The elements of Mural Art and Mediums in Potohar region

Abstract

The decorative arts in Islam are marked by a remarkable degree of stylistic consistency which has been applied to a broad range of materials, each of which had a craft-base of its own, the history of which often traces back to pre-Islamic times. The stylistic coherence within the Islamic world and the many variations of its basic themes across time, influenced as they were by local artistic traditions, are all part of the fascination of this art. In Muslim architecture virtually any surface may be regarded as worthy of receiving elaborate decoration and this is particularly apparent in religious architecture, but this principle extends out to woodwork, ceramics, textiles, metalwork, books and many other art forms There are so many mediums which have been used for the purpose of building decoration in Potohar region, these mediums are mostly used such as fresco, stucco, carving, relief, wood work and brick molding etc. Techniques, material and method to prepare wall surface and pigments, depends on the environmental factors, socio-economic background, availability of architectural and design materials, geographical economic strength, craftsman and cultural influence on architecture.

Architectural traditions, structural ideas depend on understanding of materials like brick, stone, lime, wood etc. it is an attempt to analyze the decorative mediums and elements of a historical buildings in Potohar region which belongs from Mughal, Sikh and British rulers emphasis on exclusively interior and exterior ornamentation of the construction.

Introduction

The purpose of murals varies from culture to culture and from time period to time period. Mural art appears on the walls and ceilings of interior and exterior spaces, ranging from palaces, temples, and tombs, to museums, libraries, churches, and other public buildings.

In the history of mural painting many techniques have been used: encaustic painting, tempera painting, fresco painting, ceramics, stucco, mosaic, relief etc. Mural art might be related to the religious purposes,

Religious art is any work whose theme supports the moral message of the religion it purports to illustrate. In this context, religion means any set of human beliefs relating to that which they regard as sacred, holy, spiritual or divine - whether or not deities are involved. (Encyclopedia of art)

The technical problems posed by the wall, there are numerous artistic issues to be overcome. To begin with, the mural painter needs to consider the viewpoint or angle from which his painting will be seen. it can be viewed from different points and at any time of the day, without the glare of reflected light. In addition, it must be permanent, and it should suit its architectural environment and frame.

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The ornamentation of the buildings basically done with different materials i.e. sandstone, bricks, marbles, stone tiles work, plaster, fresco and stucco most of the method and techniques of decoration is associated with the Mughal period and style which can be seen in Paracha Masjid, tomb, Wah garden, Jamia Masjid Wah, Rohtas fort etc. Various influences of Persian and Hindu architecture can be seen some typical Hindu features that have been combined in decorative structures. Decorative architecture is a combination of so many foreign and local characteristics which are also source of inspiration.

Fresco

The word Fresco derived from Italian means fresh. There are basically two types of frescoes – **buon** fresco paintings and **secco** fresco paintings. The two types of frescoes differ in their approach. The **buon** frescoes are done on wet plaster, while the **secco** frescoes are done on dry plaster.

Using the**buon** technique, painters use pigment that has been mixed with water to paint on lime mortar or plaster that is still wet. This technique does not require an additional plaster as the pigment, after being mixed with the water will bind to the wall.
Painters used powder pigments which were mixed in water and directly applied to a wet line plaster surface it become the part of plaster in this technique the color than fuses with the wet line plaster permanently water proof as it survives for a long time .

A **secco** painting is, on the other hand, done on dry paint, and therefore the longevity of the work is not for you. A **secco** painting requires a medium to bind the pigment. The **buon**frescoes last longer. Therefore, if an artist wanted to leave a lasting mark of his work on frescoes, he would definitely opt for this type of fresco work. The**secco** frescoes do not last as long as the**buon** frescoes. They were mostly used to give the final touches to a work of art, or to correct any mistakes that might be apparent in the **buon** fresco.

This technique is a old one which had been used in ancient times on rocks and caves of Ajanta cave. The Ajanta fresco style and techniques later spread towards the east and west, to Afghanistan, Iran and central Asia and to China and Japan. In the west and in Europe there are many ancient frescos found in palaces and temples of ancient Greek and Romans (LalaRukh). Fresco painting is suitable form for warm climate areas. The traditionally the fresco painting done in five colors such as white, black, red oxide, yellow oxide and green. Colors were prepared from mineral pigments like red is derived from red literate, yellow is derived from yellow literate, white from lime and black color which is known mineral made from suits of light lamps. Black color mostly used for outline or dark tone used to hair, eyes and outlines of figures and objects. Shade of green color derived from a stone Mallachite, from soil Teraverta, Vernacular soil which gives bright green shade and Terdigris soil is also used to give green shade, it is also called Zangal in Persian, used in 15^{th} century it is popular in Indian paintings and also used in paper.

Throughout the history of the Pakistan, fresco was painted in temples, mosques, palaces and private residence. In Potohar, the fresco can be seen in Mughal architecture and the later Sikh to British period. Fresco paintings are found on the surface of the murals and cellings of Paracha masjid, jamia masjid Wah, Wah garden, attock tomb, BaradariGurdwara ,Attockmandir and Palace of Guru BaxBedi Singh.

Stucco

Plaster was well established building materials and has been used from prehistory. This was a readily available material in the Middle East and was used in Islamic architecture from the very earlier period in Siria and Iraq from where it fairly rapidly spread to the rest of the Muslim world (Anon,). Plaster which used for stucco was a perfect medium and useful for the transformation, molding and carving in variety of ways when it dry. Stucco as a medium has been used as vegetal, arabesque arrangement and individual floral motif like Shamsa, mostly we found especially in Mughal Architecture in Rohtas fort and Katas fort. It had been primarily concern in decorate the Islamic architecture as well as Hindu temples and palaces.

Stonework

There is an East–West divide in basic Islamic architectural techniques that derives from earlier, pre-Islamic traditions. In the Persian/Iranian sphere of influence the principle building material tends to be brick, whereas in Egypt, Syria and Asia Minor, stone is far more common, at least for monumental building.

The earliest Islamic monuments, dating from the Umayyad period, clearly continue the Roman/Byzantine tradition in their typical structures and in their use of dressed and carved stone. These techniques continued under later dynasties in Egypt and Syria (the Fatimids, Zangids, Ayyubids and Mamelukes). This architecture is characterized by its monumental scale, its relative simplicity of form and a somewhat somber tone. The deep carving, ordered in paneled schemes, with calligraphic bands and geometrical and arabesque motifs, make an impressive contrast against great expanses of undecorated surfaces.

In Asia Minor the Seljuks, and later the Ottomans, continued the traditions both of ashlar building and of stone carving. Under the Seljuks a more plastic style of stone-carving was introduced, based on the stucco work of their predecessors in Iran. This gave rise to a rich tradition of that used all the familiar elements of Islamic decoration in a dazzling profusion of examples. The strength and vitality of this tradition of carved stonework continued up to the beginning of the $16^{th}/10^{th}$ century, gradually becoming less exuberant during the Ottoman period.

A separate tradition of architectural stonework developed on the Indian sub-continent, again derived from pre-Islamic sources. The early Turkish conquerors of India introduced entirely new, and in many ways quite opposite, architectural concepts to the sub-continent, but the synthesis that arose from the meeting of Hindu and Islamic traditions produced a great range of marvelous buildings, and countless examples of exquisite carved and inlaid stone decoration.

Brickwork

As mentioned above, brickwork was the favored building technique in the eastern Islamic provinces of Iraq and Iran, the tradition originating in the ancient civilizations of this area. Typically, however, in the hands of Muslim builders, brickwork was soon being used in quite novel and more decorative ways than in the past. In fact there is a well-defined progression in the use of brick in eastern Islam, from purely structural purposes towards ever greater decorative complexity.

The first stage (in the $11^{th}/5^{th}$century) saw an increasing variety of brick bonds that created relief patterns of light and shade to great effect. The enthusiasm for this technique was such that some buildings featured dozens of different bond-patterns, veritable showcases of brick design.

Later, carved ornamental inserts were used to break up the tedium of plain bonding; these were soon moulded before being fired, in a whole variety of motifs. In the next stage these brick inserts were glazed, a technique that lead naturally on to entire walls and domes being invested with coloured glazed bricks, by which time the structural and decorative functions of brickwork had more or less separated out. Over time these glazed bricks were gradually reduced in thickness until they were virtually tiles – and the possibility of a whole new era of architectural ornament was created.

Woodwork

Since wood is a comparatively scarce material in many parts of the Islamic world it perhaps not surprising that it enjoyed a higher status as a material than elsewhere and, at its best, displays the very highest levels of workmanship. Traditionally, it was used for doors and window shutters which are frequently inlaid, but the finest work is generally found on pulpits (minbar), the key piece of furniture in the mosque from which Friday sermons are preached. Many highly sophisticated techniques were developed to create intricate decoration; in the finer examples ebony and other precious woods are used as inlays, together with ivory and mother-of-pearl. The carving in these objects often has a concentrated, almost lapidary detail. In the Islamic world the skills of carpentry were traditionally associated with geometry. The $14^{th}/8^{th}$ century historian IbnKhuldun (who was presumably expressing a generally held belief) asserted that all the leading Greek geometricians were masters of this craft. Some surviving examples of $12^{th}/6^{th}$century woodwork indicate that the genre of complex, interlacing geometrical designs in the girih mode were relatively common by this time, and may have been expressed in this architectural medium before any other (after their probable invention as Qur'anic illumination in the $10^{th}/4^{th}$ century.

Ceramic tiles and ceramic mosaic

Coloured glaze was part of the repertoire of decoration in the architecture of the Ancient middle-east, in both Egypt and Mesopotamia – by the time Islam arrived on the scene however, these techniques had been long forgotten. The earliest Islamic monuments made extensive use of mosaic as both floor and wall decoration, but these were very much in the still-flourishing tradition of late-Antiquity. It was not really until the $12^{th}/6^{th}$century that architectural ceramics

began to be used extensively in an Islamic setting (by way of the progression described above). The gradual development of suitable ceramic glazes, in both pottery and tile-work, represented a whole series of technological advances, and as such was as much a scientific/technological achievement as an artistic one. The enthusiasm for the intense colours produced by these techniques meant that they were eventually transmitted right across the Islamic world, from the Atlantic to Central Asia.

Ceramic tiles are found in most Muslim countries, using an extensive range of techniques that include high molded relief, polychrome, luster-ware and graffito. In addition, sophisticated techniques were developed that used pieces of cut-tiles, bonded together with plaster, to form elaborate, multi-coloured mosaic panels. The latter method was particularly favored in the lands that came under Timurid influence (Iran and Transoxiana), and in the Islamic far-West (Spain and Morocco).

The broad area that fell under Iranian influence had a long, independent tradition of ceramic architectural revetment, known as kashi, which reached its first great achievement in the $14^{th}/8^{th}$century and was sustained through the Timurid and Safavid periods. Each element of the traditional Islamic decorative canon, geometric and vegetal arabesque forms, together with calligraphy, is used but with great local variations of style.

The use of cut-tile mosaic seems to have come into favor in the Islamic West (the Maghreb) with the appearance of the Berber dynasties in the 12^{th}-13^{th} centuries (6^{th}-7^{th}). Known as zellij, it is almost exclusively dedicated to geometrical arrangements in this part of the world. The Maghreb (Spain and Morocco) had long followed an independent cultural existence, developing its own characteristic architectural and decorative forms. The particular specialty here was always an intense geometric patterning, a tradition that has lasted right up to the modern period.

Mosaics

Mosaic is the decorative art of creating pictures and patterns on a surface by setting small coloured pieces of glass, marble or other materials in a bed of cement, plaster or adhesive. Employed as a form of interior or exterior decoration, and originally developed in ancient Greece, mosaics were developed extensively by Roman craftsmen, mostly in the form of pavements. Later, during the era of Byzantine art, artists specialized in creating mosaic designs for walls, and were renowned for their shimmering masterpieces of gold and multi-coloured glass. As a form of ornamental religious art, mosaic was superceded during Renaissance times by fresco painting. A revival of sorts occurred in the 19th century when many public buildings were decorated with mosaics meantime, from the 8th century onwards, Islamic artists began incorporating mosaics into the decorative schemes of their mosques. Mosaic was an ideal form of decoration for Islamic art, which banned figurative imagery from its religious buildings, focusing instead on abstract or geometric designs.There are three main ways of constructing mosaics: the direct method, the indirect method and the double indirect method.

1. The direct method of mosaic-building involves affixing the individual *tesserae* directly onto the surface of the chosen support. Preliminary drawings may be made beforehand on the area to be decorated. The direct method was a popular approach used by traditional artists in the completion of many famous European wall and ceiling mosaics. It is also used in conjunction with the surfaces of three-dimensional objects, such as vases. One disadvantage of the direct method is that the mosaicist must work at the site to be decorated, which may not be feasible for any length of time. A modern improvement involves the use of a fiberglass mesh. The mosaic is constructed on the mesh, in the artist's workshop, before being brought to its final location.

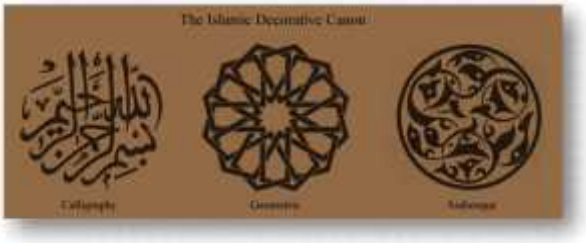
2. The indirect method of mosaic creation, customarily employed for large-scale commissions with repetitive design elements, requires the components (glass, tiles etc) to be affixed face-down onto a sticky backing. Later, they are transferred to their final destination. The advantage of this approach is that it gives the artist the opportunity to rework areas.

3. The double indirect method is like the indirect method with an extra stage. Instead of tiles being placed face-down onto sticky backing, they are placed face-up. This allows the mosaicist to see the pattern being created. Once the mosaic is finished, another layer of sticky backing is applied onto the top of it. Then the original layer is peeled off. The mosaic can then be transferred to its final resting place, as in the indirect method. (www. Materials and Mediums .com)

Note: Mosaic differs from *inlay* in that its component *tesserae* are applied to a recess just below the surface to be decorated. Each piece of mosaic is small and it is only when the piece forms part of an overall design that it acquires decorative significance.

Decorative Elements

1. **Calligraphy**
2. **Geometrical pattern**
3. **Non geometrical organic abstract shape (arabesque)**
4. **Vegetal motifs**
5. **Animal and human figure**
6. **Lifeless objects of nature**
7. **Conventionalized small objects**



I. Calligraphy

Calligraphy has been played in Muslim architecture decoration; this element has also been used in all religion and period. The inscription mostly divided into three main categories first, the longer Suraah of the Quran particularly on the mehrab and marlins of the architecture, secondly inscription has been found in the form of the verses of Quran, thirdly name of Allah and Mohammad (P.B.U.H) and lines of poetry. Most frequent literally material used in mosque decoration. We also found the inscription of temple palaces belongs from Hindus or Sikhs the word Om mostly used in Hinduism. We also found the name of builders, patron, date with detail of building are also included in the inscription with pattern for may be the purpose of decoration or recording the information about the construction.

Beautiful calligraphy and inscription can be seen on panels, spandrels, arches, bands around the dome or drums and boarders used in the different size and shape to fit the structure elements with different mediums. The most media was bricks, tiles, mosaic, carved wood, stone and carved stucco.

According to A.U Pope "The most prolific source of an ornament of the Islamic period exceeding in quantity and variety all others motifs are its own…. Indeed, it is particularly in religious monuments, with such boldness, ingenuity and refinement that the Islamic architecture in Persia could be merged and almost unintelligible without it …. It supplies the motifs for the decoration of both exterior and interior for drum and collar of domes for the face, and sometime soffits of arches, for the dado friezes and occasions to cover the walls themselves while the title inscription boarders are used everywhere to define and separate major units.

beautiful writing extended to all arts-including secular manuscripts; inscriptions on palaces; and those applied to metalwork, pottery, stone, glass, wood, and textiles-and to non-Arabic-speaking peoples within the Islamic commonwealth whose languages-such as Persian, Turkish, and Urdu-were written in the Arabic script.

- **Kufic Script**

The term Kufic means "the script of Kufah," an Islamic city founded in Mesopotamia (modern day Iraq) in AD 638. Kufic is a more or less square and rectilinear script characterized by its heavy, bold, and lapidary style. Its letters are generally thick, squat, and unslanted, and it was particularly suitable for writing on stone or metal, for painting or carving inscriptions on the walls of mosques, and for lettering on coins. Professional copyists employed a particular form of Kufic for reproducing the earliest copies of the Qur'an that have survived. The writing is frequently large, especially in the early examples, so that there may be as few as

three lines to a single page. The script can hardly be described as stiff and angular; rather, the pace is majestic and measured. With the high development of Arabic calligraphy, Kufic writing became an exceptionally beautiful script. From it, there were derived a number of other styles, chiefly medieval, in North and Central Africa, Spain, and northern Arabia.

- **Naskhi Script**

Naskh, which means "copying," was developed in the 10th century, and refined into a fine art form in Turkey in the 16th century. Since then it became generally accepted for writing the Qur'an and has remained to be perhaps the most popular script in the Arab world. It is a cursive script based on certain laws governing the proportions between the letters. Naskh is legible and clear and was adapted as the preferred style for typesetting and printing. It is a small script whose lines are thin and letter shapes are round. Naskhi was always employed chiefly for writing on papyrus and in time, it evolved into innumerable styles and varieties, including the ta'liq, the riqa', and the diwani scripts, and became the parent of the modern Arabic writing.

- **Thuluth Script**

The Thuluth script was first formulated in the 7th century during the Umayyad caliphate, but it did not develop fully until the late 9th century. The name means 'a third' -- perhaps because of the proportion of straight lines to curves, or perhaps because the script was a third the size of another popular contemporary script. Though rarely used for writing the Holy Qur'an, Thuluth has enjoyed enormous popularity as an ornamental script for calligraphic inscriptions, titles, headings, and colophons. It is still the most important of all the ornamental scripts and was used on some of the functions of the early Kufic script; it was used to write surah headings, religious inscriptions, and princely titles and epigraphs. It was also used for many of the large copies of the Koran produced from the 13th century.

- **Ta'liq Script**

The term ta'liq means "suspension" and aptly describes the tendency of each word to drop down from its preceding one. Designed specifically to meet the needs of the Persian language, Ta'liq was used widely for royal as well as daily correspondence until the 14th century, when it was replaced by Nasta'liq. Nasta'liq was the predominant style of Persian calligraphy during the 15th and 16th centuries. Nasta'liq is a combination of naskhi and ta'liq. Like ta'liq, this is a fluid and elegant script, and both were popularly used for copying Persian literary works.

- **Diwani Script**

The Diwani script is a cursive style of Arabic calligraphy developed during the reign of the early Ottoman Turks (16th-early 17th century). As decorative as it was communicative, Diwani was distinguished by the complexity of the line within the letter and the close juxtaposition of the letters within the word. Diwani is excessively cursive and highly structured with its letters undotted and unconventionally joined together with no vowel marks.

Superb example of calligraphy and inscription are found at the mosque of Malaitola, jamia masjid Wah and also fresco and stucco inscription on Mandir in Hazro. These inscriptions found in both interior and exterior.(www.arabiccalligraphy.com/resources)

II. Geometrical Pattern

The second element of Muslim art involves geometrical pattern, figures and living creation is prohibited in Islam so Muslim used and developed geometrical pattern. They crowned their architecture of palaces, mosques and gardens with geometrical pattern. These patterns can be seen in historic building of Potohar region. Most of the work is done in Mughal period and some later. The geometric patterns, consisted of, or were generated from, such simple forms as the circle and the square; they were combined, duplicated, interlaced, and arranged in intricate combinations, becoming one of the most distinguishing features of Islamic art. However, these complex patterns seem to embody a refusal to adhere

strictly to the rules of geometry. As a matter of fact, geometric ornamentation in Islamic art suggests a remarkable amount of freedom; in its repetition and complexity, it offers the possibility of infinite growth and can accommodate the incorporation of other types of ornamentation as well. In terms of their abstractness, repetitive motifs, and symmetry, geometric patterns have much in common with the so-called arabesque style seen in many vegetal designs. Calligraphic ornamentation also appears in conjunction with geometric patterns.

Many of the patterns used in Islamic art look similar, even though they decorate different objects.

The star and has been the chosen motif for many Islamic decorations. In Islamic iconography the star is a regular geometric shape that symbolizes equal radiation in all directions from a central point. All regular stars -- whether they have 6, 8, 10, 12, or 16 points -- are created by a division of a circle into equal parts. The center of the star is center of the circle from which it came, and its points touch the circumference of the circle. The rays of a star reach out in all directions, making the star a fitting symbol for the spread of Islam. (www,salam.co.uk)

According to Saud, 2004 geometry becomes center to the art of the Muslim world allowing artist to free their creation and creativity. A new form of art, based wholly on mathematical shape such as circles, squares and triangles emerged. Geometrical patterns are found in Potohar region such as Paracha mosque, Attock tomb, temple AttockHazro, Jamia masjid Wah, Wah garden and Saidpur Village Rawalpindi etc.

III. Arabesque / Non-geometrical Pattern

The arabesque (geometricized vegetal ornament) is "characterized by a continuous stem which splits regularly, producing a series of counterpoised, leafy, secondary stems which can in turn split again or return to be reintegrated into the main stem," writes Jones. "This limitless, rhythmical alternation of movement, conveyed by the reciprocal repetition of curved lines, produces a design that is balanced and free from tension. In the arabesque, perhaps more than in any other design associated with Islam, it is clear how the line defines space, and how sophisticated three-dimensional effects are achieved by differences in width, color and texture...."

"The underlying geometric grids governing arabesque designs are based on the same mathematical principles that determine wholly geometric patterns...."

The repetition of flora richly and highly modified form noted in mostly historical buildings in Potohar Region. In Islamic period arabesque takes an interesting turn, as such a highly complicated and rhythmic changing, covering mostly ceilings, dome, half dome and vaults of the mosques, temples and Palaces of Potohar region. The repeated arabesque pattern of miniature flora in different section is though very complicate decorative device in historical building of this region but is a marvelous decorative device in historical buildings of this region.Pattern and harmony of this colors creating fast movement without boring. Continuous multiple arabesque patterns emerge and applies with variation is

styles. Arabesques noticed in different shapes and sizes which spread on the required surface of murals along the edge of the celling of Paracha Masjid Attock, Jamia Masjid Wah and Attock tomb, and also large arabesque in Mandirattock.

According to Grobe, 1984 in Islamic buildings magnificent floral arabesque composed of leaves and stem, are utilized with remarkable clarity, enable eye to catch major lines of movement without being bored with endless repetition. Geometrical pattern very much linked to the concept of arabesque.

Arabesque defined in the Chamber Science and technology Dictionary, it is defined as ornamental work used for flat surfaces consisting of interlacing geometrical patterns of polygon, circles, interlocked lines and curves. The arabesque pattern is composed of many units joined and interlaced together, flowing from the other in all directions. Each unit although it is independent and complete and can stand alone forms part of the whole design not in the general rhythm of the pattern (Al.farooqi, 1973).

"***Arabesque strives, not to concentrate the attention upon any definite object, to liven and quicken the appreciative faculties, but to diffuse them. It is centrifugal, and leads to a kind of abstraction, a kind of self-hypnotism even, so that the devotee kneeling towards Makkah can bemuse himself in the maze of regular patterning that confronts him, and free his mind from all connection with bodily and earthly things" (quoted in Briggs, 1924, p.175).***

IV. Vegetal motifs

Muslim art is abstract rather than realistic floral pattern or vegetal forms in Muslim art can be seen clearly such as plant branches, leaves, flowers and fruits on Muslim historic monuments. Various types of floral pattern in Muslim architecture used because of prohibited living creatures in Islam. As far as Muslim art concern the geometrical pattern and floral pattern, the influence of these Muslim craftsmanship can be seen in Hindu temples. Decorative murals in Potohar region including Mundir Rawalpindi, Singh Haveli, MundirAttock, BaradariGurdwara are crowned with beautiful stylized vegetal motifs.

V. Stylized and Lifeless Objects

Motifs like vases, lamps, dishes, jar and waves motifs etc. also common motif in architecture of Potohar region. The historical buildings in Mughal period and later so many stylized vases, dishes and pots can be seen in Potohar region. It seems it was favorite element of decoration frequented of several architecture such as Mundir Rawalpindi, Singh Haveli, MundirAttock, BaradariGurdwara, Paracha Masjid, wah

Garden and Jasmia Masjid wah.

VI. Animal and Human Motif

Another motif which involved in living creature such as human, animal and birds figures which has been created on Historical buildings mostly Temples and Palaces in Potohar region.

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