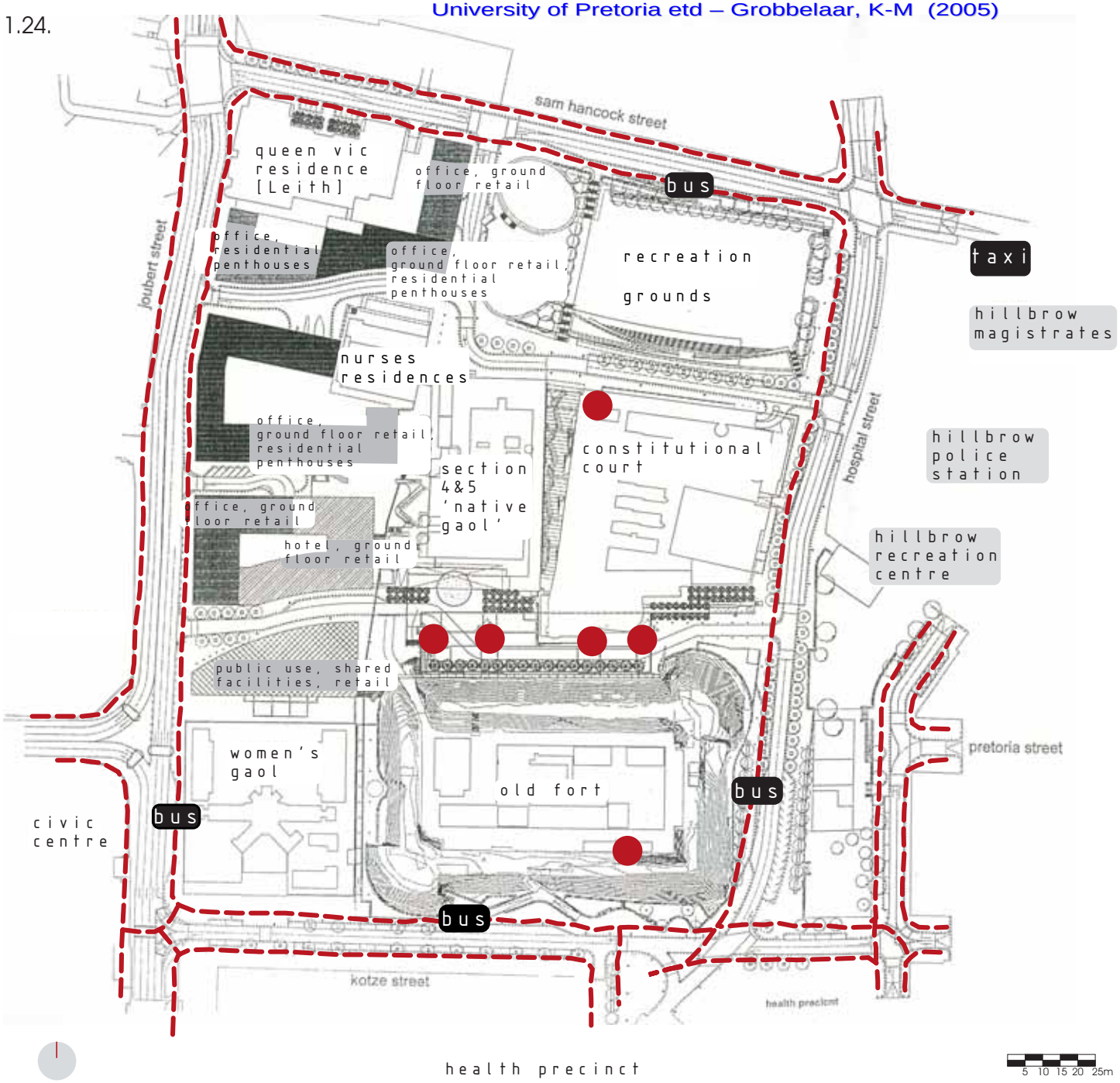
contents

1.24.



health precinct

6.1. Development Framework: Constitutional Hill.

pedestrian circulation

landmark elements

The Constitution Hill development (OMM Design Workshop and Urban Solutions) comprises 95,000 square metres of publicly owned land and properties. It hosts important heritage buildings, including Section 4 and 5 - the 'Native Gaol' - the Women's Prison and the Old Fort, which was built to control British Uitlanders and later to incarcerate Boer Rebels, white mine-workers, members of the Ossewa Brandwag and the Treason Trialists of the 1950s, and is the only prison to have held both Mandela and Gandhi. The project will develop the new Constitutional Court; accommodation for the Constitutional Commissions and other related commercial, retail and hospitality activities in 36,000 square metres of commercial space; 1860 basement parking bays; bus and taxi holding and drop-off facilities; upgraded peripheral roads and internal streets; a visitor information and exhibition centre; new museums and related heritage and tourism activities; 200 housing units; community facilities and recreation space (www.jda.org.za).

The development is located between Braamfontein and Hillbrow to the east and Parktown and Westcliff to the north. It has the potential to act as a catalyst for the integration of these highly segregated areas, as well as the upgrading and redevelopment of Hillbrow and Berea. Constitution Hill is fully accessible to the public and provides a variety of public interfaces: the historic rampart to the south, the African steps and Constitution square to the west and and a formal public colonnade to the north of the Constitutional Court. The entrance to the old Fort is located about 400m from the site on the corner of Smit and Hospital Street.

6.2. Constitutional Hill
a. Awaiting Trial block, stairwells; Constitution Square.
b. Southern elevation, Constitutional Court.
c. Northern elevation, Constitutional Court.
d. Entrance, Old Fort; Kotzé Street.
e. Main entrance, Constitutional Court.
f. African Steps.

contents

(COPY)

Hospital Hill,
JOHANNESBURG,
21st November, 1935.

Mrs. E.M. Pemberton,
18, Van der Merwe Street,
Hillbrow,
JOHANNESBURG.

Dear Madam,

We understand that it is the intention of the Johannesburg General Hospital to enlarge the accommodation at the non-European Hospital, at a cost of £30,000, the additions to be carried out on the site at present occupied by the non-European Hospital.

As the owners of property adjacent to the non-European Hospital, we must register an emphatic protest against the extensions contemplated, as we consider that this step will be against the best interests of property owners in this locality.

We would point out that at the time the non-European Hospital was built it was done without the previous knowledge or consent of property owners, who we think would not have countenanced the introduction of such a large non-European population into their district.

The additional accommodation in the Hospital must necessarily increase this population, which is not confined to the patient inmates, but to numerous visitors, a staff of native nurses and orderlies, and a number of native domestics housed in the compound abutting on the Hospital.

Hospital Hill is one of the best residential suburbs in Johannesburg. Residences have always been eagerly sought by first-class tenants, but from the time of the establishment of the non-European Hospital there has been a marked change. This was particularly noticeable after the opening of the native nurses' home, prospective tenants expressing themselves as being averse to living next door to natives.

Hospital Hill is a prohibited area under the Urban Areas Act, yet the Government or Municipality see fit to arrange in such a way that a large number of natives is continually being drawn up here, to the detriment of property owners and the peace of house occupiers, for it is impossible to spend a quiet Sunday or Saturday afternoon in their own homes. We believe we are correct in stating that the vast majority of patients treated at the Hospital, both in and out patients, come from districts situated a good distance from Hospital Hill.

In this connection may we remind you that recently

- a -

- 2 -

a fully equipped hospital was erected in Orlando Native Township, as a gift from Mrs. D.F. Corlett. So far, although this hospital is staffed and ready to give assistance, it has had no patients.

In asking you to interest yourself in this matter, we would reiterate that Hospital Hill is a European residential locality. The properties immediately adjoining the Hospital must of necessity suffer through this additional influx of non-Europeans, and we feel that something should be done to safeguard those in this district who have invested money in properties and who constitute a not unimportant section of the tax-paying community.

We consider that if this matter were brought to the attention of the Town Planning Association they would agree that with the rapid growth of the town the proposed extensions to the Hospital would only serve for a few short years, when consideration would again have to be given to further enlargements, and we submit that arrangements should be made for the removal of the non-European Hospital to some other more fitting district.

In closing we wish to lay stress on the urgency of steps being taken to prevent Hospital Hill from deteriorating into a slum area.

(Signed) M.J. Reynders, 24 Kotze Street

a n d

55 Others.

JPW/

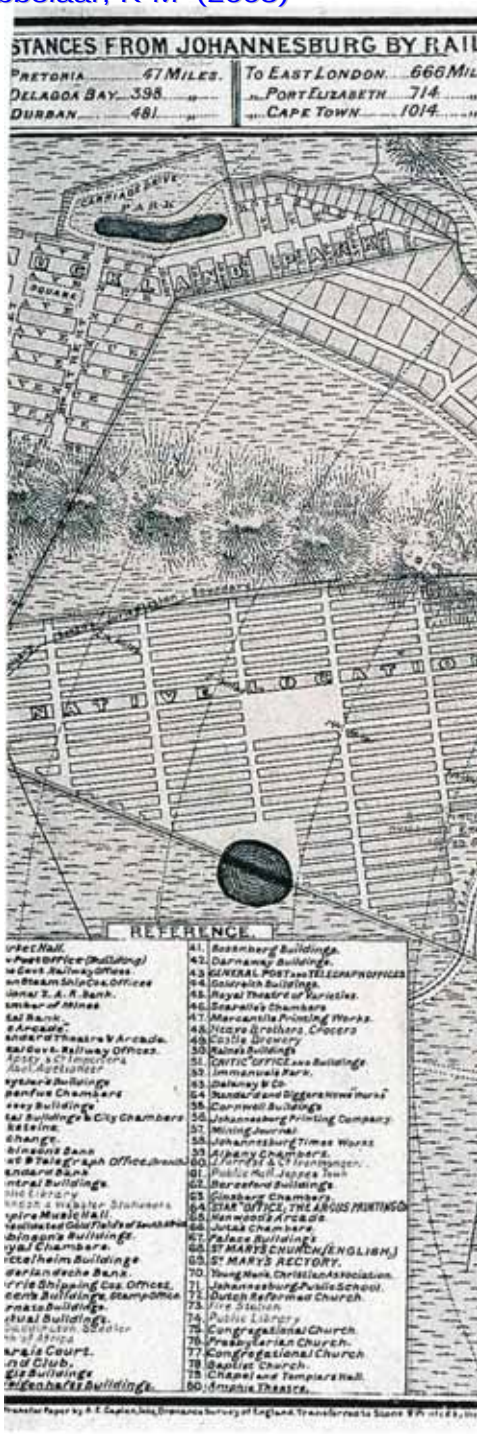
7.2 (a-b). Hospital Hill, 2004.

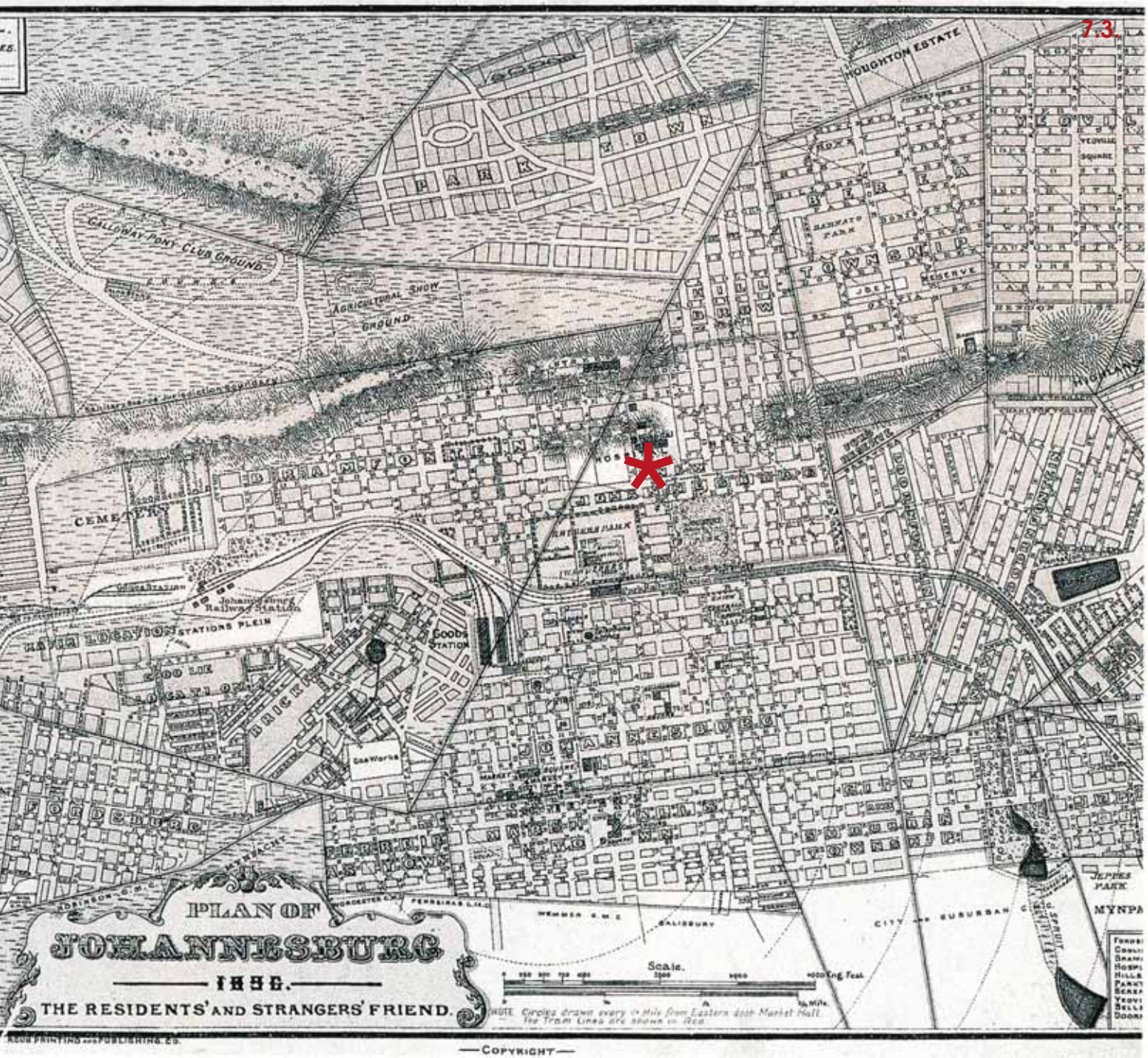
Mining Settlement

Before the discovery of the Witwatersrand gold-fields, the trade routes from the south crossed the Vaal River at the historic drifts. These recognition points in a broad featureless landscape determined the directions of the principal wagon roads leading to the Boer capital at Pretoria. After the discovery of gold in 1886, the main supply route from the mining town at Kimberley to Pretoria was diverted through the encampment at Randjeslaagte. Johannesburg was located on the central *uitvalgrond* - the portions of land remaining between the farms surveyed on horseback by the Trekkers (Holm 1998: 67) - at the crossing point of the north-south trade routes with the east-west gold-bearing conglomerate reef (Chipkin 1993: 7). Unlike the Afrikaner settlement in Pretoria, which developed around the *kerkplaats* with the church as symbolic, functional and visual centre, Johannesburg was shaped by commerce and trade.

Capitalist City

By 1888 the town had been planned into *regular broad streets and into blocks of erven 50 by 100 feet* [15.74 by 31.48 m], *street corner 'stands' being only 50 by 50* (Mathers in Chipkin 1993: 10). These were standardised units of *uitvalgrond* - mere saleable blocks of real estate. The **neutrality and open-endedness of the grid plan** represented a *tabula rasa* for the operation of the market economy and - according to Van der Waal (in Chipkin 1993: 13) - a strategy to produce an orderly democratic society devoid of hierarchical elements except white dominion. President Paul Kruger not permitting his family name to be associated with Johannesburg, the town streets were named unceremoniously after pieces of the Main Reef - Goud Street, Quartz Street, Banket Street, Nugget Street - or after Boer officials - Wolmarans, Eloff and Smit (Chipkin 1993: 10).





7.3. Plan of Johannesburg, 1896, drawn by A. E. Caplan.

Within a decade, Johannesburg developed into *a cit of a hundred thousand inhabitants, equipped with all the advantages of modern civilisation… Not one but three Johannesburgs were built up in that time. In some streets the strata of the three periods can still be detected. First came … the corrugated iron stage; next, the age of one or two storey brick buildings; finally, these were again demolished to make room for edifices of which any city might well be proud* (Jeppe in Chipkin 1993: 11).

The layout continued to developed along rational and functional lines*, the area being divided into mining and living areas, which again were subdivided into the land of the living, the land of the dead (cemetery), and beyond that the land of the 'Kaffirs'* (Holm 1998: 68).

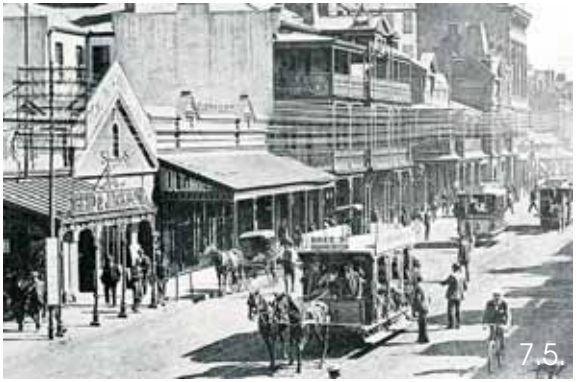
> It became a city showing *typical traits of our times: functionality and segregation of functional zones… streets as traffic channels; the abandonment of urban form, meaning and hierarchy; withdrawal from civic life and the privatisation of living* (Holm 1998: 72). Yet, *the maddening casualness and makeshift attitudes that emerged at the beginning of its existence have persisted through all the subsequent phases of Johannesburg's development* (Chipkin 1993: 10).

1932 was the Black Year in South Africa's economic history - the year of the rinderpest, Great Drought and world-wide Depression. On 27 December 1932, South Africa abandoned the gold standard. According to Chipkin (1993: 93), the gold price had rocketed by 45% by 1933 and continued to rise for the rest of the decade; creating a vast inflow of South African liquid - and foreign capital. According to De Kiewiet (in Chipkin 1993: 93) *Johannesburg and the other towns of the Witwatersrand began to rebuild themselves… From the air parts of central Johannesburg began to look like Chicago or Saint Louis…* By the late 1930's Johannesburg's CBD possessed four skyscrapers approaching heights of 60 metres, with high-density blocks of flats springing up on the perimeter of Joubert Park and the tram routes of Hillbrow (Chipkin 1993: 94).

Modernism

Johannesburg, with its rentier culture and expanding technological and academic infrastructure, proved the breeding ground for Modernism in South Africa. Stanley Furner, who took up an appointment at the WITS School of Architecture in 1925, *was instrumental in introducing the ideas of modern architecture to South Africa* (Herbert in Chipkin 1993: 157). Among his students were Rex Martienssen, Gordon McIntosh and Norman Hanson - men who came to constitute the inner core of a group of like-thinking young architects that established direct links with Le Corbusier at atelier 35 rue de Sèvres.


7.4.


7.5.

7.4. View of Johannesburg from Hospital Hill in 1889.
7.5. Commissioner Street, looking west c. 1980: the principal east-west thoroughfare with horse-drawn trams, building rubble on the roadway, cyclists, and pedestrians on the pavements under the cast-iron verandas.

Martienssen and McIntosh went on an official university student tour of Europe in 1925. Their first confrontation with modern architecture in Holland was to prove seminal for South African architecture. In 1930, on tour again, the young graduates visited Le Corbusier's houses at Weissenhof *Siedlung* and Mendelssohn's Schocken store. They returned with Le Corbusier's *Oeuvre Complète de 1910-1929 (*Chipkin 1993: 161).

In 1932 Martienssen proposed the establishment of an Alpha Club, which would be limited to an inner core of twelve members with Martienssen and McIntosh at the centre and a Beta class of membership for *lesser mortals* (Chipkin 1993: 178). Although a formal club never materialised, a loose group - including McIntosh, Martienssen, Hanson, Fassler, Cooke, Bryer, Howie and Sinclair - met frequently with a *definite unity of approach* (Hanson in Chipkin 1993: 178). Le Corbusier named them *le Groupe Transvaal*. 1933 saw the publication of the *Zerohour* manifesto: *The contemporary spirit is abroad…we should regard ourselves as drawing near to a remote future rather than receding from a historic past - indeed all living art is the history of the future*… (Chipkin 1993: 89).

In December 1933, Martienssen was in Europe again, this time to visit Delphi and, in January 1934, Le Corbusier in Paris. Le Corbusier continued to engage with the activities the Transvaal Group and regularly contributed to the South African Architectural Record, which Martienssen had converted with *modern Bauhaus typography and generous white spaces into a powerful rhetorical vehicle for new ideas* (Chipkin 1993: 164). Johannesburg in the 1930's also saw the reinforced concrete technology becoming the expertise of skilled concrete designers such as A.S. Joffe. And no sooner than Le Corbusier's ideas started taking shape on the Highveld, **the five point plan found its way into Hillbrow.**

7.6.

7.7.

7.6. View down Jeppe Street in the mid-1930's.
7.7. Young South African visitors in Le Corbusier's atelier, pasted into Martienssen's copy of the 1973 edition of *Oeuvre Complète 1910-29*.


7.8.


7.9.


7.10.

Reading Court (1936-7) - by Hanson, Tomkin and Finkelstein - in its pristine state was a narrow infill-building on a 50-feet frontage between two older buildings. The building is raised on pilotis and has large cantilevered parapet balconies to the expansive verandas, and rectangular concrete grilles with flyscreening and wired glass lower spandrels to the sleeping porches. At street level, a splayed free-plan wall is set back from the columns to create a shaded porch ante-room to the street; while a tapered column and a touch of greenery in a planter box combine to emphasise the entrance (Chipkin 1993: 169-70).

Aiton Court (1937-8), again on a 50-feet infill site, is divided into a higher rear block separated by a cortile from a lower street-front block which allows north light into the cortile in winter. A stair - and lift-tower with curved walls links the two components. The lower block is raised nearly a metre above pavement level on *pilotis* to permit natural light into the basement parking below. The *pilotis* rest on a slate-clad podium creating the horisontal plane of the cortile - in accordance with Martienssen's description of the horisontal plane in classical architecture which *by deliberate structural means negates the irregularity of existing topographical conditions* (Chipkin 1993: 172). The area occupied by the front block is recreated on its roof level, complete with solarium.

In the post-war era, Martienssen's influence continued to pervade the commercial practices in town. Hillbrow and its environs became a vast testing-ground for speculation in building stock. Giant speculative apartment blocks were thrown up in **overcrowded neighbourhoods devoid of public open space and with streets permanently in deep shadow**. Details were raided from the Martienssen House in Greenside and Le Corbusier's *Oeuvre Complète* - creating a remarkably consistent modern vernacular which took

7.8. Reading Court, Hillbrow (1936-7), by Hanson, Tomkin and Finkelstein.
7.9. Aiton Court (1937-8), Pietersen Street, Hospital Hill, by W.R.& A. Stewart and B.S. Cooke.
7.10. Martienssen House (1940), Greenside, photographed in 1955 when it was still occupied by Heather Martienssen.

7.11. Banket Street canyon, Hillbrow, in 1965; looking south from Paul Nel Street.

foreign visitors by surprise (Chipkin 1993: 228).

The consistencies derive from a number of objective factors: the modular size of erven in 50 by 100 Cape feet units; uniformity in the height and bulk requirements of the town-planning scheme; identical accommodation requirements; the use of standard steel windows, later followed by pressed steel door-frames; the use of cheap, maintenance free cladding materials, and the ubiquitous application of facebrick. Ultimately though, the Hillbrow vernacular derived form a *shared ideology and a common pool of modern idiom* (ibid), which included

> freestanding rounded, cylindrical or kidney-shaped *pilotis* at marbled entrances; large projecting sun-trap balconies; extensive north-facing fenestration with framed inset windows in the facebrick end-walls; beam and column construction in reinforced concrete; and, at rooftop level, the dormitory slums of the black proletariat (ibid.).

The post-war period similarly saw many architects turning to Brazilian Modernity for inspiration (Chipkin 1993: 230). First it was Le Corbusier, now Oscar Niemeyer. Brazilian influences in Johannesburg concentrated in the apartment suburb of Hillbrow (Chipkin 1993: 237). Though the elements of the Hillbrow vernacular were largely in place before the main impact was felt, the Brazilian influence created a certain freedom within the Modernist design idiom (Chipkin 1993: 236). Brazilian attributions include the *brise-soleil* and other elements of visual enrichment, such as street murals, the abstract geometric wall decoration of Santa Barbara in Ockerse Street and the Ndebele spandrel patterns of Brow Hill in Pietersen Street (Chipkin 1993: 237).

In 1951, the Festival of Britain provided another set of influences; this time a packaged image of *instant modernity* (Chipkin 1993: 237) from the exhibition site on London's South Bank. At Von Brandis Heights (1952) on the corner of Twist and Pietersen streets, all three major influences - Martienssen's House, Brazil and the Festival of Britain - meet in a single architectural statement of the 1950's. The building has Le Corbusier-inspired *pilotis*, entrance stonework and rounded shipshape roof forms, Martienssen's framed square inset windows in facebrick infill walling, Brazilian V-shaped end *pilotis*, and decorative zigzag balustrades and thin perforated balcony screens characteristic of the decorative attitude of the Festival of Britain (Chipkin 1993: 238).

7.12.

7.12. Von Brandis Heights (1952), by H.H. Le Roith and Partners. The unsigned perspective is probably by Wim Swaan.

Sophiatown-Hillbrow - Marabastad

Whereas the central business areas of Johannesburg *had conspicuously failed to develop a café society*, Chipkin (1993: 209) refers to two venues in Hillbrow -

> the Florian Café, where *refugees from Hitler's Germany had gathered to talk heatedly or … read newspapers and journals*, and Wim Swaan's Coffee House where *Chris McGregor and township jazzmen had played in the early 1960s*. Hillbrow became known as the 'white Sophiatown'.

Sophiatown, in turn, was the 'little Paris of the Transvaal' (Themba in Chipkin 1993: 210). Though initially laid out as a white township, the siting of municipal sewerage works and refuse dumps in the immediate vicinity of Sophiatown led to the lifting of racial restrictions. By 1913, there were approximately 700 people of all races in Sophiatown. By 1953, the population was thought to be as high as 70 000. Aggrey Klaaste (in Chipkin 1993: 208), editor of the Sowetan, described the post-war era as the *literature and art Renaissance days of Drum, Sophiatown* [and*] township jazz…* Sophiatown was overcrowded, noisy, violent, lacking in privacy; but with a special quality of neighbourliness, *the best musicians, scholars, teachers, writers…* (Chipkin 1993: 218). In the secret shanty booze-joints - reached through narrow dark alleys - a diverse culture of jazz rhythms arose, producing brilliant conversation, a literary journal and a handful of artists and writers, including the likes of Can Themba (Chipkin 1993: 209).

Sophiatown's geographical proximity to Johannesburg's white working-class suburbs and the freehold rights giving homeowners permanent possession - in conflict with Apartheid ideology - proved its downfall. In 1951, the government commenced its strategy to eradicate 'black spots' on the western periphery. In February 1955, removals to Meadowlands began, and by 1960 Sophiatown was *completely cleared of heaps of rubble and reminders of the past, erased from the map, rezoned, rebuilt as a white working class suburb* and renamed Triomf (Chipkin 1993: 218).

Marabastad, Pretoria's oldest location, dating from c. 1880 (Junod in Chipkin 1998: 153), suffered a similar plight. It was situated adjacent to the inner city, only four blocks away from Church Square, but like Sophiatown adjacent to the sewerage works. According to Chipkin (1998: 153-4), a noticeable literate class emerged from Pretoria locations such as Marabastad. Can Themba was born there in 1924 and the writer Jay Naidoo in 1941, and both Mokgatle and Mphalele spent formative years there in the 1930s.

During the 1930's, Marabastad was the centre of the vibrant *marabi* culture described by Koch as the African *slumyard dweller's whole way of life, the class position they adopted, the music they played and the way they danced* (Koch in Friedman 1994: 152). Mphalele (in Chipkin 1998: 154) writes of *reverberating jazz extravaganza…* every night at the Columbia Dance Hall, while just around the block the latest American films were showing at the Star Picture Palace (Chipkin 1998: 154). Friedman (1994: 148-9) describes *a cultural milieu of shebeens, dance parties and tea meetings with spirited music*, within an environment otherwise ridden by overcrowding, unemployment, crime and prostitution.

Marabastad also provided a centre for political activity. By the late 1930s, its proximity to the white areas had sparked agitation for its removal under the pretext of slum eradication. Removals to Atteridgeville and Laudium began under the Smuts government, until in the 1950s the whole location was declared a white area under the Group Areas Act (Holm 1998: 155).

The 'white Sophiatown' survived eradication precisely because of its white status, and today provides a cultural setting rather similar to that of the erstwhile Sophiatown and Marabastad. To romanticise the cultural worlds of Marabastad and Sophiatown is to forget the conditions of oppression and extreme poverty within which they developed. Essop Patel (in Chipkin 1993: 210) explains that

> *the creative and artistic impulse in a fragmented society often comes from the ghetto rather than from the affluent strata of society…*

Though it has to be considered that the particularly dynamic quality of the cultural activity of the erstwhile Sophiatown and Marabastad and Hillbrow can at least partially be ascribed to the illicit nature of such activity, Hillbrow's slum conditions may yet prove a prolific breeding ground for creative endeavours.

7.13. Mongeni Feza and Dudu Pukwana at Downbeat, Hillbrow, 1964.

contents

Cecil Balmond, engineer for Ove Arup, has cooperated with Koolhaas on the Kunsthal (Rotterdam 1992), Congrexpo (Lille 1994) and the Maison de Floriac (Bordeaux 1998); with Alvaro Siza on the Portuguese Pavilions for Expo 1998 (Lisbon) and Expo 2000 (Hanover); with Daniel Libeskind on the Imperial War Museum (Manchester 2001) and the Victoria and Albert Museum (London 2005), and with Ben van Berkel on the Arnhem Exchange (2003).

In his publication titled *Informal,* Balmond (2002) presents a series of ideas on the 'informal' as an approach to structural design within the current scientific paradigm of complexity and non-linear dynamics.

From ancient Egyptian and Chinese times to the present, space and structure have traditionally been understood in terms of Platonic solids and regular grids within Cartesian space to produce expressions of a formal, rational order. Most of the natural world; however, shows non-linear organisation characterised by patterns that are fractal and dynamic. Feedback produces slight variations or sudden jumps in organisational forms. Nobel laureate and scientist Philip Anderson said 'more is different' - denoting the phenomenon of emergence, whereby the addition of mass, energy or info to a system causes the system to reach a critical point and allow a new pattern of organisation to emerge spontaneously (Jencks 2002: 7).

According to Jencks (2002: 8), the problem of old patterns, and particularly formal ones, *is not that they are ugly but unchallenging.*

Order is endorsed as the safe fortress. But it misses the point: that the nature of reality is chance and that 'order' may only be a small, local, steady state of a much larger random (Balmond 2002: 115).

Balmond (2002: 14) reconsiders structure as reduction and regulation - *necessary evils out of a Cartesian logic* - and proposes instead of line - surface; instead of equi-support - scatter; instead of fixed centre - a moving locus, and instead of points - zones. His work has common characteristics: *in each case the intervention that influences the design is a local forcing move, or a juxtaposition that stresses rhythm, or two or more events mixing to yield hybrid natures*. Effects are multiplied by extension or overlapping to produce surprising and ambiguous answers that rely on interdependence rather than traditional hierarchy.

According to Balmond (2002:72), *a considered unique path of structure is often more valid than the unquestioned assumption of a distributed solution, subdivided equally through a cross section or plan… Dedication to the limited language of high-tech mast and cable, or subservience to orthogonal post and beam, needs questioning. Such configurations say explicitly: 'I am machine. I am reduced skeleton.' Better to claim: 'I am the thread propelling a story' and have structure as a generating path, rather than lay an unthinking grid map of columns and beams over the subdivision of space.*

manifesto

Berlin June 1995

The *informal* is opportunistic, an approach to design that seizes local moment and makes something of it.

Ignoring preconception or formal layering and repetitive rhythm, the *informal* keeps one guessing. **Ideas are not based on principles of rigid hierarchy but on an intense exploration of the immediate.**

The more subtle approach is to seek the notion that chaos is a mix of several states of order. What is an improvisation is in fact a kernel of stability, which in turn sets sequences that reach equilibrium. Several equilibriums coexist. **Simultaneity matters, not hierarchy.**

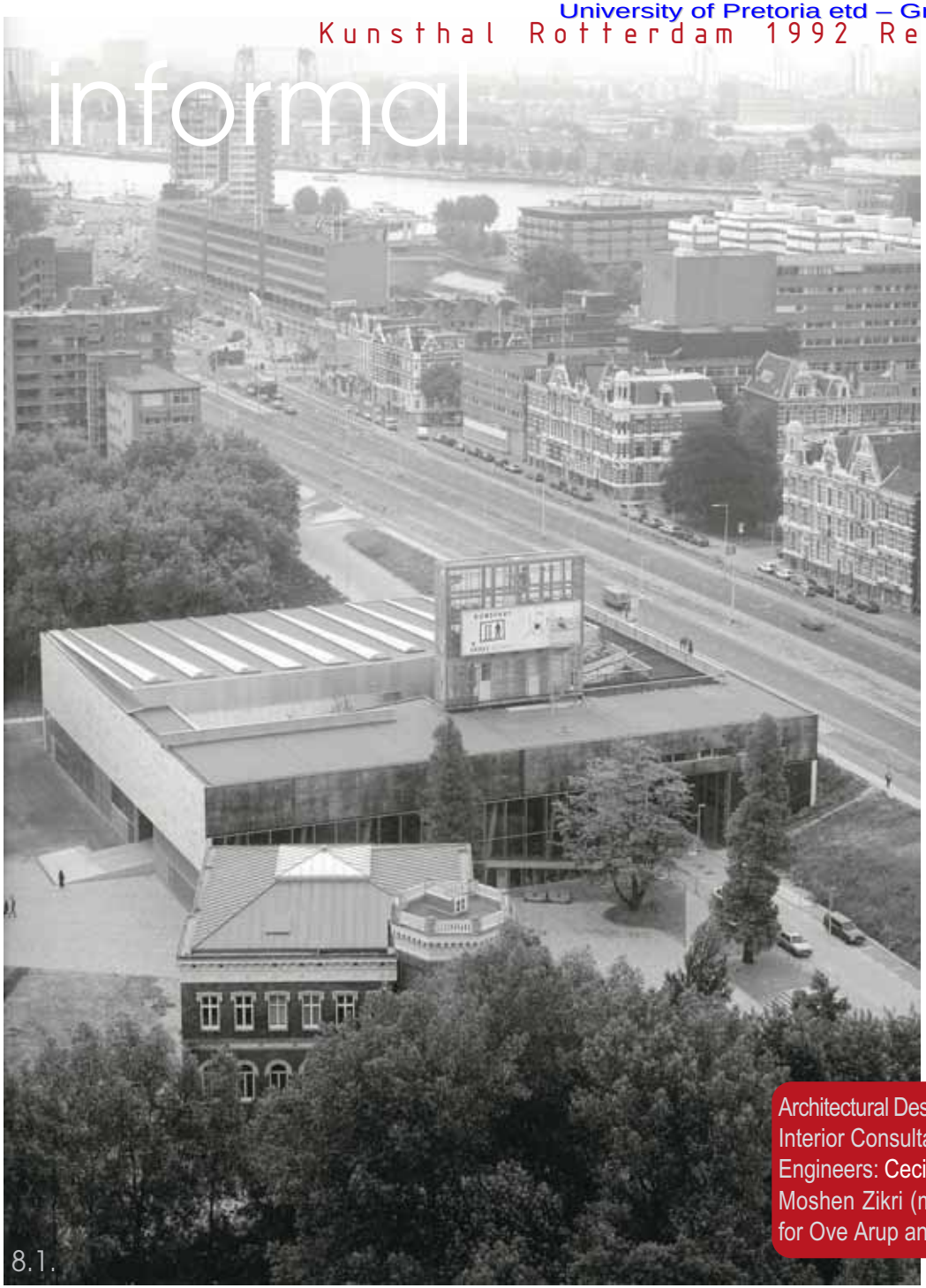
It is not an ad hocism, which is collage, but a methodology of evolving start points that, by emergence, creates its own series of orders.

When we attempt to trap chaos and convert it to our preconceptions, **Order! becomes an enormous effort.** We try to eliminate fault or error. We try hard but the effort turns to dullness and the heavy Formal.

The *informal* has three principal characteristics: local, hybrid and juxtaposition. They are active ingredients of an animate geometry that embraces the linear and non-linear. Both Cartesian and post Einsteinian geometry are encompassed by it. **The *informal* gives rise to ambiguity. This means interpretation and experiment as a natural course of events.**

Balmond 2002: 220-7.

informal

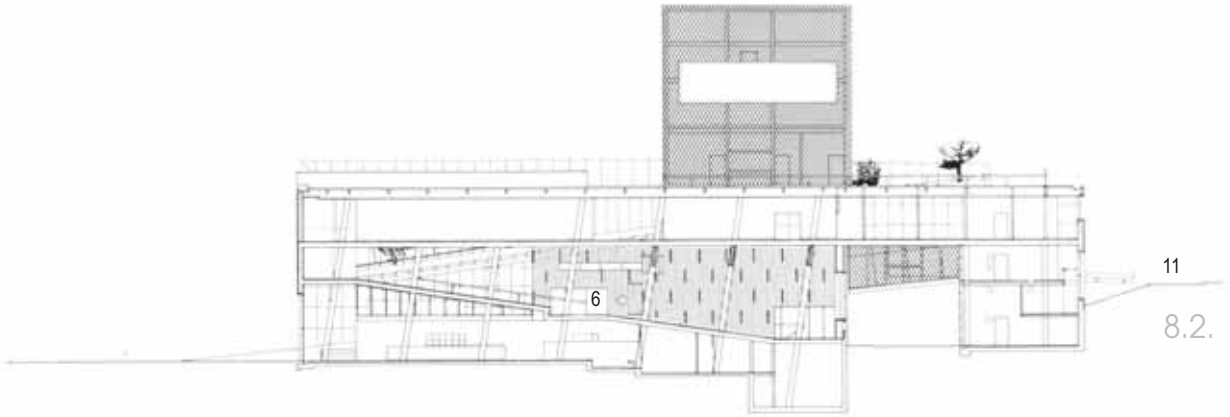


8.1.

Architectural Design: Rem Koolhaas, Fuminori Hoshino
Interior Consultant: Petra Blaisse
Engineers: Cecil Balmond, Mirvat Bulbul (structural); Moshen Zikri (mechanical), Mike Booth (electrical) for Ove Arup and Partners.

3.7. Kunsthal, Rotterdam

3. Ramp outside.
4. Main entrance.
5. ticket Office.
6. Entrance Hall.
7. Hall 1.
8. Lower gallery.
9. Ramp inside.
10. Staff entrance.



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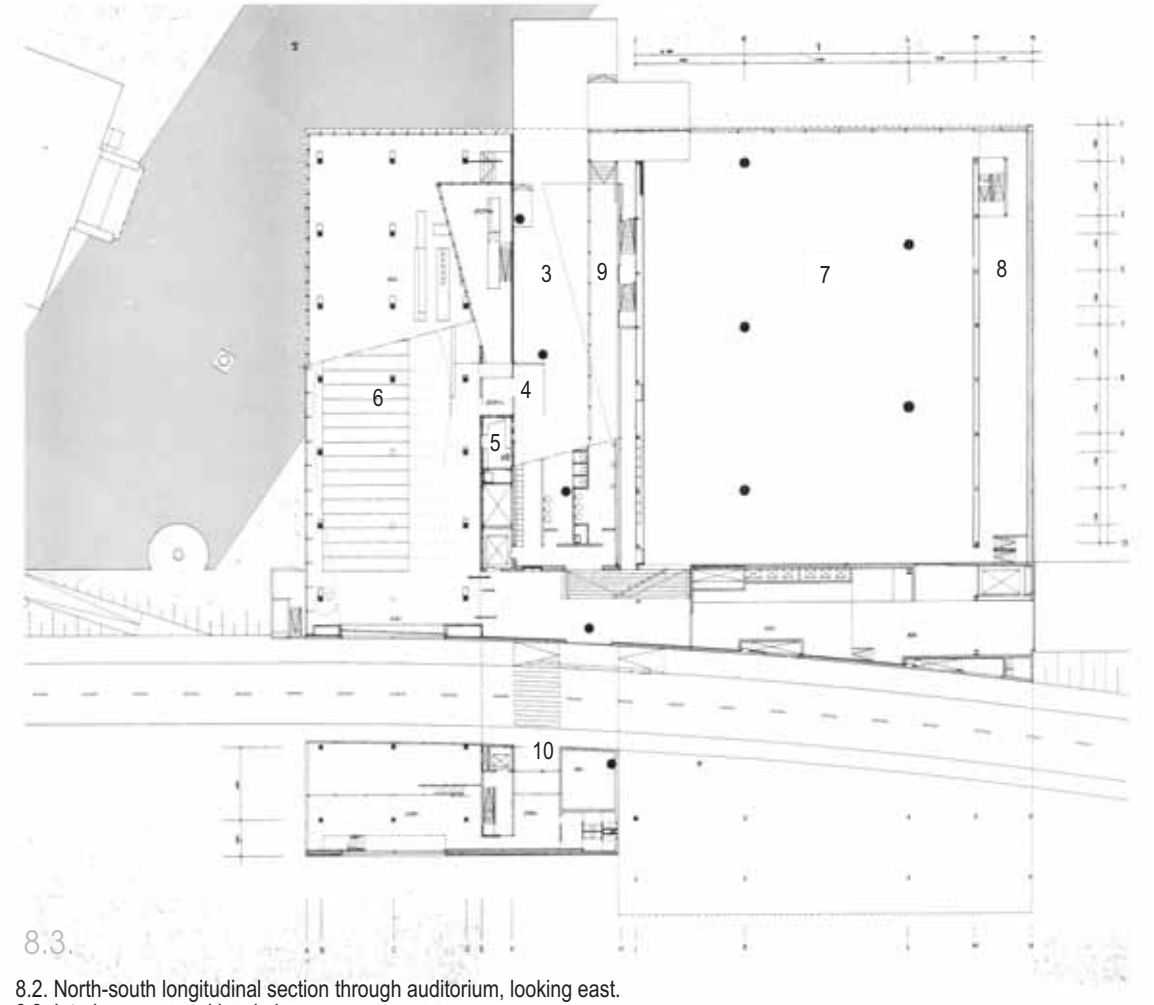


8.3.

8.2. North-south longitudinal section through auditorium, looking east.
8.3. Interior cross road level plan.

I investigate Balmond's approach in the Kunsthal, Rotterdam (Rem Koolhaas/OMA 1992). The program demanded three major exhibition spaces - to be used jointly or separately - an auditorium, and an independently accessible restaurant. The Southern edge is bordered by the Maasboulevard, a highway on top of a dike, while the northern side faces the Museum Park. The building was conceived as a square crossed by two routes: a road running east-west, parallel to the Maasboulevard, and a public ramp extending to the north-south axis of the park. The crossings divide the square into four parts. The concept is a continuous circuit - a sequence of contradictory experiences in a continuous spiral comprised of four separate squares.

The pedestrian ramp is split with a glass wall, separating the outside - a public space - from the inside - which forms part of the circuit. A second ramp, running parallel and reversed, is terraced to accommodate an auditorium, and beneath it the restaurant. On the level where the two ramps cross, the main entrance is defined. From there the visitor enters a second ramp which goes down to the park level and up to the dikelevel. Approaching the first hall, one confronts a stairway and an obstructed view which is gradually revealed - a landscape of tree-columns with a backdrop of greenery framed. From there the visitor follows the inner ramp leading to hall 2, a wide skylit space facing the boulevard. A third ramp along a roof garden leads to a more intimate single-height hall and further on to the roof terrace.


8.4.


8.5.

8.4. West Elevation.
8.5. Hall 1.

Hall 1 of Kunsthal was initially conceived as a symmetric and four-square partitioning of space and column support; creating an inner enclosure surrounded by an outer promenade. Then one row of columns was allowed to slip past the other - a small syncopation that undid the containment to allow each column to become an independent and timber-clad entity within a single unified space that travels through an end glass wall to melt into the park outside (Balmond 2002: 76-79).

At the Kunsthal's street entrance, three columns are juxtaposed: one square in concrete, one a steel I section, one a castellated I section. The configuration arises *due to separate roof loads being supported directly and not ironed out in hidden transfer structures to give a single point of support* (Balmond 2002: 82).

There is no pretence of neatness; instead: animation, a slight disturbance, an off-beat pulse.


8.6.

8.7.

8.6. Ramp with auditorium above, restaurant below.
8.7. Entrance.

About the ramp, Balmond (2002: 101) writes:

> *A ramp is a luxury. It travels through time, collecting moments of arrival and departure, its line through space touching all parts and mixing adjacencies. By nature it is an open vessel that defies containment…*

Columns are placed obliquely to the ramp's line of travel to provide release and a continuous mode of instability. The resultant overturning force is countered by the inclined slab of the ramp and lecture theatre to produce a self-sustaining network of bending and direct forces. Short stiff and long flexible elements are juxtaposed above and below the sloping plane (Balmond 2002: 80-1). On ground level, the ramp columns impede the journey, forcing visitors to dodge them and meet changing perspectives.

8.8. Lower level ramp.

The informal steps in easily, a sudden twist or turn, a branching, and the unexpected happens - the edge of chance shows its face.

Delight, surprise, ambiguity are typical responses; ideas clash in the informal and strange juxtapositions take place. Overlaps occur. Instead of regular, formally controlled measures, there are varying rhythms and wayward pulses.

Uniformity is broken and balance is interrupted. The demand for Order! in the regimental sense is ignored: the big picture is something else.

Balmond 2002: 111.

contents

Warwick Junction is comprised of Berea Road Rail Station, Victoria Street Bus Terminus, taxi ranks and numerous formal and informal markets; bisected by urban freeways and the N3 Eliat Viaduct overhead, and now accommodates two-thirds of all informal traders in the inner city. Recently formalised facilities include the Hazrath Badsha Peer Shelter on Brook Street (Kooblal and Steyn); the Herb Traders' Stalls on the vestiges of the Victoria Street on - and off-ramps (OMM Design Workshop); the Market Road Bridge, gateway and connecting bridge to the on- and off-ramps; the Traders' Stalls on the Leopold Street Pedestrian bridge (Langa Makhanya & Associates); a facility in Warwick Avenue for cooking bovine heads, and facilities in Lorne Street for cooking mealies and selling beads and pinafores. Warwick Junction provides an outlet for around 8000 traders and their suppliers in the rural hinterland.


9.1.

Formalised facilities were superimposed on existing informal patterns of economic activity, either in-situ or, in the Herb Traders' stalls' case, at a higher level to relieve pressure on ground level circulation areas - but always with respect for the existing networks of organisation. Warwick Junction reminds of Lagos and probably represents the South African extreme as regards the occupation of interstitial spaces by the informal economy. Not surprisingly, annual turnover is estimated at between R750 million and R1 billion (Dobson 2001: 6). A comparison with the annual turnover of the Pavilion shopping Mall - around R1,2 billion - provides an indication of the essential role the informal sector plays in Durban's economy.


9.2.


9.3.

9.1. Herb Traders' Stalls: OMM Design Workshop.
9.2. Traders' Stalls on Leopold Street Pedestrian Bridge: Langa Makhanya & Associates.
9.3. Herb Traders' Stalls: OMM Design Workshop.

9.4.

The **Faraday Precinct** (Albonico and Sack with MMA Architects), situated along the Eloff Street extension in the south-eastern sector of the Johannesburg CBD, has been identified as one of the city's major multi-modal transport and informal trading hubs. An established muti-market has existed under the elevated M1 motorway for 10 years.

9.5.

Old industrial buildings and sheds were refurbished to accommodate the centre management and trading and consulting activities of traditional healers. Other market buildings were designed *to recreate street conditions under cover* (Albonico and Sack 2004: 32) and to be flexible in terms of future changes in use. A distinctly internalised zone, disguised by an edge of conventional retail spaces, provides privacy and discretion for traditional healing activities. The 'recreated streets' are reasonably well used and fill with busloads of buyers sporadically, especially at month ends. Activity along the streets surrounding the Faraday Precinct is severely low; however. Retail spaces along the original street edge with more private traditional healing facilities behind them could have provided similar accommodation while contributing activity to the external streets.

9.6.

The new taxi rank is a large permeable covered area. It is noteworthy that taxis continue to rank under the motorway and draw informal traders towards them, while the new rank stands empty and unused. It seems that taxi drivers prefer the cooler, 'unintended' spaces beneath the M1 to the new formalised facilities, and a question is raised as to the futility of providing new facilities when existing interstitial and unplanned spaces can suffice.

9.4. Faraday Precinct: unused taxi ranks - note taxis under motorway in background.
9.5. Faraday Precinct: Herb Market.
9.6. Faraday precinct: view of taxi ranks.

The **Metro Mall Development** (Urban Solutions) has been identified as a catalytic project to link Braamfontein in the north and the Newtown Cultural Precinct in the south. It provides ranking facilities for 25 buses and 2000 taxis; trading facilities for 800 traders and retailers, and facilities for management, storage and ablution. Formal roller-shuttered, lock-up cubicles are located along Bree Street, which is most used by pedestrians; while stalls with concrete counters are located along internal circulation streets used by commuters to access the taxi-loading areas. A number of fully-serviced outlets are provided to accommodate hairdressing salons, fast-food services and the like.

The development completes the street grid to enable continuity of movement and stitch together the surrounding urban fabric. Traders are located along external and internal street edges to ensure adequate exposure of traders to customers without having to 'recreate street conditions' or redirect pedestrian movement. Furthermore, the street is acknowledged as a public space and provided with active edges. The enormous success of the development can be ascribed to its designers having identified localised patterns of use and designed facilities - in situ - around such patterns, rather than expecting existing networks to move and adapt to imposed patterns of organisation.

The designers avoided the stereotype ephemeral ranking structure and designed a decidedly permanent building which dominates the streetscape and presents itself with a sense of pride and arrival; with a deep interior and a series of defensible spaces to create a definite sense of ownership.

The Metro Mall represents to the new African City what the station represents to the traditional European city. Murals, mosaics and other artworks by thirty South African artists add to the distinctly African character of the development.

9.7.

9.8.

9.7. Metro Mall,Johannesburg.
9.8. Sculpture: Bree Street.

The **Rockey Street Market** in Yeoville (Urban Solutions), was opened in 1999 to provide formalised facilities for informal traders then occupying the site between Rockey - and Hunter Street. It is comprised of roofed market spaces around a number of courtyards, with a number of separate trading cubicles along the side streets and in the food courtyard, and a pay-on-entry bathhouse. The perimeter is entirely permeable and provided with a covered walkway providing shade to traders and customers alike. The market is bisected by a covered walkway connecting Rockey Street with Hunter Street. Management is stationed in an office next to the bathhouse. The monthly rent for a covered trading space is around R200.

Perimeter traders have a definite advantage over traders occupying the centre of the market, especially considering that no incentive is provided to draw passers-by into the central areas. Traders obviously favour the perimeter, while the central 'destination' areas are rather less densely occupied.

The market's significance to the study is its social organisation: it is a foreign territory. Its traders - of which around 70% are from African countries outside of South Africa - are ingenuous businessmen who know one another by name and are quick to direct visitors to other traders who can supply their needs. Precise organisation and internal support structures quickly become apparent, and so does the higher-than-usual standard of hygiene in and around the market. Although some traders are unable to speak more than a few words of English - limiting interaction with South African customers to bartering - traders converse freely with one another in French, Portuguese and other African languages. According to a trader from Uganda who had been trading on the site before the market was erected, conflict between local and foreign traders has abated considerably since the market's completion. This territory on Rockey Street has been claimed by foreigners and turned into a highly and economically profitable **cultural stronghold**.

9.9.

9.10.

9.9. Covered trading area.
9.10. Rockey Street perimeter.

Despite such efforts to formalise the street-trading community of the inner city, a new generation of informal traders occupies street corners and sidewalks throughout the inner city. While traders in centralised facilities benefit from shelter and infrastructure, mobile street-corner traders are able to reach their customers on their doorsteps, avoid competition and save overhead costs. No amount of 'formalisation' will remove the informal from the streets of South African cities: as soon as one trader moves into formalised facilities, his place on the street is taken by an entry-level trader. This pattern will remain a feature of the South African City for many years to come. Continuous formalisation will however remove an ever increasing segment of retail activity from traditional shopping complexes to markets such as Warwick Junction and the Metro Mall, which exist on the threshold between the formal and informal.

opportunism

9.11.

9.11. Informal trade: Kapteijn Street, Hillbrow.

Bellevue Road Campus, Kloof 2002 OMM Design Workshop.

Architect: OMM Design Workshop
Project Team: Andrew Meiken and Janina Masojada
Contractor: JT Ross and Son
Structural Engineer: May Houseman & Associates
Horticulturist: Geoff Nichols
Awards: KZ-NIA 2001 Award of Merit
SAIA Award of Merit 2001

9.12. View towards north of courtyard.

The **Bellevue Road Campus** for Electric Ladyland Properties (OMM Design Workshop) was commissioned by the International Trend Institute, an agency which follows and predicts international tendencies in the visual arts, fashion, design and lifestyle concepts in order to provide advise on their local application.

An existing house on the site anchors the composition of three new buildings around a shallow water pond - originally the swimming pool - the orientation of which corresponds with that of the original house. After consultation with a horticulturist, the new buildings were carefully inserted between existing trees and shrubs. The new buildings are informally placed around the formal water garden to create an informal outdoor room that enjoys a definite sense of enclosure while being imbued with a particularly dynamic quality. Two rows of original stone columns provide a secondary anchor and intersect the new geometries; thereby illustrating a layering of building fabric over time.

A series of thresholds establish distinct gradations of privacy. A first threshold is created by the entrance gate and existing trees along the perimeter fence. Visitors enter a graveled parking area to which the complex presents a soft but impenetrable façade that is broken by two controlled undulations and a series of anonymous windows. Orientation is clear – a single entrance and second threshold is announced by an in-situ concrete portico that is adorned by a sculptural element on the courtyard's side. Orientation remains clear throughout the campus – entrances are announced, but never proclaimed. A third threshold exists in the plane of the colonnades.

9.13. Existing house: South Elevation.
9.14. Site Plan

9.15. View of courtyard.
9.16. Original stone columns.

Despite the high level of accessibility within the campus a visitor, once inside the central courtyard, is passively surveyed from four sides and subtly dissuaded from wandering too far astray. A series of secondary outdoor rooms are created between the ends of the slender volumes, each providing a distinct level of privacy and intimacy. Projecting concrete surfaces and terraces are small gestures that invite the use of these rooms. The buildings present no backsides: spaces between the buildings and the perimeter fence seem coincidental, but do not read as redundant or leftover. The campus allows continuous exploration and present many surprises around its corners.

The palette of materials is mostly limited to in-situ concrete, wood, aluminium and glass. Concrete roof slabs were chosen for structural purposes: steel-and-timber floors are suspended from the roof slab by steel rods that allow floors sections to be raised to establish thresholds between 'separate' offices. The length of the building volumes defies the depth of the roof slabs [400mm to accommodate a gutter] – the slabs float effortlessly while maintaining a substantial quality. Columns are round and finished off-shutter to eliminate the costs associated with plaster and paint work. A limited budget similarly ruled out the use of factory-produced aluminium office fronts. Façade sections were factory-glazed but bolted together and sealed on site. Timber façade sections are neatly crafted and seem to be weathering well. Plastered surfaces, timber finishes and white textile sunscreens provide softer feminine elements against the in-situ concrete and face brick elements. Balustrades and smaller structural elements are 'made' in galvanised steel with simple and honest connections to concrete surfaces and aluminium sections. The workmanship is not flawless – the in-situ concrete tends towards the familiar patchy character and steelwork is messy in places – yet the result is delightfully tactile and has a markedly 'assembled' quality.


9.17.


9.18.

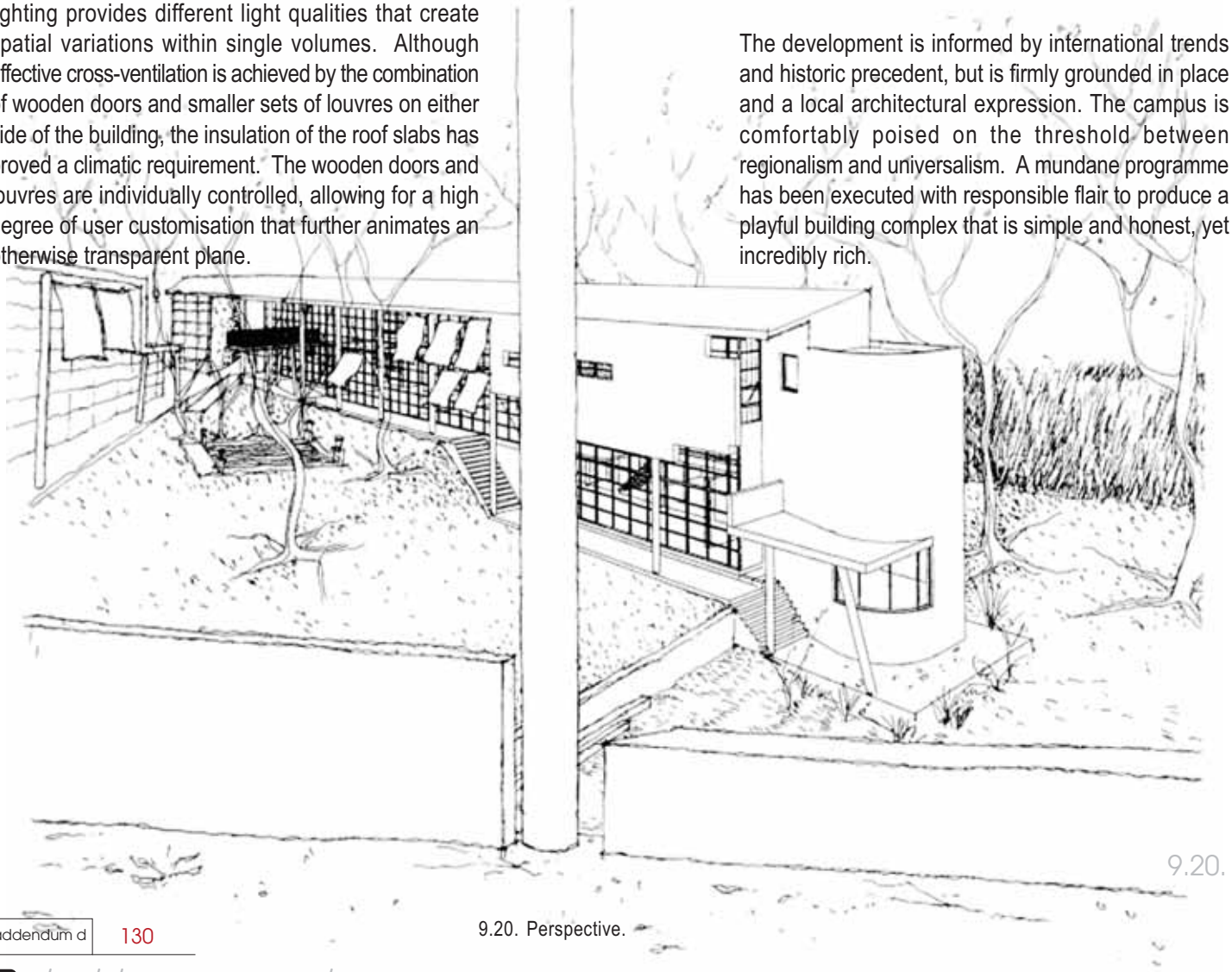

9.19.

9.17-18. Integration of buildings and existing trees.
9.19. View of interior: ITI Building.

In section the three new edge buildings are almost identical and characterised by solid edges along the perimeter contrasted with the transparency of full curtain walls facing the courtyard. A projecting roof slab and the series of canvas screens shade the nearly fully glazed curtain wall. The section depth is a function of natural light penetration from the envelope sides. A twelve meter section depth is illuminated naturally from two sides, while a split in roof slab levels ensures the mid-section introduction of soft natural. The configuration of louvres, windows, sunscreens and top lighting provides different light qualities that create spatial variations within single volumes. Although effective cross-ventilation is achieved by the combination of wooden doors and smaller sets of louvres on either side of the building, the insulation of the roof slabs has proved a climatic requirement. The wooden doors and louvres are individually controlled, allowing for a high degree of user customisation that further animates an otherwise transparent plane.

Remarkable flexibility is achieved by the simple yet innovative use of basic materials in standard sizes and profiles. For example: the unapologetic cable trays suspended from the spinal concrete frame also serve as anchors for standard fluorescent lights that can be moved, extended and multiplied as lighting requirements vary. Mid-section staircases and walkways can be moved and extended at will to allow flexibility according to varying circulation requirements. Walkways of wooden slats allow ventilation and the filtering of natural light between first and ground floor.

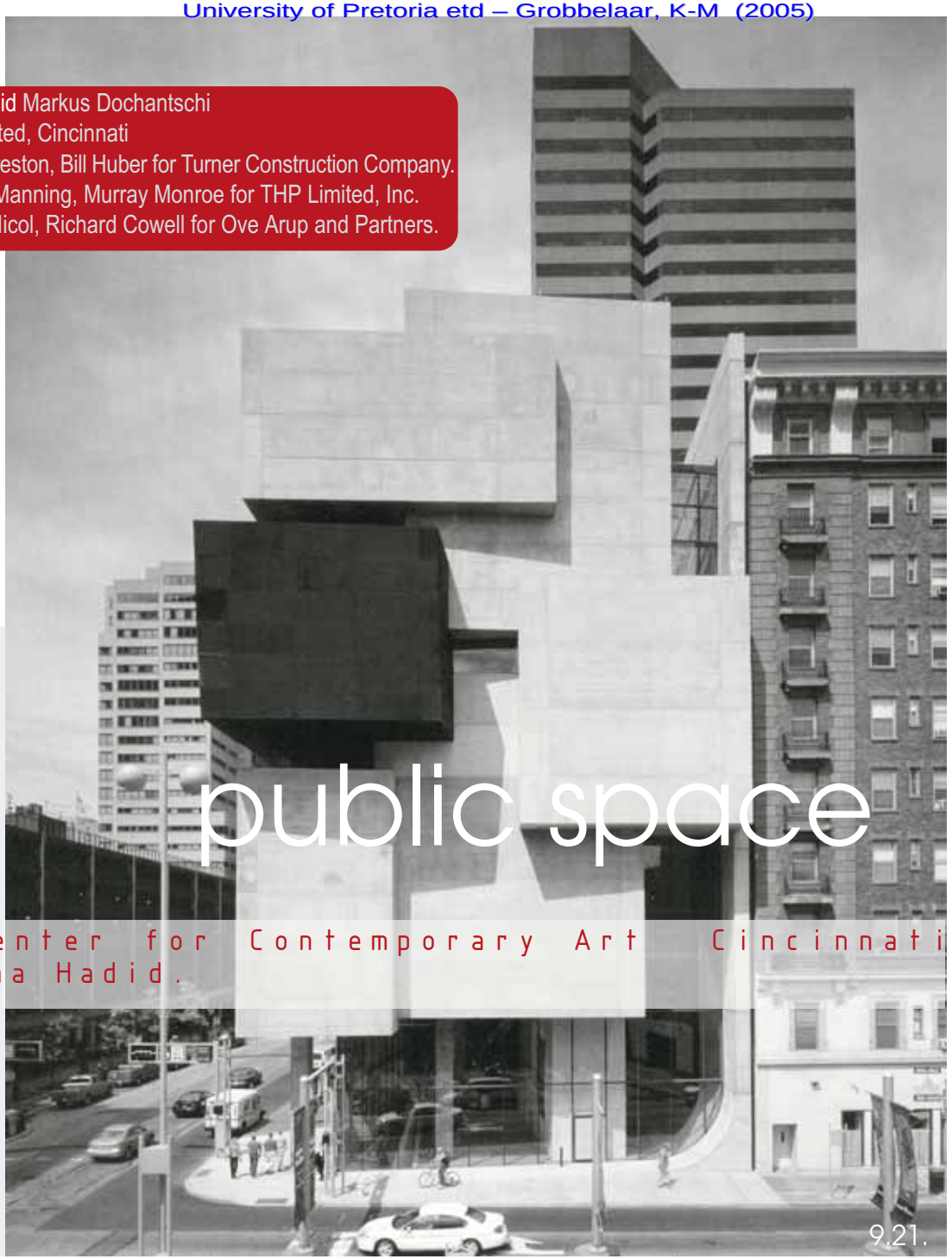
The development is informed by international trends and historic precedent, but is firmly grounded in place and a local architectural expression. The campus is comfortably poised on the threshold between regionalism and universalism. A mundane programme has been executed with responsible flair to produce a playful building complex that is simple and honest, yet incredibly rich.



9.20.

9.20. Perspective.

Competition Design: Zaha Hadid Markus Dochantschi
Local Architect: KZF Incorporated, Cincinnati
Construction Manager: Craig Preston, Bill Huber for Turner Construction Company.
Structural Engineers: Shayne Manning, Murray Monroe for THP Limited, Inc.
Acoustic Consultant: Andrew Nicol, Richard Cowell for Ove Arup and Partners.



9.21. Eastern Elevation.

The Contemporary Arts Center is committed to programming that reflects "the art of the last five minutes". It has earned a reputation for introducing new ideas into the community, fostering a dialogue on important issues, and supporting free inquiry by presenting the work of diverse artists in various media from around the world. In 1998, Zaha Hadid was selected from a list of 12 architects, including Herzog & de Meuron, Steven Holl, Toyo Ito, Rem Koolhaas, Daniel Libeskind, Eric Owen Moss, Jean Nouvel, Antoine Predock, Wolf Prix and Bernard Tschumi, to design the Rosenthal Center for Contemporary Art on the corner of Walnut and East Sixth Streets in downtown Cincinnati's backstage district.

As the Center has no permanent collection, its programme made provision for the unpredictable nature of temporary exhibitions. According to Hadid, artists have over the past thirty years been engaged in a sometimes covert, always critical relationship to the institutions that ultimately house their works. Instead of a 'neutral box' to exhibit objects in space, Hadid proposed that multiple perceptions and distant views could create a richer, more perplexing experience, taking the body through a journey of compression, release, and reflection. It is a public institution, located in a burgeoning downtown cultural district. As such, Hadid believes it to have responsibilities to the passerby as much as to private clients. She therefore sought to create a vibrant and active ground floor.

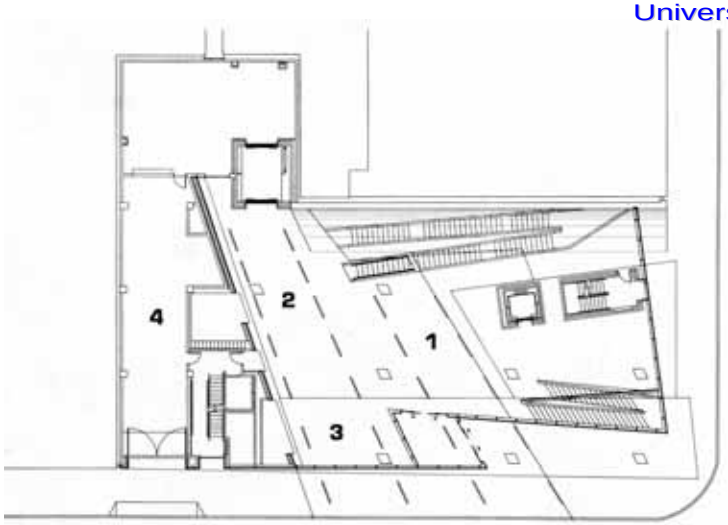
9.22. South-eastern perspective view.

The existing city grid is pulled into the Center at ground level and allowed to curve slowly upward. Upon entry, it seems that the ground is rising to become the back wall of the Center - there is one continuous surface between the street outside and the wall inside, which Hadid refers to as the 'Urban Carpet'.

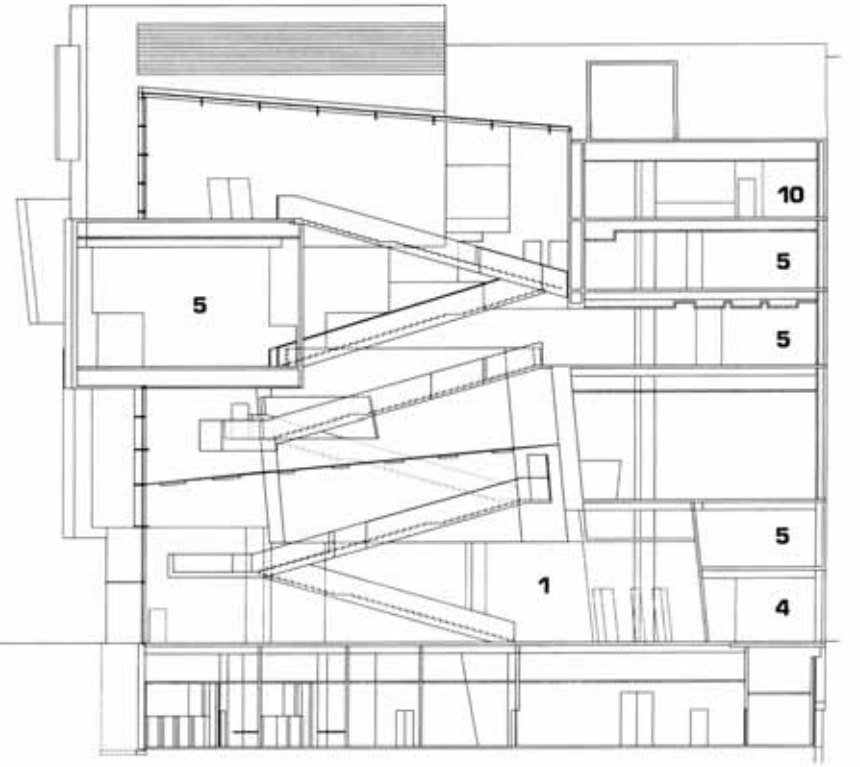
The lobby of the Center is envisioned as an artificial park - an open, daylit, 'landscaped' expanse. The Urban Carpet, developing directly from the existing pedestrian flow at Sixth and Walnut, becomes public space, a circulation system, and a partition to provide for both movement and static spaces for meeting. The carpet rises and turns to lead visitors up a suspended mezzanine ramp through the full length of the lobby, to the point where it penetrates the Carpet Wall and becomes a mezzanine landing. Another ramp leads from a cut in the lobby floor space to the lower level. Movement is transformed into space which rises and falls, cutting back and forth.

The lobby, museum shop and lower level café are 'free' public spaces that can be used independently from the rest of the Center for receptions or film screenings when the rest of the Center is closed. Ticket control is located where the Urban Carpet penetrates the wall and becomes a mezzanine landing. Although the 'free' zone ends here, the ceiling of the lobby is perforated to allow visitors glimpses of the galleries above and of the visitors flowing up and down the ramps.

9.23. Lobby with Urban Carpet.



9.24. ground-floor plan ——— 24'



9.25. east-west section ——— 20'

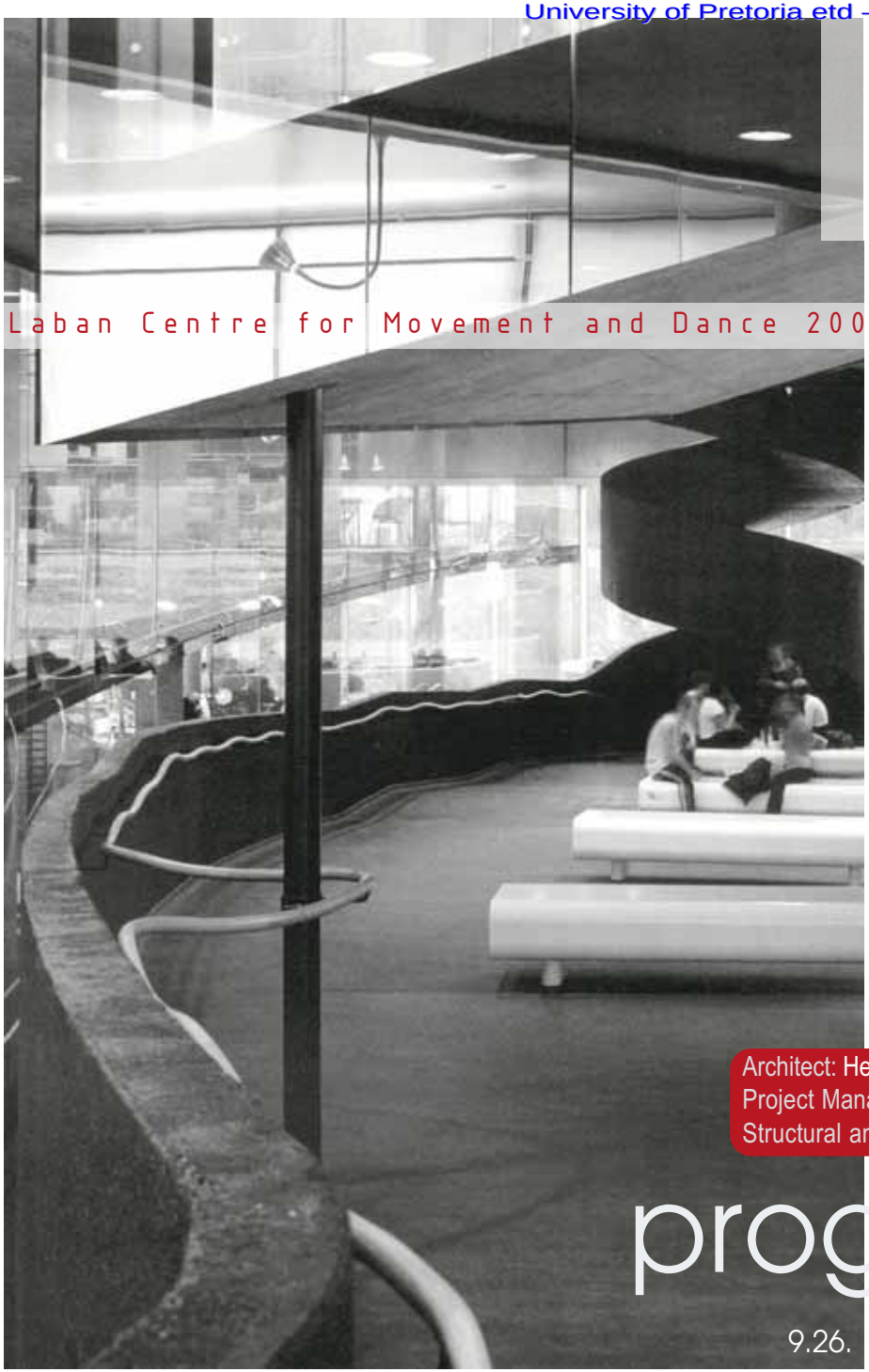
In contrast to the Urban Carpet, which is a series of highly polished, undulating surfaces, the galleries seem raw, carved from a single block of concrete and floating over the lobby space. As the stair-ramp zig-zags upward through a narrow slit at the back of the building, visitors confront unpredictable views of the galleries. The varying galleries interlock like a three-dimensional jigsaw puzzle of solids and voids, with flexible wall elements serving to subdivide larger spaces.

The UnMuseum sits on top of the two floors of galleries, and is given a sense of independence, while the staff facilities are treated as translucent objects, forming an undulating skin along the East Sixth Street side of the building and providing daylit working environments and city views. The two façades are distinct but complementary. **The south façade offers an animated and irregularly inhabited skin with gallery spaces as billboards for art and offices to put civic life on view.** The east façade is a sculptural relief that provides an imprint, in negative, of the gallery interiors. (www.contemporaryartscenter.org/newbuilding)

The scheme's relevance to the study lies in Hadid's treatment of the public aspects of a building in an urban context similar to that of Hillbrow.

Lobby 1.
Reception 2.
Shop 3.
Loading 4.
Gallery 5.
UnMuseum 10.

9.24. Ground Floor Plan.
9.25. East-West Section.



Laban Centre for Movement and Dance 2003 Hertzog & De Meuron.

Architect: Hertzog and De Meuron
Project Manager and Specialist Consultants: Ove Arup
Structural and building services engineer: Whitby Bird.

programme

9.26.

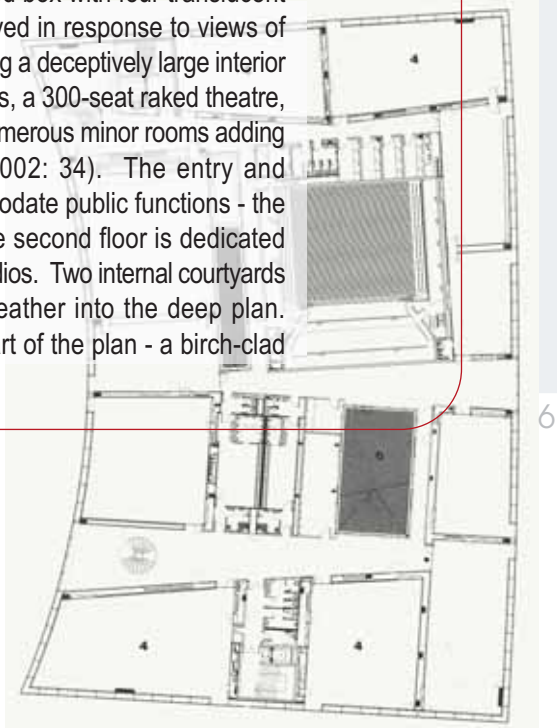
9.26. View of foyer.

9.27.

The **Laban Centre for Movement and Dance** (Hertzog & de Meuron) is set on the banks of the muddy Deptford Creek in Deptford, an industrial suburb written off as the heart of southeast London's industrial wasteland (Reid 2003: 66).

The structure is an inflected box with four translucent façades - the western curved in response to views of a nearby church - concealing a deceptively large interior containing 13 dance studios, a 300-seat raked theatre, a library, public café and numerous minor rooms adding up to 9000 m² (Spring 2002: 34). The entry and mezzanine levels accommodate public functions - the café and library - while the second floor is dedicated to the less public dance studios. Two internal courtyards introduce air, light and weather into the deep plan. The theatre lies at the heart of the plan - a birch-clad shed within a shed - with the fly-tower hidden under the roof apex to downplay the tower's rhetorical potential to signify the building from a distance (Ryan 2003: 67). Upon approach from the highway, the building first appears to be another industrial shed not all that different from its neighbours.

Two different circulation schemes are immediately established at the entrance: a spiral staircase in bush-hammered concrete and painted in gloss black lacquer, and a series of ramped streets (Reid 2003: 70). The internal streets are wedge shaped; wide enough to allow students to mill around without obstructing other people, and terminate in fully glazed openings framing wide vistas of the surrounding landmarks. They are accompanied by wavy birch handrails and colour-coded in vivid magenta, forest green and lime green to match



6.28.

9.27. Curved western façade.
9.28. Longitudinal Section.


9.29.

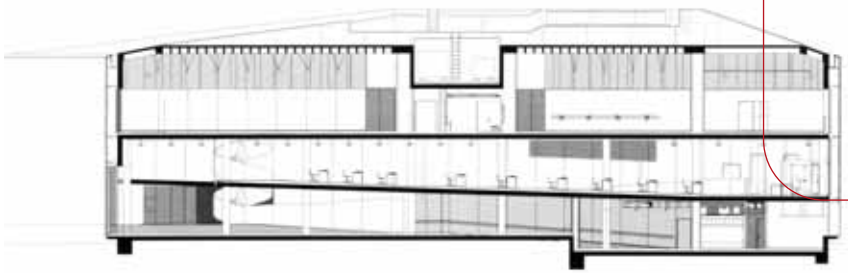

9.30.

the fainter colours of the façade and facilitate navigation through the labyrinth.

The library sits on an elevated stepped ramp that is highly reminiscent of Koolhaas's Kunsthal Rotterdam (1992). The structure is not a supershed with portals as suggested from the outside, but a concrete frame which provides a meta-narrative by means of an uneven grid. According to Ryan (2003: 78), *the odd column or beam makes an appearance contingent on the feel of each space*, again invoking the strategy Koolhaas explored with Cecil Balmond at the Kunsthal.

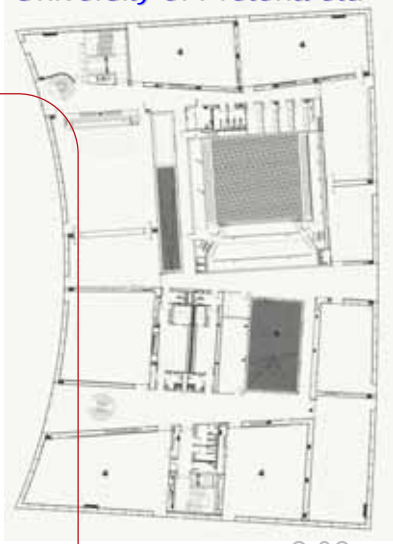
The dance studios were fitted with a sprung flooring system consisting of 2 x 2 m plywood panels laid on compressible foam pads and covered in a fleece-backed vinyl sheeting. The total thickness is 40 mm, which provides sound insulation and the required sponginess The concrete studio walls were covered in gray sound-absorbent rockwool panels stapled to battens on the concrete and lined with gray Spider fabric, which resembles the concrete below (Spring 2002: 33).

The volume is wrapped in a double-skin - an outer sheet of polycarbonate and an inner layer of translucent glass which is fixed to the concrete frame and brick walls of the building proper - containing an acoustic and thermal buffer with vents top and bottom. Doors from the rooms behind allow occupants to introduce or release heat (Reid 2003: 67). The polycarbonate panels were delivered to site at the full 14m height of the building and clipped together using a hidden waterproof tongue and groove joint (Spring 2002: 33). They are


9.31.

9.29 - 30. Interior views of stepped library and internal street.
9.31. Cross Section.

1. Theatre
3. Café
4. Dance Studio
5. Office
6. Void
7. Meeting Room



9.32.

9.33.

tinted in lime, turquoise and magenta to create blurry swatches of washed-out colour.

During the day, light passing through the polycarbonate provides a coloured backdrop to the translucent glass walls of the dance studios. At night, the entire building glows like a Chinese lantern as the backlit glass becomes transparent and the dancers' moving shadows are projected onto the coloured polycarbonate surfaces. Windows punctuating the polycarbonate are mullionless mirror-glass. In daytime, these windows obscure views of the interior from passers-by to reflect the surroundings while, at night, they frame dancers moving in the luminous interiors. The internal partitions between the studios and internal streets are in clear glass to fully reveal dancers to staff and students circulating through the building.

The double-skin cladding system, in addition to being pragmatic and relatively inexpensive (Reid 2003: 67), creates a powerfully ambiguous and ever-changing relationship between spectator and spectacle. The overlays of transparency, translucency and reflection creates a light quality which renders even flat surfaces and hard edges curiously insubstantial (Spring 2002: 36).

Although external landscaping still awaits funding, the site's decontaminated excavated soil has already been shaped into massive berms, indicating the intention to use the outdoor spaces as amphitheatres (Reid 2003: 78).

The project was funded by an arts lottery grant and additional grants from a network of local and public authorities (Spring 2003: 38). The Centre comes with goals to reach out to the local community through dance classes for children, teenagers and mothers with babies. While Deptford has gained a vibrant focus for its local community, the sponsors of the development are pinning their hopes on Laban to act as a catalyst for regeneration of the greater Deptford area.

9.32. Ground Floor Plan.
9.33. Upper Floor Plan.

9.34. Daytime view of Dance Studio.

contents

Ground Floor	
Craft Workshop	
Area	290 m²
Projected Uses	Craftwork, Light Industrial Activity, Trade
Classification of Occupancy	B2
Population	60
Sanitary Fixtures (Required)	Male: 1 WC's, 2 Urinals, 2 HWB's Female: 3 WC, 2 HWB's
Required Lighting Level	400 lux SABS 0114: Part I-1973
Critical Aspects	Robust floor and envelope Maximum flexibility Maximise public interface for commercial purposes Passive climate control to minimise overhead costs Disabled access
Foyer	
Area	175 m²
Projected Uses	Events, Exhibitions, Lingering
Classification of Occupancy	A1
Required Lighting Level	50-100 lux SABS 0114: Part I-1973.
Critical Aspects	Generosity, grandeur Adjustable lighting levels Flexibility Disabled access
Multi-purpose Hall	
Area	350 m²
Projected Uses	Public Gatherings, Performances (variety), Street Theatre, Market Space.
Classification of Occupancy	A2
Population	200
Sanitary Fixtures (Required)	Male: 1 WC, 2 Urinals, 1 HWB Female: 3 WC's, 2 HWB
Required Lighting Level	250 lux SABS 0114: Part I-1973
Critical Aspects	Maximum flexibility Acoustic performance for both large and small gatherings Overflow space Controllable indoor-outdoor connection Storage for props, chairs etc. Sprung Floor in Performance Area Disabled access
Café	
Area	160 m² indoor, 275 m² overflow space
Classification of Occupancy	A1
Population	60
Sanitary Fixtures (Required)	Male: 1 WC, 2 Urinals, 2 HWB's Female: 3 WC, 2 HWB's
Critical Aspects	Finishes Circulation Overflow onto outdoor terrace
Kitchen	
Area	25 m² Work Area: 14 m² Cold Room: 3 m² Scullery: 5 m² Indoor Waste Storage: 3 m²

Required Lighting Level	200 lux SABS 0114: Part I-1973
Critical Aspects	Ergonomics Adequate ventilation Hygiene
Gallery	
Area	90 m²
Projected Uses	Entrance Foyer, Art Exhibitions, Roll Back Xenophobia Campaign
Classification of Occupancy	C1
Required Lighting Level	200 lux SABS 0114: Part I-1973
Critical Aspects	Indirect, diffused light for viewing of artworks Flexibility Disabled Access Maximum public exposure
First Floor	
Classrooms	
Area	255 m² (subdivisable), 40 m² Language Laboratory
Projected Uses	Adult Education
Classification of Occupancy	A3
Population	120
Sanitary Fixtures (Required)	Male: 2 WC, 3 Urinals, 3 HWB's Female: 5 WC's, 3 HWB's
Required Lighting Level	400 lux SABS 0114: Part I-1973
Critical Aspects	Natural Lighting Adequate Ventilation Flexibility for future use Acceptable noise levels Disabled access
Music Studios	
Area	420 m², subdivisable by acoustic sliding door or acoustic curtain
Classification of Occupancy	G1
Population	120 persons
Sanitary Fixtures (Required)	Male: 2 WC's, 3 Urinals, 3 HWB's Female: 5 WC's, 2 HWB's
Required Lighting Level	400 lux (estimated)
Critical Aspects	Acoustic Performance: Insulation, especially absorption of low frequencies, prevention of flutter echoes Adequate Ventilation Disabled Access
Art Studio	
Area	70 m²
Projected Uses:	Shared Studio Space
Classification of Occupancy	G1
Population	7 persons
Sanitary Fixtures (Required)	Male: 1 WC, 1 HWB Female: 1 WC, 1 HWB
Required Lighting Level	500 lux SABS 0114: Part I-1973
Critical Aspects	Diffused light Visual connection between indoor and outdoor Access to escape areas

Second Floor

Offices

Area	245 m² Management 40 m² Local Radio Station 35 m² Broadcasting Studio 15 m² Production Studio 15 m² Music Library 5 m² Local Newspaper (writing only) 35 m² Roll Back Xenophobia-Campaign 35 m² Rentable Office Space 55 m² Common Room (plus lounge and kitchenette) 40 m²
Classification of Occupancy	G1
Population	20
Sanitary Fixtures (Required)	Male: 1 WC, 1 HWB Female: 1 WC, 1 HWB
Required Lighting Level	500 lux SABS 0114: Part I-1973
Critical Aspects	Natural Lighting Adequate Ventilation Prevention of Glare on visual media surfaces Acceptable noise levels Access to escape areas Disabled access

Dance Studio

Area	420 m²
Classification of Occupancy	A2
Population	120 persons
Sanitary Fixtures (Required)	Male: 2 WC's, 3 Urinals, 3 HWB's, add 3 showers Female: 5 WC's, 2 HWB's, add 3 showers
Required Lighting Level	250 lux (estimated)
Critical Aspects	4250 minimum headroom Adequate ventilation Natural Lighting Visual Connection: indoor/outside connection Disabled Access Sprung Floor

Art Studios

As above

Total Sanitary Fittings Required

Male: 12 WC's, 15 Urinals, 17 HWB's
Female: 27 WC's,16 HWB's

Additional Bathing Facilities

Male: 3 showers, 3 HWB's
Female: 3 showers, 3 HWB's

Total Sanitary Fittings Supplied

Male: 11 WC's, 15 Urinals, 22 HWB's
Female: 25 WC's, 24 HWB's

The following critical performance indicators are loosely based on Jeremy Gibberd's Sustainable Building Assessment Tool (SBAT) and considered to have a direct influence on design decisions. Issues related to building management and - operation or otherwise covered by legislation such as the National Building Regulations have been omitted.

Social

Community Building

The primary objective of the development is the creation of a cultural stronghold for Hillbrow's foreign communities. The development will create a 'foreign domain', accessible socially and economically only by South Africans who are willing to discard their xenophobic sentiments. The boundary of the domain effectively becomes the threshold between the public and semi-public domain.

The building should be programmed to multiply chance encounters between strangers and facilitate interaction

_between foreigners - to build cohesive foreign communities able to withstand marginalisation - and

_between foreigners and locals - to encourage South Africans to develop an understanding of foreign cultures and foster a tolerance for the presence of foreigners in Hillbrow.

In order to achieve maximum interaction, public spaces should invite lingering; while circulation routes should be wide enough to allow small groups of persons to pause and interact without creating congestion.

Ownership/Security

The prevalence of criminal activity in Hillbrow makes security an essential requirement. The public interface should be designed to encourage control of small areas of defensible territory by individuals or small groups; thereby creating micro-strongholds from which 'insiders' can passively survey and regulate the movement of 'outsiders'. All exterior spaces should be visible from at least one vantage point and provide some incentive to be claimed by an informal trader or other watchman; thereby eliminating parcels of unsafe, unkempt no-man's land. If the building is to contribute to the creation of a safe and vibrant urban environment, the public facilities which will be most frequently used, especially for nocturnal activities, should ideally be located along street edges. Outdoor areas are to be well-lit after sunset.

Education

Besides containing a number of educational facilities, the proposed development has an educational function in terms of counteracting xenophobia. The building is to provide both direct and indirect points of contact between the public and semi-public domain to create a platform for awareness campaigns and a showcase for various aspects of Hillbrow's foreign cultures.

Occupant Comfort

Thermal Comfort

As far as possible, comfortable indoor temperatures are to be achieved by passive means in order to save on HVAC costs and avoid the creation of an unhealthy artificial environment.

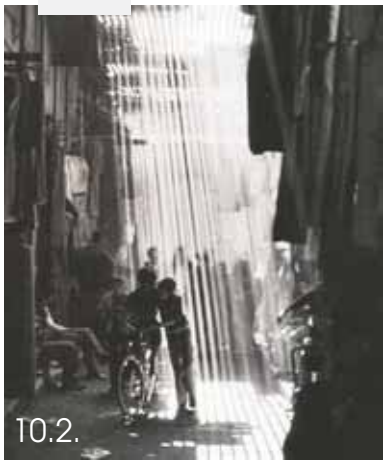
Lighting

Maximum use is to be made of natural lighting by giving façade preference to spaces requiring high levels of lighting for extended periods of the day.

Additional artificial lighting is to be provided where necessary to achieve adequate lighting levels according to the standards set in SABS 0114-1973.

Glare on visual display surfaces from direct sunlight or radiation from reflective surfaces should be avoided by adequate screening.

The mix between direct and diffuse light and the resultant light quality in individual spaces should remain a consideration throughout.



10.2.

Ventilation

Cross sections are to be designed to make effective use of natural cross-ventilation. Where necessary, natural ventilation is to be facilitated by the use of mechanical systems; while the use of air-conditioning systems should be limited as far as possible.

Interior-exterior connection

The proposed development is not intended as a fortress within the hostile urban landscape, but rather a place of meeting and interaction. Visual connections between inside and outside, besides having obvious benefits in terms of natural ventilation and daylight, promote the mental health of building occupants and allow interaction between foreign 'insiders' and xenophobic 'outsiders'.

Access to outdoor rest spaces should be provided at regular intervals and at all floor levels.

Noise

Although the development will inevitably sustain high noise levels due to its location in a busy urban environment, reasonable acoustic comfort should be ensured by

_locating the least noise-sensitive areas closer to the sources of ambient noise to act as noise screens,
_grouping noisy functions, and
_adequate insulation of noise-sensitive areas such as music studios, classrooms and offices.

Hygiene

Areas to be used for informal trade or cooking should be easily cleanable to ensure satisfactory hygienic conditions.

Inclusive Environments

The building and facilities are to conform to the standards as set out in Section S of SABS 0400-1990. Considering the proximity of a number of health-related facilities, all public spaces are to be designed to prioritise pedestrians, especially the old, infirm and children, with wide pavements, level crossings etc.

User Participation and Control

Occupants should have a reasonable measure of freedom to individualise their environments by opening/closing windows or adjusting lighting levels or internal layout. Although one should not be over-optimistic about users' willingness to manually operate passive climate control systems, user participation in systems requiring manual control should be encouraged.

Access to Facilities

Banking, communication and retail facilities are available within walking distance from informal traders and in Kotzé Street. Public transport by minibus taxi is available throughout Hillbrow, while long distance bus and taxi ranking facilities are provided within walking distance from the site around Park Station. The design of the public interface should encourage colonisation by informal traders providing a range of consumables to the building occupants.

Economic

Local Economy

Local economic development is a primary objective of the proposed development; to the benefit of both the foreign communities and South Africans who are willing to co-operate and interact with these groups. While providing a number of formal cultural facilities, the building must accommodate the informal sector to enable individuals of varying economic status to survive by personal incentive. In order to allow informal economic activity to capitalise on formal activity, formal and informal economic activity should be integrated, with informal activity occupying interstitial - and

10.3.

informal

circulation spaces rather than being centralised in 'destination' areas.

Considering the wide range of expertise, skills, materials and products available around central Johannesburg, the specifications should be limited to locally available technology and building materials so as to contribute to local economic development and minimise the building's embodied energy content; unless a well-founded motivation for the specification of such material or process can be provided.

Capital Costs

Although the cost of initial construction should be limited, high quality materials and construction is a requirement if the building is to become a 'long life-loose fit' project which can act as a catalyst for the regeneration of its urban context and in time adjust to a different pattern of use.

Although high-tech assembly and finishing procedures should be avoided, detailing should remain elegant.

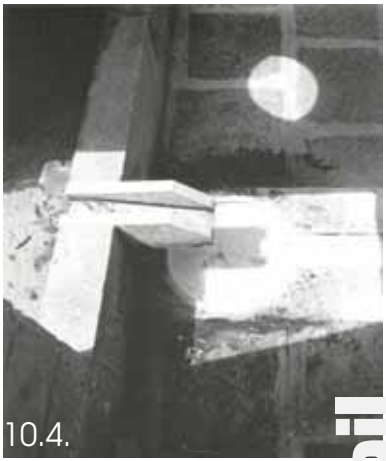
Ongoing costs

Maintenance

The building fabric is to be designed to withstand high levels of abuse and human contact, especially at ground level and along circulation routes. Because different materials decay at different rates, building layers e.g. skin, services, and structure should be 'loosely' connected to allow maintenance work on or replacement of individual layers.

Adaptability and Flexibility

The building should offer a high level of flexibility to allow adaptation to a variety user groups and patterns of use. Spaces are to offer choice, facilitating rather than prescribing activity, anticipating the unintended and informal to, in turn, be shaped by these factors. The potential for reuse of the building shell should be



10.4.

detail

historic buildings

maximised by
_careful consideration of vertical dimensions in terms of future subdivision,
_the use of non-loadbearing partitions, and
_grouping services to promote flexibility of the remaining floor area.

Exterior spaces should be highly flexible to accommodate informal economic and social activity.

Efficiency of use
The building should be adaptable for use by various users over a 24 hour period. Facilities should therefore be separately accessible to ensure security while maximising efficiency of use.

Environmental
Site
Although the site has not been built on previously, it is currently paved and can be considered a Brownfield site. Considering the value of open space in a dense urban environment such as Hillbrow's, it is important that the site not entirely lose its spatial quality. Where possible, mature trees should be conserved for their aesthetic value and microclimatic benefits. The specimens of *Quercus rubra* have historic value and must be conserved.

Neighbouring buildings
The development should respect the functioning of the adjacent Hillbrow Community Health Centre and other health-related institutions and not in any way impact negatively upon the activities of these facilities. The historically significant buildings, including the Main Block (Leith 1936), the Chapel and the Superintendent's Residence should be respected.

Materials and Components
The choice of materials and components is to be informed by the following considerations:
_embodied energy
_material/component source: renewable or not?
_environmental impact of manufacturing process of material or component
_possibility to use recycled or pre-used components
_waste during construction process
_reuse/recycling potential of material or component.

Energy
Location
The development's highly accessible inner-city location is in accordance

with sustainable development guidelines as regards providing public facilities within walking distance from residential areas or accessible by public transport within short distances of such areas.

Passive climate control

Passive control of the interior environment should be maximised to limit the economic and environmental impact of ongoing electric heating/cooling and ventilation.

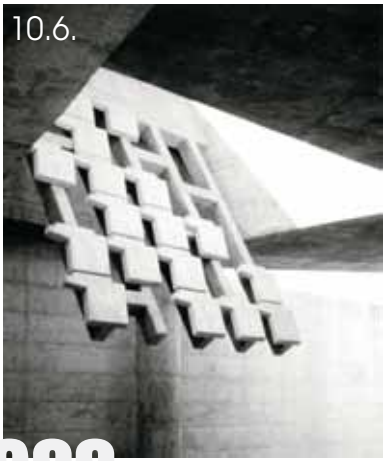
As far as possible

_high-density building mass should be applied to make positive use of the flywheel effect,

_heat gain by solar radiation should be controlled by adequate overhangs and adjustable sunscreens,

_cross-ventilation should be applied as additional cooling mechanism, and

_natural cross ventilation should be maximised through window and door openings.



Water

Runoff

Runoff into stormwater systems is to be limited by the use of permeable paving or planting in areas not to be traversed by vehicles.

Rainwater

Rainwater for the irrigation of landscaped areas should be harvested from the roof of the building.

Water use

Dual flush toilets WC units are to installed throughout the building.

Planting

Any new vegetation should be indigenous and selected to minimise the water requirements of the landscaped areas of the development.

Appliances and Fittings

Low energy consumption light fittings are to be specified throughout the building.

The table which follows contains performance requirements which were listed for individual spaces at the commencement of the design process. Prescribed lighting levels were included to enable the designer to make comparisons, but are by no means considered to be restrictive. Other quantitative prescriptions for air change rates etc. have been omitted in favour of an intuitive, common sense approach and the input of specialist consultants.

Funding and Procurement

The Seattle-based **Bill and Melinda Gates Foundation** was established in January 2000 with an endowment of approximately $26 billion through the personal generosity of Bill and Melinda Gates. The project areas of focus are Global Health, Education, Libraries and the Pacific Northwest. The foundation favours preventive approaches and collaborative endeavours with government, philanthropic and not-for-profit partners. Priority is given to grants that leverage additional support and serve as a catalyst for long-term, systemic change. Grants in 2003 were awarded to, amongst many others, the West Central Community Development Organisation, the Centre for Career Alternatives, and the Urban League of Metropolitan Seattle - a membership agency dedicated to ensuring racial, economic, political and social equity for people of colour in King County, Washington (www.gatesfoundation.org).

The **Ford Foundation** is an independent organisation and was created in 1936 **with** gifts and bequests by Henry and Edsel Ford. The Foundation aims to encourage initiatives by those living and working closest to where problems are located; to promote collaboration among the non-profit, government and business sectors, and to ensure participation by men and women from diverse communities and at all levels of society. The Asset Building and Community Development program helps strengthen and increase the effectiveness of people and organisations working to find solutions to problems of poverty and injustice. Grants support vibrant social movements, institutions and partnerships that analyse contemporary social and economic needs and devise responses to them. In 2003, grants were awarded by the Asset Buildings and Community Development Program to, amongst others, the Family institute of South Africa, the Neighbourhood Development Centre, Inc., and the South African Institute for Democracy (www.fordfound.org).

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