

# 03

## THEORETICAL PREMISE



## 3.0 THEORETICAL PREMISE

### 3.1 Urbanism

Pretoria spatial town planning characteristics complement apartheid ideologies that sought to marginalize and fragment race groups. The grain of the city, particularly that of Marabastad, is coarse primarily because development occurs in relatively detached parcels bound by road networks and large open spaces. These planning policies consequently result in high transportation and living costs for this already impoverished community. Associated with high costs of living are constrained choices on how to spend time and money resulting in severe developmental issues of unemployment and inequality, further marginalizing and making life a desperate struggle to meet basic needs.

Of particular importance in Marabastad, which is experiencing rapid growth of backyard shacks and illegal squatting induced by the relocation of displaced households and natural increase, is the need to create opportunities for small scale, self generating economic activities, and facilitating social amenities which promote social interaction and cultural cross-fertilization. In the publication “South African Cities: A manifesto for change”, Dewar and Uytendogaardt ,2002:38, reiterate that public gathering spaces are an extension to the private dwelling unit. If these spaces are poorly designed, the entire environment remains sterile and dysfunctional regardless of the detail and investment placed in individual dwelling units. Thus, public spaces, institutions and facilities form the basic structuring framework for urban settlements. These spaces generate economic, social, cultural and recreational opportunities for large agglomerate groups or individuals, with these groups and individuals incapable of benefiting from these services in isolation.

In the publication “The production of Space, 2004:56”, Lefebvre affirms that there are different levels of space, and they range from rudimentary natural environments to intricate spatiality's whose significance is socially produced. Lefebvre argues that this social production of urban space is fundamental to the production and development of society. Thus, the urban construction of space is based on values and the social production of meaning. This space serves as a tool of thought, action and expression, with each society producing space with its own spatial practice.

The dissertation places emphasis on social and spatial ordering constructs of urbanism, to create a conducive and pleasurable environment for community rituals of leisure, living and working. Urbanism is the study of economic, geographic, political, social and cultural environments within cities, and their impact on the built environment (<http://en.wikipedia.org>). It focuses on the revitalization of public spaces and the improvement of the quality of life by facilitating sustainable and stimulating environments. These environments constitute integrated community life with efficient infrastructure to promote interaction, creativity and opportunity.

Best practice urban design principles have been formulated to guide the process of generating these integrated environments for communal activities. The dissertation identifies, re-interprets and utilizes these principles to create a social and cultural node relevant for the community of Marabastad. However, it should be noted that urban design is an intervention of physical space and is insufficient to grasp social space without society or community involvement.

### 3.2 Application

#### Urban Design Principles.

##### Urban Regeneration

Marabastad's formal economy is incapable of absorbing and sustaining new entrants in the job market. Most of its community members are unskilled and frequently have no choice but to seek survival through self generated employment in the informal sector. There, therefore is need to transform Marabastad into an efficient economic node by creating pre-conditions which facilitate opportunities for economic generation, ingenuity and creativity. Providing places of trade and manufacturing with very low or no rental is one way of achieving this. It becomes vital to the survival chances of Marabastad.



Fig 3.01 Illustrates insufficient formal space, so the traders has set stalls on the pavement.



Fig 3.02 Informal trade node



Fig 3.03 illustrates the lack of informal trading space. Traders set up in a prominent pedestrian route to the Bus and train stations

## Access

There is a need to facilitate ease of access to resources and opportunities to promote equity in Marabastad. This impoverished community needs physical access to these opportunities and resources, thus, movement on foot defines the primary scale of development. Though it has a viable and efficient public transportation system, it becomes an option, not a pre-requisite. Currently, it reflects fundamental problems of urban form because of impositionary economic, political and regulatory policies. This restricts the community from fully participating and benefiting from urban life, which to them, demands the use of time and personal resources.

## Promotion of Collective Activities and Contact.

Places of collective activities in an urban context facilitate social contact and interaction, which in turn offers opportunities for innovation and diversification, (Dewar and Uytenbogaardt 2000, p17). Because of critical difference between individuals, complex social networks emerge in these places which are of profound significance to the quality of life of urban dwellers. Creating such space in Marabastad will provide social security and insurance to its inhabitants.



voids in pedestrian circulation



Fig 3.05 Facilitating an environment that allows for performance promotes social contact and interaction

## Individual Needs

Urban public places need to meet an individual's needs for the individual to engage fruitfully with the spaces. These include physical, social, psychological and sensory needs, (Dewar and Uytendogaardt 2000, p18).

### Physical needs

Nutrition

Health

Safety

Shelter

Water

Employment

### Social needs

Interaction

Community ties

### Psychological needs

Security

Identity

Sense of belonging

Choice

### Sensory needs

Stimulating environment

Learning opportunities



Fig 3.06 Poor service delivery is a hazard to the community's wellbeing



Fig 3.07 Block stormwater drains also affect the communities wellbeing and security.



Fig 3.08 The image shows a lack of a stimulating environment providing a sense of belonging

## Freedom

Individuals determine their own needs and this is facilitated by offering considerable freedom of choice, decision making and action. Promoting freedom for individuals to act realizes different energies and talents, making it a stimulating, diverse and complex environment. It is this complexity which reflects and contributes to the identity of a community and society at large. However, too much freedom leads to chaos ,so there should be judgment on the necessary freedom sufficient to release these energies.

## Balance

Balance guides growth of a community and maintains important relationships that can otherwise be destroyed. This Balance includes:

### **Society and Cosmos**

Integral to this is a sense of place. It creates a recognition and celebration of natural resources, culture and historic distinctiveness, providing landmarks to the urban users, ( Lynch, K .(1960) The Image of the City)

### **Society and Nature**

Retaining contact with the natural context is vital because it allows people to appreciate and understand that they are a small part of a greater whole.

### **Relationships between people (Mixed Use)**

This refers to the structural configurations which provide opportunities for people whilst enhancing their standards of living for themselves and others. This relates to primary elements of movement, accommodation, working and playing mixed to improve social activities and events which define urban life

### **Flexibility**

With balance comes flexibility. Space and buildings should adapt to accommodate different needs and uses. These spaces should be composed that should one component change, the system remains functional.

### Intensity, Diversity and Complexity

Pretoria has a diverse range of cultures from within South Africa and from other countries, particularly Southern African countries. These groups offer population support sufficient to create intense interaction with a variety of overlapping activities. They facilitate opportunity for spontaneous and unexpected events to occur. The conflict and juxtaposition between different activities at a particular time compliments and reinforces these activities allowing the individual to participate or withdraw from an event as they choose.

**Hierarchy.** These complexities should be expressed by spatial contrasts from community to individual scales. What is manifest in one level is hidden in the other

### Community

The idea of community relates to an individual's sense of identity and belonging within a greater whole. This is vital for both the development of the individual and for the community (Urban development). The way in which urban spaces are designed affects processes of socialization, the individual's identity and identity of the community.



Fig 3.09 promoting communal activities, whilst allow the complexities of different events.( circulation, sitting, children playing)

## Integration

Positively functioning urban environments show high standards of integration within themselves and with other parts and elements of their surrounding environment. Currently, Marabastad is fragmented within itself and isolated from its surrounding environments. For integration to occur, intensive activities and events which depend on support and participation of large populations from Marabastad and the city as a whole need to be facilitated. Furthermore, infill in the open land parcels acting as buffers between Marabastad and the city needs to transpire to allow urban continuity. Other factors which allow for integration in Marabastad include:

### **Legibility**

Legibility promotes easily accessible environments through the use of pathways, nodes, gateways and edges, ( Kevin Lynch, 1960:p25).

### **Connectivity**

Promoting well linked parts and elements that connect different activities, events and urban parcels.

### **Movement**

Creating secure, pedestrian friendly public spaces designed for walking whilst encouraging social contact and interaction



Fig 3.10 A legible, well designed environment with a scale ranging from pedestrian to society. The built fabric is well balanced with the landscape



Fig3.11 A poorly defined system with No space for the pedestrian in Marabastad

## Climate and Design

To make Marabastad as responsive as possible to climatic conditions to provide comfort to its users. The use of shadow, breeze, water elements (the Steenhoven Canal), and minimization of the of direct solar radiation within built forms are some of the tools utilized to provide these comfortable spaces for the user.

### Shadow

The use of a courtyard space and an internal atrium allows for different shadow patterns, whilst providing comfort at different times of day. The atrium allows diffused sunlight during the hot hours and acts as a solar chimney. A pressure gradient is created by the heat on the roof of the atrium. This constantly forces warm air to rise, allowing cooler air to enter adjoining spaces.

### Landscaping and Water.

The courtyard is comfortable in the morning and evening when temperatures are still cool. The use of trees and shrubs provides shade and breeze which make it comfortable to use at any particular time of day. This makes it vital to fully integrate and address Marabastad's public realm with both hard and soft landscape. Both water and trees act as cooling elements and should be located along prominent pedestrian activities where they also function as sensory amenities, adding to the sense of place.

Other factors such as orientation, compactness and form also play a vital role in reducing direct solar radiation entering buildings.



Fig 3.12 The use of water and landscaping. These can be used to transform the



Fig 3.13 landscaping to provide shade

### 3.3 Relevance

Castella's collective consumption theory suggests that the individual derives meaning in his or her life through collective action, thus an individual is understood in personal terms as well as part of a collective. This suggests that identity and meaning are generated in a social landscape with proper integration of the individual into a conducive and stable society leading to a strong sense of identity.

Urbanism facilitates this conducive environment for the community to meet and create memories whilst developing their identity. It facilitates social and cultural platforms which create and accommodate this sense of identity. Castella affirms the better the environment, the stronger the sense of identity. This necessitates the creation of this environment in Marabastad, with the development of identity boosting a sense of positive self esteem with this previously marginalized community. The design intervention forms a means to address and redress the lack of social infrastructure through this transformed urban environment, identity is generated.