a great overlap between social space and that of movement. However, after the Industrial Revolution and the invention of the automobile, these spaces became segregated and compartmentalised. As a result, the "road" frequently fragments the city as it divides and separates areas where social exchanges take place as opposed to "streets" which connect spaces and activities throughout the city.

The problem with the urbanisation of the 20th Century, according to Mies van de Rohe, was the "multiplication of objects and the neglect of fabrics" (Carmona, 2010: 91). The freestanding buildings in parks, as proposed by the modernist movement, left the residual spaces empty and, unless well designed, became unusable and merely occupied by the objects standing within them.

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the return to design, which incorporates nature and its surroundings, came about. Discussed below are the concepts and definitions of the "in-between" through the theory and work of Christopher Alexander, Aldo van Eyck and Herman Hertzberger.

CHRISTOPHER ALEXANDER

Christopher Wolfgang Alexander was one of the first theorists who explored the relationship between the public and the private domain and the effect it had on the inhabitants and the community life. According to Alexander, the pedestrian orientated civilization, with its balanced mix of quiet alleyways and squares in contrast to busy streets and plazas, has become neglected, in favour of the automobile. He believes that both of these have their place in modern cities, however, only one is incorporated in city design.

Alexander proved that it is more appropriate to design cities, or parts thereof, as semi-lattice structures in order for some functions to overlap and thus be shared. Serge Chermayeff and Christopher Alexander, in their book Community and Privacy, developed a model whereby there are two independent units; one of which is public and the other private. These should be able to function individually. Chermayeff and Alexander (1963) suggested these domains should be connected to each other via a semi-public and semi-private domain placed in-between them. By so doing, the public and private domains are isolated through the insertion of a barrier or passage between the two points; consequently preventing either from being compromised by the other. To explain this concept Alexander compared it to a canal lock, which mediates between areas of different water levels.

ANATOMY OF DWELLING: people

Alexander’s concept of the lock shows that spaces of difference can be connected without compromising the integrity of either. One could further argue that he proposes a “slowing down” mechanism as well as a transitional space. This space of pause reflects upon some aspects of historical cities, where, as previously mentioned, society was slow paced characterised by social interaction community life.

ALDO VAN EYCK

One major theme, around which all of Van Eyck’s theories revolve, is the concept of relativity. This concept can be split and further discussed within two focal points of his theoretical work; the “twin phenomena” and the “in-between”. These two ideas form the basis of Van Eyck’s design approach throughout his career. The “twin phenomena” explains what an entity is in relation to other entities, while the “in-between” focuses on the aspects of mental and physical spaces (Lammers; 2012).

Twin phenomena

Van Eyck did not only believe that everything is related, but also that all things are relative to each other, i.e. “relations are interactive.” Thus, if one cannot relate one element to another, then the elements themselves have no meaning.

For example; there is no inside without an outside, nor is there dark without light etc. This relationship between elements is what Van Eyck called the “Twin Phenomena.”

The “in-between”

The “in-between” theory came about as being the spatial equivalent of the “twin phenomena” concept. Van Eyck’s first implementation of the “in-between” into a design strategy was in the design of the Orphanage. Van Eyck convincingly argues for the articulation of transition abandoning the concept of spatial continuity, through the means of a defined “in-between” space in which one becomes aware of what is significant on either side. Through this a common ground is created where elements can exist in relation to one another and in so doing become twin phenomena (Ligtelijn; 1999). Van Eyck developed his theory of the “in-between” further into three particular areas of understanding; contradictory spaces coming together, hierarchical spaces coming together and similar spaces coming together.

1. CONTRADICTORY SPACES COMING TOGETHER

This is the most common scenario where the “in-between” could exist. And relates to the relationship between public and private, old and new, nature and man-made. The most common, being the relationship between inside and outside.
In House Visser, Van Eyck recognizes the contradictions between inside and outside, and creates an "in-between" space which incorporates an overlap of the two. By introducing wooden beams into the entrances of the house, nature (outside) overlaps with the man-made (inside), providing an "in-between" space which ties the two contradictory spaces together. In Van Eyck's Amsterdam Orphanage, in the Netherlands, the relationship between the public and the private is exploited through the incorporation of a large doorstep that protrudes into an urban square as an extension of the private realm into that of the public.

The tension which results due to two opposing spaces coming together produces a third space, the "in-between." In this instance the "in-between" takes preference over the two similar spaces.

2. HIERARCHICAL SPACES COMING TOGETHER

This relationship is usually between a part of the building and the whole, the "in-between" space created here prepares the user for what is to come. Looking again at Van Eyck's Orphanage, different spaces are all linked to each other by means of a large internal street. It is in this street where the "in-between" exists, it is the space where the separate departments (parts) become a "building" (whole) and vice versa. The "in-between," the street, is an intermediate space which allows for the interactions and chance encounters between children as they move between the different departments, and it produces an area of socialization.

3. SIMILAR SPACES COMING TOGETHER

This relationship exists predominantly between interior spaces. In this instance the "in-between" takes preference over the two similar spaces.

In Van Eyck's Catholic Church Hague the two similar spaces are separated by an introduced transitional space marked by a change in ceiling height. Van Eyck illustrates with success, how an "in-between" zone can be designed, by using different hierarchies, in order to distinguish between similar interior spaces and in so doing giving each their own identity.

A clear example of Van Eyck's belief of the importance of the "in-between" can be seen in his view of the door:

"...the world of the house with me inside and you outside, or vice versa. There's also the world of the street - the city - with you inside and me outside or vice versa. Get what I mean? Two worlds clashing, no transition. The individual on one side, the collective on the other. It's terrifying. Between the two, society in general throws up lots of barriers, whilst architects in particular are so poor in spirit that they provide doors two inches thick and six feet high, flat surfaces - of glass as often as not. Just think of it: two inches or a quarter of an inch if it is glass - between such fantastic phenomena - hair-raising, brutal - like a guillotine.

"Every time we pass through a door like that we're split in two but we don't take notice anymore, and simply walk on, halved. Is that the reality of a door? What then, I ask, is the greater reality of a door? Well, perhaps the greater reality of a door is the localized setting of a wonderful human gesture: conscious entry and departure. That's what a door is, something that frames your coming and going, for it's a vital experience not only for those that do so, but also for those encountered or left behind.

Based on the evidence brought through Van Eyck's work, it can be accepted that the "in-between" enhances the experience of the user by bringing spaces into relation with each other. The "in-between" space allows for pause, by which the user can find himself relating to his surroundings, and thereby understand his transition through space.

HERMAN HERTZBERGER

Hertzberger is a social thinker, he developed an interest to the way in which people interacted with each other and the environment, as well as how a building could enhance the communication. Similar to Van Eyck, he believes in a pause between two opposing spaces, however, his focus is between the public and private, the street and the building.
Hertzberger explained his view in terms of a child sitting on the front porch of his home:

"We are concerned here with the encounter and reconciliation between the street on one hand and a private domain on the other.

"The child sitting on the step in front of his house is sufficiently far away from his mother to feel independent, to sense the excitement and adventure of the great unknown.

"Yet at the same time, sitting there on the step which is part of the street as well as of the home, he feels secure in the knowledge that his mother is nearby. The child feels at home and at the same time in the outside world. This duality exists thanks to the spatial quality of the threshold as a platform in its own right, a place where two worlds overlap, rather than a sharp demarcation.”

Hertzberger has a thorough understanding of the social nature of the intended users. In his Montessori School, Delft, he designed the building with the intention to enhance these social interactions, and provide spaces which would allow more variety of them to occur.

An example of Hertzberger’s implementation of threshold can be seen in the space between this street and the building. Through the use of low walls and elevated platforms, he created a sheltered space which acts as a threshold between the interior classrooms and exterior school street or plaza. These zones of threshold create spaces which can be used by the children and teachers, in many ways both for playing and to study. Hertzberger said of the school that, “Children, too, have their meetings and appointments.”

Threshold and the “in-between” is a tool through which architects allow the user to experience transitions and allow for sufficient pause in order for the user to engage with his surroundings. It deals with very powerful relationships between man, society and the built environment.

In conclusion I believe all three points of focus; slowing down movement, connection between users and their surroundings, and the opportunity for social interaction to occur, to be of equal importance. All these concepts should be present in architecture to allow for successful streets and communities to exist.

The conceptual framework of my design project, pertaining to threshold as transitional space, has been set up through this research and findings.

LOST SPACE

"Lost space" is the result of poor modern town planning and the increased provision for automobiles. The first step to dealing with this issue, according to Roger Trancik is to identify these gaps in the spatial continuity of a place and then fill them with a framework of buildings and interconnected open-space opportunities that will generate new investment. "Lost space" is an exceptional opportunity for urban revitalisation.

Twenty years ago Robert Venturi identified the problem not being a lack of open-space in the city but rather the openness thereof. "Residual space in-between dominant spaces with varying degrees of openness is not unknown in our cities...the open space under highways and the buffer space around them. Instead of acknowledging and exploiting these characteristic kinds of spaces we make them into parking lots or feeble patches of grass—no-ma..." [Venturi; 1966;80] Through proper enclosure a space can be given definition and in turn create usable public space.

Three theories were explored in connection with re-appropriating “lost space” and are briefly explained below.

![Diagram of Urban Design Theories](Trancik, 1943: 15)
FIGURE-GROUND THEORY

This theory relates to the relative ground coverage of an area when buildings are seen as mass and open-space as void. It implies that a positive void is created when the relative ground coverage of an area is denser than the void, hence giving shape to open space. The best example of the figure-ground theory of urban spaces is Giambattista Nolli’s Map of Rome.

Voids need to be carved out of the solids in order to provide functional spaces. They generally consist of entry foyer space, the threshold between private and public space. Oscar Newman strongly emphasises the use of these voids for the creation of safety eye-on-the-street. A second void is the inner block, furthermore streets and squares make up voids as well as public parks and gardens. The idea behind the figure-ground theory is the possibility of manipulating the structure of the solids and voids to avoid lost space by making the pattern condensed. More importantly it identifies the structure of urban spaces in a city by creating a hierarchy of different sized spaces all individually enclosed but ordered in relation to each other. [Trancik; 1943]

LINKAGE THEORY

This implies connecting parts of the city through lines of reference such as site lines, directional flows of movement, axis and building edges and in so doing establish a coherent structure by which to order space. Fumihiko Maki, who produced extensive work on the theory of linkages, stated that: “linkage is the glue of the city. It is the act by which we unite all the layers of activity and resulting physical form in the city…thus making comprehensible links between discrete things.” [Trancik; 1943;106] The concept behind this theory is that in order to accurately understand the urban structure of a place it is essential to study the circulation and connections.

PLACE-MAKING THEORY

“Whatever space and time mean, place and occasion mean more, for space in the image of man is place, and time in the image of man is occasion” Aldo van Eyck [Starven; 1959;357]

This theory is concerned with the culture and human characteristics of a space. Trancik gives two definitions explaining that space is a void with the potential to physically link things where as place is derived from the contextual meaning established by the culture or regional content.

The theory explores the idea that people need a relatively enclosed and defined space in order to develop their social and cultural lives, which in turn produces the identity and sense of place. It suggests therefore, that “place” is not so much defined by the measurable elements as it is by the qualitative and atmospheric phenomenon that produces its character. One can therefore deduct that the primary importance of a place is its enclosure which in turn provides the user with a sense of security and allows liveable spaces for people.

Kevin Lynch who initiated and produced several books on place theory, stated that: “Just as each locality should seem continuous with the recent past, so it should seem continuous with the near future. Every place should be made to be seen as developing, charged with predictions and intentions. The concept of space and time however conceived, are the great framework within which we order our experience. We live in time places.” [Lynch; 1972;241]

In conclusion the analysis of these theories suggest, that the city is a layering of elements. Therefore if only one of these theories is used during the design process it may potentially lead to lost opportunities. For example, if the only concern is with the making of “place,” then possible connections or linkages, which could have potentially strengthened the design, will be missed. I am of the opinion that a layering of these theories is necessary in the production of successful liveable cities. These theories have had a large influence in my design decisions as well as approach throughout this dissertation.
3. PROJECT DEVELOPMENT

3.1 CONTEXT

From the outset, Salt River, Cape Town captured my attention. Its proximity to Cape Town CBD, together with its current state of urban decay, lends itself to great future potential for urban revitalisation and densification. It forms part of the N1 corridor which has been earmarked for future high density development which will form part of, support and make the City of Cape Town’s integrated transport plan more viable. It has also recently been pegged as part of the Cape Town urban renewal initiative.
3.1.1 HISTORICAL CONTEXT

The area of study is located between Devil's Peak and Table Bay on a narrow North-facing slope of land. At first, it was an inhospitable area due to poor soil conditions and exposure to harsh winds. Up to the 1850's it was used mainly as a movement passage between Cape Town and Simons Town along Roodebloem (now Salt River road) and Albert road, as well as Cape Town and the hinterland along Voortrekker road. Both of which established the underlining geometry of the area.

Urbanisation of Salt River started in the 1850's. The land was made fertile and small farms and market gardens came about. The railway line and Salt River Station, built in 1861, were major role players in the development of the area.

Salt River was established in the 19th Century, as a result of rapid growth “a staggering 394%” [Worden et al, 1998:212] due to a large number of industries moving into the adjoining areas.

The railway workshop in Salt River represented the largest single concentration of employment in the Peninsula at the turn of the century.

The founding roads were Victoria [now Main Road] and High Street [now Albert road], which connected the area with Woodstock, Observatory, Mowbray and Cape Town CBD.

Commercial and industrial developments were predominantly along the main roads with fine grain residential development to the back.

A typical building lot had a depth of 20-24m together with a 1m service lane for night service removal, resulting in a block depth of 40-50m. All buildings had outdoor toilets that adjoined the lanes. The rapid growth resulted in a consistency of materials and building details which led to a coherent and stimulating urban environment.

The implementation of the GROUP AREAS ACT led to the destruction of the adjoining District Six and forced removals of neighbouring residential areas. Even though forced removal was never implemented in Salt River itself, the threat thereof prohibited investment in the area and led to urban decay and exacerbating community division. (NM & Associates; 2002) It left the community weakened and cut off from the CBD.

Today, Salt River is one of the oldest working class residential areas in Cape Town and has sustained some of its social and cultural history. Even though many of the industries have moved or closed down Salt River still holds memories of the clothing, furniture manufacturing and food production it was once renowned for.
Figure 3.2 - Time line of development
(Le Grange, Woodstock/Salt River 2000)
3.1.2 AREA DESCRIPTION

As previously mentioned, the site selection for this project was established early on in the process. Due to the large scale of Salt River, it is the focus of this dissertation to concentrate on the precinct between Salt River Circle and the station, Figure 3.5, which forms the gateway into the area from both rail and vehicular routes. The area is currently in a state of decay, plagued by high levels of crime.

Salt River Station, when viewed from an areal perspective, forms an important junction between Cape Town and the greater metropolitan. It is where rail transport nodes from the outer city in all directions merge and flow into the CBD. The station forms part of the residential area of Salt River to the South and Culembourg industrial zone towards the North as well as an industrial zone to the East of Voortrekker road.

Salt River Market has been in existence for over 80 years. It has served as a trading post for numerous local grocers, paint shops and second hand shops. Recently though its future has become uncertain as the City of Cape Town has placed it under review. It is now running on a month to month basis which makes it unfeasible for the landlord and tenants to invest in the premises and as a result it has become neglected and a large portion has turned into storage space.
A closer look at the station and surrounding areas reveals various large portions of vacant land or "lost space" as well as abandoned retail premises and dilapidated buildings.

The Salt River Circle and the historical Market are cut off from the Station by a large vehicular overpass forming Voortrekker road. Rail commuters making use of the Golden Arrow bus system, located close to the Market, need to walk along motorways from the station and across the busy four-lane Voortrekker road in order to continue their commute. To the East of the station the rolling stock yard possesses a large amount of vacant and under-utilized land. This land borders onto the Black River where it is currently unmaintained.

As a result of the dilapidated and unfriendly pedestrian nature of the area the crime is high and muggings in this area are common. The vacant land is being illegally used by vagrants, rendering the area unpleasant and unsafe as a destination.
3.1.3 MAPPINGS AND LAYERING INFORMATION

The architectural design approach which followed, was to work across different techniques in order to build a layering of information of the site and its surrounding context. The following pages documents the research starting with Urban Systems on a Sub-Metropolitan scale. This is followed by a social investigation into the selected area and its surroundings. From here the research looks at the precinct through the lens of climate, visual connections, behavioural characteristics, pedestrian movement patterns, vehicular movement routes, residential patterns, socio-economic profile and zoning.
Urban Systems on a Sub-Metropolitan scale:

As seen previously in Figure 3.3, Salt River Station is the pivot point connecting the Cape Flats, Northern and Southern Suburbs to the CBD. According to a census done by the City of Cape Town the total number of week-day passengers recorded was 27,918 at Woodstock station, 52,339 at Salt River Station and 19,466 at Esplanade Station. (City of Cape Town CMC Administration, 2000) These statistics show that there is a very large number of pedestrians disembarking the station and moving into the Salt River area on a daily basis.

Table 1. Salt River Station: Week-day a.m. and p.m. peak hour passengers.
(City of Cape Town CMC Administration, 2000)

<table>
<thead>
<tr>
<th></th>
<th>WEEK-DAY A.M. PEAK HOUR (07H00 - 08H00)</th>
<th>WEEK-DAY P.M. PEAK HOUR (17H00 - 18H00)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>FROM CAPE TOWN</td>
<td>3849</td>
<td>251</td>
</tr>
<tr>
<td>TO CAPE TOWN</td>
<td>315</td>
<td>7403</td>
</tr>
<tr>
<td></td>
<td>11818</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3.7 – Diagram showing rail connections and week-day passenger count (Author: 2013)
When analysing the pedestrian movement in the area, it can be deduced that the majority of the week-day morning and afternoon commuters who get off at the Salt River Station work in the clothing factories and other industries located along Victoria Road. Salt River road takes preference over Durham Avenue and is the main pedestrian route connecting Salt River Circle to Victoria road.

A large number of the morning passengers (2 732) are school children who leave the area again between 15h00 - 16h00. According to the City of Cape Town, the majority of people living in the Salt River area are between the ages of 0 - 34 years. This makes them active and in need of good public space and recreational activities. Yet the few existing parks are under-used as they are deemed unsafe and unattractive.

The lack of designated pedestrian routes and crossings leave the pedestrians vulnerable to vehicular traffic. In conjunction with this, the isolation of the station and the lack of other activities surrounding it leaves the commuters exposed and insecure outside of the peak hours. It is my proposal to create a new link underneath the busy Voortrekker road by revitalising the unused vacant land below and surrounding the highway and in doing so the heavy flow of pedestrians will be redirected via a safe and attractive route. This proposal will also explore ways of linking the historical Salt River Market to the station, as well as introducing new activities into the area in order to increase the safety and security.
5 - 7 MINUTES WALKING DISTANCE FROM SALT RIVER STATION

NEW PROPOSED PEDESTRIAN ROUTE
HIGH PEDESTRIAN USAGE OF ROUTE
MEDIUM PEDESTRIAN USAGE OF ROUTE
LOW PEDESTRIAN USAGE OF ROUTE

Figure 3.8 - Pedestrian Movement Analysis [Author; 2013]
The main vehicular movement is East-West along Albert and Victoria roads. This is reinforced by the railway. A series of North-South roads connect these main roads of which Salt River road and Cecil street are the dominant connections. Where the fast moving Voortrekker road meets Salt River Circle it compromises urban activities such as Salt River Market.
PROJECT DEVELOPMENT

Figure 3.9 - Vehicular Movement Analysis (Author: 2013)
Climate Conditions

Geography – Salt River is named after a river by the same name. The Salt River is formed by the confluence of the Liesbeek and Black Rivers. The river has been canalised and flows into Table Bay between Paarden Eiland and Brooklyn.

Wind – impacts the site quite extensively. The South Easterly wind funnels down Portland, London and other roads. This often makes it unpleasant to walk down these roads. Views of Devil’s Peak, Signal Hill and Table Mountain can be seen from the site.
High visual resource. Views of Devil's Peak and Table Mountain are visible.

Medium visual resource. Views of Signal Hill and Lions Head are visible from certain areas.

Medium visual resource. Views of Table Bay area are visible if elevated above ground level.

Low visual resource due to a lack of elevation and natural resources in the area.

Figure 3.10 - Visual connections and climate (Author: 2013)
With the intention of strengthening the local culture it was of particular interest to analyse the different ways people have adapted and are currently using the space, despite the current zoning conditions. See Appendix A for zoning conditions.
Figure 3.11 - Behavioural Characteristics (Author, 2013)
Even though Salt River is not a large area the density is relatively high for Cape Town (40 units per hectare). This allows the area to be able to support a large number of shops and services. Typical characteristics of the built-fabric include:

- Row housing, Semi-detached 1-4 story houses and flats
- Fine grain, narrow fronts defining public space
- Small or no setbacks
- Threshold conditions; verandas, low garden walls, steps, recessed entrances
- Materials include; plaster, decorative iron works, pre-cast concrete columns
Figure 3.12 - Residential characteristics, housing typology [Le Grange Architects; 1993]
Albert road is very active both with pedestrians and vehicles. It presents a dynamic, bustling and flamboyant scene. The street is lined with 2-3 storey mixed-use buildings with commercial functions on the ground level. Transitional elements, such as overhangs and verandahs, create semi-public space between the building and the street. The space is both an extension of the shops into the public space as well as a movement route for passers by.

Salt River Station is located on Foundary road. The road is very active during peak hours as it is the main feeder route between the station and Salt River road which links the area with Victoria road where, majority of the factories are located. It also connects the station to the Golden Arrow bus stop on Voortrekker road which is used by commuters traveling to Atlantis. As of yet the road has not made use of the great commercial opportunities presented by the presence of the station. Only a few small kiosks exist which is largely due to uninhabitable, decaying buildings that line the street.
Sikelela, a student residence for CPUT, is located on London road. The students use the bus stop on Foundary road or alternatively a taxi from Salt River Circle to get to campus in the mornings. Furthermore, together with the route along Foundary road it is the most pedestrian travelled road in the area, linking the station to Albert road. It is mostly residential in nature with 1-2 storey semi-detached houses along the sides.

Tennyson street is predominantly a quite residential street. The architectural built fabric consists mostly of low walls enclosing a small garden, with a raised stoep marking the threshold between the private interior of the house and the public street. A fair amount of cross programming exist as numerous residences located on corner properties have turned their garages into small shops and kiosk.
The socio-economic profile of the area consists mainly of a low-to middle-income community. The majority of the inhabitants only have a matric qualification. Only about 9% of the population go on to further educational training, mainly due to lack of funds. Unemployment levels are relatively low (City of Cape Town: CMC Administration, 2000). Crime levels have increased rapidly over the last 15 years, mainly due to the lack of public investment resulting in poor environments. The area is the centre for the Cut, Make and Trim industry and, although it took a dip in recent years, it is slowly picking up and gearing itself for export opportunities.
3.1.3 SUMMARY: SITE PROPOSAL AND MOTIVATION FOR ARCHITECTURAL INTERVENTION

The area surrounding Salt River Station including Salt River Market is currently in a state of urban decay. The area is in need of an urban revitalisation.

I argue that a new safe pedestrian walkway be developed, forming a link between Salt River Market and Salt River Station by using the vacant land under and surrounding the highway. Through this development I propose to create a significant public place in the area of study, giving consideration to linkages, exposure of facilities and good pedestrian and public transport. The precinct will have the capacity to attract and hold people in the area, as well as the generate a strong economic element. This is to be done through incorporation of large trade areas, as well as educational facilities, offices and residential components. I argue that this destination trade hub of activity can have an urban developmental and regenerative effect on the surroundings.

The focus will be to strengthen the culture and history of the area through creating a key tourist attraction home to fashion and design. The centre would incorporate an educational institution, local designers and trade in addition to the traditional fresh food produce associated with Salt River Market. The centre would complement, rather than compete, with the already established fashion and design industries in the area.

The selection of site is also supported by the City of Cape Town’s future development plans in the recently published Woodstock-Salt River Revitalisation Framework. The site, hence forth referring to the demarcated area in Figure 3.19 was ear-marked by the framework as requiring urgent attention and revitalisation. Recent development along Salt River road in response to the framework has started strengthening and improving the area which forms the first leg of the proposed revitalised link between Salt River Station and Victoria road. The focus of this dissertation will be to explore and design the second leg as well as important activity node within this route.
4. DESIGN DEVELOPMENT

4.1 LARGE SCALE URBAN PROPOSAL: recreational green link & revitalised pedestrian routes (25 YEAR PLAN)

As it has been noted that there is a great lack of safe and attractive public open space in Salt River, the need for recreational facilities is crucial. This, together with the fact that the area has been somewhat cut off to the CBD following the Group Areas Act, I propose to re-link the CBD to the Salt River area through a recreational cycling and running / walking route using the left over “lost space” next to the railway line. This link will extend past the Salt River Station and connect the area to the neglected Black River, with the end point forming a park and promenade along both the Liesbeeck and Black rivers. I propose that the current rolling stock yard be re-appropriated for a future mixed-use development. The land value of the stock yard is very high due to its proximity to the CBD and, as a result, possesses great opportunities to address densification in the form of offices, retail, housing and other facilities.

Figure 4.1 - Diagram showing proposed revitalised pedestrian routes and recreational green route (Author, 2013)
4.1.1 RECREATIONAL GREEN LINK

Figure 4.2 – Diagram showing urban proposal for densification and recreational facilities – 25 year plan (Author; 2013)

Figure 4.3 – Section A-A showing proposed recreational green link (Author; 2013)

Figure 4.4 – LANDSCAPE PARK - Raipoch riverwalk playground [www.scotland.gov.uk; 06/06/2013]

Figure 4.5 – PEDESTRIAN/CYCLE LINK - New York Highline [blog.mipimworld.com; 06/06/2013]
In conjunction with the Woodstock-Salt River Revitalisation Framework, done by NM & Associates for the City of Cape Town, I propose that the dominant pedestrian-used roads between Salt River Station and Victoria road be re-designed to allow for safe, comfortable and attractive pedestrian walkways. This route will incorporate various nodes of attraction along the way, of which Victoria road industries, Salt River Market precinct and the station will be the most important. Other influential nodes would be along Albert road, Woodstock including the Biscuit Mill, The Bromwell and Woodstock Station.

**GOALS**
- Unique District Character / Branding
- Synergy of Uses
- Opportunity for Development
- Connectivity
- Critical Mass

**PHASING**
- PHASE 1: NODE 2
- PHASE 2: NODE 3
- PHASE 3: NODE 5

**DESIGN CONCEPTS**
- Streetscape Improvements along Corridors
- New Public Open Space including Pedestrian Plazas
- A New Gateway on Voortrekker Road to Adequately Welcome Visitors to the Area and Attract Them to the New Arts Centre and Market
- Capture Critical Mass of Visitors at Biscuit Mill
- Refurbishment and Re-Development of Market and Open Land to Pedestrian Plaza and Pocket Park with Night Time Entertainment Uses
- New Landscaped Recreational Cycling and Running Path
- Improve Sight Lines & Tighten the Urban Fabric

Figure 4.6 - Diagram showing proposed revitalised pedestrian routes:
1. Biscuit Mill
2. Salt River Market precinct
3. Salt River Station
4. London Road Precinct
[Author; 2013]
4.2 SITE ANALYSIS: focus area

Initially, I investigated two possible sites; one being the precinct between Salt River Market and the station and the other the portion of land between the station and Albert road as indicated on Figure 4.7. After a thorough investigation of both sites, I concluded that the former held the most interesting and challenging design possibilities.

The site is strategically located within the existing pedestrian traffic system of the area and poses great development potential. I propose that the site becomes an activity node, both within the immediate environment and in the larger city. The link between Salt River Market and the Salt River Station will tap into the critical mass of foot traffic by providing a safer and more attractive route towards Albert and Salt River roads as well as the bus stop on Voortrekker road.

The first step was to identify a possible connection between the site and the main existing pedestrian movement routes, identifying problematic areas and possible improvements. Barriers and boundaries which prevent the connection along the route were identified as well as possibilities of new connections which could be formed. Refer to Figure 4.7.

*Note A site investigation and site strategy of Site B can be found in Appendix B*
As a result of this analysis, I proposed visually opening up the station towards the market by demolishing unused and dilapidated buildings and turning the existing "dead" or "lost" space into a hub of activity through a public space or plaza. The demolition of a small portion of the market currently unused and neglected is supported by the Woodstock-Salt River Revitalisation Framework.

Figure 4.8 - Exploration of site strategy and program (Mulkhan, 2013)
4.3 ACCESSIBLE POSITIVE SPACE

PUBLIC SPACE

The public space is where community life happens. In modern society, the internal living room has become a commodity as opposed to a necessity. It is therefore evident that the space between buildings has become of utmost importance and must be designed accordingly to allow for social interactions and activities.

USABLE OUTDOOR SPACES

Outdoor spaces that are merely left over between buildings will not be used and lead to negative spaces. Thus public open spaces should be designed with clear definition and enclosure. When designing a public space in a small community it is important to ensure continuous activity in order to populate the space from day to day. Such activities could be "making it part of a circulation route or throughfare" (Alexander et al., 1977, 304 - 305) alternatively surrounding it with retail facades are ways to ensure the space remains populated. A clear character is also important to give the space identity.

THRESHOLD AS KEY TO TRANSITION

Herman Hertzberger - Aldo van Eyck - Christopher Alexander, Important theorists and implementors of the term threshold. This element negotiates transition between space of difference both on the interior of the building and on the exterior. It allows a person to adapt to the change in environment and in turn allows for various interactions and activities to occur.

4.4 CONCEPT

THE INBETWEEN

CREATION OF THRESHOLD

THE INBETWEEN

Figure 4.9 - Sections illustrating the use of visual connections in making public space safe and how visual connections can enhance the space. (Author: 2013).

Figure 4.10 - Seating areas provide space where people can interact and engage with their surroundings. (www.archdaily.com; 07/02/2013)

Figure 4.11 - Diagrams exploring usable outdoor space and threshold design. (Author: 2013).

Figure 4.12 - Diagrams illustrating the concept of the design work (Author: 2013).
SITE STRATEGY

The College was placed along the East-West access in order to strengthen the axis and connection towards the station. I proposed that the student and staff housing was to be located above the North-side of the existing Salt River Market and in so doing further strengthening the line towards the station. This position also allows the college and housing to maximise on the North and especially South light into the studio and learning spaces. At the same time the new buildings would act as a shield for both public plazas against the harsh winter N-W wind.

Figure 4.13 - Model exploring site strategy (Author; 2013)
4.5 PROGRAM

- Further Educational Training COLLEGE OF DESIGN - The college will provide further educational training in the areas of graphic, fashion and jewellery design.

- RETAIL - Jewellery shops, textile outlets, arts and crafts, clothing shops, stationery shops. These will, as far as possible, provide the students with the opportunity to job shadow and gain practical work experience.

- OFFICE - Graphic design office - Again, allowing students the opportunity to gain valuable real life experience and exposure in the field.

- STUDENT HOUSING - Housing for students as well as some staff members is to be accommodated on the precinct.

- RECREATIONAL - Café and Bar, outdoor cinema, performance spaces, sports facilities

- URBAN PUBLIC SPACE - or “square” to form part of the overall scheme. A pedestrian friendly zone which connects to other pedestrian and bicycle walkways.

- REFURBISHMENT OF THE EXISTING STRUCTURES - such as the Community Hall, Golden Arrow bus stop and Salt River Market will also form part of the larger scheme.

WHAT IS A FET COLLEGE AND HOW DOES IT FIT INTO THE SOUTH AFRICAN EDUCATION SYSTEM?

FET colleges provide for affordable and flexible programs and teaching approaches, responsive to the needs of the community, commerce and industry. It caters for people who can’t afford to or do not want to go to university after school. In order to prevent an unskilled economy, such Vocational Education and Training must become accessible and recognised as a viable alternative option for the youth. As a result, there is an undeniable need for South Africa to strengthen its current FET system.

In response to this, the Deputy Minister of Higher Education and Training, Mr Mduduzi Manana, has launched a new campaign addressing this matter at the beginning of 2013 namely, “2013 as Year of the Artisan”. This programme aims to encourage learners to take up opportunities in further education and training and promote possible partnerships between schools, FET colleges, SETA’s and employers. It encourages artisanal and technical skills as careers of first choice. [http://www.wit.edu.za/education/fet-colleges/1634355-3-Steps-forward-for-higher-education; 09/2013]

Manana argued that post-school education had long been synonymous with university education. However, the department aimed to change the public mindset and present FET Colleges as institutions of choice. [http://www.wit.edu.za/education/fet-colleges/1634355-3-Steps-forward-for-higher-education; 09/2013] The campaign also encourages municipalities, government departments, state owned companies as well as the private sector in the area surrounding the FET college to provide work placement opportunities for the college graduates.

Manana also stated that the “National Skills Development Strategy (NSDS)” encourages the need to provide appropriate training in rural areas in order to address specific needs that will contribute to the transformation and development in these areas.” [http://www.wit.edu.za/education/fet-colleges/1630666-Progress-being-made-to-fut-FET-colleges-Nkosazana; 09/2013]

For these reasons I proposed the development of an FET college specialising in Fashion, Jewellery and Graphic Design to be located in Salt River. This area is historically known for its craftsmanship, especially in the fashion design industries. In recent years this industry has taken a dip due to the lack of skilled individuals in the area, however, I believe that providing a training facility responsive to the community identity and relevant industry would spark a revival in the immediate economy and lead to a rapid urban regeneration of the area.
4.6 SPACIAL FRAMEWORK AND FUNCTIONAL RELATIONSHIPS

4.6.1 EDUCATIONAL COMPONENT

As previously mentioned, the college offers three different courses, each consisting of three years of study. The building therefore, consists of various departments, each marked by changes in surface texture and color when moving through the building. These different spaces are all linked to each other by means of a large internal street. It is in this street where the "in-between" exists; it is the space where the separate departments (parts) become a "building" (whole) and visa versa. The "in-between," the street, is an intermediate space which allows for the interactions and chance encounters between learners as they move between the different departments. It produces an area of socialization.

The relationships between the more private studios, specific to each field of study, is connected to the more public street through the use of a transitional space or threshold. Here the threshold is incorporated through a large doorstep in the form of a change in surface texture and color that protrudes into the public street as an extension of the private realm into that of the public. Van Eyck believed that a threshold produces a common ground which mediates the two conflicting areas. "... an interlocking of spaces and places between entry and exit: score of coming and going." (Ligtelijn, 1999:92)

The design intent in the building is to enhance social interactions, and provide spaces which would allow more variety for them to occur. Creating public spaces within the building would promote interactions between students waiting for their next class and in so doing enhance and create a student and community life.
### Functional Relationships

<table>
<thead>
<tr>
<th>Space</th>
<th>Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio space</td>
<td>3x Sewing Studios</td>
</tr>
<tr>
<td>Workshop</td>
<td>3x workshops - Jewellery design (each year would share their workshop with the students form the other faculties of the respective year of study)</td>
</tr>
<tr>
<td>Computer Lab</td>
<td>3x Labs - Graphic Design Students</td>
</tr>
<tr>
<td></td>
<td>3x Labs - Shared by students of the Jewellery and Fashion Design in the respective years of study</td>
</tr>
<tr>
<td>Lecture room</td>
<td>3x Lecture rooms [One per faculty]</td>
</tr>
<tr>
<td>Admin</td>
<td>2x Graphic Design Admin Staff</td>
</tr>
<tr>
<td></td>
<td>2x Fashion Design Admin Staff</td>
</tr>
<tr>
<td></td>
<td>2x Jewellery Design Admin Staff</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>1x</td>
</tr>
<tr>
<td>Entrance foyer</td>
<td>1x</td>
</tr>
<tr>
<td>Auxiliary spaces</td>
<td>Toilets</td>
</tr>
<tr>
<td></td>
<td>Social spaces</td>
</tr>
<tr>
<td>Total Bulk of College (excluding circulation space)</td>
<td>2 000 m²</td>
</tr>
</tbody>
</table>

**Figure 4.14** - Diagram illustrating functional relationships between departments in the college [Author, 2013]
4.6.1.2 GRAPHIC DESIGN STUDIO DEVELOPMENT

Precedent and Research: AAA College of Design, Cape Town Cape Town Creative Academy, Woodstock

After establishing a thorough accommodation schedule, I investigated various layouts and methods of teaching graphic design in order to create the optimum class room facility. The workspace within a Graphic Design Studio is not very descriptive. In most colleges it is merely an open plan room furnished with a few desks and chairs. The colleges normally provide only a small amount of computers [1 per 10 students] and require that students purchase their own laptops at the start of the degree. Similarly, all stationary, where required, is to be provided by the students themselves. Being an FET college it was important to take into account, when designing, that most of the students would be financially disadvantaged. Therefore, this facility needed to provide more equipped teaching facilities. Other equipment required during the course of study are samples; such as pantone colours etc. These are usually kept in one large storage room, however, through my research it became clear that the most desired area for these would be in each studio so as to ensure access to the material for all students.

As various subjects would be taught in the studio it was important to design for various methods of teaching with the space. This is illustrated in Figure 4.15.

As mentioned earlier, the creating of threshold between the public and more private areas of the college was a key element in the design. A transitional space is introduced into the interior of the studios in the form of a "foyer" and reading space, after which a change in level led the student into the main work space of the studio. Students are allowed to take ownership of this space through the storage of the work and personal belongings.

Figure 4.15 - Engages of graphic design teaching studio [www.plcs-topnotch.com; 08/2013]

Figure 4.16 - Sketch design of First Year Graphic Design Studio [Author, 2013]
deep recessed windows for protection against NE and NW light

sample storage

cable trays for safe storage of computer cables

white board for brainstorming and lectures

display case in "street"/corridor

Figure 4.17 - 3D Example of first year graphic design teaching studio (Author; 2013)

Figure 4.18 - Typical Graphic Design student desk accessories (Author; 2013)

Figure 4.19 - Illustration of possible informal lecturing space in studio (Author; 2013)
4.6.1.3 FASHION DESIGN STUDIO DEVELOPMENT

Precedent and Research: FEDISA
CAPE TOWN COLLEGE OF FASHION DESIGN

The workspace required for the teaching of Fashion Design varies greatly and is largely dependant on the college's specific requirements. Mostly it is a relatively open plan room with a few large desks. Each student needs access to a sewing machine and a surface large enough on which to unroll and cut fabric. Other requirements include; ironing boards, desks on which to draw, walls where drawings can be pinned up, mannequins (shared by students in 1st and 2nd year) as well as a small storage area for students to put their fabric and accessories like bags, shoes etc. Students are required to provide their own material and sewing utensils.

Again, it was important to take into account that the college needed to provide extra equipment in the facility in order to accommodate the students. The intention of the design was to allow various methods of teaching to happen within one space. Attention was also given to the creation of an "entrance foyer" or transitional space upon entering the classroom.
Figure 4.22 - 3D exploration design of First Year Fashion Design Studio [Author: 2013]

Figure 4.23 - The aisle in between the desks is to be used as a practice ramp and informal crit area. [Author: 2013]

Figure 4.24 - Examples of equipment: [http://typicalben.blogspot.com/2013/02/mattschool-of-fashion-and-design-open.html; 15/08/2013]
4.6.1.4 JEWELLERY DESIGN WORKSHOP / STUDIO DEVELOPMENT

Precedent and Research: CPUT
PRIVATE JEWELLERS IN KLOOF STREET
AND TAMBOERSKLOOF

Jewellery Design workshops/class rooms require a more fixed layout. I went about the process by investigating various teaching facilities both local and international in order to establish a good workable layout for the classroom. As the students will, in some cases, work with welding tools and torches certain gasses which could be harmful get released. Generally natural ventilation is sufficient to get rid of toxic fumes, however, taking note of the harsh winds that affect the area especially in winter, sufficient natural ventilation might not always be possible. For this reason small extractors are thus required where these procedures take place. The Workshops are located on the west end of the building, allowing the space to make use of cross ventilation to aerate the room, as well as maximising light into the space.

Each student in the class needs a workbench Figure 4.29. Two of these work benches together share an extraction unit. Other spaces needed within the workshop are: Electroplating machines (used for cleaning), scales, Jewell scope / microscope, ring sizing machine, ultra sonic cleaning machine. Furthermore, desks for drawing and individual locker storage for students materials are required. Hand wash basins would also be necessary.

A transitional space is introduced in the form of a recessed entrance into the classroom, creating an "in-between" zone belonging both to the public "street"/corridor and the internal studio. Upon entering the studio is an entrance foyer with lockers and display/exhibition cases, this allows the user to adapt to the space before entering the main work area.
white board for teaching

sinks and storage space for small equipment and materials

service core and storage room

evacuation vents

cable trays for distribution of burner gas

display cabinet for students work

student lockers

large multi purpose desks - crits / drawing

individual storage units for students below

cable trays for distribution of burner gas

Figure 4.27 – 3D Example of first year jewellery design teaching studios / workshops

Figure 4.28 – Examples of large machines and equipment [http://www.goldsmith-tools.com/hallmarks.htm; 07/09/2013]

Figure 4.29 – Sketch design of First Year Jewellery Design Workshop / Studio

Figure 4.29 – Sketch design of First Year Jewellery Design Workshop / Studio

[Author; 2013]
4.6.1.5 LECTURE ROOMS DEVELOPMENT

Even though most of the teaching in the college is practical and takes place in the respective studios, an adequate and adaptable lecture/crit room is needed. This space is located on the East side of the building. The space allows for a variety of layout explored in Figure 4.30. The 3 lecture rooms could potentially be used in conjunction with the gallery below to host large exhibitions. The outer skin of the building facing Voortrekker road is a prime marketing and advertising spot which could be used to advertise events hosted both in the squares as well as the college at various times of the year. This will enhance the awareness of the social space and draw more people into the area, increasing the pedestrian activity and in turn the economic infrastructure.
Figure 4.30 – Sketch design of Lecture Rooms [Author 2013]

Figure 4.31 – Example of lecture room space
(www.homelzea.com - 15/08/2013)

Figure 4.32 – Example of runway layout
(6baysc.blogspot.com - 15/08/2013)

Figure 4.33 – Example of crit room layout
(www.homelzea.com - 15/08/2013)

Figure 4.33 – Example of crit room layout
(www.homelzea.com - 15/08/2013)
4.6.2 COMMERCIAL COMPONENT

4.6.2.1 SALT RIVER MARKET

**Precedent and Research:** Temple Bar Square, Dublin, UK
Quincy Market, Boston, USA

The historical Salt River Market has undergone a drastic change over the last decade. What once was a thriving fresh food produce market is today in a state of decay. As a result most of the shops have moved out or closed down leaving the market largely empty.

Various designs for the market were tested and can be found in Appendix A. In this dissertation I propose that the Market be upgraded and restored to its original state as mainly a fresh food produce supplier. I suggest that the parking be restricted to one portion of the site, allowing the entrance to the market to be a pedestrian zone only. By moving the verticals away from the entrance, the market will become more visible from the road and thus be able to attract more people.

I also propose that a portion of the market be covered as to allow for year round usage. The covered structure will also allow the space to be used for other activities such as music concerts and social events. Furthermore, I have suggested that a Phase 2 of the college development incorporates a student and staff housing scheme, which is to be located above the North wing of the Market. This new addition will help to protect the market space from the harsh North-West winter winds, while still allowing for the views of Lion's Head and Table Mountain to be visible from the market.

**Figure 4.34** - Images of Temple Bar Square. This square is also a historical trade space where fresh food markets take place. However, as the climate does not allow for year round use, it was proposed to cover a portion of the space with a movable umbrella type structure. Together with this a stage as well as a cinema screen were located in the space allowing it to be used in a variety of ways during different periods of the day.

(http://www.meetinghousescquare.ie/29082013)

**Figure 4.35** - Existing Salt River Market (Author: 2013)

**Figure 4.36** - Images showing the decay of the current Salt River Market (Author: 2013)
Figure 4.37 - Proposal for the revamp of Salt River Market (Author: 2013)

Figure 4.38 - Section A-A through proposed revamped Salt River Market (Author: 2013)
4.6.2.2 DESIGN SQUARE

Precedent and Research: Royal Festival Hall, Southbank Centre, London
Buscuit Mill, Woodstock

The square will boast an interesting mix of social activities and street furniture designs. Its aim will be to create an attractive, safe public space with a range of activities to suite all ages, as well as, spark an interest in creative design.

When looking at the building as a whole, in relation to the square, another hierarchy between public and private can be found. The threshold between the private college and the public square is dealt with in a variety of ways. Firstly, the main educational part of the college is raised off the ground and sits on the first floor, allowing for a continuation of the public square into the public recreational area adjacent to the railway through the means of retail facilities. This also allows the college to function without any direct interference from activities in the public square. The entrance to the college, which contains a cafeteria and forms the more public part of the college, is situated underneath the highway, adjacent to the main part of the college. This space forms the semi-public "in-between" zone, it is open and inviting and connects the private college to the public plaza.

The semi-public entrance foyer and the private teaching spaces of the college are mediated by a transitional element in the form of a glass bridge which connects the two spaces on the first floor level. This bridge element also has a second transitional function: When experienced from the ground plane it creates a gateway between the design square on the one side and the recreational plaza on the other.

A series of smaller overlaps between the college and the square also happen at various intervals below the main part of the college.

Figure 4.39 - Images of the addition to the Royal Festival Hall in London. Here a dead space was reappropriated into a vibrant pedestrian walkway through the addition of a row of small S必不可 shop. The project illustrates the success of turning lost space under and surrounding a high level railway into a vibrant pedestrian zone by adding activities to an already existing pedestrian route. [https://www.worldbuildingdirectory.com/project.cfm?id=403](https://www.worldbuildingdirectory.com/project.cfm?id=403)

Figure 4.40 - Images illustrating the design ideas and activities for square. [http://www.google.co.za/search?q=street+furniture&source=univ&sa=X&ei=F lwqfiLofH7Abf2oGQ&ved=0DCMQoAQ&b.w=1440&b,h=742&dpeo=1](http://www.google.co.za/search?q=street+furniture&source=univ&sa=X&ei=F lwqfiLofH7Abf2oGQ&ved=0DCMQoAQ&b.w=1440&b,h=742&dpeo=1)
Figure 4.41 – Sketch of the Design Square public space and the Entrance to the College. (Author: 2013)
4.7 SKETCH DESIGN AND OVERALL LAYOUT

THE EXISTING

The existing layout features parking that obscures the entrance to the market. Parking is restricted to the rear of the market.

THE PROPOSAL

The proposal includes a new pedestrian route established to connect the market to the station and provide safe passage for commuters. A new pedestrian entrance to the market is also proposed.

THE FUTURE

The future proposal for the precinct will include a flexible college of design, student housing, and a revived market with fresh produce supplemented by furniture, clothing, textile, and craft shops. New activities such as an outdoor cinema, covered market, and performance space, restaurant, and recreational underpass park will allow the precinct to be activated on a 24/7 period.
Figure 4.43 – Photos of working models illustrating design development of strategy and layout (Author, 2013)
4.9 FORM AND MATERIALITY

SALT RIVER MARKET

Figure 4.44 - Explorations of threshold between the interior and exterior of shops in Salt River Market (Author, 2013)
The building structure consists of a concrete frame with brick infill. Due to the extensive length of the building (120m) it has been treated as three "separate" buildings, each with their own core joined together by a small expansion joint. See Figure 4.45 The structure of the building is to be concealed from the exterior so as to strengthen the slick strip-like appearance of the building, which reinforces movement of the railway and suggests a strong link between the Salt River Market and the Salt River Station.

The building is dressed in part by a perforated screen visible on the exterior of the building. It allows for visual connection between the interior and exterior, while at the same time providing shading. These screens mark the circulation spaces within the college. The studio teaching spaces do not have screens; as they require unobstructed light with minimal influence on the interior; for example, when viewing patterned materials in the sewing studio.
SKETCH EXPLORING THRESHOLD BETWEEN DIFFERENT SPACES PRESENT IN THE CIRCULATION PASSAGE

SECTION THROUGH EXTERIOR SKIN OF COLLEGE EXPLORING HOW THE GROUND FLOOR DEALS WITH THRESHOLD BETWEEN THE SQUARE AND INTERIOR OF SHOPS

SKETCH PLAN EXPLORING HOW SPACE IS DEFINED WITHIN THE MORE PRIVATE SEMINAR ROOM

Figure 4.47 - Exploratory sketches of technical and material resolutions dealing with how thresholds are made in the building (Author: 2013)

TIMBER CLADDING WRAPPING EXTRUDED BALCONY AND MARKING ENTRANCE TO A GROUP OF SHOPS ON GROUND FLOOR

SECTION A EXPLORING HOW THRESHOLD BETWEEN THE PUBLIC CIRCULATION STREET AND THE MORE PRIVATE SEMINAR ROOM IS DEALT WITH.
Figure 4.48 - Explorations of threshold conditions between the interior teaching studios (semi-private space) and the communal circulation space / "street" (semi-public space) (Author: 2013)
4.9 RENDERING EXPLORATIONS

COLLEGE OF DESIGN - INTERIOR

Figure 4.49 - Render showing tripple volume social spaces within the circulation route of the college (Author; 2013)

Figure 4.50 - Render showing tripple volume social spaces within the circulation route of the college (Author; 2013)
Figure 4.51 - Render showing triple volume social spaces within the circulation route of the college opening up onto the Design Square (Author, 2013)

Figure 4.52 - Render showing triple volume social spaces within the circulation route of the college (Author, 2013)
5. CONCLUSION

This project has attempted to successfully address the architectural problem of neglected "lost-space" in Salt River, both on the scale of the city as a whole and within the individual buildings, by means of acknowledging, considering and reprogramming space. The proposal was to invert the perception of an unsafe and unsecure environment and reconsider it as a positive space. This was achieved through the revitalisation and insertion of functions and programs which would stimulate activities within the space. I believe that the program responds to the cultural heritage of the area and will revive and strengthen it within the community.

The project was strategically located within an important movement route and passage linking dominant nodes in the area. The design was in line with the City of Cape Town's future transport and development plans and at the same time formed part of an existing revitalisation framework for the area. The design attempted to address the immediate needs of its programmatic function on a smaller scale, while at the same time interacting with urban systems and developmental issues on a much larger scale. The design was guided by theories of threshold, figure-ground, linkage and place-making.

The building was conceived from the idea of strengthening linkages between the Salt River Market and the Station, encouraging place-making by the intended user. It resulted from a thorough investigation of site, history, culture and movement patterns. The project successfully attempted to unveil inherent potentials of the site in order to create a sensibility that promises a positive architectural experience of place.
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BOOKS


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Hertzberger, Herman [1991] Lessons for Students in Architecture. Rotterdam. Uitgeverij 010


JOURNAL ARTICLES


WEBSITES

FET Colleges South Africa
Available
http://www.fetcolleges.co.za/
2013, Sept. 03

The Skills Portal
Available
http://www.skillsportal.co.za/
2013, Sept. 01
The Revitalisation Framework for Woodstock and Salt River is a work in progress project done by Nisa Mammon, from NM & Associates Planners and Designers. The framework tries to identify opportunities for regeneration. It also places emphasis on the culture, heritage value and public uses prevalent to the area. My project falls within this framework and on a identified site for regeneration. Even though this framework was only discovered later on in the dissertation process, it has given valuable input and informed my design decisions.
Figure 4.8b: Local Context - Economic Structure: Vacant Buildings

WOODSTOCK - SALT RIVER REVITALISATION FRAMEWORK

Figure 4.5: Local Context - Public & Social Resource Systems

WOODSTOCK - SALT RIVER REVITALISATION FRAMEWORK

Figure 4.8a: Local Context - Economic Structure

WOODSTOCK - SALT RIVER REVITALISATION FRAMEWORK

Site analysis has been conducted on an alternative site. Even though this site also had good potential for a dissertation project, I felt that the chosen site was more appropriate for my investigation into the regeneration of "lost space".
MAKING OF PLACE

- Safe Environment night and day
- High density sufficiently supporting commercial infrastructure
- Pedestrianisation - street life
- Threshold: public + private