

**PRECEDENT STUDIES**

079 - HISTORICAL TYPOLOGY PRECEDENTS

081 - GAUTENG CREMATORIA TYPOLOGY PRECEDENTS

083 - AFRICAN PRECEDENTS

085 - INTERNATIONAL TYPOLOGY PRECEDENTS

089 - INTERNATIONAL PRECEDENTS

092 - CONCLUSION

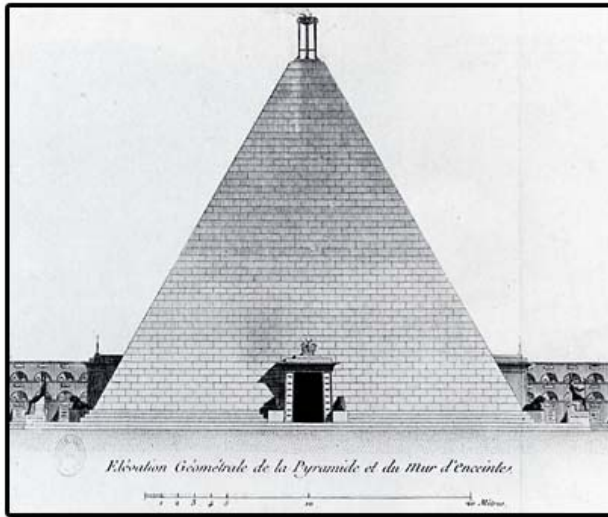


Figure 071: Pyramid Chapel with Crematorium

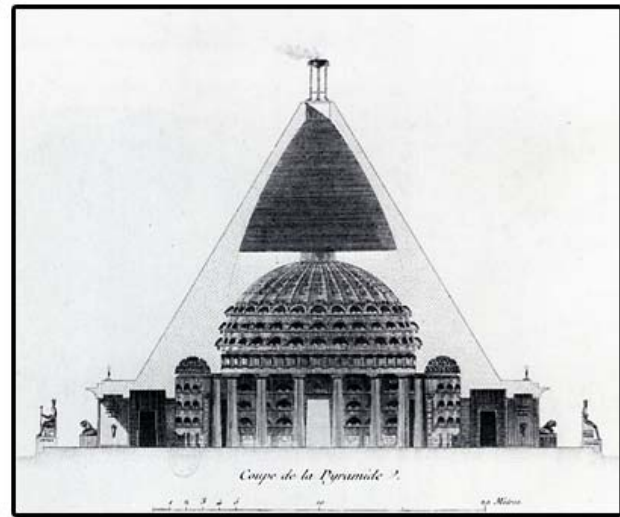


Figure 072: Section Through the Pyramid Chapel with Crematorium

No built examples currently exist of crematoria built before the First World War. Conceptual models on paper are the only known examples of this type of building typology. Thus only this single precedent study for historical precedent typology is to be used.

**STRUCTURE : FIELD OF REST, PARIS 1799 (UNBUILT)**  
**ARCHITECT : MOLINOS**

This was a concept for the transformation of an old quarry into a cemetery. Molinos took the concept of the cemetery in 1799 as a landscaped garden into the city. The simple geometries, the varied forms, the cosmological symbolism and the traditional images of immortality, such as the butterfly all combined to reassure the citizens of Paris that death was indeed a sweet rest, a journey to immortality and that the cemetery was the home of tender feelings and memories.

The beautiful catacombs in Molinos's cemetery were only for the wealthy. People with less money would either be buried in mass graves or be cremated in the furnaces of the central pyramid. The furnaces were kept out of sight, but the public spaces inside the pyramid were beautifully decorated with imagery inspired by the great roman burial chambers [60].

The significance of this un-built precedent is that of transformation and rehabilitation of a quarry to that of a cemetery. A landscaped garden within an urban environment and how landscaping could become an elusion of peace and harmony with the cremator chamber at the heart of it all.



Figure 073: Elevation to 'Field of Rest'



Figure 074: Site Plan to 'Field of Rest'

## GAUTENG CREMATORIA

Cremation began in 1918 in Gauteng with the construction of the very first crematorium in Johannesburg within the suburb of Brixton for the Hindu community. The eldest crematorium is 70 years old and the newest of the crematorium buildings that of Benoni built in 2001.

Eleven crematoriums currently exist and operate in Gauteng and are generally located within or adjacent to existing cemeteries. These developments are located throughout Gauteng from Vereeniging to Brakpan to Fourways to Pretoria. Most of the crematoria were constructed in a typical Christian type church layout with a bell tower design, oriented in an east west direction. The Hindu crematoria, on the other hand are orientated in a north south orientation.

The crematorium building typology in Gauteng is utilitarian in design and functional finishes complete the structures. The crematorium complexes as a whole are not multi-functional and are very specific in their design and arrangement with its surroundings. Although most crematoria are situated within a landscaped environment, very little to no interaction between the building and its surroundings take place. The crematorium is very seldom visited by family members and undertakers transport the body from the undertaker's mortuary to the crematorium and finally transports the ashes back to the family members.

This dissertation will attempt to re-look at this phenomena and make the crematoria a destination, not only for the disposal of a body, but a facility that could be utilised by the local community for more than just a single activity. The relationship between building and landscaping is to be strengthened and the memorial gardens are to become an integral part of the desitnation.

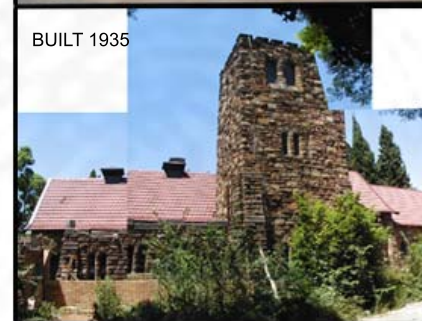


Figure 075: Gauteng Crematoria Stock





Figure 076: Various internal views



Figure 077: Various internal views

**STRUCTURE : APARTHEID MUSEUM, JOHANNESBURG**  
**ARCHITECT : MASHABANE ROSE ARCHITECTS**

The museum construction and material selection responds to the nearby mining structures with rock filled gabion baskets and large planted earth mounds recall the planted mine dumps.

The building merges with the landscape by sinking the structure into the ground. Both internal and external finishes have a theme of separation, two contrasting materials next to each other. Light is filtered through concrete shafts, and the exhibit area becomes lighter as one walks through the exhibition spaces [61].

These are the key elements that are to be addressed in the design of the Stone Bridge Memorial Park. The idea of how materials influence the people within its environment and how the building relates to the environment.

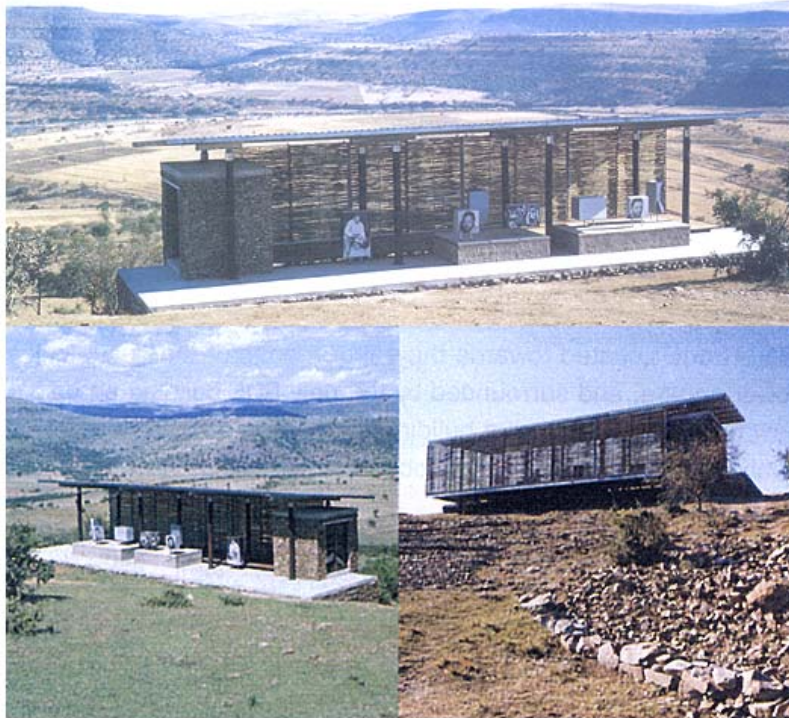


Figure 078: Mandela Museum along Main Community Path

**STRUCTURE : NELSON MANDELA MUSEUM, EASTERN CAPE  
ARCHITECT : COHEN & JUDIN**

The museum has a dual purpose of being a tribute to Nelson Mandela and the other is that of a community and cultural centre. The facility is used to activate the memories, histories and traditions of the community through everyday practices.

The museum was built adjacent to a main path used by the local community for fetching water on a day to day basis and this road and journey as linear thread was key to the overall spatial structure of the museum [62].

This approach is to be adopted for the crematorium complex, where the local community form an integral part of the development and the history and memory of the region may be retained.



Figure 079: Zimbabwe Ruins

**STRUCTURE : ZIMBABWE RUINS, ZIMBABWE**  
**ARCHITECT : UNKNOWN**

The ruins feature an array of chevron, herringbone and many other intricate African patterns in its walls, constructed from dry-stone techniques. A monument of high grey walls embrace a chunky conical tower within resembling that of a grain store [63].

This structure is an expression of African architecture and it is in this light that the Stone Bridge Memorial Park structures are to be created. An attempt to extract that what is African within the feel of the finishes to be buildings.





Figure 080: Main Entrance to Crematorium



Figure 081: Internal View of Temple

**STRUCTURE : ASHES TEMPLE AND CREMATORIUM UNIT, COLOMBIA**  
**ARCHITECT : HECTOR MEJIA VELEZ, MAURICIO GAVIRIA RESTREPO**

This crematorium has a monolithic appearance and recalls temples and mortuary buildings from other times and different cultures. The building is divided into parts, the crematorium under a triangular terrace. The ashes temple is a linear building responding to the site conditions.

The interior space looks carved out of a stone block with slivers of light leading the visitor into the belly of the structure [64].

The mass and weight of this building provides the backdrop for the emotions of a funeral to unfold. Deep sorrow and sadness are expressed in its structure. This quality of emotion generation is to be implemented into the Welcoming Centre and the chapels of the crematorium complex.





Figure 082: Internal View of a Chapel



Figure 083: Day and Evening Views of the Chapels

**STRUCTURE : BAUMSCHULENWEG CREMATORIUM, BERLIN**  
**ARCHITECT : AXEL SCHULTES ARCHITEKTEN**

Built in an existing cemetery amongst a forest grove, the concrete columns in the central hall represent its location, filtering light through the canopy into the space that focuses on a calm circular pool where water flows representing birth and regeneration. These columns also help separate the space into smaller more personal spaces.

The off shutter concrete of the structure has a cold and sombre feel, the idea of a tomb or cave. The imperfections in the concrete are a metaphor for the wounds of a body.

The strong geometric shapes of the facade together with the thin slit guides one towards the entrance as one can see the sky beyond. Further no direct influences can be drawn to any one religion or denomination [65].



Figure 084: Internal Columns



Figure 085: Walls of the Burial Niches



Figure 086: Toplit Circulation Space

STRUCTURE : IGUALADA CEMETRY, SPAIN  
ARCHITECT : ENRIC MIRALLES & CARME PINOS

This cemetery complex is sited in an abandoned stone quarry in an industrial area of Igualada. Visitors are drawn away from their surroundings and into the envelope of the hills. The burial niches become extensions to the hillside with the chapel completely below ground.

A few walls remain to help direct views and serve the cemetery, leaving the impression that you are surrounded by the ruins of an urban setting excavated and re-inhabited [66].

Reuse and a connection to its historical past is what makes this development stand out. The rough walls of the complex apart from looking like an old city also alludes to the idea of decay with the rough gabion walls to the mausoleum structures. Its this quality that is to be drawn from for the chapels and crematorium complex.



Figure 087: Interior View of Chapel



Figure 088: Aerial View of the Complex

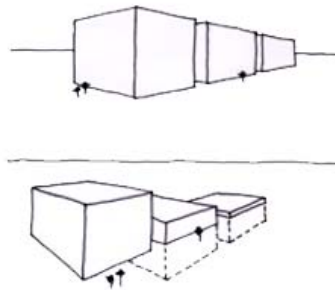


Figure 090: Massing Models



Figure 089: Linking Walkway

**STRUCTURE : KAZE-NO-OKA CREMATORIUM, NAKATSU  
ARCHITECT : FUMIHIKO MAKI**

A tranquil and spacious site was secured adjacent to an existing cemetery, together with unearthened ancient burial mounds the crematorium building blends in with the overall environment.

The architecture attempts to avoid drawing attention to the height of the building by suppressing it into the ground to create the impression of a sculpture merging into the landscape of the park [67].





Figure 091: Main Entrance Elevation



Figure 092: Main Entrance & Plaza Staircase

STRUCTURE : MIYAZAKI PREFECTURAL ART MUSEUM  
ARCHITECT : SHIN'ICHI OKADA

The museum can be regarded as a single length wall running north - south. The wall is entirely constructed from a singular type of granite block dressed in varying textures and patterns [68].

Materials and textures create emotion and generate positive or negative feelings within the viewer. Its this quality of varying textures and patterns that are to used in the compilation of the crematoria structures.

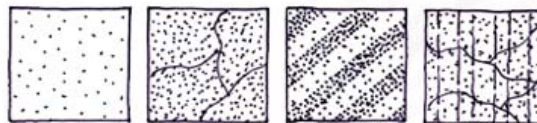


Figure 093: Texture Sketch





Figure 094: Stonehenge - Standing Stone

STRUCTURE : STONEHENGE, SALISBURY  
ARCHITECT : UNKNOWN

The best known of all the megalithic sites. Stonehenge stands isolated on the undulating plains of Salisbury.

The stark presence of elements in its setting provides the opportunity for exploration [69].

The freedom to meander and explore a destination or building allows the visitor to participate in the architecture and the environment that the person has found themselves.

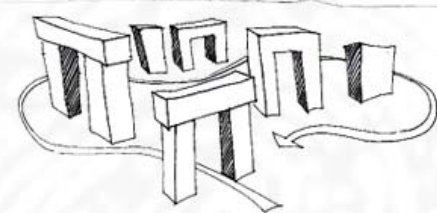


Figure 095: Stonehenge Sketch

STRUCTURE : TAJ MAHAL, AGRA, INDIA  
ARCHITECT : EMPEROR SHAH JAHAN

The mausoleum of the Taj Mahal at Agra stands in a formally laid-out walled garden entered through a pavilion on the main axis.

The tomb is raised on a terrace and first seen reflecting in the central canal.

This transition from the living world to the afterlife is represented by the body of water on either side of the central walkway [70].

It's this subliminal self-orientation that is to be implemented into the crematoria complex. Main routes together with secondary routes are to be visually linked together so that the visitor may orient themselves through out the complex.

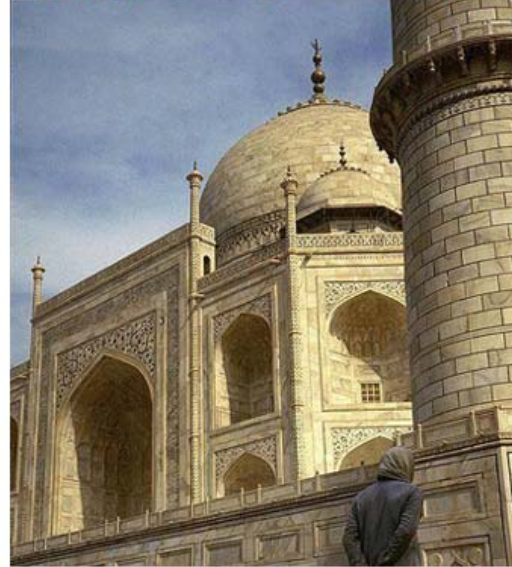


Figure 096: Taj Mahal Views

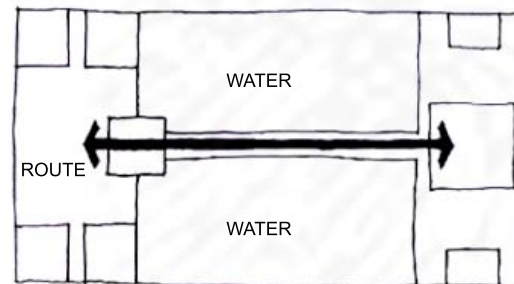


Figure 097: Taj Mahal Sketch