



D.A.G.



Durban Art Gallery



**An architectural response to traditional
and contemporary display of art:
A case study for Durban.**



**An architectural response to traditional
and contemporary display of art:
A case study for Durban.**

■ **Kyria van Soelen**

A dissertation submitted to the School of Architecture,
University of Kwa-Zulu-Natal, Durban,
In partial fulfillment of the requirements
for the degree of Master of Architecture.

May 2007



Declaration

I hereby declare that this dissertation is my own unaided work. It is being submitted to the School of Architecture, Town Planning and Housing, University of KwaZulu-Natal, Durban, for the degree of Master in Architecture, and has not been submitted before for any degree or examination at any other University.

A handwritten signature in black ink, appearing to read 'Lynne'.

17/09/2008

2007



Abstract

The role of public art galleries has internationally been revolutionized to incorporate a multiplicity of functions, resulting in a complex set of interrelationships between these. Consequently, the position of the Durban Art Gallery has changed in a quantitative and qualitative manner.

The original gallery used since 1910 was designed to house a small permanent collection of Victorian paintings. The size of the permanent collection has increased substantially and in addition, any new facility will be required to accommodate traveling and multi-media exhibitions of varying sizes. Additional educational and retail functions also need to be incorporated in order to sustain a larger public gallery.

The image of a new Durban Art Gallery will be crucial for the establishment of the cultural status of the city and will be influenced by theoretical, cultural and aesthetic factors. Similarly, the location of the new gallery and the contextual framework within which it is placed, will be vital. In addition, the needs of the Durban community will have to be established to appropriately contextualise the new gallery.

Architectural precedent studies highlight successful and unsuccessful approaches for similar design briefs, while a case study of the existing gallery establishes more detailed accommodation and environmental requirements. Design guidelines generated by this critical analysis will inform the proposal for a new contextually relevant public Durban Art Gallery.



Acknowledgements

I would like to thank the following people for their assistance and support in compiling this research document:

My supervisors and the dissertation mentors:

- Tony Wilson
- Derek van Heerden
- Prof. Ambrose Adebayo
- Prof. Derek Wang
- Alethea Duncan-Brown
- Kevin Bingham
- Prof. Walter Peters
- Deon Brewis

Durban Art Gallery

- Carol Brown: Former Curator of Durban Art Gallery
- Jenny Stretton: Acting Curator of Durban Art Gallery

A special thanks to the library and LAN staff for their continued patience over the years.

My fellow classmates with whom I have shared this challenging experience and many late nights: Saths, Rumbi, Corne, Sven, Paulette and Skura.

To my family, especially my mom:

"Baie dankie vir julle eindelose geduld, ondersteuning en liefde".



Abbreviations

■ Abbreviations used in the research

- D.A.G. Durban Art Gallery
- KZN Kwa-Zulu Natal
- CBD Central Business District
- MoMA Museum of Modern Art
- USA United States of America
- UKZN University of Kwa-Zulu Natal
- PMB Pietermaritzburg
- DUT Durban University of Technology
- KZNSA Kwa-Zulu Natal Society of the Arts
- N. P.O. Non-Profit Organisation
- A.A.C. African Art Centre



Name Changes

- The following precinct and roads names relevant to this research have recently been changed in central Durban.

Grey and Broad Streets	-Dr. Yusuf Dadoo Street
Commercial Road	-Dr. A.B. Xuma Street
Stanger Street	-Stalwart Simelane Street
Durban ICC	-Inkosi Albert Luthuli International Convention Centre Complex

The original names will be used for the purpose of the document.



Definitions of concepts

- **Paths**

Paths are established routes along which the observer may move. These include streets, walkways, transit lines, canals and railroads. The paths act as a framework within which an observer arranges the environmental images (Lynch, 1960: 47)

- **Edges**

Edges function as the boundaries between two phases such as shores, railroads, edges of development and boundary walls. Edges act as penetrable or impenetrable organizing features which define generalised areas. (Lynch, 1960: 47)

- **Precincts / Districts**

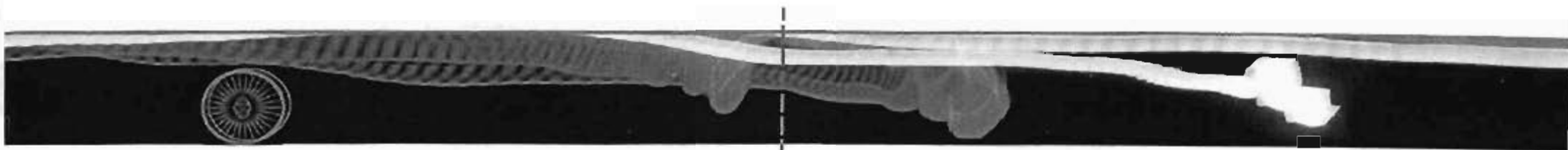
Districts consist of medium to large portions of the city which are recognisable through a common identifying factor. They are used to organize a city and as an external point of reference. (Lynch, 1960: 47)

- **Nodes**

Nodes are focal points within a city into which an observer enters. These include junctions, places of a break in transportation, a crossing or convergence of paths. Nodes may simply be concentrations as a result of a distinct physical character such as a street corner or a public square. (Lynch, 1960: 47)

- **Landmarks**

Similarly to nodes, landmarks form points of reference. The difference is that the observer does not enter them as opposed to a node but they remain external. They may consist of physical object such as buildings, signs or a mountain. Distant landmarks may be used as radial reference points. (Lynch, 1960: 49)



- **Context**

The above elements all operate together in a context. Context refers to the surrounding environment and urban framework. (Lynch, 1960: 49) The environment may either be the natural surroundings or a habitat in which a person exists. (Thesaurus)

- **Image/Imageability**

The concepts of Paths, Edges, Precincts, Nodes and Landmarks are the building blocks of the environmental image at a city scale. The built environment consists of sets of overlapped and interrelated images. A building may have a completely different image from a citywide panorama view compared to the base of the building. Images may differ according to the scale of an area involved, viewpoint, time of day and season. (Lynch, 1960: 49)

- **Legibility**

Legibility refers to the visual quality of the mental image of a city held by its inhabitants and the apparent clarity of the cityscape such as the ease with which parts can be recognized. A legible city has easily identifiable precincts, landmarks and pathways which are grouped into an over-all pattern. (Lynch, 1960: 49)

- **Form**

There are fundamental functions of which the city form may be expressive including circulation, major land-uses and key focal points. Form allows the formation of an imageable landscape which is visible, coherent and clear. The city acts as a tent which contains multi-purpose and shifting functions. This requires certain flexibility within the city form to allow an observer to physically reshape his domain into different forms. (Lynch, 1960: 49)



Contents

Title Page	I
Declaration	II
Abstract	III
Acknowledgements	IV
Abbreviations	V
Name Changes	VI
Definition of Concepts	VII
Contents	IX

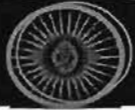
Chapter 1: Introduction to research topic	1
1.1 Context	2
1.2 South African Context	5
1.3 Motivation of Study Topic	11
1.4 Broad Problems	12
1.5 Conclusions	14

Chapter 2: Research Questions and methodology	15
2.1 Introduction	16
2.2 Key Questions	16

2.3 Methodology	18
2.4 Hypothesis	19
2.5 Aims and Objectives	20
2.6 Conclusions	20

Chapter 3: Literature review and theoretical framework	21
3.1 Introduction	22
3.2 City	23
3.3 Image and Architectural Expression	23
3.4 Environment	26
3.5 Site	28
3.6 Public	28
3.7 Artworks	30
3.8 Conclusions	32

Chapter 4: Precedent Studies	33
4.1 Introduction	34
4.2 MoMA	36
4.3 Burda Collection Museum	41
4.4 Walker Art Centre	46
4.5 Character Precedent: De Young Museum	52
4.6 Conclusions	53



Contents

Chapter 5: Case Study 57

5.1	Introduction	58
5.2	Durban Art Gallery	58
5.3	Conclusions	71

Chapter 6: Developing the Brief 72

6.1	Introduction	73
6.2	Influencing factors	73
6.3	Current Functions	74
6.4	Usage Patterns	75
6.5	Additional Functions Required	76
6.6	Environmental	77
6.7	Technical	77
6.8	Brief	79

Chapter 7: Site analysis and context 81

7.1	Introduction	82
7.2	Context	82
7.3	Site selection criteria	83

7.4	Urban design goals	83
7.5	Public transport system	84
7.6	Site proposals	84
7.7	Conclusions	86

Chapter 8: Conclusions and recommendations 87

8.1	Location	88
8.2	External Expression	89
8.3	Functional Organisation	90
8.4	Spaces	92
8.5	Exhibition	93

Illustrations 95

Sources 104

Bibliography 106

Appendices

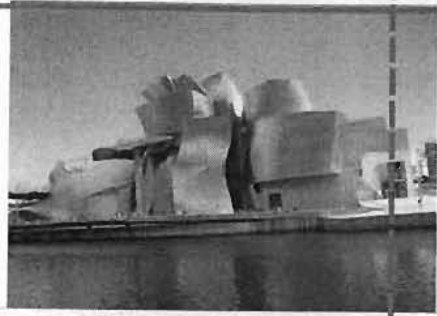
A:	Interview Schedule
B:	Schedule of accommodation
C:	Urban precinct selection chart
D:	Design Report



1

Introduction to research topic

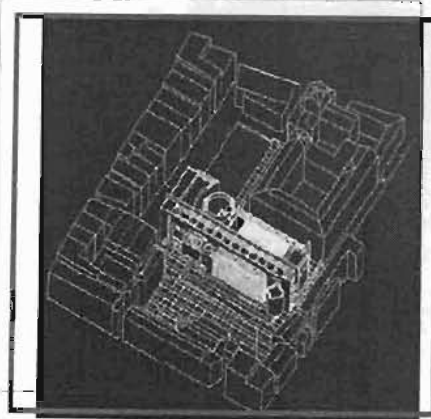
- 1.1 Context
- 1.2 South African Context
 - 1.2.1 Regional
 - 1.2.2 University and Corporate
 - 1.2.3 Commercial and Non-Commercial
- 1.3 Motivation of Study Topic
- 1.4 Broad Problems
- 1.5 Conclusions



ILL. 1: Bilbao Guggenheim Museum, elevation from river showing folded titanium skin Ref: Thau, C. *The spectacular museum*. 2004, Arkitektur DK 4



ILL. 2: Vienna Guggenheim Museum, indicating a public road and bridge running through the museum Ref: www.hanshollein.com



ILL. 3: Aerial view of the Barcelona Modern Art Museum inserted into the urban fabric Ref: www.richardmeier.com

Introduction

1.1 Context

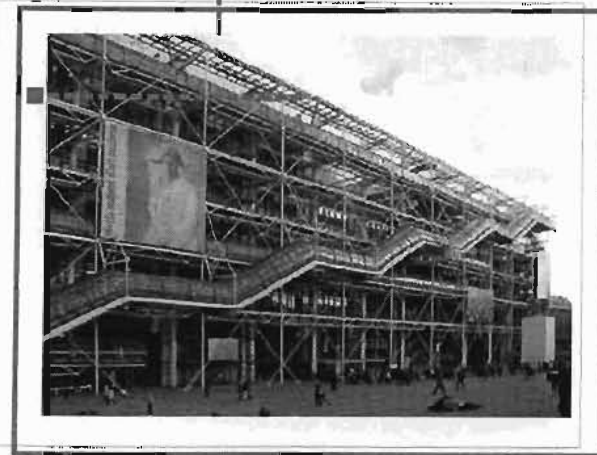
There has been an increase in the building of public art galleries internationally from the mid-1970's, escalating over the last 20 years. King (2006 interview: appendix A) holds that this is partly due to the recent trend for cultural and educational buildings such as galleries and universities, to be an expression of the marketable status of a city or region. Traditionally, religious or civic buildings communicated the viable status of a town.

The cultural status of a region is established by the spectacular nature of signature buildings such as the Guggenheim Museum (ill. 1) at Bilbao, Spain, 1997 by Frank Gehry. Thau (2004, p: 14) states that signature buildings place regions or cities on the cultural map and act as strategic financial devices in urban regeneration schemes. The Guggenheim Museum in Vienna, 1994, by Hans Hollein (ill. 2) and Richard Meier's Museum of modern art in Barcelona, 1995, (ill. 3) similarly rejuvenates fragmented city structures.

Jencks (1997, p: 33) holds that contemporary museums are seen as the cultural focal point from which society can simultaneously mirror the way it perceives itself and be a symbol



ILL. 4+5: Interior volumes of the Natural History Museum in London, indicating a similar structural system and spatial quality as within a cathedral. Ref: Jencks, 1997p: 36

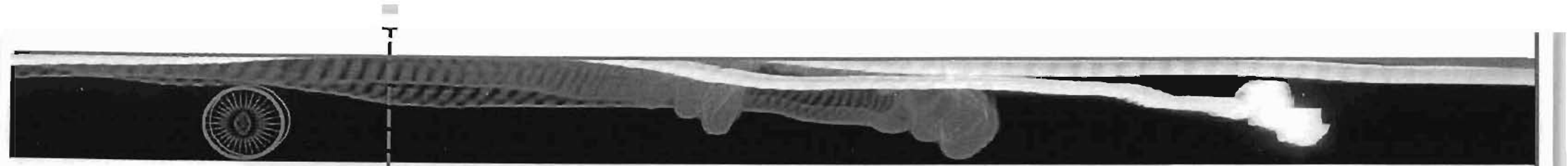


ILL. 6: Main elevation of the Pompidou Centre, indicating the architectural language and the external circulation system, the large public plaza is visible in the foreground. Ref: www.pompidou.com

of commercial and cultural achievement to the outside world. The decline in organised religion and contemporary secular society has resulted in cathedrals and churches being replaced with museums and galleries (Jencks, 1997, p: 36). The spiritual enlightenment previously offered in cathedrals is now experienced in art museums. This concept is clearly expressed in the Natural History Museum in London, 1880 (ill. 4+5) by Alfred Waterhouse, where the iconography and planning are derived from a Romanesque cathedral.

Traditional precedents of art galleries reflect monumental structures with a severe and intimidating public image. The contemporary desire to democratise the image of the museum (Jencks, 1997, p: 42), has resulted in a completely new building type. A more transparent gallery image is now preferred and this is reflected in the range of additional functions accommodated within contemporary galleries.

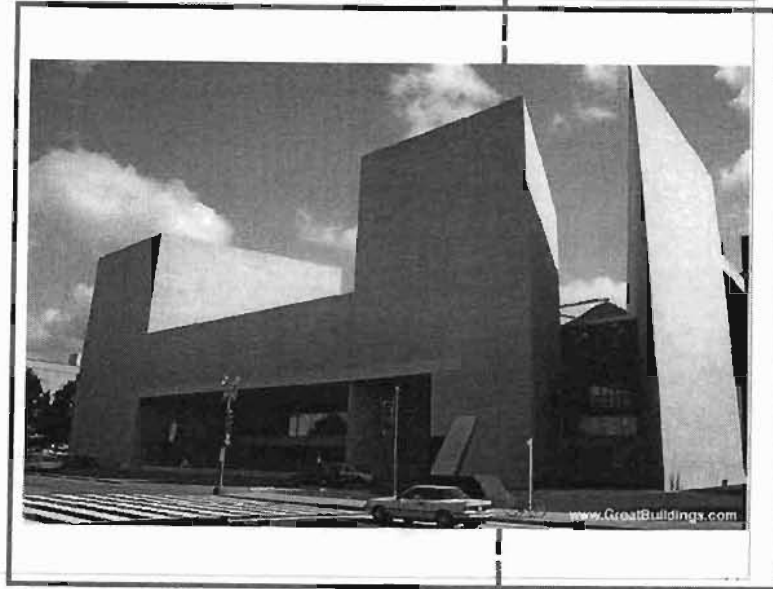
There is a need to appeal to the widest possible audience increasing public awareness and education. This is demonstrated in the Pompidou Centre in Paris, 1976 (ill. 6) by Piano and Rogers with a complete re-interpretation of the building functions and image and the State Gallery extension in Stuttgart, 1983 by James Sterling, where a public street runs through the building.



The multiplicity of functions now being housed in contemporary art galleries is a result of the complete re-interpretation of the traditional art gallery building genre (Jencks, 1997, p: 43). Similar to traditional galleries, a range of interpretive displays and conservation functions are offered. Technological advances however created new artistic media that required a re-evaluation of display techniques. Contemporary media is unpredictable in scale requiring a highly flexible exhibition space. Media such as film require additional technical, sound and artificial lighting support.

The galleries' need to support expensive purpose designed galleries to accommodate new media, combined with the enhanced public image and public ownership of galleries with a lack private funding, required the introduction of retail areas (Jencks, 1997, p: 44) such as museum shops and multiple restaurants or coffee shops in major public art galleries.

A duality now exists between the contemplative and sacred nature of exhibition spaces opposed to the public and vibrant atmosphere required for retail and education functions (Toy, 1997, p: 89). Contemporary galleries need to integrate both, allowing for an enriched experience. The spiritual shift in society and re-interpretation of art galleries resulted in increased visitor numbers equivalent to those of religious



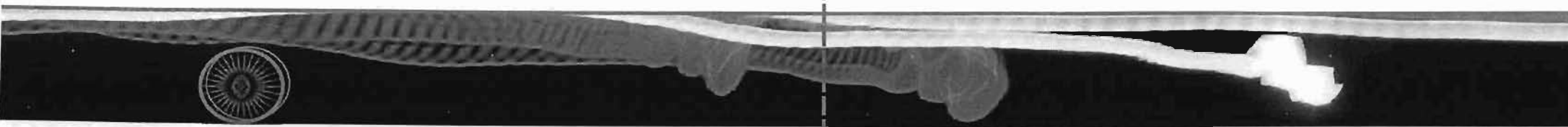
ILL. 7: Entrance elevation of the East Wing, National Gallery indicating larger scaled entrances.
Ref: www.GreatBuilding.com

pilgrimages. As a result larger entrances to galleries developed as seen at the East Wing, National Gallery, Washington D.C., 1978 by I.M. Pei. (ill.7).

1.2 South African Context

South Africa has a rich history of visual arts and a dynamic and growing contemporary art scene. The country's flagship institution is the South African National Gallery located in Cape Town. The permanent collection spans from colonial to contemporary works, lacking however in traditional pre-colonial work due to the constraints of the apartheid era. A similar tendency is evident in the regional galleries located in major cities. These include the Durban Art Gallery (D.A.G.) in KwaZulu-Natal (KZN), the Johannesburg Art Gallery in Gauteng and the King George VI Gallery in Port Elizabeth in the Eastern Cape.

University and corporate galleries are playing an important part in addressing the shortage of traditional indigenous works by acquiring works of national interest. The University collections include the Standard Bank African Art collection at the University of the Witwatersrand and the University of South Africa gallery in Pretoria. The corporate collections are largely funded by Standard and Absa Banks and the cellular phone network MTN.



An overabundance of commercial and non-commercial galleries are found in Johannesburg, Cape Town and Durban. These host solo and group exhibitions while the Goodman Gallery in Cape Town focuses on South African artists who are impacting on the international art scene.

Art galleries in KZN can similarly be categorized into regional, University and corporate, commercial and non-commercial galleries:

1.2.1 Regional:

- **Durban Art Gallery (D.A.G):** The main regional and municipal gallery of KZN housed in the Durban City Hall. The permanent collection concentrates on Victorian painting and South African contemporary art. The aim is to concentrate on works reflecting the rich multi-cultural diversity of South Africa. A spectrum of traveling exhibitions of national and international interest is hosted in addition to the Red Eye Art fundraising event that provides a platform for contemporary and emerging artists.



ILL. 8: Entrance elevation of the Tatham Art Gallery
Ref: Author

- **Tatham Art Gallery (ill.8):** The municipal gallery of Pietermaritzburg is housed in the former Supreme Court building. The permanent collection includes Victorian art, glassware, porcelain, oriental rugs, French and British works and internationally renowned works by artist such as Degas, Renoir, Picasso and Matisse. The aim of the collection is to create a historically representative and contemporary collection of work by KZN artists. Temporary traveling exhibitions increase their audience's exposure to local artists.
- **Margate Municipal Art Museum:** The municipal gallery of Margate contains a permanent collection of South African art including a small ceramics collection and also hosts temporary exhibitions.
- **Carnegie Art Gallery:** The municipal gallery of Newcastle exhibits a permanent collection of contemporary South African art. The collection focuses on art and craft from the Newcastle region, with landscape as the central theme.

1.2.2 University and Corporate:

- **Durban University of Technology Art Gallery (DUT):** The permanent collection consists of contemporary South African art, focusing on artists from Kwa-Zulu



ILL. 9: Mural outside the B.A.T. Centre
Ref: www.dbnymca.org.za

Natal. The gallery aims to promote student work and traveling exhibitions.

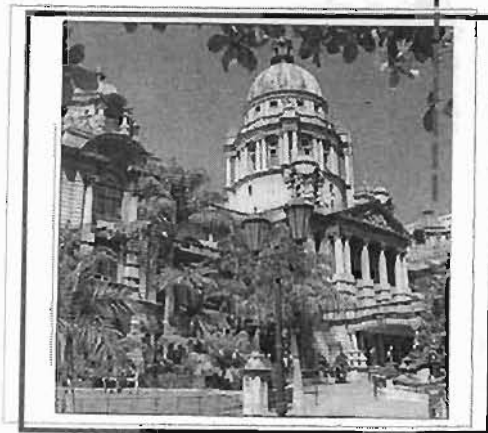
- **Jack Heath Art Gallery:** The gallery is located at the University of Kwa-Zulu Natal, Pietermaritzburg campus, and exhibits work by Masters' students and contemporary KZN artists. The collection focuses on contemporary South African art, graphic prints and textiles.

1.2.3 Commercial and Non-commercial:

- **African Art Centre (AAC):** Art of emerging and established black artists working in contemporary and traditional styles are exhibited. The media used is mainly printmaking, beadwork, woodwork, sculpture, textiles and ceramics.
- **Alliance Française:** A non-profit gallery hosting traveling exhibitions that include work by local artists.
- **ArtSpace Durban:** A contemporary visual arts gallery with dedicated artist's studio spaces. Large-scale public and private sector projects create job opportunities, skills development and exposure for local artists.
- **BAT Centre (ill.9):** A non-profit centre that exhibits temporary shows of work by emerging black artists and



ILL. 10: Entrance to the KZNSA Gallery
Ref: Author



ILL. 11: Entrance to the Durban City Hall
Ref: www.ethekwini.com



ILL. 12: Entrance to the Belfast City Hall
Ref: www.encyclopedia.com

craftspeople.

- **Empangeni Art and Cultural History Museum:** A non-profit gallery with a permanent collection, consisting of contemporary art from Kwa-Zulu Natal, and temporary exhibitions.
- **KZNSA Gallery (ill. 10):** A non-profit gallery exhibiting work of established local and international contemporary artists. Community outreach initiatives offer support to emerging artists.
- **Tamasa Gallery:** A commercial gallery exhibiting a spectrum of contemporary KZN artists.

Post-apartheid South Africa requires a re-interpretation of the cultural image projected by existing public galleries. Contemporary galleries provide an opportunity to act as a symbol of social re-conciliation and economic growth for the local and international community.

The existing D.A.G. forms part of the City Hall complex (ill. 11) 1910, designed by Stanley G Hudson, which is a replica of the Belfast City Hall (ill. 12) 1906, in North Ireland, by H&J Martin and WH Stephens. The latter similarly houses the city council and is located in Donegall square deviding the commercial and business districts of the city centre. As at the Durban City Hall



the surrounding public gardens are used recreationally by locals and tourists and there are several statues, monuments war memorials and a garden of remembrance. The Durban City Hall consequently projects a colonial image which fails to reflect the current cultural status of Durban.

Durban only has one public art gallery and a variety of smaller private galleries that cannot adequately reflect the cultural and economic potential of Durban.

These smaller galleries work in collaboration with the D.A.G. and have individual roles within the Durban artistic community:

The D.U.T. Gallery: exhibits student work

BAT Centre: educates and exhibit works from developing artists within the local Durban community

African Art Centre: develops artistic products sourced from the Kwa-Zulu Natal region

KZNSA: exhibits contemporary academic art

Art Space: exhibits commercial contemporary art
(Refer to map in Chapter 7)




1.3 Motivation of Study Topic

The current D.A.G. has no distinguishable image, as it is part of the City Hall complex. This complex provides for administrative functions, a library and a science museum. In order to establish the cultural status and a marketable identity of a gallery both locally and to the international community, an appropriate image needs to be established through the built form.

The D.A.G. exhibits a variety of traveling exhibitions, artworks from local schools and exhibits work from local artists in collaboration with the smaller existing galleries. Contemporary works cannot, however, be accommodated at the existing gallery as specific provision was not made for them. The galleries were designed for works to be viewed in daylight while contemporary media such as film require an environmentally isolated space in which light and sound can be controlled. The scale of contemporary works is unpredictable and larger works cannot be accommodated due to fixed walls and the height of ceilings in the existing gallery.

The existing D.A.G. in the City Hall is no longer able to accommodate its growing permanent collection resulting in storage and restoration facilities now being housed in a separate facility. The demand for the gallery to act as a

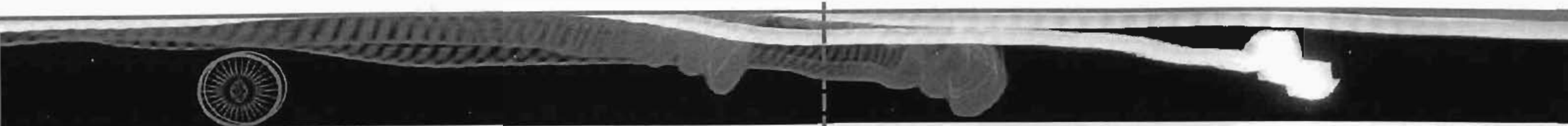


community resource has drastically increased, resulting in additional accommodation required for educational facilities. The increase in the size of the collection and variations in the media of the art works to be stored and displayed have become problematic. In addition, the need to provide educational and retail facilities renders the existing facility inadequate.

The D.A.G. hosts the Red-Eye festival which is a collaboration of contemporary art displays and live performances to promote local artists and a culture of art appreciation. Attendance numbers at this event have dramatically increased and contemporary media works require technical assistance not offered at the existing gallery.

1.4 Broad Problems

The re-interpretation of the contemporary gallery has resulted in additional and contradictory roles (Jencks, 1997, p: 12). A public art gallery is no longer only required to preserve the artwork and educate the public. An elevated symbolic role has been created with the rise of the contemporary secular society in which the public art gallery represents the cultural and marketable identity of a city or region. No accepted iconography has however been established to communicate the new role which is contradictory towards the traditional

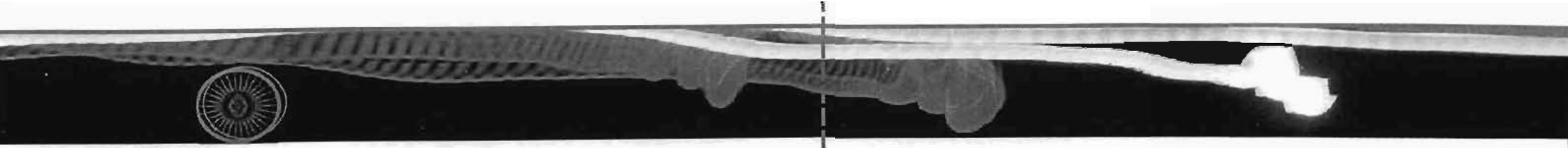


contemplative nature of galleries.

The retail and commercial facilities required to support new public art galleries further contradicts the private and reflective nature of galleries. A successful integration between both the contemplative and public functions needs to be achieved for the success of contemporary galleries.

Galleries are not only being used to promote cultural status but act as regenerative catalysts in run-down areas. As a result, the location of galleries becomes crucial. Similarly galleries are the sites of the culture industry (Jencks, 1997, p: 14). The culture industry has flourished with the recent increase in the building of public art galleries, providing jobs for artists, art professionals and associated professions. This boom has also delivered a bigger number of con artists, highlighting the increased need to educate the general public. A new typology is needed to successfully accommodate the variety of functions required to sustain the cultural industry within contemporary public art galleries.

In outlining the broader problems key questions can be derived which will be used as the criteria for analysing the precedents and case study.



1.5 **Conclusion**

- The gallery needs to fulfil roles on multiple levels; exhibition, preservation, education and the symbolic role of reflecting the cultural status.
- A distinguishable image is required.
- Appropriate and flexible exhibition methods are required to exhibit traditional and contemporary works.
- Additional functions are required to sustain the gallery, raise community awareness, develop local artistic skills and host the growing red-eye event.
- A balance is required between the public commercial accommodation and the private contemplative gallery spaces.
- The location of the gallery is vital for urban regeneration of precincts and to support the commercial functions.



2

Research Questions + Methodology

- 2.1 Introduction
- 2.2 Key Questions
- 2.3 Methodology
- 2.4 Hypothesis
- 2.5 Aims and Objectives
- 2.6 Conclusions



2.1

Introduction

Key questions have been derived from the broader problems identified. These will be used as a guide to focus the research such as the literature review and structured interviews with experts in the field. Precedents and a case study will be analysed according to criteria derived from key questions.

2.2 Key Questions

- a. What image should be portrayed by the new D.A.G. locally and internationally? (Refer to Chapter 1 and 3)
 - Appropriate marketable identity required to establish the gallery internationally while reflecting the current cultural status of Durban and its art.
- B. Where should the new D.A.G. be located ? (Refer to Chapter 3 and 7)
 - To recognise potential for urban regeneration and sustaining commercial facilities while educating the widest possible public audience.



- C. What architectural response is required to accommodate the multiplicity of functions in a contemporary gallery? (Refer to Chapter 4 and 8)
- Educational, commercial, contemporary art, Red-Eye, and traditional galleries.
- D. How can the contradictory nature of the contemplative exhibition spaces and increased public functions required to sustain the gallery be successfully integrated? (Refer to Chapter 3 and 4)
- Public vs. Private balance required, zoning and location of appropriate functions and circulation.
- E. How can an exhibition facilitate a joint display of contemporary works and the existing permanent collection, allowing the best conditions for experiencing and preserving alternate art forms? (Refer to Chapter 3, 4 and 8)
- Interaction between galleries, art, people and the rotation of these.



ILL. 13: Entrance banner to the MoMA
Ref: <http://graphics.jsonline.com>



ILL. 14: Entrance to the Burda Collection Museum
Ref: <http://www.arcspace.com>



ILL. 15: Entrance to the Walker Art Centre
Ref: <http://en.wikipedia.org>

- F. What are the exhibition and environmental requirements of artwork considering circulation, display and preservation, including ventilation, air-con, lighting and viewing distance required? (Refer to Chapter 5 and 6)

- Optimum environment required

2.3 Methodology

A literature review will be conducted of historical and contemporary views on public gallery design by experts in the field including theorists and architects. Different views and arguments will be identified and compared, considering their relationship to architecture and their impact on the changing role of contemporary galleries. Primary research will be conducted in the form of structured interviews with educational and curatorial experts on gallery design to further substantiate the issues at hand.

International examples of recently completed public art galleries will be analysed as precedent studies according to criteria derived from the theoretical framework. These include:

- **MoMA, 2005** (ill. 13)
- **Burda Collection Museum, 2005** (ill. 14)
- **Walker Art Center, 2005** (ill. 15)



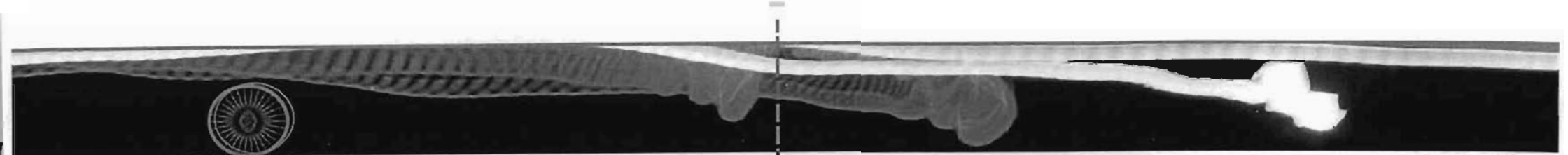
The following criteria will be examined:

- Analysis of location and context
- Accommodation provided
- Materials and construction system
- Environmental performance
- Architectural expression

In addition, an in depth case study will be conducted of the existing D.A.G. and analysed according to the above criteria.

2.4 Hypothesis

The premise of the study is that in establishing an independent identity for the D.A.G. a marketable image will be achieved which can promote and reflect the local culture and art. This will enhance the exposure of local artists to the international market while building a wider local audience. The economic potential of the D.A.G. may allow the gallery and artists to become self-sustainable while rejuvenating the surrounding context in which it is located.



2.5 Aims and Objectives

- Establishing an independent identity
- Connection between functions, art, people and the city
- Integration between functions and traditional and contemporary art
- Regenerate city structure
- Accessibility to public and educational functions
- Environmental control and preservation of art
- Exhibition of local art and culture

2.6

Conclusion

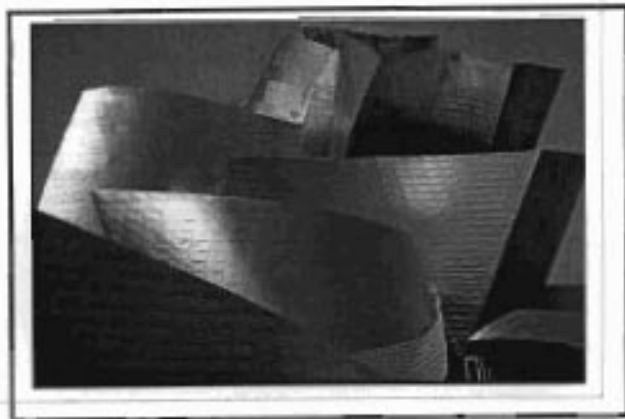
The study of theories will establish the theoretical framework from which a conceptual approach will be derived. Precedent studies will define international solutions to a similar building type. The in-depth case study will ascertain the brief requirements and outline the schedule of accommodation. The analysis of the theories, precedent studies and the case study will result in conceptual and functional design recommendations and parameters for a new D.A.G.



3

Literature Review + Theoretical Framework

- 3.1 Introduction
- 3.2 City
- 3.3 Image + Architectural Expression
- 3.4 Environment
- 3.5 Site
- 3.6 Public
- 3.7 Artworks
- 3.8 Conclusions



ILL. 16: Expressive Bilbao Guggenheim Museum skin
Ref: <http://www.abiyoyo.com>



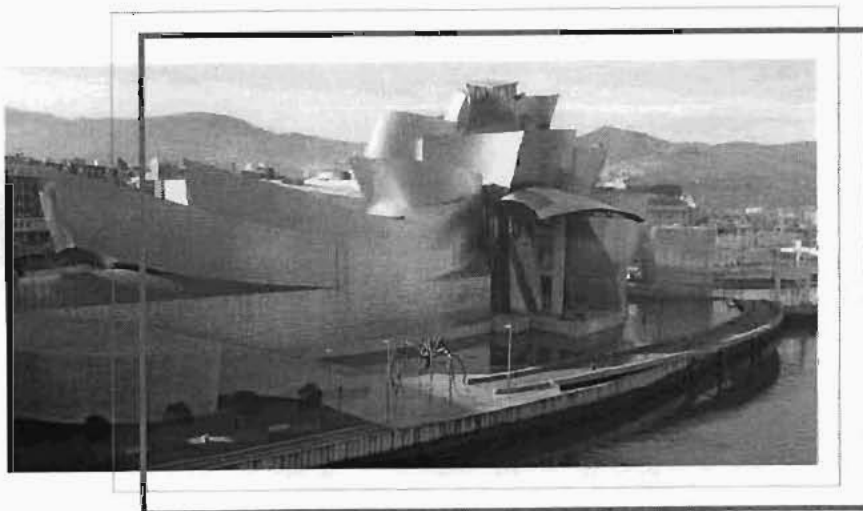
ILL. 17: Architectural expression remains focussed on the art as seen at the Beyeler Collection Museum by Renzo Piano
Ref: <http://www.nbm.org/ades>

3.1 Introduction

Russell (2005, p: 82) holds that the dramatic increase in museum design seen in recent years has created a tension between architectural approaches that follows either the "Bilbao or Renzo effect". The former (ill. 16) focuses on an expressive external marketable image where the "container overshadows the contained", while the latter (ill. 17) concentrates on the requirements of the artworks contained.

The partial success of both approaches is an indication of the complexity of museum design. The expectation of museums to fulfill a multiplicity of roles including fulfilling requirements for the museum mission and collection, while being "symbols of civic pride and vehicles of artistic exploration", may be not be plausible.

The technology used and workmanship required to produce either a Bilbao or Renzo appearance requires specific building standards that needs to be considered before a building of a similar nature is commissioned. "Ironically and regrettably, elite architecture for elite art seems to hasten the cultural isolation of both at a time when the nation searches for authentic place and real values" Russell (2005, p: 83).



ILL.18: Bilbao Guggenheim Museum, aerial view
Ref: <http://en.wikipedia.org>

In the interview with Professor Terry King it was revealed that the recent increase in public art museum building inevitably impacted on a series of principal relationships between the gallery and the city, environment, site, public, and artworks.

3.2 City

Toy (1998, p: 54) states that the role of galleries is no longer simply that of cultural status symbols, but they act as strategic financial devices. The selection of the city and site on which the gallery is to be located becomes crucial and is largely influenced by economic and political factors. Thau (2004, p: 35) similarly holds that benefactors of contemporary American museums were consciously seeking the "architecturally ambitious cultural benefit" provided by the iconic and spectacular signature buildings to act as direct competition for the revolution in electronic media. This goal aided in the international increase of galleries and established the marketable identity of museums as seen in the Guggenheim Museum (ill. 18) at Bilbao, Spain, 1997 by Frank Gehry. Zudkin (2002, p: 78) identifies the concept of "cultural currency" by using signature buildings as marketing tools for tourism and local development.

3.3 Image and architectural expression

Celant (2006, p: 6) holds that the design of a contemporary

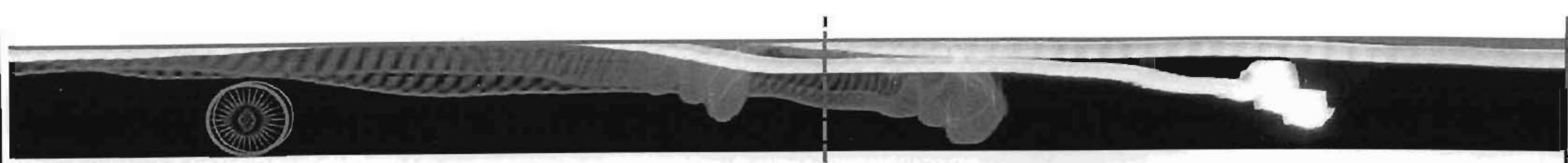


museum aims to represent a situation which is not limited to the past and present time but which extends beyond.

Historically the architecture of a museum simply framed the artwork it contained, acting as a "backdrop" for the collection. The relationship between the art and architecture was minimal, "no extension of energy is established between the objects and their container". A turning point came with the duplication of collections and the introduction of traveling exhibitions that required a highly flexible and purely functional design, completely integrated and sympathetic towards the artwork.

Jenks (2005, p: 30) holds that "self-important buildings characterize our time". This is largely due to the decline of belief in organized religion and the replacement of the monument by the recent iconic buildings. The added competitive drive of the "global society and celebrity culture" which requires the experience of architecture to be accessible through mass media, increased the desire for iconic buildings.

The symbolism of iconic buildings was clear with the bombing of the World Trade Centre. The American power it represented was attacked and destroyed and subsequently immortalized by the media. The building and site became "sanctified" because of the inherent symbolism, "an icon always has a

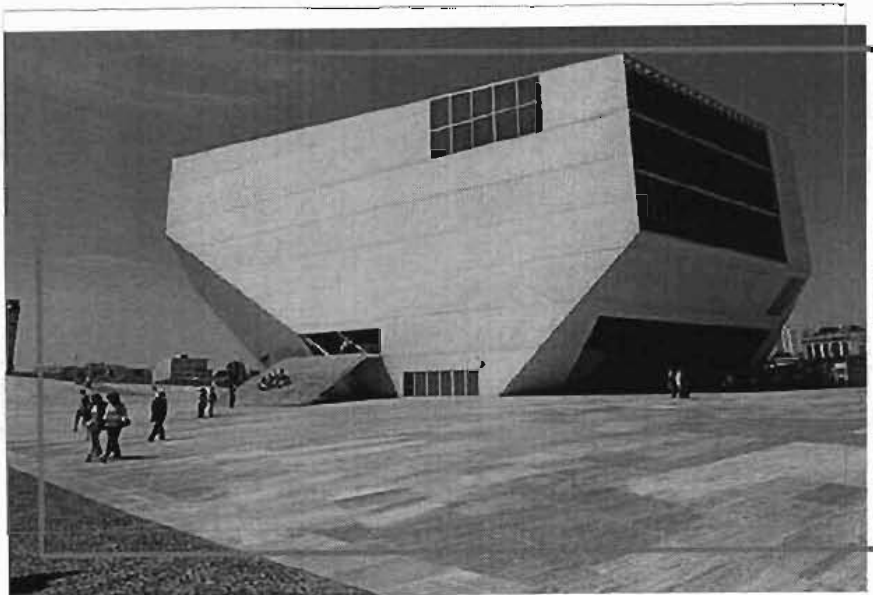


trace of sanctity about it; it is an object to be worshipped, however fitfully" (Jenks 2005, p: 30).

Icons are a reflection of that which is important and recognized in society and culture. The decline in religious belief has resulted in churches no longer being singular icons, and this role now being portrayed by civic and cultural institutions.

The classical hierarchy of buildings is now challenged and inverted as a mere bike-shed or shopping mall has become iconic and consequently elevated on the hierarchy of buildings. The appropriateness and decorum of these icons have become questionable as a supporting iconography is required. This is clear in Far East where the iconic buildings seem to have "little faith in the iconography and symbolism they sport" Celant (2006, p:9).

Jenks suggests that the solution may lie in returning to the classical "hierarchy of decorum" limiting the building types which can be considered iconic. These buildings would need to be of a higher standard and designed by established and recognised architects. The iconic building still requires a provocative image in order to compete with existing icons yet cannot directly reference religious architecture as the belief system have declined. In order to prevent the one-liner or a



ILL.19: Elevation of Casa De Musica
Ref: <http://www.arcspace.com>

simple provocation by the building image, there need to be "enigmatic signifiers".

Visual metaphors created by the form of the building elicit a distinct reaction from its viewers and this reaction establishes its iconic status. Multiple signifiers or metaphors may prevent the one-liner effect, as the building will relate to its context on multiple levels. Jenks suggests that "in the age of an ecological crisis" these may allude to nature and the cosmos. This can be seen in Casa de Musica (ill. 19), Portugal, 2005 by Rem Koolhaas where the form is hostile and severe as nature can be at times.

The aim of these enigmatic signifiers in the present secular society is to be suggestive of several metaphors as opposed to a distinct trace or link. If these metaphors are thoughtful and coherent a more relevant and lasting iconography may be achieved (Jenks website).

3.4 Environment

As the genre of iconic buildings is accepted and explored, a greater reconciliation can be achieved between the iconic building and the city and its inhabitants. The value and power of good iconic buildings is undeniable and with more thought an iconic building can be achieved which is more than a "one-



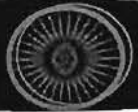
ILL. 20: Aerial view of the Scottish parliament complex
Ref: www.stuckonscotland.co.uk

liner" that simply relates pragmatically to place, function and history.

McGuirk (2006, p: 2), recognised Jenks's perception to acknowledge the value of the iconic building as a "new symbolic language in the absence of religion or any prevailing ideology". In criticism of Jenks however, McGuirk states that the symbolism of icons cannot simply be reduced to an analysis of the potential metaphors recognized, "the more things it can look like, the better it is". The economic factors are influenced by the visual image projected and advertised, "a form of branding", but this superficial level at which criticism of the architecture is employed fails to analyse the internal functioning of the building and its relationship to its surrounding context and users.

Many of the iconic buildings fail to be inhabitable and the depth of architectural quality and thought becomes questionable. The environmental performance of several iconic buildings suffer as is evident at the new Scottish Parliament Building (ill. 20) at Holyrood, Edinburgh, 2004 by Enric Miralles which was selected for an architectural prize yet had a variety of environmental, construction and budgetary shortcomings.

McGuirk (2006, p: 3), suggests that architectural "iconism" is



ILL. 21: Entrance to the MoMA
Ref: www.GreatBuildings.com



ILL. 22: Aerial view of the Juan Miro Museum in Barcelona Ref: www.GreatBuildings.com

simply derived from the current cultural obsession with icons and image in our celebrity preoccupied society.

Russell (2005, p: 84) states that the flexibility of the museum program allows architects greater freedom to "interpret contemporary reality". Phillips (2005, p: 90) similarly holds that "architecture is an art that should be advanced just like any other art". The lack of integration between the external envelope and interior requirements for exhibition remains largely problematic and unresolved.

3.5 Site

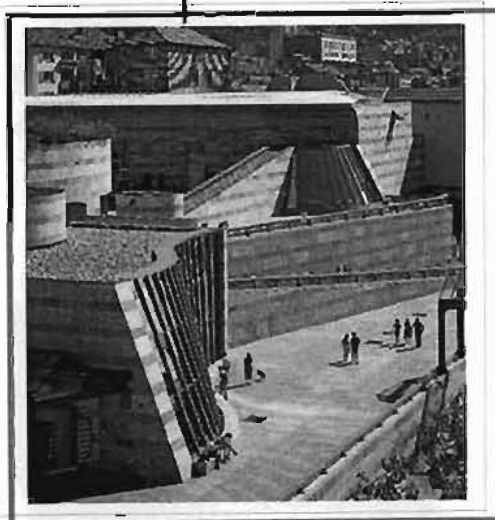
(Thau 2004, p: 52) states that attempts are being made to achieve economic success by using galleries as re-generating initiatives. These include abandoned industrial sites such as the MoMA in New York, 2005 by Yoshio Taniguchi (ill. 21) or sites in the traditional centers of cities which have become derelict and dangerous, such as Frank Gehry's new art museum in Los Angeles or Zaha Hadids' Rosenthal Centre for the Contemporary Kind, 2003 in Cincinnati. Another trend is the positioning of galleries in green zones, like the Juan Miro Museum in Barcelona by Josep Lluís Sert (ill. 22).

3.6 Public

This shift in the location of galleries from the traditional



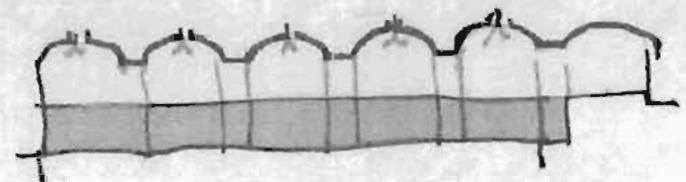
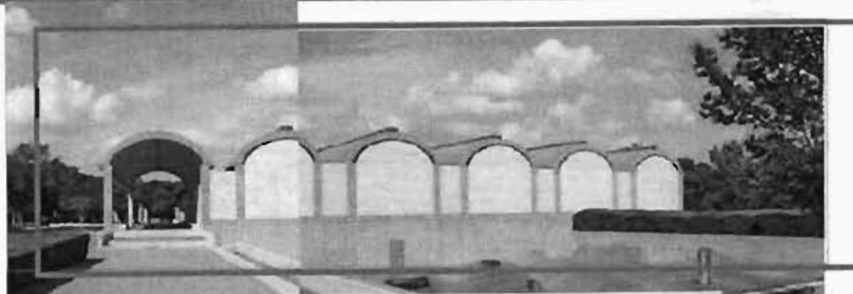
ILL. 23 + 24: New entrance to the Louvre during the night and the day Ref: www.GreatBuildings.com



ILL. 25: The State Gallery Extension in Stuttgart Ref: <http://www.britannica.com>

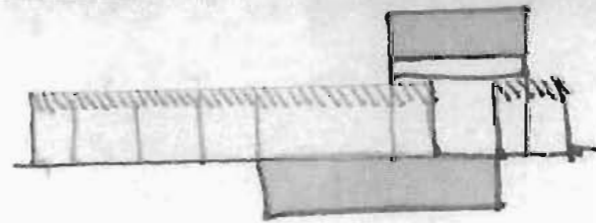
economic centers to derelict urban precincts requires a re-interpretation of building functions and imagery as a new social context exists. Piano (1980, p: 103) interpreted the role of the Pompidou Centre located in a previously rundown precinct of Paris, to represent art and culture “as a new sort of public forum, a bazaar of interaction between people and the arts”. This re-interpretation is facilitated by the removal of the traditional podium in conjunction with the antithesis of the materials used and architectural language compared to the surrounding historical setting. Similarly the new entrance to the Louvre in Paris by I.M. Pei (ill. 23 + 24), contrasts a glass pyramid with the historical façade, promoting public awareness and access. The State Gallery extension in Stuttgart (ill. 25) encourages urban infiltration with a public street running through the museum.

Jencks (1997, p: 45) holds that the consequent increase in visitors to galleries affects the manner in which buildings are entered and the circulation patterns of visitors inside the buildings. This can be seen at the East Wing, National Gallery extension at Washington D.C., 1978 by I.M. Pei., where the entrance doors are compared to those normally found at a sports stadium to allow entry to large numbers of visitors. Circulation within similarly needed to allow for larger numbers of visitors. Wright (1987, p: 59) designed a spiral



ILL. 26: The Kimbell Art Museum in Texas. Ref: www.greatbuildings.com

Below is a section indicating the continuous exhibition level with roof lighting
Ref: Author



ILL. 27: The Menil Collection Museum
Ref: www.greatbuildings.com

Below is a section indicating the continuous exhibition level with roof lighting
Ref: Author

circulation ramp that is accessed off a central foyer space within the Guggenheim Museum. This may have been a novel interpretation but lighting conditions for works on display were not ideal and the curved walls along the ramp proved problematic for the hanging of works. Kahn (1975: p, 86) oppositely created a series of galleries on a single level in the Kimbell Art Museum in Texas. This allows greater flexibility of gallery spaces and use of reflected day lighting. Renzo Piano uses a similar approach in the Menil Collection and Beyeler Foundation Museums where reflected day lighting from above allow maximum use of wall space below for exhibition.

Aalto (1996, p: 53) holds that adequate lighting is as crucial to galleries as acoustics are to concert halls. He states that a variety of lighting, both natural and artificial, is necessary to provide a variety of experiences to stimulate visitors.

3.7 Artworks

King (2006, p: 32) however, re-affirms that roof lighting does not create a completely neutral container below in which to display art, known as the "big white cube syndrome". Cherry (2000, p: 64) similarly states, "the interdependence of the subjects and spaces, spaces are not neutral containers but are recognized as active". Berger (1972, p: 26) holds that the process of viewing art and the architectural response is



ILL. 28: Entrance to the Morgan Museum
Ref: [Http://z.about.com](http://z.about.com)



ILL. 29: Entrance to the High Museum of Art by Richard Meier
Ref: [Http://www.bluffton.edu](http://www.bluffton.edu)

interdependent; "we are always looking at the relationship between things and ourselves".

One can therefore not simply assume that a blank wall has no impact on the visitor or on the way in which the spectator interprets the artwork. Similarly the impact of the gallery on its new context cannot be ignored.

Russell (2005, p: 84) identifies that artists often prefer exhibiting in contemplative spaces that indicates a preference for the "white cube gallery norm" opposed to aesthetic exploration. This is largely due to the lack of "visible authorship" which is the distinct architectural stamp of certain architects that compete with the artworks, shifting the focus from the art to the architecture. Piano (2005, p: 115) similarly rejects a distinctive architectural style "this dominating rubber stamp that makes you work recognizable", opting for a sensitive and individual approach. This apparent sensitivity to the needs of the artworks and curators alike may however be restricting and results in similar approaches and conclusions. This can be seen at the LACMA, the Morgan (ill. 28), The High Art Museum (ill. 29) and the Twombly, with a similar use of materials and lighting technique.



3.8

Conclusion

- The role of art galleries has become more complex due to social shifts in society.
- Several key relationships between the gallery and the city, environment, site, public, and artworks have subsequently been impacted.
- Galleries have the dual function of reflecting the cultural status of cities and acting as a strategic financial device potentially revitalizing derelict urban zones.
- The iconography projected through the architectural expression of the gallery needs to be both sympathetic towards the artworks it contains while maintaining a marketable image which can compete both locally and internationally.
- In order to sustain the multiplicity of functions required within a contemporary gallery the relationship between the gallery and public interaction becomes vital. Circulation needs to allow for increased visitor numbers due to the amplified public interest in the arts.
- A symbiotic relationship between the gallery spaces and the artworks is necessary to acknowledge the interdependence between the architecture and artwork.
- Visual stimulation needs to provide a balance for the visitor, allowing visual intervals between gallery spaces to assist in the orientation of the viewer. This, in combination with a variety of lighting techniques, will create an array of experiences to stimulate visitors and ensure that they remain alert and their level of concentration is consistently high.



4

Precedent Studies

Precedent studies of art galleries in an urban context, on a green site and where traditional and contemporary gallery spaces have been successfully integrated.

- 4.1 Introduction
- 4.2 MoMA
- 4.3 Burda Collection Museum
- 4.4 Walker Art Centre
- 4.5 Character Precedent: De Young Museum
- 4.6 Conclusions



ILL. 30: The Museum of Contemporary Art in Barcelona by Richard Meier is an example of an architectural response to dense urban environment.
Ref: <http://www.bluffton.edu>



ILL. 31: The Paul Klee Centre by Renzo Piano opened in 2005, is an example of architectural integration with the surrounding green site.
Ref: <http://atwm.com/200506/PaulKlee/index.html>

4.1 Introduction

Examples of recently completed international public art galleries have been selected to demonstrate the current architectural response to the multiplicity of functions required to sustain a contemporary gallery. The consideration of surrounding context is vital for the integration of the galleries both in urban (ill. 30) and green sites (ill. 31). Equally important is the relationship between traditional and contemporary gallery spaces and the correlation of these to the more public zones both inside and outside the gallery. The examples selected each display a unique approach to the complex brief while achieving a balance between the architectural language, the art displayed and integration of the building into individual environments.

The following criteria for the analysis of precedent studies have been derived from the Key Questions:

- **Location, Concept.**
- **External Expression:** Building relationship with context, image, façade treatment and expression of form, structure and entrance.
- **Functional Organisation:** Multiplicity of functions required, relationship between functional spaces, sizes and arrangements.



- **Spaces:** Quality and relationship between spaces; public and contemplative, internal and external.
- **Exhibition:** Display and circulation; effective integration of artworks both traditional and contemporary; display and preservation requirements, including ventilation, air-con, lighting and viewing distance required.

Following the definition of the criteria for the analysis of the precedent studies, three precedents were selected for the subsequent reasons:

- **MoMa, 2005:**
Contemporary Public Art Museum situated within a dense and culturally vibrant urban context.
- **Baden-Baden, 2005:**
Richard Meier is a leading designer within the gallery building genre and this is his latest work showing sensitivity both to the natural park environment and adjacent museum to achieve contextual integration.
- **Walker Art Center, 2005:**
A recent addition to this public art center has integrated both traditional media and multi-disciplinary art forms.



ILL. 32: View of the surrounding urban context from the sculpture garden at the MoMA
Ref: <http://www.thecityreview.com/numoma.html>



ILL. 33: View of the MoMA in the surrounding urban context
Ref: <http://www.thecityreview.com/numoma.html>

4.2 MoMA, New York, 2005, by Yoshio Taniguchi

The MoMA is an example of a contemporary public art gallery within a dense urban context. The location of galleries within the traditional centres of cities acts as regenerating initiatives for urban zones which have become derelict due to increasing urban sprawl (Refer to Chapter 3).

4.2.1 Location

The Museum of Modern Art (MoMA) is located in the dense urban setting (ill. 32 + 33) of midtown Manhattan in New York. The surrounding urban context includes commercial (offices, shops, and restaurants), residential and institutional functions (St. Thomas Church, Museum of American Folk Art and the American Craft Museum).

The museum was founded in 1929 as an educational institution and has been relocated, remodeled and extended several times. Additions and remodeling over the years include:

- 1932: Original remodeled residence at 2 West Fifty-Third Street.
- 1938-39: First New Building By Goodwin and Stone.
- 1951-66: Three Additions to museum by Philip Johnson, 1953, which included the design of the sculpture garden.



ILL. 34 + 35: Subtle integration of the MoMA into surrounding context was achieved through appropriate scale, use of materials and lack of structural expression seen at the entrance ill. 34 and the wall enclosing the sculpture garden ill. 35. Ref: <http://www.thecityreview.com/numoma.html>



ILL. 36: The cladding used reflects the image of opposite buildings respecting the existing context. Ref: <http://www.thecityreview.com/numoma.html>

- 1985: Gallery Expansion and Residential Tower by Cesar Pelli.
- 2005 Expansion of museum by Yoshio Taniguchi.

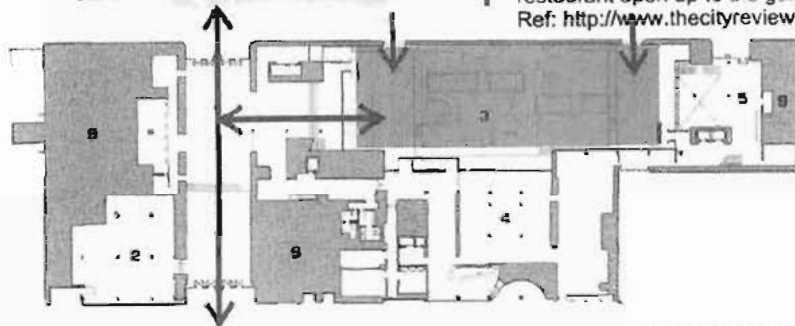
Conceptually the museum has a broader educational purpose which was established at the founding and aims to "create a dialogue between the established and the experimental, the past and the present, in an environment that is responsive to the issues of modern and contemporary art, while being accessible to a public that ranges from scholars to young children." (http://www.moma.org/about_moma/)

4.2.2 External Expression

The latest remodeling and additions by Yoshio Taniguchi focused on enhancing the relationship between existing functions, the context and public image (ill. 34+35) as opposed to a "bold sculptural statement" which has been the recent trend in public art gallery design (ill.36). The original character of the museum has been maintained with the use of modern materials and an appropriate scale, which is considerate of neighboring townhouses. Original materials consisted of a concrete frame with a glass and aluminium curtain wall. Colours ranged from pale gray to muted cerulean blue with Vermont deft marble floor surfaces. Structural support is not expressed internally or externally, resulting in a floating effect

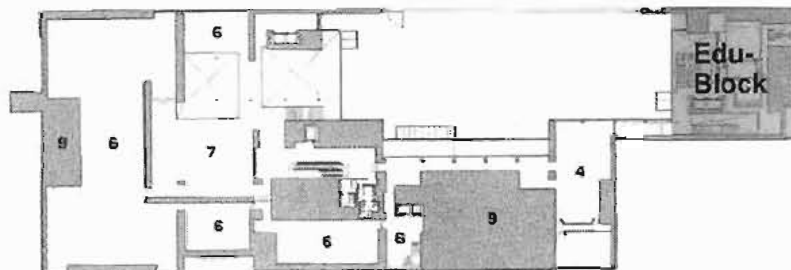


ILL. 37 + 38: The public sculpture garden spatially links the different functions while commercial activities such as the restaurant open up to the garden.
Ref: <http://www.thecityreview.com/numoma.html>



ILL. 39: MoMA Ground Floor Plan, indicating entrance points and the position of the sculpture garden. Ref: www.moma.org

- 1 lobby
- 2 design shop
- 3 sculpture garden
- 4 restaurant
- 5 education building
- 6 gallery
- 7 atrium
- 8 terrace
- 9 back of house



ILL. 40: MoMA Typical Floor Plan, indicating the position of the educational block. Ref: www.moma.org

of the planar elements and surfaces.

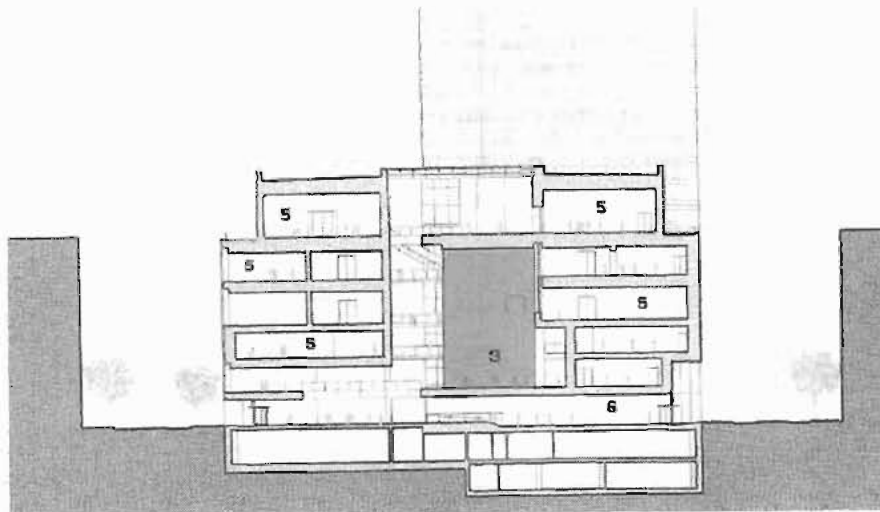
The **entrance** is highlighted through the black stone facing of the new building contrasting with the white glass skin on the garden façade of the original building. The sculpture garden can now be entered from two points, allowing greater access and variety of experience to visitors. The museum can be accessed from two parallel streets creating a public arcade along which the design shop has been positioned (ill. 39).

4.2.3 Functional Organisation

Public and private functions are highly integrated as a result of several additions and alterations. The educational building is the only exception and is distinctly separated (ill. 40). Unity is created between the different functions with the public sculpture garden (ill. 37). This links all the facilities and commercial functions such as the restaurants open up onto the garden (ill. 38). The overall legibility of the museum is improved as all functions relate to the sculpture garden, which acts as an orientation point for visitors. Enhancing the interaction between artworks and visitors.

4.2.4 Spaces

Architecturally the experience through the museum has evolved from a large house with a private sculpture garden and



ILL. 41: MoMA Section through the atrium, indicating overlooking gallery spaces into the central volume. Ref: www.moma.org



ILL. 42 + 43: Galleries and circulation spaces overlook the central foyer, while the glass facade overlooking the sculpture garden allows visitors on multiple levels to view sculpture. Ref: <http://www.thecityreview.com/numoma.html>



a narrative display approach, to a greater emphasis on horizontal movement from east to west and a larger public sculpture garden. A more interactive approach has been applied to the original enclosed box galleries. Gallery walls have not been joined at the corners leaving gaps through which visitors can view other galleries and the cityscape. The height of the ceilings has been increased to enhance the volumes of spaces required to exhibit larger works. As a result of the additional ceiling heights, receded walls and the central atrium (ill. 41), the layering of spaces have allowed several floors to be observed from a single point enhancing the interaction between artwork and visitors (ill. 42 + 43).

4.2.5 Exhibition

The museum maintains a contemporary theme through beginning the gallery layout with the latest works, commenting on society today and then working backwards in time towards the older more traditional artworks. The collection consists largely of paintings but include a variety of works in traditional, (sculptures, drawings and prints), and contemporary media (films, videos, media works, film stills, scripts, posters).

Layouts within the galleries are varied with fixed, large open and double-volume spaces (fig. 44). The central atrium caters for large scale works and creates a dialogue between the different galleries and artworks (ill. 45 + 46).

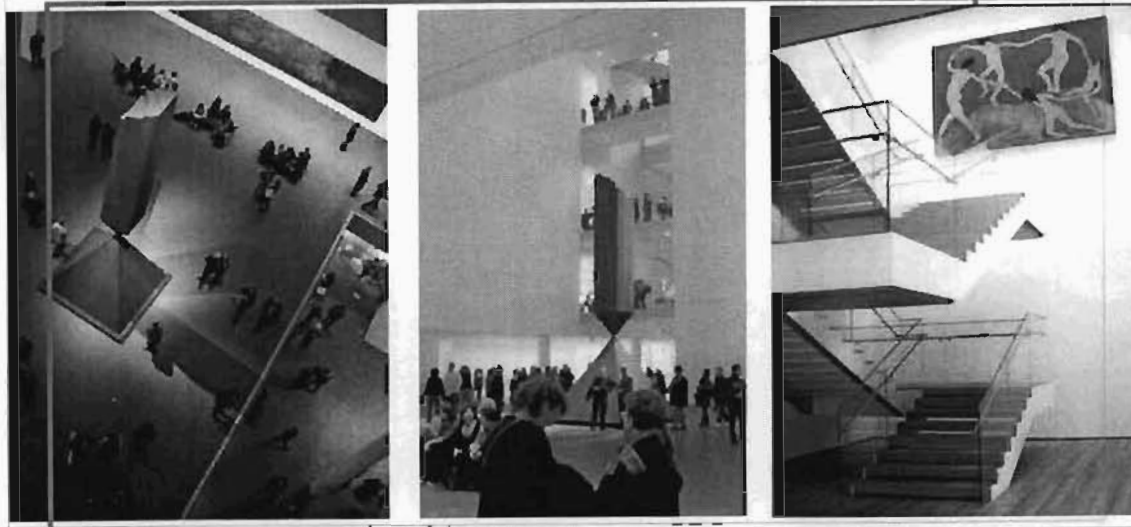


ILL. 44: View of a traditional gallery space which is artificially lit.
Ref: <http://www.thecityreview.com/numoma.html>

4.2.6 Conclusion

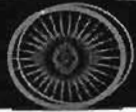
The image and external expression of MoMA responds contextually to the urban environment in scale and materials. This creates integration with the existing built fabric of New York and unifies the different functions of the museum through the application of a consistent architectural language. In shifting the focus from an aesthetically dramatic, to a more sensitive and functional approach, a time-less architecture has been achieved. The focal point remains the artwork as opposed to the building façade, which indicates a respect and balance between both the disciplines.

The use of a central atrium integrates artwork of differing scale and media as the smaller galleries all relate to the large central volume, resulting in a continuous interaction between all the artworks (ill. 45 + 46).



ILL. 45+46: View from upper galleries into the central atrium and the foyer level below, indicating the scale of the central atrium and the visual connection achieved.
Ref: <http://www.thecityreview.com/numoma.html>

ILL. 47: Vertical circulation such as stair wells create dynamic exhibition spaces offering a variety of vantage points from which an artwork can be viewed.
Ref: <http://www.thecityreview.com/numoma.html>



ILL. 48 + 49: Entrance to the Frieda Burda Collection Museum, indicating the stark contrast of the architectural language to surrounding green site which varies at different times of the day.
Ref: <http://www.architecture.com>

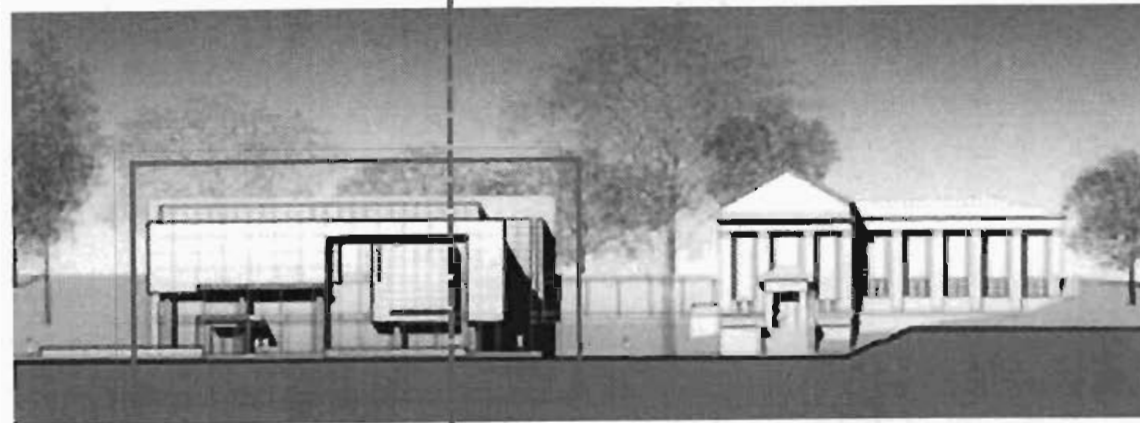
4.3 Burda Collection Museum, Baden-Baden, Germany 2005, Richard Meier & Partners

The Burda Collection Museum is an example of a contemporary public art gallery within a green site. The location of galleries within or along green zones create a formal edge and subsequently activates derelict green zones which have become dangerous and isolated. (Refer to Chapter 3)

4.3.1 Location

This museum is located adjacent to a greenbelt within the Black Forest metropolis of Baden-Baden. The site is bordered by the city's central park and the public art museum (ill. 48+49). The Museum houses the Frieder Burda Collection, a private collection of modern paintings that have been made open to the public. The architecture had to be purpose designed to accommodate the collection and to reflect the individual vision of the collector.

The adjacent State Art Museum was one of the first naturally illuminated museums. This inspired the use of daylight in the Burda Collection Museum and a connection to the existing museum. The concept of connectivity and the use of natural daylight in gallery spaces consequently became major design generators.



The pedestrian bridge symbolises and allows for collaboration between the new museum and the adjacent public art museum creating a visual and physical link (ill. 50).

4.3.2 External Expression

New galleries are positioned where an additional wing to the adjacent public art museum was originally planned. This allows the new museum to spatially complete the Kunsthalle, as well as having a physical connection through the bridge. This connection impacted major design decisions such as the entrance, which is unorthodox in location but allows for a clear entrance piazza (ill. 53). The original entrance was at the north end of the east façade to visually balance the entrance of the Kunsthalle.

ILL. 50: Elevation indicating the relationship between the Frieda Burda Collection Museum and the existing Kunsthalle. The pedestrian bridge acts as a physical link while the scale and proportion of the new museum is derived from the existing Kunsthalle.
Ref: <http://www.architecture.com>



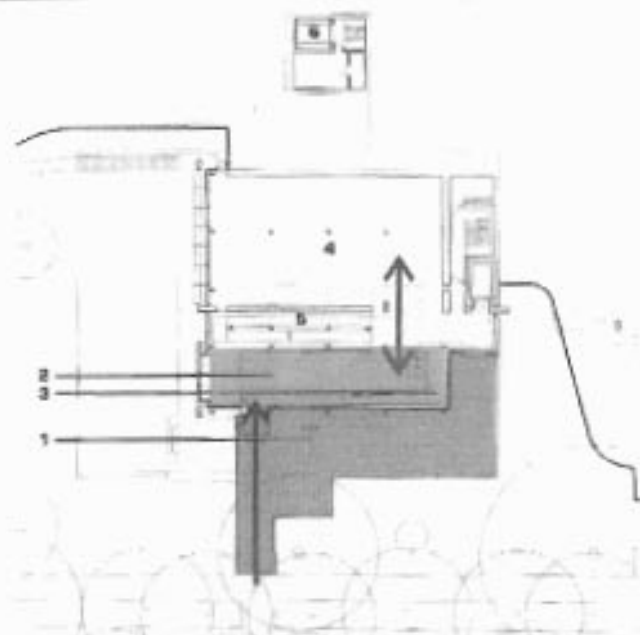
ILL. 51 + 52: Conceptual models of the Burda Collection Museum indicate the distinct external expression of the solid planes during the day, and the illumination of glass panels at night.
Ref: <http://www.architecture.com>



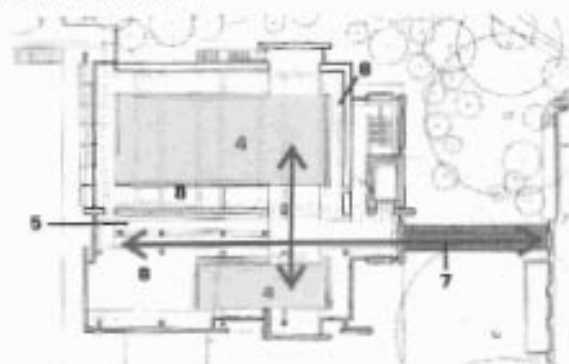
Conceptually the building reacts to the romantic natural setting with crisp white planes that simultaneously contradicts and complements the picturesque setting. Expression of structure is limited to allow uninterrupted planes of solid concrete and transparent glass (ill. 51 + 52).

4.3.3 Functional Organisation

The museum is divided into two large and two smaller galleries consistent with the division of canvas sizes in the collection. A ramp dissects the larger and smaller galleries acting as the primary vertical circulation system (ill. 54). The ramp partially



ILL. 53: Frieda Burda Collection Museum Ground Floor Plan, indicating the entrance piazza and foyer space. Ref: <http://www.architecture.com>



ILL. 54: Frieda Burda Collection Museum Upper Floor Plan, indicating the division between galleries created by the ramp and the position of the linking pedestrian bridge. Ref: <http://www.architecture.com>

- 1 entry
- 2 lobby
- 3 reception
- 4 gallery
- 5 ramp
- 6 freight elevator
- 7 pedestrian bridge below
- 8 open to below

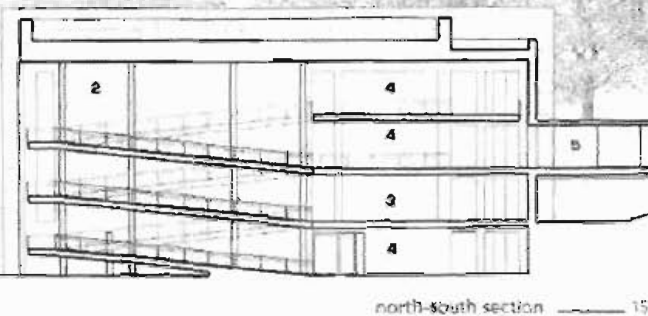
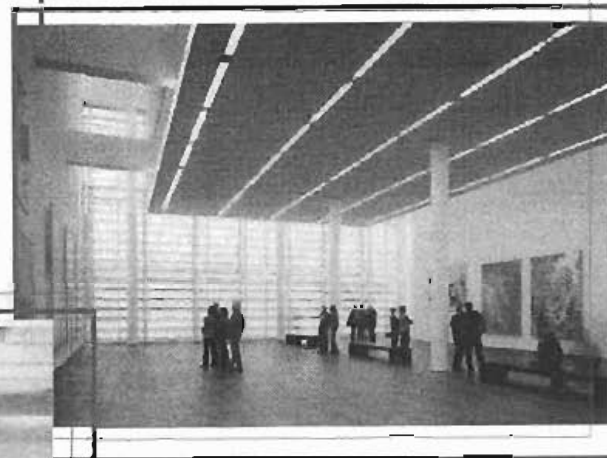
cantilevers into a glass-encased void that acts as a light well to allow natural daylight to filter into the galleries and foyer below. Storage and additional services are accommodated at basement level.

Galleries and public spaces have been arranged to overlook each other, creating a dialogue between the larger and smaller galleries and the foyer. An additional relationship is allowed between the internal and external spaces with selected views into the surrounding landscape. The precise column spacing and proportions of the rooms define an underlying rationalist rhythm.

4.3.4 Spaces

As the number of works in the collection is fixed, spaces can be custom designed for specific works. This is evident in the division of the gallery spaces between larger and smaller works (ill. 54). The walls enclosing the spaces have been manipulated to define the space by a combination of solid wall, transparent glass or mobile louvers. This allows spaces to become animated and initiates interaction between interior and exterior spaces, offering a visual and experiential variety to the visitor. The use of a glass facade allows visual interaction between the internal foyer and the external public piazza (ill.53).

ILL. 55 + 56: A view from the lower gallery towards the louvered south wall and a view of the upper gallery which is illuminated through the opaque roof.
Ref: <http://www.architecture.com>



ILL. 57: A section of the Burda Collection Museum indicating the relationship between the ramp and gallery spaces with the connecting pedestrian bridge.
Ref: <http://www.architecture.com>

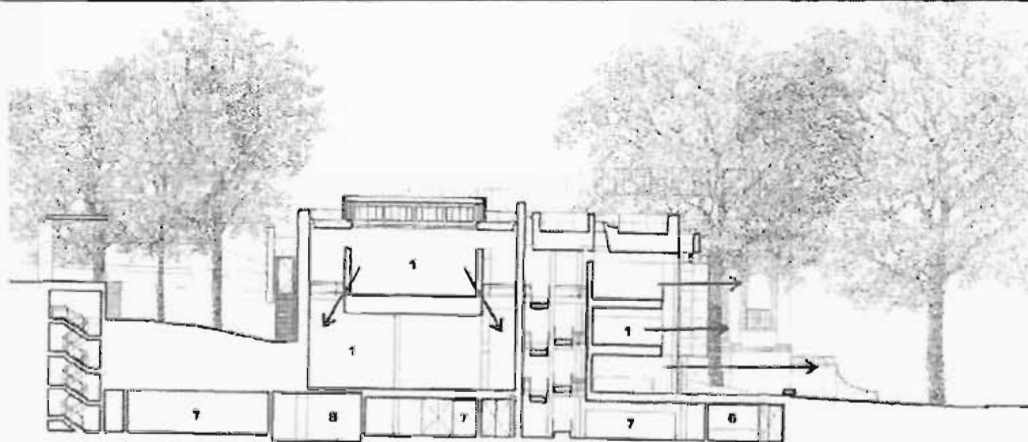
The main gallery roof is opaque with a clere story below to allow natural daylight to filter through (ill. 56). This is the ideal lighting required for the viewing of artwork. The upper gallery floor is recessed to allow daylight to filter through to the lower gallery. Additional light is reflected from the side of the louvered south wall (ill. 55).

Spaces are humanised through the use of appropriate scale and materials, with the oak floor balancing the impact of the stark walls and industrial glazing technology.

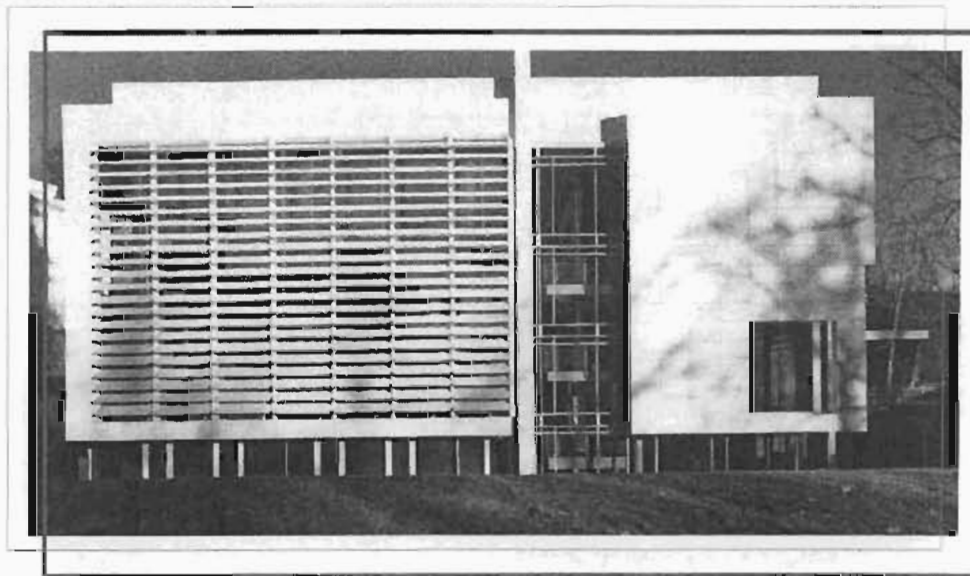
4.3.5 Exhibition

Exhibition spaces have achieved a balance between allowing reflected natural sunlight into the exhibition spaces and controlling the climatic environment. Damage to the artwork through direct sunlight and excessive heat gain is therefore prevented. This has been achieved through sunshades on the south facade and automatic control sensors mounted on the roof that adjust to the natural external climatic conditions automatically. The artificial lighting sensor system compensates for changes in the natural lighting through interior fixtures that simulate the qualities of daylight.

Exhibition spaces are predetermined with little variation required for the exhibition of the permanent collection that is on



ILL. 58: A section of the Burda Collection Museum, indicating the floating floor of the upper gallery level which allows views down into the lower level, and the views from the smaller galleries out onto the entrance piazza. Ref: <http://www.architecture.com>



ILL. 59: Elevation of the louvered south wall and the transparent panels allowing views from the ramp to the external environment. Ref: <http://www.architecture.com>

constant rotation. Proportions of galleries have been achieved by increasing the ceiling height for larger galleries and decreasing the ceiling height for smaller, intimate galleries.

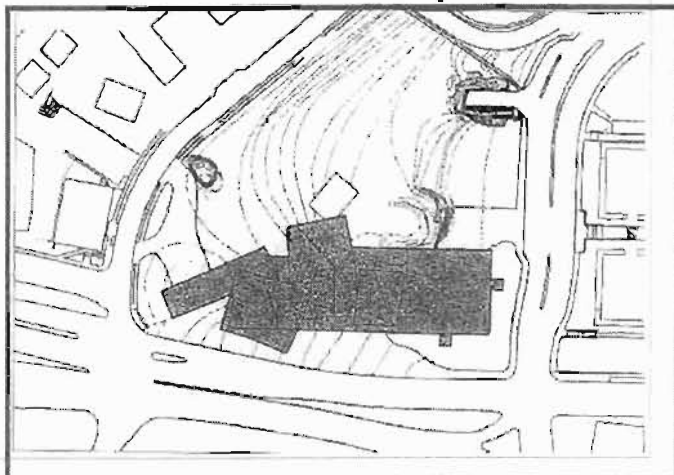
4.3.6 Conclusion

The external expression of the Burda Collection museum is a dramatic reaction to the context as opposed to a subtle integration as at the MoMA. Seemingly a-contextual, the footprint of the museum makes up the missing wing of the neighboring Kunsthalle, while the pedestrian bridge acts as a link symbolising the connection between both museums. The size and proportion of the new building relates to that of the Kunsthalle, ensuring that a uniform whole is created, while each institution still maintains its own unique identity.

Galleries and public foyer spaces are connected through a central atrium and ramp. Receding floor plates that allows visitors to view into lower galleries connects the smaller and larger galleries visually and spatially (ill.58). Transparent glass panels and louvers allow a constant view of the external environment, creating a dialogue between the visitor, the artworks and the natural setting (ill. 59).



ILL. 60: Aerial view of the Walker Art Centre located adjacent to a busy highway
Ref: <http://www.walkerart.org/index.wac>



ILL. 61: Locating plan of the Walker Art Centre, indicating the positioning of the centre along the edge of the site.
Ref: <http://www.walkerart.org/index.wac>

4.4 Walker Art Centre , Minneapolis, USA , 2005 by Herzog and De Meuron

The Walker Art Centre is an example of a public art gallery along a vehicular edge which has integrated traditional and contemporary galleries into a single complex. A relationship between traditional and contemporary works allow traditional works to remain relevant and contextualises contemporary pieces into an existing historical framework.

(Refer to Chapter 3)

4.4.1 Location

The Walker Art Centre is located in Minneapolis, USA. The center was originally completed in 1971 and designed by Edward Larabee Barnes. The recent extension designed by Herzog and De Meuron was completed in 2005. The surrounding context includes a residential neighbourhood and a large sculpture park, contrasting with a busy eight-lane highway along the east edge of the site (ill. 61).

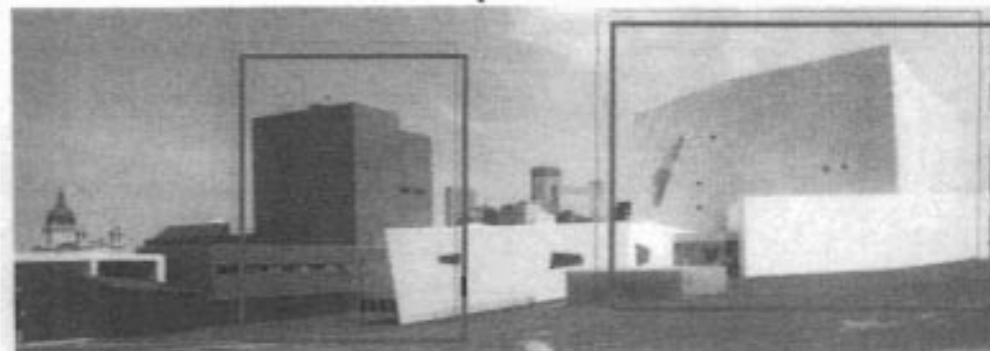
Conceptually the new tower expresses the character of the contemporary performance space within while the original tower reflects introverted nature of traditional galleries. Where the original building accommodates functions such as collecting and commissioning of artworks, the new addition focuses on multi-disciplinary works and collaborations



ILL. 62: View of the expressive new tower by Herzog and De Meuron. Ref: <http://www.walkerart.org/index.wac>



ILL. 63: A single crumpled aluminium mesh panel before installation into the building envelope. Ref: <http://www.walkerart.org/index.wac>



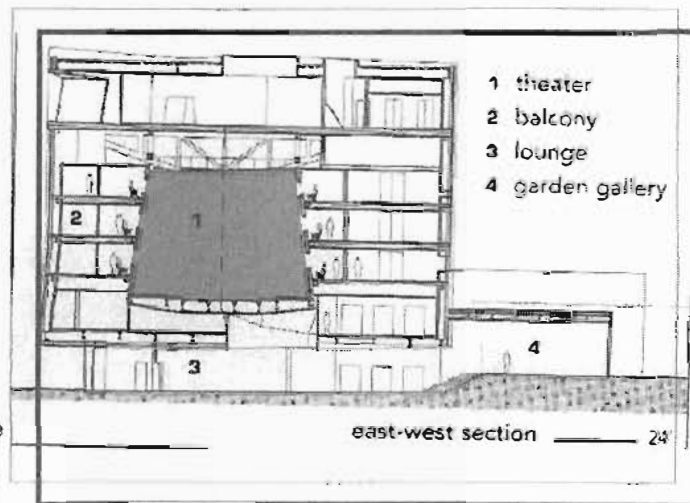
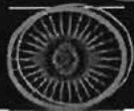
ILL. 64: View of the original tower and the addition by Herzog and De Meuron from the sculpture park. Ref: <http://www.walkerart.org/index.wac>

between design, film and visual, performing, literary and digital arts. The center as a whole strives to house a wide spectrum of creative activity.

4.4.2 External Expression

In reaction to the busy highway (ill. 60) the original entrance was placed along a quieter side street to the north. Galleries were then stacked to create a visually prominent tower to the north-east which acted as the main public face and image of the building. The addition by Herzog and De Meuron reacted similarly with a new tower housing social and performing arts as opposed to the contemplative nature of the original tower (ill. 64).

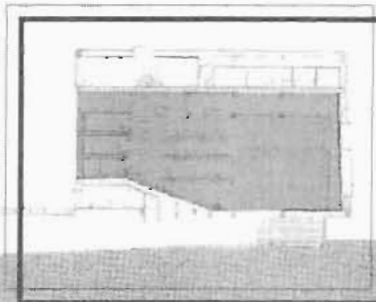
The new tower contrasts formally through a twisted geometry and materially with textured aluminium panels to the original tower. This symbolises and reflects the cultural values of the time. The original tower is a pure cubic form with a hard industrial brick skin. The new tower in comparison is a bold and Distorted cubic volume hovering in space (ill. 62). The building skin has been explored and consists of crumpled aluminium mesh panels (ill. 63). A new entrance and shop have been placed underneath the overhang allowing access from the highway edge. The focus remains on sculpting volumes and spaces, restricting the expression of structure that seems invisible. This is especially evident with the distorted and



ILL. 65: Section through the new lower tower by Hertzog and De Meuron indicating the performance auditorium.
Ref: <http://www.walkerart.org/index.wac>



ILL. 66: View of the new tower and connecting plinth, indicating the large cantilever of the tower over the pedestrian walkway.
Ref: <http://www.walkerart.org/index.wac>



ILL. 67: Longitudinal section through the new tower by Hertzog and De Meuron indicating the connecting plinth and functions accommodated below the raked seating of the auditorium.
Ref: <http://www.walkerart.org/index.wac>

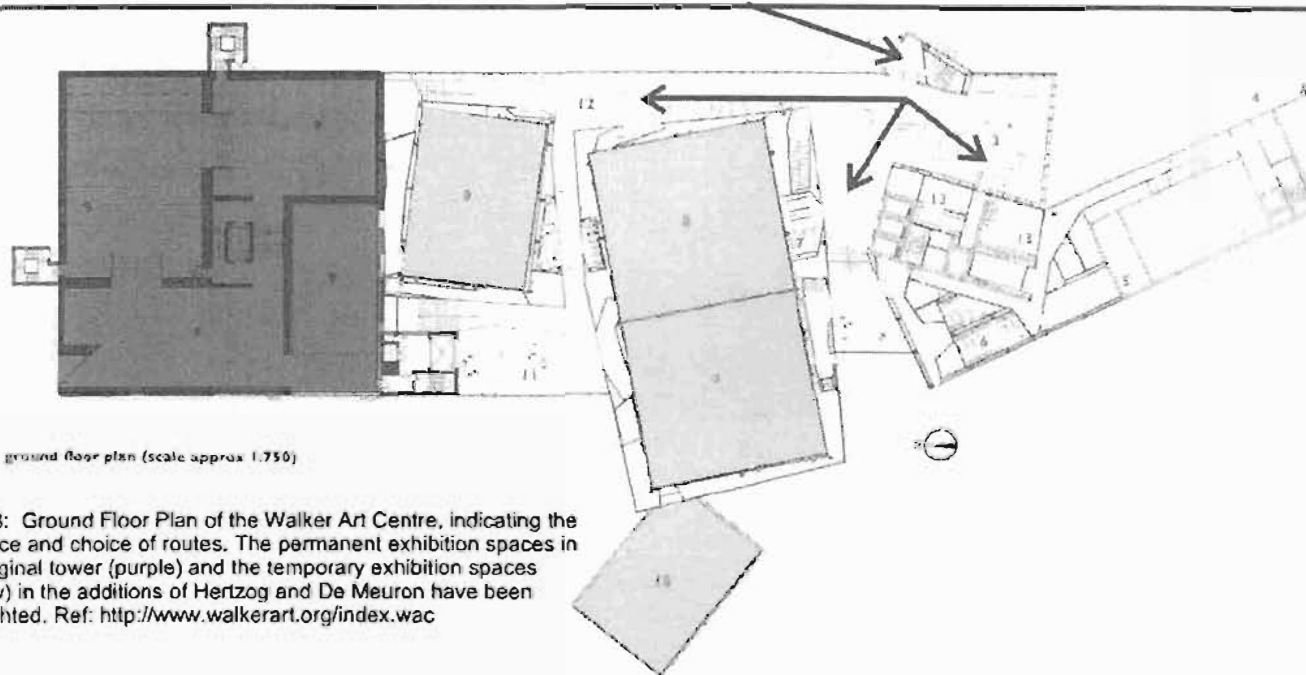
hovering cubic volume of the new tower.

4.4.3 Functional Organization

The functions of spaces provided in the new extension complement those of the original design. A theater seating 385 people in a six-story volume is provided above the shop and entrance to the new tower (ill. 65). Maximum usage of space is achieved by locating a restaurant underneath the raked seating and providing an entertainment facility which shares the top floor with the theatres' fly loft (ill. 67).

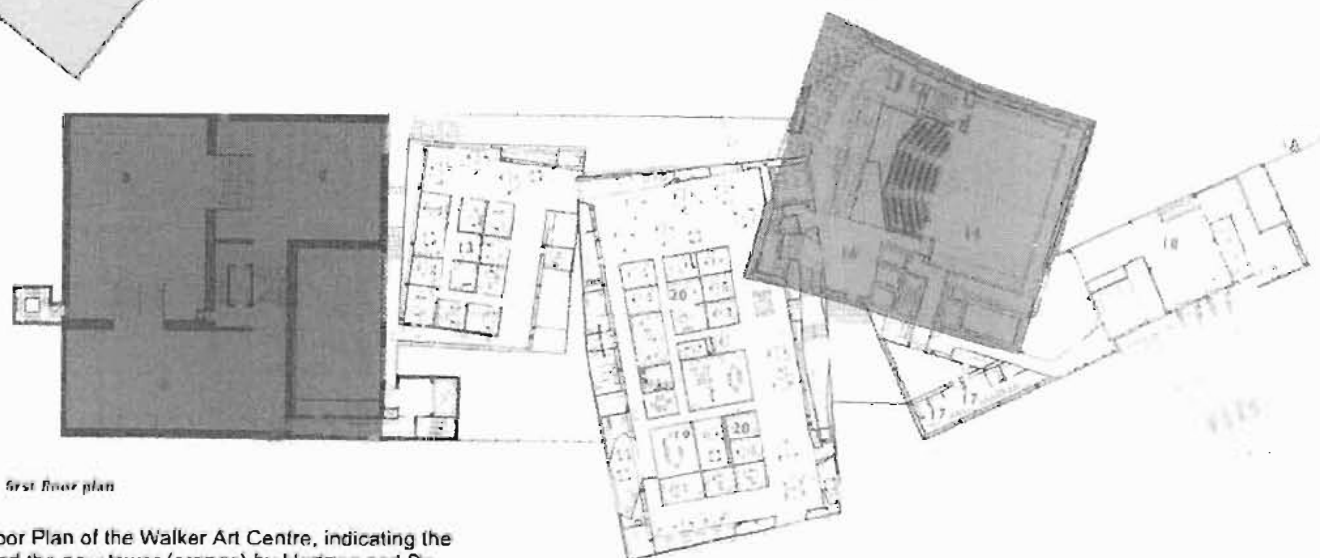
The towers are linked with a new plinth (ill. 66) that accommodates underground parking and three ground floor galleries (ill. 68). Artist studios and offices have been provided above the galleries (ill. 69). Additional functions including a library, archive, educational spaces and a cinema are located in the basement of the existing building. Service spaces have been completely separated from public and gallery functions and are located at the south end of the site.

A rejection of the traditional orthogonal geometry in planning is evident with the absence of right angles. This results in a joint-less architecture that limits the expression of structural elements. Gallery spaces are however traditionally proportioned and rectilinear for maximum flexibility (ill. 68).



- | | |
|------------------------|--------------------------------|
| 1 visitors' entry | 12 Hennepin lounge |
| 2 ticketing | 13 offices |
| 3 bookshop | 14 theatre and performing arts |
| 4 car park entry | 15 restaurant and piano bar |
| 5 technical room | 16 lobby |
| 6 wc | 17 dressing room |
| 7 cloakroom | 18 catering |
| 8 temporary exhibition | 19 conference room |
| 9 permanent collection | 20 artists' studios |
| 10 garden pavilion | |
| 11 garden lounge | |

ILL. 68: Ground Floor Plan of the Walker Art Centre, indicating the entrance and choice of routes. The permanent exhibition spaces in the original tower (purple) and the temporary exhibition spaces (yellow) in the additions of Hertzog and De Meuron have been highlighted. Ref: <http://www.walkerart.org/index.wac>



ILL. 69: First Floor Plan of the Walker Art Centre, indicating the original tower and the new tower (orange) by Hertzog and De Meuron. Ref: <http://www.walkerart.org/index.wac>



ILL. 70: View of the lace-like fretwork ceiling at the entrance to contemporary gallery
Ref: <http://www.walkerart.org/index.wac>



ILL. 71: Internal view of a gallery space where the thick canted outer walls and carved entrances are expressed.
Ref: [Http://www.archidose.org](http://www.archidose.org)

4.4.4 Spaces

Public elements such as the new tower and internal foyer areas are expressed in a light and transparent manner, using glass panels to allow interaction with the external context. The new tower appears to float due to a lack of visible structural support and weightlessness has been achieved in the use of materials and lack of right angles. In contrast, the internal gallery spaces have thick canted outer walls (ill. 71) and entrances appear carved (ill. 72) to achieve more intimate and contemplative spaces. Gallery spaces are emphasized with lace-like fretwork ceilings (ill.70) with matching gallery doors. These can be closed yet remain transparent to allow a view into gallery spaces if the gallery is used after exhibition hours.

The large and stark new public space defined by the overhang of the new tower (ill. 66) and the etched lace pattern on the concrete paving, is an inhospitable pedestrian environment considering the climate, volume and speed of passing traffic. Consequently the original entrance has been maintained to offer a choice to visitors.

4.4.5 Exhibition

The circulation route from the new entrance offers multiple routes for visitors. They have the option of entering the shop, moving a level up towards the restaurant, theatre and entertainment suite or down a ramp into a general circulation



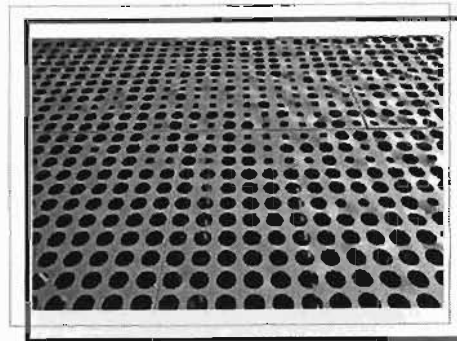
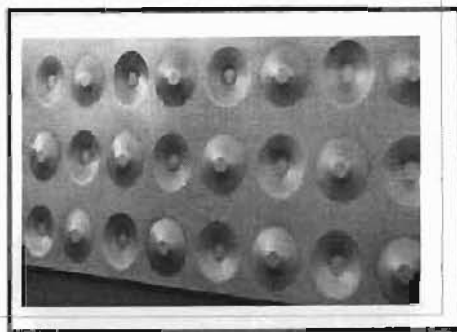
ILL. 72: View of a carved entrance into a gallery and the translucent skin separating the internal foyer from the sculpture garden. Ref: <http://www.walkerart.org/index.wac>



ILL. 73: View of the internal circulation spine which links galleries and the original and new tower. Ref: <http://www.walkerart.org/index.wac>

spine (ill. 68). The latter links all old and new galleries and the original entrance to the new entrance. The circulation space is parallel to the street and the movement of people in this linking element is clearly visible through a thick double glass skin. There is a 600mm air-conditioned space between the glass panels that act as an acoustic and climatic buffer. At a higher level the translucent glazing act as a canvas in itself, onto which images and films can be projected for advertisement and exhibitions (ill. 72 + 73).

The new galleries are similar to the original galleries and consist of flexible cubic spaces that are artificially lit. The main circulation spine opposed to a visual connection links the traditional galleries, contemporary galleries and multi-disciplinary functions. The circulation space does however become a contemporary gallery, projecting films and images that can be viewed both internally and externally (ill. 73).



ILL. 74, 75, 76: View of the expressive transparent tower of the De Young Museum in San Francisco by Herzog and De Meuron, the panels above indicate the manipulation of the building skin both in the main building and in the tower. Ref: <http://en.wikipedia.org>



4.4.6 Conclusion

The extension to the centre has highlighted and complemented the original building image through the use of dramatically contrasting forms and materials. The transparent linking element unifies the two distinct towers and simultaneously creates a greater sense of accessibility for artists and the general public (ill. 72 + 73). The new galleries have maintained a traditional contemplative character and are contrasted by the asymmetrical foyer spaces and manipulation of the building skin both internally and externally. A common circulation spine links all original and new galleries, public, administrative and retail spaces. This unifies and allows interaction between all functions and increases the overall legibility of the centre.

4.5 Character precedent

Herzog and De Meuron continue to develop the expressive tower concept in the latest De Young Museum in San Francisco (ill. 76). Here there is a similar approach as at the Walker Art Centre where manipulation of the building skin expresses and reflects the conceptual transparent intention of the museum (ill. 74 + 75).



4.6 **Conclusions to Precedent Studies**

4.6.1 **Location**

- Opposing responses is evident between the MoMA and the Burda Collection galleries, while the former subtly integrates into the urban context the latter is a distinct reaction against the organic nature of the green zone in which it is located. The Walker Art Centre responds positively to the adjacent highway, placing the entrance along that façade and locating the main circulation spine parallel to the highway. The spine has been enclosed with glass panels which double as exhibition surfaces, creating a visual dialogue between the gallery and the harsh environment.

4.6.2. **Conceptually**

- The Walker Art Centre expressed a clear distinction between the nature of contemporary and traditional gallery spaces. The organic form and use of crumpled aluminium mesh panels in the new tower is highlighted in comparison to the pure geometry of the original tower and use of brickwork. This contradicting relationship in turn creates a dialogue between the architectural language and galleries contained within the towers.



4.6.3 External expression

- Limiting the formal external expression and focusing on the use of reflective cladding panels that mirror the surrounding buildings have achieved the seamless integration between the MoMA and its environment.
- The crisp white planes of the Burda Collection Museum decisively contradict the neighboring Kunsthalle and the surrounding park with the external expression and use of materials. Instead of simply using a similar architectural language and materials to the Kunsthalle, the building has been carefully proportioned to relate to the adjacent Kunsthalle and its footprint completes the missing wing.
- The extension at the Walker Art Centre seems to have successfully married the formal and material expression of the conservative traditional gallery spaces with the highly expressive façade of the new contemporary performance space. The new animated tower cantilevers over the public sidewalk, effectively announcing the entrance in a bold manner to passersby and high-speed traffic on the highway.



4.6.4 Functional organization

Public functions within the MoMA are mainly arranged around the sculpture court that acts as a unifying element between the multiplicities of functions. Similarly in the Burda Collection Museum the galleries relate to the main entrance foyer and the circulation ramp that dissects the larger and smaller exhibition spaces. A new plinth connects the towers in the Walker Art Centre and acts as a circulation spine onto which galleries and ancillary commercial and educational functions are attached. In all precedents the circulation system has been treated as a tool to both separate and unify the contradicting functions required in a contemporary gallery.

4.6.5 Spaces

- The MoMA and the Burda Collection Museum gallery spaces have been manipulated to allow a visual relationship with the external context and between individual galleries. In the MoMA a central atrium creates a link between more traditional works and gallery spaces and contemporary pieces. At the Burda Collection Museum the floor plates of upper galleries have been recessed to allow a similar connection reflected daylight to filter through to lower galleries. As a



result of the central atrium and receded floor plates, visitors are able to have a view of multiple galleries simultaneously. This aids in general orientation and the integration between traditional and contemporary galleries. The relationship between galleries is less integrated at the Walker Art Centre where all galleries relate either to the main circulation spine or to secondary foyer spaces.

4.6.6 Exhibition

- Gallery spaces within the MoMA have a variety of sizes and volumes with the central atrium and sculpture court catering for larger works. This allows the flexibility required for the exhibition of the extensive mediums of artwork in the permanent collection and the diversity of contemporary traveling exhibitions. Burda Collection Museum has a fixed permanent collection that has been accommodated by the appropriate ratio of larger and smaller galleries. Natural daylight is reflected into gallery spaces through the roof and the louvered south façade. This in combination with an artificial lighting sensor system creates the ideal illumination required for an exhibition space. At the Walker Art Centre the circulation spine acts as a climatic buffer for the exhibition spaces as well as an exhibition surface onto which images can be projected.



5

Case Study

5.1 Introduction

5.2 Durban Art Gallery

5.2.1 Management and Funding

5.2.2 Location

5.2.3 Architectural Expression

5.2.4 Functional Organisation

5.2.5 Relationship between spaces

5.2.6 Quality of spaces

5.2.7 Exhibition

5.2.8 Gallery Activities

5.2.9 Red Eye Art

5.2.10 The Collection

5.2.11 Display Techniques

5.2.12 Storage

5.3 Conclusion



Case Study: Durban Art Gallery

5.1 Introduction

The existing D.A.G. was selected to be compared to the current theory regarding the location and image of public art galleries and the recent trend of combining the exhibition of traditional and contemporary works (Refer to Chapter 3). The architectural responses of the preceding international precedents towards the requirements for contemporary public art galleries were used to establish an international standard to which the existing D.A.G. Gallery can be measured (Refer to Chapter 4).

5.2 Durban Art Gallery

The current public D.A.G. has been selected for an in depth case study to demonstrate the existing requirements of the permanent collection and contemporary traveling collections. These requirements range from exhibition to storage and restoration. Interviews with gallery staff will establish the present and ideal administrative structure and educational functions and will identify the present weaknesses and strengths in the existing gallery to allow a realistic and contextually relevant solution to be achieved. This will require the integration of a variety of contradictory functions necessary to create a self-sustaining and globally competitive public gallery.



ILL. 77: Aerial photo indicating the position of the D.A.G. between the main transport arteries in the CBD of Durban.
Ref: www.googleearth.com

Interviews will consider the appropriate image and target market that the D.A.G. aims to serve.

5.2.1 Management and funding

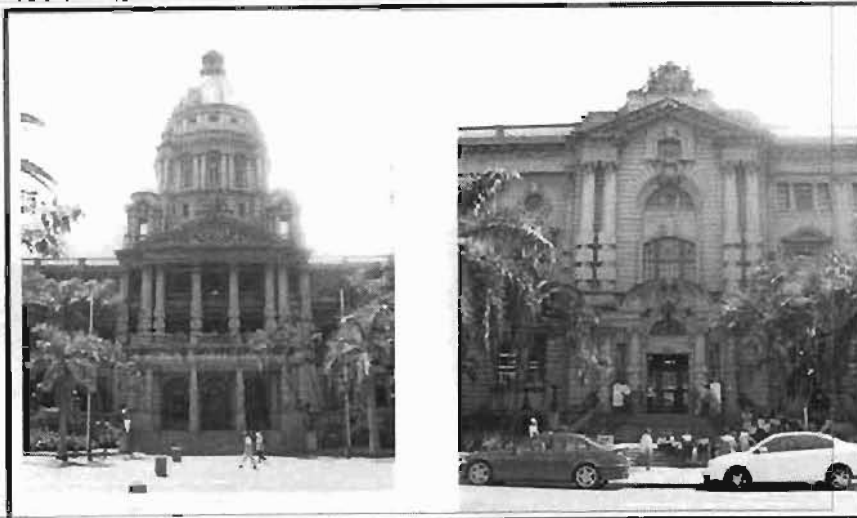
The D.A.G. is a department of the Durban Municipality. The municipality currently provides funding for staff salaries and the general maintenance of the facility. Fund-raising events such as the Red-Eye and private sponsors provide additional resources for the acquisition of new works.

5.2.2 Location

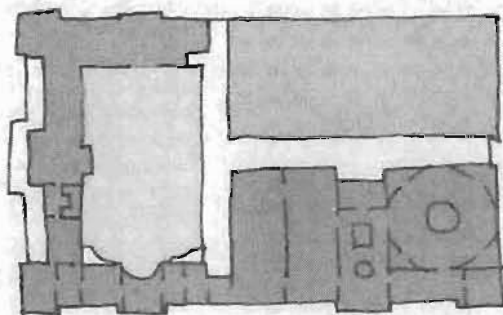
The current D.A.G. is located in the cultural precinct in the Central Business District (CBD) of Durban. There is a dense urban environment surrounding the precinct that includes commercial and residential functions. The existing D.A.G. is housed in the City Hall that is located in the CBD of Durban. West Street borders the City Hall complex to the north and Smith Street to the South. These roads are the primary transport arteries within central Durban. The City Hall faces the historic Francis Farewell Square to the west and Medwood Gardens to the north.

5.2.3 External/Architectural Expression

The City Hall was designed by Stanley Hudson and completed in 1910. It is a replica of the Belfast City Hall in Northern Ireland.



ILL. 78 + 79: Main entrance to the Durban city hall complex and the entrance to the Library, Natural History Museum and the D.A.G.
Ref: author



ILL. 80: Second Floor Plan of the Durban City Hall Complex, indicating the location of the D.A.G.
Ref: author



ILL. 81: View of the central staircase which is shared by the Library, Natural History Museum and the D.A.G.
Ref: author

The style can be classified as Edwardian neo-Baroque architecture (<http://en.wikipedia.org>). As the D.A.G is contained within the City Hall complex (ill. 78 + 80) it has no singular architectural expression or identity.

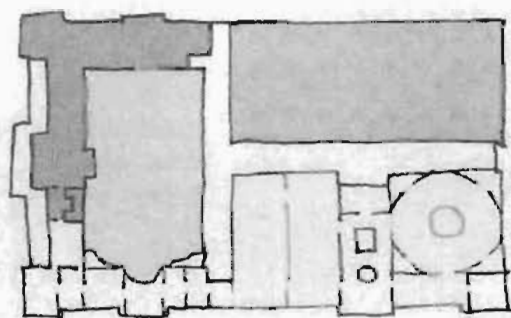
The City Hall is divided between cultural and administrative blocks. The cultural block consists of a library on the ground floor, a natural science museum on the first floor and the art gallery on the second floor. The facilities share a common entrance (ill. 79) and a central staircase (ill. 81).

5.2.4 Functional Organisation

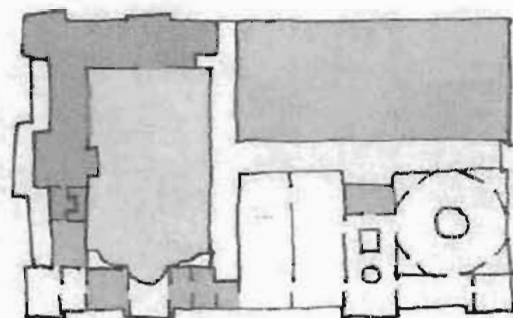
Galleries in the D.A.G are accessed from the central foyer. One of the smaller galleries is currently being used for administrative functions. Educational workshops are held on a monthly basis in one of the smaller galleries. Research offices, conservation studios and storage facilities were moved to the old Durban Beer Hall in St. Alfred Muse in 1995. This facility is also located within the CBD. Spaces previously occupied by the research and conservation studios now accommodate the reference library and a staff tearoom with lockers (ill. 83).

5.2.5 Relationship between spaces

Internal public functions are closely related with all the galleries linking directly to the central foyer and vertical circulation.



ILL. 82: Floor Plan of the D.A.G. Indicating the main gallery spaces that are accessed from the central foyer.
Ref: author



ILL. 83: Floor Plan indicating the service spaces which accommodate the reference library and a staff tearoom with lockers
Ref: author



ILL. 84 + 85: View of the rectangular gallery which fails to provide adequate natural day lighting and the gallery which was converted for the exhibition of multi-media works.
Ref: author



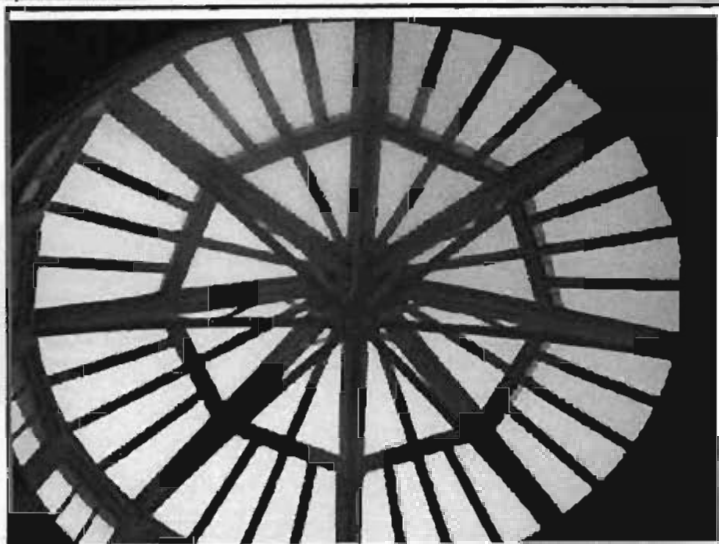
ILL. 86: View from the circular gallery into the Science Museum.
Ref: author

Access to administrative functions seems disrupted as the research library is not linked to the offices and both have to be accessed through public galleries.

There are two circular light wells visually linking the science museum on the first floor and the art gallery on the second floor, facilitating interaction between visitors (ill. 86). There is no relationship between the gallery and the public street atmosphere as it is on the second floor. This does offer a more contemplative experience but fails to initiate public interest and interaction.

5.2.6 Quality of spaces

The gallery was designed to house a permanent collection of 500 works, largely paintings. The exhibition spaces were derived from this requirement, allowing for maximum wall space through the use of overhead day lighting. The rectangular gallery however fails to provide adequate day lighting and is completely artificially lit. In addition, the nature of current exhibition has changed dramatically from that for which the gallery was designed. Current multi-media works that need to be displayed require minimal to zero day lighting, and this resulted in the glass panels of the large skylights being covered (ill. 84 +85). The material used however fails to block sunlight completely, giving an over-all pink glow to the interior



ILL. 87: View of the sky-light above the circular gallery which allows excess day light into the gallery space below that damages the works.
Ref: author

volume. The circular gallery is flooded with direct daylight from a large overhead skylight (ill. 87) that exceeds the recommended 500lux. Works are consequently damaged and excessive glare hampers the viewing of works. The skylight above the central foyer, however, successfully filters light through to the library foyer on the ground floor.

5.2.7 Exhibition: Display and integration of art works

The increase of the collection size from 500 to 7000 works, and the current trend of exhibiting traditional and contemporary works simultaneously have resulted in works being on constant rotation and in the exhibition of different media in the same gallery. Multimedia works are exhibited in the artificially lit galleries where light levels can be controlled. The lack of a designated sculpture gallery meant that these works had to be incorporated into the existing galleries. The foyer area has become a gallery in itself, creating an interesting dialogue between the contemporary multimedia works in the rectangular gallery and the traditional works displayed in the circular gallery.

5.2.8 Gallery Activities

Opening Times:

Monday - Saturday 8.30am - 4.00pm

Sunday 11am - 4.00pm



Guided Tours

Volunteer guides deliver talks and act as guides for walkabouts on required topics in English, Afrikaans or Zulu. Students, scholars, clubs, groups and members of the public can be accommodated.

Events:

Films and lectures are given in the Gallery or in the Lecture Theatre on the first floor that is accessed through the Natural Science Museum.

Youth:

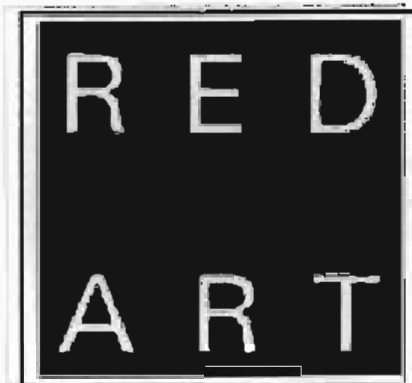
Special activities are organised for the youth during school holidays. Regular craft workshops are held in the Educentre in collaboration with the D.A.G. Activities include traditional beadwork, basket weaving and straw-hat making.

5.2.9 Red Eye Art:

Red Eye is a quarterly event aiming to reclaim the inner city and increase art awareness. Crowds of up to 2000 people are attracted. It is part of the Inner City Ethekwini Regeneration and Urban Management Programme (iTrump) (ill. 88), ABM that was established as a response to the need for the regeneration of the inner city. The aims of ITRUMP include:



ILL. 88: Logo for the Inner City Ethekweni Regeneration and Urban Management Programme (iTrump) initiative.
Ref: <http://www.durban.gov.za/durban>



ILL. 89: Marketing logo for Red Eye Art
Ref: <http://www.redeyearart.co.za/>



ILL. 90, 91, 92: Views of different installation art pieces which have been assembled in the public parks and streets around the city hall.
Ref: <http://www.redeyearart.co.za/>

- Increasing economic activity
- Reducing poverty and social isolation
- Making the inner city more viable
- Initiating effective and sustainable urban management
- Improving safety and security
- Developing institutional capacity

The Red Eye Art event (ill. 89) particularly emphasizes performance art. These include:

- Contemporary European and African dance such as ballet and gumboot dancing
- DJ's and bands in the main gallery
- Sound and Light installations in the smaller galleries
- Fashion shows

The Red Eye event assists the Durban Art Gallery (D.A.G) in developing a larger black audience by "bringing the street into the gallery and the gallery into the street" (ill. 90, 91, 92). The art has been made accessible to people from all walks of life.



5.2.10 Collection

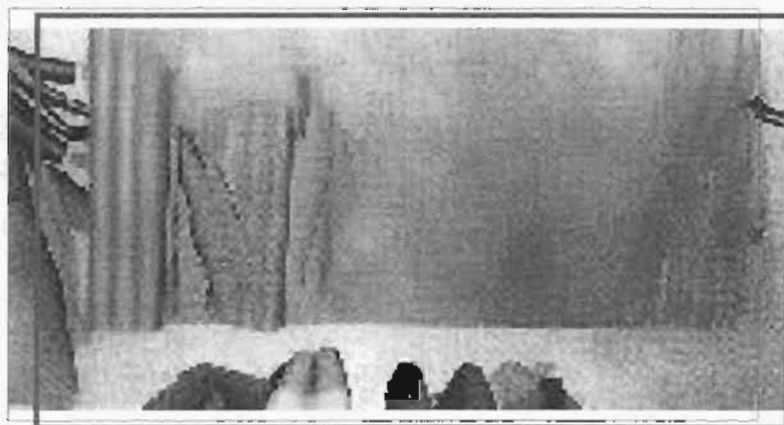
According to Jenny Stretton the Acting Curator of D.A.G. the current collection can be outlined as follows:

The D.A.G is based on the western art gallery model consisting of a permanent and a study collection. The permanent collection is for exhibition purposes while the study collection is for research only as the works have a relatively short life span.

The research at the D.A.G. is monitored by a paper conservator, an easel/oil conservator and ideally an object conservator (beadwork and fibre). The ideal management structure required would include a curator of exhibitions (organizing exhibitions, events, marketing), a curator of collections (assembling and managing and preservation of collections) and a curator of contemporary art.

The current permanent collection consists of approximately 7000 works. The works are on constant rotation. Works are rotated every two months and 7% of the collection is exhibited at a time. A small portion of the works is on loan to municipal departments while the remaining works are in storage.

The collection originally consisted of 400 works donated by Colonel R.H. Whitwell. These included British French and



ILL. 93: The largest work in the collection called "Tall, Average, Petite" by Allen Jones. Ref: Author

Dutch paintings, French and Chinese ceramics, glass vases and bronzes establishing the Foreign and English collection. From 1970 many works of local artists and crafts-people were added to the collection establishing the South African collection. The current collection concentrates largely on works reflecting the rich multi-cultural diversity of Durban and South Africa.

The collection breakdown:

4410 Paper Works 63%

1890 Paintings/Easel works 27%

700 Sculpture/textiles/fragile 10%

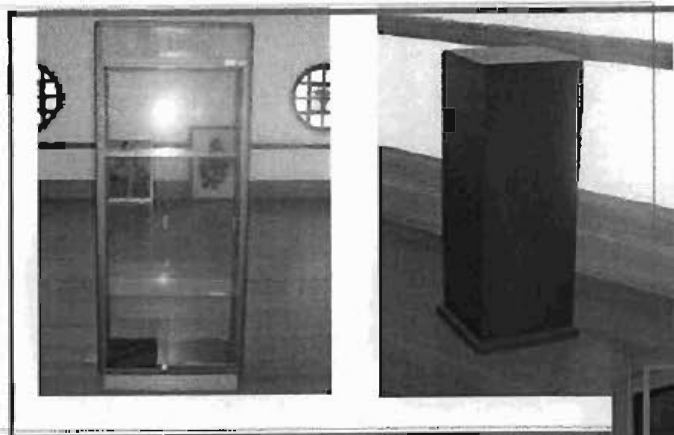
Paintings: Largest- 2.5X4m (ill. 93), Smallest- 30X15cm

Sculpture: Largest - 17mx4.5x6mm, smallest - 17x4.5x6mm

Paper works: (including photographs):
Largest - 2hx1.8x0.7m

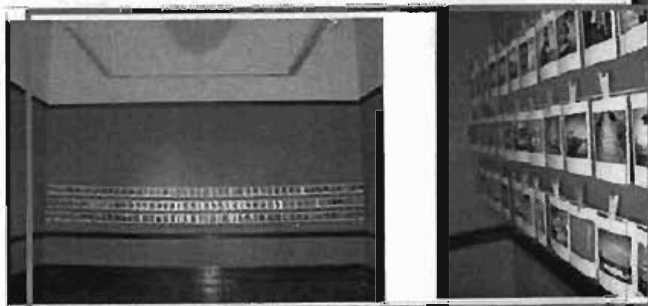
Fragile collection: includes silver and copper works

Textiles: includes delicate beadwork and clothing



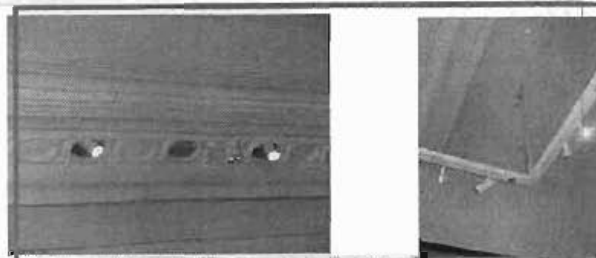
ILL. 94 + 95: Free-standing glass cases and timber podiums are used to exhibit small sculptures on. Ref: Author

ILL. 96: Wall mounted glass cases are used for more delicate works. Ref: Author



ILL. 97 + 98: Demonstration of contemporary exhibition techniques where photographs have been attached to a string which was bolted to the wall. Ref: Author

ILL. 99 + 100: Additional spotlights which have been inserted into the original ceiling details. Ref: Author



5.2.11 Display techniques

A variety of display methods are used. The traditional wall mounting is used for paintings and timber podiums are used for small sculptures (ill. 95). Free standing and wall mounted glass cases are used for more delicate items (ill. 94 + 96).

Contemporary mediums require alternative exhibition options. The current exhibition has photos attached to a string running from one wall to another. These have been fixed directly to the original existing structure (ill. 97 + 98). An alternative may be more ideal to prevent damage to the original building envelope. Multimedia works that require power supply remains problematic and can only be accommodated on a temporary basis.

Spaces originally designed for storage are now being used for exhibition. Additional spotlights have been provided which are adjustable and suspended from the ceiling. Artificial lighting has also been incorporated into the original ceiling details (ill. 99+100)

5.2.12 Storage at gallery

A small sliding rack storage facility is located adjacent to the gallery but insufficient environmental control has lead to infestation, making it obsolete (ill. 101 + 102). Timber frames



ILL. 101 + 102: View of the small sliding rack storage facility provided at the D.A.G. Which is insufficient and has been damaged by infestation.
Ref. Author



ILL. 103: Sliding rack system which is used in the paint store at the conservation facility.
Ref. Author

run on steel tracks but insufficient space has been allowed for the frames to slide out making storage and handling difficult.

Beer hall storage and conservation facility (ill. 104)

All stores and conservation studios are environmentally independently controlled to eliminate any fluctuation of temperature and humidity. All studios and stores include a wrapping table where works are bubble wrapped before relocation or unwrapped upon delivery. There is a direct relationship between the conservation studios and storage. Additional storage is required as fragile and larger works, and works of different media, which have individual environmental requirements, are being stored in the same area due to a lack of space.

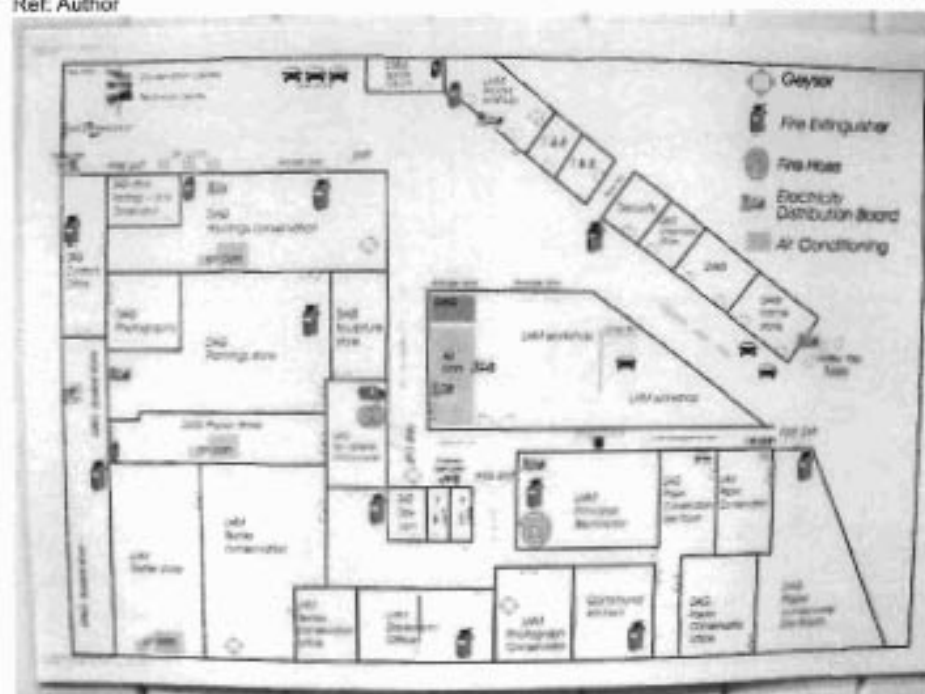
The storage facility includes:

Paper store (ill. 105, 106, 107)

Paper works are stored in horizontal drawers on acid-free mounting boards allowing them to be easily framed for an exhibition. Larger works are stored in boxes.

Paint store

A sliding rack storage system (ill. 103) is used with additional cupboards for smaller works. Each screen stores up to six works on both sides and both screens and works



ILL. 104: Map of the Beer Hall Storage and Conservation facility.
Ref. Author



ILL. 105, 106, 107:
Paper works are stored horizontally in drawers and boxes on acid free mounting boards for preservation and ease of framing
Ref: Author

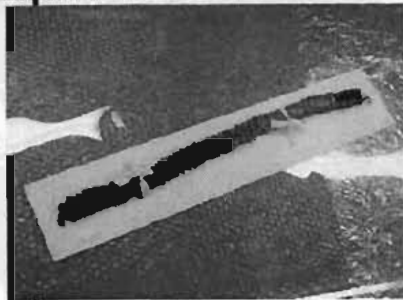
are numbered for easy identification.

Frame store

Some frames are stored separately from delicate works. A drawing board and mounting board cutter is provided to re-insert works into frames.

Sculpture store/ Textile store / fragile (ill. 108, 109, 110)

Beadwork is individually secured with pure cotton strips to non-acidic board in order to prevent pressure being exerted on the threading. Fragile silver and copper pieces are stored in a sealed glass case in bags that are tarnish free and prevent the accumulation of dust. Textiles are stored in boxes.



ILL. 108, 109, 110:
Sculpture and beadwork are on melanex and on acid free mounting boards for preservation
Ref: Author

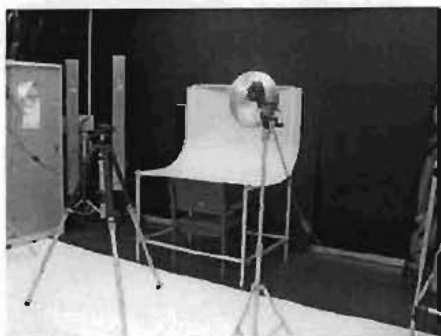
Basket and furniture store (ill. 111 + 112)

Humidity levels are closely monitored and baskets are wrapped in melanex to prevent discolouring. Pure cotton drapes are placed over furniture to prevent dust.



ILL. 111, 112: Baskets are wrapped in melanex and furniture is covered in pure cotton drapes and placed on bricks covered with melanex strips.
Ref: Author

ILL. 113: Equipment required within the photographic studio.
Ref: Author

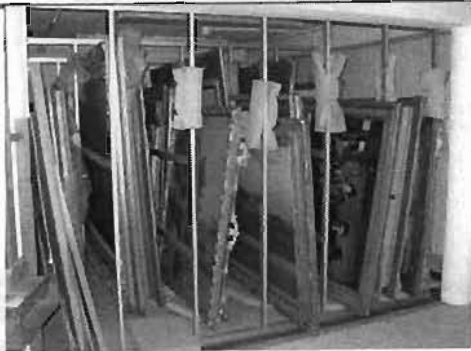


Photographic studio (ill. 113)

The photographic studio is necessary for the documentation of the collection. Specialized lighting equipment, lamps and screens are provided with side lighting on wheels. A dark room for the developing of film is shared with the science museum research department.



ILL. 114: Vacuum tables
Ref: Author



ILL. 115: Sliding rack storage system
Ref: Author



ILL. 116: Roller door access
Ref: Author



ILL. 117: Portable side lighting
Ref: Author



ILL. 118: Preparation of works before transportation
Ref: Author



ILL. 119: Washing Beds
Ref: Author

Easel and Paper conservation studio

Vacuum tables (ill. 114) are used to re-align and re-stick works. Movable side lighting (ill. 117) and flat lights are used to access works. All lights and tables are on wheels to allow flexibility for the configuration of the studio. There is a sliding rack storage system (ill. 115), wall storage rails and a specialized paper box store. Roller door access is required for deliveries (ill. 116). A marked chemical cupboard is provided for the storage of materials. A specialised air-conditioning unit contains the necessary environmental filters. A washing bed (ill. 119) is required for the cleaning of equipment and damaged works.

Administrative

Offices are provided for the conservators, curator, general and record assistants.

Owner/User Survey

Access to the gallery for the disabled is problematic as no ramp or lift has been provided. Disabled visitors have to be let in from a door at the back behind a security gate that leads to a small lift.



5.3 **Conclusion**

The D.A.G is centrally located and accessible but lacks a marketable image and a clear definition of entrance. The expanding collection and multiplicity of functions required by a contemporary public art gallery cannot be adequately accommodated within the existing facility. The relationship between the galleries and storage and conservation facility is problematic as constant rotation is necessary and this is delayed because the storage is off-site. Works traveling between the gallery and the storage facility are at risk of being damaged or stolen. The relationship between the public context and the gallery is minimal, preventing the marketing and sustainability of the gallery. Exhibition techniques fail to allow for multi-media works and sculpture to be permanently displayed and are not adequately considerate of the needs for individual media.

Considering the above a new facility for the D.A.G. is required, which will accommodate the multiplicity of functions necessary, create a marketable image and be contextually integrated in view of environmental control and public accessibility to the building.



6

Developing the Brief

- 6.1 Introduction
- 6.2 Influencing Factors
- 6.3 Current Functions
- 6.4 Usage Patterns
- 6.5 Additional Functions Required
- 6.6 Environmental
- 6.7 Technical
- 6.8 Brief
 - 6.8.1 Client
 - 6.8.2 Mission Statement
 - 6.8.3 Development



Developing the Brief

6.1 Introduction

The case study of the existing D.A.G. established the need for a new public D.A.G. The brief defines the requirements of a new D.A.G. determined by the functional, environmental and client needs. The preceding theories, precedents and case study have established these in broad terms while the brief focuses on the detail necessities and considerations.

6.2 Influencing Factors on the design for a new D.A.G.:

The case study of the existing D.A.G. partially determines the requirements of the brief. The current facility is used as a guide for the outline of the accommodation schedule identifying the present functions accommodated and additional functions required.

Carol Brown, the curator of the D.A.G. (recently retired), stated that the main accommodation problem of the gallery lies with the large increase in the number of works in the permanent collection. The original gallery was designed for 500 works while the current collection consists of 7000 works. A dramatic increase in exhibition space is therefore crucial.

Many travelling and contemporary exhibitions are being exhibited which have specific lighting and sound requirements.



The dome of the city hall, which is currently un-occupied, has been considered to become a venue for contemporary works and sculptures. The nature of the building envelope, however, with deep recessed windows, will still not be acoustically ideal and may be problematic for digital media requiring a controlled minimal light source.

The gallery aims to develop a larger black audience from the community and functions as an efficient resource to the community. Several educational classes are held during the week, currently in exhibition spaces, and require a designated space. Educational spaces and the reference library need to be interlinked for optimum usage.

The scale of the Red-Eye event that aims to promote a culture of art appreciation has increased attracting up to 2500 people. Adequate technical supported needs to be provided for the event to function efficiently and ancillary functions such as ablutions need to be considered.

6.3 Functions currently accommodated in the existing building:

- 3 large picture galleries: 1 circular and 2 rectangular galleries which are interlinked. One of the rectangular galleries functions as a multi-media exhibition hall.



- Rectangular exhibition hall
- Photographic gallery
- Entrance foyer with reception desk for 1 staff member
- Curator office and additional administration office for 3 staff members
- Male and female ablutions
- Air-conditioning plant room
- Staff lounge and tea room
- Staff changing rooms and lockers
- Reference library

6.4 The following table establishes the usage patterns and volumes of visitors using the existing D.A.G.

Number, time period and transport method of people using the building

When	Number	How
Daily	5 buses per day : 300 learners	School buses
Weekends	Saturday classes: 30 children Public :100 visitors	Bus, taxi, private vehicles
Every second weekend	Adult workshops: 60 adults	Bus, taxi, private vehicles
Semi-annually	Red-Eye event: 2500 visitors	Bus, taxi, private vehicles



General visitors consisting of the local community and visiting tourists visit the gallery independently. These numbers are unpredictable but are higher during weekends, and on public holidays and during school holidays. A variety of transport methods are used but mostly taxis and private vehicles.

6.5 According to Mrs. Brown the additional functions required in a new facility include:

- Additional exhibition space to exhibit the increased collection
- A purpose-designed multimedia exhibition facility
- Efficient technical support to adequately support the Red-Eye event
- A large sculpture exhibition hall/space
- Adequate storage facilities: including ancillary workshops and technical functions
- Restoration facilities: including appropriate ancillary functions
- Additional administration facilities to cater for the increase in the number of staff
- Educational facilities
- Commercial/retail component: Bookshop, coffee shop
- Accommodation for visiting artists / lecturers
- Access for the disabled



Potential number of stories the building requires considering the above functions necessary:

- Three to four stories
- Basement level: parking
- Ground floor: galleries, commercial, restoration, storage
- First floor: educational, administrative, galleries
- Second floor: administrative, galleries
- Third Floor: accommodation

6.6 + 6.7 Environmental and technical performance requirements

Deducted from the precedent and case studies, it is crucial for all exhibition and storage spaces to be constantly climatically controlled. This will require a 24-hour environmental control plant, adjusting to varying weather conditions and the dramatically changing volume of people within the gallery.

Natural lighting reflects in a wider spectrum of colour compared to artificial lighting. This allows works to be interpreted more accurately and in greater detail. Consequently the optimum lighting conditions for exhibitions require naturally diffused day lighting. Day light reflected evenly across the entire exhibition volume and not simply onto individual exhibitions, prevents dark



shadow lines that can detract from the art works. All natural daylight channeled into exhibition halls will need to be indirect and glass panels will need to be treated with UV-resistant film to prevent damage to the works. Materials used will have to address acoustic requirements of the space and adhere to fire regulations.

An adequate hanging system is required to cater for the increased scale of the works. The additional load on the flooring by the larger works needs to be considered.

Multi-media works require technical support, i.e. plug points, an acoustically controlled space with provision for sound equipment and flexible artificial lighting fixtures. Technical wiring and air-conditioning may be accommodated in a suspended floor or ceiling.

An appropriate security system is crucial to ensure the safety of the additional artwork and equipment. An advanced security system will allow the gallery to host specialized traveling exhibitions, i.e. a Picasso collection. This will add to the status and variety of exhibition at the gallery.



6.8 Brief and Schedule of Accommodation

6.8.1 Client:

The client is the public D.A.G. a department of the Durban Municipality. The existing gallery was opened in 1910 with the donation of a collection of Victorian paintings. The collection has increased dramatically including several South African and Contemporary works. The growth of the collection and introduction of new artistic media that needs to be displayed has impacted the exhibition, storage and restoration requirements that are no longer sufficient at the existing facility. The D.A.G. offers educational workshops and the Red Eye Art event that has similarly increased in scale and requires a new facility that can accommodate the variety of environmental and technical requirements.

6.8.2 Mission Statement of Durban Art Gallery:

The D.A.G. aims to develop a larger black audience from the greater Durban area and promote a culture of art appreciation amongst the existing local population. The Gallery strives to make the collection more representative of South African art consist more specifically of art from KZN and the Durban region. This is been facilitated by educational workshops and the Red-Eye event that offers exposure to emerging local artists.



6.8.3 Development of a new D.A.G.:

A new facility for the public D.A.G is required to accommodate the needs of the growing collection. This includes exhibition, preservation and restoration requirements. Additional educational and commercial functions need to be incorporated to enable audience development and provide additional funding for the acquisition of new works.

The schedule of accommodation outlines the functional requirements of a new D.A.G. derived from the case study and influencing factors including the environmental and technical requirements (Refer to Appendix B).



7

Site Analysis + Context

- 7.1 Introduction
- 7.2 Context
- 7.3 Site selection criteria
- 7.4 Urban design goals
- 7.5 Public transport system
- 7.6 Site proposals
- 7.7 Conclusions

Context Map indicating galleries in proximity to the Durban Art Gallery:



ILL. 120: Aerial photo of Durban
Ref: www.googleearth.com

- **A: The Durban University of Technology gallery**
- **B: BAT Centre**
- **C: African Art Centre**
- **D: KZNSA**
- **E: Art Space**
- **F: D.A.G**

7.1 Introduction

In mapping the location of the art galleries (ill. 120) within Durban the context within which the D.A.G. is situated can be established. The site with the most potential for enhancing interaction and collaboration between the different galleries can subsequently be identified.

7.2 Context

Considering the location of the existing D.A.G. and the other art galleries, four potential urban precincts were selected. These were analysed according to the brief requirements for the location of the new D.A.G. established by the theoretical framework, precedents and case study. Each precinct was rated on a scale from 1-3 reflecting the potential for providing the criteria required. (Refer to Appendix C)

Through the comparative analysis of urban precincts the CBD was identified as the area where the new D.A.G. should be located. The CBD contains the necessary transport and commercial activities required to sustain a large public art gallery. The existing cultural framework within the CBD is most appropriate considering the civic nature of a public gallery.



ILL. 121: Aerial photo of CBD
indicating precinct definitions
Ref: www.googleearth.com

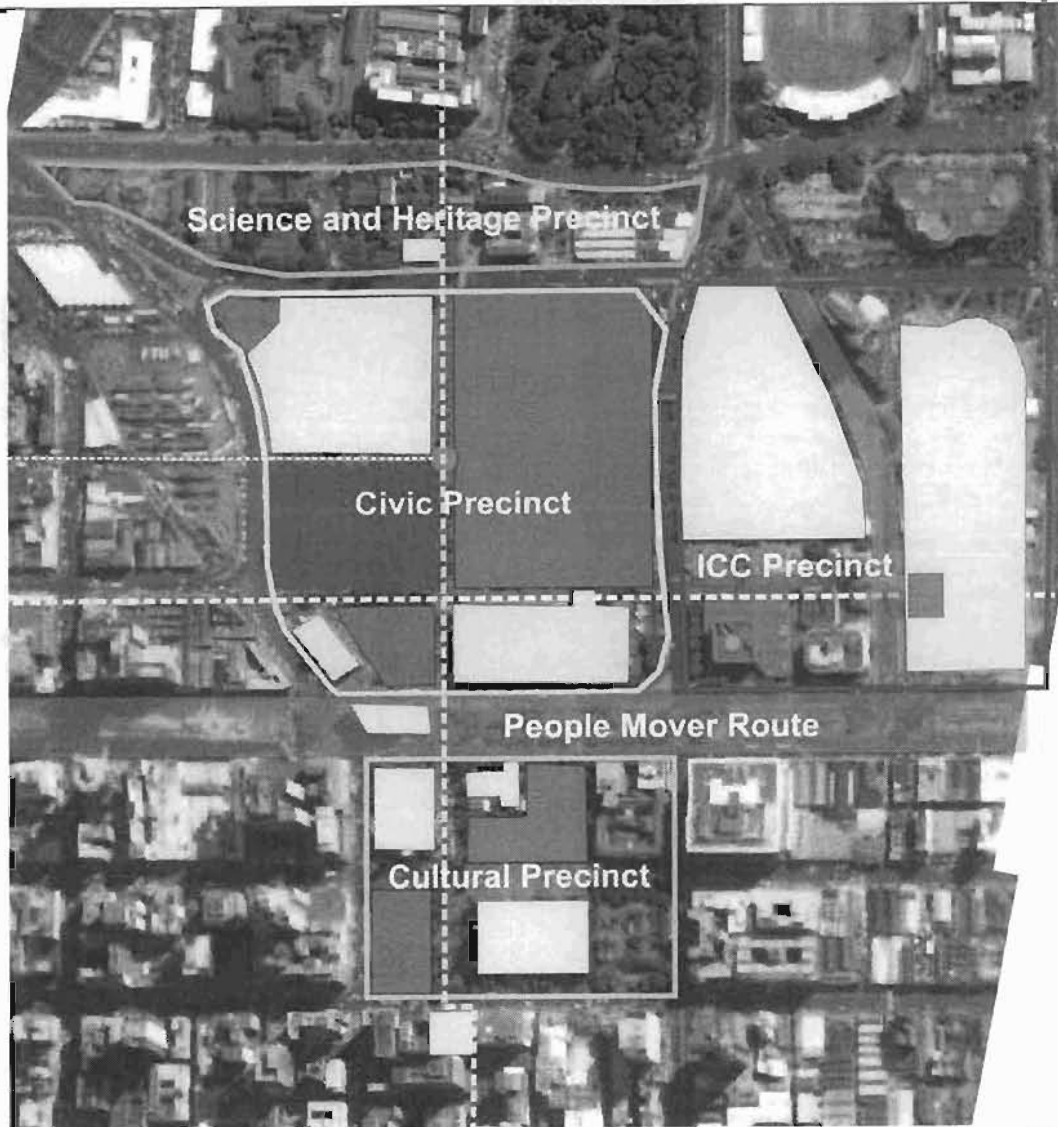
7.3 Site selection criteria

Influencing factors on the selection of a site for the new D.A.G. range from long-term urban design goals to detailed environmental analyses of specific sites. These need to be compared to determine the most suitable site and alternative locations of the building within the site. Factors that will be discussed include:

- Long term urban design goals in Durban
- Densification of established precincts
- An improved public transport system

7.4 Long-term urban design goals and densification of established precincts:

The city architect has confirmed the following plans for precinct definition (ill. 121) and urban design developments within the CBD. There is a proposal for the establishment of a cultural precinct including the City Hall, Post Office, Francis Farewell Square, Medwood Gardens and the Anglican Church. The Durban municipality has proposed the relocation of the Natural Science museum and the Durban Public Library to the Centrum site establishing a civic precinct and allowing the expansion of the D.A.G. into the entire cultural block of the City Hall. This would not be ideal as the spaces will not be able to accommodate the exhibition requirements of the gallery.



ILL. 122: Aerial photo of CBD indicating improved public transport and pedestrian routes. Ref: www.googleearth.com

7.5 An improved public transport system (ill. 122)

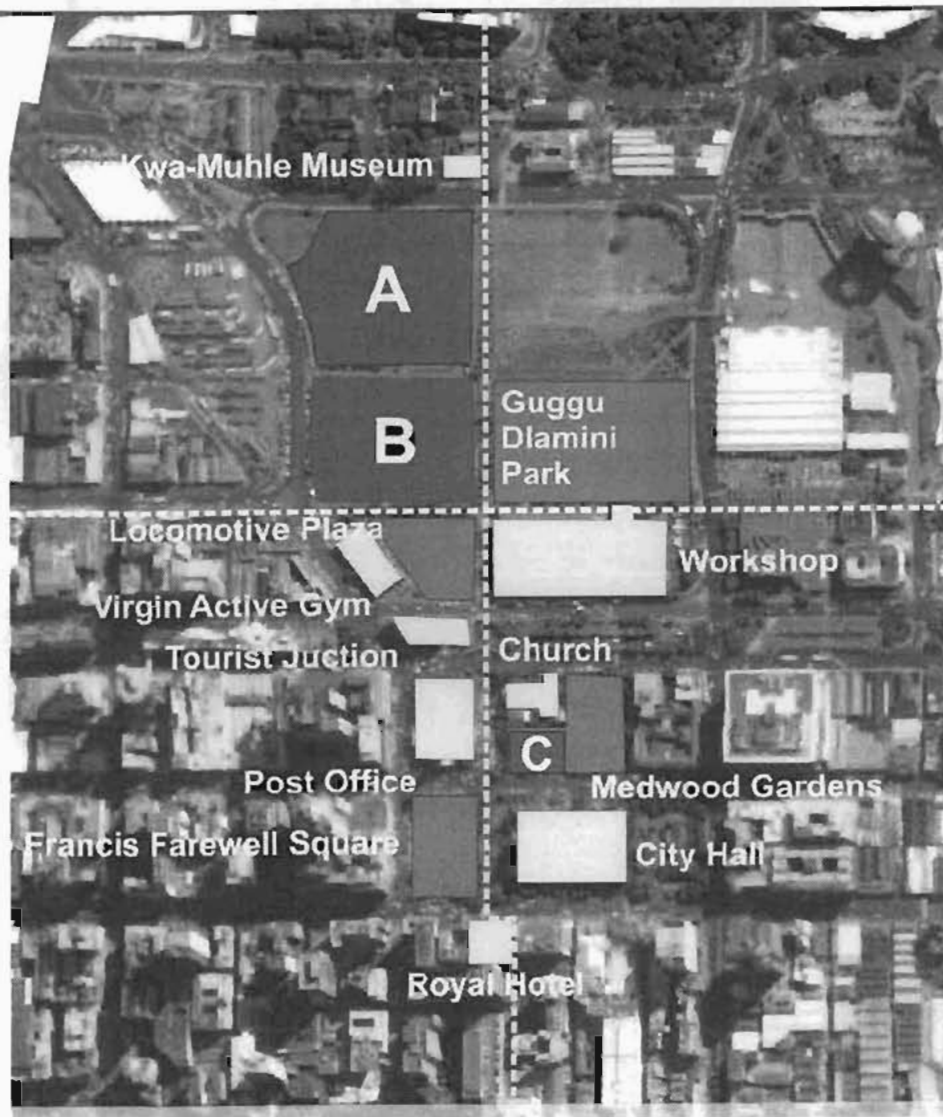
A people mover system has been introduced with the final goal of becoming a tram route. This includes stops at all major locations in Durban including the central city, beachfront and point development. The aim is for Pine and Commercial Street, major arteries linking the precincts, to become pedestrian paths in collaboration with the tram system that will follow the historical rail route through Durban.

7.6 Site proposals within the CBD for the new DAG:

Three potential sites were identified(ill. 123):

- **Site A + B**

In the civic precinct the top left and central Centrum site has been considered. Future plans by the city architect include the extension of the park to the top right of the Centrum site. These sites are highly visible to traffic entering and leaving the CBD. The sites can be accessed easily as there is an existing taxi and municipal bus drop-off point at the Soldiers Way border. Underground parking at the Workshop will eventually be extended serving the CBD. The top left site, however, needs to consider the sacred nature of the adjacent Shembe Worship site and the high speed and traffic volumes along the Northern site boundary.



ILL. 123: Aerial photo of CBD indicating site proposals for a new D.A.G.
Ref: www.googleearth.com

- **Site C**

In the cultural precinct the site of the original town swimming pool was selected. The pool is permanently empty and unused. The site is easily accessible by both private and public transport and relates to both Medwood Gardens and the market along Church Street. The site is, however, too small to accommodate the physical requirements of the proposed gallery.



Site Analysis

ILL. 124: Aerial photo of selected precinct and site demonstrating a site analysis.
Ref: www.googleearth.com

7.7 Conclusion

- **Site B** has the most potential as it is directly linked to the major pedestrian intersection and links onto the existing cultural spine. The area of Site B exceeds the requirements of the current brief for a new D.A.G. Consequently a portion of the site has been selected which directly links onto the existing cultural spine and pedestrian route. The remaining portion of the site may be used for the future expansion of the D.A.G.
- **Analysis (ill. 124)**
Opposite is a more detailed site analysis of the proposed site indicating the pedestrian and vehicular movement patterns. The site borders the Guggu Diamini Park and the historic Locomotive Plaza. The site thus offers the opportunity to create an edge to both public spaces and spatially define each.



8

Conclusions + Recommendations

- 8.1 Location
- 8.2 External Expression
- 8.3 Functional Organisation
- 8.4 Spaces
- 8.5 Exhibition



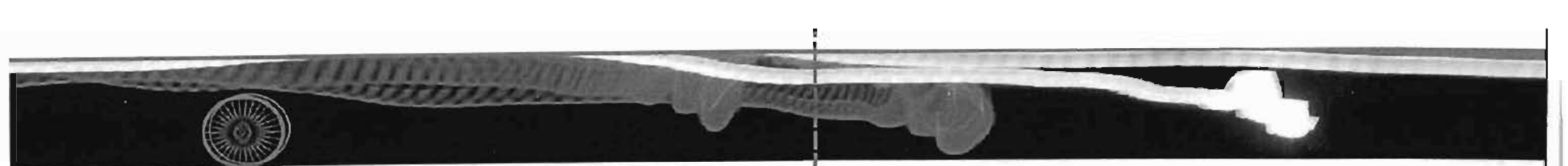
Conclusions + Recommendations

Introduction

The following conclusions and recommendations are a design guideline for the development of a new public D.A.G. These have been established from the theories discussed, the analysis of precedents and a case study of the existing D.A.G., and the subsequent development of an appropriate brief.

8.1 Location

- A new D.A.G can maximise the potential of acting as a regenerative catalyst and sustaining commercial functions if it is located in a densely populated urban zone. (Refer to chapter 1 Richard Meier, Museum of Modern Art in Barcelona and the Pompidou Centre in Paris by Piano and Rogers)
- Close proximity to public transport nodes and general ease of accessibility to the site by vehicle, bus, train and pedestrian movement including disability access will aid in the diversity and number of users of the gallery. (Refer to Chapter 3)
- The existing framework of civic and cultural buildings within the city needs to be established to successfully integrate the new public D.A.G. This may include other iconic structures that add to the legibility of the cityscape. (Refer to Chapter 3 and 4, Baden-Baden



Museum by Richard Meier and Chapter 7 outlining the position of the existing framework in Durban)

- Considerations of key pedestrian movement routes is crucial to aid in developing a larger black audience and evoke interest from the general public in gallery activities. (Refer to Chapter 7)

8.2 External Expression

- The new D.A.G. needs to express an image that is distinct and readable independent from the City Hall and which can establish the gallery as a competitive icon within the city itself, nationally and globally. (Refer to Chapter 1 and 3, Guggenheim Museum in Bilbao by Frank Gehry)
- The external expression needs to be reflective of a public art gallery located in Durban and contextually relevant considering the climatic response, use of materials and the architectural language portrayed. (Refer to Chapter 4, MoMA in New York)

The external form and expression has to remain sympathetic towards the artwork that is exhibited within the gallery, establishing a balanced relationship as opposed to an antagonism between the art and architecture. (Refer to Chapter 1 and 3, Guggenheim Museum in Bilbao by Frank



Gehry and Chapter 4, Walker Art Centre by Hertzog and De Meuron)

- The iconic and distinct image of the gallery should function on multiple levels considering the response both to the macro and micro context. The image may be more successful if it is generated as a response both to the immediate surrounding context allowing for pedestrian interaction, and as an entity that forms part of the greater urban framework considering the scale and location of the building. (Refer to Chapter 3)
- In order to reflect the public nature of the building and maximise the educational potential of functions such as restoration, the transparency of the building skin may be explored allowing for visual interaction without compromising the internal environment. (Refer to Chapter 4, De Young Museum by Hertzog and De Meuron)

8.3 Functional Organisation

- The integration and linkages between the varieties of functions required is crucial for the successful functioning of the gallery. (Refer to Chapter 4, MoMA in New York)
- The circulation system within a complex building such as the gallery functions on multiple levels both as a



physical access system and a visual bridge between public and private environments. It has to allow for connections between the different functions that inevitably make it the main public interface. This creates the potential for the circulation to act as the link between internal and external environments, whether this is simply visually or physically. (Refer to Chapter 4, MoMA in New York, Baden-Baden Museum by Richard Meier and Walker Art Centre by Hertzog and De Meuron)

- The use of a courtyard is a technique that may be used to link the contradictory functions and simplify the functional organization. This allows a clear distinction between the functions that can act independently of each other and allows greater legibility within the building. (Refer to Chapter 4, MoMA in New York)
- The separation of contradictory functions allow for the isolation of different environments that can be independently climatically controlled. The gallery spaces, storage and restoration have different requirements to the educational facilities, library, offices and restaurants and should be individually air-conditioned and ventilated. (Refer to Chapter 4, Baden-Baden Museum by Richard Meier and Walker Art Centre by Hertzog and De Meuron)



8.4 Spaces

- The quality of the exhibition spaces is crucial for the adequate preservation and observation of artwork. This includes appropriate climatic control and natural day lighting techniques. (Refer to Chapter 4, Baden-Baden Museum by Richard Meier and Chapter 6)
- A relationship between the gallery spaces is crucial to create integration between traditional and contemporary works. The use of a central atrium onto which gallery spaces overlook is a technique that allows visitors to view both traditional and contemporary art, exhibited in separate spaces, simultaneously. (Refer to Chapter 4, MoMA in New York, Baden-Baden Museum by Richard Meier and Chapter 5, D.A.G.)
- Flexibility of spaces is necessary to adapt and cater for the diversity in the permanent collection and unpredictable temporary exhibitions. (Chapter 3 and Interview with Prof. Terry King on Pompidou Centre in Paris by Piano and Rogers and Chapter 4, MoMA in New York)
- The relationship and transition between public and more private spaces needs to be clearly defined, such as the movement from the busy foyer to the more contemplative gallery spaces. This will aid in establishing the character of individual zones and allow



the co-existence of the conflicting functions and gallery spaces. (Refer to Chapter 4, Walker Art Centre by Hertzog and De Meuron)

8.5 Exhibition

- Visitors need to be offered a choice of circulation paths between exhibition spaces and ancillary functions due to the scale and complexity of a public art gallery. A combination of a narrative approach and direct access points to galleries will allow visitors to either follow a predetermined route through the gallery or access specific exhibitions independently. (Refer to Chapter 4, Walker Art Centre by Hertzog and De Meuron)
- Varied sizes and volumes of exhibition spaces create flexibility within a gallery to accommodate a variety of artwork consisting of smaller to larger scaled work and artwork of differing media. (Chapter 3 and Interview with Prof. Terry King on Pompidou Centre in Paris by Piano and Rogers and Chapter 4, MoMA in New York)
- The use of an internal atrium allows for the exhibition of larger contemporary works, while an external sculpture garden may accommodate large sculptures and outdoor performance art. (Refer to Chapter 4, MoMA in New York)



- A variation of lighting techniques used could allow for visual diversity in the experience of the viewer and keep the viewer alert. This increases the overall concentration of an individual and constantly stimulates the senses of the viewer enhancing the quality of the experience. (Refer to Chapter 3)
- A flexible exhibition system is required which can offer several configurations of gallery spaces according to the needs of specific exhibitions. This will allow some spaces to be isolated from the public while others remain accessible to allow the delivery of works and setting up of gallery spaces. (Refer to Chapter 3 and Interview with Prof. Terry King on Pompidou Centre in Paris by Piano and Rogers)

"When I'm working on a problem, I never think about beauty. I think only how to solve the problem. But when I have finished, if the solution is not beautiful, I know it is wrong."

R. Buckminster Fuller

US architect & engineer (1895 -1983)



Illustrations



List of Illustrations

- ILL. 1: Bilbao Guggenheim Museum, elevation from river showing folded titanium skin
Ref: Thau, C. *The spectacular museum*. 2004. Arkitektur DK 4
- ILL. 2: Vienna Guggenheim Museum, indicating a public road and bridge running through the museum Ref: www.hanshollein.com
- ILL. 3: Aerial view of the Barcelona Modern Art Museum inserted into the urban fabric
Ref: www.richardmeier.com
- ILL. 4+5: Interior volumes of the Natural History Museum in London, indicating a similar structural system and spatial quality as within a cathedral. Ref: Jencks, 1997p: 36
- ILL. 6: Main elevation of the Pompidou Centre, indicating the architectural language and the external circulation system, the large public plaza is visible in the foreground.
Ref: www.pompidou.com
- ILL. 7: Entrance elevation of the East Wing, National Gallery indicating larger scaled entrances. Ref: www.GreatBuilding.com
- ILL. 8: Entrance elevation of the Tatham Art Gallery Ref: Author
- ILL. 9: Mural outside the B.A.T. Centre
Ref: www.dbnymca.org.za
- ILL. 10: Entrance to the KZNSA Gallery
Ref: Author
- ILL. 11: Entrance to the Durban City Hall
Ref: www.ethekwini.com
- ILL. 12: Entrance to the Belfast City Hall
Ref: www.encyclopedia.com
- ILL. 13: Entrance banner to the MoMA Ref: [Http://graphics.jsonline.com](http://graphics.jsonline.com)
- ILL. 14: Entrance to the Burda Collection Museum Ref: [Http://www.arcspace.com](http://www.arcspace.com)
- ILL. 15: Entrance to the Walker Art Centre
Ref: [Http://en.wikipedia.org](http://en.wikipedia.org)
- ILL. 16: Expressive Bilbao Guggenheim Museum skin Ref: [Http://www.abiyoyo.com](http://www.abiyoyo.com)
- ILL. 17: Architectural expression remains focused on the art as seen at the Beyeler Collection Museum by Renzo Piano Ref: <http://www.nbm.orgades>



List of Illustrations

- ILL. 18: Bilbao Guggenheim Museum, aerial view Ref: <http://en.wikipedia.org>
- ILL. 19: Elevation of Casa De Musica Ref: <http://www.arcspace.com>
- ILL. 20: Aerial view of the Scottish parliament complex. Ref: www.stuckonscotland.co.uk
- ILL. 21: Entrance to the MoMA Ref: www.GreatBuildings.com
- ILL. 22: Aerial view of the Juan Miro Museum in Barcelona Ref: www.GreatBuildings.com
- ILL. 23 + 24: New entrance to the Louvre during the night and the day Ref: www.GreatBuildings.com
- ILL. 25: The State Gallery Extension in Stuttgart Ref: <http://www.britannica.com>
- ILL. 26: The Kimbell Art Museum In Texas Ref: www.greatbuildings.com Below is a section indicating the continuous exhibition level with roof lighting Ref: Author
- ILL. 27: The Menil Collection Museum Ref: www.greatbuildings.com Below is a section indicating the continuous exhibition level with roof lighting Ref: Author
- ILL. 28: Entrance to the Morgan Museum Ref: [Http://z.about.com](http://z.about.com)
- ILL. 29: Entrance to the High Museum of Art by Richard Meier Ref: [Http://www.bluffton.edu](http://www.bluffton.edu)
- ILL. 30: The Museum of Contemporary Art in Barcelona by Richard Meier is an example of an architectural response to dense urban environment. Ref: <http://www.bluffton.edu>
- ILL. 31: The Paul Klee Centre by Renzo Piano opened in 2005, is an example of architectural integration with the surrounding green site Ref: <http://iatwm.com/>
- ILL. 32: View of the surrounding urban context from the sculpture garden at the MoMA Ref: <http://www.thecityreview.com>



List of Illustrations

- ILL. 33: View of the MoMA in the surrounding urban context
Ref: <http://www.thecityreview.com>
- ILL. 34 + 35: Subtle integration of the MoMA into surrounding context was achieved through appropriate scale, use of materials and lack of structural expression seen at the entrance ill. 34 and the wall enclosing the sculpture garden ill. 35. Ref: <http://www.thecityreview.com>
- ILL. 36: The cladding used reflects the image of opposite buildings respecting the existing context.
Ref: <http://www.thecityreview.com>
- ILL. 37 + 38: The public sculpture garden spatially links the different functions while commercial activities such as the restaurant open up to the garden.
Ref: <http://www.thecityreview.com>
- ILL. 39: MoMA Ground Floor Plan, indicating entrance points and the position of the sculpture garden. Ref: www.moma.org
- ILL. 40: MoMA Typical Floor Plan, indicating the position of the educational block. Ref: www.moma.org
- ILL. 41: MoMA Section through the atrium, indicating overlooking gallery spaces into the central volume. Ref: www.moma.org
- ILL. 42 + 43: Galleries and circulation spaces overlook the central foyer, while the glass facade overlooking the sculpture garden allows visitors on multiple levels to view sculpture.
Ref: <http://www.thecityreview.com>
- ILL. 44: View of a traditional gallery space which is artificially lit.
Ref: <http://www.thecityreview.com>
- ILL. 45+46: View from upper galleries into the central atrium and the foyer level below, indicating the scale of the central atrium and the visual connection achieved.
Ref: <http://www.thecityreview.com>



List of Illustrations

- ILL. 47: Vertical circulation such as stair wells create dynamic exhibition spaces offering a variety of vantage points from which an artwork can be viewed.
Ref: <http://www.thecityreview.com>
- ILL. 48 + 49: Entrance to the Frieda Burda Collection Museum, indicating the stark contrast of the architectural language to surrounding green site which varies at different times of the day. Ref: <http://www.architecture.com>
- ILL. 50: Elevation indicating the relationship between the Frieda Burda Collection Museum and the existing Kunsthalle. The pedestrian bridge acts as a physical link while the scale and proportion of the new museum is derived from the existing Kunsthalle. Ref: <http://www.architecture.com>
- ILL. 51 + 52: Conceptual models of the Burda Collection Museum indicate the distinct external expression of the solid planes during the day, and the illumination of glass panels at night. Ref: <http://www.architecture.com>
- ILL. 53: Frieda Burda Collection Museum Ground Floor Plan, indicating the entrance piazza and foyer space. Ref: <http://www.architecture.com>
- ILL. 54: Frieda Burda Collection Museum Upper Floor Plan, indicating the division between galleries created by the ramp and the position of the linking pedestrian bridge. Ref: <http://www.architecture.com>
- ILL. 55 + 56: A view from the lower gallery towards the louvered south wall and a view of the upper gallery which is illuminated through the opaque roof. Ref: <http://www.architecture.com>
- ILL. 57: A section of the Burda Collection Museum indicating the relationship between the ramp and gallery spaces with the connecting pedestrian bridge. Ref: <http://www.architecture.com>
- ILL. 58: A section of the Burda Collection Museum, indicating the floating floor of the upper gallery level which allows views down into the lower level, and the views from the smaller galleries out onto the entrance piazza. Ref:



List of Illustrations

- ILL. 59: [Http://www.architecture.com](http://www.architecture.com)
Elevation of the louvered south wall and the transparent panels allowing views from the ramp to the external environment. Ref: <http://www.architecture.com>
- ILL. 60: Aerial view of the Walker Art Centre located adjacent to a busy highway
Ref: <http://www.walkerart.org/index.wac>
- ILL. 61: Locating plan of the Walker Art Centre, indicating the positioning of the centre along the edge of the site.
Ref: <http://www.walkerart.org/index.wac>
- ILL. 62: View of the expressive new tower by Hertzog and De Meuron. Ref: <http://www.walkerart.org/index.wac>
- ILL. 63: A single crumpled aluminium mesh panel before installation into the building envelope. Ref: <http://www.walkerart.org/index.wac>
- ILL. 64: View of the original tower and the addition by Hertzog and De Meuron from the sculpture park.
Ref: <http://www.walkerart.org/index.wac>
- ILL. 65: Section through the new tower by Hertzog and De Meuron indicating the performance auditorium.
Ref: <http://www.walkerart.org/index.wac>
- ILL. 66: View of the new tower and connecting plinth, indicating the large cantilever of the tower over the pedestrian walkway.
Ref: <http://www.walkerart.org/index.wac>
- ILL. 67: Longitudinal section through the new tower by Hertzog and De Meuron indicating the connecting plinth and functions accommodated below the raked seating of the auditorium.
Ref: <http://www.walkerart.org/index.wac>
- ILL. 68: Ground Floor Plan of the Walker Art Centre, indicating the entrance and choice of routes. The permanent exhibition spaces in the original tower and the temporary exhibition spaces in the additions of Hertzog and De Meuron have been highlighted. Ref: <http://www.walkerart.org/index.wac>



List of Illustrations

- ILL. 69: First Floor Plan of the Walker Art Centre, indicating the original tower and the new tower by Hertzog and De Meuron. Ref: <http://www.walkerart.org/index.wac>
- ILL. 70: View of the lace-like fretwork ceiling at the entrance to contemporary gallery
Ref: <http://www.walkerart.org/index.wac>
- ILL. 71: Internal view of a gallery space where the thick canted outer walls and carved entrances are expressed.
Ref: [Http://www.archidose.org](http://www.archidose.org)
- ILL. 72: View of a carved entrance into a gallery and the translucent skin separating the internal foyer from the sculpture garden.
Ref: <http://www.walkerart.org/index.wac>
- ILL. 73: View of the internal circulation spine which links galleries and the original and new tower. Ref:
<http://www.walkerart.org/index.wac>
- ILL. 74, 75, 76: View of the expressive transparent tower of the De Young Museum in San Francisco by Hertzog and De Meuron, the panels above indicate the manipulation of the building skin both in the main building and in the tower. Ref: <http://en.wikipedia.org>

- ILL. 77: Aerial photo indicating the position of the D.A.G. between the main transport arteries in the CBD of Durban.
Ref: www.googleearth.com
- ILL. 78 + 79: Main entrance to the Durban city hall complex and the entrance to the Library, Natural History Museum and the D.A.G. Ref: author
- ILL. 80: Second Floor Plan of the Durban City Hall Complex, indicating the location of the D.A.G. Ref: author
- ILL. 81: View of the central staircase which is shared by the Library, Natural History Museum and the D.A.G. Ref: author
- ILL. 82: Floor Plan of the D.A.G. Indicating the main gallery spaces that are accessed from the central foyer.
Ref: author
- ILL. 83: Floor Plan indicating the service spaces which accommodate the reference library and a staff tearoom with lockers
Ref: author
- ILL. 84 + 85: View of the rectangular gallery which fails to provide adequate natural day lighting and the gallery which was



List of Illustrations

- Converted for the exhibition of multi-media works. Ref: author
- ILL. 86: View from the circular gallery Into the Science Museum. Ref: author
- ILL. 87: View of the sky-light above the circular gallery which allows excess day light into the gallery space below that damages the works. Ref: author
- ILL. 88: Logo for the Inner City Ethekwini Regeneration and Urban Management Programme (iTrump) initiative.
Ref: <http://www.durban.gov.za/durban>
- ILL. 89: Marketing logo for Red Eye Art
Ref: <http://www.redeyeart.co.za/>
- ILL. 90, 91, 92: Views of different installation art pieces which have been assembled in the public parks and streets around the city hall.
Ref: <http://www.redeyeart.co.za/>
- ILL. 93: The largest work in the collection called "Tall, Average, Petite" by Allen Jones Ref: Author
- ILL. 94 + 95: Free-standing glass cases and timber podiums are used to exhibit small sculptures on. Ref: Author
- ILL. 96: Wall mounted glass cases are used for more delicate works. Ref: Author.
- ILL. 97 + 98: Demonstration of contemporary exhibition techniques where photographs have been attached to a string which was bolted to the wall.
Ref: Author
- ILL. 99 + 100: Additional spotlights which have been inserted into the original ceiling details.
Ref: Author
- ILL. 101 + 102: View of the small sliding rack storage facility provided at the D.A.G. Which is insufficient and has been damaged by infestation. Ref: Author
- ILL. 103: Sliding rack system which is used in the paint store at the conservation facility. Ref: Author
- ILL. 104: Map of the Beer Hall Storage and Conservation facility. Ref: Author
- ILL. 105, 106, 107: Paper works are stored horizontally in drawers and boxes on acid free mounting boards for preservation and ease of framing
Ref: Author



List of Illustrations

- ILL. 108, 109, 110: Sculpture and beadwork are on melanex and on acid free mounting boards for preservation Ref: Author
- ILL. 111, 112: Baskets are wrapped in melanex and furniture is covered in pure cotton drapes and placed on bricks covered with melanex strips. Ref: Author
- ILL. 113: Equipment required within the photographic studio. Ref: Author
- ILL. 114: Vacuum tables Ref: Author
- ILL. 115: Sliding rack storage system Ref: Author
- ILL. 116: Roller door access Ref: Author
- ILL. 117: Portable side lighting Ref: Author
- ILL. 118: Preparation of works before transportation Ref: Author
- ILL. 119: Washing Beds Ref: Author
- ILL. 120: Aerial photo of Durban Ref: www.googleearth.com
- ILL. 121: Aerial photo of CBD indicating precinct definitions. Ref: www.googleearth.com
- ILL. 122: Aerial photo of CBD indicating improved public transport and pedestrian routes. Ref: www.googleearth.com
- ILL. 123: Aerial photo of CBD indicating site proposals for a new D.A.G. Ref: www.googleearth.com
- ILL. 124: Aerial photo of selected precinct and site demonstrating a site analysis. Ref: www.googleearth.com



Sources



Sources

List of sources:

- Barnard, M. 1998 *Art, Design and Visual Culture*. Hampshire. Macmillian Press Ltd.
- Berger, J. 1972. *Ways of Seeing*. Middlesex. England. Penguin Books Ltd.
- Cherry, D. 2005 *Art: History: Visual: Culture*. Oxford. Blackwell Publishing Ltd.
- Cheviakoff, S. 2003. *Josep Lluís Sert*. Massachusetts. USA. Rockport Publishers Inc.
- Fleig, K. 1975. *Alvar Aalto*. London. Great Britain. Thames and Hudson Ltd.
- Francastel, P. 2000. *Art and Technology in the nineteenth and twentieth centuries*. New York. Zone Books.
- Giurgola, R. 1975. *Louis I. Kahn*. Zurich. Switzerland. Office for Architecture Artemis.
- Greene, T.M. 1947. *The arts and the art of criticism*. Princeton. Princeton University Press.
- Haywood, T. 1999. *Interpreting visual culture*. London. Groutledge Publishing
- Jencks, C. 1997 *Contemporary Art Galleries*. Architectural Design volume 67 no 11/12 Nov/Dec
- King, T. 2006. Lecture notes
- Lynch, K. 1960. *The image of the city*. Cambridge. MIT Press.
- Lucie-Smith, E. 1992. *Art and Civilization*. Singapore. Laurence King Publishers.
- MacCormac, R. 2006. *When art meets architecture (Private view 2)*. Tate journals - www.tate.org.uk
- Matthews, G. 1991. *Museums and Art Galleries (Design and Development Guides)*. Oxford. Great Britain. Butterworth-Heinemann Ltd.
- Searing, H. 1982. *New American Art Museums*. New York. Whitney Museum of American Art.
- Thau, C. 2004. *The spectacular museum*. Arkitektur DK 4 pg. 350
- Toy, M. 1997. *Editorial*. Architectural Design volume 67 no 11/12 Nov/Dec
- Walker, J.A. 1983. *Art in the Age of Mass Media*. London. UK. Pluto Press
- Trencher, M. 1996. *The Alvar Aalto Guide*. New York. USA. Princeton Architectural Press
- Wright, F. 1987. *The Guggenheim Correspondence*. London. Great Britain. The Architectural Press Ltd.
- Zukin, S. 1982. *The Culture of Cities*. United States. Savannah Publishing



Bibliography



Bibliography

List of books:

- Aalto, A. 1975. *Alvar Aalto*. London. Thames and Hudson.
- Barnard, M. 1998. *Art, Design + Visual Culture*. Hampshire. London. Macmillian Press Ltd.
- Berger, J. 1972. *Ways of Seeing*. Middlesex. England. Penguin Books Ltd.
- Blaser, W. 1996. *West meets East : Mies van der Rohe*. Basel. Birkhauser.
- Buchanan, P. 1993. *Renzo Piano Building Workshop : Complete Works*. London. Phaidon.
- Cherry, D. 2005. *Art: History: Visual: Culture*. Oxford. UK. Blackwell Publishing Ltd.
- Cheviakoff, S. 2003. *Josep Lluís Sert*. Massachusetts. USA. Rockport Publishers Inc.
- Ching, F. 1996. *Architecture : Form, Space and Order*. London. Van Nostrand Reinhold.
- Crippa, M. 1986. *Carlo Scarpa: Theory, Design, Projects*. Cambridge. MIT Press.
- Dal Co, F. 1995. *Tadao Ando: Complete Works*. London. Phaidon.
- Fleig, K. 1975. *Alvar Aalto*. London. Great Britain. Thames and Hudson Ltd.
- Francastel, P. 2000. *Art and Technology in the nineteenth and twentieth centuries*. New York. Zone Books.
- Giurgola, R. 1975. *Louis I. Kahn*. Zurich. Switzerland. Office for Architecture Artemis.
- Greene, T.M. 1947. *The arts and the art of criticism*. Princeton. USA. Princeton University Press.
- Haywood, T. 1999. *Interpreting visual culture*. London. Groutledge Publishing
- Lynch, K. 1960. *The image of the city*. Cambridge. MIT Press.
- Lucie-Smith, E. 1992. *Art + Civilization*. Singapore. Laurence King Publishers.
- Matthews, G. 1991. *Museums and Art Galleries (Design and Development Guides)*. Oxford. Great Britain. Butterworth-Heinemann Ltd.
- Murphy, R. 1990. *Carlo Scarpa and the Castelvechio*. London. Butterworth Architecture.
- Niemeyer, O. 1956. *Oscar Niemeyer: Works in progress*. New York. Reinhold.



Bibliography

- Searing, H. 1982. *New American Art Museums*. New York. Whitney Museum of American Art.
- Papadaki, S. 1956. *Oscar Niemeyer: Works in Progress*. New York. USA. Reinhold Publishing Corporation
- Trencher, M. 1996. *The Alvar Aalto Guide*. New York. USA. Princeton Architectural Press
- Walker, J.A. 1983. *Art in the Age of Mass Media*. London. UK. Pluto Press
- Wright, F. 1987. *The Guggenheim Correspondence*. London. Great Britain. The Architectural Press Ltd.
- Zukin, S. 1982. *The Culture of Cities*. United States. Savannah Publishing

Related research: unpublished dissertations

- Aunt, N.J.G., 1988. An Art Museum for Durban, Theses (B.Arch). University of Natal.
- Elphick, G.F.W., 1982. An Art Gallery for Durban, Theses (B.Arch). University of Natal.
- Grego, R.M.V., 1989 An Art Museum for Durban, Theses (B.Arch). University of Natal.
- Isemonger, A.K., 1992 An Art Gallery for Durban, Theses (B.Arch). University of Natal.
- van Graan, B, 1973. An Art Gallery for Durban, Theses (B.Arch). University of Natal.



Bibliography

Related publications

- Jencks, C. 1997. Contemporary Art Galleries. Architectural Design volume 67 no 11/12 Nov/Dec
- King, T. 2006. Lecture notes.
- Meier, R. Art gallery , Barcelona, Spain
- Thau, C. 2004. The spectacular museum. Arkitektur DK 4 pg. 350
- Toy, M. 1997. Editorial. Architectural Design volume 67 no 11/12 Nov/Dec
- Art Museums in Architectural Record, Feb 2005
- Extensions to MOMA: AR Feb 2005, pp40-51 & also Architecture, Feb 2005, pp40-50;
- Richard Meier's Baden-Baden Art Museum, Architecture March 2005, pp46-51;
- Herzog & de Meuron's Extensions to Art Museum, Minneapolis, AR Aug 2005, pp48-55

Online Information:

- http://kunstmuseum.bonn.de/architektur/dashaus/index_e.htm.
- MacCormac, R. 2006. When art meets architecture (Private view 2). Tate journals - www.tate.org.uk



A

Appendix

- Interview Schedule
- Educational
- Curatorial
- Municipal
- Environmental



Appendix A: Interviews

Interview schedule

Structured interviews will be conducted as follows:

Educational

- Professor Terry King, Head of the School of Visual Art at UKZN, PMB campus.
- John Room, Senior Lecturer at the School of Fine Arts, DUT, City campus

Curatorial

- Durban Art Gallery: Carol Brown - Curator, Jenny Stratton - Acting curator
- KZNSA gallery: Nathi Gumede - Curator
- Bat Centre: Njabulo Mtshali - Curator
- Tatham Art Gallery
- African Art Centre

Municipal

- City Architect

Services/Environmental

- Air conditioning specialist, Hirsch


A brief summary of the interviews with the educational and editorial experts has been outlined:

Educational

Professor Terry King - 16 08 06

Head of the School of Visual Art at UKZN, PMB campus.

- Art galleries have traditionally taken either an antagonistic or sympathetic approach towards the art which it contains. An exhibition is needed that would not exploit the authority naturally assumed by an art gallery but that would focus on the exhibition itself. Different quality of art in the Durban context needs to be considered ranging from high quality pieces from respected tertiary institutions to more traditional and rural art. Art in Durban is specifically of a smaller scaled nature including many textiles, prints and beadwork that would require specialized installations in protective display cases. Performance installations need to be accommodated alongside very delicate pieces. The current and future needs of installation art needs to be considered such as electrical points, scale and flexibility e.g. an installation consisting of 30 television screens. The unpredictable nature of contemporary art requires flexibility in the exhibition system.
- The Pompidou Centre art galleries were initially perceived as austere and uninviting to the general public.

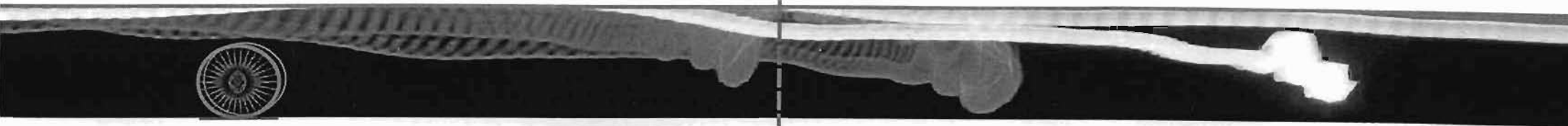


There is however, a clear departure from the traditional enclosed gallery with the architecture actively engaging passers by with its playful nature. The focus is on entertainment and tourist attraction. The center is located in a rundown residential area in attempt to regenerate the urban precinct. Pompidou is a shell type gallery which is extremely flexible so that it can adjust from small exhibition space to large areas as required. A mixture of temporary and permanent exhibition spaces are provided. The volumes of gallery spaces within the Pompidou can be adjusted according to exhibition needs.

- Traditionally a permanent exhibition was fixed within a gallery but the recent trend is for multiple circulation and exhibition options which constantly rotate within the gallery.
- Guggenheim Museum in Bilbao is completely sculptural with no traditional cubic spaces. It is intended to be spectacular and to house spectacular art works. Traditionally spectacular or large scale artworks are American. The museum is located on an awkward site dealing with a river frontage and a highway. Urban regeneration was the major design generator. Circulation patterns within galleries need to be considered e.g. Bilbao compared to the Guggenheim museum in New York. Bilbao still makes reference to traditional gothic Spanish

architecture through the architectural expression. The titanium material used reflects the river and cars creating a range of colors and a distinct contextual relationship and reference. The competition between the artwork and architecture has been problematic. The American artist Frank Serra made sculpture for Bilbao out of Corten Steel, which is usually considered to be large scale pieces, but these were completely dwarfed by the scale of Bilbao. There are performance spaces above the central exhibition area so that spectators are looking up at installations rather than traditionally looking down. Bilbao was placed on a traditional pilgrimage route and there are several political undertones which have impacted the design.

- The difference between converted galleries and purpose-made art galleries need to be clearly established. Examples of converted galleries include the Tate gallery in London, where new collections are traditionally promoted by inviting school parties with the hope of learners returning at a later stage, and the PMB Tatham art gallery. Examples of purpose-made galleries include the Eshowe Basket and Beadwork Museum by Paul Mikula and the Museum of Modern Art in Japan.
- A balance is required between the needs of the artists whom do not always feel that art should be associated with entertainment and the opposite idea where the gallery becomes an entertainment center. This refers to galleries in the



shopping mall context e.g. the Kenzo Art Gallery compared to the planning principles in the Pompidou centre. In principle the need for art to be experimental can only be achieved when it has been separated either by site or gallery treatment.

Mr. John Room 16 08 06

Senior Lecturer at the School of Fine Arts, DUT, City campus

- The traditional methods of displaying art still continue and will always be a factor in addition to the Durban climate.
- A drawback of the KZNSA gallery is that it is climatically exposed. Certain paper artwork cannot be exhibited because of the damage that will be caused by the moisture content in the air. Contemporary exhibitions in Durban are mainly focused on video installations seen in the media room of the KZNSA gallery and Artspace. This needs to be a consideration in the design of a new gallery as well as the possible discontinuation of the installation in the future. The KZNSA gallery is sustained and funded by the income of the shop with the exhibitions generating a smaller proportion of the income.
- Durban art gallery is the custodian of a permanent collection which distinguishes it from other galleries which only house temporary exhibitions. This entails additional

Storage, restoration areas, climatically controlled rooms, an outreach program, art classes and lectures. The D.A.G. budget has been cut due to changing priorities of the council and is now funded by private sponsors such as Mercedes. This is conflicting with the nature of art being anti-establishment and experimental. The political agenda of the D.A.G. has shifted the focus to developing artists which are local and from previously disadvantaged background.

- The African Art Centre is oppositely sales orientated selling arts and crafts.
- The impact of communication revolution on art display needs to be addressed.
- The Kenzo gallery in Gateway shopping mall sells large volumes by non-recognized artists highlighting the importance of public education of authentic and recognized art works. It seems to cater to a non-academic art community running parallel to that of the Durban Art Gallery and the KZNSA gallery.



Curatorial

Durban Art Gallery

Carol Brown Curator (recently retired), Jenny Stratton -
Acting curator

Carol Brown - 18 08 06

- The existing Durban Art Gallery is located in the City hall. The city hall was originally designed with the art gallery to house the permanent art collection. At that time the gallery functioned purely as a museum housing 500 works, a number that has grown to 7000 artworks in the permanent collection today. The art gallery no longer has sufficient storage or exhibition space.

- City hall is divided into both the cultural and administrative blocks. The cultural block further includes a library and the natural science museum. The administration and research component of the Natural science museum is moving to a new building near the old moth hall. This section will now become available to the Durban art gallery.

- In 1995 the conservation and technical building of the D.A.G. moved to the Beer hall in St. Alfred Muse. This is a shared facility with the history department and accommodates storage and restoration. This facility is currently full.

- The center of exhibition within the D.A.G. has shifted from permanent collections to temporary traveling exhibitions. The gallery is becoming a community resource on a local, national and on an international level. There is a focus on black audience development and the gallery has remained community orientated although there has been a push by the soccer world cup to become tourist orientated. The client of the gallery remains the local community and the gallery serves them.

- The current gallery has not been designed for temporary exhibition but rather for a fixed permanent exhibition. The international trend in galleries includes temporary and traveling exhibitions which may be a result of recent technological advances. The major feature of contemporary architecture is the increase in scale making the mounting of various works problematic. This requires an adequate hanging system. Digital works need to be housed in booths and screen need to be provided.

- Sound and acoustics are becoming an increasing demand as installation and performance art require specific spaces and equipment.

- Practical workshops for the community are held twice a month on a Tuesday and Wednesday for mainly adult audiences. Saturday morning classes are offered for children and these classes are currently being offered in exhibition



Spaces.

- There are plans to utilize the dome which is currently empty for a performance space. This consists of 3 levels with a linking staircase, high volumes and 1m thick walls. Too many windows result in not enough wall space thus the space will be used for installation and performance art. This will free up space for the exhibition of the permanent collection.
- D.A.G. is a department of municipality which funds the gallery and its employees. No funding is currently available for acquisitions therefore funding is provided by the national arts council.
- Potential artists are currently sourced through news letters and notices posted.

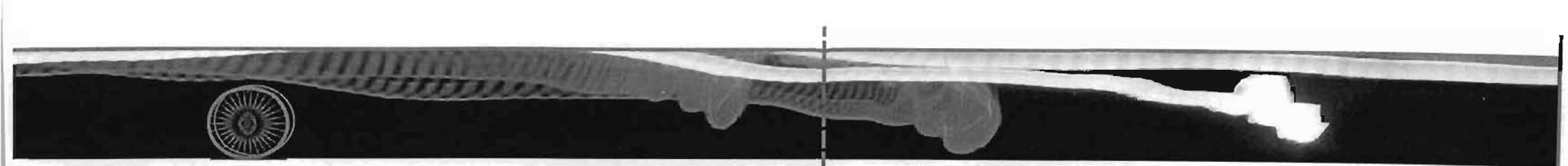
KZNSA gallery 22 08 06

Nathi Gumede Curator

- Contemporary art can be defined as something which is new and occurs presently. An example of this is the Jomba dance events which consist of dances from 6 years ago but they have been re-interpreted to make them relevant and contemporary. Contemporary media include video, installation and mixed media works. This has socio-political connotations because of the money required to produce digital works e.g. videos and recording

equipment required. This results in some mediums being economically restrictive to certain population groups. The KZNSA gallery addresses this problem by running the Young artist project which is a multi-media initiative where artists are commissioned to design works specifically for the multi-media facility provided. This is called site-specific work and various seminars are then held on issues surrounding the subjects of the various works.

- These multi-media spaces need to be flexible, soundproof, allow drilling and any adjustments which the project may require including re-painting and semi-permanent fixtures.
- Contemporary art tends to have a short life span existing only in the present moment. It is no longer art simply for arts sake but makes reference to current society and current debates. The appropriate mediums are used accordingly such as photography which is considered to be an absolute truth but can now be altered with technology. Current architecture is similarly informed by the surrounding society.
- The KZNSA gallery is purpose designed. Traditional artwork can still be accommodated but are presented in collaboration with contemporary works in order to comment on contemporary issues. The manner in which exhibition is curated today use the permanent collection to complement the traveling exhibition crating a central theme in both. This makes



both contemporary and relevant to the present day audience.

- Climatically problems have been experienced with the upstairs gallery where paintings were damaged due to excessive heat. As a result the gallery cannot host specialized shows such as the valuable Picasso collection which D.A.G. will be able to host. It is now stated in the contracts with artists that no liability will be accepted by the gallery for damage to the works.

- The gallery is further insured against flooding and fires as some collections may be worth over a million rand. Security takes place mainly through visual observation within the gallery with visible staff members and frequent observation rounds. There are three security guards both inside and outside in collaboration with the neighborhood security patrol. The art gallery is included in the overall community policing showing the close relationship between the gallery and the community.

- The gallery is a N. P.O. and is largely sustained by the shop and the restaurant which is leased to a private company. This allows the gallery freedom to experiment with collection as it is not profit driven. An additional 37% commission is charged by the gallery on all works which are sold.

Bat Centre

Njabulo Mtshali Curator of the BAT Centre

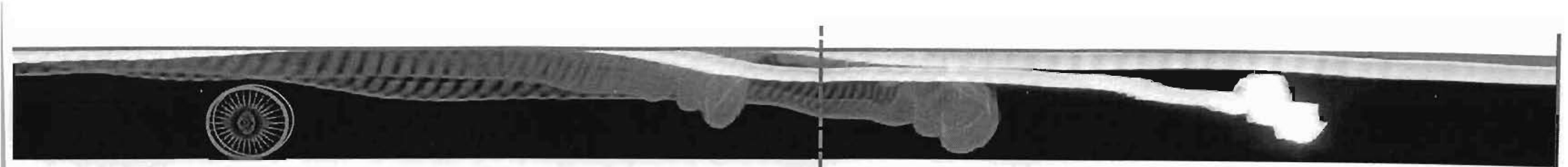
- The galleries are divided in two, one for a permanent collection called Menzi Mchunu who was a founding artist of the BAT centre and an apartheid activist whom mysteriously disappeared, and the other for aspiring and unknown artists called the democratic gallery.

- The music venue has shows every Friday night at six including traditional South African music and a jazz sundowner event every Sunday afternoon at three. Performers are largely from previously disadvantaged backgrounds and the centre offers them an opportunity to explore their talent.

- Classes are offered in both music and the visual arts including computer literacy. Artists are sourced from the townships and transported daily to attend classes and residential accommodation is provided. Artworks are sold directly from the workshops in which they are produced. Collaboration exists with the African Art centre where classes are offered on Saturdays and students are welcome to attend the classes at the BAT centre which run from Monday to Friday.

- Air-conditioning and climatic control is needed for more delicate works made out of wax which cannot currently be displayed.

- A gallery needs to take into consideration the impact that its image will have on attracting visitors from a variety of



economic classes. All Durban art galleries exhibit works from an array of artists' for example:

- DUT student gallery
- BATCentre developing artists
- AAC KZN crafters and the gallery is product driven as opposed to the bat centre where the development of the artists remains the focus
- KZNSA contemporary academic art
- Art Space commercial contemporary art

- At Bat Centre the artist is educated as a whole considering their background and history. Several community projects are run to source artists. Student projects are exhibited at an exhibition and two students are selected to be exclusively mentored for a year by a trained artist and receive dedicated studio space. The students feel that more is learnt from the other artists themselves than from the actual classes.

- The gallery focuses on authentic not mass-produced art which is a comment on the society that we live in today.

- The BAT Centre is presently an NGO. Additional funding is received from private sponsors and a minimal

subsidy from the council. The previous sponsors were the natal lottery.

- Several artists trained by the Bat Centre have achieved international success and return to teach the new techniques learnt on their travels. The centre also strives to empower artist by involving them in the process of exhibition.
- The administrative staff is completely integrated into the gallery and work closely with students.
- Components of the building were built up from recycled pieces found in the area adding to the general architectural character and atmosphere.




African Art Centre - 15 08 06

- The A.A.C. was originally started in 1959 before the bat centre and is an NGO. Artists bring work in for assessment and then the artist price + 38% commission is charged. The centre is largely tourist orientated and exports work to Cape Town.
- Regular workshops are run for product development and Saturday classes are offered at DUT.
- Exhibitions of individual artists and groups take place and the Artist of the year competition is held where the winner is trained and sponsored for additional development. A previous winner was commissioned to do the S.A. flag in the constitutional court.
- 98% of the artists are sourced from the province of Kwa-Zulu Natal. Weaving is sourced from the Transvaal and linographs from Grahamstown.
- All works are original and individual artworks and the D.A.G. sources artists from the centre for specific themed exhibitions.



B

Appendix

 Schedule of Accommodation

Schedule of accommodation for a new D.A.G. outlining the functional requirements:

Space	Function	No. of people	Time used	Loose/fixed Furniture/ Equipment	Dimensions
General					
Entrance foyer	Orientation space for visitors before entering the galleries	Max 300	7 days a week all day	Sign posts, Reception desk, movable display screens	150 sqm
Ablutions	Public facilities required		7 days a week all day	Toilets fittings Basins Urinals	25sqm x 3
Total					225 sqm
Exhibition					
Picture Gallery	Permanent painting collection exhibition space + contemporary pieces Max 150 lux	Max 300	7 days a week all day	Fixed hanging system with additional flexible artificial lighting fixtures	6 x 500sqm (50X10)

Space	Function	No. of people	Time used	Loose/fixed Furniture/ Equipment	Dimensions
Multi-media gallery	Digital exhibitions requiring technical assistance, i.e. sound , lighting Artificial lighting	Max 300	open for special events/ exhibitions	Lighting fixtures, sound equipment Electrical points	350sqm
Photographic gallery	Traveling exhibitions	Max 60	open for special events	Flexible spot lighting,hanging system	50 sqm
Large sculpture Gallery/garden	Contemporary multi-media sculpture exhibition 300 lux	Max 300	7 days a week all day	Artificial lighling Loose sculpture stands	-
Small sculpture gallery	Permanent collection + contemporary pieces 300 lux	Max 60	7 days a week all day	Sculpture stands, display cases, wall mounted display cases	50 sqm
Delicate works gallery	Textiles baskets, beads	Max 60	7 days a week all day	Fixed and loose display cases	75 sqm
Total					3525 sqm

Space	Function	No. of people	Time used	Loose/fixed Furniture/ Equipment	Dimensions
Education					
Educational workshops	Adult and children's classes	Max 60 each	weekends	Loose Seating and desks	2x50 sqm
Lecture hall	Lectures by visiting artists, conference facility	Max 300	7 days a week all day	Fixed seating Projector +screen	100 sqm
Reference Library	Books/documents on artists used by staff + educational workshops	Max 60	7 days a week all day	Loose book racks, tables, seats, filing cabinets	75 sqm
Total					275 sqm
Administration					
Curator office	Co-ordination of exhibitions + small meetings	Max 10	Mon-Fri	Loose desk, computer, chars, table	15 sqm
Staff offices	Marketing, research, filing	Max 4	Mon-Fri	Filing cabinets, discussion boards, tables chairs+ computers	80 sqm

Space	Function	No. of people	Time used	Loose/fixed Furniture/ Equipment	Dimensions
Meeting room	Staff meetings, sponsor meetings Exb. Co-ordination	Max 15	Mon-Fri	Table, chairs Projector, screen	15 sqm
Reception desk	Help desk for visitors /marketing	Max 2	7 days a week all day	Desk, chair, phone, computer	20 sqm
Staff lounge	Relaxation area for staff during lunch time	Max 10	7 days a week all day	Chairs, table	20 sqm
Tea room	Food storage + beverage preparation	Max 4	7 days a week all day	Sink, kettle, fridge, cupboard	10 sqm
Change room	Contains lockers for staff to store belongings	Max 10	7 days a week all day	Lockers, shower, sink	20 sqm
Staff ablutions	Private facilities for staff only		7 days a week all day	Toilets fittings Basins Urinals	
Total					180 sqm

Space	Function	No. of people	Time used	Loose/fixed Furniture/ Equipment	Dimensions
Storage					
Paintings store	Permanent collection storage		Deliveries +rotation of works	Fixed sliding rack storage system	150 sqm
Unframed prints drawings + textiles store	Stored flat in drawers with viewing desks		Deliveries +rotation of works	Fixed sliding flat drawer units	100 sqm
Sculpture + Ceramics store	Stored in boxes or in containers		Deliveries +rotation of works	Fixed racking system and desks	100 sqm
Beadwork + Textiles Store	Stored in boxes, on hanging units or rollers		Deliveries +rotation of works	Tubes/rollers, mobile sliding rack system	25 sqm
Study collection store	Accessibility NB, works regularly need to be retrieved and studied		When required according to research	Loose fitted racking system, viewing desks, chairs	50 sqm

Space	Function	No. of people	Time used	Loose/fixed Furniture/ Equipment	Dimensions
Crate store	Crates are climatically controlled for 24 hours before goods are off-loaded/transported		Deliveries departures	No fixtures are required	50 sqm
Technical workshop	Maintenance of crates and storage equipment		Mon-Fri	Workshop tables, chairs, mechanical equipment	25 sqm
Loading bay	In close proximity to a goods hoist, requires a viewing area before goods are stored		Deliveries departures +rotation of works	Viewing table	-
Total					500 sqm
Restoration					
Painting, drawings +prints studio	Examination and conservation of paintings 1000-3000 lux preferably window not roof lighting	Max 5	Mon-Fri	Tables, easels, Chairs, flexible artificial lighting	50 sqm

Space	Function	No. of people	Time used	Loose/fixed Furniture/ Equipment	Dimensions
Varnishing	Varnishing of works	Max 2	Mon-Fri	Necessary fixed machinery	20 sqm
X-ray-cubicle	Assessment of works	Max 2	Mon-Fri	Necessary fixed machinery	20 sqm
Storage	Fragile works need to be stored		Mon-Fri	Fixed rack system	10 sqm
Sculpture, ceramics +carvings	2 separate zones, metal and stone, marble, porcelain, timber 500-1000 lux	Max 5	Mon-Fri	Tables, Chairs, flexible artificial lighting	50 sqm
Textiles	2 zones, mending and cleaning 500 lux	Max 5	Mon-Fri	Necessary fixed machinery	25 sqm
Total					175 sqm

Space	Function	No. of people	Time used	Loose/fixed Furniture/ Equipment	Dimensions
Commercial					
Book shop	Selling of books, and gallery memorabilia Reading area	Max 60	7 days a week all day	Loose fitted racks, tables, chairs, counter, till	100 sqm
Coffee shop	Light meals, refreshments for visitors	Max 60	7 days a week all day	Fitted kitchen, loose tables and chairs	100 sqm
Total					200 sqm
Accommodation					
Temporary housing	Accommodation for visiting lecturers / artists	Max 5	Permanent access for inhabitants	Fitted kitchen, + bathroom, loose furniture	5x60sqm
Total					300 sqm
Services					
Goods Hoist	Transporting works to gallery spaces from storage facility		Deliveries departures +rotation of works	Fitted hoist /lift	

















































Space	Function	No. of people	Time used	Loose/fixed Furniture/ Equipment	Dimensions
Plant room	Control room for 24-hour environmental monitoring Generator		24-hours	Necessary fixed machinery	40sqm
Total					5420 sqm
+ 20% circulation					1084 sqm
Final					6504 sqm



C

Appendix

- Urban Precinct Selection Chart

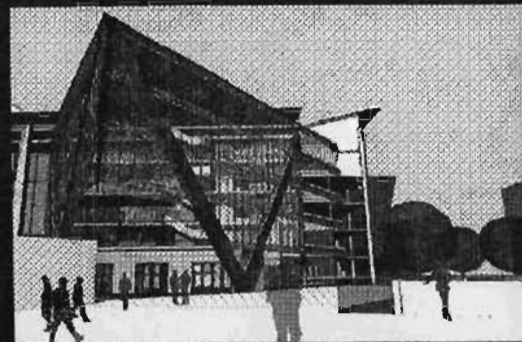
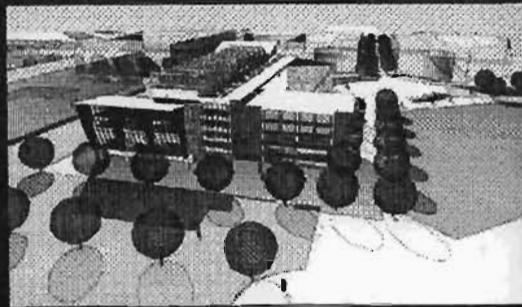
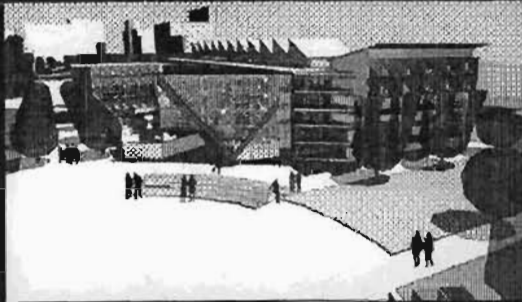
	ICC	UKZN	WARWICK	STATION
Urban Precinct Selection  3 point  2 points  1 points	 	 	  	 
Infrastructure Transport, banking, retail				
Pedestrian/public Public + pedestrian access and potential interaction				
Tourism/scope Viability of project in precinct and touristic appeal				
Exposure Visibility of site to a variety of vantage points both vehicular + pedestrian				
Urban context Urban potential of the site - densification				
Negative Potential problems, isolation noise crime				
Historical Historical character of site + surrounding buildings/precinct				
Character Richness in layering of the overall environment including architecture, atmosphere				
Context diversity Potential in the range of functions situated in proximity to the site				
Total	26	14	22	11



D

Appendix

Design Report



D

Appendix

- Design Report



U. 1 Above is a View of the Bilbao Museum in Spain, and below a view of the Menil Museum by Renzo Piano



Design Report

Introduction

Theory and application In design

The dramatic increase in museum design in recent years have magnified two distinct approaches known as the "Renzo or Bilbao effect " Russell (2005, p: 82). The Renzo approach concentrates on the ideal environmental conditions in which to display and preserve artworks. The Bilbao effect oppositely uses dramatic and distinct architectural expression to create a marketable image and regenerate derelict urban zones.

The partial success of both approaches is an indication of the complexity of museum design. The expectation of museums to fulfill a multiplicity of roles including fulfilling requirements for the museum mission and collection, while being "symbols of civic pride and vehicles of artistic exploration", needs to be explored in the proposal for a new Durban Art Gallery (D.A.G.).

Considering the above approaches the proposal for a new D.A.G. should concentrate on the functional requirements of the existing D.A.G. in conjunction with the marketable image required to establish the gallery as a cultural symbol. Existing environmental conditions need to be analysed to ensure that the proposed D.A.G. is contextually relevant and appropriately sited.

Jenks suggest to prevent the simple one-liner effect of many iconic buildings which fulfill the superficial function of creating a marketable image yet fail to accommodate the functional requirements, there needs to be "enigmatic



Design Report

signifiers". McGuirk similarly recognises the need for iconic Buildings to to analyse the internal functioning of the building and its relationship to its surrounding context and users. The proposed D.A.G. needs to respond on multiple levels to the surrounding urban context.

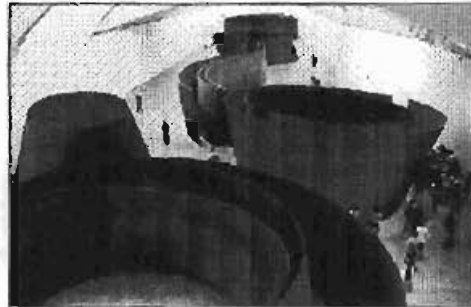
King similarly states that a public art museum building inevitably impacts on a series of principal relationships between the gallery and the city, environment, site, public, and artworks.

Art galleries have become strategic financial devices making the siting of a gallery crucial to maximise the economic potential and urban regeneration opportunities. The proposed D.A.G. subsequently needs to respond to the existing civic and cultural buildings within Durban and consider the current urban decline in the inner city.

The relationship between the public art gallery and the public itself has become vital for the economic survival of these institutions. Jencks (1997, p: 45) holds that the increase in visitors to galleries, due to the decline of organised religion, affects the manner in which buildings are entered and the circulation patterns of visitors inside the buildings. A new D.A.G. should allow ease of access to large numbers of visitors and consider disabled access to all functions contained.

Aalto (1996, p: 53) holds that adequate lighting is as crucial to galleries as acoustics are to concert halls. He states that a variety of lighting, both natural and artificial, is necessary to provide a variety of experiences to stimulate visitors artworks. The proposed D.A.G. should incorporate a

Design Report



ILL.2: Above is a View of the Bilbao Museum Interior, and below a view of the Mori Museum by Renzo Piano, interior.

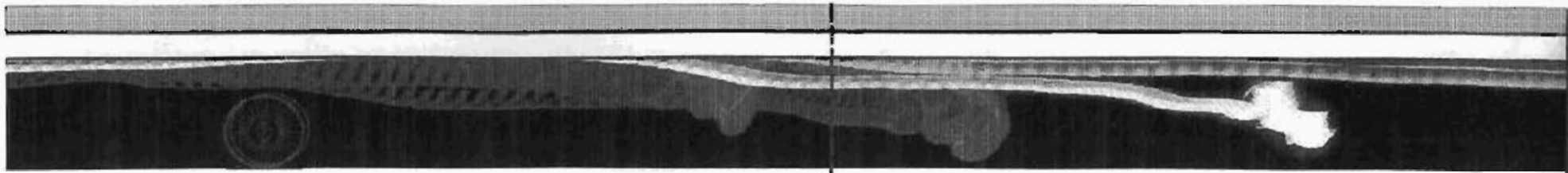


Spectrum of visual stimuli to ensure the level of concentration and interest of visitors remain constant.

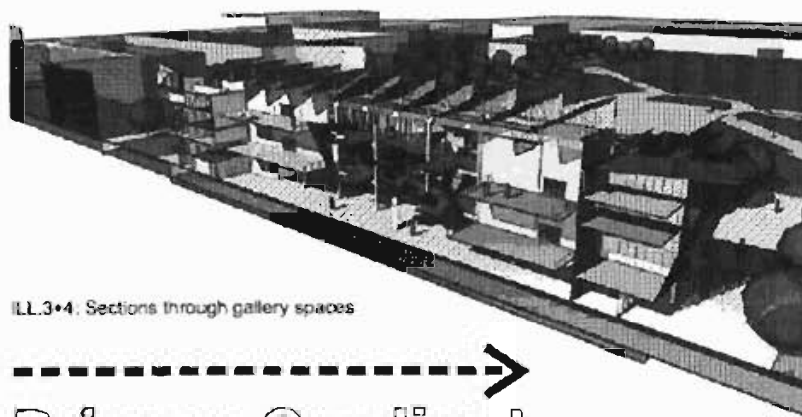
A further contradiction between the Renzo and Bilbao effect is the relationship between the architecture and the artwork. Where the Renzo approach develops a symbiotic relationship with the artwork contained within the architecture, the Bilbao effect often over powers the artwork contained. The proposal for the D.A.G. needs to create a visual kaleidoscope for visitors without overpowering the artwork contained.

Summary and principles to be used in the design

- The role of art galleries has become more complex due to social shifts in society.
- Several key relationships between the gallery and the city, environment, site, public, and artworks have subsequently been impacted.
- Galleries have the dual function of reflecting the cultural status of cities and acting as a strategic financial device potentially revitalizing derelict urban zones.
- The iconography projected through the architectural expression of the gallery needs to be both sympathetic towards the artworks it contains while maintaining a marketable image which can compete both locally and internationally.
- In order to sustain the multiplicity of functions required within a contemporary gallery the relationship between the gallery and public interaction becomes vital. Circulation needs to allow for increased visitor numbers due to the amplified public interest in the arts.

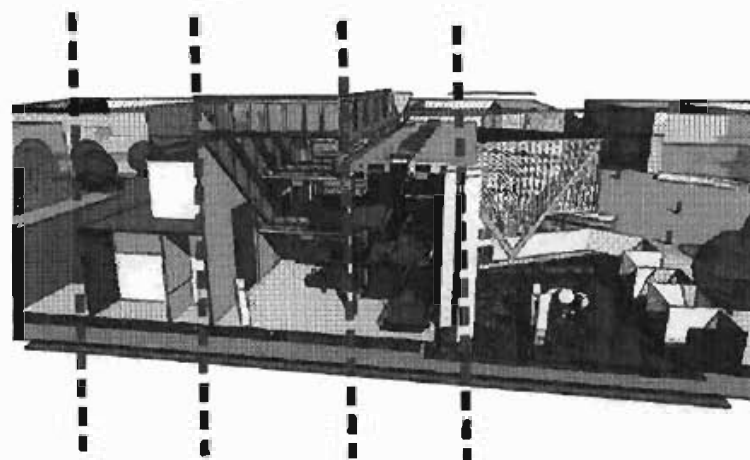


- A symbiotic relationship between the gallery spaces and the artworks is necessary to acknowledge the interdependence between the architecture and artwork.
- Visual stimulation needs to provide a balance for the visitor, allowing visual intervals between gallery spaces to assist in the orientation of the viewer. This, in combination with a variety of lighting techniques, will create an array of experiences to stimulate visitors and ensure that they remain alert and their level of concentration is consistently high.
- Piano (1980, p: 103) interpreted the role of the Pompidou Centre located in a previously rundown precinct of Paris, to represent art and culture "as a new sort of public forum, a bazaar of interaction between people and the arts". Public Art galleries are no longer isolated and elite institutions but are sustained by the their surrounding community. Consequently a greater degree of transparency is necessary to allow public interaction with the surrounding context. Similarly a greater integration is required between gallery spaces to facilitate visitor interaction and visual stimulation.



ILL.3+4. Sections through gallery spaces

----->
Privacy Gradient



Conceptual framework

A central theme of connection interlinks the conceptual framework. The integration of the new D.A.G. into its existing context is vital to sustain the public gallery which relies largely on support from the surrounding community to sustain it financially. Many iconic buildings fail to respond to the environment in which it is located which largely contribute to their lack of contextual integration. Consequently the theme of connection is an attempt to integrate a public art gallery into its context on multiple levels to develop an iconic and marketable architectural identity and ensure a functional design approach which is contextually relevant.

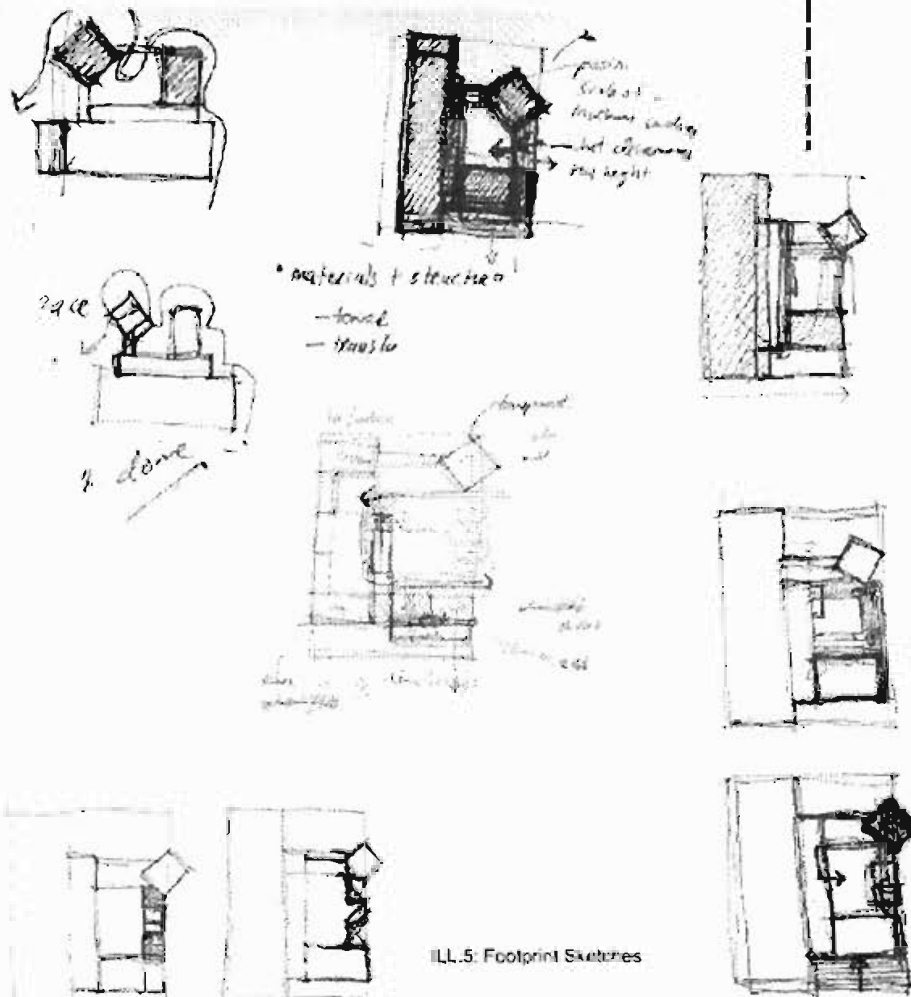
The theme of connection functions on 3 main levels:

Connection to the City:

- Linking the proposed site into the existing city grid. This allows the existing pedestrian and vehicular axes to be maintained and strengthened.
- Linking into the existing city grid facilitates the connection of the central centrum site to the north, south, east and west city districts. This will aid in the regeneration and development of the present derelict inner city area.

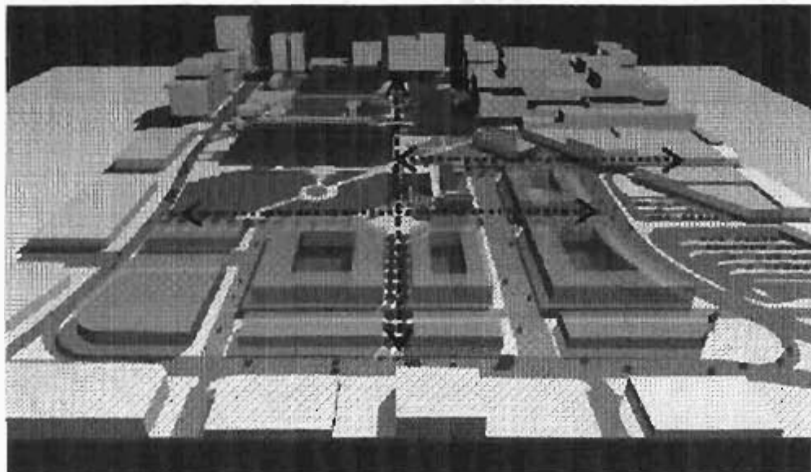
Connection to the context

- Relationship of the new D.A.G. With the opposite central park by placing a sculpture court adjacent to the park.
- Enhancing the existing pedestrian routes and sight lines to continue and improve the urban fabric.



Connection to the Art:

- The new D.A.G. needs to be a public art gallery making art accessible to the population and visitors. Transparency is necessary to express the public nature of the building both in gallery spaces and ancillary functions.
- The relationship between the public and the artwork becomes crucial to facilitate the interaction between both and ultimately the architecture.
- An interior dialogue between galleries is established to aid in visitor orientation and visual stimulation. Similarly the connection between the internal gallery spaces and the sculpture court needs to allow for visual interaction to establish a constant dialogue between gallery spaces.
- The transparency between gallery spaces extends to ancillary functions with a visual connection between the restoration and office spaces to allow visitors to see other aspects of museum functions. This aids in educating the public and promoting interest in other aspects of the art industry.
- Interaction between the public and environment is clearly successful in the precedent studies conducted (Refer to Chapter 4)



ILL. 6: View of urban context
demonstrating existing routes

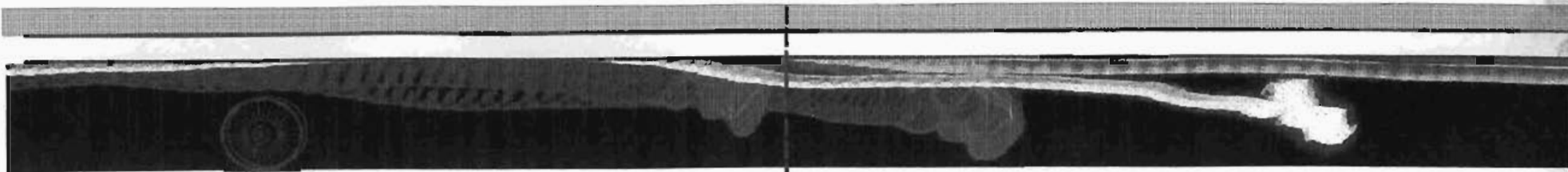
Function

The role of a new Durban Art Gallery is primarily to establish a new identity for the existing D.A.G. Which is currently located in the Durban City Hall. A new marketable identity will aid in promoting the status of the gallery and subsequently the cultural status of Durban. The location of the new D.A.G. In the inner city will regenerate the urban environment and act as a catalyst for further development on the centrum site. The placing of the D.A.G. Along the existing cultural axis aids in formalising the historic pedestrian route and establishing the civic precinct on the centrum site as proposed by the city architect.

The positioning of the gallery formalises the Victoria and Queen street axis linking the centrum site back into the west city zone.

The functional role of public art galleries have developed from simply preserving artwork to fulfilling a multiplicity of roles. These include retail, commercial, administrative, restoration, storage, and educational functions.

Additional functions are required to sustain the art gallery as little funding is available for the acquisition of new works and the restoration of existing pieces. The gallery plays an important role in educating members of the public and teaching skills which could be used to make individuals self-sustainable.



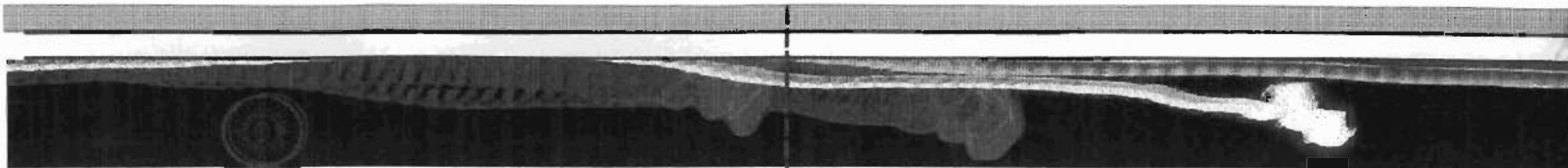
Brief and Schedule of Accommodation

Client:

The client is the public D.A.G. a department of the Durban Municipality. The existing gallery was opened in 1910 with the donation of a collection of Victorian paintings. The collection has increased dramatically including several South African and Contemporary works. The growth of the collection and introduction of new artistic media that needs to be displayed has impacted the exhibition, storage and restoration requirements that are no longer sufficient at the existing facility. The D.A.G. offers educational workshops and the Red Eye Art event that has similarly increased in scale and requires a new facility that can accommodate the variety of environmental and technical requirements.

Mission Statement of Durban Art Gallery:

The D.A.G. aims to develop a larger black audience from the greater Durban area and promote a culture of art appreciation amongst the existing local population. The gallery strives to make the collection more representative of South African art consist more specifically of art from KZN and the Durban region. This is been facilitated by educational workshops and the Red-Eye event that offers exposure to emerging local



Artists.

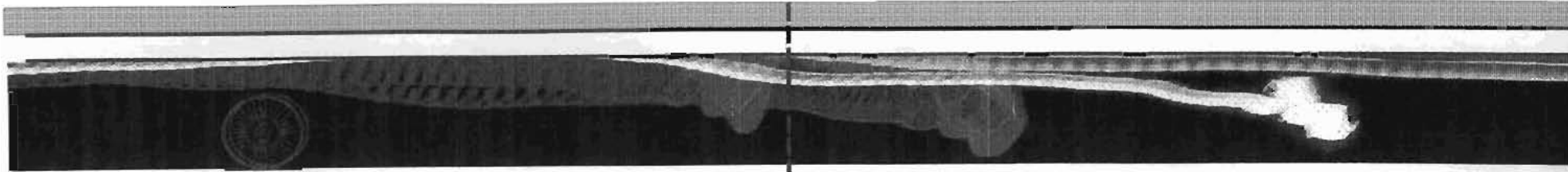
Development of a new D.A.G.:

A new facility for the public D.A.G. is required to accommodate the needs of the growing collection. This includes exhibition, preservation and restoration requirements. Additional educational and commercial functions need to be incorporated to enable audience development and provide additional funding for the acquisition of new works.

The schedule of accommodation outlines the functional requirements of a new D.A.G. derived from the case study and influencing factors including the environmental and technical requirements (Refer to Appendix B).

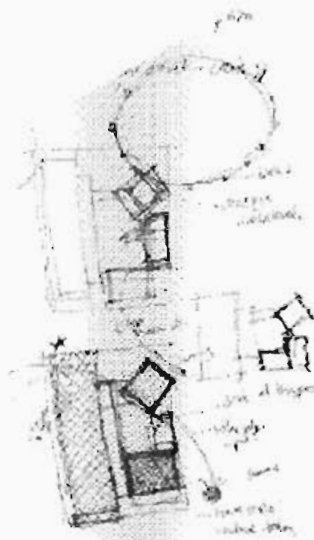
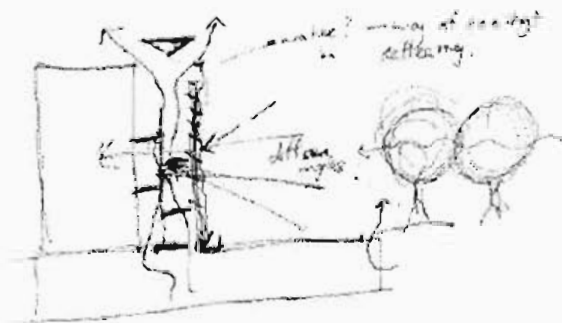
Number, time period and transport method of people using the building

When	Number	How
Daily	5 buses per day : 300 learners	School buses
Weekends	Saturday classes: 30 children	
	Public :100 visitors	Bus, taxi, private vehicles
Every second weekend	Adult workshops: 60 adults	Bus, taxi, private vehicles
Semi-annually	Red-Eye event: 2500 visitors	Bus, taxi, private vehicles



Schedule of accommodation

The schedule of accommodation has been derived primarily from the precedent study on the existing Durban Art Gallery and the international case studies conducted (Refer to chapter 4 + 5)



ILL. 7+8 Concept sketches considering environmental impacts

Environmental performance

Orientation

The building functions have been arranged according to the best orientation required for each.

- Office and accommodation functions have been arranged to face north.
- Restoration functions have been accommodated at the south of the site with a glass facade for maximum lighting to provide the best environment for the restoration of art work.
- Educational and retail functions have both a north and south orientation with sun screening on the north facade and balconies overlooking locomotive plaza to the south.
- Storage facilities have been positioned along the west perimeter of the site acting as a climatic buffer for the gallery spaces which have been positioned in the core of the building.
- A glass facade offer views of the central park to the east but has large solar louvres to prevent any direct sunlight from reaching the gallery spaces
- The main access ramp additionally acts as a solar device filtering light through to the gallery spaces.



Environmental performance

Ventilation

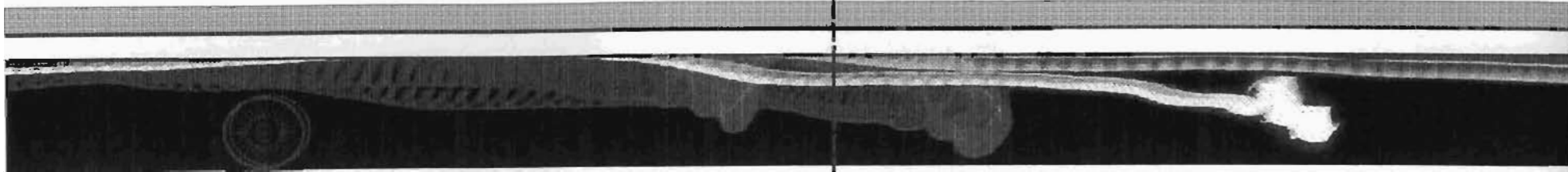
- The main gallery space and storage zones is air-conditioned as a constant temperature and humidity filters are required for the preservation of the artworks.
- The ancillary functions have been climatically isolated from the main gallery space and are naturally ventilated
- The sunken sculpture court provides ventilation for the basement below

Access/Circulation/ Universal access

- Allowing for universal access the gallery has been placed at natural ground level and the main ramp allows wheel chair access to all gallery and ancillary function levels.
- Lifts have been provided for direct access to gallery spaces and the office and accommodation component.
- Vehicular access is from the basement parking which can be accessed from Soldiers way and a lift and stairs have been provided to access the public piazza, the office and residential component of the gallery directly.
- Ramp access have been provided into the sculpture court for wheel chair access.

Security

- The gallery spaces can be closed off independently from the ancillary functions allowing access to the offices, accommodation, educational, restaurant and



Environmental performance

sculpture court after hours.

Parking

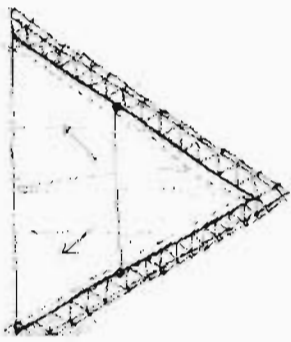
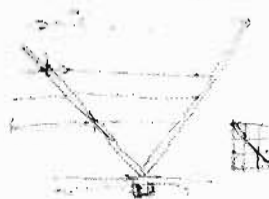
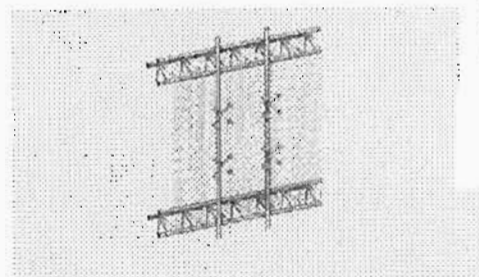
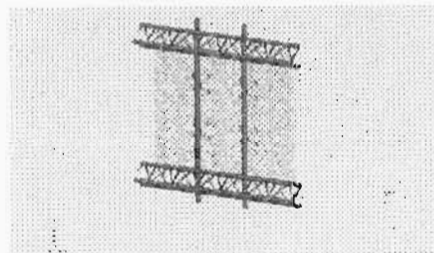
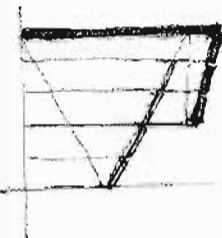
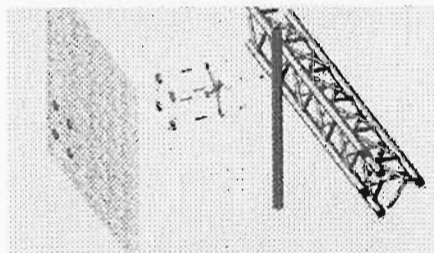
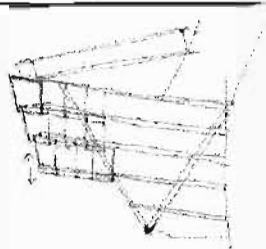
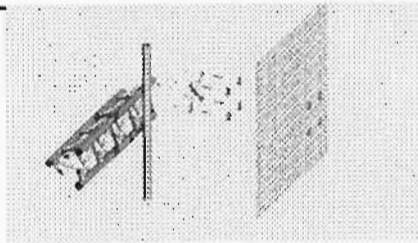
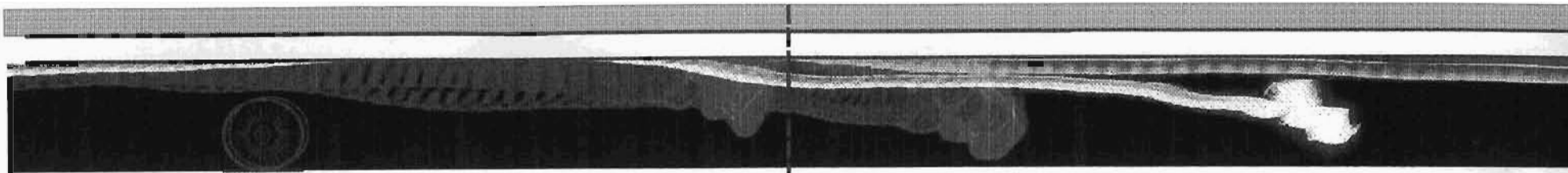
The gallery parking forms part of a larger universal parking zone below the centrum site which connects to the existing workshop parking and to future proposed development towards the north of the centrum site. A central access piazza has been created at the center of the universal parking to echo the urban piazza above and provide access to the level above with four access ramps.

Services

Retail areas are serviced from the basement where hoists have been provided to allow the transportation of supplies to the shop and restaurant. Storage facilities have a loading zone along the west edge of the site where works can be directly delivered into the workshop, the gallery spaces or the storage facility.

Waste

Waste is collected and disposed of from the basement level.



Technological Resolution

Entrance

The triangular entrance volume is supported by two V-Shaped reinforced concrete beams with triangulated trusses supporting the external cladding.

Flat Roof

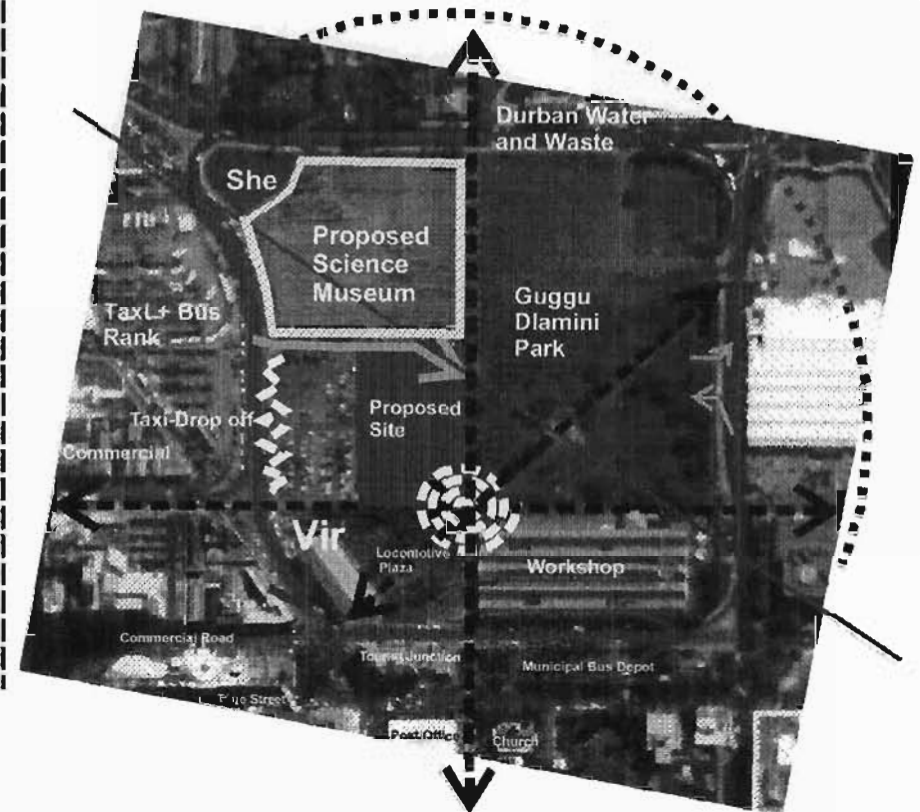
The flat roof over the central ramp act as a beam from which the central ramp is suspended and has a large gutter to allow rain to drain from the gallery roofs

South Roofs

The south facing gallery roofs are supported on Vierendeel trusses which are connected to end bearing channels and a beam on either side. The Vierendeel trusses are steel and the steel window frames allow a narrower profile which is more rigid and allows larger glass panels to be in stored for maximum day light.

ILL.12: Conceptual development of entrance cladding

Site analysis and drawings





Location Plan



Site Analysis



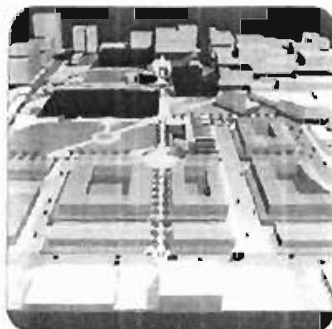
Figure Ground Study



Existing Cultural Axis



Proposed Urban Planning



Urban massing model indicating existing axis and urban proposal



View of the Workshop and the Tourist Junction buildings from Locomotive plaza indicating the existing urban character and scale



View of the Virgin Active Building towards Queen Street from Soldiers way indicating the existing pedestrian movement

Client

The client is a local business owner who has a vision for a new art gallery space. The client is looking for a space that is both functional and aesthetically pleasing. The client is also looking for a space that is well-located and accessible to the public.

Mission Statement of Durban Art Gallery

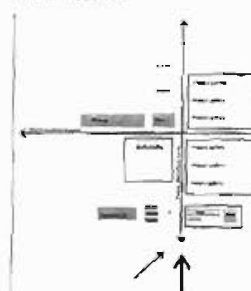
The mission statement of the Durban Art Gallery is to provide a space for the display and sale of contemporary art. The gallery is also committed to providing a space for the education and inspiration of the public.

The gallery is also committed to providing a space for the education and inspiration of the public.

Objectives

- 1. To provide a space for the display and sale of contemporary art.
- 2. To provide a space for the education and inspiration of the public.
- 3. To provide a space for the education and inspiration of the public.

Accommodation



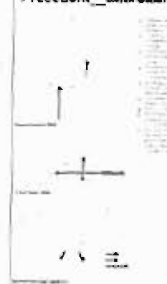
Final/Proposed Workshop Drawing

Analytical Precedent

Precedent - Name



Precedent - Name



Precedent - Name



Qualitative Precedent

De Young Museum in San Francisco by Herzog and De Meuron



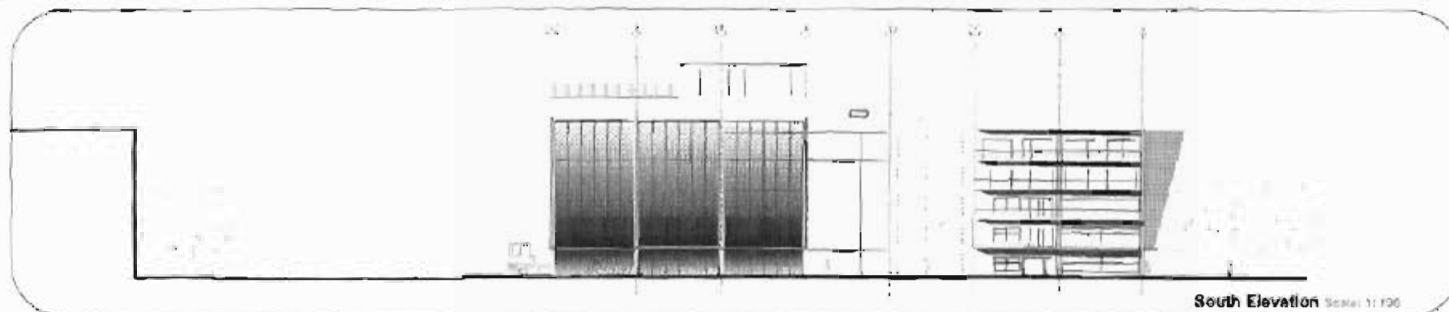
Scottish Parliament Building in Edinburgh by Enric Miralles



De Biëndonk in Antwerp by The Hague, National Institute for Architectural Research



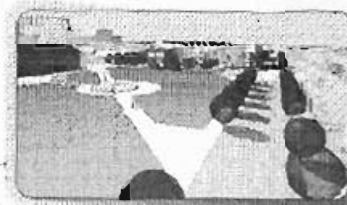
Elevations - South + East Scale: 1:100



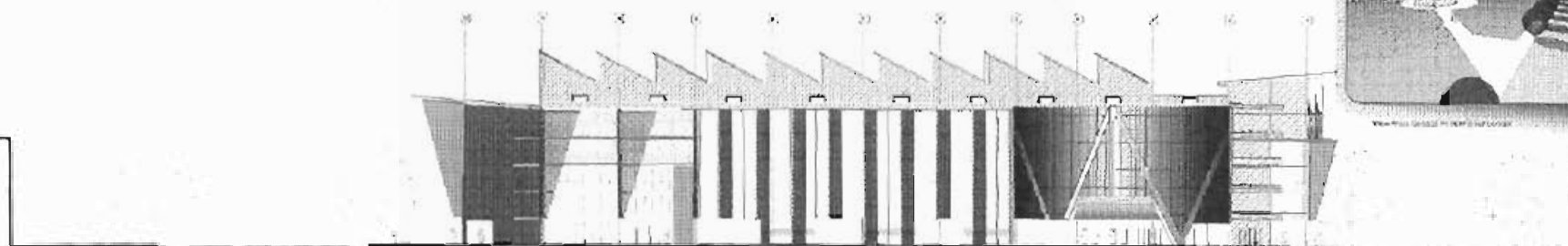
South Elevation Scale: 1:100



View of Gallery and Courtyard from South



View from Gallery to North of Courtyard



East Elevation Scale: 1:100

Durban Art Gallery



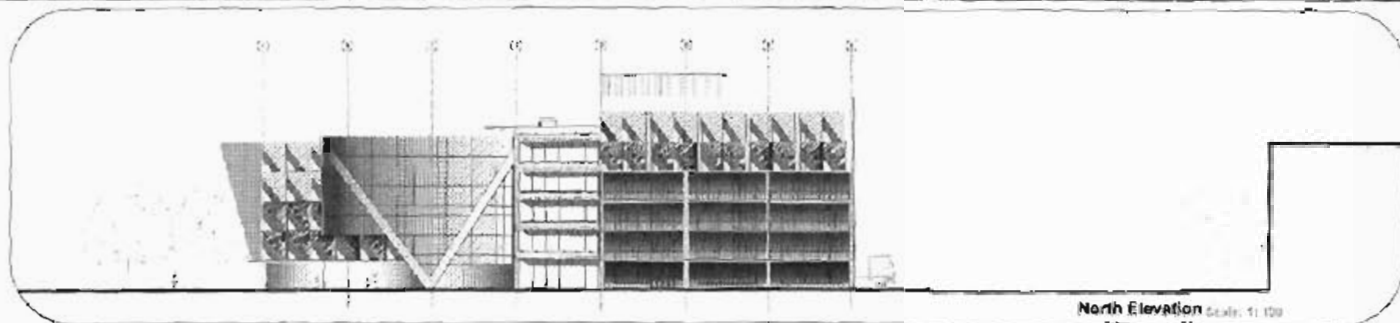
Elevations - North + West Scale: 1:100



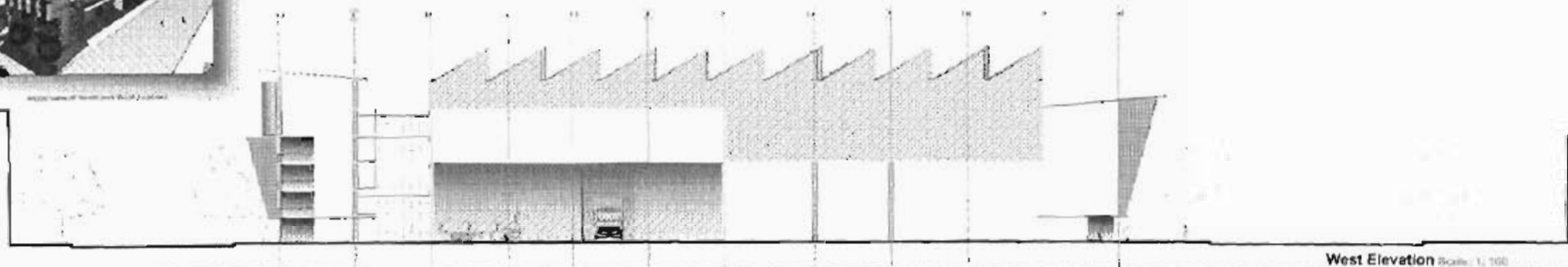
Aerial view of building complex



Aerial view of building complex from different angle



North Elevation Scale: 1:100



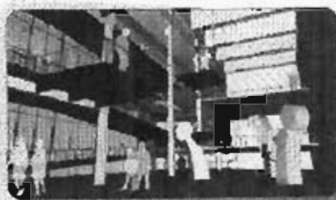
West Elevation Scale: 1:100

Durban Art Gallery

Sections - A-A + B-B Scale: 1:100



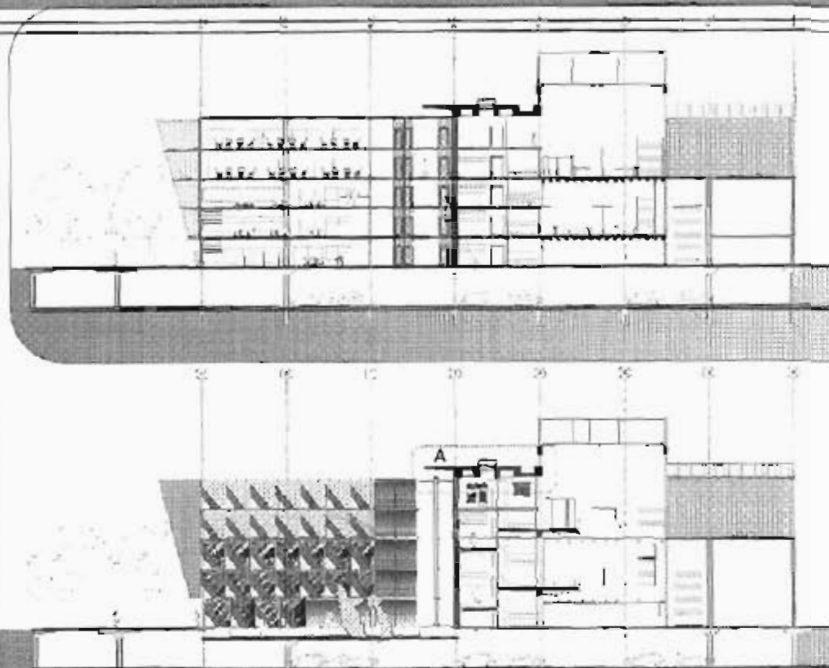
photocopy view from upper gallery level



view of transition space and upper gallery from ground floor



Durban Art Gallery



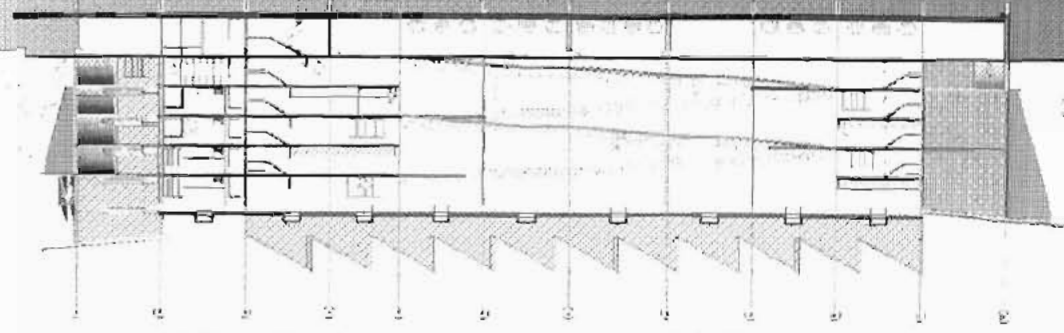
Cross Section A-A Scale: 1:100

Cross Section B-B Scale: 1:100

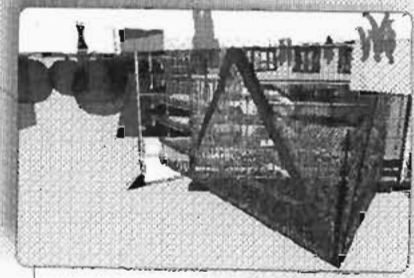
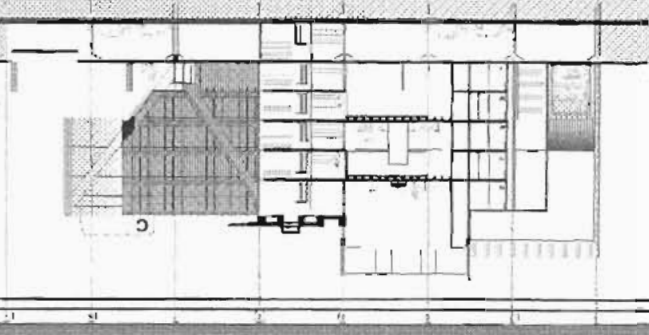


Durban Art Gallery

Cross Section D-I Scale: 1:100

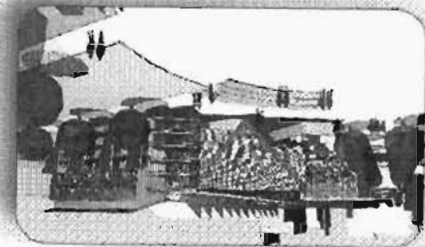
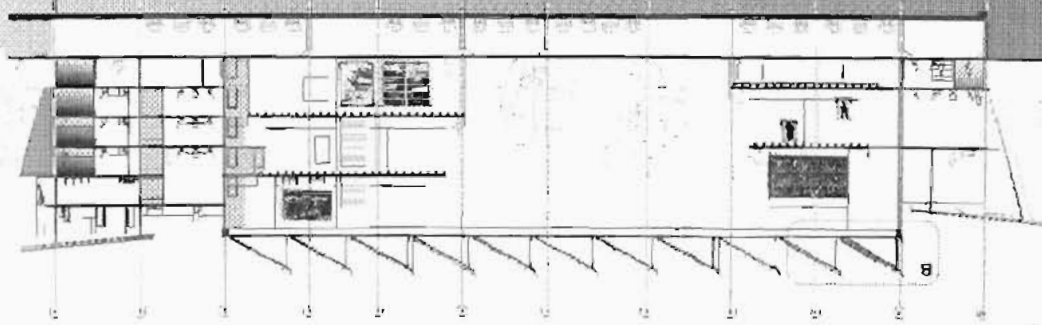


Cross Section C-C Scale: 1:100

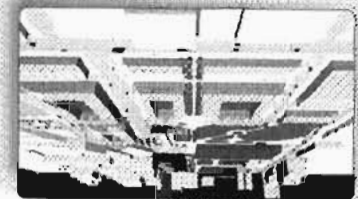


Sections - C-C + D-D Scale: 1:100

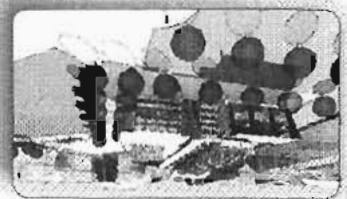
Cross Section E-E Scale: 1:100



Section E-E Scale: 1:100



Section E-E Scale: 1:100



Section E-E Scale: 1:100

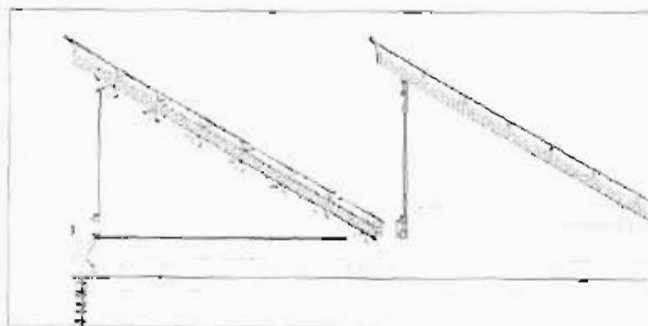
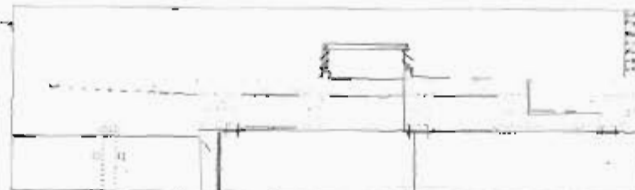
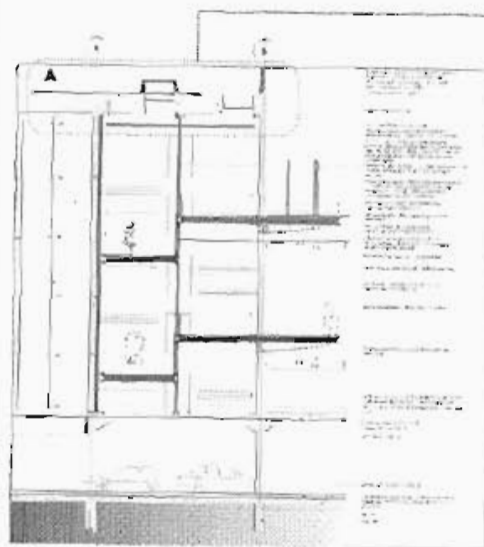


Section E-E Scale: 1:100



Section E-E Scale: 1:100

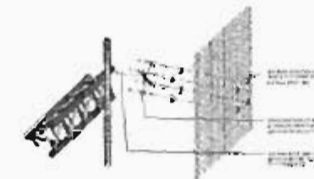
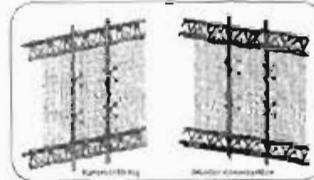
Sections + Detailed Scale: 1:50 + Details A + B Scale 1:20 + C



Section through wall and floor
 showing the relationship between the wall and floor
 and the way the wall is constructed
 and the way the floor is constructed
 and the way the wall and floor are joined together



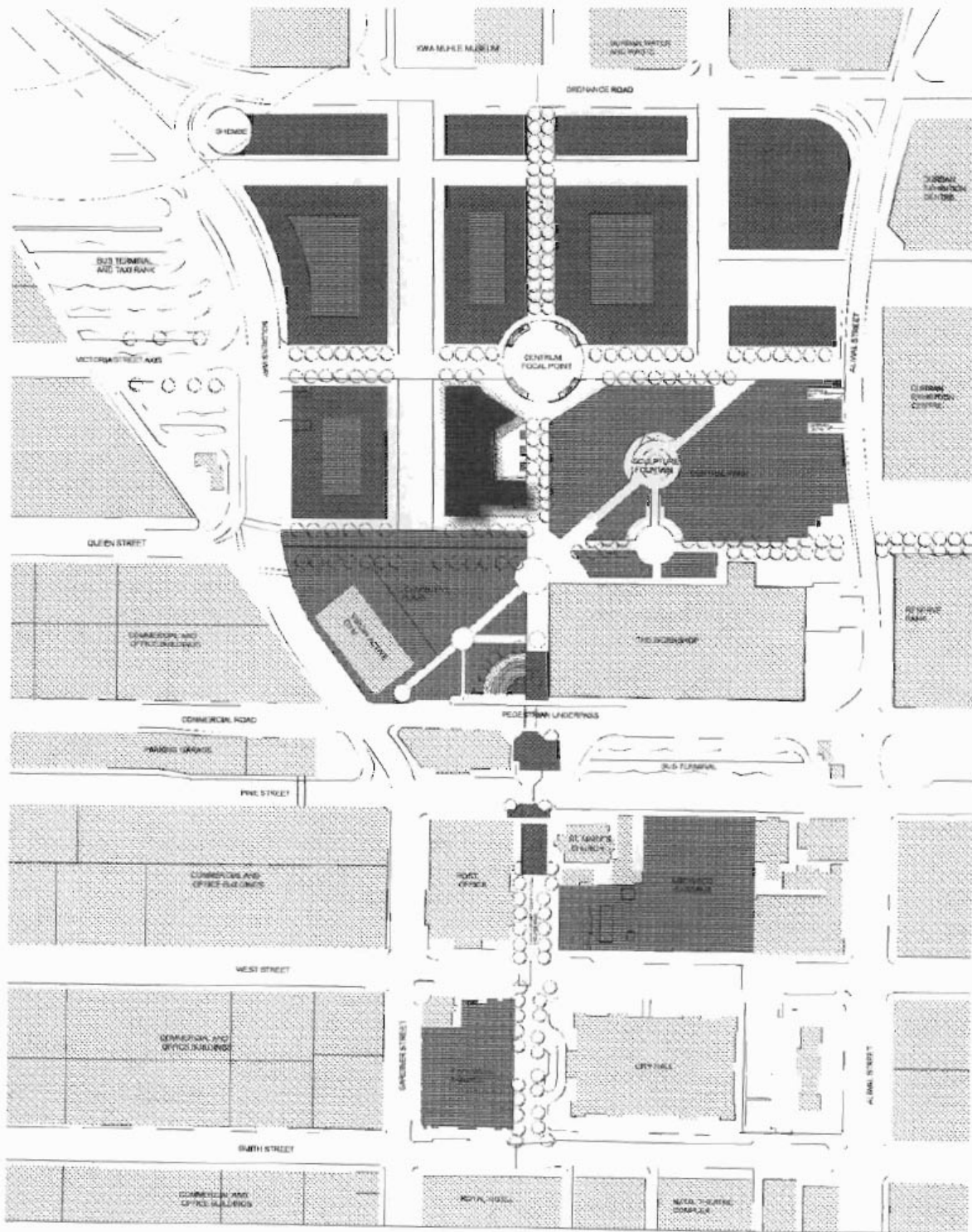
Section through wall and floor showing the relationship between the wall and floor and the way the wall is constructed and the way the floor is constructed and the way the wall and floor are joined together



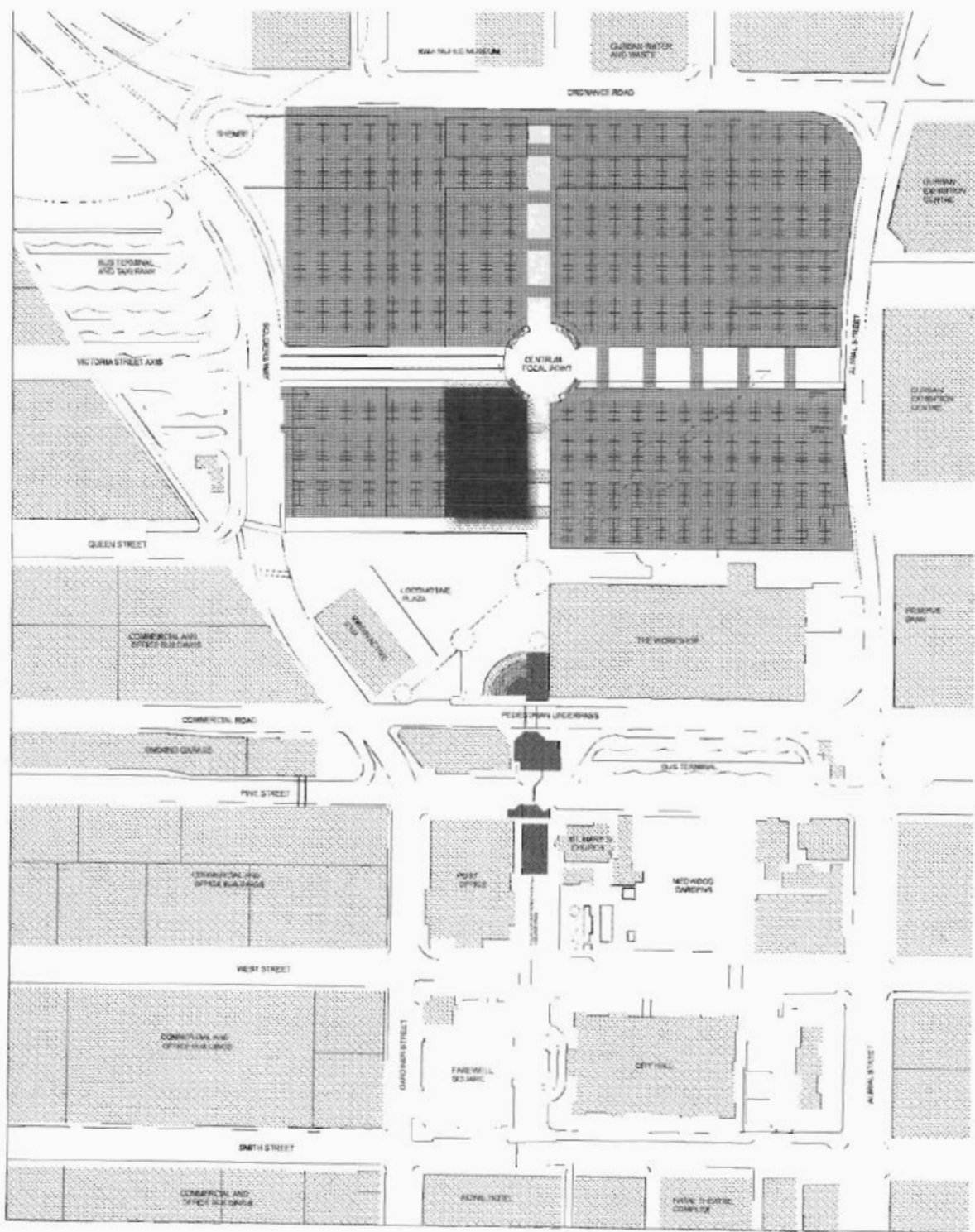
Detail C Spider Web Fixing System

Durban Art Gallery



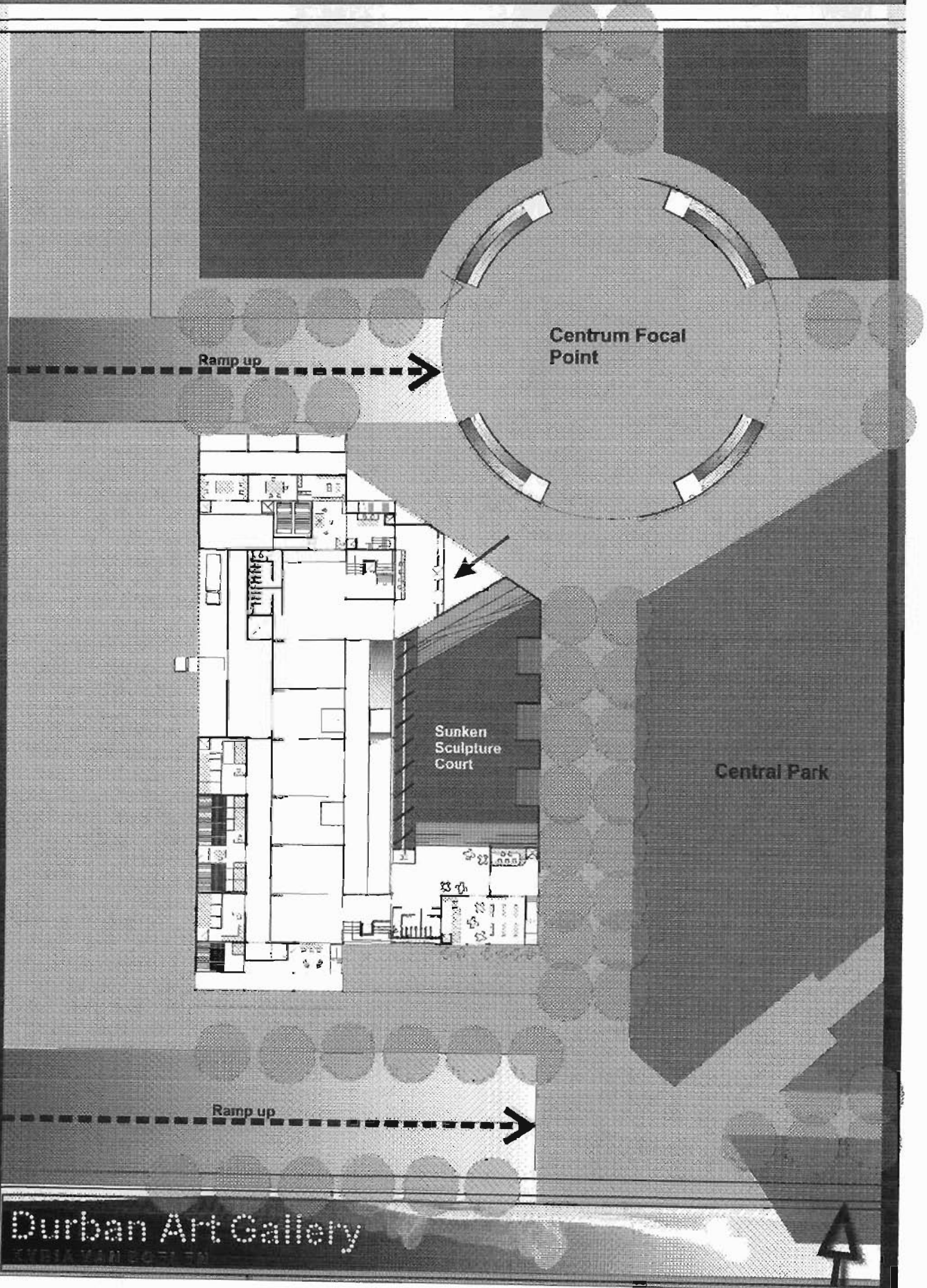


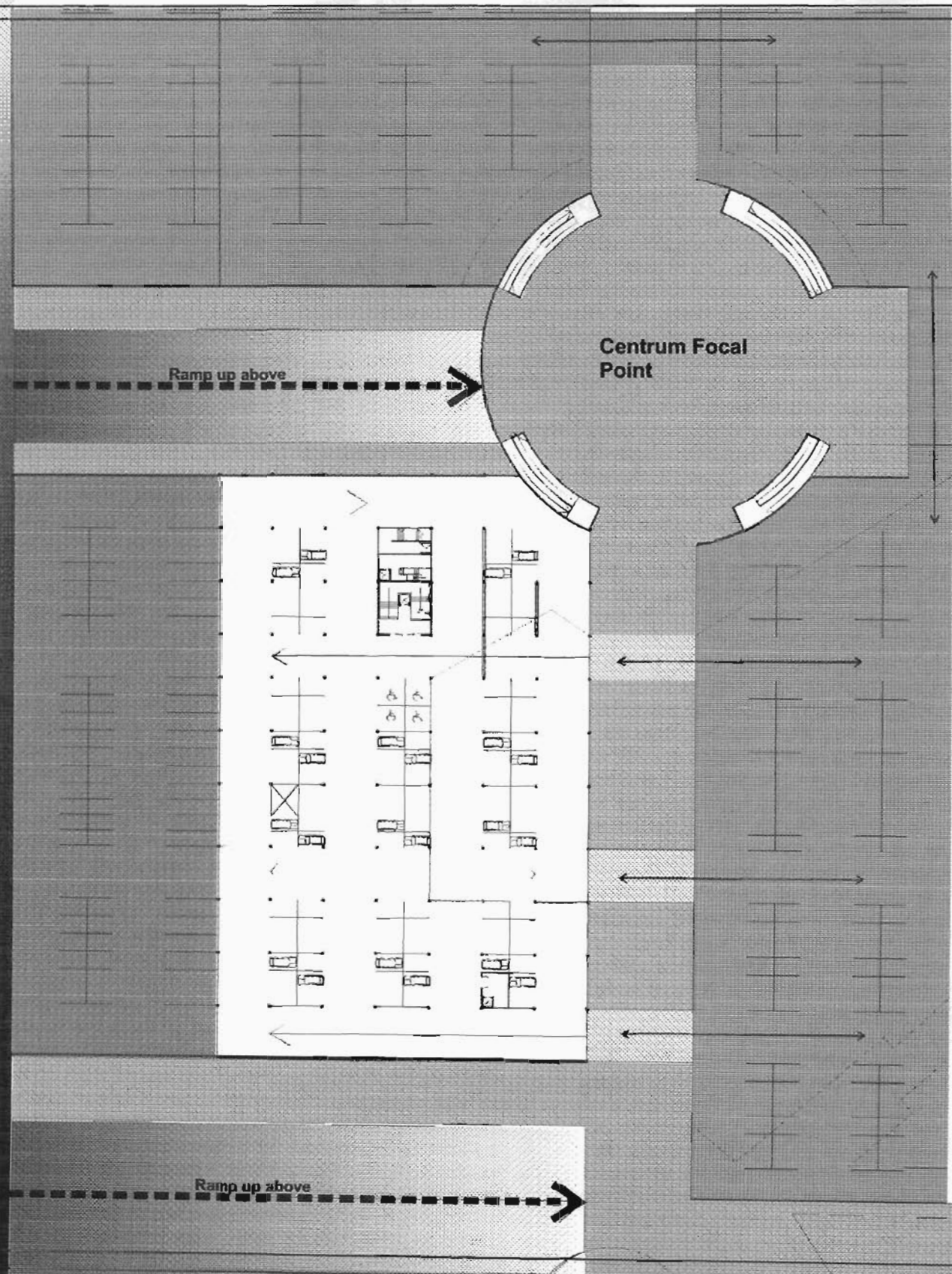
Basement Context Plan Scale: 1: 1000



Durban Art Gallery





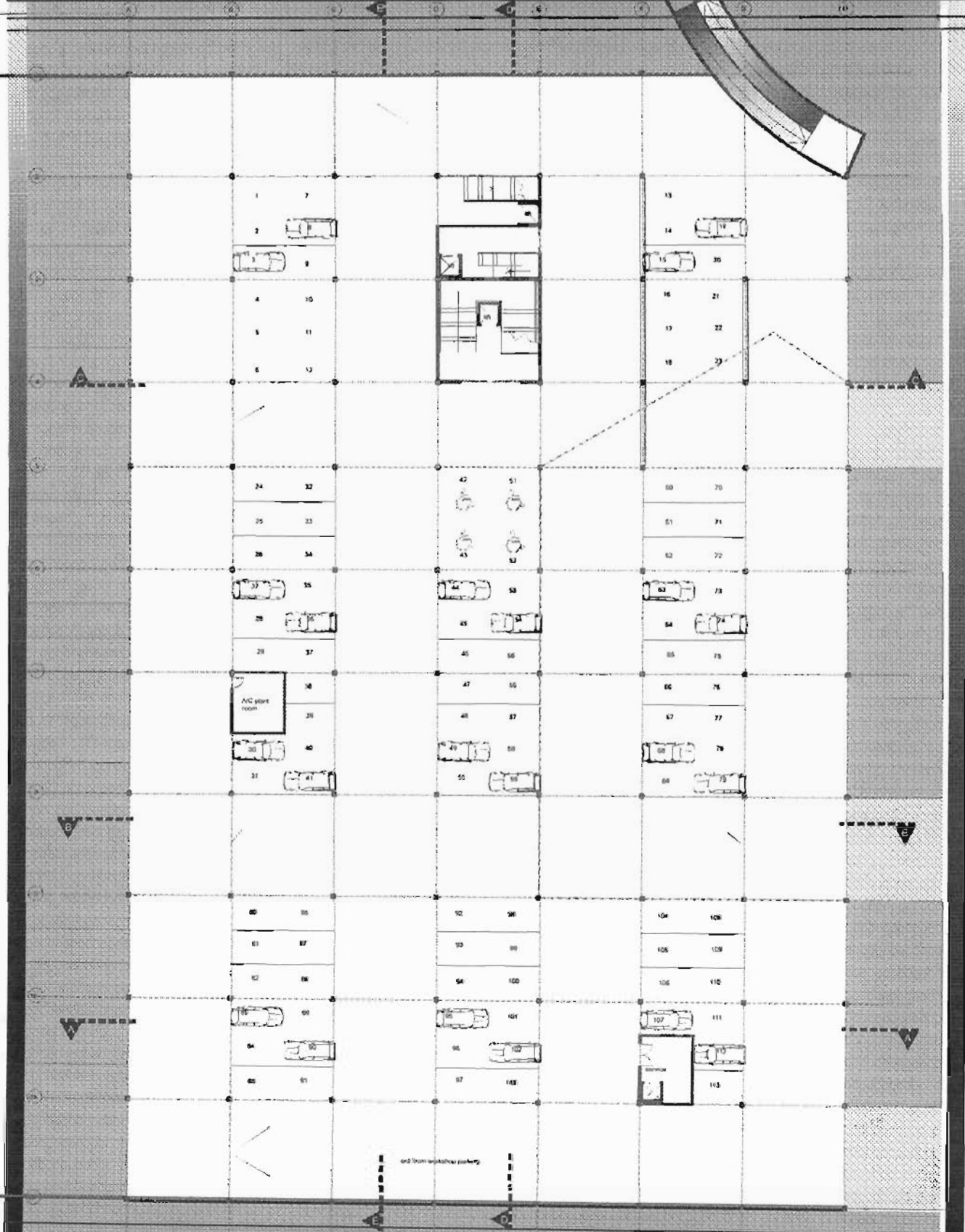


Durban Art Gallery

CYRIA VAN DER MERWE



Basement Floor Plan Scale: 1: 100

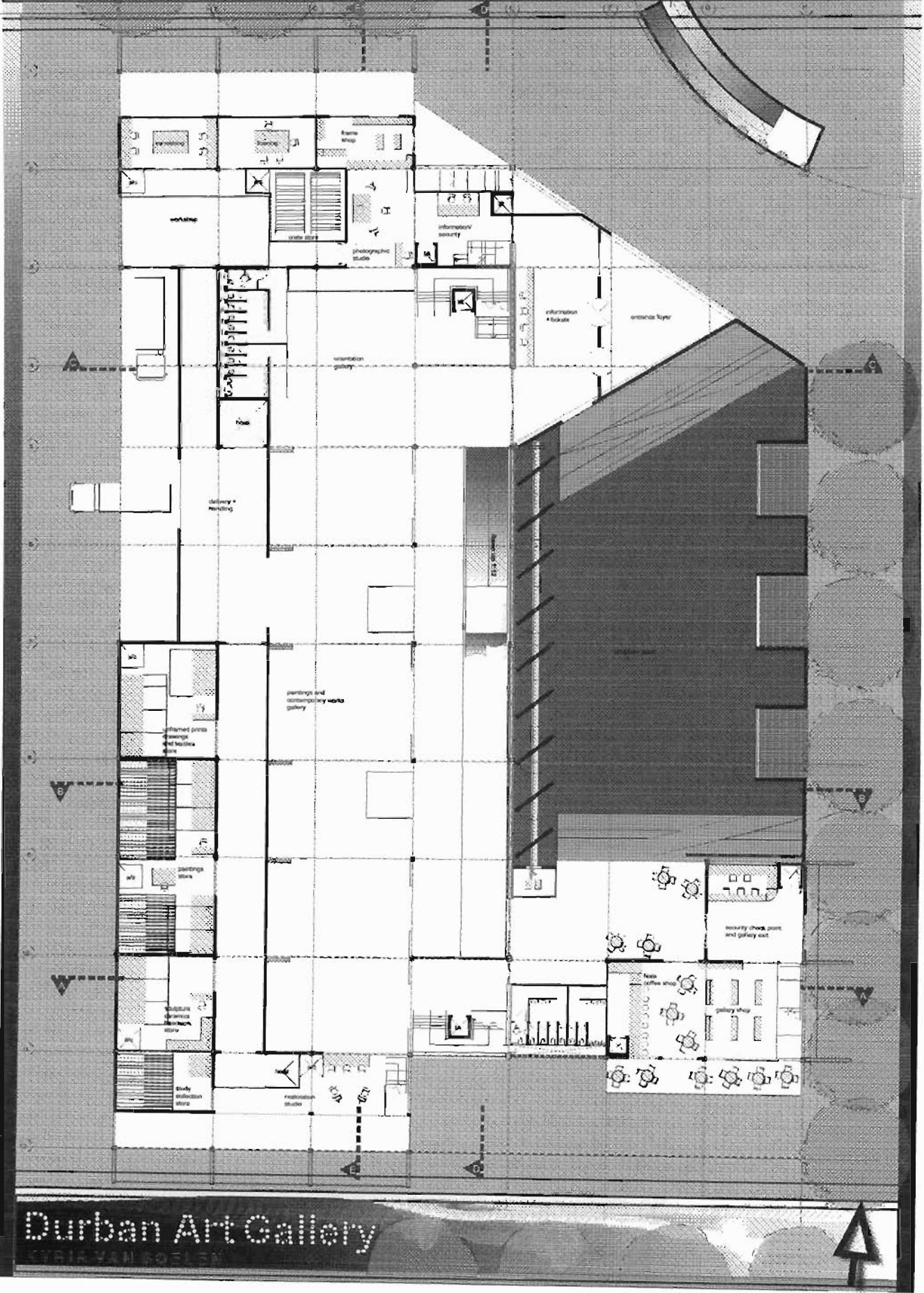


Durban Art Gallery

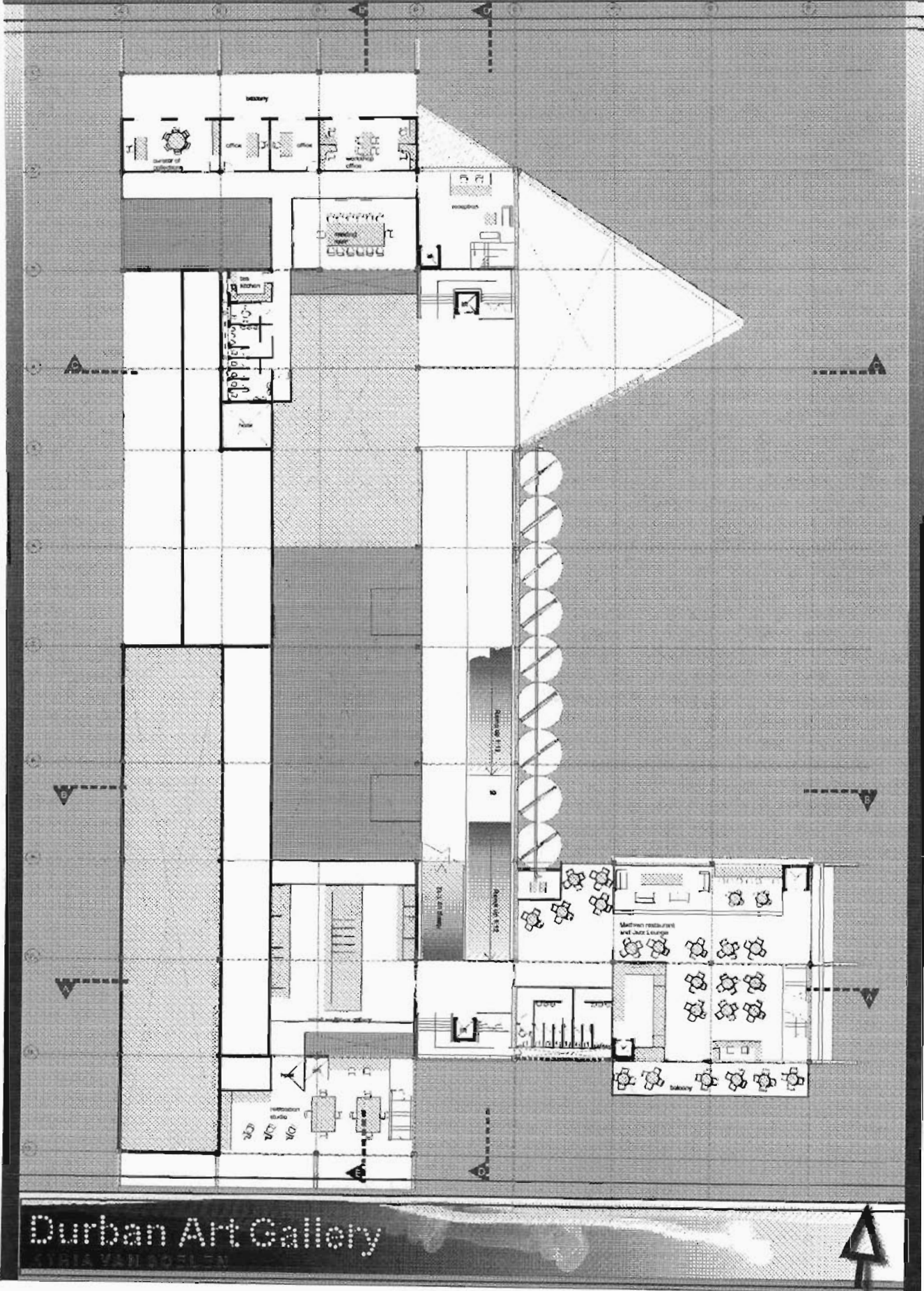
CYRIA VAN SOYLEN



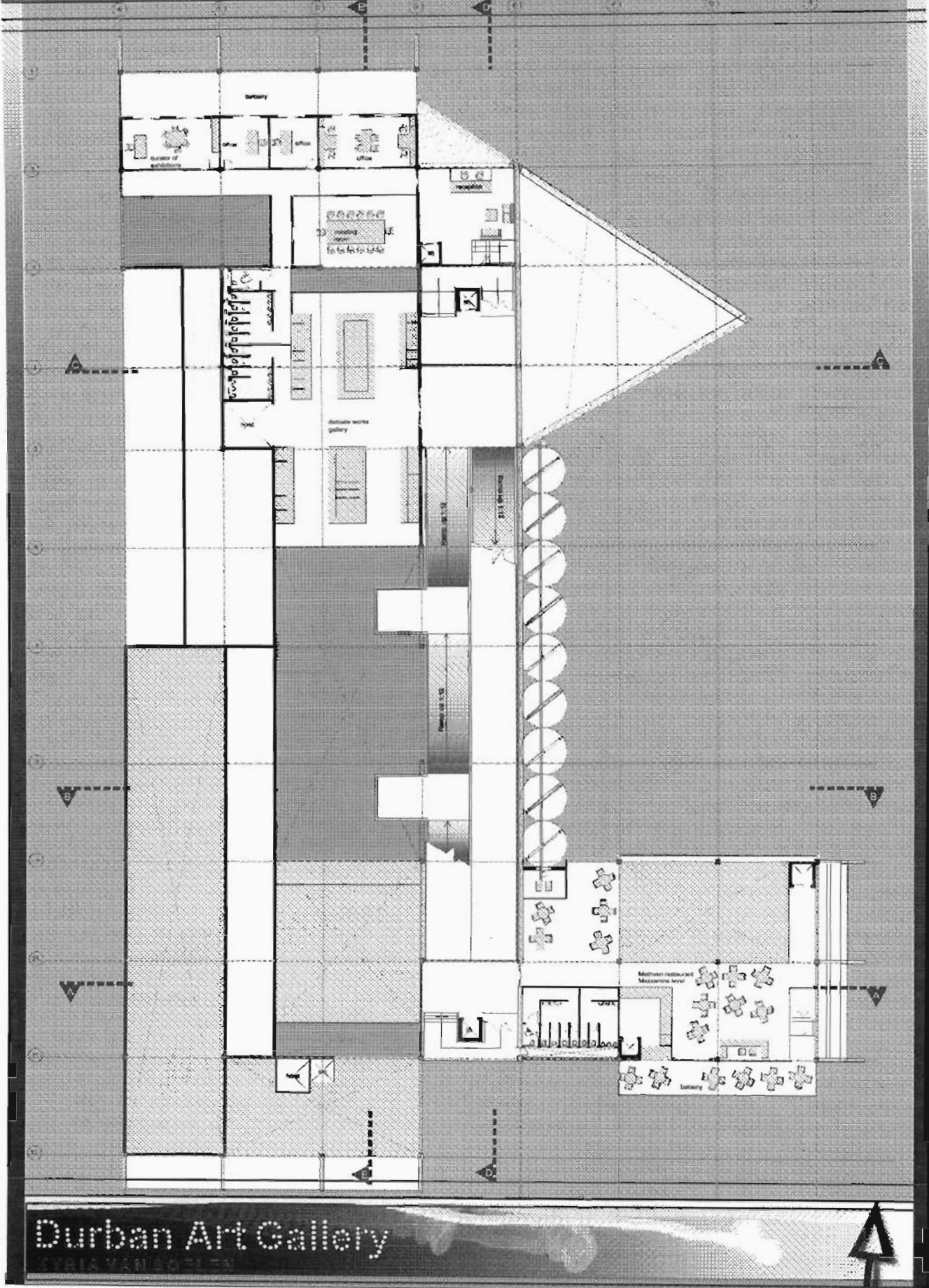
Ground Floor Plan Scale: 1:100



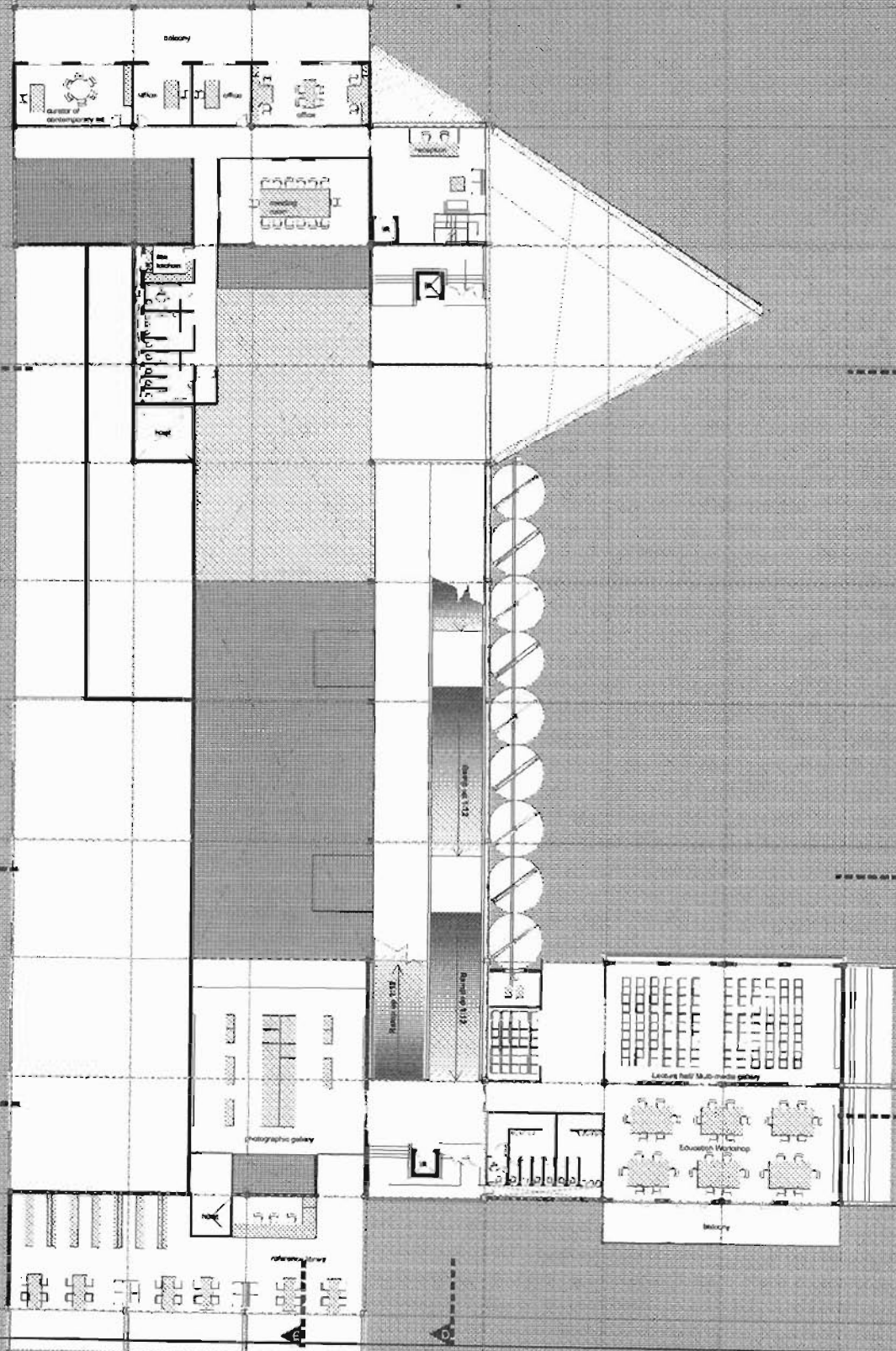
First Floor Plan Scale: 1: 100



Second Floor Plan Scale: 1: 100



Third Floor Plan Scale: 1: 100

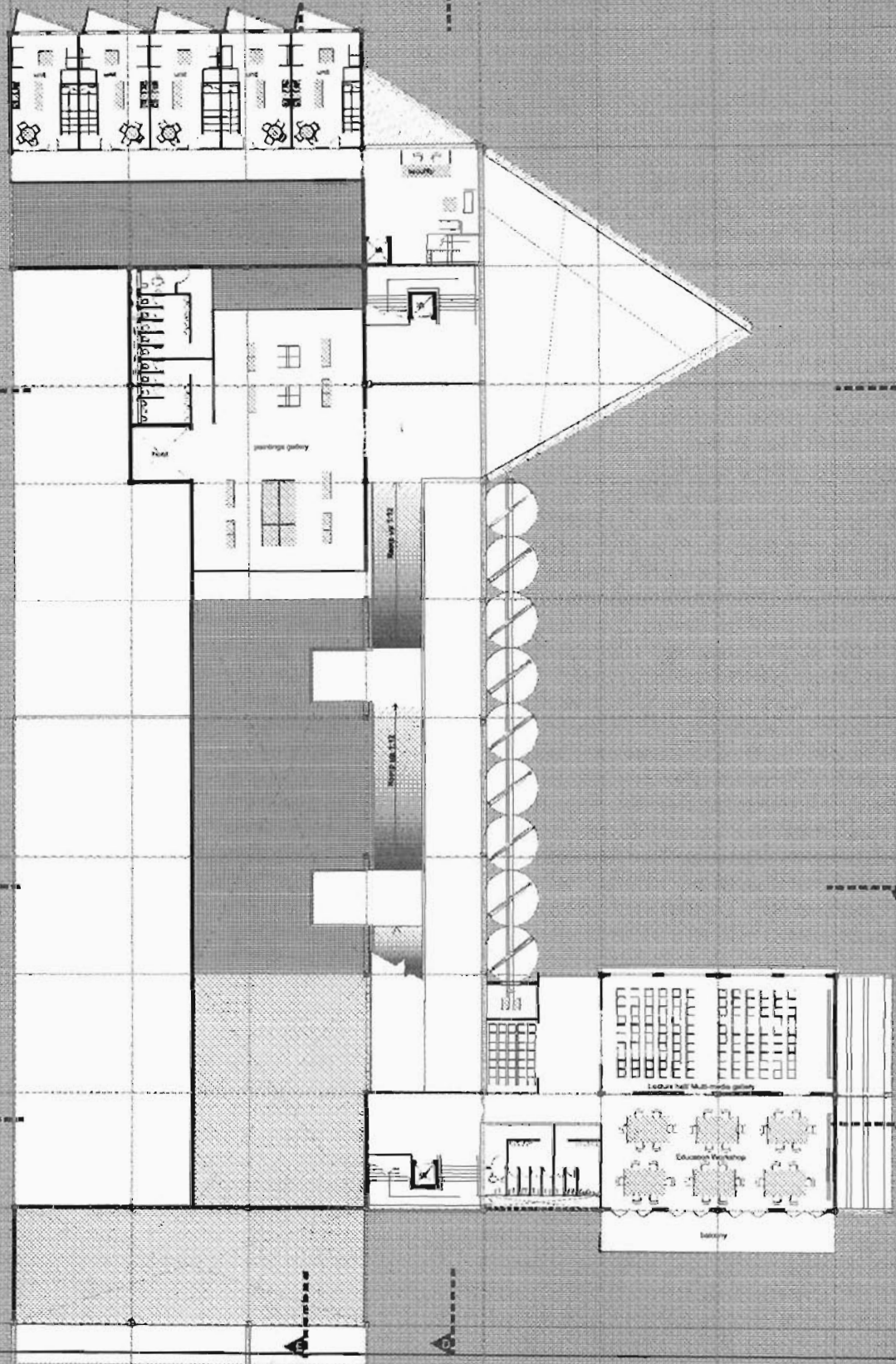


Durban Art Gallery

SYBIL VAN SOELEN



Fourth Floor Plan Scale: 1: 100

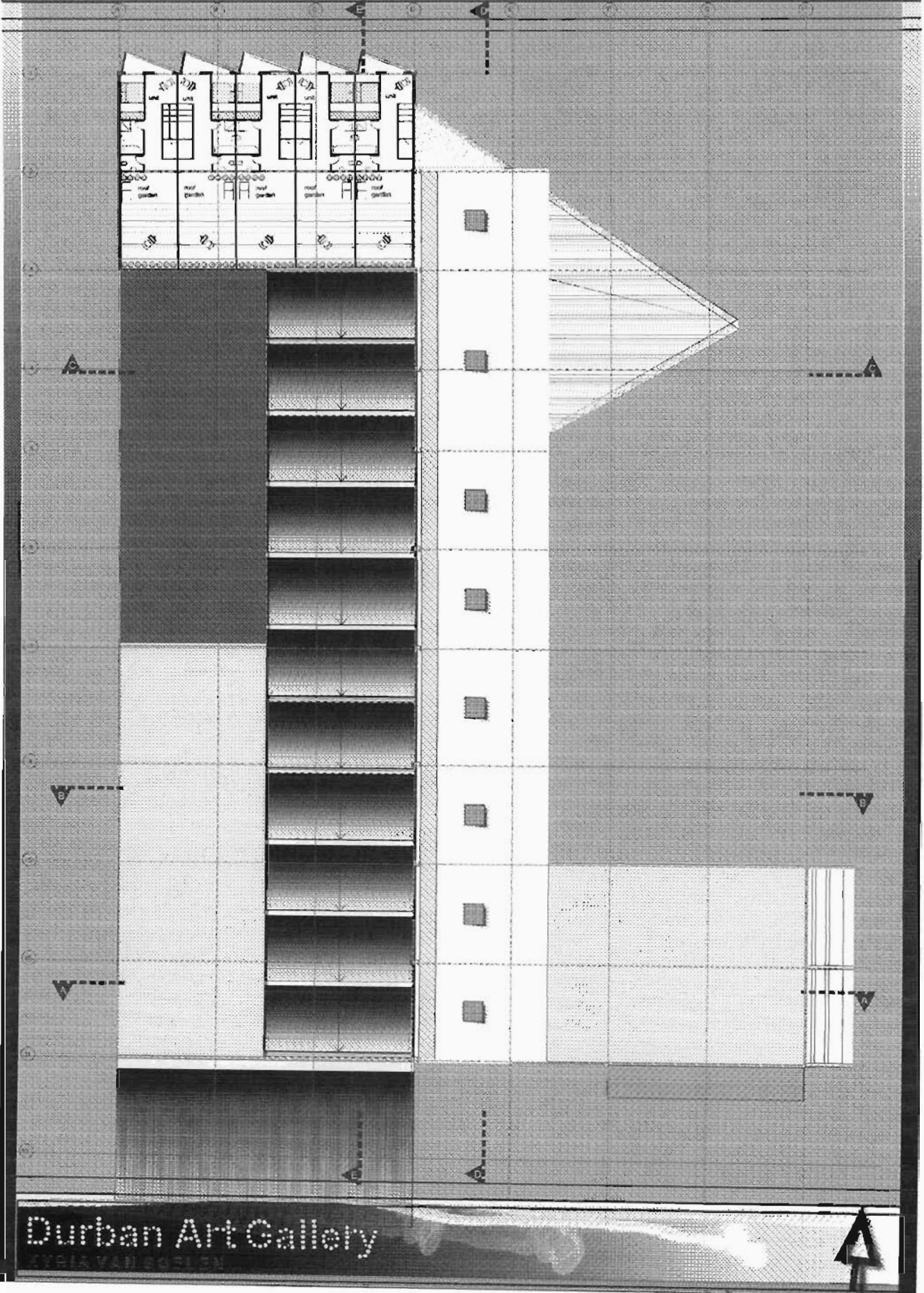


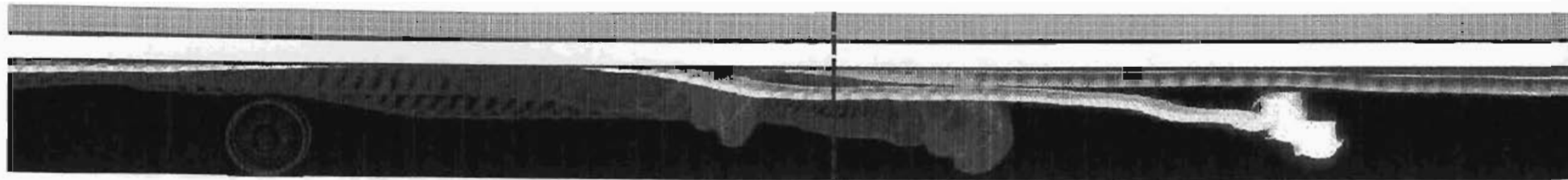
Durban Art Gallery

LYRIA VAN BOVEN



Fifth Floor + Roof Plan Scale: 1: 100





Conclusion

- The proposed Durban Art Gallery has focused primarily on contextual integration and interaction between artwork, visitors and architecture.
- The location of the proposal aims to create an iconic urban space rather than an iconic building which fails to relate to the surrounding context and over powers the artwork which it contains.
- Functions have been arranged according to climatic orientation and the potential for visual interaction between different functions.
- The entrance has been placed along the main historical pedestrian axis similar to the existing buildings such as the Workshop and the City Hall located along the axis
- The sunken sculpture court similarly responds to the central park opposite the site.
- The architectural language is largely derived from the south facing roof lights necessary to illuminate the gallery spaces as opposed to a pre-determined stylistic image.