COURSE CODE

COVER SHEET

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ESSAY WRITING REQUIREMENTS

This sheet is an overview of the minimum requirements for any essay or written work you submit for all courses in the School. As this is only a brief summary, use the recommended resources for further direction.

Essay Structure

Thesis: No matter the purpose of the essay, you must have a thesis and build your paper so to explicate that thesis.

Outline: Your essay must have a clear and organized structure. Start by developing an outline. Break the essay down into the following categories:

- **Introduction**: At least one paragraph which introduces the essay topic. It includes the thesis statement, usually as the last sentence in the first paragraph.
- **Body**: Develop the themes and points that explicate your thesis in the body of the essay.
- **Conclusion**: A final paragraph(s) that re-states your thesis and contextualizes or summarizes the body of the essay. Never add a new topic or point of explication in your conclusion.

Paragraphs: It is very important that you develop well-structured paragraphs. The rule-of-thumb is that each topic or theme is developed in a single paragraph. However, that rule may be modified if a paragraph becomes too long (which can be tiresome to read) or you have too many brief paragraphs (which are also tiresome). Include transitions at the end and beginning of paragraphs so that they flow together well.

Writing style: Your essay must be clear, concise, and flow smoothly. Academic essays require a certain degree of formality, but do not complicate the writing style or word choice unnecessarily. Utilize punctuation correctly! Check your grammar (pay particular attention that subject and verbs, pronouns and antecedent nouns agree)! Read your essay out loud to yourself to check for flow and clarity! Proof-read and spell check!

For further reading or assistance, see: http://startup.curtin.edu.au/study_skills/writing.html, or http://www.lib.uct.ac.za/infolit/report.htm, or The Humanities Library at UCT has a large collection of writing skills reference books, or visit The UCT Writing Centre (http://www.adp.uct.ac.za/adp/writing), which offers writing assistance to all students.

Referencing

All academic writing requires you to cite all the sources that you have read and consulted in the preparation of your work. Not citing all of your sources is an act of plagiarism: essentially the stealing of others' words, thoughts and ideas, and is treated as fraud. Students found guilty could at best fail their course, at worst face expulsion. Every single instance of using phrases and ideas that are not your own must be acknowledged.

Quoting: When you quote someone's words directly, you have to place these words in quotation marks. Longer quotations, which you should use sparingly, should be "blocked" to make them stand out clearly. This means indenting and single-spacing the entire quotation, also possibly using a smaller typeface.

Referencing: You must choose one method of referencing (or citation) and use it consistently throughout your essay: either the Harvard system or the footnote (Chicago or Oxford) system. No matter which system you choose to use, the information you must ascertain and include is:

- **Name** of the originator(s) of the document or the part of a document you are using as a source.
- **Date** of publication (some citation styles give the date immediately after the author; otherwise after the name of the publisher). For an electronic resource, look for the date on which the document was produced or updated.
- **Title** of the publication (and, if it is part of a larger work, e.g. an article in a journal, or one paper in an edited collection, also the title of the whole publication).
- **For an electronic resource only**, the **medium**, which may be given as "Online" or "CD-Rom" in square brackets, or you may use “Electronic” if you are not sure whether the source is online or networked CD-Rom.
- **Publication details**: Place of publication and Publisher if the item is a book; Volume and/or issue number if the item is a journal. For an electronic resource give the uniform resource locator (URL) which may sometimes be given between angle brackets (< >). If the URL is very long, it may be written on two lines, but try to break a line only where a punctuation mark occurs and do not add a hyphen, as this will alter the URL.
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In the Harvard system, referencing is done by inserting the author surname and publication date in parenthesis within the main body of the text. For a complete guide to the Harvard system, see http://www.lib.uct.ac.za/infolit/bibharvard.htm.

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In the footnote system, a reference in the text to another source is signalled by a numeral giving the number of the citation. This numeral corresponds to a numbered note at the bottom of the page (a footnote), or at the end of the paper. For a complete list and discussion of Footnoting, see http://www.lib.uct.ac.za/infolit/lbfootchicago.htm or Turabian, K. 1996. A manual for writers of research papers, theses and dissertations. 6th ed. Revised by John Grossman and Alice Bennet. Chicago: University of Chicago Press.
the george pemba art museum
how memory translates to design
This thesis has been quite a challenge and my most personally demanding academic undertaking thus far. However, if it were not for the following people who will be mentioned here, I would not have accomplished what I have today.

First and foremost, I would like to thank and praise the Almighty God for his extensive and inexhaustible grace and mercy... for being my pillar of strength during times of weakness, my sanity among the madness and my light among the darkness, you continue to strengthen me.

I would like to thank my parents and family, for believing in me when I doubted myself, for listening, caring and always lending a helpful hand when I needed it most.

Professors Jo Noero and Nick Coetzer, Dr's Eitan Karol and Andre' van Graan, for your assistance, taking time out to help whenever I needed it. You were my rock and my compass, when all failed you showed me other ways. Thank you for guiding and helping me realise my full potential.

My fellow classmates, colleagues and friends for their understanding, tolerance and valuable support. My achievement is your achievement.

Finally to everyone who contributed to my success, however small or large, THANK YOU.
This thesis is in memory of my Grandfather, George Milwa Mnyaluza Pemba.

Without your inspiration, none of this would be possible.

“Siyakuhlala sikukhumbula Gaba.”
Introduction

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An artistic heritage is what I was born into, it runs in my family. My grandfather, George Milwa Mnyaluza Pemba, sits among the great South African fine artists whose work has given black artists international recognition. He has played an important role in South African art and is recognised as one of the country’s greatest South African pioneer black painters.\(^1\) As a young Architect, I saw the need for an Art Museum which would honour his greatness and exhibit a permanent collection of his work.

This invoked the question of how this space would be designed, what principles could be applied and which methods of investigation would be relevant.

An interrogation through the case studies of single artist art museums was the first to be investigated in an attempt to examine how spaces within specific art museums had been negotiated in order to reveal the strong identities of the artists they were designed for. These museums were conceptualized around (A), the relationship created around the artist’s work and the place it was viewed in, (B), the narrative approach, where the essence of the artist’s life and experiences was captured in the architecture, and (C) where the focus was more about the movement through the spaces provided giving the viewer a prescribed journey through the work of the artists.

The next form of inquiry was an interrogation of various methods and technologies on how one can use natural light in an art museum. Climate-based daylight modeling is one of many methods which can be applied in order to assist in the provision of sufficient controlled daylight for the gallery space. This inquiry was also investigated by means of case studies to investigate various possibilities of achieving the best natural lighting within exhibition spaces.

These above-mentioned investigations were my initial guides towards ideas about spatiality and the art museum typology.

This thesis document illustrates the investigations undertaken for the development of the George Pemba Art Museum. It also contains an investigation of the artist’s life which led to possible ideas about the spatiality of the building. This in turn leads to other ideas about materiality and form which will be explored further in order to reach a tangible architectural intention.

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\(^1\) Sarah Hudleston, S. Against All Odds. George Pemba: His Life and Works. (Johannesburg: Jonathan Ball Publishers, 1996)
The Life and Art of George Pemba

Recognised today as a pioneer of ‘black’ art and a major South African artist, George Milwa Mnyaluza Pemba, born in 1912 in Port Elizabeth, Korsten attended school through scholarships which enabled him to receive his education. During this time, most schools for black pupils in South Africa did not offer art as a part of their syllabus. His father, Titus Pemba encouraged him to draw and paint, and with the help of his brother, he began painting murals on walls of the family house.

Early Years

After becoming a teacher at the Lovedale training college, he received a bursary at Fort Hare for him to further his art studies for five weeks. This proved difficult to attain due to the political warfare in the country at the time, so he struggled to receive any formal training but continued, learning through trial, error and determination. He was later awarded another bursary to study art with Professor Austin Winter Moore at Rhodes University for four months but was accepted as an "external student", as a way around the racial admission policies in education at the time.

In 1937, Pemba’s work was exhibited in the May Esther Bedford Art Competition, the very first exhibition for black South Africans, where he won first prize and Gerard Sekoto was runner-up. In the early 1940’s, Pemba was invited to Cape Town for a two-week art course, which he left early as he could not see his progress at the school. In 1944, Pemba obtained a loan from the Bantu Welfare Trust and used the funds his "grand tour" where he travelled to Johannesburg, Durban and Mthatha and Lesotho. He later confirmed that his portraits of Basotho women in traditional attire were some of his best pictures. In 1945, Pemba had two very successful exhibitions, The Annual Exhibition of the Society of Arts and Crafts in Port Elizabeth and the Durban International Club exhibition of black artists in which all his pictures had been sold within a few hours of the opening.

Troubled Times

Pemba held his first solo exhibition at the Old Mutual Arcade in Port Elizabeth in 1948, the year the apartheid government came to power, and he considered leaving the country. However, he stayed, and became one of the few black artists of the time not to go into exile. It was at this time that he became increasingly involved in resistance politics alongside his good friends ANC leaders Raymond Mhlaba and Govan Mbeki. His art skills were used through a number of satirical cartoons which aided the African National Congress in 1945 by publishing them in newspaper Isizwe. By this time, he was struggling to exhibit his work as apartheid had affected the art world but returned seriously to his painting in 1965.
the artist and his work

The Pinnacle of Success

Recognized among the black intellectuals from the 1940's, Pemba received honorary degrees from the universities of Fort Hare in 1979, Zululand in 1986 and Bophuthatswana in 1987. After this time, more exhibitions would follow, including an exceedingly successful exhibition at Port Elizabeth’s Highbury Gallery held in 1993 of watercolours Pemba did from the 1930’s and 1940’s.

His Retrospective Exhibition and Catalogue (1996) put together by the staff of the South African National Gallery was what gave him complete recognition in the art world. In October 2004, the President of South Africa awarded Pemba the Order of Ikhamanga for his pioneering and exceptional contribution to the development of the art of painting and literature.

George Pemba innocently portrayed the simple lives and customs of poor black people living in the townships of the Eastern Cape. His aim was not to try and create resistance art which was politically inspired, but to document everyday life and this resulted in grand art. Pemba had very little interest in exploring the formal densities represented by European-influenced modernism. Instead he focused on depicting realities and environments in a direct, though forcefully expressionist manner. His focus was in capturing the emotional social realism of township life, although this was perceived as a naive reflection of life in the Township of New Brighton, he documented the harsh story of life in a South African township at the height of Apartheid through painting.

Pemba’s dream and vision was for the arts to be a healing and expression form for all to appreciate, as a way of being tolerant of all African cultures as diverse as their art. He painted a range of subject matters from portraits of individuals from a variety of backgrounds, Xhosa and Sotho traditions, and landscapes. However, his township scenes are what gained him the most fame.

As a social historian, Pemba’s art revealed processes of modernization in which a resilient black culture endured extreme oppression during apartheid. However, his paintings were not limited in the socialist realism of revolutionary 20th century literature art, but rather an impressionistic style which kept with the trends set by Eastern Cape artists in the 1950’s. They were an expression of form and colours. He also completed paintings that reflected a permanent interest in African tradition, its values and customs. The aesthetic sensibility of Pemba’s art remains rooted in late nineteenth-century French modernism.

"Stylistically, it would be an over-simplification to categorize Pemba merely as a self-taught artist working in relative isolation with a dominating singular influence. Pemba’s artistic development has had a multi-faceted history, interwoven with his shifting aesthetic persuasions, and influenced by a Christian education and upbringing, in a household which had absorbed the paternalistic English authoritarian principles of Victorian colonialism. His ideological progression to African nationalism and the re-discovery of his repressed Xhosa culture, added another dimension to his extensive oeuvre which has been collectively described as one of historical and social commentary. The artist therefore worked mostly outside the realms of the formal South African art establishment, without its characteristic critical considerations, for more than 60 years."  

George Pemba's Paintings (Oil on Canvas)

George Pemba with two professors receiving his Honourary Master's Degree From Fort Hare University in 1979
Early to Contemporary Models

The first project to give form to the Museum building type was J.N.L Durand's 1779 design for the ideal museum during the Ecole Nationale Supérieure des Beaux Arts. In 1802-1805, he published a paradigmatic design for the ideal museum which consisted of a series of long galleries, vaulted spaces which enclose four symmetrically arranged courtyards around a central rotunda. This was the idea would be applied throughout the nineteenth century in most museum designs. The beauty of Durand's monumental proposal was that one did not have to follow the entire project, which in its vast scale was typical of a late eighteenth-century idealized architecture. Everything else which came along was an adaptation of this model.

Leo Von Klenze attempted to define museum space by using more realizable architectural 'vocabulary' with his 1816 design of Glyptothek in Munich. This museum had the entrance of a Greek temple, four vaulted wings which enclosed a single central courtyard. This courtyard was used to provide natural light through windows.

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Sir John Soane's Dulwich Picture Gallery, London (1811-1814), adopted the use of the long gallery which was then considered the ideal space for the viewing of art. In this building, variable-length spaces illuminated from above by natural lighting are offered by an innovative system of raised monitor lighting above the galleries which bounces it down to the artwork. The natural light enters through clerestory windows set in the vault as opposed to through the use of a skylight. This then gives a very comfortable level of daylight for viewing art.

Karl Friedrich Schinkel's envisioned the plan of the Altes Museum (Berlin, 1823-1830) to be organised around a central circular space (a rotunda). It was also one of the first museums to rise a full two stories above its monumental base. Schinkel also included what became another popular feature in museum design; the grand stair. The entrance was a stretched colonnade across the main façade and the basic plan was of a circle inscribed in a rectangle, similar to Durand's design; symmetrical but not as uniform.

A different building type started to emerge from Joseph Paxton's Crystal Palace (London, 1850-1851), through the creation of museums that function as transparent containers with vast, relatively open and amorphous spaces. Louis Khan in the Kimbell Art Museum (Fort Worth, 1966-1972) returned to Durand's vaulted gallery. Providing spaces that are room-like and have a sense of containment as provided by traditional galleries, Khan designed these spaces so that they can be easily rearranged and opened up if needed. His was a recreation of a new museum type for the late twentieth century by utilising new structural systems while returning to old planning types.

Mies van der Rohe utilised 'Universal Space' as a major element in his design for the Neue Nationalgallerie (Berlin, 1968). He designed a two level museum which reversed the standard section for exhibition space with the use of an open, light-filled space as an entrance and a dark, underground portion of the building as the exhibition space. The notion of the universal space can also be seen in the Piano and Rogers' Centre Pompidou. Renzo Piano and Richard Rogers' Centre Pompidou (Paris, 1977) then brought forward the notion of the museum as exposition hall.

Art museum design in the twenty-first century not only involves addressing issues of the museum’s design. It encompasses issues of urban and civic presence and the museum’s cultural role in society. “What is a museum mean to do for the art it contains?” This is the first question a designer should ask when observing the evolving changes in demand and the pressures placed on museums.

Many people view the museum as a place to go simply for the discovery and contemplation of art. Philosopher Nelson Goodman’s book Of Mind and Other Matters attempts to answer this question in explaining what the basic goals of a museum should be.

Natural Light in the Art Museum

The use of natural lighting in the illumination of gallery spaces is one of the main challenges faced by art museums today. The aim of the museum is to create an environment that meets both the visual needs of the viewer and the conservation needs of the collection it is exhibited in. These needs can be met in a number of different ways with the use of natural and artificial lighting.

Innovative monitor lighting and clerestory's for natural light illumination date back to the 1800's when Sir John Soan used these on his Dulwich Picture Gallery. In this project, he created an environment where light enters through clerestory windows set in a vaulted roof rather than directly through a skylight.

“Artificial light, even if perfected to the highest degree, has never the strength of sunlight and is more fatiguing to the eyes, as it does not stimulate the retina by a constant change of the intensity and colour of the light rays, as does daylight.”

5 Valentiner. New Architecture and City Planning. (Philosophical Library, 1944)
The use of windows has always been the traditional means of letting natural light into buildings. In art museum lobbies, the use of large windows is acceptable as it gives the user a sense of orientation and helps maintain a visual connection with the outside world, as in the case of the Museum of Modern Art (New York, 1984) and the Metropolitan Museum of Art (New York, 1978).

**DIFFUSION OR SAND-BLASTED GLASS**
Diffusing glass is sometimes employed in windows to break up sunbeams, but diffusing glass used in this way may become a secondary source of brightness that is more disturbing and difficult to avoid than the sunshine itself. The use of diffusing glass is the best way to diffuse direct sunlight as it has the ability to break up glare and distribute light evenly within a space.

**SCREENS AND VENETIAN BLINDS**
Another application often employed to control light in galleries is the use of screens or Venetian blinds. This has for some time been the best way to adjust window light, as it has the capability to regulate the light flux of an entire window. With the use of blinds, light that passes can be reduced and at the same time be directed towards the ceiling which reflects it diffusely to other parts of the room.

**CLERESTORY WINDOWS**
This architectural feature is commonly used in any high central space over the roof of a flanking space and is a good instrument of room lighting. Natural light allowed by these serves very well in the role of naturally lit buildings. These windows are not used for visual connections as they are positioned much higher than the normal conventional window.

**SKYLIGHTS**
Skylights date back to the early art museums which were designed and have long been the principle means of lighting art galleries. This architectural feature has been used since the nineteenth century and is still very largely used in modern buildings. However, with these the use of suspended horizontal screens have been applied as part of the ceiling (in the case where clear glass is used) to cut off beams of natural light from entering the room.

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Climate-Based Daylight Modeling

The potential use of more daylight in galleries has since developed due to pressures for the reduction of energy consumption. Recent museum projects have demonstrated the responsible use of daylight with less need for composite and often defective systems of active solar control, such as motorised louvers or blinds. The logical modelling of daylight in buildings has allowed for it to be used with more assurance than the use of complex building technology. Unfortunately the accurate prediction of daylight performance in exhibition spaces cannot be guided by the “daylight factor” or other analysis tools that are available. The problem which has been faced by many art museum designers has been the prediction of how much daylight would be present in the building throughout the year. This has been made possible with the use of climate-based daylight modelling (CBDM).

The Brandhorst Museum (Munich) is a good example where climate-based daylight modelling has been used. The use of daylight was the primary requirement for this museum. The aim was to provide sufficient controlled daylight for all the gallery spaces.

Brandhorst Museum (Munich)- Sauerbruch Hutton Architects
(Source: http://www.arup.com)
Brandhorst Museum Light Study

Diagram of Daylight-directional System

Lighting Intensity Diagram - Upper Floor

Brandhorst Museum Light Study diagrams (Source: Detail Review of Architecture, 2010, Issue 4)
Brandhorst Museum Light Study

The ground floor because of the floor above allows light through high-level clerestory windows. However, a light refracting panel mounted at an angle on the side of the building is used in order to bring natural light inside through the clerestory windows. This light is redirected by profiled soffits onto a series of translucent fin-like panels that form the visible ceiling of the ground floor galleries. The lower ground (basement) allows natural light through a skylight at ground level which doubles up as a walking surface for people outside the building. The main stairs which lead down to this level are lined with vertical glazing with external glass louvers for sun protection. There is also another layer of adjustable louvers on the inside on the vertical glazing to control the intensity of light entering the building while keeping the same ambience as the rest of the building.

Having looked at this example, one can see the benefits of CBDM as it has made possible for the designers of the Brandhorst to carefully strategize a way of dealing with and controlling natural light at the conception of the project and has saved them from the tedious ramifications that would need to take place after construction.

Brandhorst Museum Lighting Analysis of Ground Floor galleries
(Source: Detail Review of Architecture, 2010, Issue 4)
The older museum typology was meant solely for the exhibition of works of art. The twenty-first century museum not only accommodates this, but includes conveniently placed administration offices, curatorial rooms and live storages. These go hand in hand with conservation and restoration rooms for art works that have been damaged during transportation. An essential part of the museum is a library or reading room, (and in some cases) an auditorium, a room for receiving temporary shows and for unpacking goods or art works received. A sizable mechanical plant is also necessary for the maximum stability of temperature and humidity in the gallery spaces and mostly in the storage areas.

Another consideration in the design of the art museum of this century is the public’s point of view and convenience. The idea here is to keep the main entrance level with the walkway. On entering the museum, the lobby needs to be spacious enough to accommodate not only visitors or tourists assembled in this space, but people coming in and out of the various exhibition spaces. This needs to be a functional space which encourages interaction and in order to achieve this, it needs checking facilities and seating which communicate with restrooms, a lounge and a public restaurant. This space will serve as a place for contemplation, reading and information/ orientation for the works exhibited.

Exhibition space begins as a rule at the main entrance level. The place for temporary exhibitions needs to come first and spaces for permanent exhibitions should be not far from this. However, permanent exhibition spaces need to be arranged in such a way that they can be reached without going through other parts. The arrangement of this space/ spaces is often arranged in sequence of time and place, systematic, technical or in an analytical order.

Natural light since it requires such complex technical precautions to prevent the art from being harmed. The use of artificial and incandescent lighting is important for exhibition spaces. Perhaps even more important with regards to its relation to the spacial organisation of art museum buildings. The influence of good lighting on the work of the designer has been experienced mostly by art museums as they have evolved from the impasse of the use of skylights.

Earlier typologies experienced the difficulty of having the main exhibition floor with its skylights at the top of the building which resulted in all other non-exhibition spaces crammed into the floors below with no natural lighting. Recent studies have concluded that a mixture of incandescent light and natural ambient lighting seems to be the most acceptable solution. Skylights and light monitors have been given as the best way to admit natural light, although there is some feeling that side-lighting- through windows or clerestories- has the added advantage of providing glimpses of the outside world to help orientate the museumgoer.

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7 Laurence Vail Coleman, Museum Buildings (Baltimore, USA: Waverly Press, Inc. 1950)
In preparing to design the single artist museum, the understanding of the requirements which were necessary for this building type were done by means of case studies of three museums designed by selected architects.


Designed by Brad Cloepfil, the single-artist institution is dedicated to the life and work of one of the twentieth century’s most significant but mysterious painters.

The museum was designed in such a way that it dealt with two diverse acts of architecture. One being the way the site was dealt with, the other is an expression that deals with the earth weight and stillness. The idea was about how the museum could be imagined as a solid, an uninterrupted form which is then opened up with the use of natural light. The light in this building is played around with through various methods of amplification and diffusion with each surface of the building it reflects on. The museum stands a solid, dense cantilevered building consisting of two floors. Its internal and external walls are made up of concrete which contains aggregates of granite and quartz that have been fluted on the surface in order the keep with the same language and appearance of the external vegetation.

The first floor to the building cantilevers over the entrance creating a concrete canopy which pulls visitors into the museum’s lobby. On entering the building, the dim lobby acts as the second place of transition, before rising to the galleries above. The facilities on the ground floor are visually connected to the first floor through the use of a double-volume corridor which offers previews of the artwork exhibited above.
The exhibition and gallery spaces are housed on the first floor which in a way elevates the significance of the artist's work. The various exhibition spaces respond to the art through the use of changes in scales and proportions and varying the light intensities of the rooms, which serves as a tool for setting different themes. The ceiling height variations are based on the sizes of the work exhibited in those specific spaces. The low ceilinged spaces exhibit smaller works and works done on paper and the rooms with high ceilings contain large canvases.

Circulation on the first floor of the building is arranged in an anti-clockwise motion throughout the galleries. Through the flow of this movement, one uncovers the history of the artist's career carefully exhibited in chronological order as they progress. The character of each of these galleries is designed to respond to specific aspects and needs of the collection.

The perforated concrete ceilings play an essential role in the provision of daylight within the exhibition rooms by allowing diffused light to filter through them from east-west oriented skylights. Natural light is controlled with the use of light diffusing glass, motorized shades, and artificial light which gives curatorial flexibility to exhibition spaces. This generates a lively experience which gives visitors to the gallery a sense of intimacy with the artwork and creates a powerful viewing experience for the work of Clyfford Still.

The correlation between Clyfford Still's work and the architecture produced by Brad Cloepfil works well in terms of the spacial relation between the two. Because of the space provided between galleries, the large-scale expressions of the artist can be viewed at a perspective from one gallery to another and one is then drawn towards the painting. This was what the architect hoped to achieve, to preserve specific relationships between viewer and artwork.  

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10 Patricia Failing, Seeing Still for the First Time (New York: ARTnewsLCC, 2012)
Libeskind’s methodology to the design and program is of a symbolic nature. The museum has two floors above ground, and another floor which is a semi-basement and is made up of three main structures. These components consist of a tall and narrow central corridor, a long main section and a bridge which serves as a link to the old museum. The symbolic approach of the building’s design was meant to be a translation or a reflection of the life of Felix Nussbaum which is accentuated by pathways that have abrupt breaks, random intersections and dead ends.

Each of the three large volumes has a special meaning which tells the story of the artist. The first encounter of the building is an enormous oak wood parallelepiped with dramatic openings which represents the “house” which houses the exhibition rooms. This is a passage that refers to the execution of the artist. The second building, "the path" is a long and narrow blind room with a cement finished façade. The Path moves up a slight ramp between two grey walls, which is meant to be a symbol of the disturbed trail of Felix Nussbaum’s life. The third volume which is cladded with zinc and serves as a connection to the existing museum is called "the bridge". Nussbaum’s recently discovered works are exhibited in this building which has been divided into two levels. This building sits between the House and the Path and is carried by these two buildings, which gives it a floating presence.
Daniel Libeskind is known for his complex, but well thought out architecture. His aim was to capture the essence of the painter through a narrative interpretation of his life in exile. Felix Nussbaum’s paintings depict his terrifying life experience and half-lit conditions in which he lived and worked in while hiding from the Gestapo. The contrast between the three buildings depicts the different stages of his life. From the cutting of the ‘Path’s’ concrete volume through the steel ‘Bridge’ which communicates the closure of his country, to the courtyard formed by the three buildings which represent the artist being trapped, Daniel Libeskind successfully attempted to make a connection between the life of the artist and the architecture he produced. The scale of Felix Nussbaum’s work is of a domestic scale which allows it to be placed quite close to the next, assuming the nature of how photographs and paintings would be hung in a domestic setting, a house.
Felix Nussbaum Haus (Museum): Elevation showing the “Bridge” (Source: www.flickr.com, edited by Author)

Felix Nussbaum Haus (Museum): Elevation showing the “Path” (Source: http://www.e-architect.co.uk, edited by Author)
designing the single artist museum

C. Joan Miro Foundation Museum (Barcelona, 1975) Josep Lluís Sert

Architect Josep Lluís Sert designed the Joan Miro Foundation to house the permanent exhibition of the contemporary artwork of Joan Miro. Sert employed rationalist architecture design principles in the design of the art museum by using altered spaces which were set around a central courtyard in the old-fashioned Mediterranean style in conjunction with his own distinctive skylights. The conceptual characteristics of the museum which aid in the correct spatial planning that was designed to facilitate the exhibition and the contemplation of the artist's work are a result of its clarity of form, proportions, high ceilings, indirect natural lighting and volumes which are well connected by circulation.

The concept of the project was that of circulation. It was the main aspect that informed the layout of the spaces for the building. The idea was to create circulation routes that do not cross twice the same spaces. Sert's decision to assemble different building forms as opposed to grouping similar types was a design decision made in order to avoid modular repetition. Exhibition and gallery spaces in the museum are contained within white-walled rooms that extend to patios, gardens and decks. Natural light enters the gallery spaces through skylights and windows that overlook the central courtyard. Artificial lights are placed around these skylights in an attempt to mimic the result of the natural light and create a balance between the two.

Sert's circulation concept works very well for the art museum, he focuses more on maximising the spaces around the art; similar to what was has been done on the Clyfford Still Museum. Sert's work ranges from small-scale to large works which have all been well accommodated in the museum. The external walls to the museum have been placed in such a way that they provide an uninterrupted surface on which the large artwork is displayed. The smaller light-weight works are hung on partition walls in some of the galleries, so as to display a different kind of scale.

Joan Miro being a surrealist painter hoped that his art would make the viewer view things in a different light and it would change their feelings about certain things and challenge their imagination. Sert's employment of this notion of a prescribed route juxtaposed to what the artist's work was about creates a contrast between the two ideas which can be interpreted a sort of 'play' in one's interpretation of the space. However, the result of this has been a success in the exhibition of Miro's work.
Joan Miró Foundation Museum: South East Entrance Facade (Source: http://fundaciomiro-bcn.org)

Joan Miró Foundation Museum: Roof Terrace (Source: http://fundaciomiro-bcn.org)

Joan Miró Foundation Museum: View of gallery spaces (Source: http://fundaciomiro-bcn.org)
"Draw from life and imagination. Try to interpret your daily life and surroundings. Keep away from strong drink and other unhealthy distractions"

George Milwa Mnyaluza Pemba

The narrative approach to architecture has been known to prioritise human experiences and the need to shape these into a story. The emphasis is placed on the building’s meaning rather than its performance and focuses on how a building is experienced.

Nigel Coates in Narrative Architecture describes the term ‘narrative’ as something that “has come to signify a level of meaning that substantiates the object, and yet contains an animated inner quality that interprets human events in relation to place”. Here, a similar notion is applied, where the story of the artist’s life is depicted and interpreted through space and form. This sequence narrative (defined by Coates as one often applied in art museums), is where the viewer is taken through a journey which tells the story of George Pemba.

His statement, “I paint what I see” has influenced my architectural approach which is much similar to his pragmatic and literal depiction of everyday life in his home town in Port Elizabeth, New Brighton.

**Sequence Narrative**

When applied to art museums, the sequence narrative tends to tell a story in a kind of ‘sequence’ or order which lays out a specific route for the museumgoer leading them from space to space to indicate a chain of ideas. Each of these spaces would possibly have their own spatial coherence. The idea is to generate a build-up and evoke different moods as the visitor moves through the exhibition while translating the work being exhibited. The following projects are a result of sequence narrative.
Sequence Narrative

Amanda Levete (AL A), V&A Exhibition Road, London (2001): New Gallery Space

The concept for Amanda Levete's New Gallery Space was the idea of excavating an exhibition space under an existing courtyard exposing old Victorian façades on the West side of the building. The idea was to reimagine the dialogue between the V&A and Exhibition Road and in doing so, this then generated a new cultural public space in the heart of London. Levete uses a temporal sequence narrative which captures the varying degrees of permanence, from ancient rock formations to the latest temporary exhibition, where the visitor experiences indirect flashbacks and forward glimpses.

Amanda Levete- New Gallery Space: Stairs to New Gallery (Source: www.dezeen.com)

12 Nigel Coates, Narrative Architecture. (United Kingdom: John Wiley & Sons Ltd. 2012)
Sequence Narrative

Amanda Levete - New Gallery Space

Amanda Levete - Night View of the Courtyard (Source: www.dezeen.com)

Amanda Levete - New gallery space (Source: www.worldarchitecturenews.com)
Sequence Narrative

Lina Bo Bardi, SESC Leisure Centre, Pompeia, Sao Paulo, Brazil (1977-82)

The narrative which Lina Bo Bardi’s follows for the Sao Paulo's leisure centre is more of an entertainment nature and conceptually is meant to have a calming effect on the user. Due to Sao Paulo’s aggressive nature, sheer scale, complexity and the location of the centre, Bo Bardi opted to utilise an existing factory complex and create a multi-purpose building. The various programs of the centre provide some-what of a getaway from reality with the inclusion of a giant mural of the jungle with birds and animals which is an illusion that mixes signs and activities which activate an elaborate narrative which unfolds as the visitors journey's through the boardwalk’s artificial beach.

Lina Bo Bardi- Entrance Approach (Source: www.mimoo.eu)
Sequence Narrative
Lina Bo Bardi- SESC Leisure Centre

Lina Bo Bardi- Leisure Centre: Auditorium (Source: www.flickr.com)

Lina Bo Bardi- Leisure Centre: Leisure Centre Library (Source: www.treehugger.com)
Sequence Narrative
Lina Bo Bardi- SESC Leisure Centre

Lina Bo Bardi- Leisure Centre: Covered Courtyard (Source: www.treehugger.com)
The interpretation of the history of George Pemba's life as an artist was one that was inspired by my knowledge of the artist as a grandson and from read literature. This led to the narrative approach which was undertaken for the design of the art museum.

The journey began with the mapping of a timeline which depicted positive and negative experiences in the artist's life, as well as illustrating some of the work produced during these periods. The result was that there were 3 stages in the narrative of the artist's life which were of paramount importance.

1. Early Years: The Struggle for Art Education
2. Art and the Struggle: Troubled Times
3. Honour & Recognition: The Pinnacle of Success

These presented an opportunity for translation into spatial ideas which when observed inform the environment which needs to be created within each of these spaces.
Since George Pemba was of Port Elizabeth (now Nelson Mandela Bay) origin, the location of the site was not debatable. However, the actual site location was one which needed to be mapped and investigated.

**Site Location**

Through the analysis of Port Elizabeth and its suburbs, with regards to accessibility for the users this building is intended for, New Brighton, being one of the so-called black townships George Pemba spent most of his life, it was the location which I selected for the design of the George Pemba Art Museum.
Site Selection

The site sits on a location which is a walk away from where the artist lived (called Thembalethu) and did a lot of his best work. It is bound by Mendi and Fergusson Roads which are the main routes used by public transportation (ie taxis and busses). It also sits in a prominent location due to the high vehicular and pedestrian movement around a traffic circle which acts as a central point of access to vehicles traveling to and from the CBD on Sheya Kulati Drive.

The site is surrounded by a small-scale shopping complex and a petrol station which most residents use daily. There however seems to be a major attraction (at all times of the day and night) within the local residents to use the petrol station due to its 24 hour shop at which residence get their daily commodities.

There exist two memorials around the site one adjacent (Mendi Memorial) and another at the traffic circle (Sheya Kulati Memorial). Further down Mendi Road is Mendi Cultural Centre which the city is developing in on the street edge behind Emlotheni Memorial.

The City council of Port Elizabeth is also looking at developing a BRT route from the CBD which runs through Sheya Kulati and Mendi Road to other neighboring townships. This presents an opportunity for those who use public transport to reach the site. The site is flanked mostly by single story residential buildings and has been vacant since the early 40's and was used as a dumping site and a pedestrian circulation path.
Historic Images of the Site

The site is flanked mostly by single-story residential units and has been vacant since the early 40's and was used as a dumping site and as a circulation route for pedestrians as a 'short-cut from Fergusin Road to Mendi Road.

Map of New Brighton- 1941 (Source: Port Elizabeth Main City Library)
Historic Images of the Site

Map of New Brighton- 1950 (Source: Port Elizabeth Main City Library)

Map of New Brighton- 1964-65 (Source: Port Elizabeth Main City Library)
Historic Images of the Site

Map of New Brighton- 1969-71 (Source: Port Elizabeth Main City Library)

Map of New Brighton- Present Day (Source: Port Elizabeth Main City Library)
Street View Images

View from Sheya Kulati Traffic Circle

View from Mendi Road

View from Ferguson Road

View from Mendi Memorial

View from corner Ferguson Road and Sheya Kulati Drive

Selected Site Street Views- New Brighton (Source: Google Street Maps)
Site Analysis

Various site investigations were carried out in order to examine the character of the site and to assess the physical opportunities the site had to offer.

Climatic Study

The site receives sunlight throughout the day as there are no multi-story buildings near or around the site. This presents an opportunity to create a positive outside space which receives sunlight throughout. South Easterly and South Westerly winds blow through the site from Fergusson Street. This invites the idea of creating a colonnade using trees as a buffer against the wind. Also this presents the opportunity to have a defensible space which screens and protects the courtyard from the wind.
Site Analysis

Pedestrian Movement

The diagram indicates pedestrian traffic flow through and around the site. The site has high pedestrian activity because of the retail outlets nearby. This invites the introduction of retail or a more public space which can be used by the public. This invites residents to use the site daily and also gives back to the site. The site is currently used as a short-cut to get to Mendi Road, this can be maintained as another means of activating the site.
Site Analysis

Access Nodes

This diagram shows ideas of possible access into the site. Fergusson Road has the highest vehicular traffic. This was the selected possible vehicular access point. With the proposed BRT route from the CBD through New Brighton and other neighboring areas, Mendi Road was the best location for a BRT bus stop. This was another area considered as a public access point.
Site Analysis

Edge Conditions

Keeping in mind that Fergusson Road was considered to have a protective edge, there needs to be some form of permeability from this edge into the site. The existing memorials on the edge of the site are looked at as nodes and the corner required a space that would respond to the nature of this zone. The rear of the site is populated by residential buildings. These will need to receive a hard edge which acts as a protective edge for this zone.
The proposed program and spacial intention for this site as described earlier is that of an art museum for the permanent exhibition of George Pemba's work. The main facilities of the building would be the exhibition spaces which would consume the forefront of the museum. Following the sequence narrative approach, these would need to tell the story which the timeline attempted to reveal. The character of each of these galleries would need to reflect the periods discussed on the timeline and attempt to capture the essence and character of the events that happened during the time.

Support spaces would need to be on the periphery of the building and edge the site. These would be more private (back of house) spaces. The space between these abovementioned areas would be dedicated to the public or museum visitors where circulation and gathering spaces would be accommodated.

The South of the site along Fergusson Road would be edged by a colonnade provided by trees. This is where the program would extend to an art school with temporary exhibition spaces for upcoming artists. The corner of the site would accommodate a coffee bar to anchor and pronounce the corner of the site where the traffic circle and the two memorials are located. This in turn would serve to activate the corner and the memorials and open out to a sunken courtyard on the North side of the site. The site would be treated in such a way that it allows pedestrian movement through the site, allowing people to access the courtyard which is landscaped with seating at various locations.
Accommodation Schedule

Art Museum

A. Administrative Curatorial Spaces:
   Head Curator's Office
   Offices
   Storage & Closed Storage

Conservation & Restoration:
   Workshop
   Framing
   Unpacking & Storage

Back of House:
   Staff Room
   Kitchenette
   Cleaner's Room
   Storage
   Mechanical Room
   Goods Receiving & Delivery
   Unpacking & Storage

B. Public Areas
   Entry & Foyer
   Reception & Storage/Office
   Public Toilets
   Courtyard
   Open Access Storage
   Library & Archive

C. Permanent Galleries
   Gallery 1
   Gallery 2
   Gallery 3
   Display Area
Accommodation Schedule

Art School

A. Administration:
   - Reception & Foyer
   - Office
   - Storage
   - Staff Room & Kitchenette
   - Studio 1
   - Studio 2
   - Toilets

B. Art Studios & Temporary Exhibition:
   - Art Studio 1/ Temporary Exhibition 1
   - Art Studio 2/ Temporary Exhibition 2

Coffee Shop

   - Storage
   - Kitchen
   - Service Yard
   - Bar & Sandwich Counter
   - Internal Seating Area
   - Outside Seating space
The first guiding principle of this project was to find a suitable location to place the building on the +5000sq.m site. Taking into consideration the fact that the site had been used by the community to walk through, the idea was to maintain this route and give part of the site back to the community by providing a place to pause and continue on their journey.

Site analysis studies and sketches were instrumental during this process of interrogation and led to ideas and opportunities about spatial hierarchies. The position of the building allowed the original pedestrian movement to be maintained and allowed more of the site to be dedicated to public interventions. This way, the public become part of the site and interact more with its surrounding buildings.
Site Strategy

These site models were the initial site explorations which led to the previous site strategy; the idea was to have the program split into different buildings which would act individually and open up into the courtyard.

This exercise was unsuccessful as it enclose the space, although it created spaces which turned their backs on the streets which was not the desired intention. The site was dedicated to the public for circulation and the idea is to re-create this but with the provision of a recreational space which is inviting and allows people to engage with the activities and spaces on the site.
Site Arrangement

The idea to recess the building was to create a relationship with the existing buildings on adjacent sites on the West side of the site and presented an opportunity to place all back of house amenities on this edge allowing the more prominent spaces to be visible from the surrounding streets.
Scale & Massing

The scale of the building has been developed from the notion of progression and the history of the artist through time. The hierarchical order of the gallery spaces as one progresses from the first gallery to the next is one that has influenced the scale of the building. It was felt that New Brighton being a highly residential area, the building needed to have a large presence and could be used as a landmark in the area.

Diagram showing hierarchy of spaces and massing intension
Design Development

The notion of 'the narrative' during the design of the building was considered. This is manifested when the three stages earlier discussed are reinterpreted and translated into space. Through the timeline and other informants about the artist's life, it became possible to incorporate in the architecture of this museum, George Pemba's deep humanity, his lasting vision and profound significance within society and the art world.

The memory of George Pemba is tied to New Brighton and is a projection of his life. This Museum is meant to create some form of connection between George Pemba and the people he spent his life painting, thus making his work accessible for public consumption. The artist's life and history is presented as a journey through spaces which are symbolic of this memory. The architecture reveals a space for George Pemba's work in 3 distinctive forms which are chronologically ordered by a hierarchical significance and spatial identification.
Galleries as Events

As the museum visitor navigates through these forms they are met by the first gallery which is a simple building representing his 'Early Years'. This space is well lit and simple in its architecture and has a special relationship to a time when the artist was young and was self-taught artistically, struggling to receive art education. The permanent collection exhibited in this gallery space would be works painted between 1920 and 1948.

The next volume, larger in scale represents 'Troubled Times'. This architecture reflects a time of confusion and doubt in the artist's life when the apartheid government came into power. This dimly-lit volume represents a kind of darkness which is also reflected on his art. The architecture of this space is also somewhat 'troubled' and confused and translates an uncomfortable feeling upon entering. The work displayed here are paintings done during the 'struggle' and depict riots and police brutality, raids and other violent episodes experienced during this time from 1950 to 1978 (when his work started becoming relevant).

The third and final volume symbolizes the 'Pinnacle of Success/ Honour and Recognition', the largest volume of the 3. The architecture of this volume assumes the character of a celebratory space. The space is filled with natural light which symbolises 'a change for the better'. The work exhibited here are paintings done from 1971 to 2001.

Permanent Gallery Spaces

- Early Years
- Troubled Times
- Pinnacle of Success
The diagram above shows how a permeable protective edge has been created by the building. This creates a defensible space and screens the public courtyard space from the harsh Port Elizabeth South-Easterner and South-Westerner winds which cut across the site. This also gives the opportunity for the space provided on the South side of the courtyard to open out onto the North.
The site is accessible from 3 sides. There are 2 access points into the building and these are located on the South of the site from Ferguson Road and the other from Mendi Road through the courtyard. The courtyard can be accessed from the Ferguson Road entrance, the corner of the site where the traffic circle is located and from Mendi Road. This is in order to maintain the existing pedestrian access through the site for public use.

The art school building flanking Mendi Road on the South side opens up onto the North facing courtyard and this presents an opportunity for the coffee shop at the corner to have outside seating facing North.
On entering the Art Museum, the visitor encounters a large foyer which leads directly into the first gallery. This is where the first exhibition happens and leads to the next gallery, then the third. Once navigated through these spaces, they travel a different route through other spaces where other archives and accessible stores are located. An open courtyard is also provided on this route and other smaller gathering spaces before circulating to the main foyer.

The experience through the different galleries is strengthened by the notion of open gallery spaces which are compressed as one navigates through to the next gallery for a more and dramatic effect. This language is repeated at various intervals through the circulation route towards the main foyer and exit point.
Sketch Design Proposal

Process Sketches
design development

Sketch Design Proposal

Plan Layout
Sketch Design Proposal

Sections and Perspective Elevation
Sketch Design Proposal

Site and Proposal Model
Sketch Design Proposal

Site and Proposal Model
Ideas on materiality and the expression of the elements contained on the site were related to the way in which each space feels and is experienced. The building is broken up into 4 basic elements, the protective edge as one and the 3 event spaces as the other. The architecture of the protective edge is a simple expression of a contained space with a high ceiling. It is made up of 2 basic materials which are a series of columns that support the concrete roof above with brickwork infills.

The first gallery which represents 'Early Years' in the artist's life is a modest space. The materials used in this space are cement block walls and concrete. The inside of the gallery is finished with plaster and paint with the exterior exposing the cement block wall and off-shutter concrete columns and beams. The feeling generated within this space is meant to be of purity, when George Pemba was a young artist.

The second gallery represents 'Troubled Times' and has a steel frame which acts as a portal. This portal is clad with Corten Steel on both sides (interior and exterior). The form of the building is meant to express a difficult period in the artist's life where riots and police raids were popular among the black community. The steel cladding is meant to give a cold and uncomfortable feeling to the building user. Externally, the lines and stains that are left on the material after weathering could be interpreted as the scars left by apartheid and the effects it had on the artist's work.

The third gallery represents 'The Pinnacle of Success' and is the largest volume. This has a series of continuous bands of concrete which give the user the impression of the volume spiraling upwards. The concrete is cast in-situ which gives an off shutter expression externally.

These material expressions are meant to assist in the interpretation of the narrative and tell the story of George Pemba.
Materiality

Corten Steel Elevation of the Utilities Building: 33kV Primary Substation
Travis Street, Manchester (Source: www.archello.com)

Side of the Utilities Building: 33kV Primary Substation
Travis Street, Manchester (Source: www.archello.com)
This thesis was based on the exploration of a narrative architecture. The name George Pemba is slowly beginning to be a name used only in South African art history books and is slowly being forgotten by the people of Port Elizabeth. The intension of the Art Museum serves not only as a building but as a memorial in itself and is about the memory and history of not only George Pemba, but New Brighton.

The process has evolved from an understanding of what an art museum is, to the idea of memory and an interpretation of a history which manifested into an architectural idea. This was followed by the study of how other architects dealt with the single artist museum and the way they approached the challenges of dealing with a specific artist's collection in terms of scale, expression and mediums.

Essentially, the idea was to provide a single-artist art museum for the permanent exhibition of the work of George Pemba. Due to the nature of the site, its heavy pedestrian traffic flow and corner location, what manifested was a public square dedicated to the community which provided a social space for social interaction and community gatherings. However, the success of the building would be satisfied when the museumgoer is not only left thinking and contemplating on the artwork but also the experience while in the art museum.
BOOKS


Case Study


Journals


Internet


Internet


Images


Images


[Guggenheim Museum (Frank Lloyd Wright) Roof Skylight] n.d [image online] Available at: <http://www.davidhealdphotographs.com/index.php#mi=2&pt=1&pi=10000&s=22&p=3&a=0&at=0> [Accessed 03 May 2012]

[J.N.L Durand's Pradigmatic design (1802)] n.d [image online] Available at: <http://picasaweb.google.com/lh/photo/WUqUz5R18ClrejPZkNAxSw> [Accessed 18 April 2012]


Images


