



# education

Department:  
Education  
**REPUBLIC OF SOUTH AFRICA**

## **NATIONAL SENIOR CERTIFICATE**

**GRADE 12**

**VISUAL ARTS P1**

**FEBRUARY/MARCH 2010**

**MEMORANDUM**

**MARKS: 100**

**This memorandum consists of 26 pages.**

## INSTRUCTIONS AND INFORMATION

Read the following instructions carefully before commencing marking:

1. This exam paper consists of **TEN** questions. Learners must answer any **FIVE** questions for a total of 100 marks.
2. It is **MOST IMPORTANT** that allowance is made for the learners in many instances:
  - Learners must be given credit for providing their own opinions and ideas in answers.
  - Credit must also be given for lateral thinking.
  - Also important is that arguments and statements are well reasoned and qualified by reference to specific factors.
3. Questions and sub-sections must be numbered clearly and correctly.
4. Information and art works discussed in one answer must not be credited if repeated in other answers but art works may be cross-referenced.
5. Learners must name the artist and title of each artwork mentioned where applicable.
6. Learners may discuss both two- and three-dimensional art works in any question where appropriate.
7. ***It must be remembered that many learners will be discussing these examples, never having seen them before. We therefore cannot expect factual, academic information. They should draw upon their own experiences, cultures and interpretations of the art.***

## GENERAL INFORMATION FOR MARKERS

- This marking memorandum is to serve as both a guideline for markers as well as a teaching tool. Therefore the memorandum for certain questions is in greater depth, as the information may be used as notes for learning material. Other parts of the marking memorandum may merely be a suggested guideline.
- Markers are encouraged to reward learners for what they know, rather than punish them for what they don't know.
- Although the information for the questions are given in point form, learners must write in essay/paragraph format discussing their information in a holistic manner.
- Learners must answer all their questions in **FULL SENTENCES** or **PARAGRAPHS**, according to the requirements of each question. Point form answers cannot receive full marks.
- Markers must refer to the Visual Arts SAG document rubric (p. 24) to obtain a guideline to help them assess the levels of achievement.

**Assessing learners' ability to analyse and respond to examples of visual culture**

<b>ACHIEVEMENT RATING CODE</b>	<b>LEARNING OUTCOME 4: VISUAL CULTURE STUDIES</b>	✓
<b>7</b> <b>Outstanding</b> <b>80 – 100%</b>	Demonstrates exceptional ability to respond to and analyse artworks in relation to their cultural, social, political and historical contexts. Shows outstanding ability in the use of appropriate visual arts terminology. Demonstrates extremely well-developed writing and research skills in the study of art. Shows exceptional insight and understanding and uses divergent approaches.	
<b>6</b> <b>Meritorious</b> <b>70 – 79%</b>	Demonstrates a well-developed ability to respond to and analyse artworks in relation to their cultural, social, political and historical contexts. Shows excellent ability in the use of appropriate visual arts terminology. Demonstrates highly developed writing and research skills in the study of art. Shows excellent insight and understanding.	
<b>5</b> <b>Substantial</b> <b>60 – 69%</b>	Demonstrates substantial ability to respond to and analyse artworks in relation to their cultural, social, political and historical contexts. Shows substantial competence in the use of appropriate visual arts terminology. Demonstrates well-developed writing and research skills in the study of art. Shows a good level of insight and understanding.	
<b>4</b> <b>Moderate</b> <b>50 – 59%</b>	Demonstrates moderate ability to respond to and analyse artworks in relation to their cultural, social, political and historical contexts. Shows moderate competence in the use of appropriate visual arts terminology. Demonstrates competent writing and research skills in the study of art. Shows a fair level of insight and understanding.	
<b>3</b> <b>Adequate</b> <b>40 – 49%</b>	Demonstrates adequate ability to respond to and analyse artworks in relation to their cultural, social, political and historical contexts. Shows adequate competence in the use of appropriate visual arts terminology. Demonstrates adequate writing and research skills in the study of art. Shows an adequate level of insight and understanding.	
<b>2</b> <b>Elementary</b> <b>30 – 39%</b>	Demonstrates only basic ability to respond to and analyse artworks in relation to their cultural, social, political and historical contexts. Shows little ability in the use of appropriate visual arts terminology. Demonstrates basic writing and research skills in the study of art. Shows an elementary level of insight and understanding.	
<b>1</b> <b>Not achieved</b> <b>0 – 29%</b>	Demonstrates little or no ability to respond to and analyse artworks in relation to their cultural, social, political and historical contexts. Shows extremely limited ability in the use of appropriate visual arts terminology. Demonstrates limited writing and research skills in the study of art. Shows little or no understanding or insight.	

**QUESTION 1: THE EMERGING VOICE OF BLACK ART IN THE 1950s AND 1960s**

- 1.1 Learners must discuss FIGURES. 1a, 1b and 1c in terms of how the three artists have chosen to represent women in different ways. (approx ONE page)

FIGURE 1a: Gerard Sekota, *The artist's mother and stepfather*, 1946 portrays his parents with a sense of honesty. They are placed in an interior space, sitting on a wooden bench and have been painted in a fairly simplistic style. Strong contrasts of blue / purple in the clothing, contrasts strongly with the powerful orange walls. The portrayal of the mother slumped forward with arms resting on her legs, is suggestive of an elderly and perhaps weary woman. Her attention has been caught by some activity outside the viewer's frame of reference.

FIGURE 1b: George Pemba, *Portrait of the artist's mother*, shows a more realistically painted rendition of an elderly woman dressed more formally, wearing a smart hat. She has a fairly intense, somewhat impatient look on her face as she stares intently and directly at the viewer. She too is shown within what looks like the interior of her home. She has been painted using local colour.

FIGURE 1c: Willem de Kooning, *Woman 1*, is a complete contrast to FIGURE 1a and 1b, both in style of painting and depiction of the female form. De Kooning's slashing, gestural style of painting accentuates the semi-abstract nature of the bare-breasted woman who may be smiling, smirking or grimacing at the viewer. Her large staring eyes and accentuated mouth confront the viewer in a menacing manner. Strong arbitrary colour has been used in both the figure and the background. (8)

- 1.2 Learners must write an essay (approx 1½ pages) in which they discuss any TWO artists they have studied whose works show the influence from international / overseas art and/or the art of Africa.

The following information must be included:

- Name of artist/s and title of work/s.
- Subject matter.
- Style of art.
- Context of work – in terms of local and international influences.

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**QUESTION 2: SEARCH FOR AN AFRICAN IDENTITY IN SOUTH AFRICAN ART**

2.1 Learners must refer to both FIGURE 2a and 2b and discuss the following in their paragraph: (approx ONE page).

- Similarities and differences.
- Use of imagery.
- Use of medium and technique.
- Formal elements of art.
- Stylization.
- Any other information you could relate to these images

The following information may be considered when marking:

**FIGURE 2a: Symbols of life:**

Walter Battiss uses abstract, simplistic and naive San images of people and animals. There is a definite influence of primitive art. He has spontaneous line usage and exaggerated drawings. The figures/images are stylized and simplified. Perspective is non-existent. Arbitrary, decorative and juxtaposed colour [pure primary colour] is randomly placed on the canvas. These coloured forms look as if they have been torn. The background is composed of stylized black images of San figures. The artist uses oil paint in a flat technique, no brushstrokes are evident. Two figures surrounded in red are more modeled / decorative than the flat San-like images.

Figure 2a has a less formal composition than FIGURE 2b. FIGURE 2b does not show as much movement as FIGURE 2a.

**FIGURE 2b: San rock art:**

The San created an artwork as a record of events, possibly to pass on to future generations. Here San figures [all walking in the same direction] are illustrated as going into a battle or hunting. The artist/s mixed natural pigments with lime, blood, and charcoal or egg yolk and then painted the images onto the rock surface. This technique is not permanent and will fade over the years. No bright colours are present as in FIGURE 2a. The artist uses neutral colours like sepia, ochre's, browns and blacks.

Simplified form is evident in all the artworks and has been stripped of their perceptual allusions.

Stylized shape of human beings. Non-illusionary space

*Stylization:* Reduction of aspects of a visual image to a set of basic design strategies that are repeated through the image eg elongation, squared-off forms, silhouette work, curves or heavily-drawn edge.

These paintings reinforce his study of man in his environment, in the context of Africa and rock art.

(8)

2.2 Learners must write an essay of at least 1½ pages in which they discuss the work of any TWO artists whose work portrays a search for their cultural roots. They must consider the following:

- Use of medium and technique.
- Influences.
- Stylistic characteristics.
- Establishing a true African identity in their artworks.

Learners may discuss the following: Irma Stern, Walter Battiss, Cecil Skotnes, Sydney Kumalo, Alexis Preller, Helen Sebidi, Mary Stainbank ect.

Their influences may be: San Rock Art, African tribal art, Ndebele architecture and wall decorations. German expressionism, Cubism and Henry Moore.

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### QUESTION 3: ART AND POLITICS: RESISTANCE ART

3.1 The learners must refer to any TWO visual sources provided in FIGURES 3a – d, stating whether they agree/disagree with the statement:

A search for true identity is when a person or artist is looking for his/her 'roots'.

They must use the following as a guideline:

- Use of formal elements of art.
- Composition.
- Theme/possible message/meaning.
- How do you respond to the visual resources?
- Do you think that they are successfully conveying a message of power or resistance?

Information such as the following may be used:

#### FIGURE 3a *Liberty leading the people*

Propaganda for French Revolution

Diagonal lines indicate unrest/power/movement...i.e. resistance/instability

Hand raised holding the flag symbol of victory and freedom

Youth to the right indicates symbolizes the nation ready to rise in revolt against the regime

Theme relates to the events leading up to the French Revolution

The message is one of victory/uprising/revolt

Learners must give their own response to artworks and motivate whether it is successful in conveying its message

FIGURE 3a and 3b are in direct contrast, although they portray the same message of revolt/uprising/liberation

In FIGURE 3a, the woman symbolising liberty is portrayed in a feminine way, with flowing lines of her attire as well as in the lines of the waving French flag. Her breasts are revealed, almost in defiance of the oppression that all French peasants suffered under the Monarchy. It is also marvellously subtle in its message, because a woman with her breasts laid bare is extremely vulnerable and in that respect lady liberty lays her soul bare so to speak, prepared to be naked in the face of the inhumane way in which the French population was treated. She is completely exposed but for her political beliefs when it comes to confrontation with the legions of the Monarch, yet by waving the French flag already indicates victory or liberation. She carries a weapon with a bayonette, just like the youth next to her, indicating that she herself will go into battle even willing to come face to face with the enemy, and using the gun as a dagger. This is a menacing subliminal message, successfully conveyed by the artist.

FIGURE 3b *The flagbearer*

The roles are reversed in this rendering of Adolf Hitler, here referred to as The Flagbearer. The title in itself is ambiguous, as a flag bearer is not seen as the absolute despot that Hitler was. The figure is clad in white body armour. This signifies that his position here is to remain spotless, unharmed and untainted throughout the onslaught on the world, somewhere in a bunker from which he can observe the events.

The painting was executed in 1939, long before the end of the Second World War, but Hitler had time to prepare his offensive and stands like a king on a chessboard, armed with strategy and an army that could take on the world, therefore he portrays a silent rigid conviction and confidence, accentuated by the rigid pose. His hand, holding the flag, is not raised in in victory or defiance; it is as if he is holding a staff, like Moses proclaiming victory and enforcing his will and dominance over his people and the world. His gaze is fixed as if he has already seen victory. The lines of his stance are in complete contrast to the movement and energy one perceives in FIGURE 3a. In both figures the National flag plays a prominent part.

Both figures are portrayed in profile, accentuating power.  
One is static, one is full of movement.

FIGURE 3c: Johan Kannemeyer, *N is for nightmare*.

Artist Johan Kannemeyer created a socio-political statement, part of his series 'The alphabet of democracy'. He portrays a typical middle class home in a suburban neighbourhood, where the new nightmare is crime. Kannemeyer tackles a lot of issues politicians and journalists tend to shy away from, by using a mixture of the stereotypes associated with political cartooning and combining them with the deeply personal, the irreverent and the surrealism of the subconscious. His idiosyncratic mash-up of allegory, history, existentialist nausea, self-loathing and nihilism makes for a heady brew. He takes political satire a risky step further into the murky depths of white fear. To fear someone or something implies that you believe they mean you harm. The figures stalking the dreams of the sleeping suburb portrayed here are not the sympathetic victims of poverty and previous disadvantaged.

They are deliberately rendered as savages reminiscent of Herge's depiction of 'the natives' in the controversial Tintin in the Congo. The use of Tintin as a satirical character, as seen in the parody of Tintin in the Congo, is poignant in more ways than one.

Although very different in content and meaning, FIGURE 3c still bears striking resemblances to all the other figures portrayed here.

The natives are portrayed with menacing facial expressions and are holding spears and weapons just like the lady liberty. A weapon is a symbol of destruction

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- 3.2 Learners must write an essay (approx. 1½ pages) in which they refer to at least ONE artist/ groups of artists who use their art as a tool of protest or propaganda.

Reference must be made to the following:

- Name of the artist/s or group of artists.
- Title of the artworks (where applicable).
- Media and technique.
- Influences.
- Stylistic characteristics.
- Success as a tool for protest or resistance.

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#### QUESTION 4: CRAFT AND APPLIED ART

- 4.1 Learners must write a paragraph of about 1 page in which they discuss their understanding of the words *curio*, *collectables*, *craft* and *art*. Reference must be made to FIGURES. 4a – 4d and the following must be used as a guideline:

- Differences/similarities between the traditional or contemporary approaches.
- Value of the art/craft piece.
- Target market.

The following information may be considered:

*Curio*: This may refer to a souvenir, trinket, antique or novelty purchased. You purchase them as a reminder/ gift or memento. Unusual, fascinating and collected in many cases by travellers during visits to new countries. Authentic "ex-curios" are rare and extraordinary in terms of style, technique and imagery. They have become truly collectable.

*Collectable*: Usually the object/ artwork/applied art is of great value and very expensive. Due to its monetary value the work will appreciate in value over the years. They can be both functional and non-functional pieces.



*Craft:* There is a definite distinction between planning and execution. Usually the artist will create an art piece which needs skill and ability of which he/she has acquired over many years. For example, basketry, beadwork, carved walking sticks, furniture and wood carvings ect. Some are functional and others non-functional. The concept of craft is associated with the production of useful objects.

*Art:* An artist's work is typically without useful or functional function. Art appeals to the imagination and is not created for any practical utility, except the in the development of the human spirit. Original art is generally more expensive whereas craft is more accessible to the man on the street.

Both Craft and Applied Artists need talent, ability, skilfulness and competence. The relationship between art and craft is a complex one. Most of these artists make use of recycled paper, wire etc.

- The traditional craft and applied art makes use of materials that are not manmade, inexpensive and easily accessible. E.g. wood, clay ect
- Contemporary craft and applied artists now make use of new mediums like glass, beads, plastic and metals like pewter/stainless steel and aluminium which tends to be a little more expensive.
- The contemporary applied artworks that use metal and glass are more expensive [Carrol Boyes] and have a different target market to those crafts which are purchased as a curio or memento.

FIGURE 4a: Beadwork/weaving, these have become good buys for overseas tourists as they represent our bright land, and are easy and light to transport.

FIGURE 4b: Wood is a very precious to our country as our trees are becoming endangered. The wooden bowls can be functional; however the figurines are just decorative.

FIGURE 4c: Plastic is very inexpensive. Designers are now creating exciting colourful and arty bowls, cutlery, place mats ect that are accessible to everyone.

FIGURE 4d: Decorative and designer ceramics in general are expensive and often only used as a display piece/ non-functional. For Example: Ardmore Studio.

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- 4.2 Learners must write an essay (approx 1½ pages) on any TWO craft artists they have studied.

Mention must be made of the following:

- Name of Artists.
- Discussion of medium and technique used.
- Use of decorative elements.
- Influences

Learners may refer to the following:

- Ardmore Studio Ceramics, Nesta Nala Ceramics, Rebecca Matibe Ceramics, Hylton Nel Ceramics, Clementina Van der Walt Ceramics, Alina Ndebele tapestry weaving, Reuben Ndwandwe basket weaving, Beauty Nxgonga basket weaving, Elliot Mkize wire weaving, Kaross embroidery project, Esther Mahlangu wall decoration, or any others.
- International links or influences may include Pan African Craft, Bauhaus, Art Deco applied design and Native American craft, or any others.

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### **QUESTION 5: ART AND POWER – COMMEMORATIVE BUILDINGS, MEMORIALS AND ARTWORKS**

The learners must read the text provided as well as the visual sources in FIGURE 5a and b, and write an essay of at least 2 pages in which they discuss/debate why commemorative buildings / memorials and architecture are such powerful forms of expression. The following must be considered:

- Names of examples of at least TWO commemorative buildings/memorials you have studied
- Use of materials and techniques
- Significance of the site of the building/structure
- Purpose/Function of the building/structure
- Discussion of decorative features/imagery where applicable
- Your response to these structures and their meaning/significance

The following information must be considered:

The term commemorate means call to remembrance /to mark an event or a person or a group by a ceremony or an observance or a monument of some kind.

- The examples chosen may be religious, spiritual, commemorative, political or corporate.
- Learners should be able to indicate in which way the chosen examples may be seen as commemorative buildings, memorials and artworks.
- They must provide valid information on the use of materials, techniques and decorative features/imagery.
- Learners need to give their own response to the meaning of the chosen examples with sufficient justification.
- Purpose and function of the building/structure, examples discussed.

For generations architecture has been a visual reminder of previous or present societies and they are judged on their buildings/structures and what those structures say about society e.g. Egyptians are judged on the pyramids they built for their pharaohs to be buried in which is seen as a powerful symbol of society.

Wealthy people in power want later generations to remember them by the structures they have built. In the early years people erected piles of stones to remember a certain event at a certain place. Nowadays there are monuments or memorials of events everywhere.

Different countries tell us about its ideas of its own past and present – architecture is a powerful form of expression. Buildings are built for many different reasons and many different sorts of power.

People are judged by the structures they build or live or work in. Memorials help bring people together after a national crisis like a war. A war memorial is defined as a building, monument, statue or any other edifice to celebrate victory of a war or to commemorate those who died or were injured in the war. Many war memorials take the form of a monument or statue and serve as a meeting place for memorial day services and allow easy public access.

**Some Pan-African/European examples:** Egyptian pyramids, the Parthenon, Roman arches and columns, the column of Trajan, Arc de Triomphe in Paris, Arco di Trionfo Rome, Arch of Constantine, etc.

#### **South African Architecture and Power:**

**FIGURE 5a:** Boshoff *Garden of Words*, Kirstenbosch, Installation 2007: this edifice or garden has been created to represent a field of white flowers symbolising purity. These synthetic flowers are tools to relay messages. Each flower [extinct/red-listed] has both the botanical and common names of a plant written onto the white cloth which creates the flower – His gardens remind us of memorial gardens. He uses colour symbolically – red plastic stems are used for the cups that hold the white cloth petals. Red is the colour of a threatened species and bloodshed during the war. White flags, in the context of war, were used for surrender or truce. In addition the native country is also printed onto the white cloth which likens the flowers to people. The artist has created this ordered temporary memorial of sorts for endangered plants as they are becoming extinct/loss of nature. His garden of words discuss and interrogate truths, knowledge and power. Words and knowledge are what has driven humanity to its present technological peak.

Other examples that may be used:

1. **Union Buildings** – Arcadia, Pretoria, 1913 [architect Sir Herbert Baker]. Sandstone English monumental style. Two wings at the sides represent the union of the formerly divided people. The east and west wings represent two languages, English and Afrikaans. Terraced indigenous gardens and 9 000 seat amphitheatre. Various monuments and statues. Large statue of General Louis Botha on horseback [first prime minister of RSA]. In 1956 20 000 women lead by Lilian Ngoyi, Helen Joseph, Moosa and Williams-De Bruyn staged a march to the Union Buildings to protest against the proposed amendments to the Urban Areas Act [pass laws].
2. **Voortrekker Monument** – Pretoria, 1948. Afrikaner Nationalism [architect: Moerdijk]. A monument that would stand a thousand years to describe the history and the meaning of the Great Trek. A monolith on a low hill just outside Tshwane as a reminder of apartheid or an important memorial for Afrikanerdom. The dome signifies a half circle [three-dimensionality].

There is a circle within a square [represents earth/four corners of the earth with statues at all four corners] and the circle becomes a symbol for all things spiritual. On 16 December at 12:00 (noon) a ray of sunlight falls onto the Shrine of Honour in the Heroes' Hall, bearing the inscription "Ons vir jou, Zuid-Afrika!". Indigenous gardens and at the foot of the monument a statue of a Voortrekker woman and her children has been sculptured by Anton Van Wouw.

3. ***Vrouemonument [National Women's Memorial]*** – Bloemfontein, 1913 [architect Soff]. This monument commemorates the suffering of some 27 000 Boer women and children who died in British concentration camps during the Boer War. A simplistic sandstone shrine. It consists of an obelisk about 35 m in height and low, semi-circular walls on two sides. At the base of the obelisk is a sculpture by Van Wouw, which brings to mind the suffering of those women and children who died of illness and hunger in the British concentration camps. The statue is surrounded by the 'whispering wall'.
4. ***Sharpeville Human Rights Precinct*** – Gauteng, 2001. The Sharpeville Memorial and precinct was opened on 21 March 2002 by Nelson Mandela. It honours those who lost their lives in the Sharpeville Massacre on 21 March 1961 and was built to remember when a Pass Law protest ended in tragedy. 69 people died and over 300 people were injured when a large group of people gathered in Sharpeville, in a Pass Law protest organised by the PAC lead by Robert Sobukwe.

In 2001, the government marked 21 March by unveiling the Sharpeville Human Rights Memorial on the site outside the police station where the 69 men, women and children were shot. Their names are all displayed on the memorial plaque. The 46th anniversary of Sharpeville Day is also the 10th birthday of Human Rights Day and the signing of South Africa's Constitution. The Memorial is a symbol of hope and the surrounding areas of the monument is bordered by indigenous grass. The monument's focal point is the water feature and the water running through the centre of the Monument to this fountain represents the blood that flowed in the streets of Sharpeville. Water runs through various outlets on the wall of the fountain which represent the bullet holes that riddled buildings, vehicles and bodies during the massacre. The water represents the blood spilled on the day, but also symbolises cleansing. Pebbles line the base of the fountain; a representation of the lives lost in the struggle. The various columns in the monument are individual cenotaphs for each victim of the massacre. A memorial stone for the victims is also housed within the memorial. It was unveiled on 10 December, 1996, the same day when the New Constitution was signed in Sharpeville by former President Nelson Mandela.

5. ***Freedom Park*** – Pretoria, 2004. Freedom Park [52 hectares] is a project that will see the development of a dedicated heritage precinct on the Salvokop hill outside Pretoria. A centre of knowledge aiming to create a deeper understanding of South Africa and all its people through the narration of the country's pre-colonial, colonial, apartheid and post-apartheid history. Comprising a memorial, interactive museum and garden of remembrance, the park will strive to accommodate all of the country's unfolding experiences and symbols to tell one story of the struggle of humanity for freedom in South Africa – the struggle for survival, land and resources and how they shaped the social, economic, political, cultural and historical landscape of the country. The government put aside about R350 million towards building the Park.

*First phase complete*

Construction of the first phase of Freedom Park, a 25 000 square metre garden of remembrance, began in July 2003 and was completed by March 2004, in time for Freedom Day – and the tenth anniversary of democracy in South Africa – on 27 April. The garden of remembrance, a landscaped garden, forming the external environment of Freedom Park – and soon to be interspersed with monuments, statues and sculptures – symbolises the final resting place of the fallen heroes and heroines of the conflicts which shaped the history of South Africa.

In 2003, a series of cleansing, healing and symbolic reparation ceremonies took place in each province across the country, acknowledging the seven main conflicts in South Africa's past – genocide, slavery, the wars of resistance, the Anglo-Boer wars, the First and Second World War, and the struggle for liberation from apartheid.

Some soil from the site of each ceremony, along with a plant unique to each province, was collected and sent to form part of the garden of remembrance, in honour of those affected by each of the seven conflicts. A roll of people who died during the seven conflicts will also form part of the garden. At the official handover on 8 March 2004, former president Thabo Mbeki said that it would be a place for all to meditate on what had been achieved in South Africa.

The completed Freedom Park features a memorial, an interactive museum, an open space capable of accommodating at least 5 000 people, a conference centre and commercial precinct, and a library and audio-visual library. The Freedom Park memorial will seek to facilitate a communal process of commemorating the pain and celebrating the victories of the past, by preserving the memory of victims of conflicts and human rights abuses caused by slavery, colonialism and racism, and by honouring the victims, heroes and heroines of the struggle against apartheid. The museum, through interactive, state-of-the-art exhibitions, will serve to present and preserve South Africa's pre-colonial, colonial, apartheid and post-apartheid history and heritage.

6. ***Constitutional Court*** – Johannesburg, 2005 – democracy in action.

- 150 000 bricks from the old prison buildings were used for the construction of the Court and great steps
- Work began on site in October 2001
- 500 workers on site
- The whole complex is 95 000 metres squared
- R492 million (cost of project)

The Court's permanent home was inaugurated by former President Thabo Mbeki on Human Rights Day in 2004 – part of the celebration of 10 years of democracy. The Constitutional Court is a groundbreaking building that not only houses the 11 judges who guard South Africa's Constitution but also stands as an icon of our new culture of democracy and human rights. The young architects responsible for the winning submission which was based on the concept of "justice under a tree" were Janina Masojada and Andrew Makin from Durban, and Paul Wygers from Johannesburg.

The Court, a symbol of the democracy that replaced apartheid, has been erected on the site of the Old Fort, Johannesburg's notorious prison, symbolising the triumph of hope over a troubled past. The building which reflects the values of our new culture of constitutionalism, has a court chamber, public areas, a library, public reading space and rooms for 11 judges and other staff. On this site, once the Old Fort Prison Complex, commonly known as Number Four, political prisoners and common criminals awaited trial and sat out their jail sentences. In 1995, the Constitutional Court justices began looking for a permanent location for the new Court. The dilapidated Prison Complex provided a central location with a rich cultural history. The Old Fort Prison Complex, commonly known as Number Four, is to broadly map the history of resistance in South Africa.

**Old Guard Tower** – Constitutional Court, Hillbrow, Johannesburg, South Africa. Constitution Hill's public participation programme has begun the long process of inviting ex-prisoners and warders back on to site to participate in research-based workshops. Exhibitions are designed as a participatory experience.

There are many facilities on Constitution Hill for you to record your own memories and response to the exhibitions.

**The Mandela Cell** has a film documenting Mandela's time at the Old Fort.

**The Women's Jail** – Victorian-style building belies the pain and suffering that occurred within.

**We the People wall** – Running the length of Constitution Square, at the base of the Old Fort ramparts; contributors range from Nelson Mandela and other ex-prisoners to ordinary people across South Africa. There is a collection of prison objects and emblems that sheds light on the system of punishment and incarceration in apartheid South Africa.

**The Constitutional Court [OMD Design Workshop and Urban Solutions, architects Masojada, Makin, Padden and Wygers]**

Entrance to the Court is through a pair of imposing 9 m high timber doors decorated with carvings of words and sign-language symbols that convey the 27 rights enshrined in the Constitution.

These are doors with a history: the judges asked for wood but the architects said they preferred metal because wood was not durable.

When the Constitutional Court was inaugurated in 1995, the shelves of the new library were bare, but now the collection stands at more than 40 000 volumes. The library occupies a spacious three-story complex in the northern wing of the Constitutional Court. The new library has an expandable public reading room with a separate entrance.

The foyer/entrance of the Court is a spacious, light-filled area with slanting columns, an architectural metaphor for trees under which African villagers traditionally resolved their legal disputes. This is just one of the many representations of a recurring theme in the building: that of "justice under a tree".

The columns are decorated by mosaics – blue, green, orange and red. The concrete roof has slots designed to create moving areas and sunlight filters through leaves.

The roof's concrete beams are inscribed with the words "human dignity, equality and freedom" in samples of the handwriting of each of the judges. The focal point of the foyer is a wall of 512 stained-glass windows.

The courtroom is constructed on the site of the awaiting-trial block, which was built in 1928 and demolished to make way for the new structure. But the architects commemorated the old building in a novel way: four of its central stairwells have been saved and bricks salvaged from the block have been used to build the south wall of the room, creating a rough but striking surface. The north wall is almost all glass and lets light flood the room.

The judges' podium, raised and in the shape of a half-moon, runs around the east side of the room. Each judge's name is printed just below the rim of the surface. The podium front is decorated in a cow-hide pattern – brown with splashes of white. In front of the podium is another long desk for the law clerks.

In front of them, facing the judges, are two rows of seats for the legal teams. Unlike other courtrooms, this one has no witness dock. The public seating consists of brown metal benches and the judges sit on black leather chairs.

### **Collection of Artworks**

Judge Albie Sachs initiated the project he started with a budget of R10 000 and donations were made. Judith Mason's *Blue dress*, Berman's *Fires of the Truth Commission*, tapestries by Marlene Dumas, paintings by Sekoto, *Three figures* by Feni, *Sleeper Black* by Kentridge. Other artists include: Mautloa and Oltman's overhanging lampshades representing the leaves of trees.

### **Judges' Courtyard**

The new building has two layers: the outer one consists of the foyer, the court chamber, a debating chamber and an exhibition space that opens out onto the Great African Steps. The next layer consists of the administration section and, right in the middle of the building, 14 judges' chambers – 11 for the Constitutional Court judges and three for visiting ones. The judges' chambers are on three storeys and have open spaces and ponds at ground level. They offer easy access to the courtroom and to the library.

### **Constitutional Court Steps/Great African Steps**

South Africa's first major post-apartheid government building was designed to embody the openness called for by the Constitution itself. Transparent and welcoming, filled with warmth. No marble cladding or wood panelling, but has graceful proportions.

And the principal materials – timber, concrete, steel, glass and black slate - infuse the court with an African feel.

#### **7. *Red Location district* – Port Elizabeth [Nero Wolf Architects]**

This is an important site of South Africa's struggle for freedom and the home of many cultural and political leaders. A modern museum in a slum/ghetto confronts views of museum design and visitors are treated as active participants. The past is represented as a set of memories of struggle. The museum shows South Africa with its tumultuous history. Twelve memory boxes [rusty/unmarked] housed in the main exhibition space are 6 metres and 12 metres tall.

The boxes show memories that migrant workers used to fill objects that documented their tragic lives when they were uprooted from rural areas. The spaces between the boxes are reflections that bring us to the present [the twilight of memory]. The museum includes an auditorium, library, art gallery and offices, a memorial space to commemorate local heroes of the struggle and a tomb for Raymond Mhlaba, a national struggle hero.

Saw-tooth factory roof, steel windows, rusted corrugated sheets are used on the memory boxes, concrete blocks. Manipulation of natural light is used efficiently. The eastern side of the building becomes a habitable wall with seating, a play area for children and parking space for the taxis. The front area is covered by a gigantic timber pergola/porch, marking the entrance of the building and defining a public gathering space. The grassed, outside gathering space has a huge screen for an outdoor cinema for 2 500 people. The building relies on the drama of light and space.

**[20]**

**QUESTION 6: THE ROLE OF THE FORMAL AND INFORMAL ART CENTRES IN THE TRAINING OF ARTISTS IN APARTHEID/POST-APARTHEID SOUTH AFRICA**

6.1 Learners must study the two visual sources provided in FIGURE 6a and b and write an analysis of the works (approx 1 page). Their answer should include the following:

- Discussion of the choice of medium
  - Both artists have made use of the printing method of linocuts. They have worked with black ink only to create works that have a very strong positive and negative shape contrast
  - The use of linocuts meant that they could print a certain number of images of the same work.
- Use of the elements of art
  - Strong contrast between white and black, positive and negative shapes
  - Use of solid areas of black (lino) and more linear areas where the lino has been cut away
  - Use of simplified, naïve imagery to put across a message
  - Use of text in FIGURE 6b
  - Strong use of organic decorative elements in FIGURE 6a

**(8)**

6.2 Learners must write an essay (at least 1½ pages) in which they discuss ONE adult art centre they have studied, and the work of at least ONE artist whose work epitomises the style and philosophy of the art school.

Their essay should include the following information:

- Name of art centre.
- Type of training provided.
- Funding.
- Philosophy of the centre.
- Name of artist.
- Subject matter.
- Style.
- Technique

**Rorke's Drift Art & Craft Centre:** Azaria Mbatha (printmaker), Gordon Mbatha (ceramicist), John Muafengejo (printmaker), Alina Ndebele (weaver), Dan Ragoathe (printmaker), Cyprian Shilakoe (printmaker), Vuminkosi Zulu (printmaker), etc.



- The Evangelical Lutheran Church (ELC) and craft centre at Rorke's Drift, Natal was established in 1962.
- The fine arts section was closed in 1982. Situated in Dundee, on the site of one of the most famous battles of the Anglo-Zulu War.
- The Evangelical Lutheran Church (ELC) started a tiny workshop in 1962 of black artists who were trained by Swedish art teachers.
- Teaching: Crafts – weaving in natural wool, linocutting, spinning and dyeing and textile printing [taught by Malin], graphics and sculpture [taught by Cetto], ceramics, silkscreening.

**Teachers:** Peder and Ulla Gowenius (founders), Ola Granath and his wife, Malin and Otto Lundbohm, Marietjie van der Merwe (pottery), Allina Ndebele (first student, then teacher).

**Who studied here:** Azaria Mbatha (printmaker), John Muafangejo (printmaker), Alina Ndebele (weaver), Gordon Mbatha (ceramicist), Dan Ragoathe (printmaker), Cyprian Shilakoe (printmaker), Vuminkosi Zulu (printmaker) and others.

**Funding:**

- Initially funding was provided by the Evangelical Lutheran Church, but the idea was the creation of functional art that could be sold to make the school self-sufficient.
- This was successful, but the profits generated by the weaving section paid for the running of the school, including the fine arts department and the pottery and textile-printing workshops.
- It appears as if there was tension between the fine arts and the crafts section – since the crafts produced more of the income, the fine arts section was closed.

**The purpose of the school**

- The initial purpose of the school was to train women students as arts and crafts advisors to work with patients in hospitals. (TB patients did art as therapy).
- The stated aim of the centre was: "to nurture the unique artistic heritage of Africa. To extend this heritage with new influences so that it will find its rightful place in an evolving and changing society."

**Dualities:**

- Rorke's Drift started, whereas Polly Street closed.
- Rorke's Drift was rural – Polly Street was urban.
- Rorke's Drift was "in Africa" – Polly Street attempted a "romantic reconnection to Africa".
- Rorke's Drift was dominated by women – Polly Street was dominated by men.
- Within the centre itself there are the following dualities:
  - The duality between old and new
  - Western and African
  - Traditional and new techniques

- Also the duality between the sexes (and issues of gender), one sex almost exclusively practised one art form, i.e. weaving was for women (apart from some designs by men) and fine arts were practised by men. Women did pottery using the coil method, while men did ceramics using the kick-wheel.
- There was also a distinction in Rorke's Drift between "useful" and "other" arts, what we call functional and non-functional. The problem arose in that it seemed as if the functional arts – weaving, ceramics, etc. – were funding the non-financial arts (printmaking, drawing etc). This led to the "fine arts" section being closed. The problem is that with the fine arts section closed a large source of visual inspiration was lost to the "crafters" and this resulted in the fact that the creative growth of the school has diminished.

Dualities between the fine arts section and the crafts section can also be seen in the following:

FINE ARTS SECTION	CRAFTERS SECTION
<ul style="list-style-type: none"> <li>• Tended to have students that came from <b>urban</b> areas</li> <li>• This section <b>cost</b> the church money</li> <li>• Were more <b>politically conscious</b> and thus more critical</li> <li>• More artistically creative</li> <li>• Closed in 1982</li> </ul>	<ul style="list-style-type: none"> <li>• Tended to have students mostly from <b>rural</b> areas</li> <li>• This section <b>funded</b> the centre</li> <li>• <b>Less politically conscious</b> and less critical</li> <li>• Borrowed freely from fine arts section</li> <li>• Continues production but with diminished creative growth</li> </ul>

Two distinct phases in the school's history:

### The first period

The evolution of a number of significant talented individuals – mostly printmakers, using relief and intaglio – Azaria Mbatha; John Muafangejo; Cyprian Mpho Shilakoe; Vuminkosi Zulu.

### The second period

During the 1970s this phase is marked less by the development of any major individual talents than by the attempt to establish the school on a sounder educational basis.

**Polly Street Art Centre:** Dumile Feni, Sydney Kumalo, Ezrom Legae, Louis Maqhubela, Ephraim Ngatane, Lucas Sithole, etc.

**Nyanga Arts Centre:** Patrick Holo, Sydney Holo, etc.

German Expressionist printmaking, African tribal art, Cubism, Swedish applied design, etc.

(12)  
[20]

**QUESTION 7: MULTIMEDIA – ALTERNATIVE CONTEMPORARY AND POPULAR ART FORMS IN SOUTH AFRICA**

- 7.1 Learners are to read the text provided and refer to the visual resources provided in Fig 7a – d and write a paragraph (approx 1 page) in which they analyse how Damien Hirst has used imagery in his artworks. The following must be considered in their answer:

- Subject matter.
- Formal elements of art.
- Styles/medium and techniques.
- Your interpretation of the works.

*Subject matter-* Damien Hirst uses animal life in all his artworks. He preserves them in formaldehyde – to prolong their lives once they have died. He creates images that define death as seen in the skulls. He also preserves the “zebra”, a wild animal from South Africa. “*The golden calf*” is a white bullock preserved in a tank of formaldehyde that is mounted on a plinth. His hooves and horns are 18 carat gold. His head is crowned by a gold Egyptian solar disk- a false idol.[this is meant to be a self portrait]. The artwork is comprised of 18-carat gold, glass, gold-plated steel, silicone and formaldehyde on Carrara marble plinth.

*Formal elements of art:* All the artworks are 3-dimensional/sculptural installations. Hirst uses bright/flashy colours in his artworks, over the top, unrealistic. The skulls are shiny and the one has bright sweets stuck onto them.

*Styles/medium and techniques:*

FIGURE 7a: Life-size cast of a human skull in platinum and covered by 8,601 pave-set diamonds. He uses luxury diamonds to create a skull [ironic as when you die you cannot take any riches with you].

FIGURE 7b: Hirst uses hundreds of sweets to create a skull, again these niceties cannot be tasted when you have died.

FIGURE 7c en 7d: Hirst uses large animals that are both native/ local and foreign/exotic that he boxes in formaldehyde.

*Learners' interpretations must substantiate their answer.*

(8)

- 7.2 Learners must write an essay of approx 1½ pages in which they discuss at least TWO specific artworks that they have studied where artists have made use of multi-media in a contemporary way.

*Learners may refer to :* Beezy Bailey ,Steven Cohen, Kendell Geers ,William Kentridge ,Clive Van den Berg ,also popular art forms e.g. Bitter Komix / Mural Art / T-shirts and posters, etc

Pop Art, Op Art ,Minimalism, Conceptual Art ,Performance art, Digital Art installations and video art or any other relevant artists they have studied.

(12)  
[20]

**QUESTION 8: ART AND THE SPIRITUAL REALM – ISSUES IN ART AROUND BELIEF SYSTEMS AND THE SACRED**

- 8.1 Learners must study the wide variety of imagery in Figs. 8a-d, all related to religion and spirituality. They must explain in their own words what they consider to be the non-verbal message conveyed by each image. They must also state the effectiveness of these images in illustrating a spiritual or religious idea. (approx 1 page).

FIGURE 8a: Pippa Skotnes studied archaeology and combines the history of the Ixam bushpeople of South Africa with Catholicism. The fact that she wrote on the skeletons, turning them into books, reminds us of the Ixam rock art found in Namibia and near Kimberley. She studied the writings of Wilhelm Bleek and Lucy Lloyd. They recorded the stories of the Ixam jailed for cattle theft in the old Cape. They told of the complex cosmology and symbology of the bushpeople and their creation myths.

All of these have been included in numerous etchings and writings that Skotnes has created over the years. The fact that she added vellum and other metals to the bones also links with ancient scrolls like those found at Qumran. Vellum was used for the writing of ancient religious manuscripts and turns this installation into a living manuscript of sorts. The combination of catholic symbols like the crucifix creates an eerie atmosphere, because the skeletons in themselves appear like angels of death.

Her study of archaeology has deeply influenced this work of art and her depth of knowledge of the Ixam history and culture, including rituals and sacred ceremonies fills the work with meaning far beyond the obvious.

FIGURE 8b: Salvador Dali portrays St. Anthony, a saint who was tempted by all sorts of demons and monsters. Dali portrays the saint, holding up his cross in an effort to stave off the onslaught of creatures that originated from Dali's recurring nightmares. His nightmares are tainted with fears of impotence. Saint Anthony was also tempted by women. Dali rendered himself as St. Anthony, holding up the crucifix to keep nightmares at bay. He often portrayed Gala, his wife, as the Virgin Mary. Here, a nude female figure is perched on top of the second animal in the row of beasts and frightening figures. The animals all have elongated legs, accentuating the dreamlike/nightmarish atmosphere. The first figure in the row of creatures about to stampede, is a horse, its front legs reared and ready to crush St. Anthony, who is naked and defenceless barring the cross/crucifix, which he holds as his only defence. An obelisk-like shape follows on the back of the next animal in the row. A cathedral is perched on top of the fourth animal in the row. The traces of mud dripping from the horse's hooves add to the horror of the stampede. Artists often use myths and narratives allegories or even rituals as a source of inspiration for their paintings. It does not always signify the artist's religious orientation or belief in the sacred and spiritual, but could indicate a spiritual quest. All artistic expression can however be seen as spiritual and it need not necessarily be religious

FIGURE 8c: Christian stained glass window, depicting Mary, Mother of Christ to the right and the baby Jesus with his face turned towards the viewer. Joseph, Mary's husband is on the left, holding a staff in his left hand. His one hand is stretched out, as if he is blessing the child. The mother of Christ has her hands raised in blessings for her child. The halos are around the heads of all three figures, i.e. they are holy. The diagonal lines originating from the top of the picture plane indicate the presence of a ray of light, symbolic of the presence of the Holy Spirit. The stained glass window is found in churches and Cathedrals and depicts religious themes from the Bible.

FIGURE 8d: Michael Zondi created the head of a prophet from one piece of wood, roughly carved. The facial features portray an old and wise man, with possible reference to the prophets of the bible, like Moses or Jeremiahs bearded face enhances this.

His eyes are shut, as if in prayer/meditation or in rapture of a vision. He has been influenced by religious accounts from the Bible and most centre on religious themes. It is however universal, because it could be a prophet of the tribe.

- 8.2 Learners must write an essay of approx 1½ - 2 pages in which they analyse and compare the artworks of TWO artist whose themes are related to religion and/or the sacred.

(8)

Learners must refer to the following:

- Name of the artist/s and title/s of the art works
- Formal elements of art
- Use of medium and technique
- Use of imagery to convey ideas
- Stylistic characteristics

Religious or spiritual significance (this could be personal or universal).

(10)  
[20]

## QUESTION 9: GENDER ISSUES

Learners must write an essay (at least 2 - 2½ pages) in which they discuss how the artists, used in the visual sources Fig 9a – d OR any others of their own choice, have challenged or accepted the stereotypical manner in which the male and female are portrayed in the media.

Information that needs to be included:

- Name of artist/s and title of work/s.
- Aspects of gender and stereotyping portrayed in the works.
- Style and technique used.
- Any other relevant information.

**FIGURE 9a. Frida Kahlo, Self-portrait with cropped hair 1940**

Kahlo painted *Self-portrait with cropped hair* shortly after she divorced her unfaithful husband, the artist Diego Rivera. As a painter of many self-portraits, she had often shown herself wearing a Mexican woman's traditional dresses and flowing hair; now, in renunciation of Rivera, she painted herself short haired and in a man's shirt, shoes, and oversized suit (presumably her former husband's).

Kahlo knew adventurous European and American art, and her own work was embraced by the Surrealists, whose leader, André Breton, described it as "a ribbon around a bomb." But her stylistic inspirations were chiefly Mexican, especially nineteenth-century religious painting, and she would say, "I do not know if my paintings are Surrealist or not, but I do know that they are the most frank expression of myself." The queasily animate locks of fresh-cut hair in this painting must also be linked to her feelings of estrangement from Rivera (whom she remarried the following year), and they also have the dreamlike quality of Surrealism. For, into the work she has written the lyric of a Mexican song: "Look, if I loved you it was because of your hair. Now that you are without hair, I don't love you anymore."

**FIGURE 9b Kate Moss, Chanel Perfume Advert.**

Kate Moss appears in this 2005 ad campaign for Chanel's Coco Mademoiselle. The supermodel's contract with the French fashion house, signed in 2002, ended in August of 2004, and the next campaign was expected to feature a new face.

But, according to *Hellomagazine.com*, Chanel bosses insisted that Kate was the perfect choice to represent their perfume.

The new campaign depicts the alluring 31-year-old wearing nothing but a string of pearls and a bowler hat. The pictures were published right after the model's glam-rock birthday celebration, for which guests donned glittery wigs and Seventies-style costumes.

**FIGURE 9c. Eric Fischl, The bed, the chair, dancing, waiting, 2000**

In this eight-painting cycle depicting a brooding reverie of cinematic proportions, Eric Fischl explores the structural and psychological relationships of a shifting cast of men and women to each other, to a few domestic furnishings and to the mise-en-scene they occupy. Without exception, an ascetic, muscular choreography plays out within their tenebrous depths. The paintings are voyeuristic vignettes cobbled together from a fragmented narrative with no beginning and no end.

Each of these recent large oils contains one or two figures in various states of undress, an unmade bed and, depending on the canvas, one or both of a matched pair of slipper chairs. Each title begins with the words "The Bed, The Chair," followed by a description of a depicted activity, often expressed in present participles. In *The Bed*, *The Chair*, *Dancing*, *Watching*, an unseen light beyond a window in the viewer's space casts the shadow of an unseen dancing figure on a wall to the right of the bed. In the foreground, a naked man hunches forward in a chair, intent on the unseen figure, but with eyes meeting the viewer's gaze.

**FIGURE 9d. Zanele Muholi, Martin Machepa 2006**

In the past three years or so, Zanele Muholi's photographs have been generating excitement as much as they have been unsettling audiences in South Africa and elsewhere around the world. It seems important that we as South Africans, and indeed all Africans, should ask ourselves if we are ready for Muholi's voice and what she is beckoning us towards. Can we risk hearing, seeing and crossing to this seemingly unfamiliar territory?

Muholi came into public awareness with her solo exhibition 'Visual Sexuality: Only Half the Picture' held at the Johannesburg Art Gallery in 2004. The exhibition marked the end of her Advanced Photography course at the Market Photo Workshop in Newtown, Johannesburg. After that, her work showing black lesbians in intimate moments became a subject of both private and public scrutiny from art historians, feminist and gender scholars.

Muholi chose to stay closer to her experiences by capturing her world and 'people' as she would unsurprisingly declare. The closeness Muholi shares with the people she portrays plays itself out in a way in which they appear comfortable in the intimacy of their environments. The pictures are conceptually provocative, playful, and outright confrontational. As photography remains a mode of expression dominated by men, Muholi's images serve to claim a space for black female bodies from centuries of objectification. It is an exercise in ensuring that those rendered voiceless can begin to reclaim the (visual) culture that was historically denied to them.

Muholi's work further evokes moments of women 'living under siege' as so straightforwardly articulated by feminist scholar Pumla Dineo Gqola in a comment published in the *Mail and Guardian* (May 2004) entitled 'Bleeding on the streets of South Africa'. The current visibility of Muholi's work coincides with major political shifts and events, such as the much debated Same Sex Civil Union bill recently passed by South Africa, the first country in Africa and fifth in the world to allow such unions.

**[20]****QUESTION 10: CONTEMPORARY ARCHITECTURE IN SOUTH AFRICA**

Local and International architects alike, are currently striving to create aesthetically pleasing yet sustainable buildings. From skyscrapers and corporate buildings to domestic homes, the challenges of using materials wisely are being seen across the globe.

Using the quote provided as a starting point, students must write an essay (at least 2 pages) in which they discuss any TWO examples of contemporary architecture that they have studied. They may refer to the visual sources provided or those of their own choice.

The following should be included in their essay:

- Name of buildings and architects.
- Function and site.
- Style and use of materials and building techniques.
- Valid reasons why you find these buildings inspiring.

### Dynamic Architecture Dr David Fisher

The newest modern architecture design concept is called Dynamic Architecture designed by Dr David Fisher. Modern architecture skyscrapers that will keep moving forever change their shape to better fit nature and your imagination. Dynamic Architecture reveals three major innovations – changing shapes, industrial production of units and self-production of clean energy. This example is just one of many that innovative architects are creating.

Dynamic Architecture buildings keep modifying their shape. As each floor rotates separately, the form of the building changes constantly; you may not see the same building twice.

Dynamic architecture marks a new era in architecture. This new approach, based on motion dynamics, is in fact a challenge to traditional architecture that until now was based on gravity.

Dynamic Architecture buildings will become the symbol of a new philosophy that will change the look of our cities and the concept of living. From now on, buildings will have a fourth new dimension TIME. Buildings will not be confined to rigid shapes; construction will have a new approach and flexibility. Cities will change faster than we ever imagined. [David Fisher, from [dynamicarchitecture.net](http://dynamicarchitecture.net)]

So I know what you're thinking - incredibly wasteful, right? Not if Fisher is successful in placing horizontal wind turbines between each of the tower's floors - providing 48 turbines to power the building's spinning

In addition to the horizontal turbines, the building is to be fitted with photo-voltaic panels on the roof - generating approximately 7 million dollars worth of electricity every year, according to Fisher. So, the building doesn't *just* power itself and its own spinning/rotating - it can also power its surrounding urban area?

### Beijing National Stadium

This was a joint venture among architects Jacques Herzog and Pierre de Meuron of Herzog & de Meuron, project architect Stefan Marbach, artist Ai Weiwei, and CADG which was lead by chief architect Li Xinggang. During their first meeting in 2003, at Basel, the group decided to do something unlike Herzog and de Meuron had traditionally designed. "China wanted to have something new for this very important stadium," Li stated. In an effort to design a stadium that was "porous" while also being "a collective building, a public vessel", the team studied Chinese ceramics This line of thought brought the team to the "nest scheme". The stadium consists of two independent structures, standing 50 feet apart: a red concrete seating bowl and the outer steel frame around it.

In an attempt to hide steel supports for the retractable roof, required in the bidding process, the team developed the "seemingly random additional steel" to blend the supports into the rest of the stadium. Twenty-four trussed columns encase the inner bowl, each one weighing 1,000 tons. Despite random appearance, each half of the stadium is nearly identical. After a collapse of a roof at the Charles de Gaulle International Airport, Beijing reviewed all major projects. It was decided to eliminate the retractable roof, the original inspiration for the "nest" design, as well as 9,000 seats from the design. The removal of the elements helped to bring the project under the reduced construction budget of \$290 million, from an original \$500 million.



With the removal of the retractable roof, the building was lightened, which helped it stand up to seismic activity; however, the upper section of the roof was altered to protect fans from weather. Due to the stadium's outward appearance, it was nicknamed "The Bird's Nest". The phrase was first used by Herzog & de Meuron, though the pair still believes "there should be many ways of perceiving a building." The use is a compliment Li explained, "In China, a bird's nest is very expensive, something you eat on special occasions."

Ground was broken, at the Olympic Green, for Beijing National Stadium on 24 December 2003. At its height, 17,000 construction workers worked on the stadium. In January 2008, The Times reported that 10 workers had died throughout construction; despite denial from the Chinese government. However, in a story the following week, Reuters, with the support of the Chinese government, reported that only two workers had died. All 110,000 tons of steel were made in China, making the stadium the largest steel structure in the world.<sup>1</sup> On 14 May 2008, the grass field of 7,811 square meters was laid in 24 hours. Beijing National Stadium officially opened at a ceremony on 28 June 2008.

#### Other issues to bear in mind re. sustainable architecture

- **Low-cost housing/shacks:** Traditional and modern building technologies are now used other than brick and mortar. Architects are now using insulated precast concrete, brick and steel and water-based resin. South Africa has a huge problem with people living in shacks, which are constructed from anything from scrap timber to old tin sheets. They do not provide adequate housing and give very little protection from the weather. The poor materials and poor construction lead to a risk of fire. Many low-cost housing projects have not been up to standard and are neither structurally sound nor suitable for living.
- **Use of eco-friendly building materials/components:** A new development technique or invention is that of pedal-operated equipment and moulding systems to make concrete blocks, roof arches, tiles and roof sheets. Other alternative methods used by South Africans and international architects consist of: straw bale, cob [mixture of clay and straw], rammed earth [earth, sand, gravel and stabilisers like cement or lime are compacted within a framework], paper crete [industrial strength paper maché made with paper and cardboard], sand and Portland cement. Not only is it low-cost, but also sturdy and well-insulated. Roof constructions need to be strong and inexpensive, the combination of timber and metal moulds are ideal.

Use of corrugated iron roofing, concrete floors and brick walls are ideal, and inexpensive for South Africans. Solar energy roofing systems, solar energy water heater/pumps, sun batteries are just a few of the many choices to conserve electricity. Soil is one of the cheapest building materials. Materials used like stone, wood, straw and soil are non-toxic.

- **Location:** Weather and affordability influence the location of a home.

- **Environmental impact/issues:** Air quality, waste water and discharges, groundwater quality and quantity, hazardous materials, condition /state/sensitivity of ecosystems, rare and endangered or valuable plant species and their habitats, noise or vibrations, solid waste disposal, slope stability and erosion, migratory species, surface water quality and quantity all impact on the environment.
- **Sustainable architecture must take into account:** The environment, CO<sub>2</sub> emission, energy use, vernacular architecture and cultural patterns. Wind generators can be used directly as in water pumping applications or stored in batteries for household usage.
- **Socio-economic effects:** Relocation/Disturbance of settlements, conflict with land/natural resource uses, employment [job loss/creation, employment equity, etc.], services and utilities, health and socio-economic conditions, e.g. quality of life/health and safety/property values/scenic views, culture/religion, etc.
- **New approaches to low-cost housing:** The use of wind generators, solar power, hybrid systems that combine solar panels and/or fossil fuel generators.

**[20]****TOTAL: 100**