

Honouring National Heroes Through Architecture: *A Case Study of Presidential Mausoleums*

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Abstract

The Presidential Mausoleum is a novel architectural typology procured by African states to honour fallen leaders. The purpose of this study is to expose the Presidential Mausoleum as a significant artefact of national importance, through revealing key considerations, design principles, ideas and concepts in its architecture, in a thematic manner based on content analysis. The study discusses implied and embodied meanings in these Mausoleums as vessels of cultural containment imbued with national symbolism. The study provides Afrocentric content and exemplars pertaining to architectural theory on poetic dwelling and its metaphoric dimension to address the dearth of such knowledge in Kenyan architectural academia. The archival research method is employed, with selected Presidential Mausoleum as the unit of analysis. The Mausoleums were purposively identified on the basis of convenience and availability of secondary data such as photographic images and seminal publications which were critically identified and reviewed. A physical visit to Jomo Kenyatta Mausoleum in Nairobi uncovered additional primary data, yielding pertinent observations whose hermeneutic explication and interpretation revealed multiple meanings. Unstructured interviews were conducted with Government officials at Kenya's National Assembly to obtain background material on Jomo Kenyatta Mausoleum and rituals that are performed therein. The findings outline commonalities, as leitmotifs, in the design of the Presidential Mausoleums and their potential inspiration by the Egyptian Pyramids, focusing on thematic aspects such as form, geometry, numerology, ornamentation and symbolism. The study recommends regular maintenance of Presidential Mausoleums to prevent their physical deterioration. The thematic approach to interpretation herein is recommended for extension to African Presidential Mausoleums that were not discussed in this study. African Governments should provide research funding and grant access to schematic and production drawings of these Mausoleums to enable researchers to provide richer holistic hermeneutic interpretation.

Keywords: Hermeneutic interpretation, Kenyan architectural academia, Presidential mausoleum.

INTRODUCTION

Honouring national heroes and tribal leaders in Africa is a practice that can be traced to Ancient Egypt, where the pyramid was the culmination of a typological series of interment building forms that evolved from the mastaba (Simpson, 1916). The pyramid's architectural largesse, grandeur, simplicity and cultural symbolism are attributes that exemplify some of the concepts and principles of an 'architecture of the dead'. The traditional vernacular architecture of African communities in the pre-colonial period also exhibited instances where the living dead and tribal ancestors were bestowed with such honour (Ralwala, 2016). In the post-colonial period, the presidential mausoleum has emerged as a novel architectural typology which has been procured

by African states and first families to honour fallen Presidents. These Presidents, who are actually national heroes, died in active duty, like Kenya's Jomo Kenyatta, or in retirement, like Tanzania's Julius Nyerere. The Presidential Mausoleums are highly significant national artefacts in the countries where they are situated. This study examines the implied and embodied meanings in these Mausoleums as vital components of the modern heritage of Africa, thereby indicating their indispensable role as tangible vessels of cultural containment through the cultural symbolism in their constitution, and the cultural practices (customs and rituals) which were conducted during their conception, inauguration and commissioning, as well as in the post-interment period.

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This paper explores the architecture of the Presidential Mausoleum, in a thematic manner, seeking to highlight the importance of this typology to national built heritage. Through performing a hermeneutic reading of the images of the mausoleums of Jomo Kenyatta, Daniel Arap Moi, Julius Nyerere, Levy Mwanawasa, Laurent-Desire Kabila, Kwame Nkrumah, Bingu Mutharika, Kamuzu Banda, Fredrick Chiluba and Mobutu Sese Seko, as cultural texts, an analysis and interpretation of the architecture of the presidential mausoleum is undertaken. Leitmotifs in the design of these mausoleums are presented, exposing key considerations, in the form of design principles, ideas and concepts, in the architecture of the Presidential Mausoleum.

The mausoleum buildings form part of the Modern Heritage of Africa, and are worthy of study because they are highly revered in the countries where they are located. In Kenya, student projects within the architectural studio have not included design of Presidential Mausoleums. Presently, Eurocentric exemplars such as the ossuary by Aldo Rossi at Modena Cemetery in Lombardy, Italy, and Asiatic monuments like the Taj Mahal in India are used in the instruction of Kenyan architecture students. The prevalent problem is the dearth of publications on the main parameters to be considered in the design conceptualization of these Mausoleums. This study exposes hitherto concealed and sedimented knowledge on selected Presidential Mausoleums in Africa, thus providing Afrocentric material that can be used in architectural pedagogy focusing on 'architecture of the dead'. The study additionally aims to address the dearth of Afrocentric content and exemplars pertaining to architectural theory on poetic dwelling and its metaphoric dimension.

The new knowledge generated will be consumed by architectural academia, practitioners, and the public at large, enriching existing understanding of the Presidential Mausoleum as a novel architectural typology. Moreover, the Mausoleums ensure cultural sustainability and their holistic presentation and interpretation is key to the comprehension of their significance. The uncovered knowledge should provide content that can form part of the nomination dossiers that may be used during deliberations on their individual consideration for inclusion / inscription on

Tentative Lists as potential UNESCO World Heritage Sites.

THEORY

Historical Lessons from the Egyptian Pyramids

The Egyptian pyramids are probably the earliest architectural artefacts in which rulers -Pharaohs, as priests who were considered to be gods in human form- were interred (Mallgrave, 2005). These pyramids were an indication and a physical manifestation of the great honour that was bestowed upon the Pharaohs by their subjects. Earthly dwellings were generally perceived as temporary and the focus of the entire populace shifted to tomb construction (Fletcher, 1905), to provide permanent dwellings that were suitable for the afterlife, as eternity. Architecturally, the pyramids were pioneering, revealing pertinent concepts, some of which are still deemed relevant in the design conceptualisation of contemporary Presidential mausoleums. The concepts are outlined in Lethaby (1912), Statham (1912), Simpson (1916), and Fletcher (1905). They include:

i) Application of geometry in plan and massing of the form: The pyramids had square bases and the triangular faces were inclined at 52° (typically $51^{\circ} - 53^{\circ}$) to the base (Fletcher, 1905; Simpson, 1916).

ii) Axial approach to the pyramid: The circulation pathway from the mortuary temples on River Nile were orthogonal to the linear South to North direction of the river.

iii) Cosmology in the form of astrology and its role in the alignment of the pyramids: Pointed obelisks lined the approach pathways, and these were used to mark the various positions of the sun in the sky—East to South to West—as well as equinoxes and solstices (Gest, 2007). Moreover, some of the pyramids were aligned with stellar constellations. This reveals that Egyptians possessed knowledge of celestial bodies and believed in their spiritual influence on terrestrial existence.

iv) The verticality of the pyramids symbolized an attempt to reach the heavens where the sun god, *Osiris*, was domiciled. The first rays of the rising sun would be incident on the tip of any pyramid, gradually spreading down its faces, and this phenomenon could be observed from far and wide; conferring mystery and reverence upon the pyramids.

v) Location of the sarcophagus: The pyramid as a tomb contained a stone box as the sarcophagus in which the mummified body was buried / interred.

vi) Charms and amulets were included to protect the interred Pharaoh and his property.

vii) Exterior and interior surface ornamentation and inscriptions: Although the Pharaohs were buried with their earthly belongings, whatever could not be provided was painted on the tombs.

viii) Monumentality, revealed through architectural largesse / grandeur at the level of form (Mallgrave, 2005). This was to signify the power and might/dominance of the Pharaoh. The 'superscale' of the pyramid indicated dehumanization as the transcendence of man, and the world of the living.

ix) Stepping of the pyramidal form by Imhotep, in some cases, which recalled the 'stairway to heaven' in the biblical dream by Joseph.

x) Harmony with surrounding landscape: The golden / brown colour of the pyramids and the rough texture of its surfaces resonated harmoniously with the extensive surrounding desert.

xi) Significance of the cardinal points (Fletcher, 1905) and overhead position of the sun: The valley of the dead Kings (Necropolis) was located to the West, while the dwellings of the living were located to the East. The West is associated with sunset and symbolizes death, while the East is linked to sunrise, symbolizing life.

xii) Inclusion of a chapel: This was a colourful room in which the soul was supposed to live forever.

xiii) A statue of the departed was positioned inside the pyramid as a substitute in case the body of the Pharaoh was destroyed.

xiv) Recognition of the fluid nature of the departed soul: Tunnels were constructed beneath the pyramids for onward communication of the soul, *Ka*, with the afterlife.

The Traditional and Contemporary African Context

In Africa, particularly sub-Saharan Africa, various cultural practices existed with regard to honouring departed leaders. In pre-colonial times, the graves of prominent ancestors would often be physically demarcated in the landscape to distinguish them from

the graves of ordinary persons (Ralwala & Barker, 2016). These sites would act as community shrines where the general populace would communicate with their living dead and ancestors (Mbiti, 1969), requesting them for atonement in times of calamities and other pestilences; and blessings in times of plenty and in war. In the post-colonial period, decolonization has occurred as a result of inter-cultural convergence and fusion, resulting in widespread acculturation. However, cultural practices in relation to honouring the dead have prevailed.

African funerals are proper ceremonies and are different from the truncated versions observed in Western nations (Lee & Vaughan, 2021). Moreover, Africans remain bonded to their dead because the social world is constituted by both living persons and the dead. In Africa, death often creates mixed emotions of fear and revulsion, and the process of death management has no shortcuts. Mourning must be elaborate and accompanied by complex rituals, otherwise the dead would transition to become vengeful ghosts rather than esteemed ancestors (Lee & Vaughan, 2021).

Ritual and Identity in African Presidential Mausoleums

The process of interment of leaders exposes the spiritual and physical orientation of a nation as vital components of its culture (Lee & Vaughan, 2021). The death of a serving or past president induces strong forces that result in physical, spiritual and social rupture. The resolution of these forces is incumbent upon the fulfillment of dual obligations: a primary transition involving the cleansing of the deceased to eliminate impurity and contagion in order to transform the individual to a state of purity and harmony that is required for a higher existential and eternal dwelling in the spirit-world (Lee & Vaughan, 2021). This is followed by a secondary re-integration of the living to a communal existence that is devoid of the departed in order to secure group-solidarity in the nation. The dual obligations can only be realized through elaborate funerary and mourning rituals, and this is the stage at which the construction of a Mausoleum building becomes relevant. The Mausoleum is often a collage composition which fuses both Christian (modern) and traditional (vernacular) imagery (Lee & Vaughan, 2021), through tangible and intangible

manifestations.

The African Presidential Mausoleums are buildings that preserve the remains of the interred presidents as well as their public memories as political leaders (Leick, 2013). These Mausoleums became popular from the 1970's onwards. They are a novel architectural typology because their forms lack classical or historical precedence, although these forms -with the exception of cases such as the Mobutu Sese Seko Mausoleum- may adopt eclectic references to classical architecture. Novelty is also evident from the fact that the African Presidential Mausoleums are 'radically' different from political mausoleums in Western and Asiatic countries in an attempt to reveal unique national architectural identity through exposition of the lives of the interred presidents (Leick, 2013).

Regarding form development and aesthetic formulation, design choices in the conceptualization of these Mausoleums oscillates between the extremities of a temple or chapel and a tomb (Leick, 2013). More choices involve the period of construction of the Mausoleum building, namely during the lifetime of an existing president or in the period after the death of the president, irrespective of whether the president is in active duty or retired. In fact,

"...many feature lions as symbols of African pride and strength and almost all incorporate one-star emblems. References to indigenous architectural forms or to folk customs are also popular..." (Leick, 2013).

RESEARCH METHODS

The qualitative study adopted an archival research method. The unit of analysis was the individual Presidential Mausoleum. These units were purposively identified for study on the basis of convenience and availability of basic secondary data such as photographic images and foregoing descriptions by other studies in this research field. An archival research design strategy was employed in the form of a desk study in which secondary data from seminal texts on the topic at hand were critically identified and reviewed. Photographic images of the Presidential Mausoleums were selected and presented. Content analysis of the gathered data was undertaken from a thematic perspective. The themes

were derived from, and aligned with the objectives of the study. Photographic images of these Mausoleums were treated as cultural texts that could be read and interpreted in a hermeneutic manner. A physical visit by the author to the Jomo Kenyatta Mausoleum, at Parliament Buildings in Nairobi, was undertaken to uncover additional primary data. This visit yielded pertinent observations whose hermeneutic explication and interpretation revealed the multiple meanings in this architectural artefact of national significance. Impromptu unstructured and casual interview conversations were conducted by the author, with Mr. Mainah Wanjiku, an official from the Chambers of the Clerk of the National Assembly, and Mr. Andrew Shangirai, the Sergeant-at-Arms at Parliament Buildings in Nairobi. The conversations provided material on the background of the Mausoleum and the routine rituals which are performed during visits by foreign dignitaries and commemoration of the death of President Jomo Kenyatta. Comparative analogy was limited to presentation of commonalities as leitmotifs in the design of the Presidential Mausoleums and their potential inspiration by the Egyptian Pyramids.

The study adopted a thematic approach in the presentation, analysis, critique and interpretation of the Presidential Mausoleum as an architectural artefact. The themes are derived from, and aligned with the objectives of the study. They are: background and context (location and when built); a description of form (visual appearance, inspiration and materiality); design conceptualisation (ideas, principles and concepts); scale (anthropometric or humanised, dehumanised and monumental); numerology; geometry (including sacred or secular geometry); poetic constitution (symbolism in the form of imagery, metaphor or allegory); and, surface ornamentation (inscription, colour and decoration).

RESULTS

Jomo Kenyatta Mausoleum

Background and context: The Mausoleum building (Figure 1) was designed by an architect of Jewish descent, George Vamos, in 1978, after the death of Jomo Kenyatta, which occurred while he was on active duty on 22nd August 1978. Kenyatta -Kenya's first president- ruled the country since its independence in 1963. The Mausoleum is situated on Parliament

grounds, which also hosts the National Assembly and the Senate. The changeover ceremony that signified the shift from colonial rule to self-rule by indigenous Kenyans took place at Parliament grounds in 1963. Moreover, Jomo Kenyatta had an office at Parliament Buildings during his reign. This background gave legitimacy to the use of the present site for interment of Mzee Kenyatta. The entire ground is secured using concrete columns with intermediate metal rod fencing that permits direct visual linkage into the site, and temporary sheet metal fencing has been positioned immediately beyond the fence along Uhuru Highway due to ongoing road construction. Razor wire has been fixed atop the fence to prevent intruders from climbing over. The Mausoleum, which is a national monument, is bounded by Parliament Road, City Hall Way and Uhuru Highway, although its single access is only off Parliament Road.

The Parliament Road Pavilion that was a landscape feature on the pedestrian walkway to the left of the Mausoleum entrance towards City Hall Way has largely been demolished, and it is not yet clear whether this is permanent or merely for upgrading purposes. Other key architectural artefacts in the precinct include the Intercontinental Hotel along City Hall Way, the Kenyatta International Convention Centre and the Sheria House, which are directly opposite Parliament

Buildings and Uhuru Park along Uhuru Highway. The mausoleum is inaccessible to Kenyan citizens, whatever their societal rank or distinction. Visits to this artefact can only be undertaken with prior approval from the Clerk of the National Assembly.

Performance of rituals: Recently, an entry plaza was created at the entrance to the Mausoleum, immediately outside its first gate, which is flanked by two guard houses in which two Kenya Defence Forces (KDF) soldiers in ceremonial attire are permanently stationed. This plaza is the place of performance, where a guard of honour is mounted for visiting presidents and foreign dignitaries of comparable stature, and on Mzee Kenyatta's death anniversary. During the anniversary, only the reigning president, and Jomo Kenyatta's wife Mama Ngina Kenyatta, have direct access beyond the processional approach, to lay wreaths and pray beside the sarcophagus. However, in the year 2021, the anniversary was commemorated without much fanfare. The president (His Excellency Uhuru Kenyatta, Jomo Kenyatta's son) drove himself to the Mausoleum and no live broadcasts were aired (M. Wanjiku, personal communication, September 8, 2021), perhaps due to the COVID-19 pandemic. On the occasion of international visits, deemed to be state functions, interfaith prayers are held within the circular enclosure and the visitors surround the



FIGURE 1
Jomo Kenyatta Mausoleum
Source: Ngathuri 2018

sarcophagus during the ceremonies. Three religious persons preside over these prayers: a chaplain from the Kenya Defence Forces (KDF), an Imam from the KDF and a Hindu priest (A. Shangirai, personal communication, September 8, 2021). This indicates that although Jomo Kenyatta was a Roman Catholic, he was amenable to interacting spiritually with other faiths, perhaps in pursuit of enduring national unity.

Description of form (visual appearance, inspiration and materiality): The entrance consists of a miniature linear avenue, as an axial and ceremonial approach which is lined symmetrically with eleven flagpoles on either side, with each pole proudly flying the Kenyan national flag with its distinct colours of black, red, green and white, onto which the national shield is superimposed. Of the eleven pairs of flagpoles, ten are outside the Mausoleum enclosure. Only the last pair are inside the enclosure. There are modest palm trees on either side of the approach, five to the left and two to right. The apparent breakdown in the strong bilateral symmetry as an anchoring design concept, can only be explained by the fact that three of the five original palm trees on the right wilted due to the harsh conditions of the site landscape. The axis terminates at the Mausoleum itself which is enclosed within a circular space bounded by a thick masonry wall, with a projecting concrete beam as coping. The coping is painted cream white and is also draped in the Kenyan flag. Previously, there were three side water fountains to the left of the ceremonial approach. However, these fountains were demolished when the Parliament Buildings were expanded to accommodate the Senate in 2010.

The entrance to the Mausoleum itself is via a second black gate that is approximately 1.2 metres high and is supported by two tall columns onto which the sculptures of two grand lions are mounted to symbolically guard the Mausoleum perpetually. The two lion sculptures also indicate to everyone the bravery of Kenya's first president who fought for independence and was detained for several years in this quest by the British Colonial Government. The coat of arms is fixed at the capital of each of the two tall columns, and this indicates the seal of the Kenyan state on the Mausoleum. The gate has five tiny spikes on the left, and six on the right, giving a total of 11 spikes.

The relatively huge sarcophagus (**Figure 2**) is a permanently sealed tomb that is prominently mounted on a stepped platform. It is made out of concrete and is finished with grey granite tiles that create a ribbed or corrugated exterior finish that is reminiscent of ripples. Clearly, the objective was to build a structure that required minimal maintenance. The sarcophagus is derived from a rectangular shape with eight ribs on the long side and five ribs on the short side. Thus, the sarcophagus has a total of 26 vertical ribs. An inverted decapitated concrete pyramid finished with granite sits on the sarcophagus as a crown. It has prominent and sloping trapezoidal faces. A wooden epitaph on which the Psalm of David -*the Lord is my shepherd, I shall not want* (Psalms 23)- has been inscribed is crudely placed on the Mausoleum floor, leaning onto the sarcophagus. The entire composition is pavilion like (Leick, 2013), with a simple quadripartite pitched roof that is supported on four double black concrete beams which reveal four gable ends that intersect at a point, creating four valleys, and each end has a triangular window with a central steel mullion that divides it into two parts. Directly above the sarcophagus is a black lighting fixture, with six bulbs, each enclosed in a hexagonal prism. An automatic switch operates the fixture, depending on the levels of natural illumination. This ensures that the sarcophagus is always in light. The floor of the Mausoleum is raised by a single step, of approximately 300mm rise. The sarcophagus is further raised on another platform, probably 200mm high. These measurements are mere estimates as accurate dimensioning was not permitted by the Officers of the Clerk of the National Assembly who accompanied the author during the physical visit.

The Mausoleum roof seems to float as it is supported by four square columns at the corners of the square plan. When one stands beside the sarcophagus and looks upwards, four white inclined beams emanating from the corners of the double black ring beam rise upward and meet on a relatively small cuboid shape. The cuboid is rotated at 45° to the sarcophagus below. The dimensions of this cuboid beneath the roof apex could not immediately be determined, but it remains curious as to whether the actual dimensions were based on sacred geometry (Gest, 2007). The inclined beams are separated by timber boarding. The Mausoleum is open and extremely porous as it has no walls. Between the square platform and the circular masonry wall are shrubs that border the platform and

a lawn that acts as a soft landscape. The Mausoleum structure is flanked by fig trees, immediately after the second entrance and on its sides, with partly drying leaves that indicate the prevalent dry season in Nairobi, at the time which the visit was conducted. The circular perimeter wall is made of roughly finished natural stone with a rusticated appearance. The wall has a dual character: it is vertical on the inside and slanting on the outside. The third course of the external wall has equally spaced grafted and vertical machine cut stones. A narrow circular tiled pavement links the ground beyond the Mausoleum and the slanting solid circular wall. This wall cuts off any possible link between the Mausoleum and the extensive lawn outside it, revealing the introverted nature of the Mausoleum, which confers upon it an aura of mystery that induces curiosity upon the many Kenyans who pass by the perimeter of the site on a daily basis.

Poetic constitution: symbolism in the Jomo Kenyatta Mausoleum: Mzee Jomo Kenyatta belonged to the prosperous and populous Kikuyu community. The non-recognition of Kikuyu culture in this Mausoleum, through absence of cultural insignia and artefacts such as the fly whisk, Kikuyu attire, and attributes to Mt. Kenya, communicates to the Kenyan citizens that President Kenyatta transcended association with

tribe as he was a leader of the entire nation. Kenyatta's personal paraphernalia is also absent, a further indication that a key design intention was to avoid the personalization of the mausoleum as it is a public artefact. The absence of Jomo Kenyatta's statue is also noticeable. However, this can be explained by the fact that a grand statue of Jomo Kenyatta is only a few metres away at the plaza of the Kenyatta International Convention Centre (KICC). This Mausoleum is actually a tomb and not a chapel because no cross is positioned anywhere within it, even at its apex. The only allusion to Kenyatta's Christian faith is the wooden epitaph onto which the Psalm of David was inscribed, a further indication of the intention to associate the late Kenyatta with the main religious faiths in the country, posthumously.

Continuity of life is depicted by the palms and figs on site whose leaves sway in the wind and the ruffling sound they create as a result symbolises the free spirit of the president, whose fluid nature enables it to wander, to go and come at will. This is made possible by the porous design of the mausoleum which is free of walls, has an apparently floating roof, and the 'left over' space between the mausoleum and circular wall which is open to sky. The introverted design, coupled with the highly limited access was intended to ensure that Mzee Kenyatta would remain undisturbed, and



FIGURE 2

Jomo Kenyatta's Sarcophagus

Source: Muchucha 2013

this would then perhaps enable him to ‘rest in peace’.

Geometry (sacred or secular): In plan, the Mausoleum is essentially composed of a circle (the walled enclosure) onto which a narrow and long rectangle (the ceremonial approach) has been attached. Inside the circle, a square (the Mausoleum) is discernible. Is this geometry attributable to the Great Architect of the Universe? (Gest, 2007). The use of geometry is also evident in the square plan of the Mausoleum, the four square columns at the vertices of this plan, the trapezoidal faces of the crown atop the sarcophagus, and the rectangular shape of the sarcophagus which could not be a perfect shape (the square) as it had to accommodate the physical dimensions of the embalmed remains of Jomo Kenyatta. The windows at roof level are also triangular in shape but these ensure that natural daylight is admitted into the Mausoleum to complement the artificial hexagonal prism lighting system. This ensures that literal perpetual light always shines on the sarcophagus. The geometrical order supports the bilateral symmetry of the Mausoleum as the various geometric shapes that are used have inherent or implied bilateral symmetry, and thus connote purity of form.

Scale: By African standards, the Jomo Kenyatta Mausoleum building is mundane and modest, with an anthropocentric scale of construction. The mundane nature of the mausoleum indicates that even though Jomo Kenyatta’s persona was domineering, beneath the statesman’s demeanor was an ordinary Kenyan, who wished to be remembered that way rather than as the *Mutongoria* (leader).

Numerology: This was also taken into account in the conceptualisation of the mausoleum. There are 11 pairs of flags and flag poles, 11 spikes on the gates, 2 lions symbolically on guard, 2 tall columns, 2 coats of arms, 4 roof gables and 4 roof valleys, 4 triangular windows at roof level, and 1 sarcophagus. These numbers are rich in meanings and associations (Gest, 2007). Number one implies unity with the deity, in this case God Almighty. Number two recalls the duality of heaven and earth which are complementary opposites just like life and death. Number three, represented by the triangular windows and the implied triangular

shape of the roof’s gable ends is associated with the three chief positions of the sun in the sky, namely the summer solstice, the equinox and the winter solstice (Gest, 2007). Number four recalls the four cardinal points: north, east, south and west. It also recalls the four elements: earth, air (wind), water and fire (Gest, 2007). Number eleven is ambiguous because on the one hand it is associated with spiritual awakening and also disorder, chaos and eventual judgement. It therefore may be taken to represent the tumultuous journey of the soul of the departed in its quest to achieve eternal rest.

Surface ornamentation (inscriptions, colour or decoration): Colour was used sparingly and intentionally in the design of this mausoleum. The two entry gates to the ceremonial approach and the Mausoleum itself are painted black, the sarcophagus and its inverted pyramidal crown are grey (a combination of black and white with black in greater amount), the slanting white beams that transfer the load of the roof to the black double ring beam, the small white cuboid beneath the roof apex, and the creamy white circular ring beam atop the rusticated grey-brown natural stone wall that encloses the mausoleum. Brown and grey denote the colour of the earth’s surface soil and religiously indicate ‘dust returning to dust’; Black signifies death, while white signifies eternal glory, an existence associated with the afterlife, which indicates that the spirit of Jomo Kenyatta lives on. The clear silvery colour of water, which was present when the now non-existent fountains were in operation implied continuity of life after physical death.

Daniel Arap Moi Mausoleum

Background and context: Daniel Moi was the second president of the Republic of Kenya. He is interred at his farm and residence in Kabarak, Nakuru County, Kenya. Moi died on 4th February 2020. His Mausoleum was unveiled during the first anniversary of his death.

Performance of rituals: A recent ritual, in the form of a church service, was performed to commemorate the second anniversary of President Moi’s death.

Description of form (visual appearance, inspiration and materiality): The Mausoleum Building (Figure 3) has the appearance of a chapel rather than a tomb. The cross is prominently displayed on the triangular pediment on the gable end of the Mausoleum, reminding everyone of Moi's strong Christian faith. The Mausoleum roof is relatively large and extends beyond the eight columns which support it, and this gives it a feeling of lightness and an apparently 'floating' appearance. Moi's Mausoleum has a marble floor finish. The preference for a portrait rather than a statue of Moi is consistent with Moi's desire for humility rather than grandeur in death. The portrait is simply mounted on the floor of the Mausoleum, immediately beyond and in between his grave and his wife's.

Poetic constitution: President Moi is buried next to his wife Lena, indicating that as they were together in life, so are they together in death and eternity. It is not clear whether it was Moi's wish to share the Mausoleum with his estranged wife, or the decision of his children, after Moi's death. This is the first case of a Presidential Mausoleum which exhibits 'shared glory', evident in the equal sizes of the two graves of the Moi couple. The apparently floating roof, the porosity and openness of the Mausoleum indicate that the spirits

of Moi and his wife Lena are free in death, to go and return at will. The eight Tuscan columns reveal classical inspiration in the design of the Mausoleum, and these columns are a symbol of domineering masculinity, which befits Kenya's second President. Moi's Mausoleum is devoid of all the insignia, cultural symbols and trappings of the state, an indication that the president passed away in a state of retirement. He was no longer in active duty.

Geometry (sacred or secular): The Mausoleum has a rectangular plan. The two graves are rectangular. The inclined planes of the roof are also rectangular. Triangular pediments dominate the gable ends of the roof. Each of the eight columns has a circular cross section whose area diminishes with height.

Scale: The mundane anthropocentric scale of the Mausoleum reveals Moi's choice to identify with an ordinary life in retirement, rather than the extravagant lifestyle associated with state largesse.

Numerology: This is evident in Moi's Mausoleum. Eight Tuscan columns in all; four columns on each of the front and rear facades; two columns on the



FIGURE 3

Daniel Arap Moi Mausoleum

Source: Goessling 2021; Makao Bora 2021

side facades; three steps with four risers all-round the Mausoleum. The interpretation of the Numerology is the same as for the Jomo Kenyatta Mausoleum.

Surface ornamentation (inscriptions, colour or decoration): The large expanse of white colour indicates the choice by Moi's family to celebrate life and its continuity in a higher existential state rather than death as a termination of life. The concrete columns are painted white. On the front façade, the interior of the pediment is painted grey to frame the black cross. The white colour dominates the black colour in this Mausoleum. The symbolism is direct and literal. The graves are black, a direct representation of death. Moi's grave is prominently inscribed with his name, a prominent Christian Cross, and biblical scripture (a verse from Galatians 2: 20) (Mwangi, 2021). The shared glory is further evident in the fusion of life and death because each of the eight columns in the Mausoleum is inscribed with a name of one of Moi's children, and seven out of the eight children are still alive at present.

Julius Nyerere Mausoleum

Background and context: The Mausoleum (Figure 4) is located in President Nyerere's family estate in Butiama, Tanzania, in close proximity to Nyerere Museum. Initially, the president was buried next to his parents in a grave that was open to sky. Later, directly above Nyerere's grave, his Mausoleum was built (Nad, 2015). Inside the Museum are personal documents, items, pictures and numerous gifts, such as watches, which Nyerere received during his presidency (Nad, 2015). However, Nyerere's portrait is prominently displayed above the Museum entrance, probably as a reminder that although he is physically gone, his spirit lives on.

Performance of rituals: These are limited to annual rituals which are performed to commemorate his death.

Description of form (visual appearance, inspiration and materiality): The design approach in Nyerere's Mausoleum was to separate the place of his interment from the Museum that was built in his honour,



FIGURE 4
Julius Nyerere Mausoleum
Source: African Spice Safaris 2021

although both buildings are on the same location (village) and in close proximity (Nad, 2015). Nyerere's Museum is a National Museum that is managed by the Ministry of National Resources and Tourism. The quest for perfection is evident in the bilateral symmetry of the Mausoleum building and simplicity in its design. The stepped entry and recessed door are a welcoming and an inviting gesture to pilgrims to come and commune with the spirit of the late Nyerere. The themes of rusticated textures, mundane structures and inspiration sourced directly from domestic architecture are evident.

Poetic constitution: The late Nyerere was buried facing East, indicating his cultural reverence for celestial bodies, particularly the sun.

Geometry (sacred or secular): The Mausoleum has a rectangular footprint that is typical of domestic architecture. Each of the two steel casement windows on the main façade are rectangular and symmetrical and are sub-divided into rectangles of varying sizes.

Scale: The single storeyed Mausoleum Building is a mundane, rusticated, lowly, and relatively cheap structure with an anthropocentric scale befitting of the humble down to earth character of the president. Consistent with the desire for lack of grandeur, a statue is absent at both the Mausoleum and the Museum.

Numerology: Number 1 is evident in the single Mausoleum Building and the single grave of President Nyerere therein. Number 2 is revealed in the two large windows of the main façade; Number 3 in the tripartite subdivision of the columnar glazing on the windows; and Number 6 in the total number of subdivisions of glazing on each window. The numerology has the same interpretation as that of Jomo Kenyatta Mausoleum.

Surface ornamentation (inscriptions, colour or decoration): The inscription “Mwl. J.K. Nyerere, Baba wa Taifa” (Nad, 2015), is permanently etched above the entry. The inscription reveals to everyone that Nyerere was first a teacher and then the father of the nation. The grey and brown colours of the Mausoleum Building are earthen, befitting a ‘son of the soil’.

Mobutu Sese Seko Mausoleum

Background and context: Mobutu Sese Seko was the president of the Democratic Republic of Congo from 1965 to 1971, and later Zaire from 1971 to 1997. He died on 7th September 1997, in exile, in Morocco. He is interred in a Mausoleum located in the Christian Cemetery at Rabat-Sale-Zemmour-Zaer in Morocco.

Performance of rituals: The rituals are limited to family pilgrimage devoid of state fanfare as the President died as a pariah.

Description of form (visual appearance, inspiration and materiality): The Mausoleum (Figure 5) lacks the largesse that Mobutu was associated with during his presidency. Mobutu’s Mausoleum was inspired by classical architecture and exhibits a universal appeal (Mobutu was a world renowned prominent African president). The front façade exhibits a gable roof which is a triangular pediment onto which a smooth perfect circle on an organic wavy rough line has been inscribed as a symbol. The Mausoleum door (entrance) is framed by four Tuscan Columns, two on each side. Each column has its own base. Each pair of columns is mounted on a low pedestal.

Poetic constitution: The Mausoleum is a chapel rather than a tomb, perhaps an indication of a reconciliatory rather than an adversarial approach to life that was adopted by Mobutu in sickness, prior to his death. A permanent cross is displayed above the roof, a confirmation of the Christian faith that was professed by Mobutu in his lifetime. The circular and wavy line symbol on the pediment has a dual nature and perhaps represents the comforts that were available to Mobutu during his presidency amidst his tumultuous reign that was associated with violence and death. Two vertical spires on the roof, together with the cross, recall the vertical spires of Gothic cathedrals. The spires are probably an attempt to spiritually link with the heavenly realm.



FIGURE 5

Mobutu Sese Seko Mausoleum

Source: AFPTV 2017

Geometry (sacred or secular): The building form is basically a triangular prism roof which rests on a cuboid superstructure. The building has a rectangular footprint, triangular pediments on the gable ends and inclined rectangular planes on the roof.

Scale: The Mausoleum is an anthropocentric single storeyed building which is antithetical to the grand opulent palaces that Mobutu inhabited when alive.

Numerology: Number 1 is evident in the single Mausoleum Building, the single grave and the single cross atop the roof. There are 2 vertical spires, 2 columns on each side of the entrance and 4 columns in total. The numerology has the same interpretation as that of Jomo Kenyatta Mausoleum.

Surface ornamentation (inscriptions, colour or decoration): The Mausoleum has black and white marble exterior finish and the ground has a black

marble finish. Black and white symbolize the conjoint duality of death and life respectively. The door is inscribed with Mobutu’s initials- MSS. Pilgrims have to acquire clearance, then go through the threshold before securing audience with the late President, even in death.

Laurent-Desire Kabila Mausoleum

Background and context: Laurent Kabila was the president of the Democratic Republic of Congo (DRC). President Laurent Kabila died on 16th January 2001, a victim of political assassination. His Mausoleum (Figure 6) has been extensively researched and analysed in Leick (2013), and it is located in Kinshasa, (DRC).

Performance of rituals: These were limited to family pilgrimage and annual commemorations of Kabila’s death, particularly when his son was the president of DRC.



FIGURE 6
Laurent Kabila Mausoleum
Source: JKUAT third year class presentations 2021

Description of form (visual appearance, inspiration and materiality): The Mausoleum is a pentagonal reinforced concrete structure with a shell roof, and is raised on a stepped platform. Guard lions on pedestals, a golden pentagonal star that is placed on the roof facing the entrance and flag poles flying the DRC national flags are prominently in view. The Mausoleum is fronted by the prominent, 25-foot-tall, 'larger than life' statue of President Kabila, with his demeanour indicating his domineering persona and overbearing approach to leadership. The grey roof is decorated with huge white artificial palm leaves whose stalks partly support the roof and are held by short concrete columns moulded in the form of President Kabila's hands. At the centre of President Kabila's Mausoleum is a transparent sarcophagus (Figure 7) in the form of a miniature house.

Poetic constitution: The five hands represent the five countries which assisted President Kabila in his ascendancy to power, namely: Uganda, Namibia, Zimbabwe, Angola and Rwanda. The choice of a house shape indicates that Kabila's interred body and spirit continue to dwell in this new home. The transparent sarcophagus shows that the president has nothing to hide in death unlike during his contentious reign.

Geometry (sacred or secular): The Mausoleum roof is a distorted truncated cone. The sarcophagus is

contained in a 'house' consisting of a triangular prism atop a rectangular prism (cuboid). The President's statue is anchored on a distorted cuboid pedestal with trapezoidal faces positioned on a stepped triangular platform.

Scale: The 25-foot statue of President Kabila is monumental, domineering and dehumanizing. The Mausoleum Building is quasi-monumental, with an anthropocentric datum on the exterior, a large roof and a huge dominating interior.

Numerology: Number 1 is evident in the President's statue, the single Mausoleum Building, the golden star on the roof and the sarcophagus. Number 2 is represented by the two guard lions. Number 5 is visible on the five palm leaves on the roof and the five pointed golden star. Number 5 occurs naturally on many flower petals such as the blackberry bush and on the pentagram (Gest, 2007). In ecclesiastical architecture, Number 5 symbolises the five wounds of Christ that were attained during crucifixion on the head, hands and feet (Gest, 2007). The rest of the numerology has the same interpretation as that of Jomo Kenyatta Mausoleum.

Surface ornamentation (inscriptions, colour or decoration): Consistent with other presidential



FIGURE 7

Laurent Kabila's Sarcophagus

Source: JKUAT third year class presentations 2021

mausoleums in Africa, the preference for grey, white and black colours, and their attendant symbolisms is evident. The blue colour of the frames in the sarcophagus are consistent with the blue flag that drapes President Kibila's coffin, an indication that he continues to lie in state. The low grey marble walls that tightly frame the sarcophagus were probably an attempt to force physical distance between the pilgrims and the sarcophagus itself, to ensure that the peace of the president is not disturbed. The Mausoleum roof is supported by black internal concrete columns at its centre, and white inclined and horizontal beams. These colours depict the death-life binary opposition or dialectic, as duality.

Kwame Nkrumah Mausoleum

Background and context: President Nkrumah's Mausoleum has been analysed extensively in Leick (2013). President Kwame Nkrumah was originally interred at his birth place in Nkroful, Ghana. During the reign of President Jerry Rawlings, Nkrumah was re-interred once again at the 'purpose-built' Mausoleum located in the Kwame Nkrumah Memorial Park in Accra, Ghana in 1994.

Performance of rituals: Rituals of annual commemoration of death and pilgrimage by citizens are routinely conducted at the site.

Description of form (visual appearance, inspiration and materiality): The Mausoleum building (**Figure 8**) is sculptural, with an arched passageway to the right. The slanting faces of the Mausoleum recall the buttressed temples of the Sumerians and Assyrians in the Ancient Near East period. The dynamic statue of President Nkrumah is mounted on a black pedestal in the foreground. The solid nature of the base of the Mausoleum contrasts with the porous nature of the upper part of the structure. Perfection is achieved through an organic form that tapers upward, repetition, numerology and bilateral symmetry. The short fence around the tomb reveals the closest distance of approach by pilgrims who visit the grave because the peace of the resting president cannot be compromised.

Poetic constitution: The arched passageway is both inviting and mysterious, perhaps representing transition to a world beyond, and a journey filled with uncertainty and discovery. The majestic gait of the president is a clear indication of Nkrumah's triumph over death. The continuously running fountains and surrounding pool of water confers life upon the Mausoleum Building, even though the lifeless body of Kwame Nkrumah is interred therein. This duality expresses the irreconcilable permanence of the death of Nkrumah's physical body and its static nature, as well as the free spirit of Nkrumah which in its higher existential state is able to come and go at will.

Geometry (sacred or secular): President Nkrumah's tomb is a grave (**Figure 9**) that vertically stacks two truncated pyramids: the smaller one sits atop the larger, and is clad with brown granite, while the larger one is marble faced. The prominent trapezoidal faces of the truncated pyramids are evident, indicating the geometrical order within the Mausoleum. These trapezoids were also observed on President Jomo Kenyatta's sarcophagus. The trapezoids are also evident on the pedestal supporting Nkrumah's statue.

Scale: The Mausoleum dominates its surrounding as a tall structure in a relatively plain setting. The Mausoleum is a monument, and using the arched walkway as a scaling element, its grandiose height can be appreciated.

Numerology: The Mausoleum has 1 tomb, 1 monument and 1 statue. 4 trapezoidal faces are observed on each of the grey and brown solid encasing on the tomb. The interpretation of numerology is similar to that of Jomo Kenyatta Mausoleum.

Surface ornamentation (inscriptions, colour or decoration): The duality of life and death is further captured by the grey marble exterior finish of the Mausoleum. Life is forever entangled with death, as white is added onto black to make grey. No inscriptions are visible on the Mausoleum Building and on the President's statue.



FIGURE 8

Kwame Nkrumah's Mausoleum

Source: Travelwaka 2021



FIGURE 9

Kwame Nkrumah's grave inside the Mausoleum

Source: Travelwaka 2021

Kamuzu Banda Mausoleum

Background and context: President Kamuzu Banda died on November 25th, 1997. Banda ruled Malawi from 1961 to 1994. The Mausoleum is located in Lilongwe, the capital city of Malawi. The Mausoleum Building was unveiled on May 14th 2006 (maravipost.

com, 2021). The construction of the Mausoleum is, however, not yet complete. A perimeter fence, a library (to contain books about the life of Kamuzu Banda) and Banda's personal belongings are yet to be constructed. It has been alleged that President Banda and his successors in Malawi appropriated culture to legitimize their reign and validate their power through rallying popular support (Chirambo, 2009). This is the background through which the Malawi Mausoleums should be 'read'. It has also been alleged that Malawians who were persecuted by President Banda contemptuously dismissed the Mausoleum as a monument that merely honours a "blood thirsty" tyrant (Chirambo in Kalusa & Chanda, 2021).

Performance of rituals: Pilgrimages by family members and annual commemoration of the death anniversary are routinely performed.

Description of form (visual appearance, inspiration and materiality): The Mausoleum is both a tomb and a chapel. The building portrays a strongly defined

axial entry approach which is both horizontal and inclined via the steps leading to the platform. Two flag poles flying Malawian national flags are positioned symmetrically, on each side of the pedestrian pathway, at the start of the axial approach. There have been claims that Banda's Mausoleum (**Figure 10**) fused the architectural principles of an Asian Mausoleum and that of a Classical Mausoleum. Asian Mausoleums typically exhibit a large pagoda-like roof, and are elevated on large heavy platforms. They emphasise surface decoration and bi-lateral symmetry. On the other hand, Classical (Western) Mausoleums are often symmetrical and their elements are in fixed ratios and proportions (phi and the golden ratio). They typically contain statues of the departed, as sculptures. Their surfaces often reveal minimal ornamentation (decorations). Banda's Mausoleum utilizes both marble and granite as finishes. The Mausoleum is based on a square plan. At the vertices of the square are four large columns. A portrait of a relatively youthful President Banda is mounted to the rear of, and above his tomb (**Figure 11**). Another portrait of the president is positioned at the front face of a miniature barrel vault roof that is reduced to an

elongated arch at the entrance.

Poetic constitution: The Mausoleum is highly porous and open and this permits the free and fluid movement of Banda's spirit.

Geometry (sacred or secular): The grey roof of the Mausoleum is a truncated pyramid with four slanting trapezoidal faces. The cross atop the Mausoleum Building rests on a chamfered hemisphere that is placed on a hollow cuboid. The cuboid which protrudes above the centre of the truncated pyramid comprises of eight columns on its perimeter, but gives the appearance of three columns on each of its sides, suggesting the significance of geometry and numerology in the design of Banda's Mausoleum.

Scale: The Mausoleum is anthropocentric in scale, both internally and externally evidenced by the President's epitaph, tomb and portrait as well as the open to sky area that surrounds the covered part of the building.



FIGURE 10

Kamuzu Banda Mausoleum

Source: JKUAT third year class presentations 2021



FIGURE 11
Banda's epitaph and portrait
Source: JKUAT third year class presentations 2021

Numerology: The four tall grey circular columns at the edges of the hollow cuboid have their capitals painted white and have six shorter white columns on each of the four sides of the Mausoleum. Once again, four represents the cardinal points and the elements: earth, wind, water and fire. Number six is greatly revered because God created the earth in a period of six days (Gest, 2007).

Surface ornamentation (inscriptions, colour or decoration): Each of the four columns on the square base is inscribed with one of the four virtues that was dear to President Banda. They are: loyalty, obedience, unity and discipline, and they serve to remind Malawians that the virtues must be upheld even in his physical absence. Banda's tomb/grave (Figure 12) is stepped. Three marble clad concrete treads and risers are evident and the white column to the rear has a ribbed shaft. Both the base and capital of the column are grey. However, it is an adapted column as its base and slenderness ratio indicate that it is not a Doric column. Only two colours are employed in the entire Mausoleum: grey (a shade of black) and white, denoting the dual co-existence of life and death.



FIGURE 12
Banda's tomb/grave
Source: JKUAT third year class presentations 2021

Fredrick Chiluba Mausoleum

Background and context: President Chiluba ruled Zambia from 1991 to 2002. He died on 18th June 2011. Chiluba Mausoleum is located at the Embassy Park in Lusaka near Government Office buildings.

Performance of rituals: These are limited to family pilgrimages and annual death anniversary commemorations.

Description of form (visual appearance, inspiration and materiality): The design of President Chiluba's Mausoleum sought to express the President's legacy, religious beliefs and sartorial habits (Kalusa & Chanda, 2021). The Mausoleum Building (Figure 13) is both a tomb and a chapel. The exterior has ten buttressing columns in the form of inclined planes and these are only symbolic as reinforced concrete is a strong material that would only require buttressing in exceptional cases. For continuity, the tapering columns are 'hollowed out' near the point of contact with the ground to avoid the creation of compartmentalized bays, breaking the visual continuity at ground level. The sides of the Mausoleum are framed by trees, creating a balance between living and inanimate objects. Though the Mausoleum has an almost equal balance of fenestration/glazing and blank surfaces, it still appears to be introverted and this enables



FIGURE 13

Chiluba's Mausoleum

Source: JKUAT third year class presentations 2021

pilgrims to concentrate and focus on the purpose of their visits, without external distractions. The arched low-level windows on the sides of the Mausoleum are necessary in order to improve the interior daylighting of the Mausoleum.

Poetic constitution: The Mausoleum is not elevated, apart from a slight plinth. The building is practically in contact with the ground, indicating that President Chiluba was 'hands on' and down to earth, aware of what was happening on the 'ground' - the reality in the lives of ordinary Zambians. The circular fascia of the building is not completely round but has a modified edge, showing that President Chiluba was not a perfect human being but had his own failings and shortcomings. A crucifix has been positioned above the hexagonal prism form, in solidarity with Chiluba's proclamation that Zambia was a Christian nation in 1991 (Kalusa & Chanda, 2021). Another artificially illuminated crucifix is fixed internally. The three bays of glazing at the entrance are approximately equal in area recalling the equal co-existence of the Christian God in the form of the Holy Trinity (Father, Son and Holy Spirit). The hexagonal prism (house) recalls Chiluba's "Presidential Housing Initiative" that sought to improve the lives of Zambia's urban dwellers. The Mausoleum Building is buttressed by ten strong black columns which denote the ten years of Chiluba's

reign (Kalusa & Chanda, 2021). The red pavement at the entry takes the shape of a neck tie and recalls the expensive 'royal' dressing that was typically adorned by Chiluba (Kalusa & Chanda, 2021).

Geometry (sacred or secular): The Mausoleum form is derived from a distorted circle and a polygonal (hexagonal) 'house' above the distorted circular fascia.

Scale: Although the entrance to the Mausoleum is clearly indicated, it is mundanely pronounced and its articulation is downplayed, a further indication of President Chiluba's humility. The Mausoleum has a vast hard surface at the entrance but the entry steps are downplayed and the balustrades are ordinary, lacking in grandeur.

Numerology: Number 1 is evident in 1 Mausoleum Building, 1 tomb, 2 crucifixes (one internal and one external). The hexagonal prism has 6 vertical faces. 3 bays of glazing are visible at the entry. There are 10 buttressing columns. Like number 1, 10 also represents the deity (Gest, 2007). The numerological interpretation is similar to that of Jomo Kenyatta Mausoleum.

Surface ornamentation (inscriptions, colour or decoration): The Mausoleum is a creamy white container buttressed with ten black columns. It has 'shiny silvery' balustrades at the entrance. The building is devoid of surface ornamentations and inscriptions.

Bingu Mutharika Mausoleum

Background and context: President Bingu wa Mutharika was an economist and a devout Catholic. The Malawian president died on 5th April 2012. His Mausoleum (**Figure 14**) is located in Thyolo, approximately 30km from Blantyre, Malawi.

Performance of rituals: These are limited to annual death commemorations and family pilgrimages.

Description of form (visual appearance, inspiration and materiality): Although President Mutharika is interred inside it, the Mausoleum is a chapel rather than a tomb and its form is a 'residence' that befits a president. The Mausoleum seems to borrow heavily from the American White House, with the aim of celebrating life rather than commemorating death. The Mausoleum also recalls the designs of prominent churches through its form. The roof top dome on

cylinder, is reminiscent of the Renaissance Rotonda. The Mausoleum is raised on a platform and the many steps enable pilgrims to transition into it well, giving them sufficient time to focus and contemplate as they leave their worldly thoughts behind. Upon landing, the Mausoleum is set back to provide circulation space around it, which acts as a pre-function and a post-function space, allowing pilgrims to wait or linger on, as appropriate. The raised platform is reminiscent of the Ancient Near East temples and palaces of the Assyrians and Babylonians.

Poetic constitution: Spiritually, the white colour of the Mausoleum communicates purity of form and the absence of any blemish. President Mutharika lives on, with Christ, as his sins were forgiven when he received the last Sacrament. The Mausoleum as a palatial residence signifies Mutharika's opulence and grandeur in death just as it was during his life.

Geometry (sacred or secular): Geometry was key in the design of the Mausoleum, which from top to down reveals a truncated dome on a cone, on a cylinder, on a hemisphere that rests on a larger cylinder which is supported on a cuboid. The cylinder above the cuboid (the protruding circular atrium) has clerestory



FIGURE 14

Bingu wa Mutharika's Mausoleum

Source: JKUAT third year class presentations 2021

windows that provide additional illumination in the Mausoleum.

Scale: The Mausoleum provides evidence of architectural largesse and opulence through the grand stepped entry, the relatively large windows and doors, the double volume space within the Mausoleum and the superorder of columns (with a double storey height).

Numerology: This is evident in the two miniature towers that provide pedestals for statues flanking the sides of the Mausoleum. They represent duality of heaven and earth. More research is required however, to determine the number of steps, columns, and pilasters in this Mausoleum to justify the claim of its design inspiration by numerology.

Surface ornamentation (inscriptions, colour or decoration): The white colour symbolizes purity in opposition to the many grey steps that actually denote death. No surface inscriptions or decorations are visible in the photographs of this Mausoleum.

Levy Mwanawasa Mausoleum

Background and context: President Mwanawasa was buried on 3rd September 2008, at the Embassy Park in Lusaka, a national presidential burial site (Kalusa & Chanda, 2021). The Mausoleum (**Figure 15**), a national monument, was built at a cost of approximately \$204 million, provoking outrage within and without the Zambian Government (Kalusa & Chanda, 2021), with numerous allegations of corruption.

Performance of rituals: These include annual death commemorations and family pilgrimages.

Description of form (visual appearance, inspiration and materiality): The Mausoleum was built to honour Mwanawasa's values, beliefs, achievements and legacy (Kalusa & Chanda, 2021). The iconic and sculptural Mausoleum is raised on a stepped platform. The Mausoleum has a modular symmetrical circular organization. Its expansive arches frame the windows; and its fenestrations are recessed.

Poetic constitution: The Mausoleum rests on four huge boot like pillars, with each pillar representing



FIGURE 15

Levy Mwanawasa's Mausoleum

Source: JKUAT third year class presentations 2021

one of the triumphs of his presidency over: Poverty; Corruption; Slow economic growth; and Low economic productivity in agriculture and mining (Kalusa & Chanda, 2021). The Mausoleum takes the form of an African stool symbolizing that Mwanawasa died while sitting on the throne (as an active president). The Mausoleum roof form recalls the shape of a lawyer's wig (Mwanawasa was a human rights lawyer prior to politics). The projecting circular fascia signifies unity. The five wide steps at the Mausoleum entrance denote Mwanawasa's full five-year term in office, while the four tapering steps indicate his second incomplete term (Kalusa & Chanda, 2021). The building has a delicate balance. The lower level is dominated by arched fenestrations while the upper level is solid and devoid of openings. This reveals that while Mwanawasa's spirit is free to come and go at will, his interred body has no chance of escape from its eternal resting place. Though the symbolism is appropriate, the designers seem to have stifled Zambian vernacular architecture as the Mausoleum form is devoid of vernacular inspiration, in the form of restatement or re-interpretation.

Geometry (sacred or secular): The Mausoleum has a circular footprint and circular organization. The flat roof is circular and its edges are propped up by a circular fascia.

Scale: The sculptural Mausoleum has an anthropocentric scale which is enhanced externally by the large arched openings whose horizontal aspect breaks down the verticality of the form.

Numerology: There is 1 Mausoleum and 1 tomb. The 5 complete steps and the 5 tapering steps collectively make 10 steps. Numbers 1 and 10 represent the deity (Gest, 2007). 4 boot like pillars support the roof. The numerology interpretation is similar to that of Jomo Kenyatta Mausoleum.

Surface ornamentation (inscriptions, colour or decoration): The Mausoleum is devoid of ornamentation and inscriptions. The grey fascia, creamy white walls and the earthen brown entry steps and ramp collectively create a chromatic harmony on the form.

DISCUSSION

Presidential Mausoleums must be made accessible to the public, without relaxing their security, to enable continuity of reverence for the departed presidents who are now part of the living dead and are capable of interceding to the African gods on behalf of the populace. Mausoleums such as those of President Kenyatta and President Moi were built in a rush, for the immediate interment of the president and first death anniversary, respectively. In such cases, construction is often hurriedly done, and Government procurement procedures are often bypassed due to the urgency of the situation at hand. The design team is rapidly constituted on the basis of 'word of mouth' recommendations rather than through professional competitions. The design team is thereafter only answerable to the Office of the President (or interim president in the case of the death of a reigning president).

The main disadvantage of this method is that participation by professionals and the public at large is not taken into account and multiple voices are stifled, denying the many suggestions that would enrich the hermeneutic interpretations of these mausoleums and their attendant symbolisms. Although the ten Presidential Mausoleums demonstrate good incorporation of established theoretical positions pertaining to their designs, any inadequacies can be explained by the elitist and exclusive method of procurement of the design team. The closed nature of the process also implies that accurate construction/production drawings of these Mausoleums are not available for scrutiny by architectural academics, denying their possible use in the instruction of students of architecture. Moreover, the drawings of these Mausoleums are not deposited into the Nairobi City County and other County Government repositories since no construction approval was sought after in the first place.

These Presidential Mausoleums are potential targets for terrorist attacks. However, as national monuments, they are already so well guarded such that any potential threats seem to have been effectively thwarted or warded off. This novel architectural typology must therefore be exposed to full analysis by architectural academia. Research funding must be sourced both

locally and abroad to facilitate the requisite analysis, in order to satisfy the intellectual curiosities of architects and the public at large.

CONCLUSION AND RECOMMENDATIONS

The process of interment of leaders exposes the spiritual and physical orientation of a nation as vital components of its culture (Lee & Vaughan, 2021). Whether the designers of the discussed presidential mausoleums were inspired by the architecture of the Egyptian pyramids remains uncertain, although reference to the design concepts from the pyramids seems to be arguably internal to each program, at least on an intuitive level. On comparative analogy, differences abound in the forms and visual appearances of these Presidential Mausoleums and this was to be expected because of their different designers, backgrounds and contexts. However, various leitmotifs are common and discernible amongst them. They include: The choice to design the Mausoleum Building as a chapel or tomb or both; Geometry at the planning level; The building of a national monument, enhanced by grandeur where possible; Employment of sleek finishes such as marble and granite, typically, no costs are spared in this endeavor; Numerology in the number of different elements that constitute the form; Cultural symbolism that expresses the legacy, religious beliefs and political leanings of the departed president; Colour coding that enhances the adopted symbolism; and, The placement of the sarcophagus on a raised platform.

The study sought to highlight the importance of the Presidential Mausoleum as a significant artefact of national built heritage. To ensure the sustenance of this stature, Presidential Mausoleums should be regularly maintained to prevent their physical deterioration. The wooden epitaph at Jomo Kenyatta Mausoleum is too crude and does not befit the late president's eminence. A plaque that is congruent with the status of the Mausoleum as a national monument should be constructed and fixed onto the concrete sarcophagus.

The study wanted to expose the key considerations, in the form of design principles, ideas and concepts, in the architecture of the Presidential Mausoleum. The thematic approach to interpretation that was employed in the study could be broadened further

when the approach is extended to other Presidential Mausoleums that were not considered herein. The study sought to examine the implied and embodied meanings in Presidential Mausoleums as vessels of cultural containment, including national symbolism. Visits by academics and students of architecture to these national shrines will definitely yield deeper analysis and consequently even richer hermeneutic interpretation to uncover concealed meanings.

Finally, the study sought to address the dearth of Afrocentric content and exemplars pertaining to architectural theory on poetic dwelling and its metaphoric dimension. In this regard, there is need for further investigation into Presidential Mausoleums. Architectural drawings of the Mausoleums under discussion, in the form of plans, sections, elevations, and perspectives were unavailable for analysis due to inaccessibility. The prevalent threat of terrorism, coupled with protectionism from the Governments, and the dearth of relevant publications on the subject denied a possible holistic analysis of these Mausoleums. Only a hermeneutic explication was possible. Were it possible to obtain original detailed architectural drawings of these Mausoleums, then a richer interpretation on the basis of sacred geometry such as fitting/superposing the Vesica Piscis (intersecting circles), pentagrams, hexagrams, and octagrams (Gest, 2007), would have been possible. Physical dimensions would have revealed concealed/underlying ratios and proportions such as phi and the Golden ratio.

Stakeholders (Governments and academia) need to collaborate in this endeavor by providing research funding, as well as granting access to the schematic and production drawings of the Mausoleums to aid researchers to develop richer interpretations, both objectively and subjectively, guided by architectural hermeneutic theories and Gestalt theory (the part and the whole binary oppositions/dialectic). This will provide material for use in architectural pedagogy, and reference in Afrocentric architectural praxis additionally.

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