Revival of the Swahili Built Heritage Along The Kenyan Coast
Case Study of The Dheulle Mosque

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Introduction
From the onset of the trade between the Arabian and Indian peninsulas and the East African coast a unique cultural heritage was entrenched on the shores of the latter and whose most notable aspect is manifested in the magnificent stone cities spread from Mogadisho in the north to Ilha de Mozambique in the south. The cities within this landscape flourished economically between the 9th and 15th centuries before succumbing to regional conflict, colonisation, rise of new trading foes, and diminished demand for most of the significant products that they traded. Today most of these historic ensembles have been reduced to ruins or constitute some of the poorest settlements in their respective regions (NMK:2006). However these sites within the Swahili landscape have been identified by their governments as national heritage and have been placed under legal protection as cultural heritage sites. Despite the fact that it has been widely recognised that cultural heritage may be developed as an important source of livelihood and an ideal tool for economic resuscitation (Feilden 2003:2), many of these sites are yet to be developed to realise their full potential. In other areas survival of these historic monuments is being threatened by contemporary developments. In addition their preservation is perceived by some as anti-progress (The East African, October 24th 2005). Drawing from the latest approaches to adapt from imported innovative conservation techniques of historical buildings, the author intends to draw up a restoration and maintenance plan that may be used to revive the significant monuments within the Swahili landscape for the improvement of the socio-economic welfare of the region. Mosques are the structures most worthy of studying for not only are there many more of them than any other stone buildings but their spiritual, and socio-economic importance means that the best techniques and most carefully made elaborate decorative elements were used in their
construction. In addition emphasis of previous conservation projects has been on residential buildings and focused on the historic town of Lamu (DHV 1987); the author has selected dheulle mosque as an entry point into the rejuvenation of these significant heritage using a case study.

Abstract

Located on the southern fringes of the buffer zone of the Lamu World Heritage Site, Shella village founded in the 16th century has experienced an inordinate growth of tourism over the last ten years. The resultant myriad of tourist establishments now threatens the identity and character of the village. This paper will illustrate the need to preserve the unique architecture of Shella through a case study of one of its most prominent historical structures. With regard to the premise that an Islamic mosque is not only a religious building but the focal point of the whole community and may fulfill the multi- functions of refuge, court, school and treasury (Galarke 1966), the project proposal will also highlight the enhancement of the socio-economic welfare of the Shella community through utilization of the mosque and its compound for income generating cultural activities with the ultimate objective to keep alive the intangible cultural heritage of village. This paper will promote the use of traditional building techniques in the mosques rehabilitation to serve as a medium of imparting the rapidly vanishing indigenous skills to the youth. The resultant document may be adopted to serve as a restoration and maintenance plan for the numerous historical structures within the larger Lamu district and the Kenyan coast in the context of the enhancement of the socio-economic welfare of the respective communities. Taking physical measurements, library/internet and archives reference, observations, documentation (written and photographic) and conducting interviews from the local residents and professionals based in Lamu will form part of the research methods to be employed in data collection.

Introduction

Location

Lamu District is located on the northern most part of the coast province of Kenya and is bound by Ijara District to the North, Tana River District to the West and South and the Indian Ocean to the East. It covers a total area of 6814 Square Kilometres. Out of this, 150 sq. Km is made up of islands of which Lamu is the most notable. Shella village is located on the south-eastern tip of Lamu Island and is cushioned from the open sea by the sand dunes and the projecting arm of Manda Island. The village spreads along the shore for a distance of 150 meters. Dheule mosque is set right at the southern end of this ancient settlement. It lies to the west of the Friday mosque and is separated from it by a low lying dune. Dheule Mosque is perhaps one of the oldest mosques in Shella Village and has been the subject of
study by many scholars (Ghaidhan 1975). Owing to its unique
architectural and historical significance its preservation will
illuminate one of the objectives of the National Museums of Kenya.
This study intends to document in detail the salient features and
design an appropriate restoration plan for the seriously dilapidated
structure of the once glorious Mosque.

Historical background
Shella village is probably more than 500 years old, the Dheule mosque
is one of the one oldest structures in the present day village. The
mihrab of the mosque has an inscription incorporating the date AH
1264 (AD 1848). It is from the same period as the Shella Friday
Mosque whose mihrab is inscribed with the date AH 1245 (AD 1829).

Use of coral at this date calls for a reconsideration of the currently
held view that this mode of ornamentation came to an end at the end
of the eighteenth century (Ghaidan 1975). Judging from the scale and
quality of the plasterwork in most of the ruined stone houses, Shella
village must have enjoyed a period of wealth and confidence during
the middle of the last century when it probably reached its
zenith (Ghaidan 1975). The ruins of the Dheule mosque bear witness
to this presumption.

All over the town are exposed wall fragments showing curved plaster
which is deteriorating due to exposure. With the general economic
decline of the twentieth century, Shella deteriorated rapidly; a factor
which caused a massive emigration of the residents to the southern
towns of Mombasa and Malindi subsequently causing most of its
original structures to be abandoned. (Ghaidan 1975).

The mosque is also closely associated with sheikh bin Al-Amin a
distinguished cleric and Islamic scholar who was buried in the
proximity of the mosque.

Construction
This is a 16m x 8m mosque with coral rag walls set in lime mortar, an
exception to the more typical mud mortar construction predominant in
most of the buildings in the village from the same period (Ghaidan
(1975) and my field notes). The floor plan consists of an ablution area
at the back of the mussalla (main prayer hall) and exactly opposite the
mihrab which faces the kiblah (north in the case of East Africa). The
main prayer hall is divided into bays by the massive columns which
demarcate the area into convenient roofing sections. The columns
support ceiling joists and of these the Main beams are dressed and
rebated mangrove poles. Bays are roofed with similar sections placed
at about 180mm with moulded cornices.

Building Elements
• At the rear of the mosque is the mutawaddah consisting of a pool filled with water from a nearby well and is where the wudu ablution is performed
• At the front is the mehrab prayer niche, with trifoliate arches and elaborate decorations; it indicates the kiblah, the direction of the kaaba, the holy stone of Mecca and is where the imam leads the jammat (congregational) prayer. It consists of a double tier of trifoliate arches framing a deeply coved niche of carved coral and plaster construction. The trifoliate are framed with outer orders of semi-circular arches. Jambs are of curved coral and corner spandrels panels have geometric floral patterns in continuous cable pattern, also in curved coral. This is surrounded by another enframement made of a series of rectangular patterns and niches
• The thick walls which help to isolate the heat and keep the mosque cool, were built by overlapping raw pieces of coral rock and joined by lime mortar and covered by lime plaster.
• The roof structure consists of a series of mwangati ceiling joists on which is arranged a layer of mangrove poles creating a bed on which is laid selected pieces of coral arranged evenly to receive a layer of lime and coral aggregate concrete. A layer of lime screed is laid to fall to drain off rain water from the roof.
• Traces of intricate friezes above the window level in the interior of the mosque and the elaborate plaster motifs signify the architectural merits of the mosque.

**Current legal status**

The property is at the moment classified as a ruin and is gazetted as a National monument under the National Museums and Heritage Act 2006 and its predecessor the Antiquities and Monuments Act Cap 215.

**Condition survey**

At present the structure is undergoing a period of deterioration and poses a threat to its visitors. The main objective of this part of the report is to tackle all the technical issues affecting the entire building structure and finishes with special emphasis on the authenticity of the
significant architectural features. The existing walls, floors, columns and suspended roof slab have been measured and their condition illustrated in detail in the appended drawings. After a thorough survey the following key problem areas were noted:

**The Mihrab**

The Mihrab is in a seriously dilapidated condition. In 1975 the Lamu Museum cleared the mosque of vegetation and restored the broken mihrab (NMK Records). A number of clinical restoration exercises have since been undertaken but have not been sufficient as to prevent the accelerated rate of decay of the mihrab.

**Finishes**

Very little of the original plaster work remains on the ruinous fragments of the dheulle mosque. Traces of plaster motifs and other decorations have noted for reproduction during the mosque’s reconstruction. The ruinous mosque requires major reconstruction exercise of most of its structural components.

**Conservation guidelines**

The restoration project shall be undertaken in line with the provisions of the Lamu old conservation by-laws 1991 under the close guidance of the Lamu local planning commission and shall be subject to the conservation guidelines contained in the:

- Ghaidan (1975: 83-109)
- Siravo and Pulver (1986: 99-153)

**Restoration plan**

Reconstruct fully the ruinous mosque in line and in conjunction with authenticated architectural and archeological study reports; only stabilizing the existing portions of the external walls and interior columns; adding on / fixing missing portions of the walls, floors, columns, roofs and timber fixtures; reintroducing decorative motifs on the plaster and timber fixtures; apply fresh plaster to newly built masonry; restore the decorated mehrab to its former glory; develop a garden with seating benches (public open space-designed to host a number of cultural and religious activities for the youth and also adults) within the mosque grounds; provide electricity supply to the building and its adjoining facilities; provide appropriate fencing to secure the premises; provide furnishings and facilities for running the complex.

**Phase I**

The first phase will involve the rehabilitation and replacement of the severely damaged structural elements. It is vital that emergency props be fixed as soon as possible to prevent sudden collapse of the seriously dilapidated sections of the suspended floors.
Additional beams that shall consist of hard wood should be erected over large floor spans to facilitate the replacement of the rotten mangrove joists.

Replacement of the defective joists is deemed to be the most critical element at this juncture, however in the event that modern materials or building techniques are adopted they should in the final analysis be indistinguishable from the old. Bills of quantities, specifications and drawings appended have illustrated the restoration plan in detail.

**Phase II**

The second phase will address aspects of wall and floor finishes, windows, doors, electrical fittings, roof coverings and finally landscaping around the building and garden.

Fabrication of new windows and doors crafted in the Swahili designs of the mosques period is to be undertaken with a view of reinstating the ambience of the traditional Swahili mosques of this period.

Use of Swahili motifs should be reintroduced in the plaster decorations and timber fixtures. This should be undertaken in conjunction with the documented research findings on the mosque.

Additional information on the decorative motifs may be obtained by visiting existing mosques from the same period.

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**Plate 4.** Western elevation of the Dheulle mosque before restoration. Source: Author.

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**Analysis**

Dheulle was built as a traditional Swahili mosque in the mid 18th century. It exhibits cultural, historical and architectural traits that are of not only invaluable significance to Shella village but also to the entire Swahili landscape. This may be summed up as follows:

**Social - Cultural values**

It served as a House of worship for the local residents, meeting place for the local men, venue for weddings (nikah), Koranic school (madrasa), Court House (Kadhis office) and bank (baytul maal).

**Historical values**

The mosque derives its name from a local cleric whose favourite Islamic scholar was Al-Dheuli an Islamic linguist. The cleric’s
constant reference to al-dheuli earned him the nickname Dheulle local connotation of the scholar's name. Subsequently, the mosque which he was serving acquired the nickname. As one of the oldest surviving religious structures in the town, the mosque occupies a special place in the local history (Cary 1975).

**Architectural values**

Typical Swahili mosque exhibiting the salient features from the medieval Swahili Islamic architecture. The plan of the mosque is composed of two chambers which form its major axis pointing toward Mecca (north), and a small vestibule, which is appended to its eastern façade. In layout, the mosque shares similar characteristics with the “southern Tanganyika type” described by Neville Chittick as without aisles. It represents a valuable bank of religious architectural theory (Cary 1975).

**Problem.**

Following the economic downturn of Shella village that resulted in the mass exodus of its residents to the more prosperous southern towns of Mombasa and Malindi, many structures especially the stone buildings within the village fell into disuse. These dire economic circumstances also prevented the Dheulle mosque from being actively maintained and utilised (Cary 1975) resulting in its systematic abandonment and decay from the elements of weather. During his 1975 study, Cary highlighted rain, encroachment by the adjacent dune and anonymity as the most immediate threats to the ruins. A survey conducted more recently by the NMK reaffirms these elements as still the most of concern.

**Solutions**

- Rescue the structure from further decay and probable disappearance especially in light of the radical changes that Shella village is undergoing;
- Return the mosque to use and supplement the existing mosques in hosting prayer for the ever-rising population;
- Develop a socio-cultural centre adjacent to the mosque which can host a number of activities for the Shella people especially the youth;
- Reinstate the waning historical and cultural significance of the mosque and its premises;
- Devise innovative architectural intervention and documentation of the reconstruction project showcase the built heritage of Shella;

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**Plate 5.** Mihrab of the Dheulle Mosque

**Plate 6.** Dr George Abungu, former Director general of the NMK, gives the Moroccan ambassador to Kenya a tour of the ruins.
Justification
Owing to the radical changes that have taken place in shella village over the past five years, the proponents of the Dheulle mosque reconstruction project, in collaboration with the National Museums of Kenya have identified a number of monumental structures within the village that should be preserved to reflect upon the current and future generations the magnificent heritage of the shella people. The Dheulle mosque is one such example exhibiting cultural, historical and architectural traits that are of invaluable significance to the people of shella village.

- It is also envisaged that the project shall trigger of a domino effect which will see the revitalization of traditional arts and crafts among other intangible cultural and religious practices which will have found a home in the reconstructed building and its compound.
- The project shall be the first of its kind and among very few which aim directly to develop the cultural and religious heritage of shella against the wild tide of tourist developments. Preservation of this heritage is paramount since it is one of the principle reasons why shella gained popularity as a tourist destination.
- At the moment shella village does not have a public open space other than the primary school which can host community functions.
- Revenue generation for the sustainable management of the grade 1 listed monument.

Anticipated benefits

- Additional mosque to serve the shella residents
- Revenue generation from the Quran and Islamic calligraphy classes
- Revitalization of traditional and religious knowledge
- Religious Edutainment centre
- Showcase of traditional building techniques.
- Public open space
- Enlivenment of an otherwise dead part of the village
- Enrichment of the individual lives of the shella people
- Reinstallation of the sites reverence and significance.
- Improvement of the entire landscape in the mosques vicinity
- Restoration and sustainable development of a cultural heritage asset for tourism and use by the community

Anticipated handicaps

- Conflicts as to the ownership of the mosque and its grounds.
- Myths associated with reinstatement of abandoned mosques
- Sufficient funding for the project.
- Issues related to Islamic liturgy.
- May be objected to by some archeological practitioners as a possible interference with an archeological site of high merit.
and they may argue for its continued preservation as an archaeological site.

Possible negative impacts

- Project may alter an otherwise quiet neighborhood into a noise haven
- The financial incentives accruing from the commercially motivated cultural activities may flourish beyond all expectations, eventually overshadowing completely the religious objectives of the project.

Proposal

Guiding principle

In furtherance of the historic Lamu Gazette Notice NO 2490 (see Appendix I attached) and the enlistment of the Lamu stone town (including the adjoining buffer zone) into the prestigious list of world heritage sites, this conservation plan proposes to restore and develop the Grade I listed Dheule mosque in conjunction and in line with the provisions of the Lamu Old Town Conservation By-Laws (1991) and the development plan for the conservation area. A thorough survey has been conducted on the structural condition of the building in collaboration with local master craftsmen both of whom have extensive experience in the care and restoration of stone houses.

Thorough consideration has also been accorded to the:-
- merits and demerits of the reconstruction project,
- envisaged future use of the reconstructed building
- anticipated benefits
- management of the facility

with regard to the following defitions Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, and architectural values. Restoration is defined as the act or process of accurately depicting the form, features, and characteristics of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems, and other code-required work to make the properties functional is appropriate within a restoration project—Historic Structure Reports & Preservation Plans:A Preparation Guide, Hawkins DM .The author proposes to combine the two concepts for the revival of dheulle mosque
Concept
The proponents wish to fully reconstruct the ruinous structure and return it to use as a mosque. Additionally it will also serve as a religious/cultural resource center whilst showcasing the rich cultural heritage of the shella people. The grounds around the mosque offer an ideal location for the development of an open air amphitheatre suitable for hosting a number of cultural activities.

Envisaged use
The project proponents have planned to return the main reconstructed mosque to its traditional function as a house of worship. The mosque will also serve as a centre for the youth to learn and perfect their ability to recite the Quran. In addition it will act as a centre for teaching Islamic calligraphy, an important traditional skill which has almost been lost among the island’s youth (NMK report on the stakeholder Consultation Meeting on the restoration of dheule mosque).

The mosque grounds which are to be developed appropriately shall be used to host family gatherings and functions (e.g. weddings, funerals etc.). The grounds will also play host to cultural dances (kirumbizizi etc), recital of poetry, production and exhibition of Swahili arts and crafts among other cultural activities. The grounds development shall include fun park facilities designed for children’s games and intended to offer entertainment for kids during Islamic and public holidays.

The grounds will also serve as a center for peer education where invited speakers shall make public presentations with a view of wooing the shella residents towards righteous ways.

Method
The debate over/for the Conservation of historic structures along the Kenyan coast has intensified over the last several years as more and more contemporary developments are proposed for implementation within this historic Swahili landscape. More often these developments compromise greatly the integrity of the monuments and sites in their vicinity. The ensuing mitigation measures have been inadvertently misconstrued and this has resulted to negative perceptions of the conservation movement by the local communities. The case study at hand is located in a village whose recent economic fortunes are greatly associated with contemporary tourist developments and which now threaten to inundate the historic monuments within the site. This necessitated the author to engage the local residents in several candid consultative meetings in which the socio-economic benefits of which the restoration project would be anchored were extensively highlighted. This was with a view of creating an acceptance by the local community of the conservation efforts. In addition local clerics
were also engaged in efforts to demystify the held belief/myths to do with ruinous buildings which the local community associate with spirit dens. In order to gain the communities confidence the author engaged the local community in interviews to show correspondence of the mosque’s history as written in history books and their oral traditions.

Even though there had been several detailed studies of the dheulle mosque carried out in 1975 (Ghaidan and Cary) and 1986 (Siravo) the condition of the mosque has deteriorated extensively since then. This has also necessitated for a thorough survey of the ruins through actual site measurements. Observation/fieldwork notes and photographic documentation was also undertaken to ensure a permanent record for future reference on the mosques condition before intervention. The measurement and documentation exercise enabled the author to prepare accurate working drawings that include all the original salient features.

Extensive reference to existing literature on Swahili architecture, archaeology of the east African coast and history of the Swahili people was also carried out. This assisted the author in highlighting the significant attributes of the dheulle mosque through comparative studies and also in the accurate reconstruction of the mosque especially since many of its important features have been lost to elements of decay.

**Discussion & Conclusions**

The issues with Islamic liturgy have cropped up during several consultative meetings with the community on the revival of disused structures. A section of the local community has along established belief that ruinous buildings offer refuge to evil spirits. Following extensive consultations with local clergy on the matter it has been established by the author that this notion has no religious basis. Elsewhere in the world several Islamic religious buildings have been revitalised after having been abandoned for years. An example is the award winning amariya madrassa in Yemen. In addition the relatively high costs associated with conservation project as compared to new a development of similar size was also highlighted by the local residents. However the author was able to vividly illustrate the envisaged benefits of the project. The community was also sensitised on the need to initiate a management committee for the future care of the mosque. It had been noted by the author from the local community that no individual had made claim to the mosques ownership making it easier to manage the project as a community undertaking.
With regard to this feasibility study report, which has been compiled after extensive consultations and site surveys, it is the author’s opinion that the reconstruction project is viable and offers innumerable benefits to the preservation and development of cultural heritage assets (tangible and intangible) for appreciation by both the shella residents and tourists alike.

The proposed reconstruction plan of the dheulle mosque as suggested in this paper, if executed to the latter would not only have salvaged a great monument but also entrenched enthusiasm for cultural heritage preservation amongst the shella people. The restoration work commenced recently and is expected to take at least 10 months.
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Appendix 1

photographs

Plate 9. North eastern corner of the mosque before the restoration exercise commenced

Plate 10. The roof of the mosque had completed collapse and was earmarked for complete reconstruction
Plate 11. Interior of the mosque before rubble from the collapsed roof was removed

Plate 12. Local residents during a site visit by the stakeholders. The rubble in the mosque had been carted away and the site prepared for commencement of the restoration work.
Plate 13. Eastern façade of the mosque as work commenced

Plate 14. Interior of the mosque. Many components of the roof structure had been extensively damaged and needed to be replaced
Plate 15. Western façade before reconstruction

Plate 16. Western façade after reconstruction
Plate 17 shows the laying of timber ceiling joists of the same material and shape as the original. The joists are supported by intermediate composite beams of coral rag pieces bonded in Lamu mortar and set on timber members. The timber members will be painted with linseed oil.

Plate 18 shows the timber members forming the roof structure can last for decades and can be replaced at will using traditional techniques. The restoration project provided the community with an arena in which traditional skills were exchanged from the master craftsmen to the younger generation.

Plate 19 shows the reconstruction of the roof structure from the top. Coral rag pieces will then be laid on top of the timber members and then covered with a layer of lean concrete to form the topping slab. If well maintained, this kind of construction can last for generations as evidenced in the stone town of Lamu.

Plate 20 shows the interior of the mosque after the entire ceiling/roof slab has been reconstructed. The octagonal shaped columns were also repaired using pebble dash to restore their original shape.
Plate 21: shows the rehabilitated eastern façade. New window openings had to be introduced to improve the air circulation and lighting inside the mosque.

Plate 22: shows a mason repairing the eroded sections of the walls by applying a layer of pebble dash. The walls were checked for structural failures arising from rodent infestation and repaired appropriately.

Plate 23: filling the joints of the coral rag bed laid over the timber ceiling joists. This is the traditional technique used in constructing suspended floors in Swahili buildings.
Plate 24. shows the restored interior of the mosque.

Plate 25. reconstructed roof slab of the mosque. This was the only component to be fully rebuilt.

Plate 26. the rehabilitated western facade

Plate 27. the rehabilitated eastern facade