1.1. Abstract

This dissertation proposes the adaptive reuse of existing abandoned spaces in the City Centre and Die Meent buildings, Pretorius Street, in the Pretoria Central Business District. City Property is the primary client, while MINI Space is the secondary client, for whom a gallery for the exhibition of art, architecture, design and cars is required.

Two problems are investigated. Firstly, a number of buildings in the city, especially the CBD, are abandoned due to their restrictive design, failed management or similar. Secondly, the neglect of architecture and design is particularly evident in the public sphere, where neither is being promoted. Therefore an existing, derelict building is investigated and its re-use explored. A gallery also forms part of this conversion, functioning as a place...
Fig. 1.1 - Aerial photograph of Pretoria CBD, with certain aspects and possible sites indicated.

Fig. 1.2 - Aerial photograph of the TPA building.

Fig. 1.3 - Multirama view of the TPA building.

Fig. 1.4 - Aerial photograph of the City Centre and Die Meent buildings.

Fig. 1.5 - Multirama view of the City Centre and Die Meent buildings.
where architecture, art and design are accessible to everyone as an extension of the public realm.

The urban environment is investigated and therefore this dissertation is classified under the Housing and Urban Environments research field.

(Samevatting)
(Hierdie verhandeling stel die hergebruik van bestaande, verlate ruimtes voor in die City Centre en Die Meent geboue, Pretoriusstraat, in die Pretoria Sentrale Besigheidsdistrik. City Property is die primêre kliënt, terwyl MINI Space die sekondêre kliënt is, vir wie ’n galerie vir die uitstalling van kuns, argitektuur, ontwerp en motors benodig word.

Twee probleme word ondersoek. Eerstens word baie geboue in die stad, veral die SBD, verlate gelos weens hul beperkende ontwerp, ongeslaagte bestuur of soortgelyk. Tweedens word argitektuur en ontwerp verontagsaam in die publieke sfeer, waar nie een bevorder word nie. Dus word ’n bestaande, verval gebou bestudeer en die hergebruik daarvan ondersoek. ’n Galery form ook deel van hierdie omskepping en funksioneer as ’n plek waar argitektuur, kuns en ontwerp toeganklik is vir almal as ’n uitbreiding van die publieke terrein.

Die stedelike omgewing word bestudeer, dus word die verhandeling geklassifiseer onder die navorsingsgebied van Behuising en Stedelike Omgewings.)

1.2. Background and context

Established in 1855 (Holm 1998:61), Pretoria is a relatively young city and yet a number of its buildings stand abandoned within the CBD. During the initial stages of this dissertation it was
realised that unused buildings add to the growing deterioration of existing urban areas within the city and warrant design interventions.

Three such buildings were identified, both with low occupancy. The first is a government building housing various groups of offices in Pretorius Street and known as the old TPA (‘Transvaal Provinsiale Administrasie’) building (‘1’ on fig.1.1, also figs.1.2 and 1.3). This is a large-scale building wherein most floors are empty, especially in the main block. The second and third buildings are also in Pretorius Street (‘2’ on fig.1.1, also figs.1.4 and 1.5; City Centre and Die Meent buildings). A security guard (2009) stationed at the lifts on ground floor indicated that the first and second storeys of the City Centre building house educational institutes, while storeys three to seven are empty and have been for quite some time, however further investigation revealed a day-care centre on a portion of the third floor (fig. 1.6). Die Meent building has lesser empty floors, with offices and parking occupying most of the upper storeys (fig.1.6). These buildings were chosen as the site, because of

- their location between two important public spaces, Church Square and Lilian Ngoyi Square,
- their size being sufficient for the dissertation,
- their context, comprising of large numbers of pedestrians and high density buildings.

Considering that some floors in the building are empty, the definition of 'site' was questioned. The term 'site' in this case does not necessarily refer to a piece of land, but rather each empty floor can be seen as a site or groups of smaller ones (fig.1.7). The redevelopment of the World Trade Centre in New York City deals with the term
'ground zero' (Eisenman 2003:60), yet this term was never questioned directly during the process of designing the proposed new buildings. If the concept of "ground zero", created as the result of the destruction of a building, is equal to the notion of ‘site’, which is conventionally thought of as a “ground plane” (Ching 2007:20), then should the scope of ‘site’ not be widened to include the vertical space above ground plane, where the building once existed or where empty storeys stand disused? This dissertation thus asks: - what is ‘ground zero’? - could ‘site’ in some cases be ‘ground zero + 3 meters’? - should sites consist of physical soil or could they rather be sold off at higher levels and then redeveloped or consolidated to create three-dimensional cities?

The initial site boundaries, which only included the empty spaces in the City Centre building, were thus extended beyond this building, to include empty floors and rooftops of neighbouring structures (fig.1.8). This argument is explored further in Chapter 3.

1.3. Aim of the study

The study aims to show that one can reuse existing buildings and in so doing Pretoria CBD can be adapted, and ‘repaired’, to become a city where everyone can live, work and play. Terms like ‘site’, ‘arcade’ and ‘architecture’ are questioned through the adaptive design of an existing building, while in addition, a new model for dividing city land, or space, is proposed. The product furthermore promotes the accessibility of architecture and design for all.
1.4. Research methodology

To find a solution for the dissertation problem, a principle theory was identified by which a new way of creating space was made possible. The research was informed by a host of other factors (e.g. context, programme and secondary theories) and from this onwards a circular system was applied (fig.1.9). The design intervention was then used to apply the research findings and to show how the problem can be solved. This process was one of continuous asking, answering and re-asking.

Current theories applicable to the dissertation problem were researched, after which a specific argument was formulated. Research was conducted by means of literature reviews, interviews and field work.

1.5. Research problem

The concept behind this research problem is based on the investigation of the Cartesian axes x, y and z, a formula that is used for locating objects, thus Q:xyz. Questioning this system is translated into four points in this dissertation:

- the typical Pretoria CBD building is questioned: where is it located with regards to site?
- the Pretoria CBD arcade is investigated: why does it usually only have x- and y-directions?
- the x-y-z of architecture is also questioned: what is architecture?
- a new notion of ‘site’ is investigated: what is ‘site’?

Figure 1.9
1.6. Client brief

The primary client is City Property, whose main objective for the proposed site is to unlock financial profit and thus finding tenants for all the empty spaces in the buildings they currently manage. MINI Space, the secondary client, is in need of a gallery space in which anything from paintings to cars can be exhibited within the CBD.

1.7. Design brief

The project is divided into two phases. The first is the design of a system proposed to solve the issue of empty space in the two buildings under investigation, referred to as the ‘Site Development’; it includes specific, physical components. Secondly, the MINI Space Gallery will be designed as an
example of how the system can be used in future applications.

1.8. Definitions, assumptions and exclusions

Deconstruction, for the purposes of this dissertation, is defined as the theory that questions contemporary ideas, especially those taken for granted. It does so by using that which is within the idea or concept under examination, and in this process, a new way of combining elements is investigated (see Chapter 3).

“Multirama” refers to an image composed of a number of photographs taken in a series of two directions, i.e. horizontal (left-to-right) as well as vertical (up-to-down). It is a specific type of photomontage that was derived from the “panorama” which is a similar type of image, but where the successive photographs are taken only in one direction (usually horizontal). Thus the need was identified to create a new term. Fig.1.10 compares a multirama to different similar terms.

Stereotomic, as Semper describes it (Porter 2004:193), refers to the “massive form of load-bearing masonry rooted in the earth.” When used in this thesis it therefore refers to the massive parts of a building.

The term tectonic is used with two different meanings. The first is used together with structure in defining one of the components of architecture - in this case it means the art of construction (ibid.). The other sense is the direct opposite of stereotomic, thus it refers to the lightweight elements of a design (ibid.).
1.9. Outline of study

Introduction:
Chapter 1: The problem and its setting.

Research:
Chapter 2: Context: analyses, client profile and group frameworks.
Chapter 3: Argument: Q:xyz - theoretical base: deconstruction; the new site; architecture.
Chapter 4: Precedent studies and analyses thereof.

Product:
Chapter 5: Assignment: the setting out of the project and accommodation schedule.
Chapter 6: Design development.
Chapter 7: Design solution.
Chapter 8: Technical development and report.

End:
Chapter 9: Conclusion.

Each chapter has an introductory paragraph, followed by the examination of the particular topic. The conclusions at the end of the research chapters contain principles for the design of the Site Development and the MINI Space Gallery.