

MORTALITIEs IMMORTALITY

DESIGN DEFENCE FOR STONE BRIDGE MEMORIAL PARK

BOOK 3

Abstract

This dissertation examines the emotional aspects of death, the process of self-healing and how architecture effects the process by influencing ones state of mind through shape, colour and material of the structure. Religion provides the backdrop for architecture to unfold and is the stage in which emotional experiences are realised through a journey of self-exploration. Symbolism and myth play a major subconscious role in religion, while humanities attempt to connect with the divine. By intertwining these aspects of emotion, religious myth, symbolism and mankind's unconscious connection to these, a meaningful architecture is achieved without necessarily forcing direct symbolism or any single religious meaning to the architecture.

Introduction

Can death exist without life? Is life a prerequisite for death? This brings to mind a West African Folk-Lore tale of Life and Death, where Life and Death are standing adjacent to a spring debating who was the oldest. The owner of the spring then says, "How can one speak of Death without Life, from which it proceeds? And how can one speak of Life without Death, to which all living things go? Your words are true. Neither can exist without the other. Neither of you is senior. Neither of you is junior. Life and Death are merely two faces of the Creator. Therefore you are of equal age." [1] Each ethnic or social group has built-up a collection of beliefs enabling them to explain the origins of the universe, the existence of mankind and the introduction of evil into the world and death. Due to these varied myths and beliefs, the living world and the afterlife were viewed differently from one ethnic group to another, but ultimately all reached the conclusion of the existence of a Creator.

How closely linked is religion, spirituality, myth and belief in relation to the emotional aspects of death within humanity and the confines of our contemporary life? Over the last century human existence has become largely secular, with religion seen as secondary to the pursuits of worldly pleasures. Today science has answered most questions about life and has answers for almost everything. The only question still unanswered is what happens after death? Death is defined by the physical, a body ceasing to function. Funerals are defined by the need to dispose of that lifeless body. According to Coupé, death could be seen physically as "a necessary end, an unconscious sleep, a light that goes out; the body returns to the elements, matter passes into other combinations and perpetually transforms itself" [2]. This moral significance led previous societies to venerate their dead, who were buried with dignity and remembered by means of monuments. This raises another question as to whether religion or faith have a connection to the way religious structures are assembled?

Despite mankind's disillusionment with religion in contemporary life, religion, mythology and rituals still form the fundamental backbone to the human subconsciousness. Our social behaviour, regardless of our intellectual and technological standing, originates in our human psyche from past generations.

Footnote : [1] Courlander (1996:56)

[2] Kselman (1993:169)

As Thomas Barrie notes “We are the same species that painted the walls of our subterranean chapels in France and Spain with images of our animal gods, grunted with exertion as we dragged sarsen megaliths across Salisbury Plain, and knelt in adoration before the relics of a saint.” [3]

Sacred architecture is not only confined to a single cultural or religious group, but is a universal ideal in that all humans attempt to draw closer to a powerful unseen divinity, by creating special spaces or places in which to hold and maintain this precious relationship. Architecture thus serves to transcend this ideal by responding to symbolic needs and expressing meanings associated with human existence. Symbolism then, forms an integral part of all religions utilising signs and metaphors in one form or another to illustrate and provide guidance for its congregation and followers in lieu of an unseen divinity.

Paul Ricoeur states that, “the interpretation of the symbol orients us towards the idea that the justification of the symbol by its power to reveal constitutes a simple increase of our own self-awareness.” [4] The symbol is then an expression that communicates a meaning, this meaning is declared from the intension derived by speech. Thus the interpretation of the symbol, sign or metaphor gives rise to thought.

Humphreys (1980), in *Perspectives of Death* emphasises that symbols have a complex combination of social experience, practical observation, speculation and meaning [5]. Thus an identical symbol may be interpreted in many different ways by different religious groups and cultural societies. This is illustrated by the symbolism associated with the colours black and white. In western society the colour white is representative of purity, virginity and life, as Jesus is described as being dressed in white robes and riding the white horse of the Apocalypse in the Bible Book of Revelations [6]. This is contrasted to eastern culture where white is associated with death and mourning, whereas from a western perspective black depicts death. [7] [8]

Architecture then, is the stage where the rituals of myth and religion are played out; myth is thus embodied in the form of architecture and the ritual the interaction between them.

Footnote : [3] Barrie (1996:3)

[4] Ricoeur (1967:17)

[5] Humphreys SC (1980:11)

[6] Revelation 19:11 & 14

[7] www.princetonal.com/groups/iad/lessons/middle/color2.htm. Access 17 October 2003

[8] www.wired4success.com/colorsymbology.htm. Access 17 October 2003

Connecting with the divine

“Even today, with interest in organised religion on the wane, sacred architecture, in its many forms, still expresses and manifests humans striving to connect with a sense of the divine” Catherine Slessor [9]

Since the beginning of time when man used caves as a form of shelter, humans made use of nature's geological formations. This use of natural materials and the need for humans to attempt to bring themselves closer to the divine, lead to the development and creation of natural sacred spaces and places. Then how does one make meaningful architecture that connects with the divine in today's mixed cultural secular society?

This designs point of departure remains the emotional aspects that one feels and experiences when attending a funeral or grieving for a loved one, relative or close friend. These emotions are largely personal and is dependent on the individuals outlook on death and his previous experiences, previous crises in life, the relationship and degree of attachment to the deceased, the mode and circumstances surrounding the death, personal characteristics of the bereaved person, the quality and quantity of support given by relatives, friends and society. These emotions can drive, inspire and influence your overall feeling. Your state of mind can be influenced by factors around you such as shapes, colours and textures and even smells of the surroundings. Molyneux (1985) confirms that emotions differ from person to person and according to circumstances when it comes to funerals and cremation. He notes that the most common stages of bereavement are shock and numbness, physical pain and yearning, loneliness and disorientation, panic and fear, guilt, anger and hostility, hope and reorganisation and then lastly acceptance. [10]

In the process of understanding the sequence of a funeral, the following emotions were employed in the design development to achieve an 'emotional journey' within the funerary complex. These emotions commence with a sense of anguish, anger, fear, sorrow, humility, repentance, reconciliation, joy, celebration and finally remembrance

By further understanding the emotions of the architectural journey, the process of matching 3 dimensional forms and simultaneously selecting a material pallet, some natural and other man-made, linked the emotions to the experience along the physical journey. This developed into a meaningful library of appropriate shapes to inform the design and form of the structures.

EMOTION	FORM	MAN-MADE MATERIALS	NATURAL MATERIALS
ANGUISH	TORN / TWISTED	STEEL SHEET	TREE TRUNK
ANGER	SHARP	STEEL / CONCRETE SHARDS	SLATE SHRADES
FEAR	RESTRAINT	CORROSION / CHAINS	MOLTEN LAVA
SORROW	BROKEN	RUSTED / RIPPED	CARCASSES / BONES
HUMILITY	EXPOSING	LITTER	WEEDS
REPENTANCE	LOW / ENVELOPING	CONCRETE TUNNEL	STONE
RECONCILIATION	PURE / WARM	FABRIC / BANNERS	MARBLE / PEARL / SHELL
JOY	SPIRALLING	RAMP	WOOD / FIRE / SUN
CELEBRATION	REFLECTIVE / REGAL	METALIC / DRAPES	LEAVES / PALMS
REMEMBRANCE	ELEVATED	BALCONY / TOWER	LIGHTING

The choice of materials provides the props for architecture to unfold, creating the emotions and atmosphere required for the subliminal symbolism in religiously based architecture to be experienced. The sacred structure then comes into a relationship with the visitor through the ritual action. These experiences aid in the overall upliftment and sense of closure, required by the families when departing from the funerary complex.

The Site

The establishment of a sacred site is a place marked out from ordinary spaces. A mountain-top, river or spring may be considered sacred, as a focus of the divine. A site may be made sacred by events that have taken place on that site or by the carrying out of certain rituals. Symbolic elements on the site could also provide a reason to establish a sacred structure on that ground. [11]

The selection criteria for the location of a crematorium complex within Gauteng was achieved by evaluating the symbolic and historical potential of various other sites. The practice of burying the dead outside towns and urban centres has its roots in the ancient Greek and Roman civilisations where 'Funerary Cities' were established for the dead [12]. Thus the site needed to be within a rural environment adjacent to a habitable urban edge. The chosen site is situated between two urban centres, namely Centurion and Olifantsfontein and provides both historical and symbolic representations for a structure of symbolic reference. The following key elements of the site inform the design and provide the necessary symbolic representations required for the overall emotional journey in the development.

· The Olifantspruit River

According to Greek mythology, when a person died, the vital breath or psyche left the body to enter the palace of Hades, which was the residence for the dead. This vital breath is much like our definition of the 'soul' except that they believed it was an intuitive part of the human makeup. The dead were guided to the River Styx by Hermes (Mercury), who handed them over to Charon, the old ferryman. He in turn ferries the dead into the underworld, across the River Styx where the dragon-tailed-dog-Cerberus guards, allowing all souls to enter but none to leave. If bribed with a coin, Charon would transport the dead across the river. If they had no coin, they were doomed to wander the riverbank for eternity. [13] [14]

The Olifantspruit River is the symbolic representation of the River Styx that separates the living world from that of Hades' 'Realm of the Dead'. North of the Olifantspruit River is where the living gather in the Welcoming Centre or at the chapels to celebrate the life of the deceased. To the south of the Olifantspruit River is where the deceased congregate in the memorial gardens where the crematorium resides.

Footnote : [11] Humphrey C & Vitebsky (2003:28)

[12] Etlin (1984:217)

[13] www.geocities.com/athens/1044/hades.htm. Access 13 October 2003

[14] www.messagenet.com/muths/bios/styx.html. Access 13 October 2003

· **The Stone Bridge & Railway Line**

The stone bridge acts as the permanent metaphor of Charon's ferry linking the living world to that of the dead world. The historical significance of the 1901 railway sandstone bridge is representative of transportation and movement, thus linking the two sides of the site together. The stone bridge also reflects the historical connection of its time to the site as a monument to the deceased who have travelled over it.

The remnants of a single lined railway are a reminder of days gone. The railway path is to be re-introduced into the development as the metaphorical link between the living world of the north, to that of the dead world to the south. This funerary causeway will maintain the historical connection of walking from the church to the graveyard, in this case in lieu of the graveyard the crematorium and the memorial gardens.

· **The Stone Kiln & Quarry**

The site was an old lime quarry and remains a scar in the landscape, and so is it true for those experiencing the death of a relative or close friend. The departure of this person from your life creates a scar on your existence and, thus the symbolism between the scarred rehabilitated landscape and that of an emotionally scarred visitor finding healing in the funerary process is attained.

The stone kiln is symbolic of the light at the end of the tunnel associated with near death and is to be converted into a lantern that visually links the scarred southern area of the site to that of the north. The stone kiln in turn is then the final threshold that takes you from the funerary causeway into Hades' realm of the dead directing you into the crematorium complex

The welcoming centre

The welcoming centre is the first contact the visitor has with the crematorium complex. This group of pavilion like structures house the administrative functions of the development, ablution facilities and Priest Consultation Rooms.

Ching (1979) describes the threshold as “Entering a building, a room within a building, or a defined field of exterior space, involves the act of penetrating a vertical plane that distinguishes one space from another, and separates ‘here’ from ‘there’.” [15] The walled-like complex is permeable and entrance is gained through a set of large centre pivot doors. These doors firmly define the visitor’s scope from the parking area where you move along a defined walkway.

Gateways, thresholds and openings mark the transition between one space and another. Crossing them signifies an individual’s transition between the sacred and the ordinary. These thresholds are often a symbolic barrier marked with prayers; spells and blessings aimed to ensure that such entry is benign and protect the space within. [16]

On entering the welcoming complex the visitor is forced to make a choice with regards to the path they wish to take. This selection is reminiscent of life’s journey, where one must make decisions as to the direction one is to take. Glimpses of adjoining structures along all the paths provide a sense of direction and security. The two main paths run obliquely to one another, representing the emotional state that the visitor is in on arrival.

Facilities adjoin the two paths and a reflection pond separate them similar to that of a Christian cloister with an arcaded walkway surrounding a garden. This semi-enclosure like courtyard with the reflection pond allows the visitor the opportunity to be partially separated from the outer world for the sake of self-reflection, before proceeding along the path to the chapels and crematorium.

The architecture of these structures compliment the emotional state of the visitor, off-shutter concrete and hard surfaces relate to the anguish, anger and fear experienced by the visitor in their first encounter with the complex. The sense of touch of the concrete, and the sight of the penetrating light through slits in the structure must be complimented by the sense of smell. Scented gardens located on either side of the two main pathways provide the overall experience.

Footnote : [15] Ching (1979:256)

[16] Humphrey C & Vitebsky (2003:132)

The chapels

“In building this chapel I wanted to create a place of silence, of prayer, of peace and internal joy. The feeling of the sacred animated us. Some things are sacred, others not, irrespective of whether or not they are religious.” So confirmed Le Corbusier in his dedication speech at the Chapel of Notre-Dame-du-Haut at Ronchamp in 1955. [17]

The majority of crematoria in South Africa and especially those in Gauteng have the chapel attached to the crematorium typically in a Christian church layout. (Refer to the detailed analysis of each Gauteng Crematorium located in Annexure Section of Book 1) The placement of the coffin is usually located adjacent to the pulpit or altar of the church. The coffin is then either lowered, simulating a burial, or placed on a conveyor belt linked to the ante space of the crematorium chamber. The placement of the coffin and how it is then transported to the crematorium chamber has been disputed in recent years. According to Wilhurst (1980) the method of committal is crucial to the bereaved. He further expresses the opinion that “mechanism intrudes, and human involvement is needed”. Thus there is no direct connection between the chapels and the crematorium. Pallbearers must physically transport the coffin from the chapels to the crematorium building along the funerary causeway. This is reminiscent of a traditional funeral where one must walk to the graveyard, something that has been lost in our modern society. [18]

Aaron Betsky notes that, “Buildings replace the land. That is architecture’s original sin. A building makes something new, but does not do so in a void. What was once open land, filled with sunlight and air, with a distinct relationship to the horizon, becomes a building...in all cases, a building is one thing above all else: not the land”. [19]

The earth is a place of return, where man first found shelter from the elements. It is symbolic of the womb out of which we came and is where human culture and religion developed. The chapels are in essence, a return to the ground, the cave, submerged into the landscape they allow for the partial notion of burial. The emotions experienced at this stage of the funeral are generally sorrow, humility, repentance and reconciliation.

Footnote : [17] Heathcote & Spens (1997:46)

[18] Wilhurst (1980:10)

[19] Betsky (2002:5-6)

The architecture reflects these emotions. By burrowing the chapels into the ground a deep sense of sorrow is achieved through humility in its human scale, repentance in its orientation focusing towards the crematorium and reconciliation through its finishes.

The focal point of the three chapels is towards the Ash Ceremonial Platform and the crematorium on the southern side of the Olifanspruit River. The significance of this orientation is that our mortality can be seen, but not physically reached until our death, thus allowing the mourner to repent.

A series of staircases leading from the funerary causeway link each chapel signifying the “sacred stairways” as envisaged by Baroque architects in the 18th century. The approach into each chapel is thus inspired with spiritual significance. The staircases have three distinct landings reminiscent of Rome’s Spanish Steps that ascend to the church of Santa Trinitá, each landing representing the Holy Trinity in Catholicism [20]. In this case the three staircases do not ascend to the church, but descend into the chapels. Again this is a symbolic representation of mankind’s mortality and death. The paving finish extends from the funerary causeway into the chapels, so that it becomes in effect, an open courtyard. The separation of chapel to circulation courtyard is blurred by the introduction of centre pivot doors that may be left open or closed during a funeral service, depending on the number of people attending.

Light is perhaps the most fundamental metaphor in most religious based architecture. According to Islamic scriptures “God is the light of the heavens and the earth” [21]. The play of light and shadow through the gabion walls provides a sense of ‘spiritual light’. The gabion wall is the modern version of the Christian stained glass window where light reflects through it rather than off it. Intensity in the daylight will vary through the gabion wall as the day progresses, providing contrasting light as if it were the openings in a cave. The strong opaque sections of the external stone wall contrast with the filtered light that penetrates into the space through the internal glazed wall.

The external finishes to the chapels comprise of varying textures and construction methods of the same stone type. The east facing walls are clad in smooth polished stone slabs fixed to the wall through stainless steel crimps. These walls represent the rebirth and renewal offered by the rising of the sun. In contrast the west facing walls comprise of gabion-finished walls and dry stacked stone clad walls. These rough finished walls represent the death and the closure of the day as the sun sets. Internal finishes match that of the exterior and internal walls are clad in smooth polished stone and off-shutter concrete illustrating the cold reality of death.

Footnote : [20] Humphrey C & Vitebsky (2003:76)
[121] Humphrey C & Vitebsky (2003:50)

The funerary causeway (old existing railway line)

"We cannot hold a torch to light another person's path without brightening our own." Unknown [22]

Since antiquity, sacred architecture has been designed to allow for processions. Processions thus link separate places by creating a corridor of sacredness along its pathway. Humphrey & Vitebsky define pathways as a means in which to travel between buildings and places. This pathway leads the traveller to a focal point, encircle a holy site or meander along natural lines, thus the pathway is therefore not just a means for travelling from one place to another, but an intrinsic part of the architecture. [23]

Curl (1981) adds that a true committal is 'profoundly moving' and gives an emotional response that becomes 'part of life', enriching and teaching. He concludes that there should be a direct committal to the flames which is witnessed by the bereaved, and that the committal should be done by the ceremony family, and not by the crematorium staff [24]. The funerary causeway links the chapel complex with that of the crematorium. This funerary causeway or procession path is thus symbolic of the journey of life and the bereaved family should share this journey by participating in the walk from the chapel to the crematorium building, as in the past from the church to the graveyard.

The funerary causeway follows the original railway lines with rest nodes along its length representing the journey of life with changes in direction and level, but ultimately ending up at the same point, that of death.

Footnote : [22] Grinaker LTA (2003), Internal Company Communications
[23] Humphrey C & Vitebsky (2003:134)
[24] Curl (1981:109)

The Crematorium

The crematorium represents the final stages of the emotional journey of the mourner through the funerary complex. Joy, celebration and remembrance are all emphasized in it's architectural layout and material selection.

The circular plan of the crematorium building takes symbolic gesture from the sphere as its metaphor for the eternity of life, equality and that of rebirth. The Greek philosopher Pythagoras developed the theory of the harmony of the sphere and attributed mystical significance to it [25]. The structure is light in design and construction, with its primary elements being of steel and glass. Utilitarian in construction and design, the mourners enter the crematorium building through the existing stone kiln portal and along a gabion walled passage to the main entrance of the crematorium. Alternating paths allow mourners to divert from the crematorium directly to the memorial gardens.

Current technology in solar energy does not allow for cremation utilising this form of energy, so provision has been made for the future installation of glass lenses onto the conical structure located at the centre of the crematorium building. Currently the conical structure conceals the chimney flue from the two gas cremators.

The Memorial Gardens

Some theologians have pointed out that a committal held at the crematorium cannot be logically followed by the mourners when attempting to dispose of the ashes [26]. This means for the most part the ashes are not disposed of at the crematorium grounds. Bereaved family members have the opportunity to take the ashes home and dispose of them when they are ready. Ashes can be taken to a place of significance such as the ocean or back garden.

“Thus, the entire park at Ermenonville was a landscape of illusion intended to transport the viewer into an Arcadian world. When death was encountered it appeared in a peaceful setting fraught with sweet melancholy and nostalgia” Giaradin [27].

The biggest negative aspect of crematoria and cremation is that there is no tangible act of committal, compared to that of a graveyard where the tombstone and grave acts as an everlasting remembrance of the deceased. As Dr. Thomas said, “The moment of parting is one of great psychological impact and significance” [28]. Thus the gardens of remembrance should be landscaped to create the illusion of peace and tranquility. Olive groves line the return route back to the Welcoming Centre with pause spaces for contemplation and reflection sit within landscaped exterior courtyards.

The Sora of India plant upright megaliths for the dead, the deceased are fed at this stone with wine and the blood of a sacrificial buffalo. The stone summarizes the full range of the dead persons needs [29]. This symbolic gesture is repeated in the provision of ash placement stacks where ash balls are placed in lieu of disposal within the memorial gardens. These ash placement stacks thus become the gravestone or the actual grave in the mind of the bereaved family members. A special place to come visit, remember and mourn.

Footnote : [26] Lloyd (1974:179)

[27] Etlin (1987:209)

[28] Thomas Dr (undated: 201)

[29] Humphrey C & Vitebsky (2003:147)

Conclusion

Most sacred buildings or natural spaces have a relationship with their worshipers. It is on this idea that the Crematorium Complex is built, so that a relationship is created between it and the mourners. The traditional sacred building full of direct symbolism and story telling has become lost in today's modern society, secular man is no longer influenced by imagery of heaven or hell, however the universal need for mourning and grieving still exist.

The location and spiritual intensity allowing for rites of consecration and purification make any structure or building suitable for the meeting and teachings between humanity and the divinity. The design of this Crematorium Complex allows the visitor to experience and engage the architecture no matter what their religious background if they chose to involve themselves with the building. Catherine Slessor confirms this by saying "the touch of stone, the flicker of light, the processional path, the gathering of souls – that express the human desire to commune with forces more venerable and mysterious than the cosmos itself" [30].

The architecture of death is thus the same as that of life; full of symbolism, myth and spirituality. This crematorium evokes the spirits and emotions of the mourners through subliminal symbolic representations of the emotions experienced and that of the physical architecture.

- Barrie, Thomas. 1996. Spiritual Path, Sacred Place. London. Shambhala
- Betsky, A. 2002. Landscrapers. London: Thames & Hudson Ltd
- Carlander, Harold. 1996. African Folklore. New York. Marlowe & Company
- Ching, Francis. 1979. Architecture: Form, space & Order. New yYork. Van Nostrand Keinhold
- Curl, J. 1981. The Historical Problems of Designing Crematoria. London. Pharos
- Etlin, Richard. 1984. The Architecture of Death. Massachusetts: First MIT Press
- Heathcote, Edwin & Spens, Iona. 1997. Church Builders. London. Academy Editions. pg46
- Humphrey, Caroline & Vitebsky, Piers. 2003. Sacred Architecture. London. Duncan Baird Publishers
- Humphreys, S. 1980. Mortality & Immortality. New York. Academic Press Inc.
- Kselman, Thomas. 1993. Death and the Afterlife in Modern France. New Jersey. Princeton University Press
- Lloyd, T. 1974. Liturgy & Death. London. Grove
- Molyneux, Chris. 1985. An Investigation into the Determinants Influencing the Decision Regarding the Method of Disposition of the Dead within the Greater Cape Town Area. University of Stellenbosch
- Ricoeur, Paul. 1967. The Symbolism of Evil. New York. eacon Paperback
- Slessor, Cathrine. 2003 Architectural Review. March 2003. London: MBC Architectural Press & Building Publications
- Thomas, Dr H. undated. Changing Social Attitudes. London. Pharos
- Watch Tower Bible. Revelation 19:11 & 14. 1984. New York. Watch Tower ible & Tract Society of New York Inc.
- Wilhurst. 1980. What does the Public Think. London. Pharos

www.princetonal.com/groups/iad/lessons/middle/color2.htm
www.wired4success.com/colorsymbolism.htm
www.geocities.com/athens/1044/hades.htm
www.messagenet.com/muths/bios/styx.html