

CHAPTER 5 - PRECEDENT STUDIES

CHAPTER 5: Precedent Studies

5.1 Introduction

The precedent studies have been divided into two categories; **theoretical precedents** and **functional precedents**.

Theoretical precedents aid in demonstrating the successful incorporation of an architectural philosophy into a design resolution. Functional precedents aid in resolving the spatial planning and technical aspects of the proposed project.

5.2 THEORETICAL PRECEDENTS

5.2.1) The Constitutional Court of South Africa, Johannesburg

5.2.2) The Apartheid Museum, Johannesburg

5.3 FUNCTIONAL PRECEDENTS

5.3.1) The Bloemfontein Tourist Centre

PROJECT The Constitutional Court of South Africa, Johannesburg, Gauteng, South Africa.

ARCHITECT OMM Design Workshop & Urban Solutions Architects and Urban Designers.

5.2.1 The Constitutional Court of South Africa

"Freedom, democracy, equal opportunity, diversity, responsibility, reconciliation and respect: these ideals form the foundation of the new South African Constitution and are the values that the new building of the Constitutional Court sets out to convey" (Deckler 2006:19).

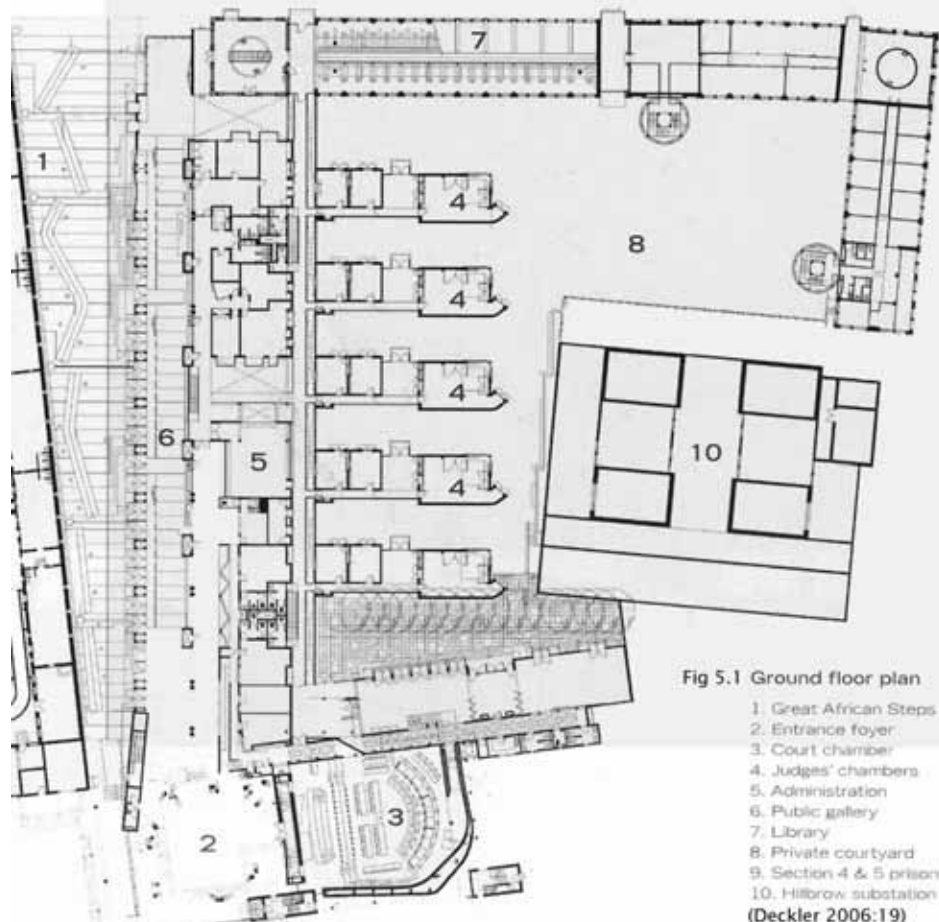


Fig 5.1 Ground floor plan

1. Great African Steps
 2. Entrance foyer
 3. Court chamber
 4. Judges' chambers
 5. Administration
 6. Public gallery
 7. Library
 8. Private courtyard
 9. Section 4 & 5 prisons
 10. Hillbrow substation
- (Deckler 2006:19)

The brief stipulated that the building was to be:

1. Socially responsive
2. Historically embedded
3. Culturally Sensitive
4. Responsive to climate and weathering
5. Technologically Innovative and
6. Labour resourceful

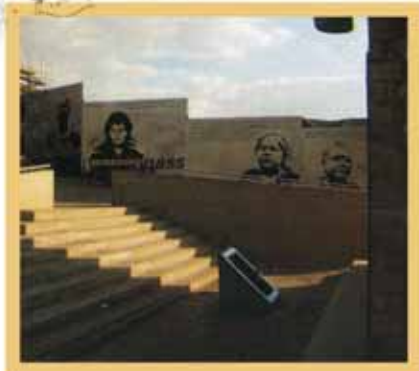


Fig 5.2 View showing a commemorative space, with artwork done by local artists and craftsmen. The dramatic lighting effects adds to its quality when moving through the space. (Deckler 2006:20)

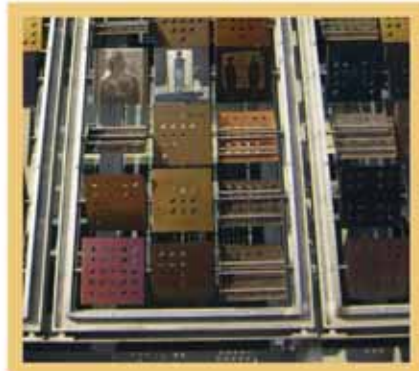


Fig 5.3 Innovative etched shading devices on the Western facade encourage the visitor to engage with the tactility of the building. (Deckler 2006:20)



Fig 5.4 The sunken floor of the entrance foyer creates a warm and intimate environment in which to wait, relax and admire the finer details of the architecture. (Deckler 2006:20)

LOCATION

The Constitutional Court building is located in the heart of the Johannesburg CBD. Its surrounding context is the high-density, urban residential Hillbrow suburb. The site is the location of the Old Fort prison of central Johannesburg, a place rich with political symbolism. This is the highest point of the old Witwatersrand and is therefore very prominent.

The Building



Fig 5.5 above. A glimpse of the roof construction shows how light is diffused through a series of translucent boxes before it enters the foyer area inside. This results in soft, natural lighting effects internally. (Deckler 2006)

Fig 5.6 above, but below. A view of the entrance of the building showing both old and new elements.



Fig 5.7 Walkways open onto volumes that allow views of the floors below. (Deckler 2006)



Fig 5.8 Columns stand at interesting angles bringing a dynamic element into the space. (Deckler 2006)



Fig 5.9 The Court Chamber, lit from above, but linked inconspicuously to the outside by a ribbon window at external ground level. (Deckler 2006)

The main aim of the Constitutional Court building is to re-establish part of the city's urban fabric and act as a catalyst in returning spatial order to the precinct. This concept has been made accessible through the creation of public building that is directly connected to its surrounding context. The other aim of the building is to "enhance the quality of life in the city and in the building, and to give pleasure" (Deckler 2006:19).

The building is recognisable on the Johannesburg skyline, particularly at night, by its characteristic 'lanterns' that serve as markers within the urban environment. It is linked to its surroundings through the effective use of landscape design. The Main Entrance fronts onto Constitutional Square to the South-West and is directly accessible from the top of 'The Great African Steps'. These steps run next to the building's Western façade.

"The building embodies the victory of idealism and human rights over cruelty and despair, and reflected the openness and transparency called for in the Constitution."
(Deckler 2006:19)

The Interior

Their direct contact with the building's façade encourages one to engage with the innovative, artistic, steel-etched shading device that protects the building from the Western sun. At the top of the steps Constitutional Square is experienced as barren and uninviting. The self-contained historical blocks located around the periphery of the square, turn their backs and give the space a distinct boundary. From this finite space, the main entrance of the Constitutional Court building provides an open, inviting and contrasting escape.

The plan of the building centres around its two main public functions; the Entrance Foyer and the Court Chamber. Due to its public character, this Southern wing of the building allows great visibility and accessibility. The Entrance Foyer is directly accessible via the main entrance, announced boldly in the colourful letters of all eleven official languages. When entering the main Foyer, the volumous interior space and long stairway feel foreign at first. However, the incredible attention to detail, the high quality of workmanship within this space, the lightness embodied in the architecture invites one to relax and enjoy the new environment. The Entrance Foyer is representational of the old African custom of settling matters and disputes under the protection of an important tree. This concept gave rise to the interesting architectural treatment of this space, both internally and externally. Light is diffused through a series of shafts capped with glazed boxes set into the roof structure. Although aesthetically innovative, these glazed boxes serve also as passive solar control devices, protecting the interior from the sun's seasonal changes. This roof treatment gives the effect of light falling through a tree. The feeling of being seated beneath a tree is enhanced by the columns positioned at angles that appear to be haphazard.



Fig 5.10 **NORTHERN ELEVATION** (Deckler 2006)



Fig 5.11 **WESTERN ELEVATION** (Deckler 2006)

Internally, circulation occurs via a flight of stairs that run parallel to 'The Great African Steps, running along the West of the building. These steps direct members of the public towards the law library, that forms the Northern wing of the building, as well as functioning as an exhibition space and art gallery. Light filters gently into this space through the ever-changing shading device of the Western façade. A hierarchy of spaces is explored by creating a gradient between public, semi-public and private space.

The Building

The private functions of the building (administration offices, the Judges' Chambers and their related amenities), are off-set to the East. This Eastern part of the building is made up of five North Facing blocks, each three storeys high. These blocks sit within a reflective pool and are accessed via a series of narrow walkways, therefore re-iterating the segregation between the public and private realm. The Eastern blocks have views of an Inner Courtyard and the existing substation beyond.

Parts of the existing historical buildings were retained due to their relevance. The contrast between old and new is achieved by leaving materials exposed and untreated. This concept allowed for the use of a range of materials including concrete, honed slate, galvanised steel, timber, plastered brickwork and glazed curtain walling.



The roughness of certain materials contrasts effectively with the elegance of others, heightening ones awareness of the building's textures. The materials used form a canvas on which local artists and craftsmen were employed to make their mark. The intricate level of detailing results in a human scale that covers urban design principles as well as intense technical resolution.

"It is a building to be physically experienced, not seen from a distance; a building carefully made, people-friendly, culturally respectful and responsive; a beacon on the hill serving as a marker in the urban landscape"
(Deckler 2006:21).

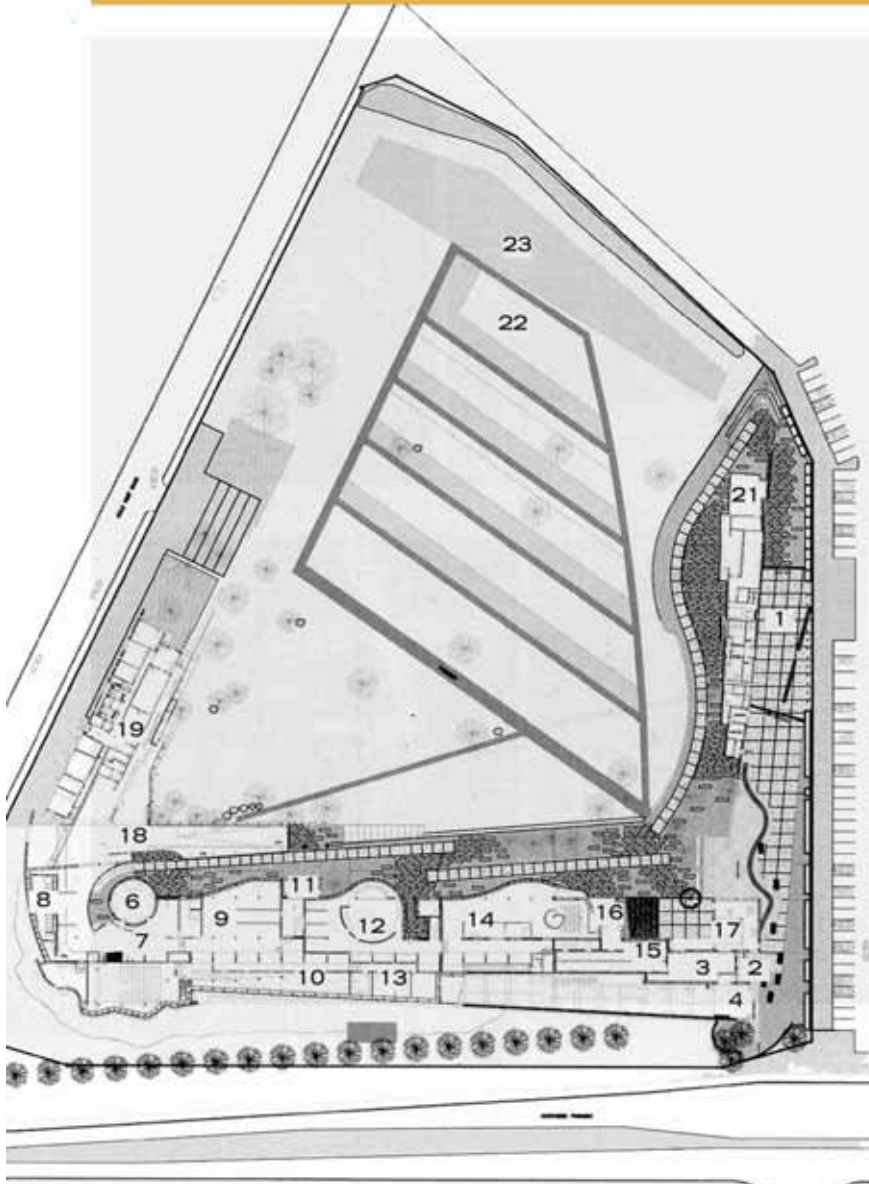
Fig 5.12 above left. Light filters through the external shading devices, creating interesting effects internally. (Deckler 2006)

Fig 5.13 above right. This photo shows 'The Great African Steps'. (Deckler 2006)

PROJECT Apartheid Museum, Johannesburg, Gauteng, South Africa.

ARCHITECT GAPP Architects and Urban Designers, Mashebane Rose Architects, Britz Roodt Association, Linda Mvusi Architecture & Design.

5.2.2 Apartheid Museum



In Summary, this *“linear museum, half-buried in the mining landscape South of Johannesburg, traces the origin, development, implementation and deconstruction of South Africa’s notorious Apartheid system”* (Deckler 2006:39).

Fig 5.14
Main floor plan

1. Main entrance
 2. Ramp
 3. Hall of reception
 4. Exterior ramp
 5. Stairs from arrival ramp
 6. Hall of congregation
 7. Hall of gathering
 8. Ablution
 9. Hall of separation
 10. Hall of resistance
 11. Cellspace
 12. Hall of resistance
 13. Security control network
 14. Hall of witness
 15. Election hall
 16. Ramp
 17. Memorial
 18. Hall of international struggle
 19. Archives
 20. Walkway
 21. Shop
 22. Landscaping
 23. Pond
 24. Main exit
- (Deckler 2006:39)



Fig 5.15 View showing the entrance foyer when entering the interior museum space. (Deckler 2006:40)



Fig 5.16 Image showing one of the display spaces. (Deckler 2006:40)



Fig 5.17 Image showing a display space that pays tribute to those who lost their lives fighting against Apartheid. (Deckler 2006:40)

LOCATION The Apartheid Museum is located South of Johannesburg, adjacent to the Gold Reef City Casino Complex and Theme Park.

The Building



Fig 5.20



Fig 5.21



Fig 5.22



Fig 5.23

Fig 5.18 and Fig 5.19 show the material and texture of the surfaces. (photos by author)

Fig 5.20 View of the Apartheid Museum within the landscape. (Deckler 2006:41)

Fig 5.21 View experienced from the main entrance of the complex. The path is both linear and directional. (photo by author)

Fig 5.22 A view down the external ramp as one is elevated within the site's walls. (photo by author)

Fig 5.23 At the top, the ramp narrows at its culmination 'forcing' one to follow its lead. (photo by author)

The Apartheid Museum building sinks into the site, therefore embedding it into the landscape and its greater context. Due to this, the characteristic skyline of Johannesburg to the North becomes evident and often dominating. Views to the North are emphasised as one ventures through the museum complex. The layout of the building itself sets up a narrative *"journey through space and time"* (Deckler 2006:39) as one moves through it. When exploring the museum, one is constantly aware of the position of one's body in space. When ascending the series of ramps, stairs, tapering, naturally lit outdoor spaces and dark, resounding indoor spaces, one's senses are heightened. It is through this heightening of the visitor's senses that such a full experience is eventually achieved.



Fig 5.24 View on entering the main building where the visitor first encounters the museum's content. (Deckler 2006:41)



Fig 5.25 A small exhibition niche along the exterior ramp echoes barrenly as one walks through it. (photo by author)

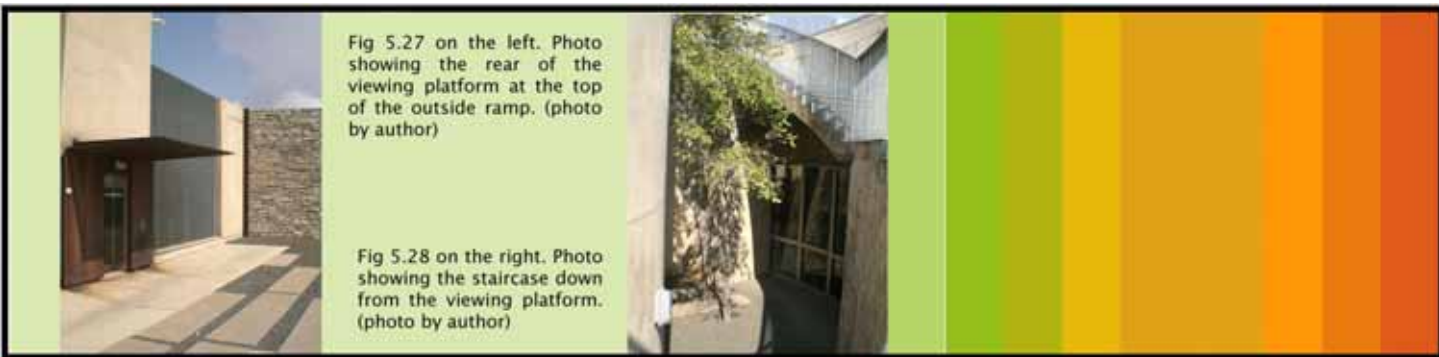


Fig 5.26 A rusting steel audio-visual viewing box set within a small external courtyard adds to the materiality of the building. (photo by author)



Fig 5.18

Fig 5.19



The Interior

When entering the building, one is forced into a confined area, confronted with the concept of Apartheid for the first time and then immediately guided outside again, to the base of a long ramp ascending through the landscape. When climbing the tapering ramp, one becomes aware of the echo of one's own footsteps on the concrete underfoot. At the top, the space becomes wide and elements of the building frame the skyline of Johannesburg to the North. It is from this point that the visitor enters the museum's "cavernous spaces, half-buried underground" (Deckler 2006:41).

The sequence of ever-changing spaces within the museum, leads the visitor on a chronological (although also emotional) journey through South Africa's political history. Places for viewing and reflection are strategically positioned so as to enhance the visitor's experience of each display space. Spaces vary from being constrictive and uncomfortable to dark and strangely comforting.

Both outside and inside the building, concrete is bare and cold, walls are cut away from one another and materials left exposed. The tactility of the building's surfaces adds to the sensory appeals of this environment. Although the building is said to echo "iconic industrial architecture" (Decker 2006:39) and contain a richness of Apartheid symbolism, it appears as a subtle, yet engaging backdrop for the displays that it houses. The museum's displays are primarily graphic, video and audio-visual, hardly reminiscent of traditional museum artifact displays. This contemporary take on exhibiting material, increases the relevance of what is being portrayed. Behind these displays, the interior architect itself, provides a "neutral canvas" (Deckler 2006:41) on which to tell a story.



Fig 5.29 SECTION (Deckler 2006:41)



"The design consciously avoids any literal reference to 'African' architecture, but prefers to rely on a suggestive and conceptual manipulation of form, colour and texture, to achieve its presence and identity" (Deckler 2006:41).

The Apartheid Museum, however controversial, is successful in that it accomplished what it has set out to do, elegantly and inconspicuously. When exiting the museum complex, having travelled through spaces of observation, reflection and interaction, one feels a sense of peace and hope, emotions are stirred and an imprint is left within.



Fig 5.30 The entrance to the exhibition spaces is marked by heavy red doors contrasting with the neutral palette of the building itself. (photo by author)



Fig 5.31 View back towards the museum while exiting. The articulation of the building's neutral palette becomes evident. (photo by author)

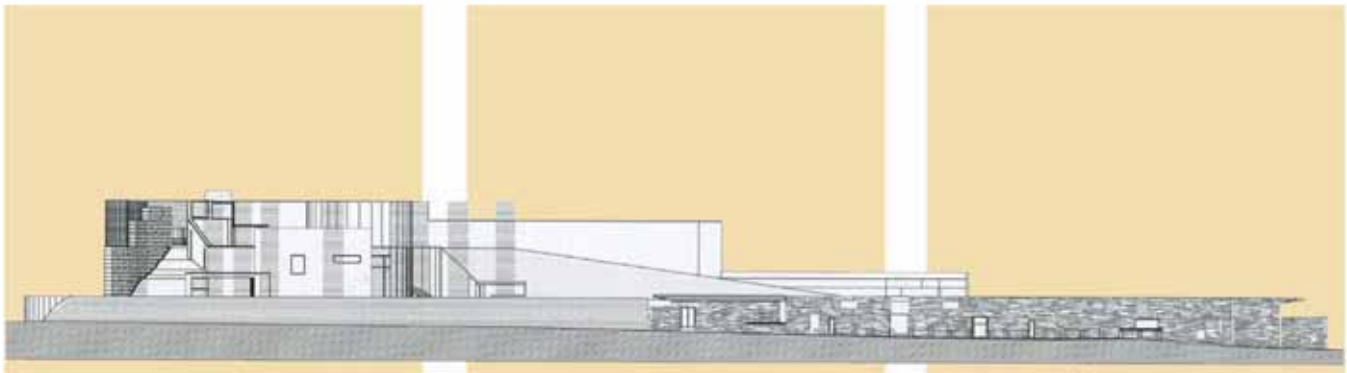


Fig 5.32 EASTERN ELEVATION (Deckler 2006:41)

PROJECT Bloemfontein Tourist Centre, Bloemfontein, Free State, South Africa.

ARCHITECT Pieter Malan and Jan Ras Architects.

5.3 Bloemfontein Tourist Centre

This local project has proven to be highly informative with regards to the development of the programme of the proposed new 'i-hub' project.

In summary, this precedent *"comprised the design of a one-stop tourist facility where buses stop over, tourist information is made available and commercial or office space is rented to tourist related institutions and businesses"* (Els 2000).

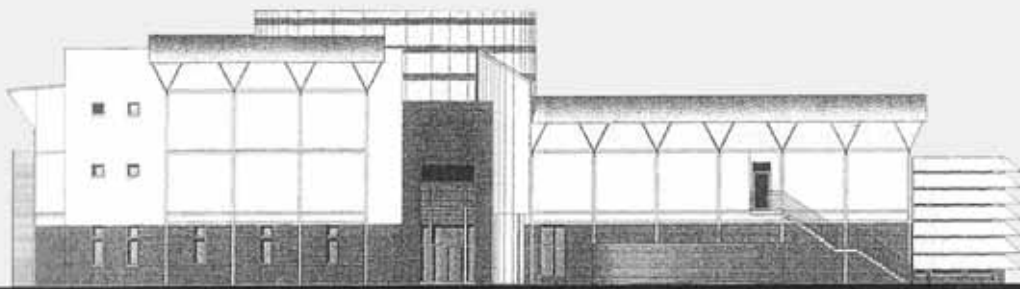


Fig 5.33 NORTHERN ELEVATION (Els 2000)

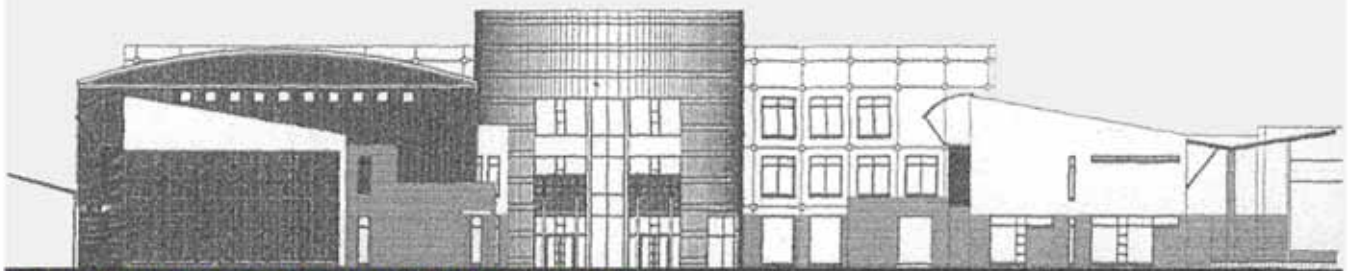


Fig 5.34 SOUTHERN ELEVATION (Els 2000)



Fig 5.35 The side entrance of the building when approaching the parking lot. (Els 2000)



Fig 5.36 A view of the side entrance as seen from the bus rank. (Els 2000)



Fig 5.37 The images above shows the main entrance of the Tourist Centre. (Els 2000)

LOCATION

The building is located on a site of maximum accessibility. It is situated between two main traffic arteries that link Bloemfontein to the nearest major national freeway (N1). It is also positioned in close proximity to Bloemfontein's tourist attractions and accommodation facilities.

Fig 5.38 Passive solar design elements have been incorporated into the building. (Els, 2000)



Fig 5.39 Surface articulation (Els 2000)



The Building

The building is U-shaped in form, enclosing a central parking area. The main entrance to the building is clearly marked by a cylinder protruding from the Southern façade. This cylinder is not only where one enters, but also where vertical circulation to the floors above occurs. The user is therefore able to understand, immediately on entry, how access to the first, second and third floors is achieved. Movement up and down this staircase enhances the experience of the cylinder's internal space (Els 2000:43). From the staircase, the user is able to see glimpses of the interiors beyond. The building height tapers from three storeys at the central wings, to two storeys at the side wings. This insures that the building does not overpower the user, unfamiliar to the area, as a human scale is maintained throughout. Two other entrances provide access from the bus rank to the West of the building, and the parking lot to the East.

The way in which the various different textures of the rendered walls, exposed brickwork, natural stone, steel elements and glazing are articulated, gives rise to interesting, ever-changing surface effects. The passive design elements used here also contribute to the building's aesthetic appeal. Steel shading louvres and corrugated steel panels protect the building from the harsh Free State sun.

The building is primarily used as a pit-stop for tourists travelling through central South Africa, en-route elsewhere. The building is found to be functioning well. It has been noted, isolated by a "sea of parking" (Els 2000:43) on all sides, that the building does not contribute to the surrounding context in any way.



Fig 5.40 View down the central corridor along which various line shops run. (Els, 2000)



Fig. 5.41 Openings within the building create vistas of strong design elements. (Els, 2000)



Fig 5.42A light steel roof structure carries translucent roof sheeting that allows diffuse light into the building's internal spaces. (Els, 2000)

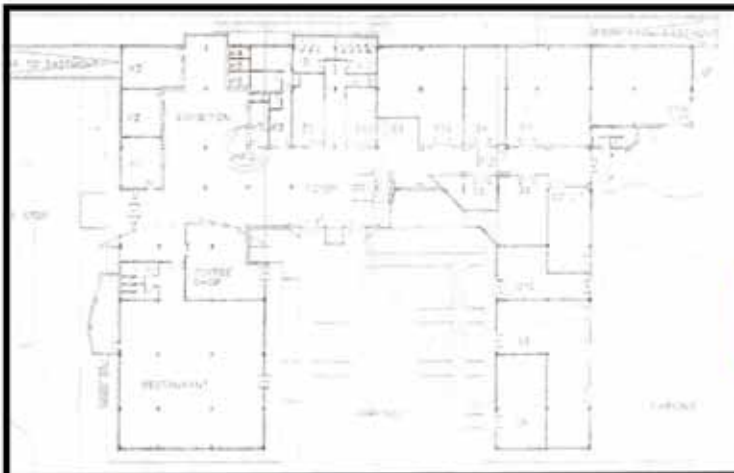


Fig 5.41 **GROUND FLOOR PLAN** (Els 2000)

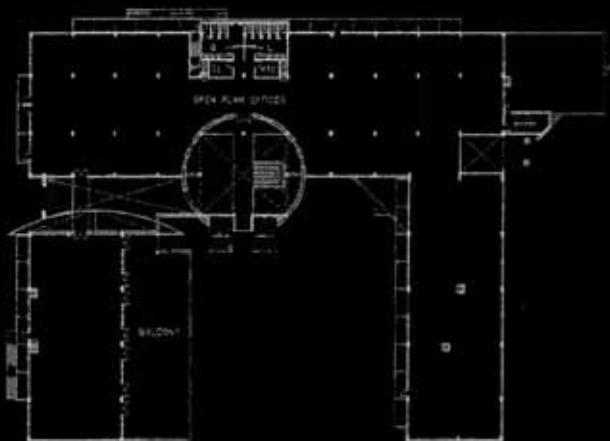


Fig 5.42 **FIRST FLOOR PLAN** (Els 2000)

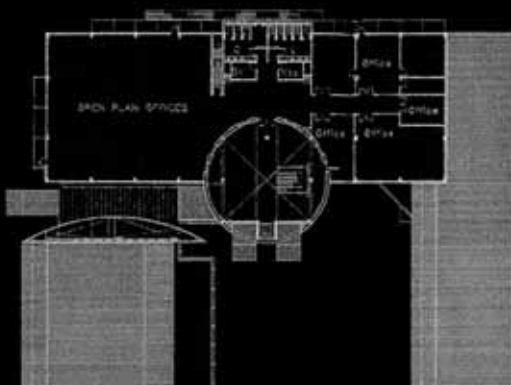


Fig 5.43 **SECOND FLOOR PLAN** (Els 2000)

Accommodation

1. An Information Counter and office
2. Long Distance Bus offices and waiting facilities
3. Drop-off and pick-up points for coaches and shuttles
4. Budget Car Rental office
5. Travel Agents
6. An array of shops catering for tourists
7. A restaurant
8. Various government departments such as, The Department of Environmental Affairs and Tourism
9. Sun International
10. Free State Tours

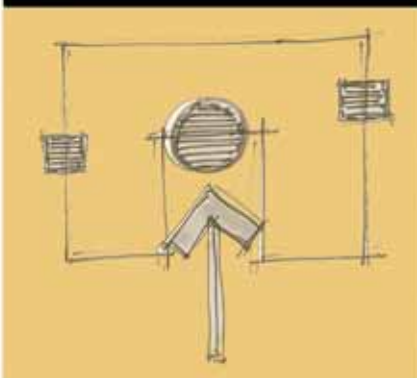


Fig 5.44 Analytical sketch showing the location of the entrances.

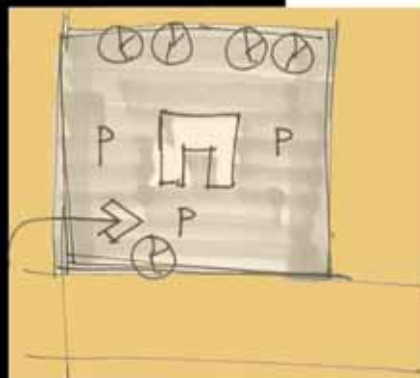


Fig 5.45 Analytical sketch showing "the sea of parking" (Els 2000:43) surrounding the building.

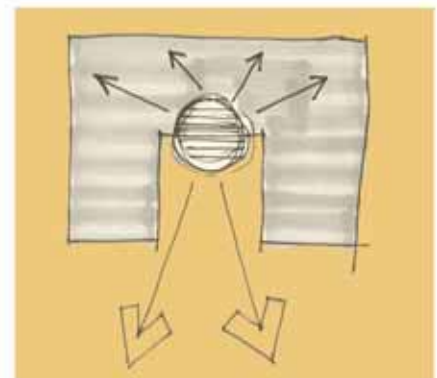


Fig 5.46 Analytical sketch showing the central position of the vertical circulation core and the vistas from it.

A number of different conclusions can be drawn from study of the three precedents shown on the previous pages. All of these precedents are buildings that interface with the public at various different levels. It is however, not only the functions housed by these buildings that are engaging, but also the volumes, views, materials and textures that are used. The buildings use design elements to guide users to and from points of importance. Users are drawn through a hierarchy of spaces linked together by a design language that is tactile and carried throughout each building.

5.4 Conclusions

Important Considerations:

The site should be highly accessible.

The Centre should be located in an area of close proximity to tourist attractions and accommodation facilities.

Entrance points should be clearly indicated.

Circulation routes (both vertical & horizontal), into, around and within the building should be highly legible.

The programme of the building should overlap so as to cater of a variety of user's needs, as well as increase the feasibility of the building's functionality.

It is important to realise that a good understanding of the background and context of the proposed project is needed, before the design phase can begin. A thorough investigation of all the aspects that will inform the design has now be completed and development of the concept can now commence.