

# Authenticity in Architectural Conservation: A Review of Conservation works at Monument of Sultan Ibrahim at Makli, Thatta

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**Abstract:** Makli is famous for its historical Architecture especially mix use of various materials art work and patterns. The work presented in brick, stone and tile on various parts of the structures are considered as novel pieces of unique art, rendering and masonry. The elegant art and design work in Makli is virtually lying in open sky and being dilapidated day by day. Most of the monuments are in enormous threat of natural and human interactions. The conservation efforts made so far need very careful review and intervention but the situation at site is miserably conducted and authenticity of monument is on stake. In order to maintain the authenticity of the monument, conservation work on Sultan Ibrahim need to be very carefully reviewed and analyzed. The initial observation and pictures of the work illustrates indication of wrong conservation.

**Keywords:** *Authenticity in Architectural conservation; Enormous threat of natural and human interactions; Wrong conservation.*

## 1. Introduction

Makli situated in Thatta, Sindh, Pakistan, has status of World Heritage Site that spread over 12 sq km, with a width of around 8 kilometers. Makli hill is the interment place of approximately 125,000 Sufi holy people. The tomb of Mir Sultan Ibrahim and His Sibling Amir Muhammad (1556-1592) fig.1-2, is one of the important places in Makli Thatta that is under discussion [1]. The Makli site disposes as a landmark of vaults, arches, domes and art work of this biggest Muslim necropolises. It is an open theatre and display of ill, broken and ruined monuments. Some of them are still standing very high and some of them are shabby and partially broken and rest of them are totally collapsed and laying down on ground fig # 3a

This tomb is situated at outskirt of Thatta Makli. Shows the condition of tomb of sultan Ibrahim. This tomb stands in the middle of a rectangular courtyard, measuring 137-ft 7 1/2-in. by 87-ft 10 1/2 in. with arched entrance on the east. The enclosure walls, which are constructed with bricks, have now found fallen but the stone foundations are still standing.fig-3(b) (c).[2]

## 2. Description of the Architectural Conservation:

Conservation can be defined as the process of understanding, interpreting and managing the architectural

heritage in order to safely deliver it to the posterity [3]. Many of our traditional buildings are more charming and poses greater character than their modern counterparts, having been constructed by skilled craftsman using high quality natural materials and this research also concerning that issue related to the proper maintenance and ensuring of safe exploitation of historic building. Architecture can be described as the sum of the social, economic, political and culture developments and the places where people live for years. Therefore all historical buildings represent their own architectural, cultural message which have undertaken a social duty to give culture messages to their environments and future generations as that expected on its design and construction time.

### Authenticity of conservation:

Authenticity in conservation needs research documentation and commitment for excellence, Conservation without authentic is meaningless and a huge destruction. Authenticity has several facts and each one of it has its unique role and meaning in conservation. In any conservation project these aspects are important where one must be very careful to investigate, to maintain to preserve and to safeguard authenticity of monument. If these aspects are considered than one can claim that conservation action or process is authentic.

### Levels of Authenticity in Architectural Consecration:

Authenticity in conservation have various levels; In the first degree one gives full respect to originality & genuineness minimum action is allowed. In such cases the action is restricted to preservation and consolidation. This requires complete documentation to diminish the possibility of deviation from the original concept of the monuments and its finishes. In second and third levels the interaction depends on the need of the conservation, but minimum consideration is sorted out regarding the authenticity of the monument rather tourism is considered as main objective.

### Minimum interaction:

In first level of authenticity considerations are made to minimum interaction on fabric and skeleton the monument to avoid any remarkable change. In such case the actions are restricted to preservation and temporary consolidation are very basic Conservation only. This requires complete documentation to diminish the possibility of deviation from the original concept of the monuments and its finishes. In documentation before and after photography and recording in essential.

The second degree is moderate authenticity that leads to the permanent restoration of the monument with all the need to fit and adopt any new function called adoptive reuse. In that degree of conservation and restored the authenticity is compromised at some degree especially additions are made in internal structure. However, the outer fabric and main structure needs to be safeguarded and maintained.

In third level of interaction with monument the authenticity in conservation is compromised for the sake of new adoptive reuse or for tourism purposes, where historical context and name and fame of the monument is just associated, and substantial changes are made to fit the monument in its new adoptive reuse. In this stage monument can be completely shifted from one place to another place and the same monument is even reconstructed on another place.

### Aesthetic authenticity:

Conservation work will not be considered accurate if it is aesthetically unauthentic the color, texture, size of finishing material, and workmanship must be like the original one. if some modern work is done that should be clearly indicated and visually differentiated from the original work. Authentic quality deals both visual and artistic (design) aspects and all interventions must match with the original [4].

## 3. Material and Experiments

### Description of materials.

This Structure is constructed with brick masonry in its superstructure and stone in its foundation. The walls are rendered with glazed tiles consists of calligraphy of Quranic verses. The lime and stucco are used for rendering various parts of the structure.

**Brick work:** Sindh has been known for its brick masonry since the third millennium B.C.as seen at the prehistoric site of Mohenjo-Daro. The brick used in the buildings of Thatta reflect an inheritance of superb craftsmanship, and are decidedly superior to present day bricks, the dark-red bricks are used at makli. The standard size of bricks is 225mmx112.5mmx75mm (length x depth x height) this include 10mm mortar joints and so the standard size of a bricks itself is 215mm 102.5mmx65mm (length x depth x height).

**Stone work:** The Thatta carvings have been called lace-work in stone. If each individual panel of the whole design is carefully examined, it seems as if tile work has been rendered in stone and the painter's brush has been converted into the artist's chisel. The carving is in two techniques in the one design a fine filigree-work, is carved in relief on the ground which is sunk; in the other, the ground is raised, and the design is incised in the dressed surface of the stone. The whole scheme thus provides a very pleasant effect of light and shade.

**Glazed tiles:** The glaze tile of Sindh was largely influenced by the tradition serving in Persia from the ancient civilizations. Glazed tile is local tradition ascribing them to chines workmen reported to have migrated to Sindh at a very early period. The tile of Thatta are made of hard-baked terracotta and some composition of siliceous sand lime, bonded with a cementing material. Thatta tile are generally of two colors, white and blue, the latter varying in hue from a dark purplish to a light greenish or turquoise blue both colors are transparent and enquire an effect of depth and richness by their treatment. The light blue has occasionally run in firing, blurring the outline of the patterns, and producing a soft blending tints. Yellow was also used a foil to emphasize the brilliance of the blues. And the tile is mostly used square or rectangular.

**lime and stucco:** Until the latter part of the nineteenth century, it was common that plaster, which was used inside a building, and stucco, which was used outside, would consist of the same primary materials: lime and sand (which are also used in mortar) Animal or plant fiber were often added for additional strength [5].

**4. Research Aims:** The aim of this research is to critical review the existing wrong and unauthentic conservation works and suggestion for authentic conservation of Sultan Ibrahim.

**5. Research Objectives:** To fulfill this aim following objects are set:

- To critical review of the existing conservation works conducted under conservation project on Sultan Ibrahim tomb.
- To identify the shortcomings on authenticity Architectural Conservation at Sultan Ibrahim tomb.
- To suggest proposals for authentic Architectural Conservation.

## 6. Scope of Research:

Every monument itself carries a set of information on various aspects of the project including; building materials, environment, construction technology, art & design, economics and socio cultural aspects of that time. The message tags that are associated with the monuments needs to be properly preserved and maintained during the process of the Conservation work. Any mistake if made during conservation will vanish away the tags that monument carries. Such action is supposed to be real death of that monument. Therefore, it is important that the research must be made to identify the conservation mistakes on time and save the authenticity of the monument. Otherwise all the efforts of the conservation will go in vein.

## 7. Literature Review:

**Timoticin. K** (2015), "Authenticity principle in conservation of De Javasche Bank of Surabaya: Materials, substance and form". This paper aims to discuss the application of the notion of authenticity principle in the conservation work of De Javasche Bank building in Surabaya in term of form, materials and substance. to achieve the principle of authenticity in the conservation work, action taken should follow the principles namely the principle of minimum intervention preserving the original form, material; recognizable as a new when introduce new materials and techniques; and the principle of reversibility for the conservation action taken so far at any later stage.

**Elisa F Lucrezia V**, (2018), " The environmental impact of cleaning materials and technologies in heritage buildings conservation", The results highlight that the different technologies involve remarkably different environmental impacts, but that in some cases their impact could be easily reduced by substituting some secondary materials in the cleaning process, without affecting the effectiveness of cleaning. The results also show that the methods involving the lowest environmental impact are not necessarily the best ones in terms of safety and waste production in the building site.

**Rachel D, John J, Siân J, Thomas Y**, (2016) "Science, value and material decay in the conservation of historic

environments". The historic environment undergoes cycles of material deterioration, and these processes have a powerful impact on the meanings and values associated with it This requires a case-by-case approach, because the cultural values and qualities associated with material transformation are context-specific and vary with various kinds of monuments and materials. We conclude with a series of recommendations aimed at integrating humanities and science-based approaches to transformation in the historic environment.

**Soheir M. Hegazy** (2014), "Conservation of historical buildings – The Omani–French museum as a case study", in this paper The Omani–French exhibition hall is a valid example and feature some basic issues, for example, the impact of including an incorporated group of very qualified experts. Thus, introducing the major faults in conservation are conducted even the team involved in conservation consists of senior and veteran conservators. Bringing conservation faults on screen is a huge contribution of Omani as a critic on conservation works.

**Abdul Reham** (2011), in this research, "Conservation of historic monuments in Lahore: lesson from success and failure " describe the conservation history of the various monuments and highlight the conservation issues and narrated wisely and made valuable suggestion for the proper conservation of the monuments.

**Shaikh M. Javeria** (2013), "Damages, Pathologies and Repair of a Bay of South Facade Villa Zerbi Reggio Calabria Italy ", This research presents the analysis, meaning of pathology and problems and conceivable protection intercession of a chose part of Genose Manor Zerbi in Reggio Calabria which is been changed over into a gallery. It concentrates on visual and basic intercession and respectability of the new with older.

**M. Y. Awan** (2008), in his research, "Building Stone and Province of Preservation of the construct heritage of Pakistan", has concentrated on hypothetical research with respect to logical learning of stone and its utilization in the structures, which is fundamental to be comprehended, as all the protection work rests upon it. It has been discovered that a critical part, over 60%, of the constructed legacy has a place with stone. In this manner the paper gives all the required essential data to the Stone preservation.

**Savino di Lernia** (2006) in his research, " Building landmarks, making character Steers religion as a social reaction to quick ecological changes in the Holocene Sahara", manages a particular contextual analysis—the rise of a 'cows clique' inside Holocene peaceful social orders in the northern areas of Africa.

**A.F. Mohd-Isa** (2011),"Built Heritage Maintenance: A Malaysian Points of view", included basic survey of existing writing and featuring some major standards in

protection of notable working in connection to the upkeep needs. It additionally announced the beginning time of proposed progressing research in Universiti Teknologi MARA which concentrates on the upkeep routine with regards to Malaysian monitored legacy working at UNESCO's Reality Legacy Site. Discoveries recommend that support is most significant so as to accommodate with the protection great practice.

**M. M. Bahari, N. F. Zahari (2011),** " The Implementation of Restoration Processes in Building Conservation. A Case Study: Balai Seni Alor Setar, Kedah", the goal of this exploration is to know the strategies for work that are connected to the minaret structure of Balai and to dissect the preservation hone. Information was gathered from auxiliary information sources which comprise of data full from book, control, diaries and different wellsprings of data; and essential information source which comprises of data accumulated from casual meetings with temporary workers, advisors and Jabatan Warisan Malaysia.

**P. Pattanurot, (2011),** " The Old buildings and conservation guidelines developed City area community Chiang Khan, Loei in Thailand " the motivation behind this paper is to examine neighborhood structures in the present vernacular and to manage about preservation and improvement of old building, Chiang Khan and to advance social tourism.

## 8. Methodology of Research:

The conservation work is not only very sensitive, but each monument is distinctive and unique in its own fabric, form, construction technology, conservation material and socio-cultural history therefore methodology of research for each monument is unique. This paper meant to safeguard the authenticity therefore all the research strategies will move around the monument in question.

Hence this can be listed as:

- By literature review
- by Site surveys and site observations
- By evaluation and comparing old and new works

## 9. Comparing and Analysis:

### Documentation



Fig.1, Location and Site of Makil graveyard Site plan

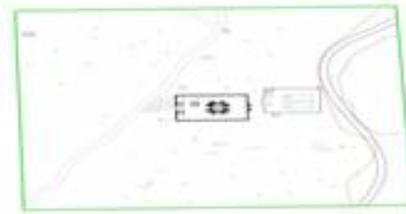


Fig.2, (a) Master plan

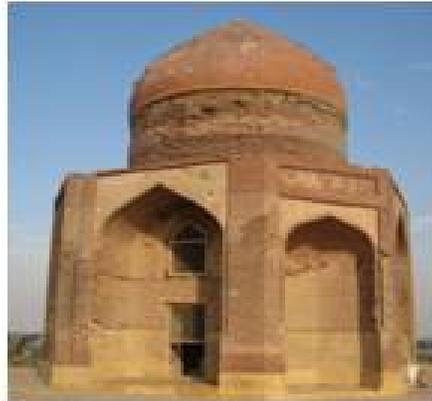


Fig.3 (a) View of tomb sultan Ibrahim tomb



Fig.3,(b) Elevation

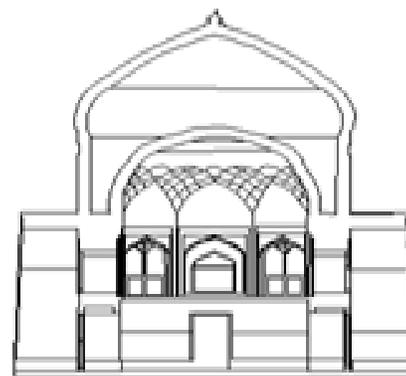
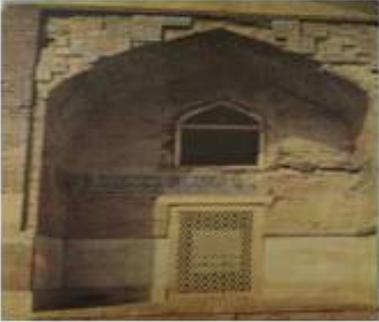


Fig.3,(c) Section

## 10. Analysis and comparing of conservation

S.No. Photo	Description of condition of Old structure	Comments on the conservation works on the same structure
1	<p>The upper part of the structure showing shabby bricks and bricks in bottom of the structure are eroded.</p> 	<p>The upper part of the structure is improperly conserved and consolidated where as bottom part of the structure seems pity good and consolidated properly.</p> 
2	<p>The floor is damaged and stone tiles are disintegrated.</p> 	<p>The stone tiles are very badly repaired and the pattern and the bonding material is badly ignored.</p> 
3	<p>The steps leading to platform are totally disintegrated and damaged because of earlier wrong conservation by using cement instead of its original bonding material.</p> 	<p>The pattern, masonry and material is highly ignored thus the consolidated part has nothing to do with original thus the act of conservation is more damaging than original disintegrating conditions of the structure.</p> 
4	<p>This is showing the damaged and disintegrated parts of the inner side of the dome.</p> 	<p>The dome is partially conserved without context thus the act of preservation and conservation seems limited. Moreover the work is unauthentic as the old and new don't resemble each other.</p> 

<p>5</p>	<p>Surface of the stucture is eroded and bricks are highly disintergrated.</p> 	<p>Repair is made without any consideration of bonding and masonry thus this works has nothing to do with the original structure. Father the tile needed to be conserved properly but the same part is not touched this show the non-seriousness and miss management of the conservator.</p> 
<p>6</p>	<p>This seems already wrongly consrverd but the conditon seems not that bad.</p> 	<p>The work of the conservation is totally wrong no research is made on material bonding and appearance of the structure.</p> 
<p>7</p>	<p>The opening is totally dammaged and there are no sign of the original work.</p> 	<p>Total conservation work is out of context and nothing to do with original work and the message tagged with the monuments and its part is badly vanished.</p> 
<p>8</p>	<p>Stone wall and lattice is disintegrating.</p> 	<p>Total conservation work is out of context and nothing to do with original work and the message tagged with the monuments and its part is badly vanished.</p> 

9	<p>Material is fadeout from the platform.</p> 	<p>Platform is maintained.</p> 
10	<p>The part still carrying its original footings need proper research.</p> 	<p>Un-authentic work is done, and the major work is leftover thus such type of partial conservation work is a huge mismanage on part of conservation team.</p> 

## 11. Conclusion

The conservation work conducted at Sultan Ibrahim and Amir Mohammad tomb are without considering the conservation material, bonding material, pattern & sizes of the material and other basic consideration related to the authenticity in conservation.

During this act of improper conservation original message that remain tagged with structure is not considered rather ignored badly. The all the efforts of conservation are went in vain and instead of getting benefit the original structural lost their authenticity and status.

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