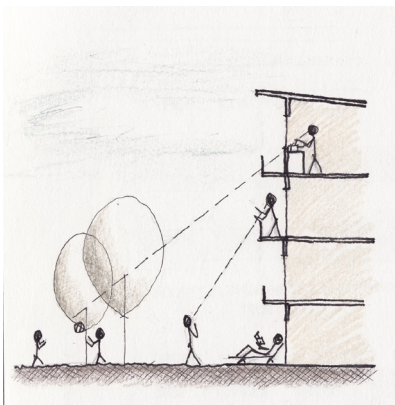


[4]

[chapter 4] theoretical informants



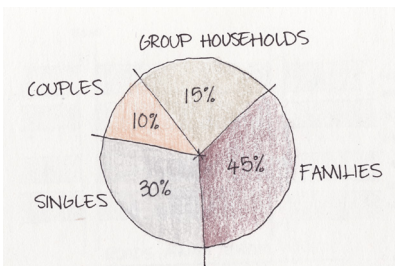
[Fig. 26] Four storey limit

1. pattern language

Christopher Alexander's book 'A Pattern Language' focuses on the needs people have from the spaces they inhabit. The following patterns extracted from the book have a particular focus in how people prefer to live and work. This is particularly relevant information to this thesis which focuses on the design of a mixed use building which contains both residential and working components.

Pattern #21 - Four-Story Limit

High buildings have no genuine advantages, high rise takes people away from the ground and disconnects them from activity on the sidewalks. There is also abundant evidence to show that high buildings make people crazy. It is possible that certain building can exceed four storeys but they should never be for human habitation.



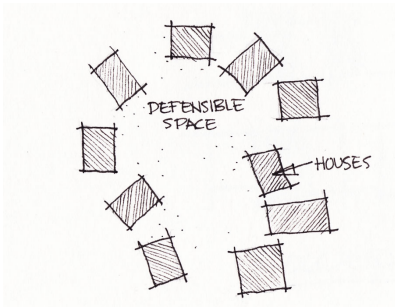
[Fig. 27] Household mix

Pattern #35 - Household Mix

A mix of households should be encouraged in every neighbourhood, this allows people access to confirmation and support from people who have reached a different stage in their life cycle as well as people who are at the same stage. Especially always make provisions for the elderly in every community. The correct balance can be easily derived from the demographics of an area. This mix will only work if the community is small enough to have some internal politics and human intercourse, it is suggested that a neighbourhood of 500 people works well.

Pattern #36 - Degree Of Publicness

People are different, and the way they want to place their houses in a neighbourhood is one of the most basic kinds of difference. Each neighbourhood should have three kinds of houses, in about equal numbers: those, which are nearest to the action, those which are half-way in between, and those which are almost completely isolated.



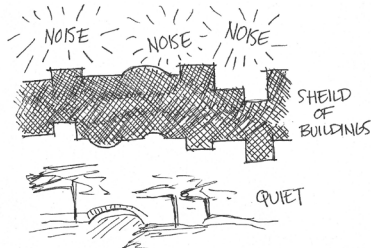
[Fig. 28] House cluster

Pattern #37 - House Cluster

People want to be part of a neighbourly cluster, with public land between them that is jointly owned. Clusters should not be so tight that they exclude the greater community, groups of 8 to 12 household seem to work best, with this number of households it is easy for everyone to keep in touch with the whole group without too much effort.

Pattern #48 - Housing In Between

Where there is a sharp separation between residential and non-residential areas the non-residential areas will quickly turn to slums. When housing is integrated with non-residential functions the area is enhanced by the vitality of people's homes, this makes the entire area 'lived in.'



[Fig. 29] Quiet backs

Pattern #59 - Quiet Backs

Anyone who has to work in noise all day, surrounded by people, needs to have a place to go for quiet, a place to pause and refresh themselves. The fronts of buildings can be given over to the busyness of the street but create backs with a quiet place to get away from the bustle.

Pattern #60 - Accessible Green

People need to have green open places to go, these greens need to be close for people to use them, if they are further than a 3 minute walk the distance will overcome the need. It is recommended that a green space should be provided approximately 230m from every house and workplace; these greens should be at least 45m across and least 5550m² in area.

Pattern #61 - Small Public Squares

A town needs public squares they are important outdoor rooms. However one should make a public square much smaller than you would first imagine, squares that are too large look and feel deserted. A good size is between 14 – 18m across, and never more than 21m, this applies to the short dimension, but in the long direction it can certainly be longer.

Pattern #64 - Pools And Streams

Water plays a fundamental role in our psychology, we need constant access to water, however, in cities water is always out of reach. For most people their only connection with water is when they turn on the tap. Imagine having access to water to swim in, water to sit beside, water where you can dangle your feet. Natural pools and streams should be allowed to run through the city, with paths next to them for people to walk along, and in places with out natural running water create fountains in the streets.

Pattern #118 - Roof Garden

If you consider how much of the earth's surface consists of roofs, coupled with the fact the total area of ground that can be exposed to sunlight is finite it becomes obvious to create roof spaces which take advantage of the sun and air. These spaces can be like rooms without a ceiling, protected from the wind but open to the sky. Ideally roof gardens should be able to be accessed at the same level as a lived in part of the building. The

roof gardens should be flat with places to sit and even sleep and even possible terraces for planting.

Christopher Alexander offers a more pragmatic approach to architecture, with his patterns giving direct clues in terms of architectural form, dimensions and layouts of space, all with a specific focus on human scale and level of experience. He also provides much insight into how people like to live and work, however, many of his patterns refer to dwelling in a more suburban setting, part of this study is to gain insight from these patterns and interpret them at a more urban scale.

2. social housing foundation

The Social Housing Foundation (SHF) in South Africa provides guidelines and information for designing and running social housing projects. Historically this was the responsibility of the National Housing Commission (NHC), however, the standards set by the NHC focused on minimizing space requirements, materials and cost of constructing and maximized densities, with the intention of creating dormitory towns to provide labour for the city, this attitude made it virtually impossible for these places to be healthy sociable areas. (Martin, 2000:4)

The SHF works to bridge the gap between where people live, work and socialise (Martin, 2000:7), and ensure that social housing projects are designed to:

- fit into and enrich the neighbourhood;
- provide for the range of residents' needs;
- integrate residents and neighbourhood; and
- make every resident proud of his or her home

“Social housing promotes improved quality of life and the integration of communities by providing affordable, high standard, subsidized housing with the added benefit of regeneration of the area in which the housing stock is located. The process is managed by viable and sustainable, independent institutions which encourage the participation of residents in the management of their own communities. Social housing is aimed at low-to-moderate income families and takes into account a wide variety of tenure forms. It does not include immediate individual ownership.” (Martin, 2000:7)

The SHF uses the following as their working definition of social housing:

The SHF also has criteria which they recommend for the quality design of social housing projects, below is a summary of these criteria extracted from their ‘Guidelines for Social Housing Design’ (2000:15); namely:

1. Meeting the objectives of social housing

- a. Affordability
 - b. Meeting the unique need of the target market
 - c. Safe and secure environment
 - d. Sustainability
2. Urban planning and design
 - a. Intergrated into the urban development (such as accessibility to amenities)
 - b. Long-term planning design
 - c. Community involvement
 3. Use of the site
 - a. Fit (relationship to the street)
 - b. Geo-technical and topographical characteristics
 4. Building(s)
 - a. Appropriate density for the context (rural or urban)
 - b. Quality
 - c. Aesthetics
 - d. Safety and health (such as visibility and lighting)
 - e. Mixed use of land (residential and other)
 5. Units
 - a. Size
 - b. Affordability (size to rent ratio)
 - c. Mix of types of units
 - d. Safety and security
 - e. Standard of finishes (such as carpets and tiles)

The SHF helps to offer insight into the practicalities of designing and developing a social housing scheme, and the summary of criteria for quality design that they provide serves as a good checklist for this study.

Informants

- housing that would enrich the neighbourhood
- provide for a range of the residents' needs
- creation of homes that the residents' can be proud of
- bridging the gap between living, working and social places
- provide mixed types of units
- create a safe and secure environment

social housing act

In its preamble the South African Social Housing Act (SHA) recognises the “dire need for affordable rental housing for low to medium income households which cannot access rental housing in the open market”(2008:2). It States that:

- everyone has the right to have access to adequate housing;
- the government must give priority to the needs of the poor in respect of housing developments;
- the elimination and prevention of slums and slum conditions

is promoted; and

- in order to ensure the economical use of land and services, higher density housing developments are promoted.

The SHA stipulates general principles for social housing, points under Section 2.1.i that are of particular relevance to this study are that nation, provincial and local spheres must promote:

- training opportunities for stakeholders and interested parties who wish to enter the social housing market;
- social, physical and economic integration of housing development into existing urban and inner-city areas through the creation of quality living environments;
- medium to higher density in respect of social housing development to ensure the economical utilisation of land and services;
- the provision of social, community and recreational facilities close to social housing development;
- the expression of cultural identity and diversity in social housing development;
- the suitable location of social housing stock in respect of employment opportunities;
- the conversion or upgrading of suitable residential and non-residential buildings for social housing use; and
- the use of public funds in a manner that stimulates or facilitates private sector investment and participation in the social housing sector.

Informants

- Integrate housing into an urban environment
- Provide medium to higher density housing
- Locate housing close to employment opportunities
- Convert or upgrade existing buildings for residential use
- Provide training facilities
- Provide social, community and recreational facilities nearby
- Express cultural identity and diversity

south african national heritage resources act

The South African National Resources Heritage Act (NHRA) mostly addresses the administrative aspects of dealing with a heritage building. However, it does promote the use and enjoyment of and access to heritage resources and promotes that these resources contribute towards social and economic development (NHRA 1999:sec5.7).

Under section 7.1 the NHRA (1999) distinguishes between three categories of heritage resources:

- (a) Grade I heritage resources with experiential qualities that are of special national significance;
- (b) Grade II heritage resources which, although forming part of the national estate, can be considered to have special qualities which make them significant within the context of a province or a region; and
- (c) Grade III: Other heritage resources worthy of conservation.

The NHRA also states that no person may alter or demolish any structure that is older than 60 years without a permit (NHRA 1999:sec34) and that special consent would be required for any alteration or development to a listed building (NHRA 1999:sec 30.7a).

The majority of buildings at the Pretoria Power Station are well over 60 years old. This means that even if the buildings were not declared heritage resources (although they most likely would be) special consent would still be required before any development on site could take place.

Informants

- Promote enjoyment, use and access to heritage
- Contribute socially and economically

burra charter

The Burra Charter speaks more specifically on how to deal with heritage buildings, it states that the aim of conservation is to retain the **cultural significance of a place** (Australia 1999:sec 2.2) and that **conservation is based on a respect for existing fabric** and recommends a cautious approach of changing as much as necessary but as little as possible. It also goes on to say that the cultural significance of a place is best understood through a process of collecting and analysing information before making decisions (Australia 1999:sec 6.1).

The Burra Charter recommends that adaptation is only acceptable when it has **minimal impact** on the cultural significance of the place and involves minimal change to significant urban/cultural fabric (Australia 1999:sec 21). Imitation should be strictly avoided and new work should be readily identifiable as such (Australia 1999:sec 22).

Informants

- Collect and analyse information in order to understand cultural significance
- Adaptation should not effect cultural significance
- Imitation should be avoided
- New work should be easily identifiable