CHAPTER FIVE

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

PRECEDENCE STUDY

BMW WELT

BRITISH AIRWAYS HEAD QUARTERS

Architect: Coop Himmelblau Wolf D. Prix/ W. Dreibholz & Partner ZT GmbH Coop Himmelb(l)au arcspace feature
Completed: 2007
Munich Germany

FIG 31 BMW Welt

"Ever since Le Corbusier liberated the roof of the Unité as a landscape from its singular significance and function as a mere protective element, and ever since Oscar Niemeyer completed the design of his single-family dwelling Casa das Canoas near Rio de Janeiro, we have understood that the roof of a building need not necessarily follow its basic layout and structure. Rather, the "roof" has taken on a new meaning, new significance in modern architecture." Wolf D. Prix

The design of the building complex enables all of the structures, to take the form of a walk-through sculpture in an urban landscape that is overarched by the virtually free-floating roof that originates out of the Double Cone and further differentiates the space into various sub-areas.

The most prominent elements of the brand experience and automobile delivery center BMW Welt are the roof and the Double Cone. The roof landscape of 16,000 square meters, supported by only 11 columns, not only forms the space-enclosing upper limit of the building, but also forms a functional, structural, and above all formally independent structure, in conjunction with the Double Cone.

The Double Cone visualizes the soaring dynamics of the building with its continuous transition into the seemingly floating roof. It takes the form of two leaning truncated cones with a rounded transition between them.
The building is sustainable through innovative climatic concepts which result in an

BMW WELT

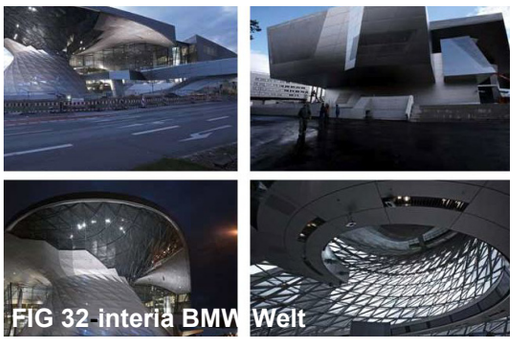

FIG 32 interia BMW Welt

FIG 33 Concept images

FIG 34 Arieal View

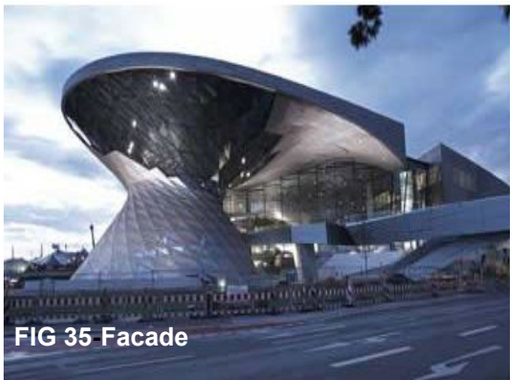

FIG 35 Facade

estimated 30 percent energy savings. Included in these ideas are the naturally ventilated hall with facade construction that may be heated or cooled as well as the photovoltaic roof panels which provide energy. But not only is the climatic concept sustainable; the form is sustainable as well.

At the heart of BMW Welt is vehicle delivery, which forms both the spatial hub and the functional backbone of the building, and the processes connected with this function extend over almost all levels.

The new vehicles are delivered to the lower floors via their own loading yard. Here there are car washes, mechanic's workshops, final paint inspection sites and final cleaning sites as well as a one-day storage facility, an automatic high-rise storage unit with a capacity for 250 cars. This corresponds to the maximum daily capacity of the vehicle delivery process. The delivery and end-finish process takes place hidden from customers and visitors on an underground stage. The vehicles are then transported in transparent glass elevators to the actual delivery stage, dubbed "Premiere," which is at the center of BMW Welt, visible from all other areas. This area is also known as the "Marina" since the vehicles are handed over to customers on rotating platforms, from where they can drive out of the building via a generously sized ramp.

Although BMW Welt is basically a public building, certain areas are open exclusively to those picking up new vehicles. For example, at the main entrances to BMW Welt customers can check into a hotel and enjoy exclusive use of two Lounge levels.

The "Lounge" is integrated into the roof and thus virtually suspended over the delivery area, supported only by the utility service shafts and a column. The necessary formalities

for vehicle hand-over are taken care of in the Lounge, which also contains common areas where guests who have arrived from far away can withdraw and rest. Via a gradually descending stairway connecting the Lounge to the Marina, the customer is guided by a customer service representative to the actual hand-over point. In this process the melding of interior and exterior space or suspension of the usual separation between them also becomes tangible on the functional level

The "Forum," located in the north wing of the building, represents another key function of BMW Welt, this section embodies in a particularly striking way the concept of spatial and visual integration coupled with the highest degree of functional independence. The "Tower" in the southwest, looking toward the Olympia Park, represents a multifunctional area in the fullest sense of the term. Just like the Forum, it offers both encapsulated interior rooms with sight lines out into the Hall and toward the Olympia Park as well as walk-through surfaces and terraces both indoors and outdoors.

Inside BMW Welt, all publicly accessible areas, such as the Forum, Tower and Double Cone, are connected by a lightweight, sweeping bridge structure. In order to eliminate columns in the interior, the bridge was hung from the ceiling instead. At defined panorama points, curving bulges in the bridge invite guests to pause and take in the scene.

The functional and formal concept of the bridge is extended out over Lerchenauerstrasse and thus to BMW areas situated on the opposite side of the street (administration headquarters and museum), so there is no intersection with the vehicle traffic down below.

Special attention was paid to the underground networking of the various structures, so that it is possible to provide catering and supplies to the entire building from all restaurant units. The four-story underground base of BMW Welt also contains two public parking levels with up to 600 parking spaces. Access to the Hall is gained decentrally via 16 elevator groups.

FIG 36 Plan

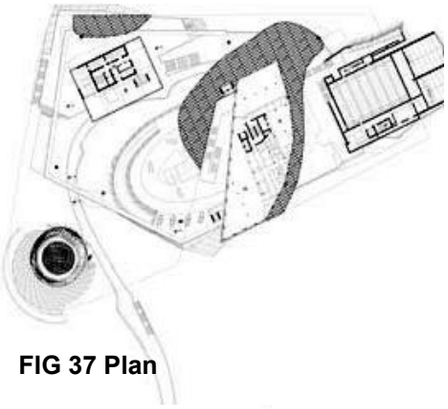

FIG 37 Plan

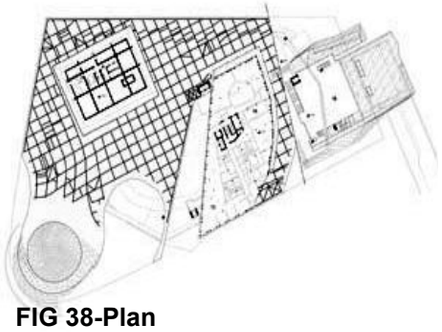

FIG 38-Plan

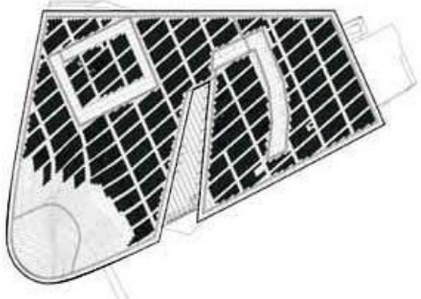

FIG 39-Roof Plan

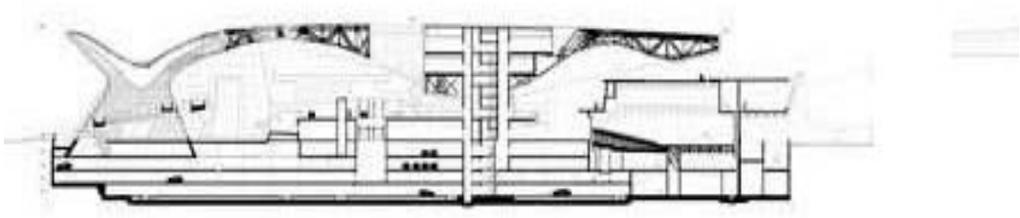

FIG 40-Section

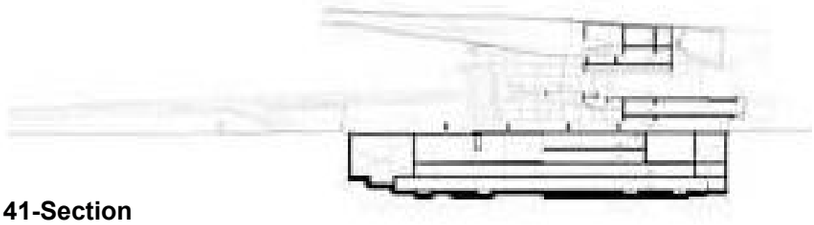

FIG 41-Section

FIG 42-Exterior View

FIG 43-Exterior View

FIG 44-interior Ramp

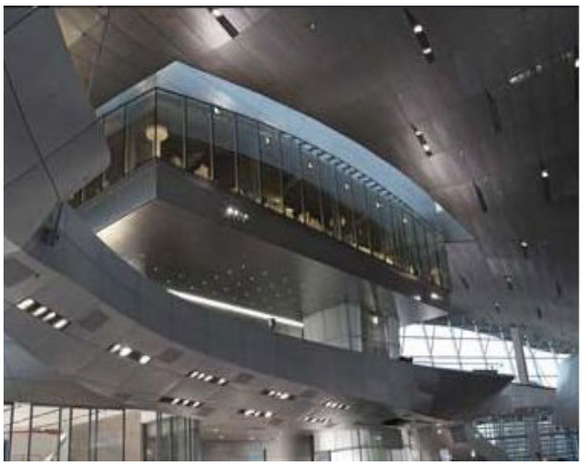

FIG 45-Interio ramp

Architect: Niels Torp and Øyvind Neslein
Completed: 2007
Parkland Heathrow

FIG 46 entrance elevation

When British Airways had the opportunity to build their corperate headquarters in parkland near Heathrow Airport they seized the chance to make a quantum leap forwards, to a new way of working. The building needed to house over three thousand employees and be the physical launch pad for business success well into the twenty first century. One of the objectives of this building was to create a base from which people can better team work using flexible workspaces and the latest communications. To help achieve this British Airway identified feng shui as one of the ideologies that could be incorporated into the design process. The building itself had to support new ways of working together and more effective communication. To achieve this and provide maximum flexibility, the workspaces are all open plan. Even Bob Ailing, then chairperson, worked in an open plan environment. BA found that humans work most effectively in teams of four to eight people. Therefor the open plan areas were set up to work in teams of six to eight people. The chief architects' Niels Torp and Øyvind Neslein had begun to design the building in way that incorporated many of the fundamental feng shui principles. Coming from Norway where sun light is particularly important during the dark winters, they had carefully considered how each part of the building would benefit from natural light. They created the idea of building twelve separate houses connected by a main street so that each part of building receives plenty of natural light along with beautiful

BRITISH AIRWAYS

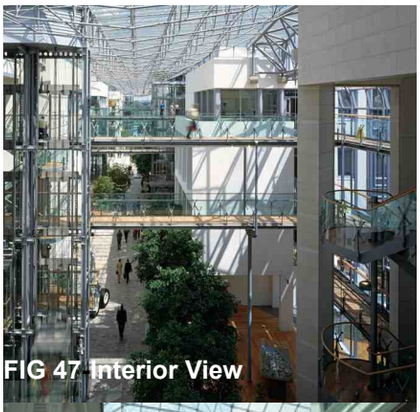

FIG 47-Interior View

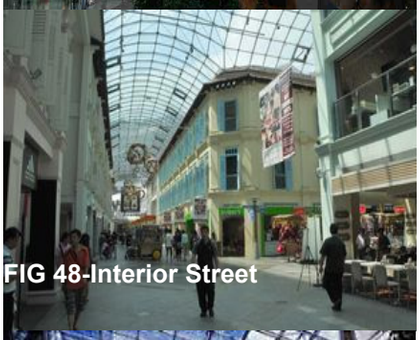

FIG 48-Interior Street

FIG 49-Roof

views of the parkland. Every part of the building has a bright sunny atmosphere. The Street that connects the twelve main office spaces is a wide pedestrian walkway covered by a glass roof. In the street are cafes, restaurants, bank, shops, meeting rooms, library and main reception area. All this is surrounded by parkland with lakes, trees and paths.

The following are positive Feng Shui features of the British Airways Waterside building. FENG SHUI AND LOCATION Not in the shadow of another building. The site is fortunate in that the building is not in the shadow of any other taller buildings which would lead to a deficiency of energy as the sunlight would be denied to the part of the building in the shadow. The whole building has good exposure to natural light and is therefor charged by all the different kinds of energy generated by the sun as it moves through the sky. FENG SHUI AND PARKLAND Surrounded by more natural healthy energy. The parkland surrounding the Waterside building will generate its own energy. The trees, bushes and grass will radiate a natural, organic energy which will drift through the Waterside building. This helps maintain a more natural healthy energy in peoples own bodies. Research in hospitals has shown that there is an advantage to being in bed close to a window with view of a natural landscape. There appears to be a psychological benefit to being able to see the kind of landscape that has the air, water and food we need for life. The Waterside building has been cleverly designed to ensure that everyone has views of the parkland or the courtyards between the houses.

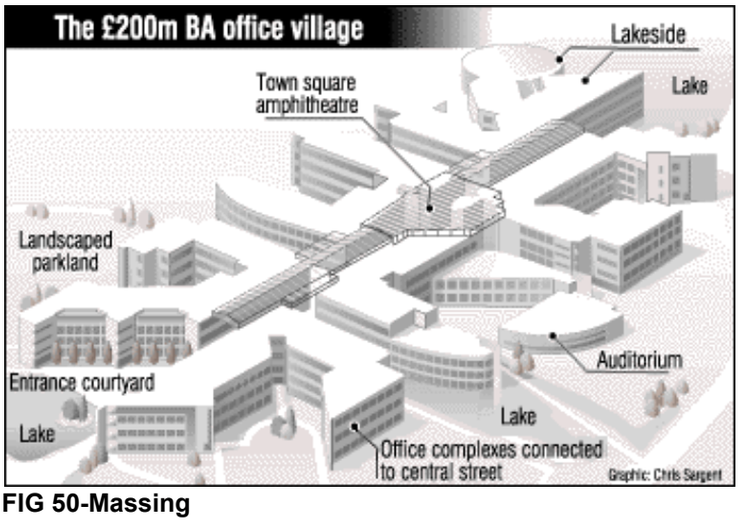

FIG 50-Massing

Architect: Urban Solutions
Completed: 2003- 2005
Braamfontain

FIG 51-Metro mall

The Bree station, or metro mall taxi rank was commissioned to cater for a transport and trader terminal in a people-friendly way, by providing spaces to traders which allow them to maximise the passing trade. It is known as the only shopping centre in Joburg without car parking, but with several floors of minibus taxis. Approximately 150,000 people pass through here per day on their way to and from the city centre from Soweto and the suburbs.

The building has been created to be hardwearing and low maintenance, using robust materials like red face brick and concrete finishes. The building is three stories tall, and is designed to accommodate 25 buses serving 35 different routes, with holding facilities for 2 000 taxis, servicing an estimated 100 000 commuters.

FIG 52-Metro mall

METRO MALL RANK

FIG 53-Metro mall

FIG 54-Metro mall


FIG 55-Metro mall


FIG 56-Metro mall

There is space for some 800 traders, inside the building and along the ground floor exterior in Bree and Sauer streets.

The buildings double volume entrances, which are decorated by local artists in mosaic and tall wooden sculptures, act as “collection baskets” to draw people into its interior. With this building, the architects strove to create a mixed use structure that blends with city buildings in the vicinity, allowing easy access and freedom of movement inside the building. The building has also turned a rapidly deteriorating side of the city into a vibrant, people place, at the same time providing a formal home for both taxis and traders.


FIG 57-Metro mall

BMW WELTS

Interpretation of identity through image and branding

The BMW welts building, from a programmatic and iconic point is an appropriate precedence in the sense that in light of the afore mentioned theoretical component of this thesis, the building incorporates all facets of the automotive process into a single structure. This notion has particular significance in relation to identity formulation and recognition. Secondly, the design of the building dramatically uses imagery and branding in order to further convey the notion of identity for the BMW brand. In light of the principals of identity design, the architects have followed both methodologies recommended for the creation of a structure that tacitly conveys identity.

BRITISH AIRWAYS

Expression of institutional ehtos through architecture

The brief of the B.A building was to create a building that not only managed to house the 3000 employees, but also simultaneously embody the institutional ethos of the B.A brand. The design had to be the enabler of the organizations operational requirements from its daily running to its organizational psychology. In essence, the building had to be the manifestation of the company's identity, not from a marketing view, but from an operational view. Thus in relation to this thesis, this design serves as an example of how architecture can be used to represent the ethos or defining culture of an organization. It further explains how identity does not only need to be created through imagery or branding, but can also be expressed through spatial and cultural articulation.

INTERPRETATION

METRO MALL

Programme and expression of urban transport architecture

Metro mall taxi precinct along with Bara taxi rank, serve as a new building typology for transport architecture in the new South Africa. The two buildings for the first time display a direct intent from the designers and commissioners to incorporate and align the informal economy with that of the public transport systems. There designs show the realization of the interdependence between the commuter public and the transport systems they utilise. In essence, it can be argued that their presence indicates an emergence of new definition of a “home”(SouthAfricainfo.co.za, Davie, 2005) for the public transport systems, namely taxis and busses. Thus, it can also be said that the designs of theses buildings represent an acknowledgement of the importance of the informal economy as well as the taxi industry. For the purposes of this thesis the metro mall precinct was examined dues to its city context. The building’s relevance as precedence is, further highlighted as the building also elucidates as to how the programmatic and urban transport architecture should be expressed.