4 PRECEDENT STUDIES

Architecture Must Blaze
People and Place
The Neutral Line
Transformation
The goal of early Modernists was to create a non-conformist architecture of habitable spaces. This was not intended to be the formalistic dogma that shapes our contemporary environment and as such, the principles of early Modernists used as a post-modernist reaction is still highly relevant today.

In the 1980’s a group of Russian architects used conceptual fantasy projects stimulated through design competitions, shown in Figures 4.1 and 4.2, in order to revive the cultural content of their profession. The portfolio of work from this period varied extensively in the approach to both futuristic and heritage architecture yet it was the search for architectural meaning in post-modern Russian which drove the movement.

‘Some look hyper-forward, seeking to raise modernist stakes to a further plane of projective abstraction; others look backward to retrieve lost wisdom, soul, and the gift of encompassing the void a cosmos of symbols.’ (Brian Hatton in The Architectural Association 1988:47)

The projects dubbed ‘paper architecture’ were a reaction to the visionary or utopian creations of 1920’s and 1960’s modernism prevalent in Russia. The main difference between past utopian and the reactionary paper architecture is that the latter opposes the reality of its context in that ‘fantasy does not pretend to discover historical or metaphysical necessity.’ (Rappaport on Galimov in The Architectural Association 1988:9)

Russian post colonial and post-modern expression of new power in and the meaning of heritage can be compared with Pretoria today. Both cities emerge from a past of failed utopias to struggle in search of expressions for the intangible identity and past culture.

The fantasy projects provide an a-contextual yet nostalgic perspective and are a tempting response to the post-utopian designer as the theory remains free from the dogma of preceding architectural viewpoints. However the expression of identity, specifically that of the contemporary Russian urban environment, remains the key generator of these fantastical designs as with the work of Iskander Galimov, shown in figure 4.2.
Similarly, it is the notion of an anti-functional, sensory approach to urban life that dominates the work of Coop Himmelblau:

‘We want architecture to have more. Architecture that bleeds, that exhausts, that whirls and even breaks. Architecture that lights up, that stings, that rips, and under stress tears. Architecture should be cavernous, fiery, smooth, hard, angular, brutal, round, delicate, colourful, obscene, voluptuous, dreamy, alluring, repelling, wet, dry and throbbing. Alive or dead.
Cold – then cold as a block of ice.
Hot – then hot as a blazing wing.
Architecture must blaze.’ (Himmelblau 1984:90)

The spontaneous nature of the Coop Himmelblau exhibitions will be translated in a permanent structure as an adaptable form and spatial arrangement. The design will follow the principle of a building as a product that can be moulded over time in order to physically adapt and reflect the change in function or needs of its users.

The works, represented in Figure 4.3, are often temporary and publicly engaging. This notion encapsulates the architecture of impermanence which will be explored in the Pretorian context as a reaction to the city of monuments. The notion of an anti-functional approach towards the public buildings of Pretoria is applicable to the current project which seeks to advocate innovative, relevant South African architecture.

Figure 4.3: Works of Coop Himmelblau
Himmelblau 1984
'Relevant architecture' is defined from a reference to Albie Sachs’s address during the ArchAfrica Congress 1998 as, ‘architectural expression that is determined by the specific and unique parameters of its place... an architecture that affirms Africa – its climate, its landscape, its people – rather than negating it.’ (Marschall 2000:1)

The heritage sites that exist preserved within the heart of the Pretoria as well as the surrounding urban context have a debatable relevance to those living as well as the descendants of the previously excluded non-white users of the city today. Lipman suggests that architecture should portray ‘the successful negotiations in time, space, economic interest and personality’ (Lipman, 2003:vii).

This approach advocates the merging of social and cultural interests and is the motivation for recycling places of lost opportunities in order to facilitate the true function of a public space. A true public forum will allow for users to interact with each other in order to form communities of shared interest.

It is the African idea of space as a ‘communal world’s view’ (Marcshall 2000:169) which is evident in Figure 4.4 (a) and (b) by the arrangement and use of space not only within an indigenous built structure but also between forms, affecting the placement and relationship of adjacent structures. The Zulu homestead pictured here, embodies the social, cultural and environmental responses to the specific context of rural KwaZulu-Natal.

The proposal to redevelop Pretorius Square as a new plaza will use this concept to examine whether architecture can serve as both a physical and social space in which users are able to express contemporary values and attitudes while instilling a renewed respect of past culture.

Figure 4.4: Traditional Dwelling
(a) Ntuli - Zulu Homestead
University of KwaZulu-Natal: The Campbell Collection
(http://campbell.ukzn.ac.za/?q=node/12)
(b) Zulu huts in various stages of construction
Author, 2010
An example of non-stylistic community orientated architecture is that of the Durban BAT centre. The building has a unique, eclectic aesthetic that is linked to the creative identity of its users and its function as a performing arts centre. Renovations were made with available recycled components with spaces arranged according to the social needs and comfort of the users.

The success of the building lies with the relationship of internal and external spaces as a passive response to environment control. The outdoor areas provide cool, shaded courtyards (Figure 4.5) in the sub-tropical climate and serve as nodes of informal social interaction (Figure 4.6).

Architecturally, the centre uses the aesthetic image of its function and context as a representation of the social desires of a community of diverse cultures. Each space is reflective of its function and users, characterised by the recycled objects integrated within the structure. For instance, ‘industrial windows are aptly used for the workshops, a beautifully detailed wood-frame bay window lends dignity to the more formal meeting room, and portholes collected from old ships are suitably placed along the gangway-like bridge’ (Marschall 2000:55). Old portholes and gun racks now used for windows and bookshelves respectively, further connect the building to its harbour and past military context. Instead of aligning with any one user group, or avoiding overt displays of identity, the BAT centre negotiates between the two options and creates opportunity for new meaning defined by collective interest in creative arts by re-appropriating the existing historical elements and contextualising these for new uses.
Africa Centre for Health & Population Studies
East Coast Architects – 2004
Somkhele, KwaZulu-Natal

Africa Centre in rural KwaZulu-Natal embodies both aspects of the high-tech, institutionalized function of the facility as well as the spirit of local identity and community ownership.

The project is a successful example of integrated social and environmentally conscious design. Using regional materials and construction technologies such as gum poles, earth walls and ‘zenzela’ reed screens (Figure 4.7), the building utilizes local resources thereby emulating the vernacular of rural African architecture.

The architects used the knowledge of the neighbouring community and promoted new skills with on-site training in order to promote community participation and ownership of the project.

A large portion of the facility is accessible as public space with legible entrances and internal orientation. This follows the ethos of community-based architecture as the resources provided will add to the community and achieve long-term social upliftment.

Steve Kinsler of East Coast Architects describes the firm’s work as ‘a social rather than a Green firm: ‘A great deal of our work is with communities, and most projects are community based. We design our buildings so communities participate, become empowered, and take ownership. Obviously, environmental issues are just as important, and usually there’s a strong connection between the two. If you’re saving energy planet-wise, you’re also saving a community’s small resources.’ (The Property Magazine, April 2008)
Figure 4.8 (Top) - Section through tower and entrance
Figure 4.9 (Bottom Left) - The building provides for visual access into public areas
Figure 4.10 (Bottom Right) - Murals convey community identity and involvement in the construction of the centre

All images on this page from: ARCHi-technology Sep 2009
KwaZulu-Natal Society of Arts Gallery
Durban

The KZNSA Gallery offers a neutral non-cultural space for the exhibition of local artists. The gallery is visited daily by a variety of users with a restaurant component that draws regular customers.

The building is aesthetically simple, thereby non-intimidating or associated with an elitist culture like most art institutions. The main feature of the gallery is the northern, longitudinal façade which is simple transparent glazed wall to allow visual communication between the internal circulation corridor and outside restaurant seating area. This façade also allows pedestrians and passers-by from the street to engage with the visual display inside the gallery.

The relationship with the natural environment is extended to the passive ventilation and solar control strategies integrated with the building envelope. The success of the gallery as a public centre is due to the good public interface between the commercial component and the street as well as the diversity of internal spaces to allow for a variety of exhibitions to occur simultaneously.

The gallery is a good example of an inclusive space that does not attempt to mimic what Marschall describes as an 'African aesthetic' that is usually 'focused on recognisable imagery and the superficial incorporation of visual references to familiar forms of traditional architecture and well-known historical monuments – an approach that carries the danger of a lapse into banal clichés and...architectural expression devoid of authenticity and meaning.’ (Marschall 2000:167)

Figure 4.11: (Top)
Street view of the Gallery (www.nsagallery.co.za)

Figure 4.12: (Bottom)
Exhibition Layout drawn from (www.nsagallery.co.za)
The proposal for the exhibition and housing of Spain’s Royal art collection resulted in studio Cano Lasso’s creation of a new intervention, amidst the existing historic fabric. The project sits between the Almudena Cathedral and the Palacio Real, two of Madrid’s most famous landmarks.

The new structure adopts the ‘neutral’ attitude in order to respect the built heritage. The building itself is described as a ‘void’ tensed between the two blocks of the Palace and Cathedral (Thompson 2006:173). The roof is comprised of a lattice structure allowing natural light to filter through into the vaulted spaces below. Instead of adding visibly to the existing structures, the museum roof acts as a simple platform on ground level with the collection housed underground. In this way the dual function of a stepped square as well as a grand-scale building can be achieved without negatively impacting on the historic space.
Reichstag: New German Parliament
Foster + Partners 1992-1999
Berlin

The Reichstag, a controversial symbol of Germany’s Nazi past, was targeted for renewal and transformation by the city of Berlin following the fall of the Berlin Wall. Up until 1992 this icon was left disfigured by warfare and careless renovation and retained much of the scars left by past conflicts.

Since its creation as a political symbol of German pride, the Reichstag has undergone various changes. This has been characterised as four separate phases each symbolising a specific political era and subsequently the social transformation of the German people.

The design of the new cupola departed from the original to provide a dramatic contradiction of form. The new dome is a transparent structure, providing light to interior spaces as well as allowing public visual accessibility into the heart of the building.

The political discord of Berlin’s history and the conflicting representation of its heritage structures are comparable to Pretoria’s own utopian heritage. Both the Reichstag and Pretoria’s City Hall have withstood transformation of social behaviour and cultural change. While Berlin’s Reichstag was physically affected by the destructive effects of war, Pretoria’s City Hall and the Pretorius Square has remained intact. The negative implication of an unchanged civic structure is that it remains symbolic only of the past, providing little opportunity for forced reflection and representation of current social needs.

Pretorius Square will be reprogrammed following the principles of the Reichstag’s latest renovation by Foster and Partners. The proposal will aim for the simultaneous approach of creating additional layers to the historic complex while symbolically excavating the existing fabric to reveal the intangible or hidden relevance of the heritage of the square.

PHASE 1
ORIGNIAL

The building effectively conveys the passage of time as the four phases of the Reichstag’s history are each preserved and memorialised for the interpretation and reflection of current and future visitors. The original Reichstag was a neo-renaissance building, symbolising the then newly established German empire and built between 1884 and 1894. The load bearing masonry structure and frieze (Figure 4.14) was a symbol of the German people’s pride as a nation.

Figure 4.14: Frieze translated as: ‘for the German People’
(http://www.fosterandpartners.com/)
Following a suspicious fire in 1933, the Reichstag was used as an icon for the rise of the Nationalsozialistische Deutsche Arbeiterpartei (Nazi Party). The attack of an iconic German symbol was used to stir up opposition to the communist party at the time. In order to further propagate the patriotic feeling stirred by its destruction, the Nazi Party allowed the building to remain partially destroyed and was not repaired until only after World War II.

The third period encapsulates the fall of the Nazi regime. The Reichstag building was bombed, looted and left in a vandalized state following the Soviet invasion of Berlin. The physical destruction of the structure also symbolises the political defeat of the Nazi power and as such is as powerful a memorial as the original complete structure.

When Germany became a reunited democracy in 1990, the Reichstag was chosen to once again represent the seat of parliament. New additions and alterations to the structure by Foster and Partners would not only repair the physical damage but also serve to alter the negative perceptions surrounding a once controversial political symbol.

The attitude adopted by Foster and Partners targeted the renovation on four points, the most notable of which was the addition of a new transparent cupola.
a

PEOPLE AND GOVERNMENT

The heritage of the Bundestag (parliament) as a democratic forum

The new cupola, a high-tech glass and steel structure, is symbolic of the democratic philosophy of transparency between the people and German government. The main aim of the alterations was to achieve public accessibility into the innermost chambers. Following this concept, the main entrance is used by both general public and politicians. Figure 1.8 is a view of the restaurant showing the extension and integration of the public realm even onto the roof terrace.

Figure 4.18: Restaurant with View over Berlin
(http://www.fosterandpartners.com)

b

TRANSPARENCY

Transparency between parliament and the people of Germany

The glazed cupola in memory of the original which was destroyed, emphasizes Foster and Partners’ values of clarity and transparency. The new landmark for Berlin is also a symbol of the newly revived democratic process. The cupola acts as platform for 360 degree views over the city as well as into the Parliamentary chambers below. The helical ramps shown in Figure 1.9 allow public access onto the observation deck and is also symbolic of the people’s importance over their governmental representatives in the court below.

(http://www.fosterandpartners.com)

Figure 4.19: Glass dome in cupola allows visual access to chamber below
(http://www.fosterandpartners.com)

c

EXPOSE LAYERED PAST

A sensitive approach to the multi-layered history

Some aspects of the original building were preserved and repaired such as the piano nobile and courtyards in order to retain the essence of the historical building. The interior of the building was peeled away in sections to reveal the layers of past renovations as well as graffiti from Soviet soldiers, preserved beneath the plaster (Figure 4.20). The exposed vandalism is an important testament to the role of the Reichstag in past conflicts. Preserving the visible past allows the Reichstag to become a living museum of German history.

Figure 4.20: Graffiti left by Soviet soldiers during occupation of Berlin
(http://www.fosterandpartners.com)
A rigorous environmental agenda

Current technological processes are used to convey the progress of cultural concerns towards the relationship of the environment. These high-tech developments are expressed in contrast to the original masonry and load bearing structure.

The cupola acts as a lighting tool, with solar reflectors transmitting daylight into the lower chambers. A 'light sculptor' (Figure 4.21) and adjustable sun-shield, reduces glare and prevents solar gain. At night the lit cupola acts as a torch (Figure 4.22), 'signalling the strength and vigour of the German democratic process.' (http://www.fosterandpartners.com)

These modest energy requirements allow the building to perform as a power station for the new government quarter. Environmentally conscious features include the use of refined vegetable oil as renewable bio-fuel to produce electricity, resulting in a 94% reduction of carbon dioxide emissions. Surplus heat, stored in aquifers 300 m below ground, can be pumped up to heat the building or to drive an absorption cooling plant to produce chilled water. (http://www.fosterandpartners.com)
conclusion

The City Hall has always represented Western ideals of government and power with classic expressions of order, geometry and ornamentation. To mirror these ideals with indigenous African expressions would involve negotiating a diverse array of traditional built heritage. However, to copy or reflect the past in as a superficial exercise degrades the original meaning of the object and of the people who came before. This will only result in further separation between the living and past. For this reason, the processes of mirroring or copying the past was negated as solutions to a reactive approach to the site. The most suitable architectural responses to the expression of identity and heritage for the proposal were investigated using both international and South African examples and fell into four reactive categories:

- Architecture Must Blaze
- People and Place
- The Neutral Line
- Transformation

The proposal for a new and accessible cultural centre in a historic district negotiates between the different manifestations represented by these groups in order to achieve a relevant response to the historic context and people of Pretoria today.