PICTURE WALL OF LAHORE FORT

The Longest Mosaic Kashi Wall in the World



WALLED CITY OF LAHORE AUTHORITY

WCLA

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AGA KHAN TRUST FOR CULTURE

PUNJAB
TOURISM FOR ECONOMIC GROWTH

THE WORLD BANK
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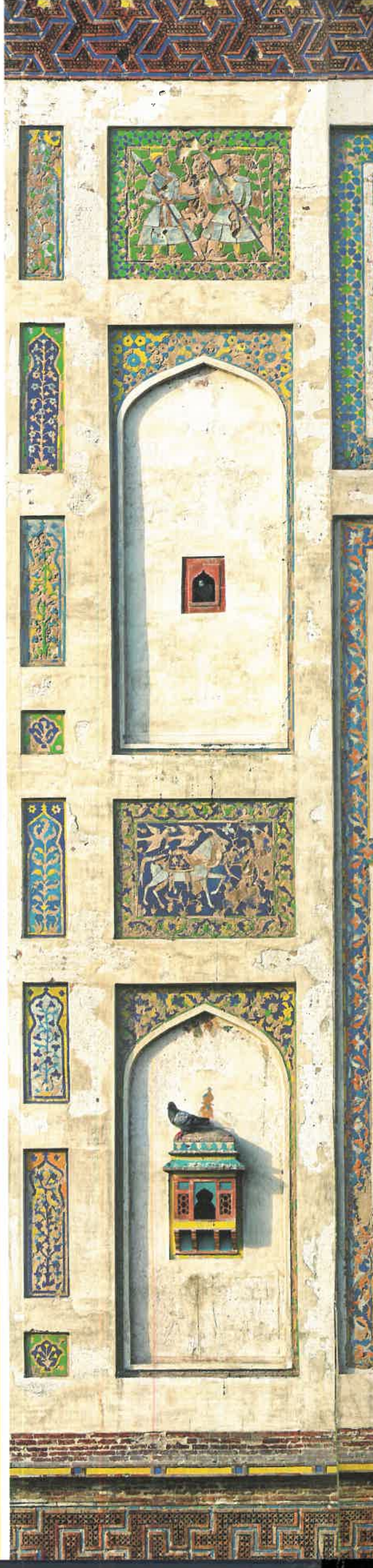
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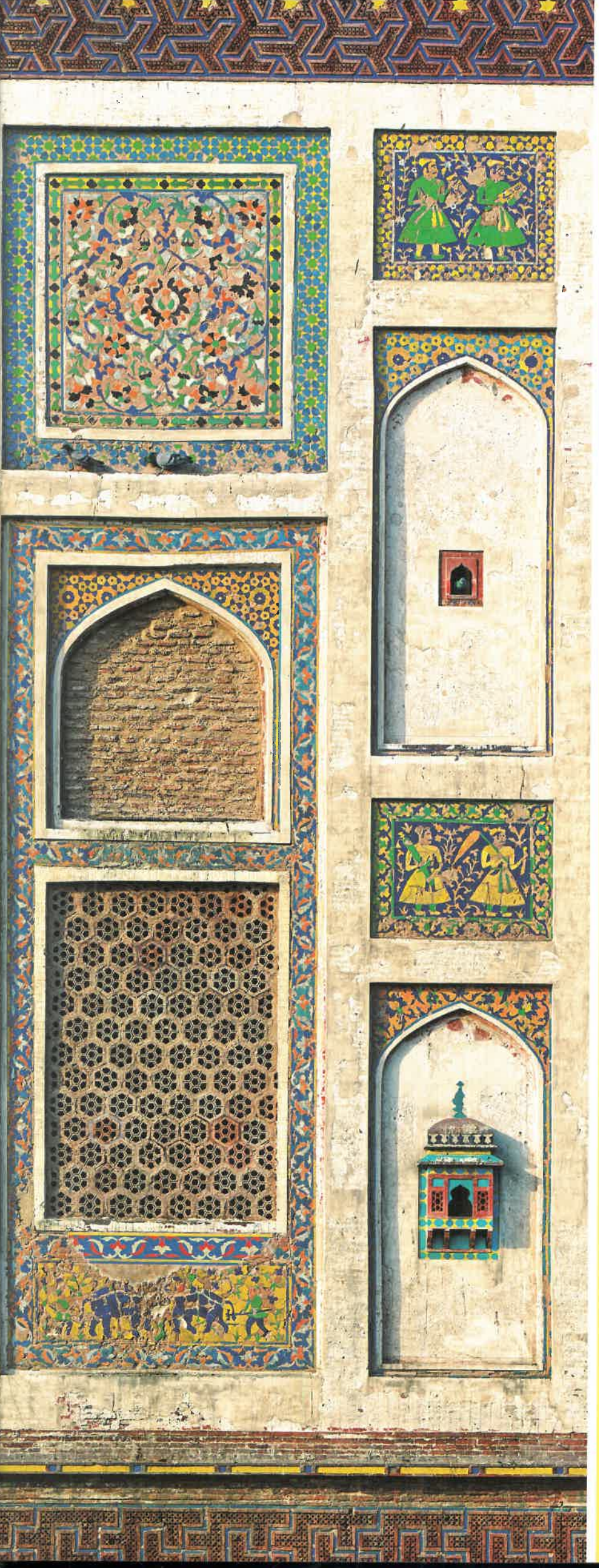
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Numerous times, I have walked along the Picture Wall of Lahore Fort, looked at it, gazed at it, sensed it and pondered upon it. One day, as I trudged along, I could feel and sense it as a living soul, beckoning me to listen to its echoes.

"Hear me, not with your ears but your heart. You are my custodian, my manager and guardian; Open up your senses for what I have to say is deep and intense. I am the Wall of the World. I am crowned as the Queen of Walls, of all times and all places; I am the largest running mosaic wall in the world, with 1000 panels and 1900 frescos.

About 400 years ago, I got constructed by one of the most aesthete person in the human history: Mughal Emperor Jahangir and continued by his son Shah Jahan, who were ardent lovers of painting and artistry. I stood as a Royal tapestry, exotic and unique but shared my beauty with every passerby, because art and beauty are not exclusive, I'm an exterior Wall, seen by all, high or low.

I stood here for centuries with full grace and glory. However, my splendor and glory deteriorated with the decline of Mughal Empire. I was caught up in brutal conflicts and battles between the Afghans, Sikhs and British. Many scars were inflicted upon my face. The British who occupied my roof top structures i.e. the *Sheesh Mahal,* altered the drainage system of Mughals and the stormy rain waters were entirely diverted from the original Mughal design, creating water spouts on my face directly. I felt that my regal stature had been splattered with the drainage. The British who are known for preserving their heritage, had inflicted this treatment to the heritage of Lahore.

British departed, the Subcontinent but my suffering did not end. I learnt with great excitement and expectations that I was falling into the hands of an independent sovereign country i.e. Pakistan. I thought I was now in the right

hands that will respect and value its great heritage. Time rolled on and I kept wondering and waiting. My condition worsened, I was despoiled and desecrated. My art work was scarred; I was besmeared by smoke, filth, haze and water seepage; I felt like a spoiled, torn and tattered queen. My body was defaced and the exotic designs faded away. What kind of independent nation had I mutated into, that threw cans and garbage around me, blew horns and emitted smoke and spitted next to me and worst of all, passed by without even looking at me.

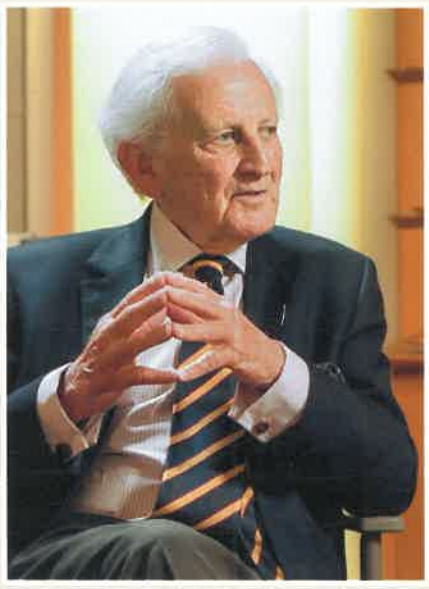
One day, my cries reached up to the heavens; I found that my tears had melted into the heart of a newly created Government organization i.e. Walled City Lahore Authority (WCLA), who had joined hands with the Aga Khan Trust for Culture (AKTC) to work upon my conservation; restoring me to my original glory. It was an enormous task, very intricate, painstaking, costly and demanding great patience and slow work. I am grateful for the patience, expertise and dedication of the experts for restoring me to my original beauty and grandeur. Today, I stand tall and proud and pray for those who conserved me and to those who look at me with admiration. I hope I can inspire a sense of ownership and pride to all those who have inherited me."

I wish to record my special thanks to the persons who made this publication possible;

Dr. Kanwal Khalid, who worked several months on its research, composition and the explanation of panels. Aisha Khan, Deputy Director Culture, WCLA for her interest and coordination to carry forward the Project. Lastly, but not the least, Aga Khan Cultural Service, The World Bank, Punjab Tourism for Economic Growth (PTEGP) and their team for the generous contribution to own up and finance the printing of this prestigious publication. I hope the book will reach the right hands to ignite interest and appreciation of our unique heritage legacy.



Kamran Lashari
Director General
Walled City of Lahore Authority (WCLA)



One of the most neglected areas of the Lahore Fort, the most important landmark in the Walled City, was the Picture Wall. The Picture Wall is a 1560 meters long mural composed of decorative tile, that spans the Northern and Western façades of the Fort and is the principal reason for the site's inscription on the UNESCO World Heritage List in 1981. Together with the *Shah Burj* Gate (*Hathi Pol*), the Picture Wall forms the original entrance to the Fort. Built approximately 400 years ago; it is among some of the most exquisite features of the Lahore Fort and is one of the largest murals in the world. Parts of the Wall are extensively embellished in cut brickwork, cut glazed tile mosaic work, filigree work and painted lime plaster. The Wall consists of an array of exquisitely decorated recessed panels, and the eaves and brackets of pavilions and other roof top structures are carved in sandstone and marblework inlaid with semi-precious stones.

Prior to restoration, the Picture Wall had become a site for storage of surplus materials and disposal of refuse. A major road (removed in 2016), just outside the Fort and running parallel to the Picture Wall, carried heavy traffic and further contributed to the Wall's degradation. As a result, the Wall's surface decoration was deteriorating at an alarming pace, exposing it to the risk of complete destruction.

Continuing an already strong collaboration between the Aga Khan Trust for Culture (AKTC), and its country affiliate, the Aga Khan Cultural Service-Pakistan (AKCS-P), and the Walled City of Lahore Authority (WCLA), established during the restoration of the Wazir Khan Hammam and the Wazir Khan Mosque in the Walled City of Lahore, and the Imperial Kitchen in Lahore Fort; in September 2015, under a partnership agreement, AKSC-P and WCLA engaged in the Conservation of the Lahore Fort project, which included as a key component, the restoration of the Picture Wall.

After the completion of detailed documentation, a technical review of the challenges pertaining to the conservation of various decorative elements led to the selection of a short section of the Western facade of the Wall for prototype conservation, to inform the Picture Wall's conservation principles, criteria, and methodologies. As a result, international experts and specialists were brought together for a peer review session in Lahore in January 2018, to review and assess the 'prototype' conservation and to arrive at a final course of action for the Picture Wall's conservation.

The methodology was endorsed and validated by this international team of experts. The approach to conservation was not to reconstruct missing pieces, but instead to protect and enhance what remains of the Wall. For this reason, reconstruction was kept at a minimum and only implemented where there was a clear aesthetic benefit, and where the original decoration of the Wall was completely lost. The development of an agreed presentation concept involved extensive team discussions, as well as numerous on-site trials and computer simulations. The solution that was adopted had the objective to safeguard the as-found condition and to enhance what remains of the original decorations by creating a visual order and by reducing visual interferences. The project warranted the expertise of both heritage crafts as well as conservators.

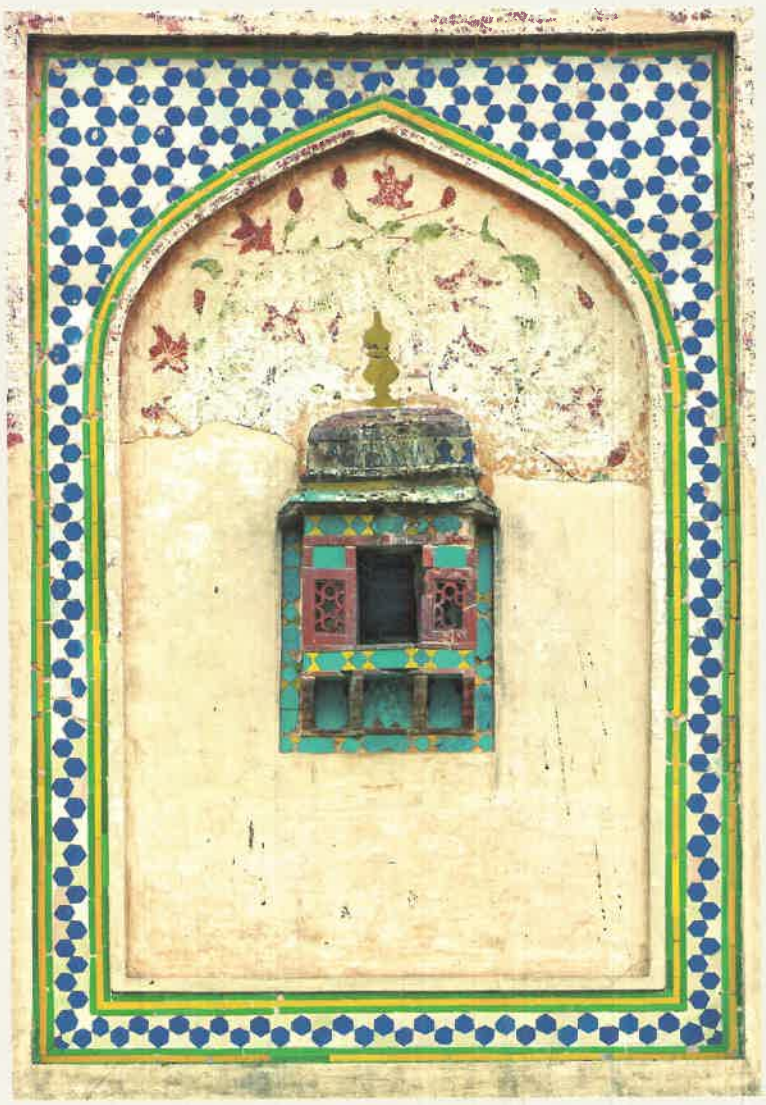
This approach was put into practice by the AKCS-P team and has resulted in the meticulous restoration of 1020 meters of the Picture Wall and the historic *Shah Burj* entrance to the Fort. AKCS-P plans to complete the final section of the Picture Wall in 2025, bringing this structure back to its glorious splendor.

While the conservation of the Picture Wall is an important initiative, it needs to be complemented by additional efforts and investments in urban design, urban rehabilitation, monument conservation and landscaping to reconnect the Lahore Fort with the rest of the Walled City and improve the quality of the Fort and surrounding buffer zone. To meet this objective AKCS-P and WCLA are contributing to on-going conservation activities under a comprehensive project '*Heritage and Urban Regeneration in Lahore*' funded by the Agence Francaise de Développement.

The partnership between AKTC, AKCS-P, and WCLA has resulted in the protection and conservation of Lahore's prized historic core and the maintenance of a substantial residential population within the old city by improving the quality of life through improvements in the urban environment. The strength of this commitment and dedication of the leadership within WCLA and the Government of Punjab has been key to the success of these endeavors, which I hope will continue in the years ahead.

Luis Monreal.

Luis Monreal
General Manager, AKTC





I am delighted to see this beautiful compilation of history, art and heritage. This is brilliantly done and walks its readers through the magnificent city of old Lahore with poise and grandeur. This is a wonderful addition to the personal collection of a diverse group of enthusiasts in Pakistan and abroad. It takes a great deal of effort, research and attention to detail for bringing a piece like this together. The powerful and awe-inspiring images in this book will amplify the imagination and bring interesting historical accounts to its readers. Several will want to visit these picturesque sites to admire the creativity and historical relevance.

The World Bank is a strong advocate of contributing towards a liveable planet and proactively sponsors heritage conservation projects. The Bank, in partnership with the Government of Pakistan and provincial governments is encouraging tourism departments to work with communities and private sector for cultural education, site conservation and promotion of creative industries.

Promoting tourism can create more and better jobs, as this industry remains labour intensive and also has the ability to absorb women workers. This book is a starting point for a very exciting and attractive tourism product which will be long cherished. We are glad to be a partner of the provincial government and the Walled City of Lahore Authority in this unique journey.

Najy Benhassine
Country Director for Pakistan,
South Asia Region
World Bank

Preface



The Mughal Dynasty began in 1526 that ended formally in 1857. The legacy of this dynamic era has intrigued the world till date. Scholars, historians, artists and architects have investigated, explored, researched and wrote about it for decades but there are dimensions that have remained hidden, even from the experts. Forts, tombs, palaces, gardens, mosques and other buildings by the Mughals, were created with sheer love and passion for these spaces. The creators of these monuments, employed the human genius in a very effective manner. The Mughal rulers not only encouraged and patronized the talent of that time but their appreciation and respect for them inspired the public as well into artistic creations of their own. This attitude of the rulers encouraged the genius and talented from all over the world to travel to the Mughal Courts and prove themselves. One such masterpiece created by these geniuses is the Picture Wall of Lahore Fort.

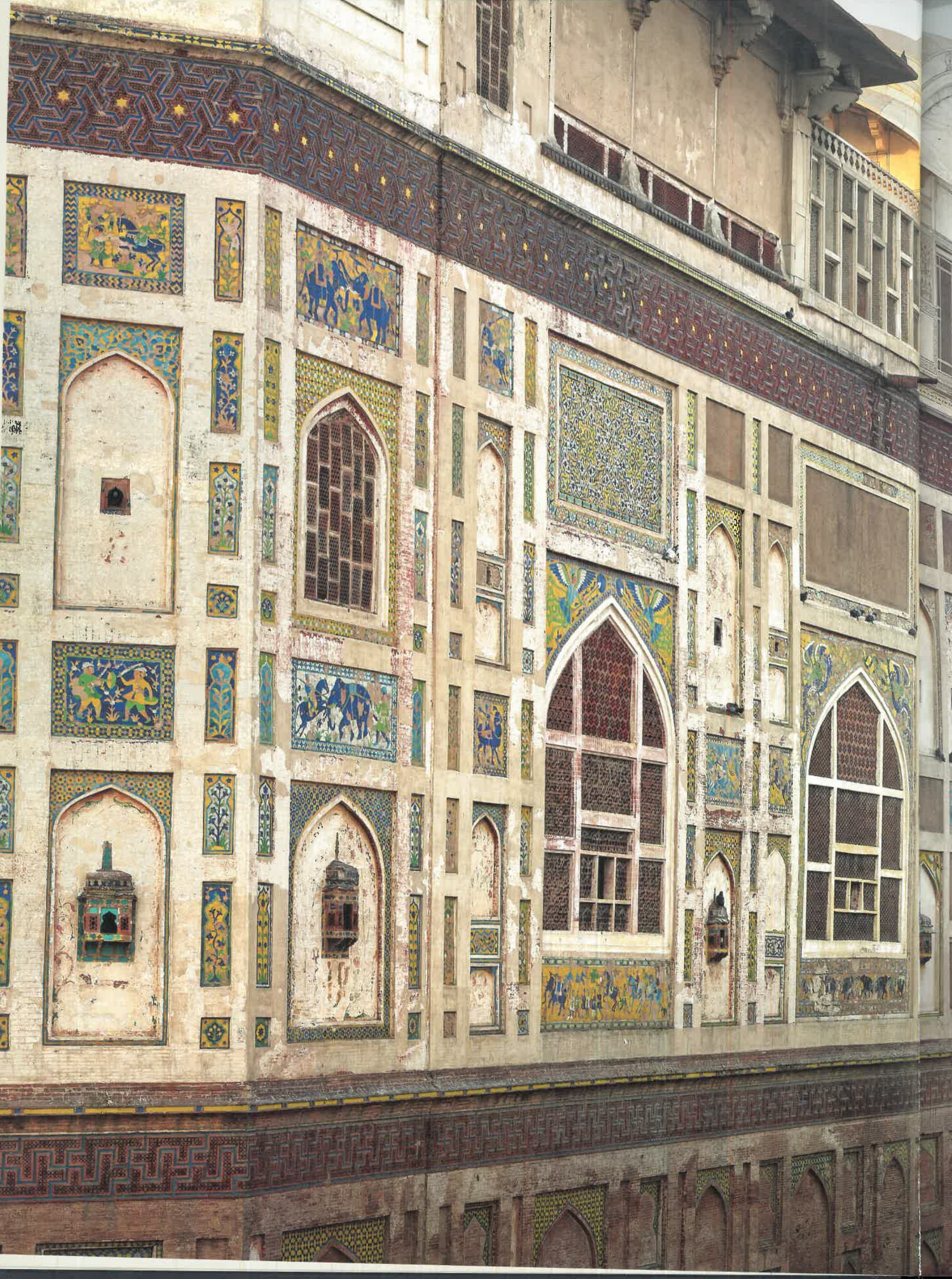
The city of Lahore was greatly loved by the Mughal rulers. They used to stay here for months and sometimes for years. The culturally rich atmosphere of the city suited the romanticism of Mughal cultural sensibility. They bestowed the city with innumerable gems in the form of buildings, out of which most of them perished in the past two centuries either due to wars or vandalism. But fortunately, some specimens survived the cruelty of time and became testimonials for the coming generations. These were the constructions that showed the level of technical expertise of ancient masters that was laced with aesthetics of a high level especially in the iconographic display of history, thoughts and philosophies. Picture Wall of Lahore Fort is a classical example in this regard. It is the visual dictionary of Mughal Era that contains intimate information of those days. All of this is saved in the imagery created by using different techniques such as fresco, brick work, Kashi Kari etc. Out of these mediums, Kashi Kari was the most favored, which makes this Wall the largest Mosaic Kashi Tile Work Wall in the world. The Wall contains amazing imagery of such a gigantic magnitude that has never been seen before or after. Much has been written about this Wall but in this publication, I tried to go beyond the surface value of the imagery and apart from discussing the aesthetics of the designs, forms and figures, I tried to interpret their symbolic value in relation not only to indigenous cultures but also to that of China, Iran, Europe and many other parts of the world.

Currently, a project related to the conservation of the Picture Wall is in process, which is initiated by the Walled City of Lahore Authority (WCLA). This is one of the largest conservation initiative in the history of Lahore. The main consultants associated to the restoration are the Agha Khan Cultural Service, Pakistan (AKCS-P), one of the leading conservationist bodies in the world. Their professional method of recording the data, conservation and preservation has made it a case study for the rest of the world. During the process, I was fortunate enough to get connected and was asked to give my input with reference to the history and aesthetics of the Wall. The result is this book in your hand, which is the product of a labor of love. But nothing would have been possible without the support, encouragement and patience of the Director General WCLA, Mr. Kamran Lashari, who initiated this endeavor and provided guidance and invaluable advice at so many levels of this publication. I am grateful to Mr. Kamran Lashari for his never-ending patience and patronage. I am also in debt to Mr. Khawaja Tausif Ahmad, the CEO of (AKCS-P) and the staff of the Project, who were helpful in providing the information for writing this monologue. I am also grateful to Ms. Aisha Khan Deputy Director Culture WCLA for her administrative support that was necessary in the completion of this book. Last, but of course not the least, I am grateful to my family especially my daughter Alina Khalid for her editing and proof-reading skills and my husband, Khalid Nawaz, for the photography of the book.

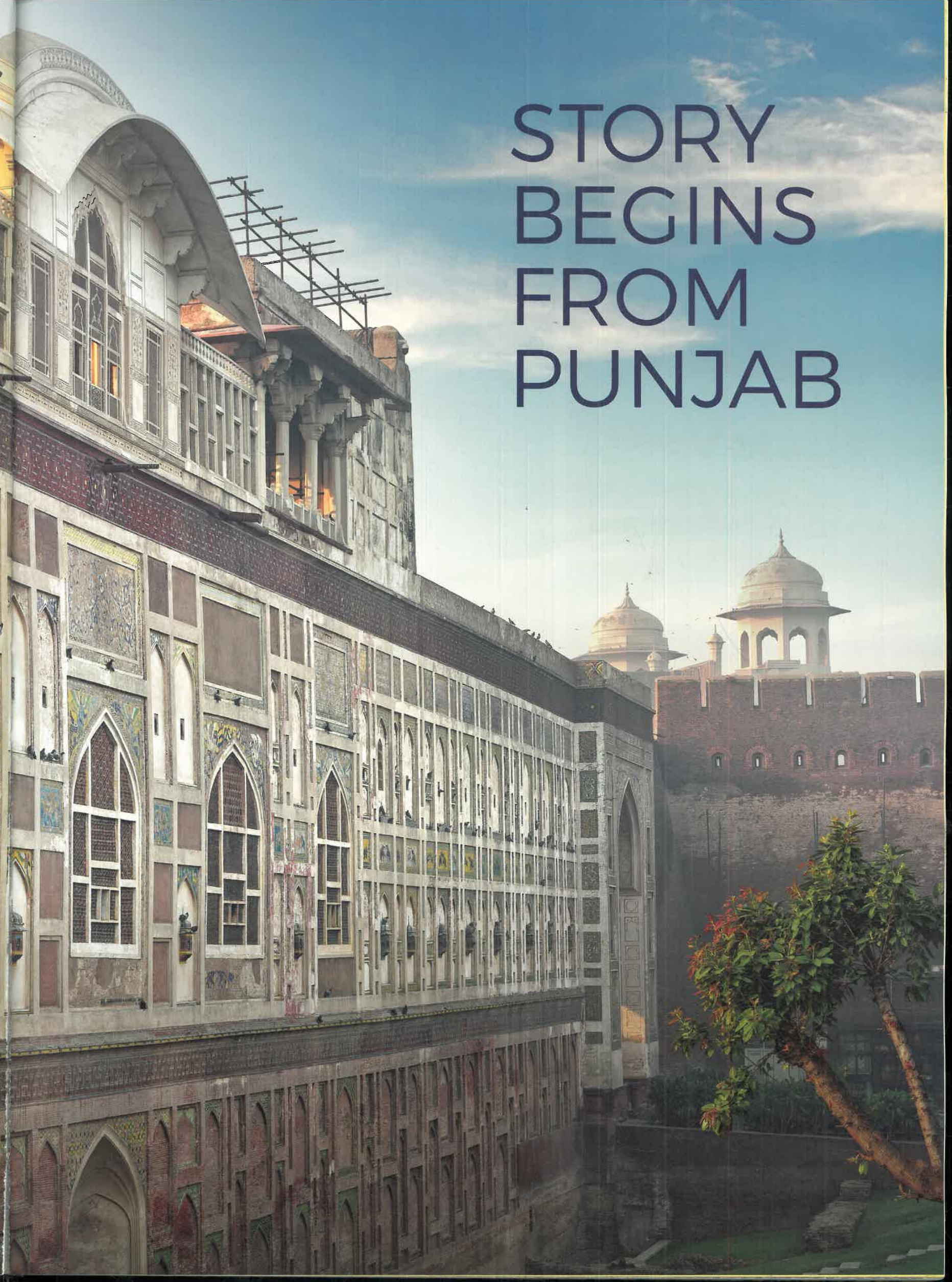
I hope the readers will enjoy the journey of exploring the aesthetics beyond the surface as much as I enjoyed investigating it and penning it down.



Prof. Dr. Kanwal Khalid
Art Historian
August, 2024



STORY BEGINS FROM PUNJAB



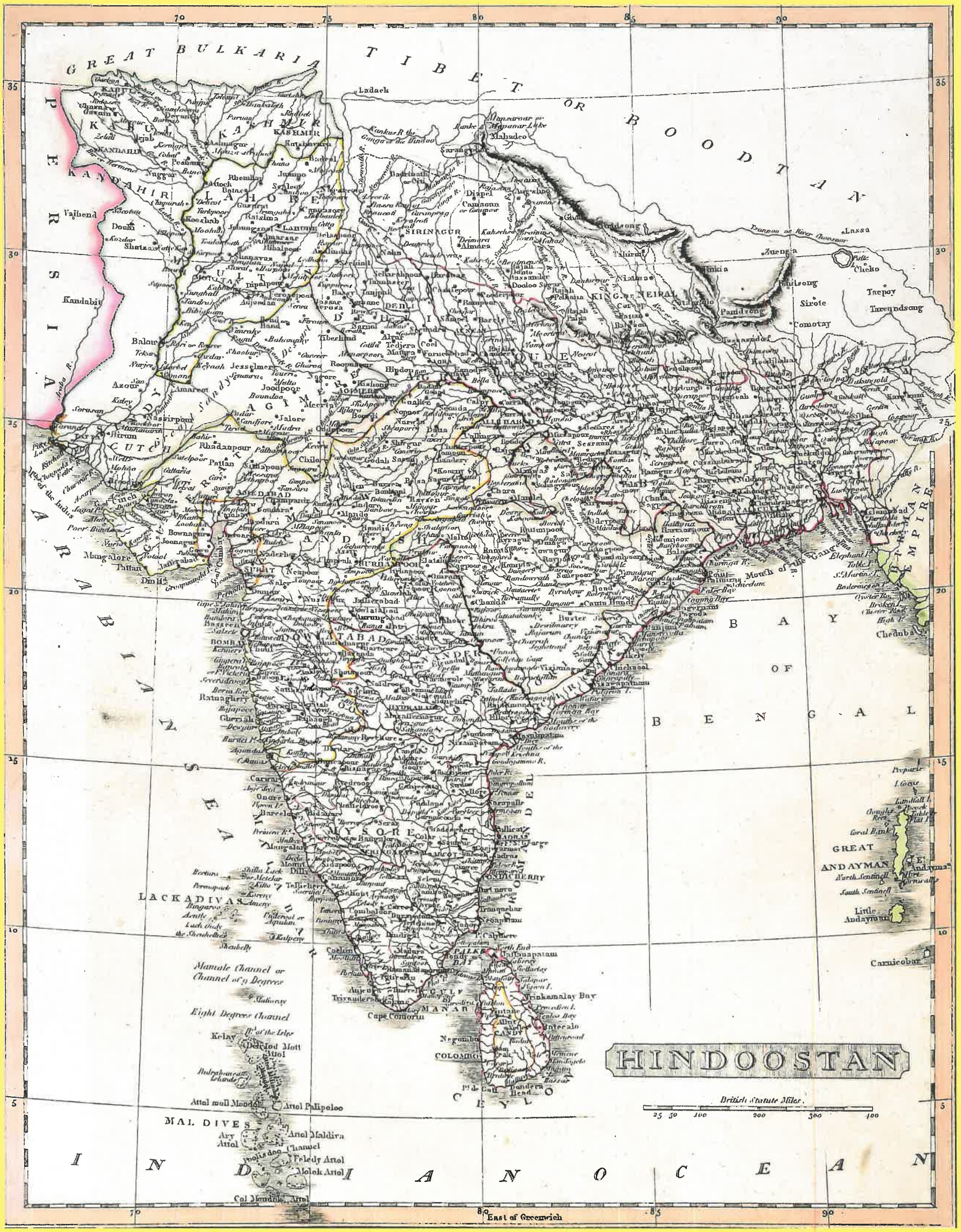


Fig. 1 *Map of the Subcontinent (Private Collection)*

History is a Continuous Dialogue
Between the Past and the Present.
—E. H. Carr

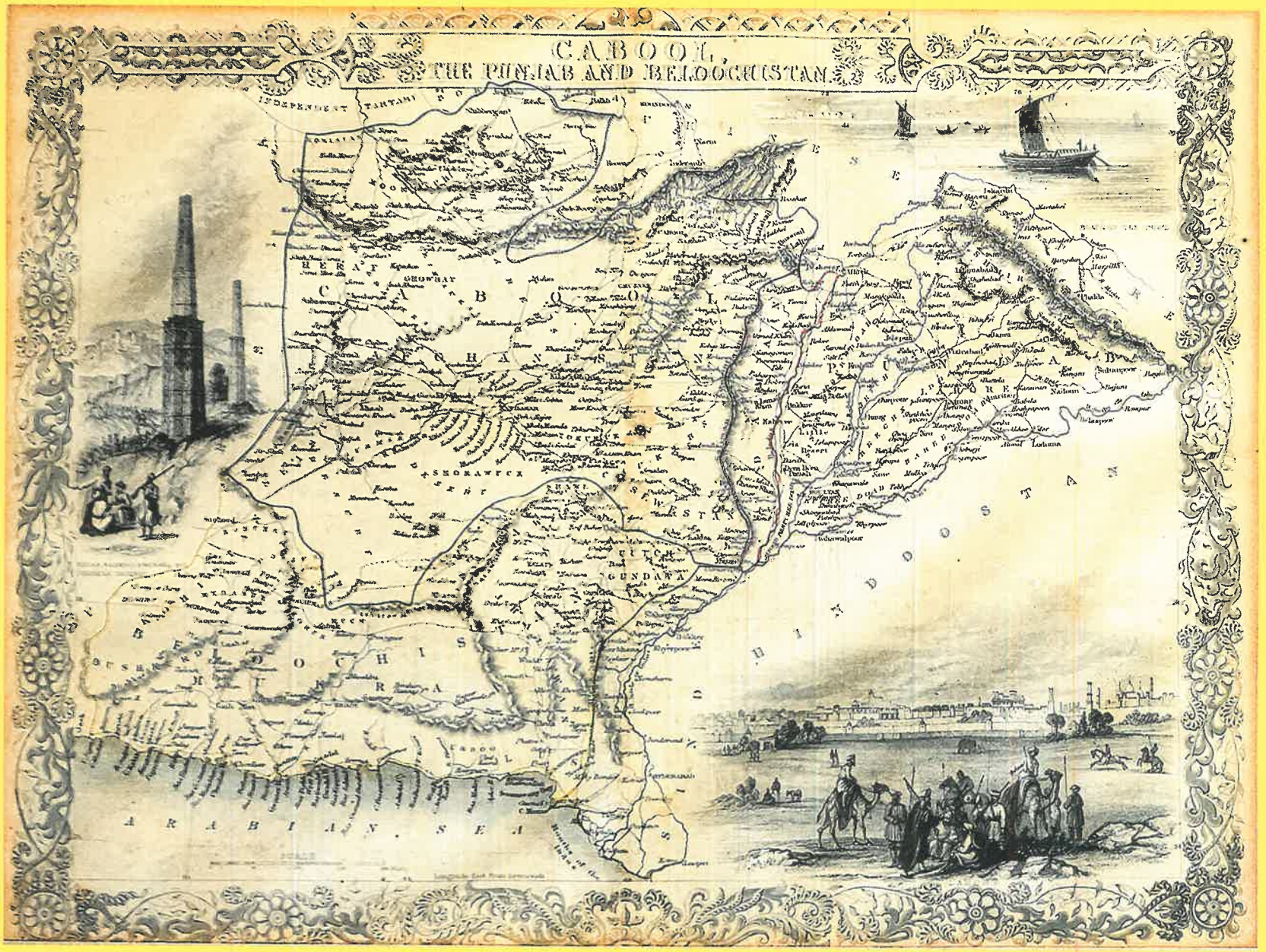


Fig. 2 *Map of Kabul, Punjab, Baluchistan (Private Collection)*

CARTE
de la Partie Supérieure
DE L'INDE EN DEÇÀ DU GANGE,
Compriſe entre la Côte du Concan et celle
d'Orixa avec l'Empire du Mogol, le Bengale,
le Rme d'Atham, partie de ceux d'Ava et de Pegu.
Par M. Bonne, Ingr Hydrographe de la Marine.

CABOUL
CANDAHAR
KAMARES
PETIT THIBET
CACHEMIRE
ARRACKHAGE
THURAN
HAJAKAN
MULTAN
les Scheiks
les Afghuans
SINDI
MOGOLS
MALOUF
INDOSTAN
CANDISH
GUZURATE
SIBA
BALAGHAT
Golfe de Cambaye
Golfe de Cambaie
Golfe de Guzurate
Tropique du Cancer
Caboul
Candahar
Nagar
Rokhaga
Vaihend
Kozdar
Kelvé
Kandahil
Bukor
Bando
Scheiks
Multan
Gehnat
Dipalpur
Tanasar
Serhind
Lahor
Jeinb
Nagracot
Eskerdon
Lalak
Cachemire
Ratab R.
Attek
Guzerat
Shantra R.
Ravy R.
Bidh ou Via R.
Jamad
Jeinapour
Dsapron
Mila
Serongé
Chunderpour
Keiff
Narvar
Gehud
Godah
Shahaur
Mirda
Paddar R.
Karmadi R.
Jesselmere
Azmer
Jaepur
Agra
Matura
Gualeor
Delmy
Bikanar
Parual
Pirumur
Ugen
Chitorgutte
Chipour
Ahmedabad
Cambaye
Barokia
Nerbodat
Brampour
Surate
Maman
Bacaim
Bombay
Chaul
Dabul
Mangalor
Mandoa
Tapti R.
Narbadal R.
Sihvand
Indus
Haur R.
Mansora
Tatta
Jauagar
Diul Sindi
Moahsa
Mossada
Pte Jaquete
Sihon
Stal
Nehend R.
Osvid ou Taul R.
Gange Fl.
Jumna R.
Ganga R.
Dsukiang-Somlou Lac
TIBET
Cosse de 4
Lieues communes
Lieues 4
Longde du Meridien de Fer
Longitude Comptée du

In the development and formation of any society, the land of that particular region plays a vital role. Before studying the evolution of any culture, it is important to understand what role Mother Earth played. (Fig.1) Historians and anthropologists have observed that the fertile areas of the world produced societies that gave birth to the civilizations that created arts of high quality. The main source of their progress was the affluence produced due to the fertility of that particular region, which depended on the rivers that flowed there, and the cities that flourished on their banks. Classical examples are Egypt beside the river Nile, Yellow and Yangtze rivers of China and Mesopotamia between Tigris and Euphrates. These were the lands of one or two rivers. In the present context Punjab is discussed, a land of not only one or two, but seven rivers in the ancient times, and five rivers in modern times.

In the Subcontinent, the pre-Aryan languages have not been deciphered; that is why, for the historical writings of this region, the concepts and names are picked from Aryan Period onwards. During this era, we find plenty of literary evidence regarding the life, culture and geographical features of Punjab. With the arrival of Aryans in the Subcontinent, *Rig Veda,* one of the oldest religious books of the world, was formulated between 1500 to 1000 BC.[1] In one of the verses of *Rig Veda*, it is written, "Indra killed the 'dragon' *Vritra*, son of *Danu,* the first born of *Vritra's* and *Ahi's*, and disclosed the water and cleft the channels of the mountain torrents and released the *Sapta-Sindhvah".*[2] *Sapta-Sindhvah* comprises of two Sanskrit words, *Sapta* meaning seven and *Sindhvah* meaning river, the land of seven rivers. The word is used to define the region more or less comprising of modern East and West Punjab. The question arises which were the other six rivers apart from river Indus? A generally accepted answer is *Sarsavati*, *Stadru* (Satluj), *Vipasa* (Bias), *Chandrabhaga* (Chenab), *Vitasta* (Jhelum) and *Ariavati* or *Iravati* (Ravi).[3] For the seventh river some scholars argue between River Kabul and River Indus. Both meet at the point of Attock and they have been considered as separate as well as one river. (Fig. 2)

But why did Aryans christian the land with this name? A very interesting argument is given by Sir N. G. Desai when he writes, "In Central Asia, Russian Turkistan, there is a country called 'land of the seven streams' and later all these streams flow into one lake. So, when the first Aryans came and settled in Punjab, they observed the similarity and might have transferred many of their original geographical names to this new land."[4] Later, in one of the songs of the aboriginal people of India, these Aryans were addressed in this manner, "Who would free (us) from the ruinous woe or from the *Arya* (enemy) of the seven rivers, though O, valiant hero, bend the *Dasa's* weapon down."[5]

In later centuries, mention of five rivers in the collective sense was found in *Yajurveda* and a word *Panchananda* was used,[6] which is a Sanskrit word to describe a land where five rivers meet. The locality of that meeting point is still called *Panchnad*. Beyond this point the Indus was called *Satnad*, carrying the waters of seven rivers including Indus, five rivers from Punjab and river Kabul. In later period, the word *Pentapotamia* (*Penta* means five and *Potamia* is water-----the land of five rivers) was used by Greeks to identify this

land.[7] In the same manner, Muslim Historians used the word 'Punjab' for this region.[8] The word is employed to define, more or less, the same area even today. (Fig. 3)

This is the land loved by its people for thousands of years and a 19th century. poet Zeerak Kalanori describes Punjab in such manner;

Persian Verses
Punjab ba Naz Khush Adai
Teeghi Ast ba Dast Dilrubai

Translation
'Punjab is a bewitching woman who holds a sword in her hand with great charm and allurement.' [9]

City of Lahore and Lahore Fort

The rivers of Punjab have cities on their banks and an important one is on the bank of river *Iravati* that is Lahore. According to Hindu mythology, *Iravati* is one of the names of Hindu goddess Durga. She is the wife of Rudra (one of the names of Shiva), god of rage, anger and fury, who unleashes terrible storms upon the mortals.[10] River *Iravati* is now Ravi, a major river of Punjab, running a full 450 miles from its source i.e. from Berha of Bengal, in Kangra District of Himachil. River Ravi is *Adris* of Ptolemy, *Hydrates* of Strabo and *Phaudis* of Pliny. In *Vedic* literature, it has also been called *Purushini*, or *Parushani*.[11] In the 1883-84 Gazetteer of Lahore District, Ravi has been described as the smallest of the five rivers of Punjab.[12]

Lahore is one of those cities in the world that has no record regarding its foundation date and it is very difficult to locate its origin. Muhammad Baqar in his book *Lahore, Past and Present* wrote that the first literary reference of Lahore was found in a book by an Arab historian Ahmad Bin Yahya who lived under the rule of the Abbasid Caliph Mu'tamid towards the middle of the 9th century. He lived in Baghdad and died in 892 AD. He is one of the earliest Arab chroniclers and in his book *Fatuhul Buldan*, he mentions Lahore by the name of *al-Ahvar*.[13] But this was a city of importance long before that. The basic logic is very simple that a land as fertile as Lahore, on the bank of a river, must have been a great attraction for the prehistoric inhabitants of this region. In one of his articles Khawaja Abd-ul-Rashid writes, "Lahore is one of the oldest cities of this continent (Asia). Its time period is that of Mohenjo Daro and Harappa. But the city has supremacy among other ancient cities and that it was never completely or irrevocably destroyed. Historians give the name of two cities Dimashq and Arabil that fall in this category, but we believe that there was a third city that shares the same honour and that is Lahore."[14] He gives 3000 years BC as the time when human inhabited this highly fertile land.

Lahore is an intriguing mystery for the students of history. Its legendary role in different mythological/historical events has made it an all-time curiosity for researchers. The story seems to begin by Ram, king of Ayodhya, the hero of *Ramayan*, who belonged to the Rajput tribes. Stuart Cary Welch in his book *Art* and *Culture* in *India* gives a detail about this race when he writes, "No one knows precisely when and how the Rajputs first came to India. 'History' as usual, blends myth with fact. Rajputs, whose name in Hindi is for sons (*Putras*) of kings (*Rajans*), are legendary descendants of the sun and the moon."[15] As the tradition goes, one of these Rajput Rajas, Ram had two sons Lav or Loh

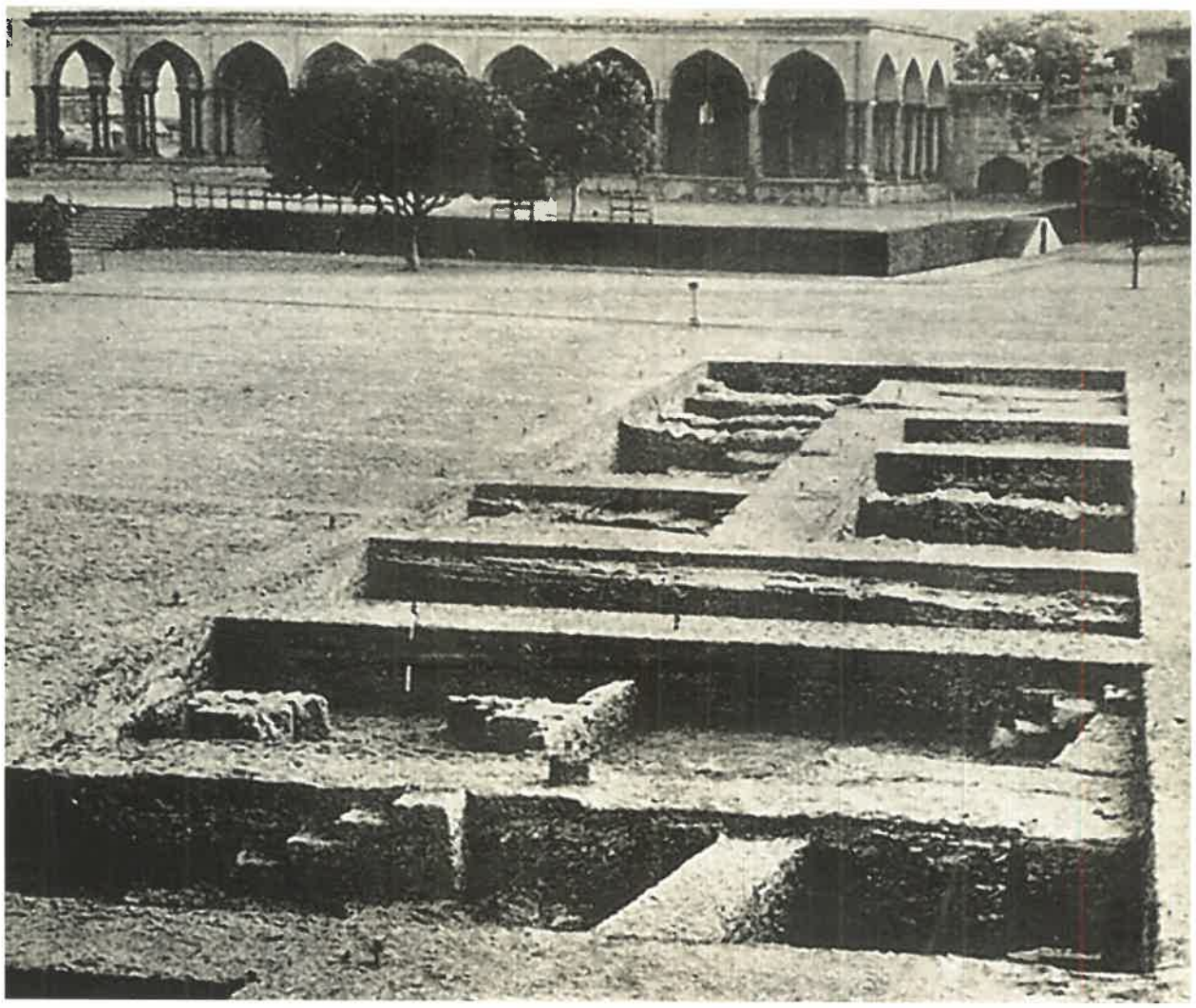


Fig. 4 *View of the Trench Dug at Lahore Fort 1959, in Front of Deewan-i-Aam (Department of Archaeology)*

and Kash, who founded the cities of Lahore and Kasur. Writers like James Tader 1838, Bota Shah 1847, Chishti 1867, Kanhaiya Lal 1886, Sir Richard Temple 1884, Gulab Singh 1884, and Thornton 1873, all agreed that Loh, son of Ram, was the founder of Lahore.[16] It is also accepted by all these historians that no specific date can be assigned for the foundation of this city.

A city as old as Lahore has a tradition of arts and crafts since ancient times. Evidence was found during the excavation carried out at Lahore Fort. (Fig. 4) Muhammad Wali Ullah, superintendent of Archaeology Department, Punjab, writes, "On the 14th May, 1959, excavations were started in the spacious lawns in front of the *Diwan-e-Aam* in the Lahore Fort and were closed on the 30th June, 1959 to be resumed again after the rains. The excavations have gone to a depth of about 40 feet, approximately the level of the area outside the Fort, and have revealed half a dozen occupation levels laid one above the other of British, Sikh, Mughal and Pre-Mughal periods. Among the cultural remains of the Pre-Mughal period, Ghorid and Pre-Ghorid layers are included. Interesting antiquities such as terracotta depicting mother goddess, horses, bulls and plaques carved out of bricks with figures of undoubtedly Hindu origin and style have been found. This shows that the mound, on which Lahore Fort and a portion of the Walled City of Lahore are built, is an accumulation of cultural layers of sufficient antiquity, the exact chronology of which is yet to be ascertained. In the last days of the excavation, a gold coin of Mahmud, minted at Ghazni and dated A. H 416 (1025 A. D) was also found in layer No. 18 at a depth of 25 feet."[17]

The digging went on for three months and a trench measuring 180 by 60 feet was dug for this purpose. It was stopped only when the archaeologists encountered virgin soil. In the report printed in Pakistan Archaeology Number 12-1964, it was written, "In all, twenty stratified cultured layers were encountered, (Fig. 5) which represented, from top to bottom on the natural soil, four distinct periods; the British and Sikh, Mughal, pre-Mughal, ____ and what is more important _____ the pre-Muslim period."[18] (Fig. 6-9) In the Pre Muslim section, a seven feet thick layer of debris was found with fallen mud bricks that indicates a great disturbance. 'The clearance of this thick deposit revealed a 12-foot-high wall of mud bricks against which much cultural debris had accumulated. This may represent the non-Muslim mud-brick fort, which is recorded to have been sacked by Mahmud of Ghazni during his Indian campaigns.[19] This is the first evidence that a large construction did exist here, which was most likely part of a Fort.

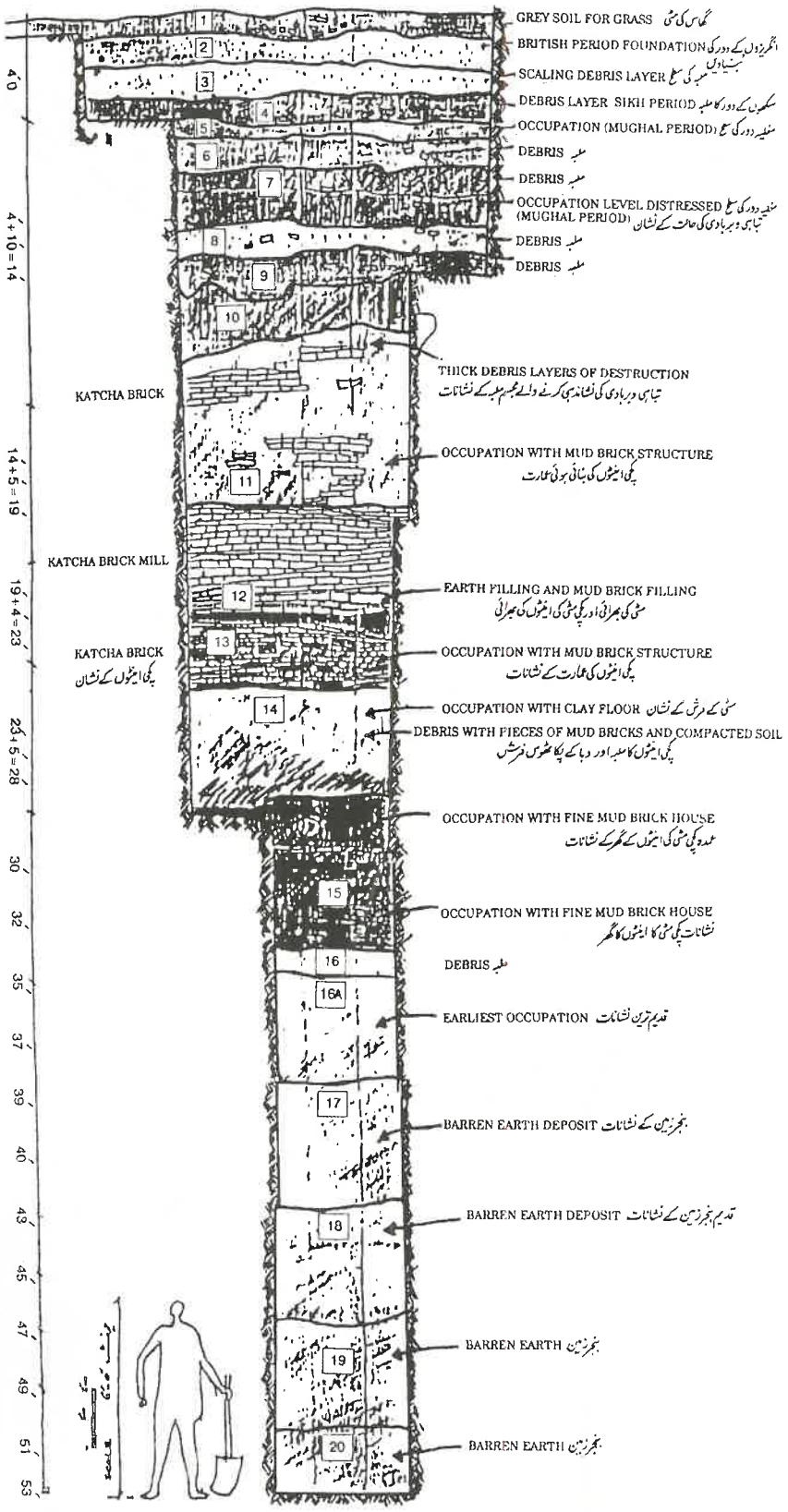


Fig. 5 *Archaeological Strata Uncovered in 1959 in Lahore Fort (Department of Archaeology)*

Except for the fact that some Rajput prince founded Lahore, there is not much of a political history available about the city, until the period of Muhammadan invasions[20] that took place primarily during the rule of Raja Jai Pal, a leader of the *Hindu Shahi* administration from 964 to 1001 AD. His territories extended from Peshawar to Lamghan and from Kashmir to Multan.[21] During that period, Alpatagin, who was a slave of Mansoor Samani, established an independent kingdom. After Alpatagin's death, his courtiers elected his slave Sabuktegin as a king. Sabuktegin and Raja Jai Pal encountered each other on the battleground many times and mostly it was the Hindu Raja who lost. Sabuktegin died after a reign of 20 years[22] and his son Ismail inherited the throne but his brother Mahmud overthrew him in 997. For the next 4 years he put his kingdom in order and in 1001 AD, attacked Hindustan for the first time. Raja Jai Pal thought that he could defeat the young prince, but lost the war. After so many successive defeats from the same enemy, the Raja performed the Hindu act of *Jauhar* by burning himself to death right outside the



Fig. 6 *Terracotta Pottery Found During 1959 Excavation, Pre-Muslim Layer (Department of Archaeology)*



Fig. 7 *Terracotta Utensils Found During 1959 Excavation, Pre-Muslim Layer (Department of Archaeology)*



Fig. 8 *Terracotta Horse Found During 1959 Excavation, Pre-Muslim Layer (Department of Archaeology)*



Fig. 9 *'Relief of a Goddess with A Child in her Lap', Found During 1959 Excavation, Pre-Muslim Layer (Department of Archaeology)*

wall of the city of Lahore that was his capital.[23] This also confirms that the city had a wall around it as early as the *Hindu Shahi* period.

Anand Pal, the son of Jai Pal and successor to the throne, faced the immediate challenge of Mahmud. He called the rulers of Hindustan and they joined their forces to get rid of Mahmud once and for all. They fought in the vicinity of Peshawar. Anand Pal lost the battle but Lahore was left untouched for the next 13 years and the Raja had to pay the tribute money to Mahmud.[24] Abu al Fatah, the ruler of Multan, was against Mahmud so the Afghan decided to punish him. Mahmud asked for help from Raja Anand Pal who was his tributary. The Raja not only refused but also allied with Abu al Fatah. After defeating the Multan ruler, Mahmud turned around and attacked Raja Anand Pal. The Raja ran to Kashmir and Mahmud had the chance to conquer his territory but instead he appointed Jai Pal II, the son of Raja Anand Pal, as the next ruler.[25] Mahmud kept on expanding his territories in Hindustan. In Lahore Jai Pal's grandson tried to create problems for Mahmud. In 1021, the Afghan stormed down from the mountains of Kashmir valley and seized Lahore without any resistance from the ruler.[26] Both politically and geographically, the city of Lahore and its rulers were very important. Muslims fought for 200 years to control this region and once they were successful in Punjab, it put the seal of confirmation on the fate of the Subcontinent.

Mahmud of Ghazni conquered Lahore in 1021 and it is believed by many historians including Kanhaiya Lal[27] that he immediately appointed Malik Ayyaz (his favourite slave) as the ruler of Lahore. But this is not the fact. Initially he allowed the local Bhats of a Rajput tribe to rule here[28] but due to frequent rebellions, it became necessary that he

appointed his courtiers to govern Lahore. No prince was appointed as the ruler of Lahore but it was given under the control of the officials called *Salars*. The very first name that we find in records is *Salar* Abdullah Qratgin. We do not know his date of appointment but he governed Lahore till 1030. The next name found in the history is *Salar* Uriaruq who ruled till 1032. *Salar* Ahmad Nial Tageen replaced him but he was killed in 1034 when he rebelled against the Ghaznavid rule.[29] Over the next two years there seems to be no one in Lahore to represent the Ghaznavids but since the city was an important military base, the Sultan handed it over to a member of the family and for the first time in history, a Muslim prince was appointed as the ruler of Lahore. Sultan Muhammad Bin Mahmud Ghazni appointed his son, Prince Amir Majdood, as the ruler of Lahore in 1036. He was accompanied by Abu Mansoor as *Dabir*, Saad Salman as Finance Minister and Abu al Najam Ayyaz as the *Ataliq* and counsellor to the prince.[30]

Unfortunately, almost all the art and crafts of that period, are lost to the mist of time but in the poetry of Ghaznavid poets like Masood Saad Salman, Masud Raza and his son Abu-al-Faraj Rauni, the grand buildings and the rich culture of Ghaznavid Lahore was frequently mentioned. There is also a reference of beautiful wooden doors of Ghaznavid period that were discovered in the walled city almost 20 feet below the ground. (Fig. 10) Arif Chughtai, the director/ curator of Chughtai Museum Lahore, wrote in one of his articles that few other doors of the same era were taken from Lahore to Victoria & Albert Museum in 1911.[31] Percy Brown also mentioned the *Lahori* doors of this style in his book *Indian Architecture (The Islamic Period).*[32] (Fig. 11)



Fig. 10 *Wooden Door of Lahore, Chughtai Museum, Lahore*

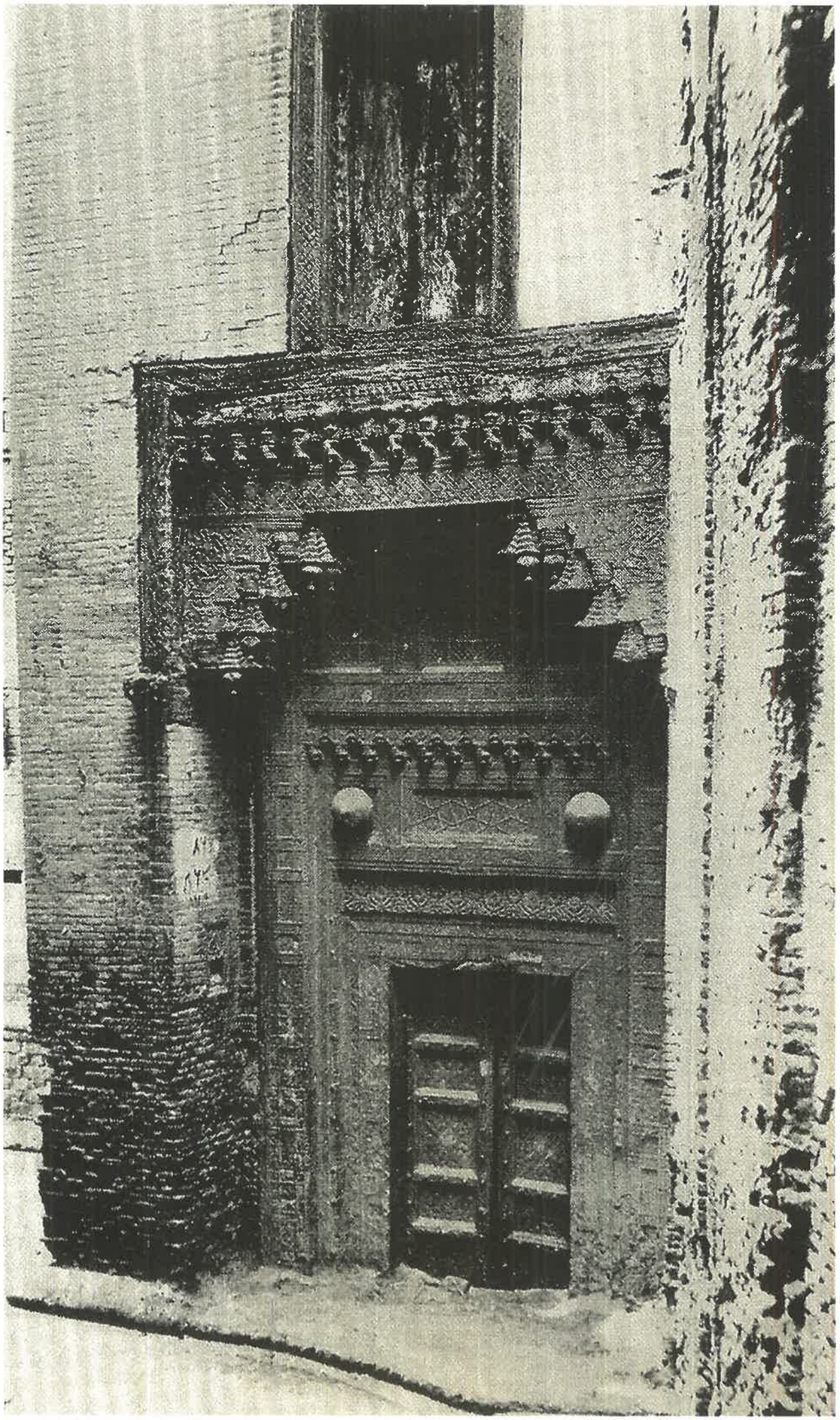


Fig. 11 *Wooden door of Lahore Published in Percy Brown's Book 'Indian Architecture (The Islamic Period)'*

For the next 165 years, from 1021 to 1186, Lahore enjoyed the status of a provincial capital and later the capital of 16 rulers of the Ghaznavid Dynasty. In 1186, the city was conquered by Shihab-ul-Din Muhammad Ghouri who assumed the title of Sultan of Delhi in 1193. Since then it remained, up to 1524, the provincial capital of the Turks i.e. the Khiljis, Tughluqs, Sayyids and Lodi Sultans of Delhi.[33] During the rule of all these dynasties, Lahore Fort played a pivotal role not only in the defence mechanism of the city but this location was vital in the socio political and cultural legacy of Lahore.

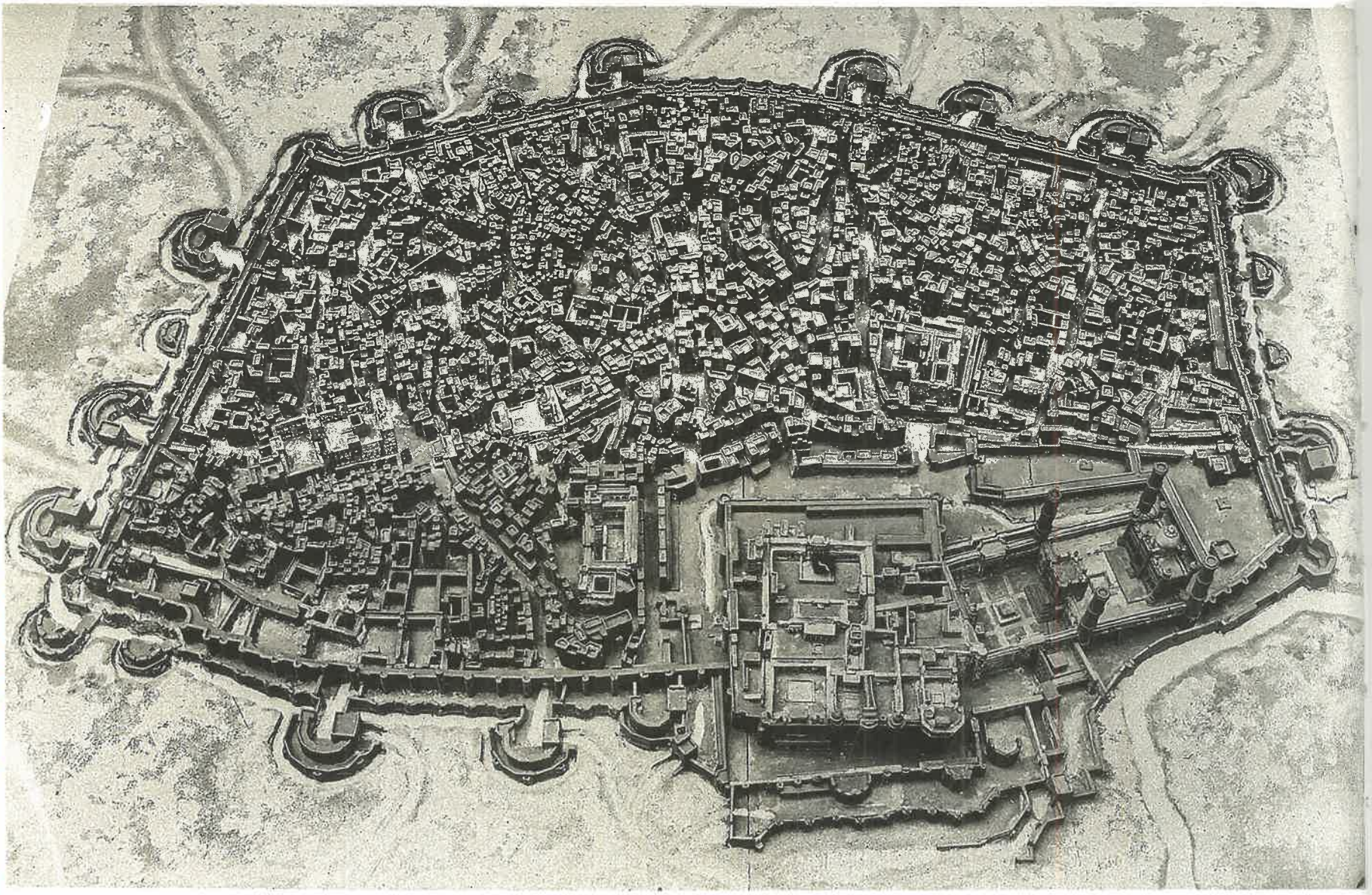


Fig. 12 *Photograph of a 19th Century Clay Model of the Walled City of Lahore, Destroyed in World War II (Image Victoria & Albert Museum)*

Shahi Qila (Lahore Fort)

Occupying the North-West corner of the city, irregular in plan, Lahore Fort measures about 1400 feet East-West and 100 feet North-West excluding the moat and the Northern fortification wall, which were added later during the time of Ranjit Singh. (Fig. 12) Ravi, which originally banked the Fort Wall, shifted its course further North, thus necessitating such a defence on that side.[34] (Fig. 13) This Fort is a witness of many dynasties with a layered past. Existence of a citadel in its present location is centuries old and a very interesting monument inside is the *Smadh of Loh,* commonly known as *Loh Ka Mandir.* (Fig.14) The site and design of the current structure that dates back to Sikh Period,[35] has no architectural resemblance to the design of traditional temples. If we compare the level of *Smadh* with

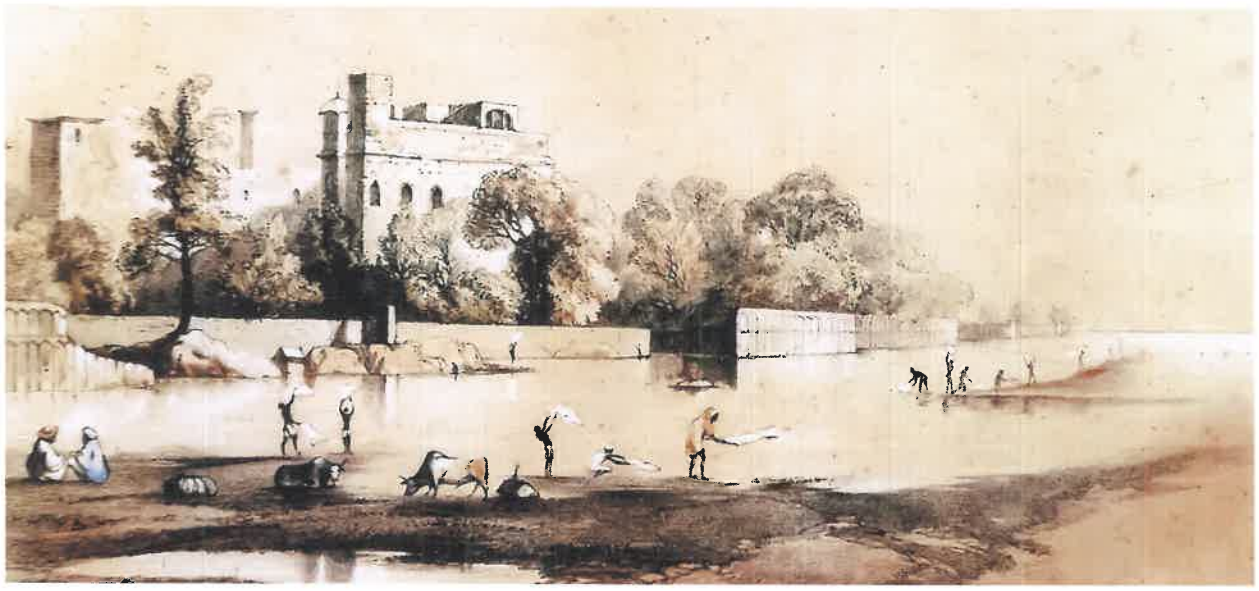


Fig. 13 *River Ravi flowing near Lahore Fort Wall, Collection Punjab Archives*



Fig. 14 *Structure in the Room Adjacent to Loh Ki Samadhi?, Lahore Fort*



Fig. 15 *Loh Ki Samadhi?, Lahore Fort*

1959 Lahore Fort excavations, we can see that it is almost at the same level of pre-Muslim layer. Recently, rooms have been excavated by AKTC, adjacent to this structure. In one of the rooms, a *Smadhi* is discovered. (Fig. 15) So, it can be fairly assumed that this might be the location of cremation of *Loh,* traditionally known as the founder of Lahore.

The story of *Loh* and *Kasu* might be considered a myth, but there is always some grain of truth behind every tradition. As mentioned earlier, Rajputs were associated with this city and there are frequent references of Lahore and its brave Rajput Rajahs in different ancient chronicles. 'In the *Raja Tarangini,* the ancient chronicle of Kashmir, Lahore is mentioned as dependency of the great Lalitaditya'?.[36-37] In the *Desh-vi-Bhaga*, a compilation from the *Puranas,* drawn up by order of the learned Raja Jai Singh Sawai of Jaipur, it is recorded, "At the end of the Dwapar or Bronze Age, Bhim Sen fought Ban Mal, Raja of Lahore, a mighty prince, with an army of 10,000 horsemen, and after a conflict that lasted for three days, took him prisoner and made his kingdom tributary."[38] It can therefore be fairly assumed that Rajputs of the Solar Race were ruling and living in Lahore and Loh was an important personality of the city. About the Rajput kings and their relationship with the Fort, it has been written, "The society under the Rajput rule was feudal. Agriculture, industry and

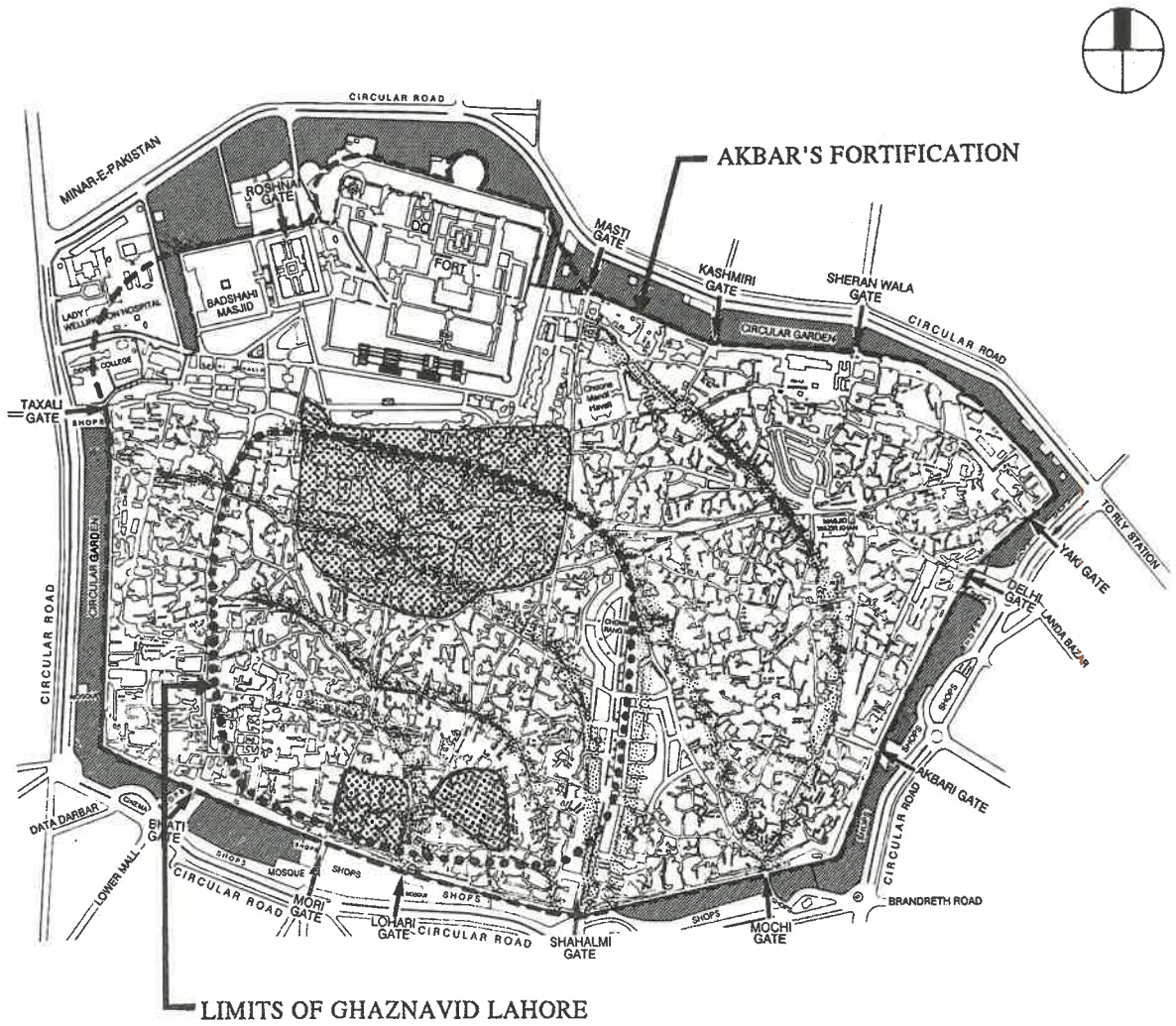


Fig. 16 *Growth Rings of the City Showing Limits of Ghaznavid Lahore (Department of Archaeology)*

trade flourished that resulted in the accumulation of wealth for the rulers; these rulers constructed many forts. One of the forts, *Loh Kot* was constructed with clay and initially it was called *Loh Awar* (the fort of *Loh*) and today it is famous as *Shahi Qila* (Royal Fort)."[39] Lahore was invaded innumerable times and the location of the Fort was strategically very effective to defend the city. Nazir Ahmad Chaudhary observes, "There did exist some sort of fortification on a mound close to the city, the regular and formal building of the Fort of Lahore came up with the arrival of Muslims."[40]

Mahmud of Ghazna sent Malik Ayyaz to Lahore in 1037[41] who played a pivotal role in the development of the city. Most of the Lahoris declare him the founder of modern Lahore. He rebuilt the badly damaged Fort and strengthened the wall around Lahore. But this Walled City was not so big and it had maximum four or five gates. (Fig. 16) In 1040 when Prince Madood attacked Lahore, the young prince Majdud took refuge in the newly built Fort. This proves that the Fort was constructed by then. Malik Ayyaz died in 1057.[42] In 1286 Lahore was invaded by Taimur Khan. Balban's son prince Muhammad defended the city but the Mongols ravaged the region. Later on, Ghakkar tribes continued to rob Lahore for some time. During all these attacks, the Fort was damaged and rebuilt continuously.[43]

Over a course of thousands of years, rulers of Lahore made changes and altered the construction plan of Lahore Fort many times. As a result, several foot marks have been left here but much of the existing structure is attributed to Mughals who gave the Fort its current look.

The Mughals



Fig. 17 *Mughal King Babur, Miniature Collection, Lahore Museum*

Mongols (later Mughals) attacked and besieged Lahore, in 1241. Behram Shah, the governor of Punjab, first barred himself in the Fort and then escaped to Delhi in the dark of the night. The invaders damaged the Fort walls badly and burnt its gate.[44] Babur (Fig. 17) carried on the tradition of his ancestors and made his first raid to the Subcontinent in 1519. By 1524, he had attempted to invade Punjab three more times. He was unable to take control over the region but a joint request for help from Alam Khan, Ibrahim Lodi's uncle, and Daulat Khan, an unsatisfied governor of Lahore, encouraged Babur to attempt his fifth, and first successful, raid.[45] In *Baburnama* (his personal memoirs), he mentions that Daulat Khan, after seeing his approaching army, fled to the South to a colony of Baluchs. Babur faced the opponent army, led by Bihar Khan Lodi, and defeated them. Some deserters fled towards Lahore. Babur followed them and entered the city. It is believed that he attacked Lahore on 15th January 1524. He stayed for four days and during that time, people were killed mercilessly, the city was looted and burnt. From here he moved on to Depalpur and the treasures found there were in the form of grain, slaves, gold and silver. He marched towards Sirhand, came back to Lahore and appointed Mir Abdul Aziz (his master of the horse), the head of Lahore Garrison. This Garrison helped him throughout during his conquests,[46] which eventually led to his final victory in the famous battle of Panipat on 21st April 1526 that established Mughals as the main rulers of the Subcontinent.

In 1529 Babur brought his family to India.[47] Kamran Mirza, Babur's son, was given the governorship of Lahore and Multan. From the beginning, Kamran showed interest in the art, architecture and culture of the city that was to become the hallmark of later Mughals. He built many beautiful buildings including his palace called *Nau Lakha*, near *Yaki Darwaaza* along the bank of river Ravi.[48]



Fig. 18 *Kamran ki Baradari (Department of Archaeology)*

In those days anything that was unusual and extraordinarily expensive was called *Nau Lakha* e.g. *Nau Lakha Haar* (expensive necklace), *Nau Lakha* pavilion (expensive building), *Nau Lakha* Pakwan (expensive food), *Nau Lakhian da Khandan* (extraordinarily rich family) etc. This palace was also given the same name due to its high cost of construction. The other important monument associated with Kamran, is his *Baradari* on the river Ravi near Shahdara. (Fig. 18) In his times it was on the left side of Ravi but now it is in the middle of the river and people have to use boats to reach there. This was the second Mughal garden after Agra. Although many gardens were built by later Mughals but this *Baradari* and garden was always appreciated by later generations. Zafar Khan Ahsan, a *Mansabdar* and poet of Shahjahan's court wrote about Kamran's *Baradari*;



Fig. 19 *Mughal King Humayun, Miniature Collection, Lahore Museum*

Persian Verses

Bakam Kun Chu Ahsan Ta Tawani
Babagh-e-Kamran Kun Kamrani

Translation:

'Oh Ahsan! As long as possible, according to the desire of your heart, celebrate the festival in the garden of Kamran.'[49]

This was the earliest known monument of Mughal Period in Lahore but the old remains were bulldozed and replaced by a modern *Baradari.*

Unfortunately, Babur did not live long to enjoy his family and empire, and died in December 1530. His son Humayun (Fig. 19) was enthroned but due to continuous intrigues by his brothers, he lost his empire to Sher Shah Suri in 1540. Humayun won back his kingdom with the military and financial assistance of Persian Emperor Shah Tahmasip and sat on the throne of Delhi on 23rd July 1555 but lost his life in an accident after six months and died on the 24th January 1556. Humayun never stayed in Lahore but came here for a few days when he was running to Persia to save his life. It is said that in those days he met Hameeda Begum and married her. Later on, she gave birth to the greatest Mughal king in the history of India known as Akbar the Great.[50]

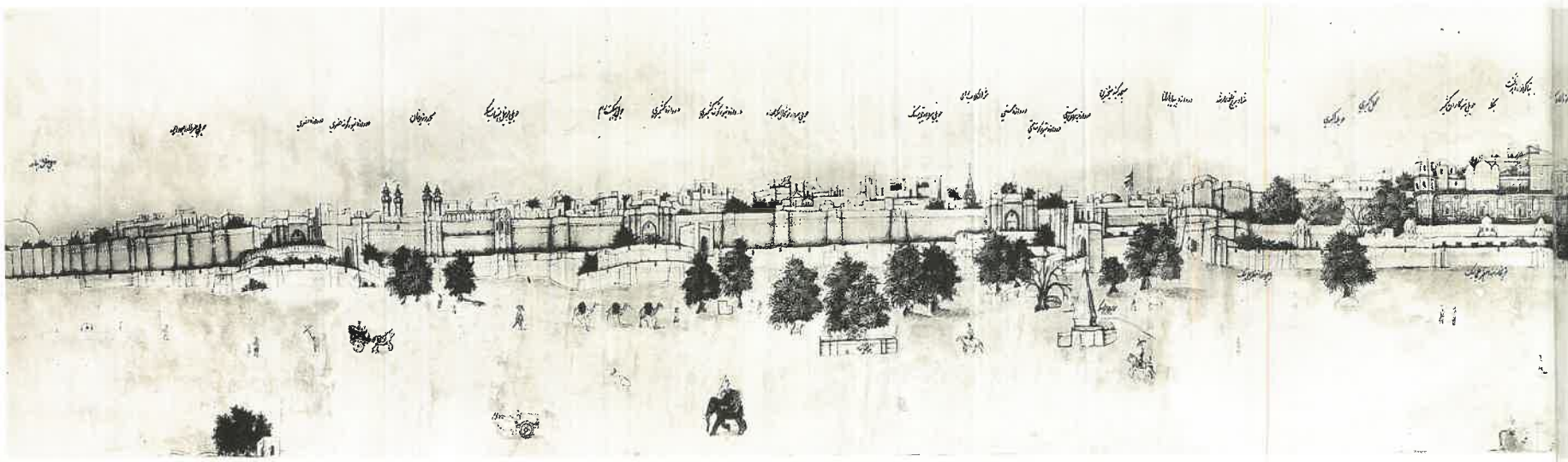


Fig. 21 *Sikh Period Map of Lahore, Collection Punjab Archives*



Fig. 20 *Mughal King Akbar as a Young Boy, Miniature Collection, Lahore Museum*

Akbar spent his childhood tossed around because of the conquests and misfortunes of his father but he was an excellent wrestler and skilled horseman from a very young age. He was encamped at Kalanore and fighting the Afghans when he heard the news of his father's death. Since he was the only legitimate heir to the throne, Akbar was proclaimed *Padshah* at Kalanore. He was 13 years and four months old.[51] (Fig. 20) His young age was a problem but Bairam Khan, a faithful courtier of his father, took charge to guide and train him. First few years, of Akbar's reign, were spent in this way but later on the strong-willed young king, found Bairam Khan too oppressive. Very intelligently he got rid of him and by the age of 19, Akbar was an independent ruler taking care of his empire.

As king, Akbar came to Lahore on 7th December 1556 and stayed here for four months and fourteen days. He reorganized the administration of the city and then to supervise the campaigns of Sindh, Kabul and Kashmir, Akbar declared Lahore the capital of Hindustan in May, 1586. It remained so for the next fourteen years. Initially, he lived at the *Haveli* of Raja Bhagwan Das, whose daughter was married to his son, Prince Saleem.[52] The city wall was doubled and between those walls a ditch was laid that was filled with water. Twelve gates, at their present locations, were pierced in the wall with two smaller gates called *Mori Darwaaza* and *Mori Sannan*.[53] (Fig. 21,21a)

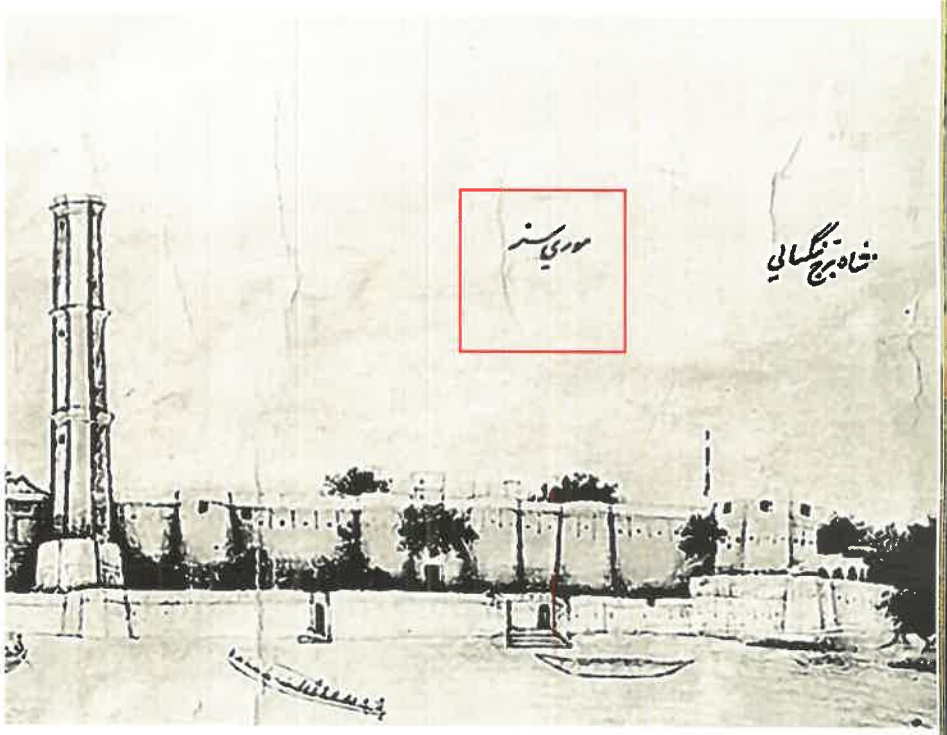


Fig. 21a *Detail of Map Showing Mori Sannan*

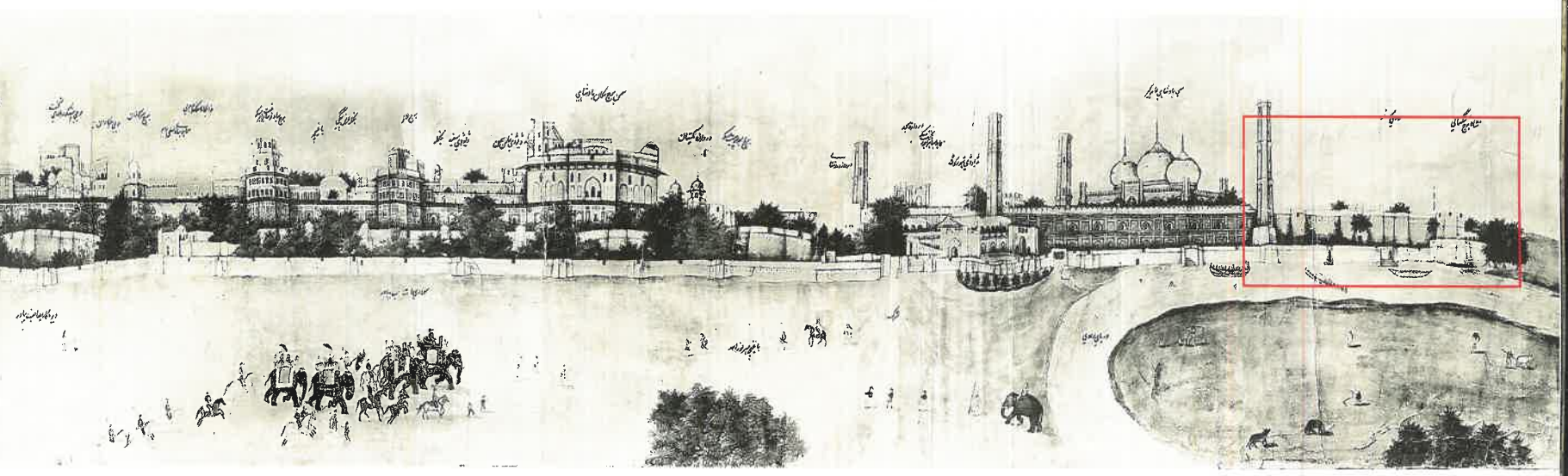




Fig. 22 *Mughal King Akbar, Miniature Collection, Lahore Museum*



Fig. 23 *Mughal King Jahangir, Miniature Collection, Lahore Museum*

After initial years of trouble, Akbar's period in Lahore was comparatively peaceful. (Fig. 22) His kingdom was strengthened and his family settled. During his stay, the city thrived with artistic and cultural activities. Akbar was not literate but his memory was legendary and it is said, he knew the names of the artists and artisans who worked in his atelier and workshops. He patronised artists and many projects of illustrated manuscripts were undertaken by the Mughal Court. During Akbar's stay in Lahore, more than fifteen famous works were illustrated including *Tarikh-i-Khandan-i-Taimurya*.[54] Lahore Fort was also the home of young Prince Saleem. (Fig. 23) Although, they had many differences but both father and son shared a passion for art and architecture. The prince began to appreciate fine arts and started contributing his own ideas as well.



Fig. 24 *17th Century Mughal Miniature, Miniature Collection, Lahore Museum*

These were the times when the Mughal Empire was becoming famous for its wealth and kings were getting the reputation as the great patrons of different forms of knowledge, art and craft. Learned people from all over the world were encouraged to join the Mughal court. As a result, the creative processes of that period onwards, were a combination of influences from Iran, China, Turkey and many other regions. The European travellers and missionaries have been coming to India for many centuries but their number increased tenfold during the Mughal Era and since the King was in Lahore, they resided here. With them came European philosophies, illustrated Bibles, sketches and prints. They were also bringing European paintings as gifts to the King. All this was a source of great inspiration for both the patrons and the artists. The local painters were asked to make copies of European paintings and they did it very successfully.[55] (Fig. 24)

Lahore Fort and the Mughals

At present the Fort is a shadow of what it must have been during the Mughal period. Time has not been kind to this majestic architectural structure but the 21 remaining monuments are a testimony to the artistic inclinations of the Great Mughals. Babur and Humayun were not able to contribute much to Lahore Fort due to their troublesome reigns. It was Akbar who had the Fort reconstructed. Many buildings were added not only in the city but to the Fort as well. According to *Ain-i-Akbari,* Emperor Akbar demolished the mud Fort and rebuilt it in burnt bricks; but no date of its construction is recorded. A Fort, however, is mentioned in connection with Mirza Muhammad Hakim's rebellion in 1566. Assuming it to be the same Fort as built by Akbar, it can be concluded that the present terracotta brick Fort was constructed before 1566.[56] This was the beginning of the Fort as it is today. A massive *Masjidi Darwaaza* was also constructed in the same year. (Fig. 25) According to Muhammad Wali Ullah Khan, "It appears that the Fort of Akbar's period had only two gates, one on the East, *Masjidi Gate,* and the other on the West, which was later replaced by *'Alamgiri Gate'*."[57] Akbar did not build the whole Fort but he established the nucleus of it. *Akbari Mahal, Jharoka-e-Shahi* or balcony (now to be seen in the centre of *Deewan-e-Aam*), *Akbari Hammam* and the *Moti Masjid* were the buildings that formed Akbar's quadrangle. *Akbari Mahal,* which was close to the Eastern Gate of the Fort, does not exist anymore. Akbar and Jahangir made their daily public appearance at the *Jharoka.* According to court chronicler, Mullah Abdul Hamid Lahori, the courtiers who attended the audiences, in front of *Jharoka,* were protected against rain and sunshine by an awning.[58]

Akbar accomplished great achievements and many ambitious architectural projects, especially his forts, were a hallmark of his era, but, unfortunately, at Lahore Fort, most of the buildings of his period, were wiped out in the massive fire that broke out in 1597.[59] Akbar's stay in Lahore was the artistic zenith of the city. The Emperor moved to Agra in 1599, never to come back.[60] But the later Mughals contributed a lot to rectify the damage caused by the fire.



Fig. 25 *Akbari Darwaaza, Lahore Fort (Image WCLA)*

Jahangir inherited the Empire in 1605 and Lahore was his favourite city. He added many buildings in the Fort and the prime area is famous as Jahangir's Quadrangle that consisted mainly of *Khawabgah* (bed chamber) and *Seh Dara*. The construction of *Daulat Khana Khas-o-Aam* was initiated by Akbar in 1587 and completed by Jahangir in 1620. This building of hundred and sixteen rooms, took almost thirty-two years to be completed and seven *lac* rupees were spent on it. Much of the building is gone now. Just some traces of the foundation stones can be seen.[61] Luckily *Jharoka* and the twelve-room building is still in existence. (Fig. 26) *Makateeb Khana,* near the *Moti Masjid,* is another important construction of Jahangiri period. An inscription can be found on the *Makateeb Khana* that records that the building was completed in the seventeenth year of Jahangiri period i.e. 1617 under the supervision of Abdul Karim known as Ma'amur Khan. [62]

Much has been written about Lahore Fort but the treasures it holds for any researcher, are beyond our imagination. Although in a deeply ruined state, the remains testify existence of majestic structures, in which the grandeur of the past can still be seen. To relive the glory of it, Jahangir's memories about the Fort are narrated here. He writes, "On Monday, the 9th of the Divine month of Azor (which is the ninth month of the Iranian calendar, has thirty days, begins in November and ends in December by the Gregorian calendar), corresponding to 5th *Muharram* of AH 1030 (20 November, 1620), mounting an elephant by the name of *Indra*, I went towards the city, scattering coins as I proceeded. After three watches and two *Gharis* of day had passed, at the selected auspicious hour, having entered the royal residence, I alighted happily at the building recently brought to completion and finished handsomely by the exertions of Ma'amur Khan. Without exaggeration, charming residences and soul stirring sitting places had been erected in great beauty and delicacy, adorned and embellished with paintings by rare artists. Pleasant green gardens with all kinds of flowers and sweet-scented herbs deceived the sight. Altogether, there had been expended on these buildings the sum of Rs. 700,000 or 23,000 current Tumans of Persia."[63]



Fig. 26 *Jharoka-e-Shahi, Diwan-e-Aam, Lahore Fort*

Ma'amur Khan is mentioned frequently with the construction of different Mughal buildings. In many instances his title Ma'amur Khan is presented as driven from the word *Mai'mar* that means constructor which is equivalent to the architect in present times. But this could also be from the word *Ma'amur,* which means 'assigned for a job'. The prime example of the mentioning of this title is on the main entrance arch of the *Daulat Khana-e-Jahangiri* commonly known as *Makateeb Khana*. It is believed that this is the space that was used by the administrators of Mughal court to issue orders and carry out secretarial jobs.

Apart from adding many important quarters in the Fort, Jahangir is credited with the world famous *Deewar-e-Musawwari*, Picture Wall that is encircling the Fort on the Western and Northern sides in present times. This was an extremely ambitious project that was completed during Shahjahan's reign.



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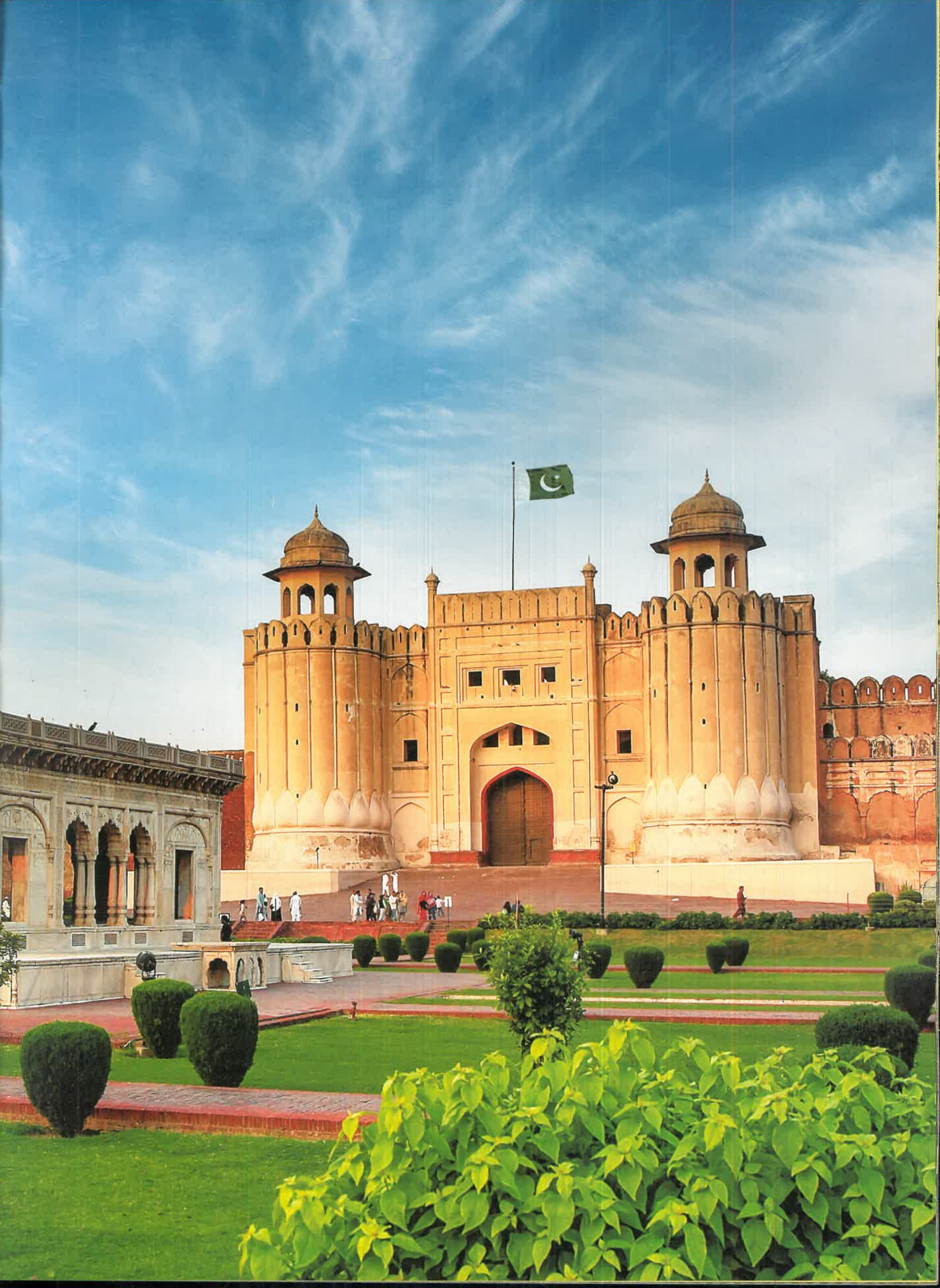




Fig. 1

DEEWAR-E-MUSAWWARI

Picture Wall of Lahore Fort

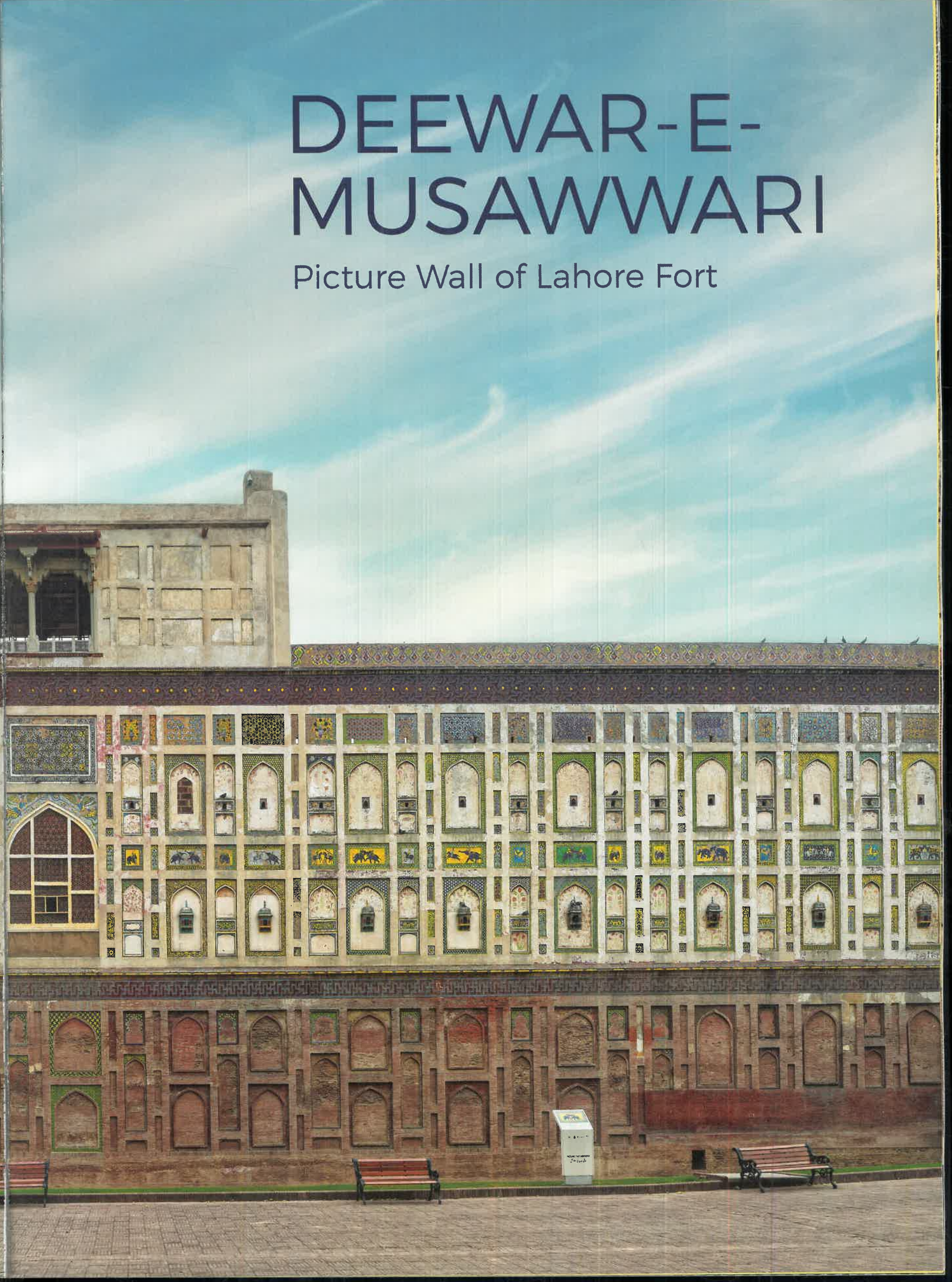




Fig. 2

The creative capacity in every human being is of different levels but some of the creations prove the extreme extent of the efforts of creators. Picture Wall of Lahore Fort is a prime example in this regard. (Fig. 1) Called as the largest mural in the world (450 meters long with an average height of 15 meters), it is extensively embellished with fretwork, fresco panels, filigree work, lattice work (trellis), tile inlay etc. The unique feature of the Wall, are the panels made using the technique of Kashi Kari that makes it the longest Mosaic Kashi (glazed tile mosaic) Wall in the world, with 500 yards of length and an average height of 16 yards, a surface of 8000 square yards, adorned in such an impressive manner. This Wall is one of the main factors due to which Lahore Fort was declared UNESCO World Heritage Site in 1981. R. Nath writes, "The wall originally covered an immense mural area 500 yards in length and 16 yards in height (=8000 square yards =72000 square feet =6688.80 square meters)."[1] Currently the West facade is 235 feet, curvature one is 63 feet, curvature two is 72 feet, curvature three is 63 feet and the Northern side is 1355 feet that also includes *Kala Burj, Lal Burj* and the Last Tower. (Fig. 2)

Picture Wall Over the Centuries

Initial study of the Picture Wall reveals the stylistic coherence of the whole space. It was a huge undertaking that covers the Western, West-Northern and Northern sides of Lahore Fort. Starting from Akbar's Quadrangle, the Wall enfolds Jahangir's and Shah Jahan's Quadrangles, (Fig. 3) almost covering the main constructed areas of the Fort because the later Mughals did not add much in the following centuries. The climax is the *Shah Burj*, which, according to the inscription written on the arch, is a construction of the *Shah Jahani* era.

The exact date of the construction and embellishment of the Wall is not confirmed. Different historians have mentioned various eras. According to Muhammad Wali Ullah Khan, a renowned Pakistani archaeologist of yesteryears, the Wall was, "Commenced by Jahangir in his 19th regnal year in 1624-25, this Wall of *Shah Burj*, known as the Picture Wall, was completed by Shahjahan in 1631-32".[2] R. Nath assigned the construction period from 1612 to 1619.[3] Vogel is of the view, "This much may be asserted with certainty, that the tile-mosaics of the Lahore Fort belong to the first-half of the 17th century, i.e., the period during which this decorative art flourished in India. If we wish to fix the date between narrower limits, we may perhaps venture to say that it fell in the decade from A. D. 1620 to 1630, in other words, at the end of Jahangir's reign and the beginning of that of Shah Jahan."[4] (Fig. 4)

For the research, a conventional route was taken by consulting the accounts written by European travelers. But unfortunately, not much detail was found in their writings about Lahore Fort. William Finch (1610) spent some months in Lahore, but his memoirs does not provide detailed information. Finch's scanty observations were copied by Joannes de Laet (1581-1649). The tarnished form of his writing was used by Sir Thomas Herbert

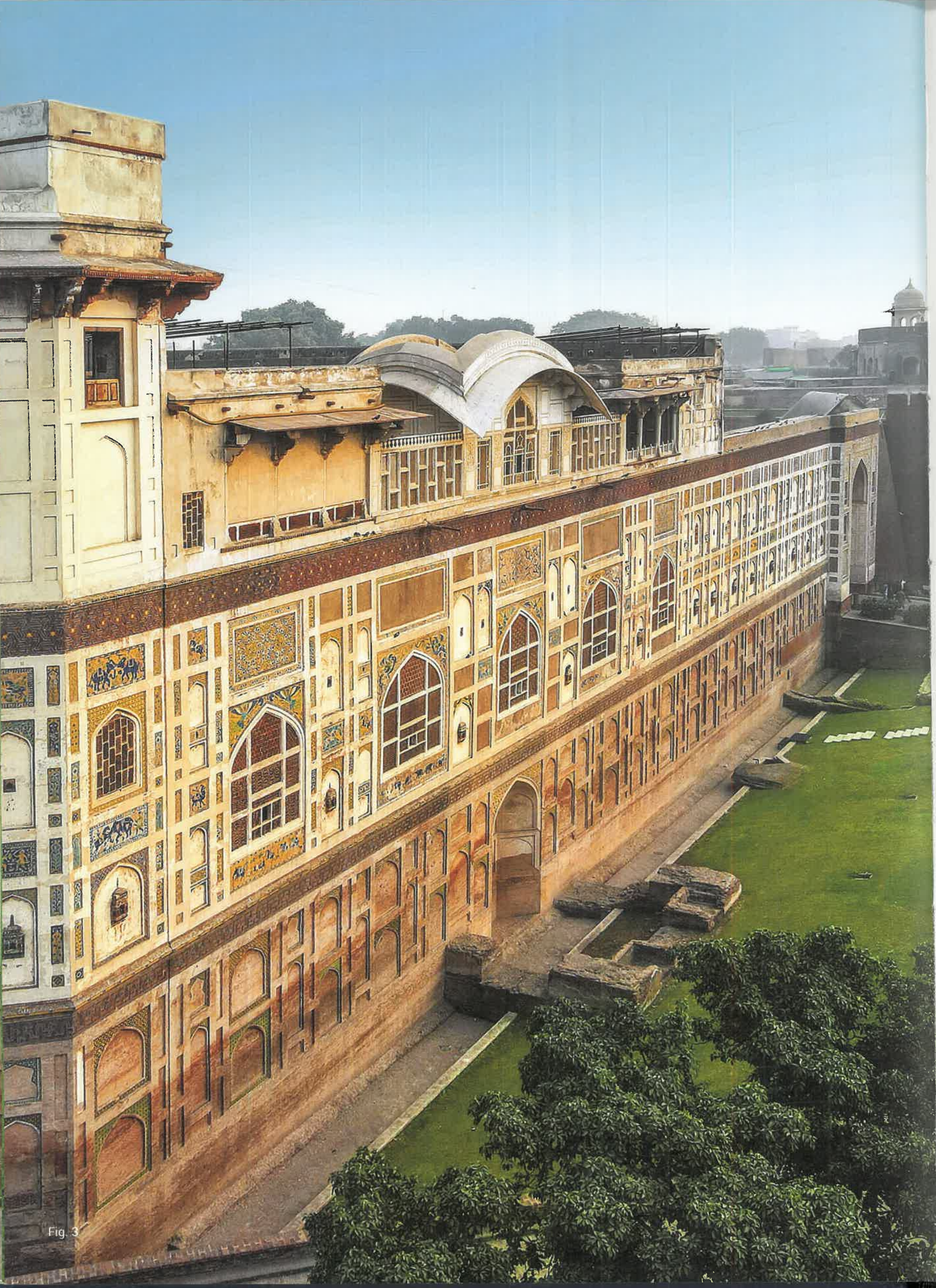


Fig. 3



Fig. 4 *Mughal Emperor Shah Jahan, Miniature Collection, Lahore Museum*



Fig. 5 *Maharaja Ranjit Singh, Miniature Collection, Lahore Museum*

(1606-1682). Thevenot (c.1620-1692) in his turn seems to have copied Herbert.[5] Mannuci (1638-1717), who lived in Lahore for quite some time and labeled himself as the *Farangi* Doctor of the royal family, does write about Lahore but did not mention the Fort. Francois Bernier who spent more than two months in the city, on his way to Kashmir in 1683, is also quiet about the King's residence and Tavernier did nothing but copy Bernier's account.[6]

The situation did not change as late as the 19th century during the Sikh period when Dr. J. M. Honigberger, physician of Ranjit Singh (Fig. 5), mentions some buildings of the citadel but has no knowledge of the Maharaja's living quarters. 'The traveler William Moorcroft,[7] who visited the city of Lahore on the 13th of May, 1820, under the guidance of the Governor Faqir Nur-ul-Din, devotes a page to the Fort; he was the first to notice the tile decoration on the Fort Wall.'[8] The evidence provided here ascertains that the Europeans had no access to the close quarters of the Mughal Kings, contrary to what they wrote in their memoirs. These locations were prohibited for the general public, which is why it is also named Curtain Wall or *Parda Deewar*[9] because its location is that of the private quarters of the King and his family. One person who could reach to that point was William Moorcroft and it was only because Faqir Nur-ul-Din, an important minister of *Khalsa Darbar*, was accompanying him. That is why he was the first European to have access to the Picture Wall. It seems that many of the travelers such as Joannes de Laet, Sir Thomas Herbert, Thevenot give details of a Fort they never visited. This puts a big question mark on their writings that have been considered Gospels by many contemporary scholars.

Even J. Ph. Vogel had to write, "It is gratifying that, while the narratives of European travelers and writers do such scant justice to the Lahore Palace, we possess some very full and remarkably accurate notices in the works of Muhammadan historians of the 17th century. "[10] He is greatly appreciative of Mulla Abdul Hamid and Muhammad Salih, both were the residents of Lahore. [11]

The Wall is Conceived

Akbar inherited a Fort much smaller in size. He expanded it considerably and began some intense constructions, which were continued by Jahangir. The additions inside the Fort, was a regular feature and it was a standard that the structures initiated by one king were carried on by the following kings. Same was the case here and during the Akbari expansions, Jahangir's stay in Lahore is very meaningful because with his keen interest in painting, which was forming at that time, it is not possible that he would have stayed aloof to the ongoing projects around him.

In most of the books, the Wall is attributed to Jahangir and Shahjahan but some investigative evidence leads us to believe that the Wall and its embellishment plan was initiated by Akbar because the Northern side was also the focus of his expansion plan. 'When he thought of extending the area of the Fort North-ward in order to build his palaces, he had to bring this area in level with the Southern part. In doing so, he, however, took advantage of the low-lying area on the North for the construction of *Tehkhana*

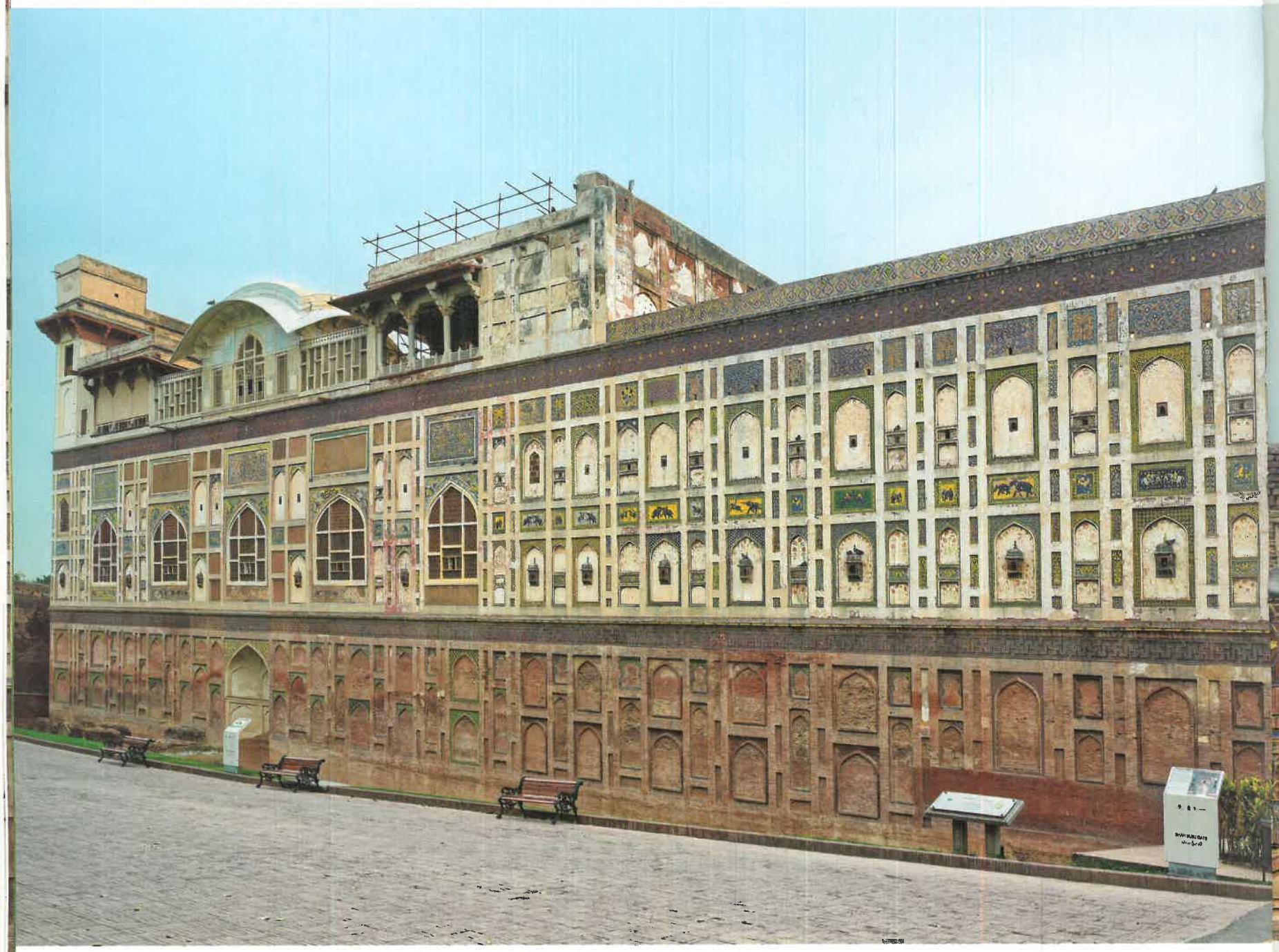


Fig. 6

(basement chambers), which are the special feature of the Northern half of the Fort. '[12] The construction of these basements were not possible without a solid wall to support them and the intense embellishment on the Wall would have never been feasible after its completion. On the other hand, the royal quarters of Akbari era must have also been on the top floors of these basements that were destroyed in the fire of 1597[13] because this was the side of the Fort that used to face the river Ravi, most pleasant and scenic sight for the residents of the royal family. Another argumentative support we get from the descriptions of the foreign visitors who may have never had the chance to reach such close quarters of the royal family but the bazaar gossip or a chance visit helped them to draw the picture of how this whole architectural complex must have looked and used. In this context William Finch does mention the royal quarters overlooking the river Ravi.[14] Many important Mughal monuments were designed to be situated on the banks of the rivers and in Lahore this was a view that enchanted the Royalty. They were enjoying

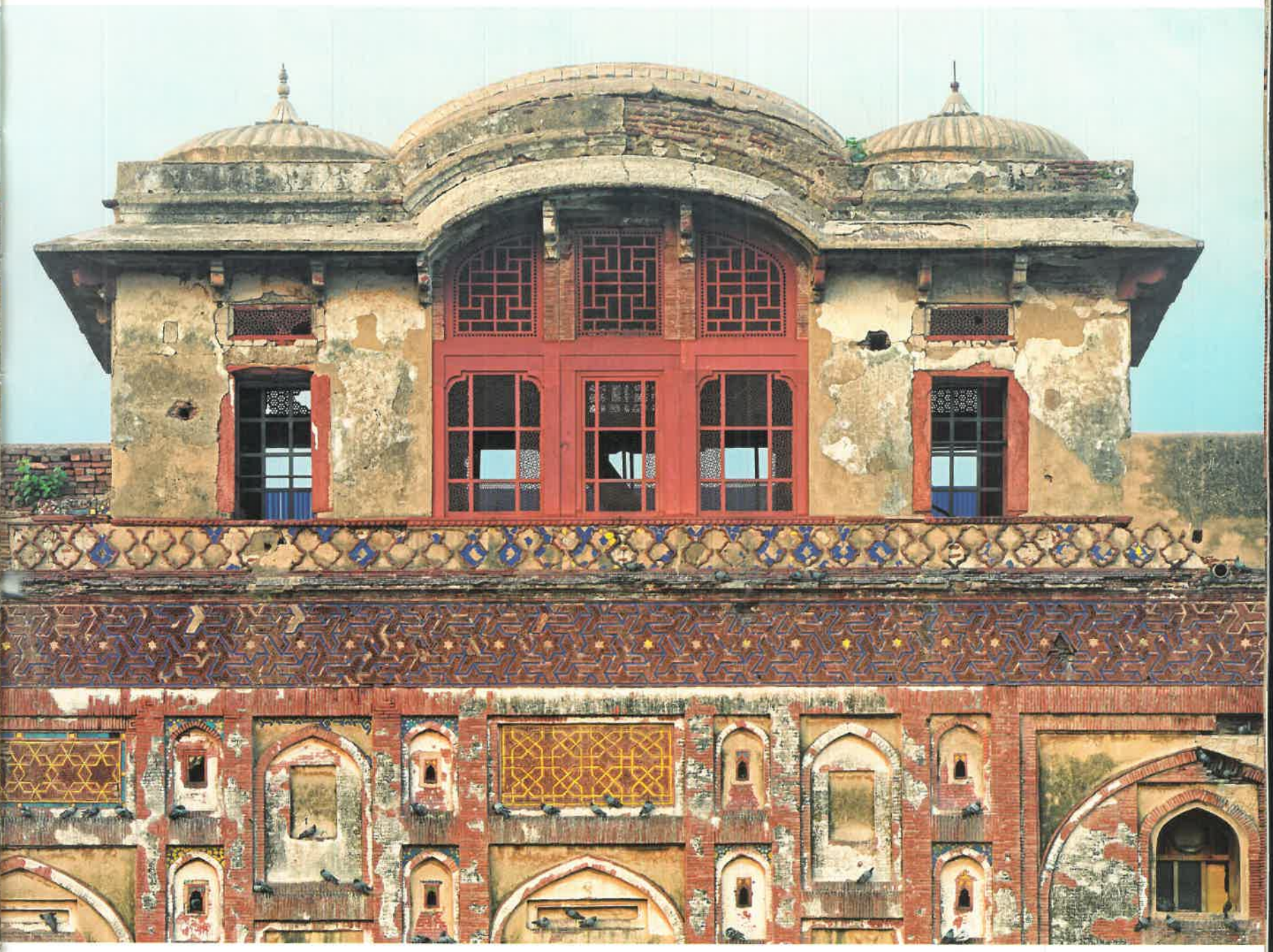


Fig. 7



Fig. 8

not only the spectacular riverscape but the parades and games that were organized on the ground floor, right at the foot of Picture Wall. The same activities were portrayed on the Wall panels to enhance the relationship of the whole ambience. Another point to be noted is the use of the sand dunes by the river that were touching the foundation of the Wall. For the wrestlers, animals and other violence- based games, that may cause injury to the players and animals frequently, this sandy ground was a natural cushion.

The key to understand the Wall lies in its coherence of design. (Fig. 6) Starting from one corner to the other, the niches, arches, fresco panels, mosaic panels, pigeon holes, the upper most filigree (floral design), upper filigree (star patterned) (Fig. 7), lower filigree (Swastika patterned) (Fig. 8), parapet walls and openings are all in one unison. There is no sudden change and awkwardness to disturb the flow of surface design. The whole Wall is a huge undertaking that could have never been initiated without the basic outline of not only the masterplan of the size, niches and arches but also how to fill them with different designs. From the first tower (Fig. 9) on the Eastern end of the Northern Wall adjacent to Akbari Bath till *Shah Burj*, (Fig. 11) neither the scale nor the scheme of design gets out of rhythm and harmony. All of them are based on pure mathematical calculations with geometry used in the angles and postures, even the panel borders are calculated to the last detail. Although the panels changed in shape and size, but the distance between them is identical i.e. 10 to 12 inches. (Fig. 10) This visual realization leads us to believe that the Wall was constructed with the thought in mind that it will be intensely embellished and the basic scheme for embellishment was already part of the masterplan. Looking at the Wall, with this perspective, indicates that the design on it must have been conceived during Akbar's period. The artists had the basic calculations and measurements in hand to visualize and then made basic drawings to be followed in later years. Interestingly there is not much difference that we observe in the layout of the Wall, throughout. Since the construction must have been initiated by Akbar (because these areas were used as the royal family quarters for the Mughals or even in earlier times), we can fairly assume that the basic lay out was envisaged at a very early stage with the foresightedness shared by Akbar, Jahangir and Shah Jahan because the Wall is massive, which was a characteristic of Akbar, with fine detailing in panel arts that was a trademark of Jahangir and a rich royal finish that was the hallmark of Shahjahan.



Fig. 9

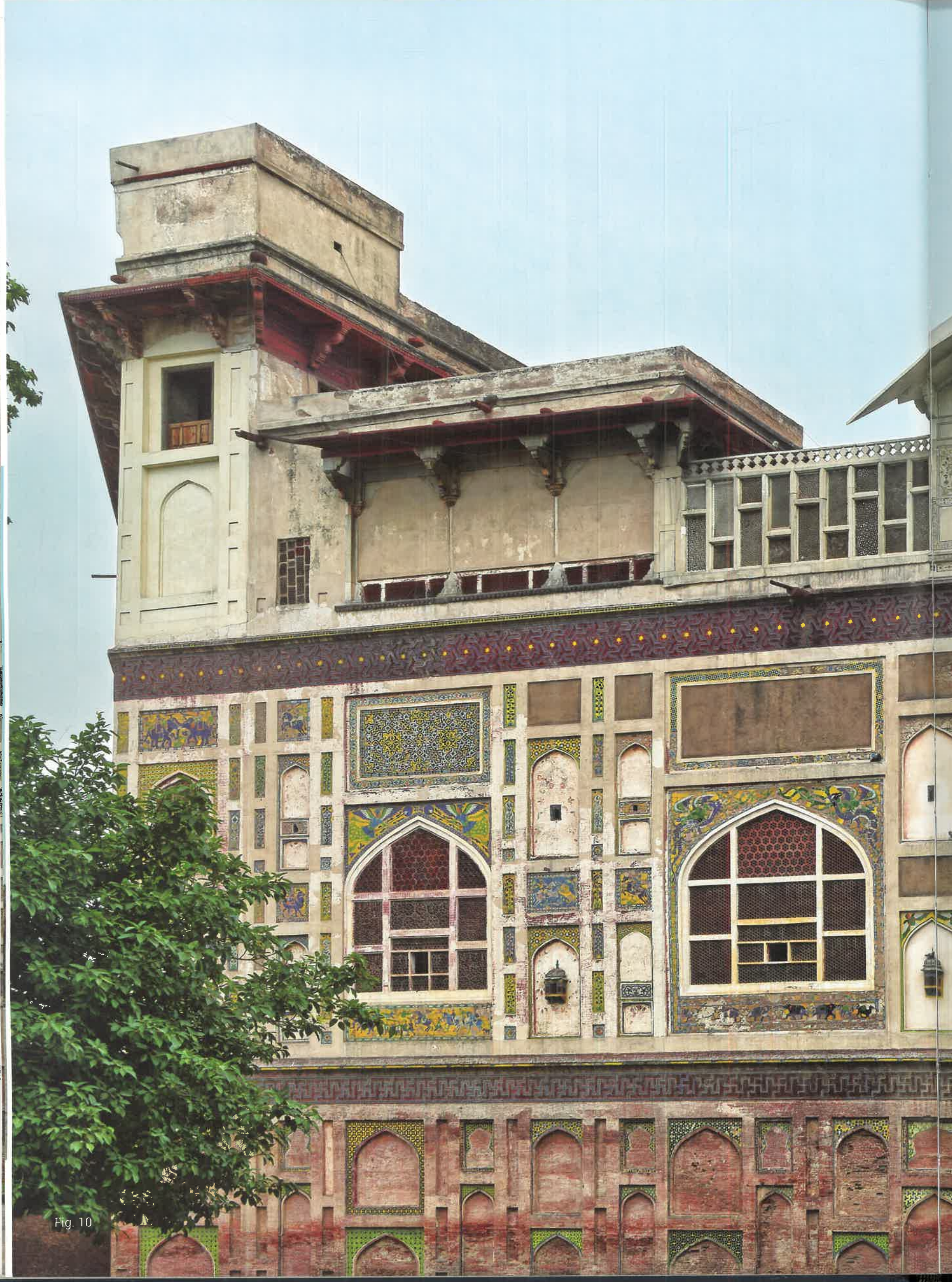


Fig. 10



Fig. 11

George F. Dales in his 1960 article 'The *Old Fort at Lahore, Restoration of a Moghul Fortress in West Pakistan'* writes, "The identification of the emperor responsible for these magnificent mosaics is uncertain, but the portrayal of living beings, both human and animal, reflects the unorthodox, religiously tolerant tendencies of both Akbar and Jahangir. Jahangir especially had a great fondness for pictures and took pride in his court painters, in defiance of the basic tenets of the Moslem creed."[15] This statement also defies the hatred of figurative arts associated to Alamgir, who never tried to obliterate, destroy or change any image made on the Wall, although he ruled and controlled his Empire for 49 years (1658 to 1707).

My point here is that the design of the Wall was conceived before the construction, as circumstances suggest, may have taken place during Akbar's period and the application of surface design continued during Jahangir and Shahjahan's periods. Apart from a big variety of geometric and *Arabesque* patterns, the Wall is a design dictionary of the Mughal Era with humans, costumes, animals, dragons, angels, fairies and demons dominating the space. (Fig. 10) Detailed study of the Wall reveals that the design vocabulary used is very much interconnected in all the major portions. The flora and fauna depicted has a connectivity and continuity not only in the composition and layout but even the subjects and themes are inter related on both sides of the Wall i.e. Northern and Western side. This cannot be a coincidence at such a massive level. Logical relationship of the visuals lead us to believe that it was a very well thought out plan that was finalized even before the first line on the Wall was chiseled. (Fig. 12)



Fig. 12

Execution of Picture Wall

To design a flat surface of 8000 square yards was a mammoth job, taken up by the artists of Mughal *Darbar*. It was a huge undertaking and any mistake in the scheme of surface design would have been disastrous. Another fear was to avoid the flatness and monotony of the form and techniques. All of this was very successfully handled when the whole surface was divided and sub divided into smaller niches, squares, rectangles, bands and oblong panels. Each panel had raised borders to give a sculptural look that created the illusion of light and shade. Now this is a very interesting phenomenon used by the craftsmen who took excellent advantage of the ever-present sunlight. In most of the cases the sunken surfaces had colored tiles and the raised borders were given a neutral off white hue that created a light-colored framed look, around the more colorful shapes and forms. This was a genius solution to the problem that was to last as long as the Wall is there because the design was enhanced by the sunlight that was to be there forever. (Fig. 13) To increase the interest of the onlooker, the entire Wall is divided in sections that vary in size but they are composed and fitted with each other so perfectly that the onlooker cannot find any flaw or awkward distance in between. Looking at the Wall, one experiences a perfect blend of harmony and balance.



Fig. 13

The design construction at this colossal level, with such a vast variety of subjects, can never be achieved without detailed studies and formal drawings. It was the trend of that time that the conceived designs for the buildings were drawn on papers to get the approval of the patrons. These were prepared by the master craftsmen with the help of drawing artists, *Naqqash, Ghalib Kar,* masons etc. This idea is strengthened when Sayyad Sabah-ul-Din, while discussing the daily routine of Shah Jahan, writes, "There was a red curtain at the entrance of *Deewan-e-Khas,* where the courtiers used to come to pay respect. Here all those administrative work was done that could not be performed in the public courts... the precious jewels and rare paintings were presented. *Darogha-e-Imarat* (incharge architect) would show the designs of the Royal buildings that were under construction."[16] (Fig. 14) The first persons connected to the embellishment design must have been the sketching masters and painters who prepared detailed painted drawings that were to be transferred on the Wall. The design makers were various because according to the tradition of that time, every genre of expression had separate experts. There must have been different people engaged to draw animals, flowers, geometric designs, human figures, *Arabesques* etc. Even within animals, the drawing masters were separate e.g. elephant, horse, camel, lion makers etc., who drew according to their specialization. This is the reason, we observe difference in the final execution of the drawings. Interestingly all the visuals are not of the same standards and some are inferior in quality. This explains the stylistic difference in the presentation of different panels but most of them had the expert hands of masters.



Fig. 14 *Sketch/Blue Print of a Building Design, Miniature Collection, Fakir Khana Museum, Lahore*

These blueprints were taken up by the architects and masons, then masonry was planned accordingly or vice versa because the design may possibly have been inserted after the placing of the niches and arches were finalized or probably both the processes were adopted simultaneously. Later the fresco painters did their share of a wonderful job but the real mastery came from the *Kashi Gars* (glazed tilers) who played the instrumental role in the process of accomplishing a miracle on the surface. R. Nath writes, "The Picture Wall of Lahore Fort is a wonderful specimen of Mughal art, par excellence, and it was planned and made not to serve a use, purpose or function, but as a work of ART. "[17] I disagree to this because it was the Wall, meant to protect the Royal family and their living quarters. They were residing immediately behind this Wall and four to fifteen feet thickness of it, (Fig. 15) tells another story, that it is not just meant to be an artistic expression but safety and security was the primary concern.

The river flowing on the North side of the Fort was a natural defense and the deep moat added to the difficulties for any invader who would think of attacking the Fort. Interestingly almost all the important buildings such as Jahangir and Shah Jahan's Quadrangles, *Lal Burj* (red tower), *Kala Burj* (black tower), *Sheesh Mahal* were constructed right behind the Picture Wall and these locations were directly connected to the daily lives of the Royal family. This cannot be a coincidence but a well thought out plan of Akbar period, which was followed by the later Mughals.

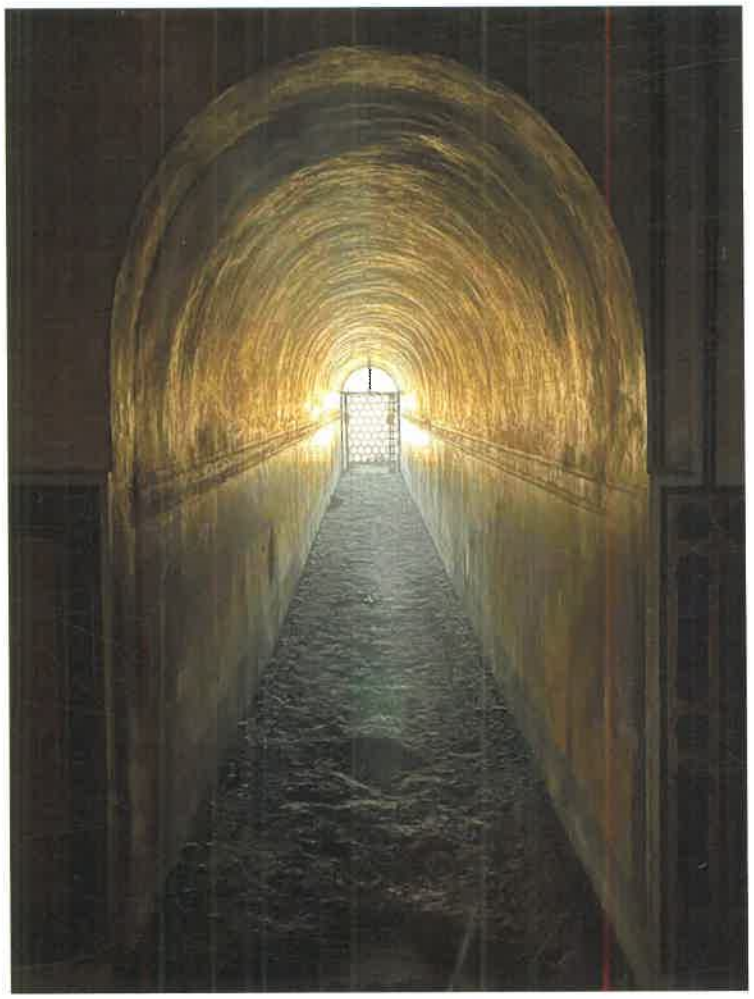


Fig. 15

The Royal family was very fond of processions, animal fights and inspecting their newly acquired elephants, horses, lions, tigers, goats, cows etc., was their favorite pastime. Jugglers and wrestlers from different parts of the world were also a source of amusement for them. With reference to Delhi and Agra Fort, we come across frequent references about the Mughal Kings and their ladies witnessing the *Jalus* and *Tamasha* (processions and entertaining troupes), through *Jharoka* (royal window) or while sitting in the *Burj* (tower). 'Shah Jahan, after saying *Fajar* prayer, would come in the *Jharoka* (royal window) for *Darshan* (public appearance), where he stayed for *Do Ghari* i.e. almost one and a half hour, and received petitions from the *Raya* (public)..... Later on he would watch the processions and fights of animals. '[18] About the Agra Fort it is written, "Opposite the Burj, beautiful waves of river Jamuna could be seen and the *Begamat* (royal ladies) including Mumtaz Mahal, would watch the animal fights and other entertaining performances from the *Burj*."[19] The area underneath the Picture Wall also served the same purpose because the land between the Wall and river was used as parade grounds. The royalty and the courtiers including the ladies must have sat in the *Jharokas* of Jahangir's Quadrangle, *Deewan-e-Khas. Kala Burj, Lal Burj* and *Sheesh Mahal* and would have watched parades, processions, jugglers, animal fights and so much more with the beautiful waters of river Ravi as the background. Lahore Fort parade grounds are exclusive as compared to Agra and Delhi because the activities taking place on the grounds were portrayed on the Wall. In case of Agra and Lahore, the sandy grounds between the rivers of Jumuna and Ravi and the palace walls, were ideal for such activities. This is very unusual and no other example is found anywhere in the world.

As mentioned above, the Wall was no less significant in the defense plan because the art on it never diminished its functional value, which was to defend the royal family as it turned out that this is the most embellished defense wall in the world and a classical example of the concept of form and function in which the aesthetically pleasing form

does not compromise on functional value, which is the reason it was created. The concept of Art for Art sake was never considered in Asia in general or in Islamic arts in particular. The buildings and objects created always had their functional value but the forms were aesthetically so strong that they have been considered pieces of art in their own right. Examples are manuscripts, carpets, pottery, textiles, jewelry, weapons etc. Same is the case with this Wall. Despite having a massive volume, it contains the delicacy and fragility of aesthetics that is of a higher levels.

I always marvel at the valor of those individuals who drew the first line in Ajanta Caves, chiseled the first flake off the mountain to create Kalasha Temple, placed the first stone at the pyramid of Khufu, laid the first brick for the Great Wall of China or the potter who pasted a small piece of first glazed tile on the Picture Wall. These were the humans with the courage and power, compareable to Greek gods, giants, achieving the impossible.

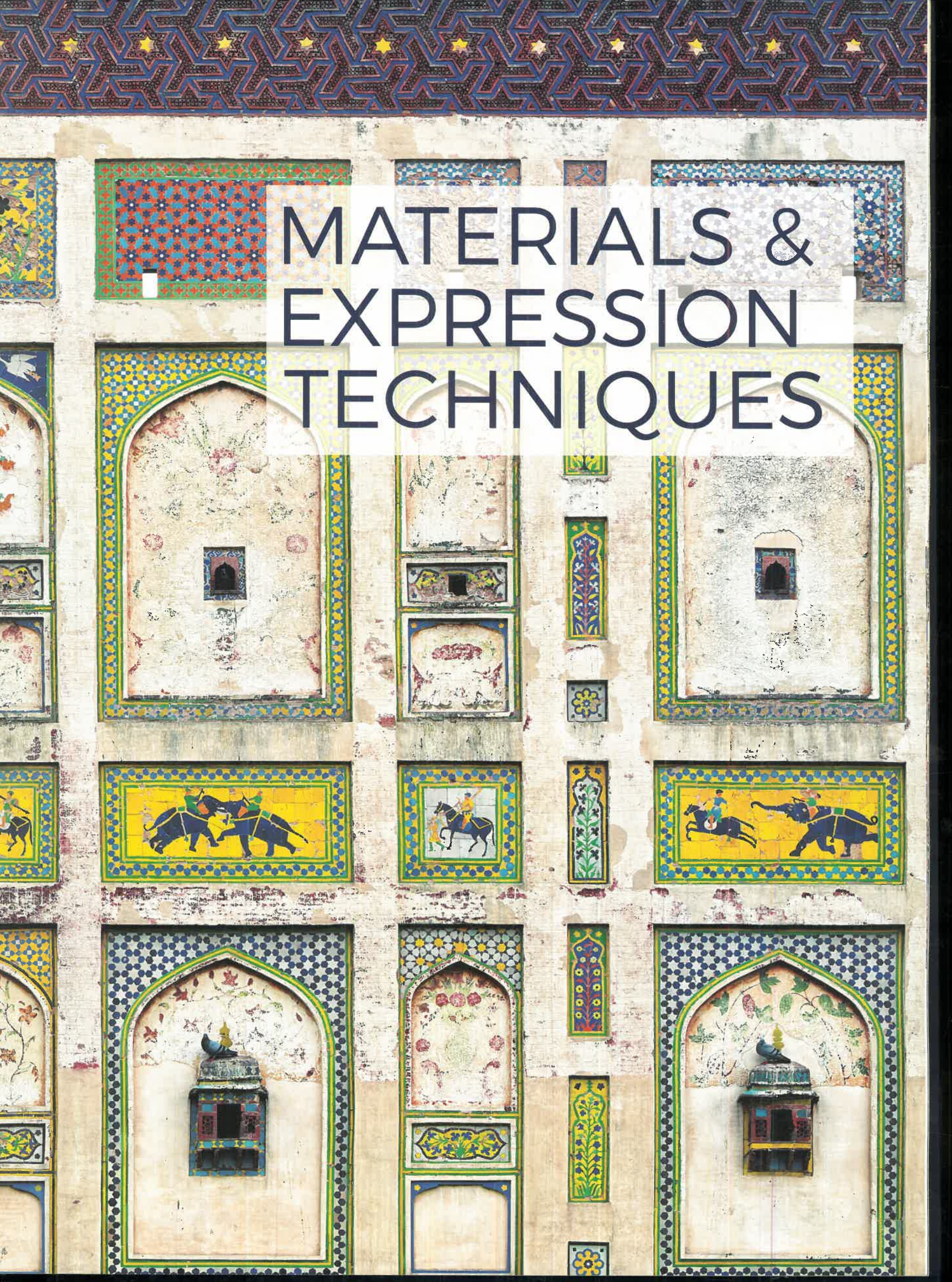


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MATERIALS & EXPRESSION TECHNIQUES



Experts and professionals, of all the eras, are always looking for appreciation and encouragement not only from the society but from the rulers as well. It is the patronization of the administrative heads that help them to achieve unbelievable apexes. The Mughal period was an optimal era in this respect. The artistic expressions such as painting, manuscripts, textiles, vessel making, jewelry, music, dance, poetry, calligraphy etc. were highly appreciated. Men of merit were not only acknowledged but their expressions were the pride of the rulers. This is the primary reason that the arts and crafts touched such heights. Mughal architecture was a showcase of the skills and techniques of the masters of their times. Forts, palaces, *havelis* (mansions), gardens, *baradaris,* tombs, mosques and mausoleums were all masterpieces of those times that have not stopped mesmerizing the world till date and these monuments would have never been possible without the encouragement of the kings. This admiration of the arts and crafts trickled down to the courtiers, aristocracy and general public. Masses used carved pieces of furniture or metal vessels with intricate relief work or embellished their houses with fresco paintings or the ceilings were adorned with *Aina Kari* (mirror work), woodwork etc. Artists with talent were treasured. The Mughal era was a period of respect and encouragement for the artisans and they gave their best when it came to creation of any kind. There was no concept of art for art sake and no differentiating line was drawn between the artists and craftsmen. These were the humans, showcasing their highly respectable skills to the rulers and general public. Every generation tried to outshine the previous one. Expressions on the Picture Wall is an outcome of that thought process. This Wall contains multiple subjects, depicted in different techniques that needed artisans of different genres who in pursuance to surpass each other, created a masterpiece that had never been repeated in the later centuries.

The Wall was constructed of small brick masonry with lime mortar and they were of a special size, specific to the Mughal period. The main material used was cut and dressed baked bricks made out of lime, clay and silt, with traces of silica. The mortar and plaster are both a mix of lime and sand.[1] Burnt brick, red sand stone and white marble were used for adornment. Intangible ideas conceived by the *Ustads*, drawn by the masters, needed tangibility through mediums that were being adopted by the artisans to showcase their aesthetics and technical skills. For this purpose, various techniques were adopted by them. Some of them are narrated below;

Naqqashi, Fresco

Fresco is a very popular technique used in the Subcontinent for thousands of years. Ajanta caves are a beautiful display of this medium. In later centuries, it was frequently employed to embellish the palaces, mosques, tombs, *havelis*, temples etc. Fresco paintings were used both indoors and outdoors. Within Lahore Fort, *Naqqashi* is a familiar site in apartments, such as, *Daulat Khana-e-Khas-o-Aam, Seh Dara, Kala Burj, Sheesh Mahal* and many more. The same technique is applied in different locations. In most of the cases, Fresco paintings are found in the recessed arches of the Picture Wall, showing various compositions of flora, vases and even bowls of fruits. Fresco painting process begins with the application of a thin layer of plaster, onto which the pattern is traced using a *Khaka* (drawing), which has design or image perforated. A painting pigment is

run over the perforations to transfer the pattern onto the surface. It is then coloured in with details, using a variety of pigments.[2]

Unfortunately, most of the panels containing designs with fresco technique are almost gone and only some faint traces can be seen of the actual colors that must have been fresh and bright originally. (Fig. 1,2) It seems that the pigments used were not good enough to last long. This is very unusual because no artistic expression of Mughals was ever a failure. Every creation was meant to last *Rahti Dunya Tak* (till the end of times), let it be a building, manuscript, miniature, textile or any piece of embellishment. The artisans experimented with them to attain the perfection. Much of the damage to the outdoor arts, that we see today, is due to vandalism. But here mere weather factor has destroyed them all without any exception, with water causing the maximum damage.

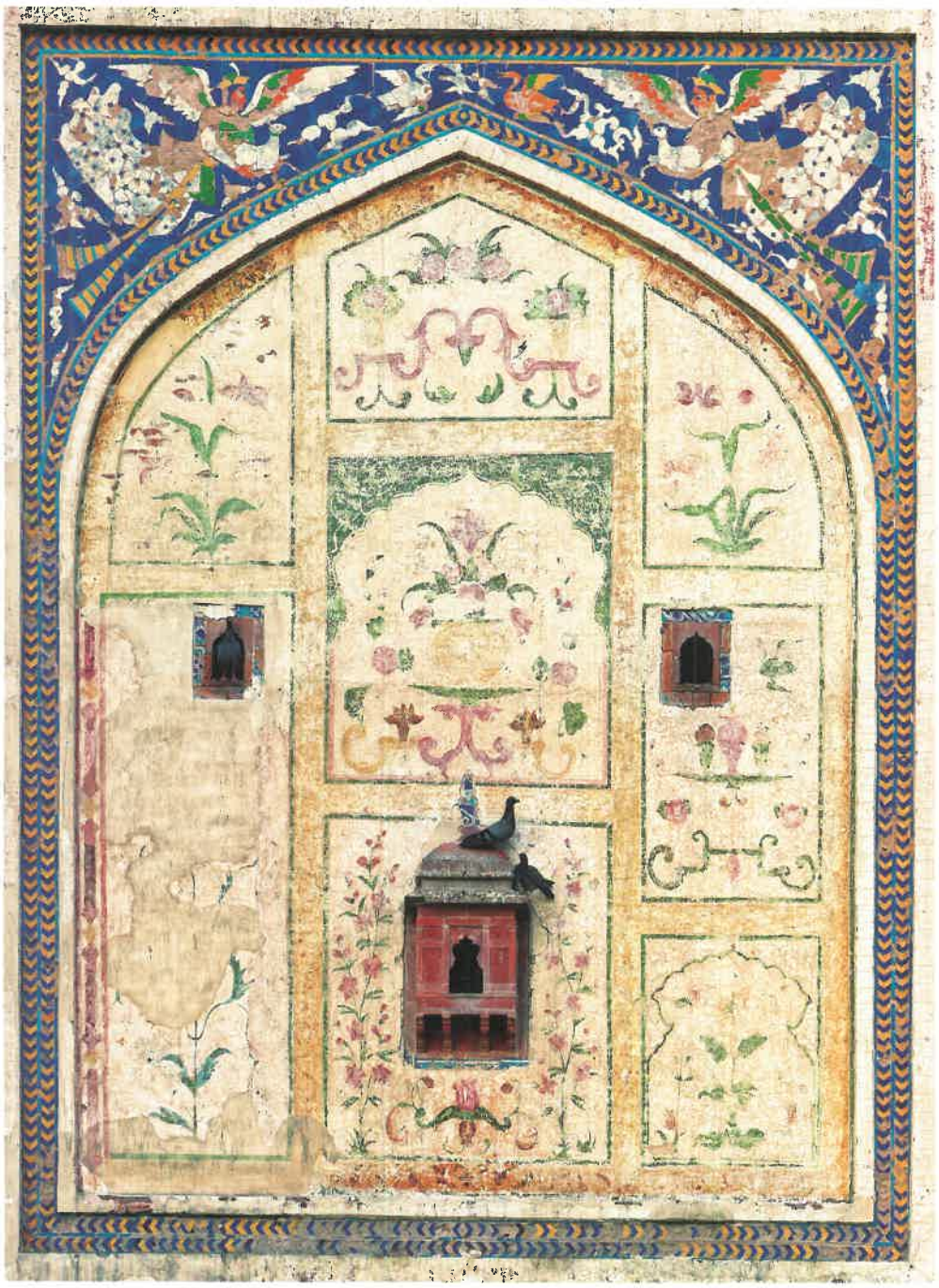


Fig. 1



Fig. 2

Tazakari,
Brick Imitation Work or Incised Faux Brick Work

The Wall surface that frames the recessed panels is mostly covered in *Tazakari.* This process is carried out by applying a thin layer of red-tinted lime plaster on top of a thin layer of white base plaster. The grooves are then scoured onto the red plaster, revealing the white plaster underneath to give an impression of the mortar joints in brickwork.[3] *Tazakari* on the Western facade of the Picture Wall has deteriorated to a great extent. Apart from erosion and flaking of the surface, it has also lost its colour due to exposure to direct sunlight, rain, water drains from the *Sheesh Mahal* Quadrangle.[4] Both fresco wall paintings and brick imitation work follow the same technique of applying paint on wet plaster.[5] Some good specimens of Mughal period *Tazakari* can be seen on the tower adjacent to *Akbari Hamam.* The Muqarnas of the Tower are adorned with this technique and the minute details of the designs are rendered amazingly. (Fig. 3)

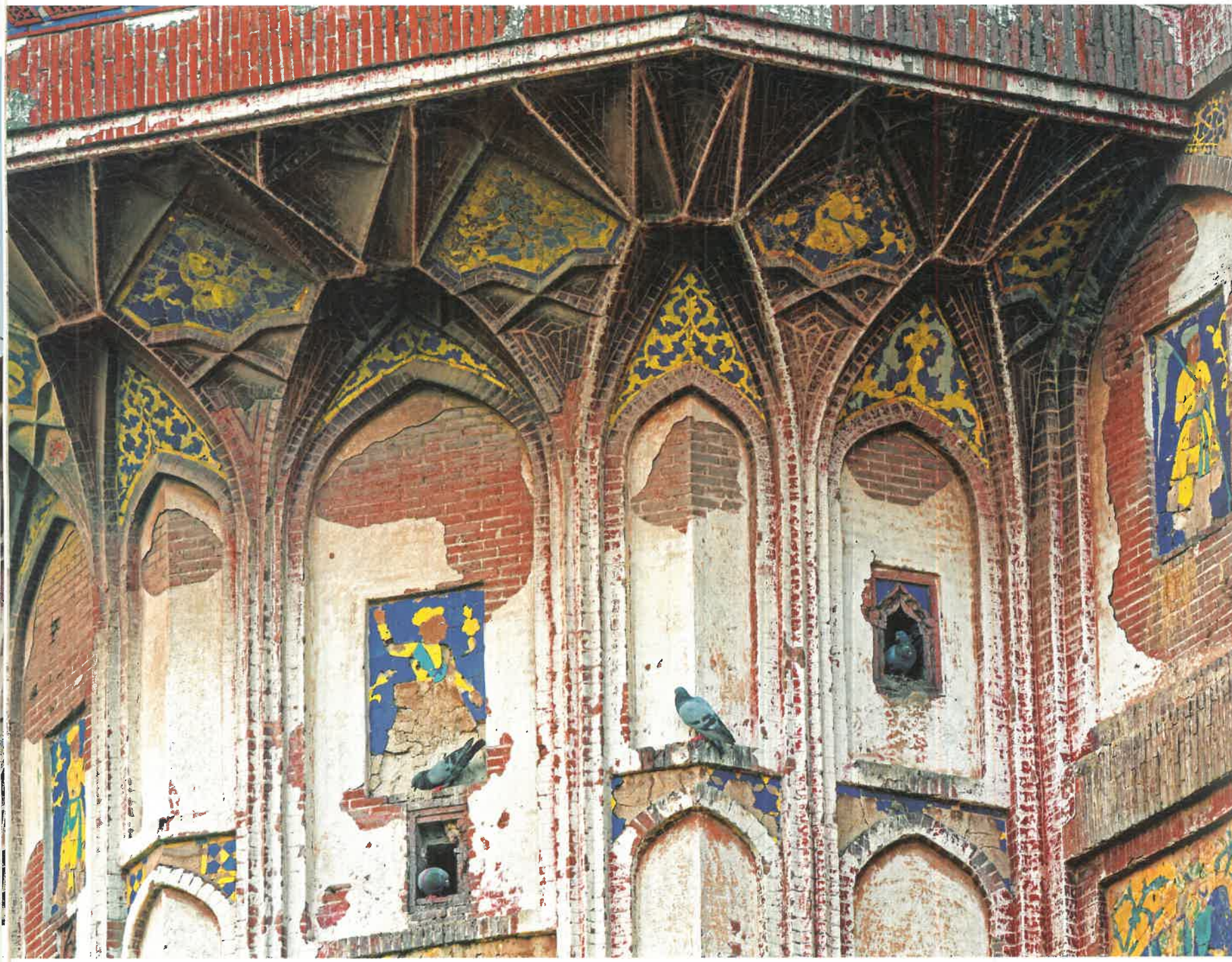


Fig. 3

Ghalib Kari, Stalactite Work[6]

For stalactite work, brick structure is plastered after proper surface preparation in varying thickness according to various patterns. When the plaster is almost set, it is carved in with special types of craft tools. In the case of engraved lines, after the application of base and top layer of plaster, the lines are engraved accordingly with a sharp-edged tool. The surface is then finished with glaze lime plaster.[7] This technique was favored by the artisans of Mughal Period and we can see the use on the Picture Wall. (Fig. 4)

Jali Trellis, Pinjra Work

According to Talib Hussain, *Jali* (Trellis) was an invention of the Muslims.[8] In Mughal architecture, it had the advantage of being very useful and highly appreciated for its strong aesthetics. The delicate *Jalis* (screens) were used to cover *Jharokas* (balconies) or to divide inner spaces within a big arched opening or to serve as railing or parapet. These frets produced a pleasing effect, allowing sufficient light and cool air to enter the rooms and passages, while controlling the sharp glare of daylight. The *Jalis* (frets) were named according to the design of their openings. The artisans called hexagonal shaped *Chheh Mass* and octagonal shaped *Aath Mass.* There are also other designs based on the various geometrical, floral and plant-based patterns.[9] Interestingly, the angles and



Fig. 4

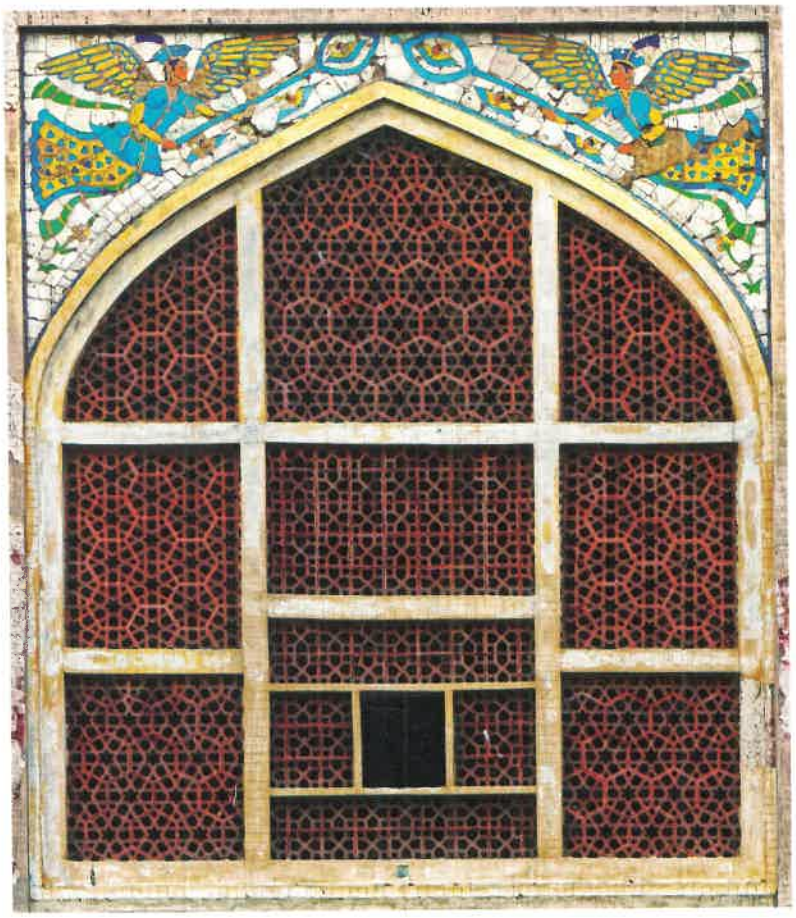


Fig. 5

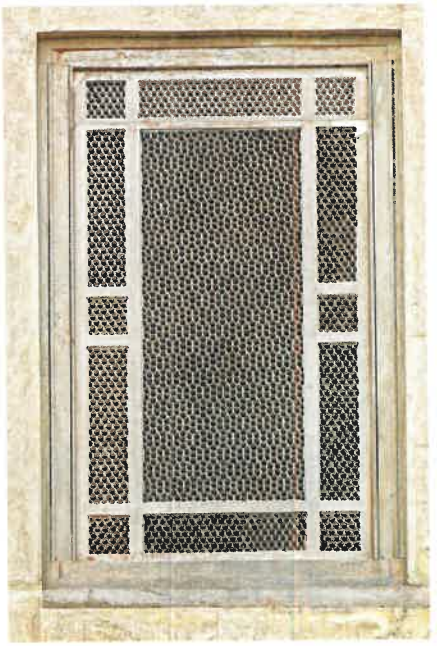


Fig. 6

shapes of the trelli openings also accelerated the wind speed entering in a room, chamber or passage. Its use on the Picture Wall is frequent due to ventilation purpose for the living areas behind the Wall. Since this Wall covered many apartments of the Fort that is why latticed screens were made part of the structural embellishment with different designs by using marble or red sand stone or terracotta bricks. Some of the *Jalis* seen today are later interventions. (Fig. 5,6)

Cut and Dressed Brick Work

Cut and dressed brick work was extensively used in the construction of the Picture Wall. This was a popular craft in the Mughal period where the fine joints between bricks were filled with lime mortar. In this technique, bricks are cut in exact size after which their size is checked and corrected with a gauge. Finally, these bricks are laid in lime mortar on the Wall.[10]

Minakari Filigree Work

The word Filigree is mostly used for a 5000-year-old jewelry making technique, in which fine twisted threads of silver or gold are maneuvered to create the most intricate designs.[11] While describing the technique, Talib Hussain writes, "It is a rare type of surface decoration and in local terminology, it is called *Minakari* and *Binnatkari*, both names derived from Iran and Central Asia respectively. This is basically a play of chess-board design work with its origin in wood or terracotta work. In this design one *Khana* (square) or some *Khanas* (squares) are left open or incised and others blocked according to a pre-defined scheme."[12]

Filigree on the Picture Wall is combination of many techniques and in one of them a geometrical ornament of horizontal and vertical straight lines is repeated, in low and high relief, to form a band.[13] It is a very delicate and detailed expression that has been employed here while using bricks. This is the form of decoration in which glazed tiles are inter-laced with unglazed terracotta bricks. Two horizontal friezes of filigree work run throughout the Picture Wall with self-replicating geometric patterns. The upper most filigree is partially gone but the beautiful curves of Mughal design along with its inserted glazed tiles, testifies the mastery of the craftsmen. The upper filigree has a *Shash Pari* (six-pointed star) pattern (Fig. 7) while the lower one has a *Swastika* pattern.[14] Here, the glazed tiles, inter-laced with unglazed terracotta filigree work, are also labelled as Glazed Tile Inlay in Cut Brick work. This is a very interesting mix of two techniques i.e. Cut Brick work and glazed tiles. Small pieces of glazed tiles are fitted into a structure developed by cut brick technique. A combination of these two different methods was frequently used in Mughal buildings. The glazed pieces are always laid sunken to improve the design durability. Most of the time this technique is used in wood or metal but on the Picture Wall, it is executed in cut brick, which is more difficult to handle. This straight-lined filigree also falls in the category of *Kufi Kari* (Fretwork). Due to constant exposure to rain, drainage from the *Sheesh Mahal* Quadrangle and the dampness on the North side, the filigrees have been damaged considerably and large portions of the bands are lost.

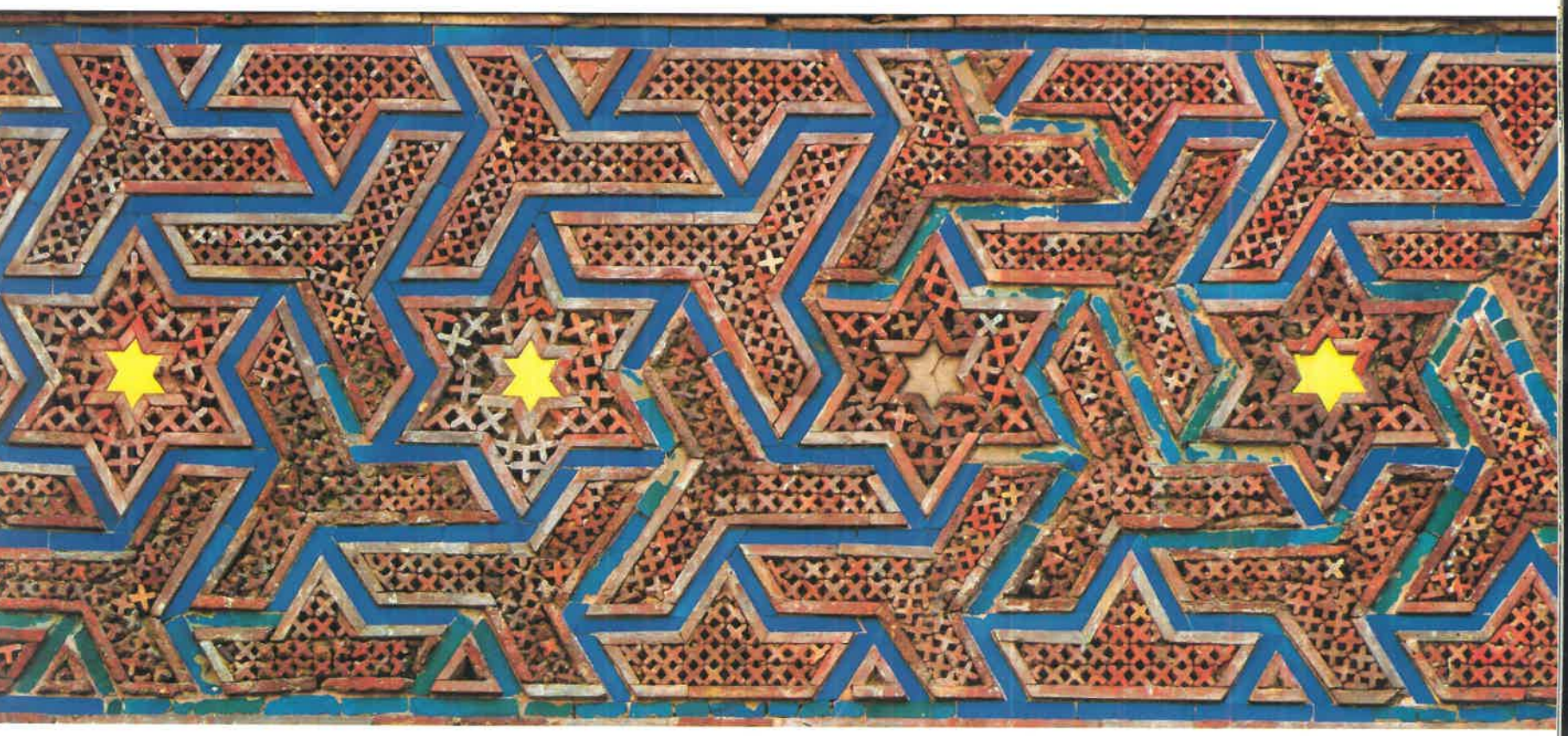


Fig. 7

Kashi Kari (Glazed Tile Mosaic)

Picture Wall of Lahore Fort is famous for its panels crafted with Kashi Kari. In fact, it is the largest Wall in the world that is embellished by using this technique predominantly and since majority of the panels are made by using this method, a detailed account is presented here to trace the origin of this technique and how it travelled to the Subcontinent and then to Lahore.

Humans have exploited different dimensions of materials all over the world. Of all the materials, clay was perhaps most persistently employed, from ancient to contemporary times, mainly because of its easy availability to the river-based civilizations. But the aesthetic of the humans created so many varieties that it surpassed from being just a material to a tool, vibrant with beauty and pleasure that the viewer experienced from its visual reproductions. Use of clay was a key factor in the buildings because of its functionality. The value of form was added when we see Mesopotamian Ziggurats, constructed during 2200 to 500 BC,[15] decorated with colored glazed terracotta tiles that were pleasing to the eye.[16] The relationship continued with Neo Babylonian temples and here we observe elements of experimentation added to the simple representation. 'The most renowned of the New Babylonian kings was Nebuchadnezzar II (614-562 BC) who restored Babylon to its rank as one of the great cities of antiquity.. ..... Nebuchadnezzar's Babylon was a mud-brick city, but dazzling blue glazed bricks adorned the most important monuments. Some of the buildings, such as Ishtar Gate, with its imposing arched opening flanked by towers, featured glazed bricks with molded animals, real and imaginary. '[17] This depiction of animal forms, in glazed tile technique, was a mastery attained by the Babylonians and the skill was taken up by the Mughal artisans, almost 1000 years later, on the Picture Wall, when animal and human forms were portrayed with an imagination and great level of expertise.

Another interesting angle about the antiquity of the glazing technique is given by Major H. H. Cole[18] who finds that the employment of glazed tiles for architectural purposes, dates from Ramses II and Chinese used colored porcelain in their building from an early period.[19] When we study the conquests of Ramses, it is observed that he was very much in touch with Mesopotamians[20] because as early as in the fourth year of his reign i.e. 1274 BC, he was at war with Syria.[21] It can be fairly assumed that the glazing technique was an inspiration from the Crescent Valley.

Kashi Kari in the Subcontinent

Although there is no concrete proof of when and how this technique reached the Subcontinent but the excavations of Harappan Civilization (also called Indus Valley Civilization) yielded pottery of different styles that is either plain or decorated with glazing techniques. These are interesting examples of the use of this technique in older times. A kiln, in which, pots were baked, was also discovered. Different shapes, made beautifully with perfect craftsmanship, supply evidence of the advance techniques known to the Indus Valley potter.[22] As mentioned earlier, the ancient structures of the world also played their role and the key factor in this regard are the Mesopotamian Ziggurats and Ishtar Gate, which are so far one of the oldest monument that has traces of glazed tiles. The logical route seems to be from Mesopotamia to Indus Valley because people of the two regions were very much in contact with each other through trade and travelling.[23] In later centuries, traditionally it is also said that glazing experts came to India with Muhammad Bin Qasim and many mosques were built in Sindh using this technique and from there came to Multan where it was used extensively. My argument is that trade between the Subcontinent and Mesopotamia was active long before Muhammad Bin Qasim. Aboriginal people of the land were using glazing since ancient times, so it cannot be the conquest of Muhammad Bin Qasim that brought the technique to this region.

Other sources say that glazing was introduced in this region from China, by the influence of Tamerlane's Chinese wife, at the end of the 13th century. Babur, in his memoirs, while describing the famous buildings of Samarkand writes, "In this garden there is another state pavilion, the walls of which are overlaid with porcelain of China, whence it is called the Chinese House. It is said that a person was sent to China for the purpose of bringing it."[24] Colonel H. R. Goulding also attributes the technique to China with another interesting angle when he writes, "But although the art, as practiced in India and Persia, seems to have been derived from China at the end of the 13th century, it has, doubtless, existed in other forms among Semitic nations from far more ancient times; and it is remarkable that the term *Kas* is said to be neither Hindi nor Tartar, but of Arabic origin, and akin to the Hebrew *Kos*, a cup. The art was imported to Europe by the Arabians at the end of the ninth century, and adopted by the Italians, under the name of *majolica*, in the manufacture of earthenware, in the fourteenth century. The art thus introduced was rapidly developed, and gave birth, in time, to the porcelain wares of Palissy, Limoges, Sevres, and Dresden."[25] Another name given by the locals to the technique is *Chini Ka Kam*. The word Kashi Kari is also associated with Kashghar, a Westernmost Chinese city in Xinjiang, its borders touching Kyrgyzstan, Tajikistan, Afghanistan and Pakistan. Kashghar has a rich history of over 2,000 years and served as a trading post and was strategically important city on the Silk Road between China, Middle East and Europe. This may conclude the Chinese connection of the technique and may justify Kashi Kari also being called *Chini Kari*.[26] After studying all these arguments, it can be said that the glazing was an invention of Mesopotamians along with Egyptians as their counter parts but Chinese artisans, in the following centuries, added their expertise to popularize it further.

In later centuries it became the main method of surface decoration that was used for the building constructed under the Muslim rulers. James Fergusson believes that the Mosque of Cordoba was the first major Muslim monument with Kashi Kari. "But so far" writes Major Cole, "As I have been able to ascertain, the first Mohammadan building in which glazed tiles were used, is the villa Viciosa Mosque of Cordova, in Spain, which according to Prissa, dates from A. D. 965, and, according to Fergussan,[27] from A. D. 1200."[28]

Apart from an obscure beginning, time and region, the technique was very popular and it was adopted by many regimes and regions of the world such as Central Asia and Afghanistan. Persia is the country mainly responsible for carrying out this thousands of year-old technique from ancient to contemporary times and Iranian architectural embellishment is very much dependent on glazed tiles till date. The local term of Kashi Kari is associated with an Iranian city of Kashan also. 'It is generally held that the term '*Kashi*' by which tile work and faience in general are indicated not only in Persia but also in Northern India, was derived from the name of the town of Kashan in Iran. It is true that the potters of both Kashan and Kum in the same province enjoyed great celebrity, and the form *Kaskani*, which is used in the same sense as *Kashi*, would seem to point even more clearly to some connection the name of the town first mentioned'[29] According to professor M. T. Houtsma, however, it is more reasonable to derive *Kashi* from the Persian *Kash* meaning 'glass'. The words *Kashi* and *Kashigar* i.e. Pottery and Potter are Persian and thus confirm the Persian origin of Indian tile-work.[30] *Kash* can also be the basis for Urdu word *Kanch*.

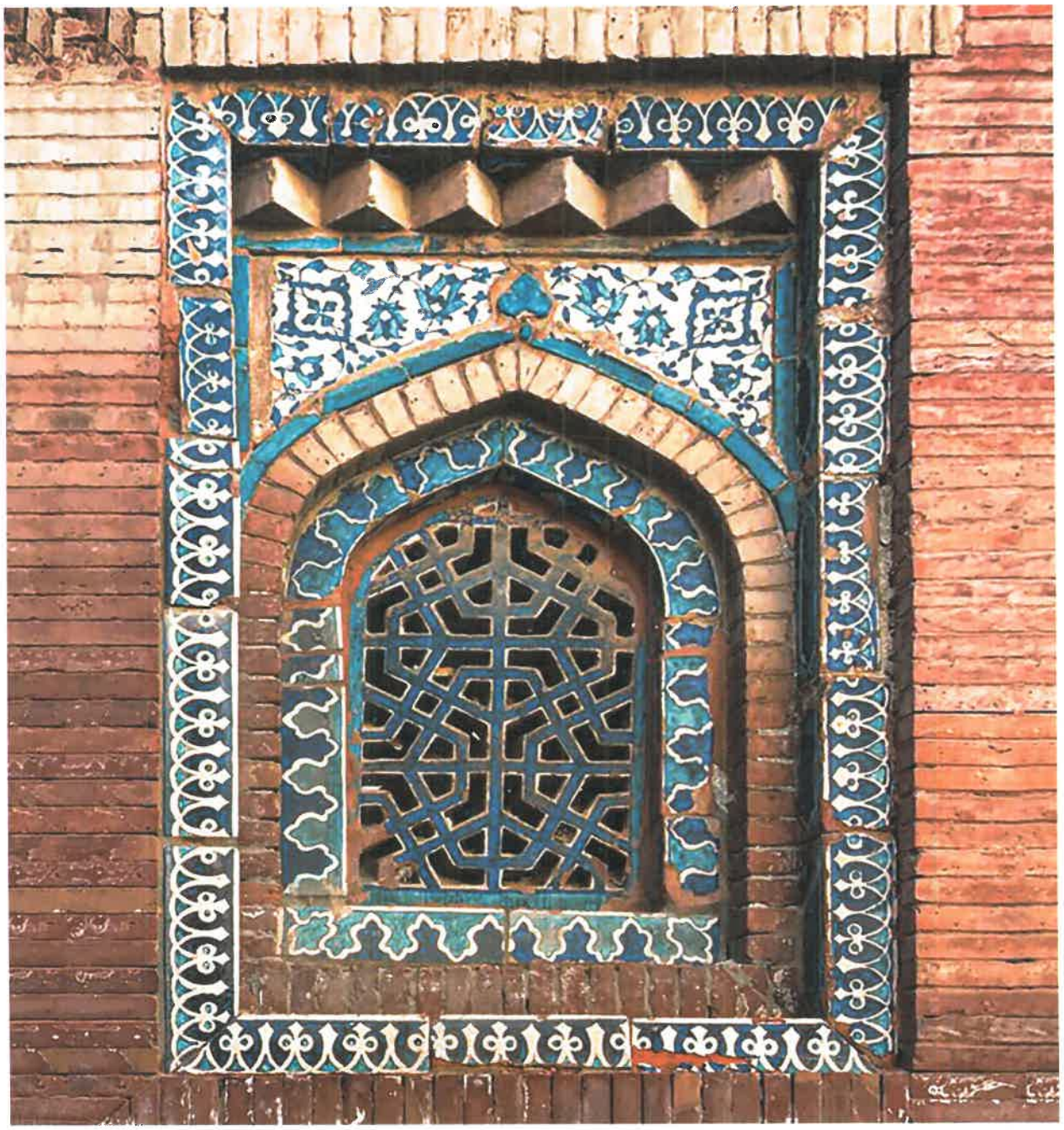


Fig. 8 *Sawi Masjid, Multan*

In the Subcontinent, the earliest documented building with glazed technique was the famous 2nd century Pagoda of Kanishka at Peshawar.[31] Then, till the 16th century, we do not find much evidence. However, after that there was a big boom of glazing technique and great popularity of this technique was enjoyed in Sindh and Punjab. Thatta Mosque of 1640, tomb of *Bibi Jiwandi* Uch Sharif, Shah Yousaf Gardazi and *Sawi Masjid* of Multan are good examples in this regard. (Fig. 8) But the 1520 tomb of Rukn-e-Alam in Multan is declared one of the finest specimens of early glazed tile technique. The 1517, tomb of Sikandar Lodhi at Khairpur, 1524 tomb of Khawaja Khizr at Sonepat, Mausoleum of Sher Shah Suri,[32] a ruined mosque of 1562 *Khair-ul-Manzil* opposite *Purana Qila* in Delhi, and another tomb remembered as *Nili Chhatri*, all were embellished using Kashi Kari. 'Among the wonderful collection of historic tombs grouped round the *Dargah* of Nizam-ul-Din, one of the most attractive is that of Akbar's foster father Shams-ul-Din Atgah Khan, surnamed Azam Khan.'[33] The building is adorned with faience mosaics in which deep blue and green tiles are combined with white marble in geometrical patterns, a mode of decoration not found anywhere else. This building must date from 1567. The tile mosaics of Akbar's reign exhibit a scheme of five colors, deep and light blue, green, yellow and white; the designs are essentially geometrical.[34] Another fine example of glazed tile can be seen in Agra at the left bank of Jamuna, known as *Chini Ka Rauza*, which traditionally holds the remains of Afzal Khan, a poet who died in Lahore in 1639.[35]

If we trace the popularity of this technique, it is observed that the initial focused area was Iraq, Syria, Persia, and then it became popular in Egypt, China, Central Asia and South Asia. Within South Asia, Kashi Kari in Lahore was probably the last golden era of this technique in the Subcontinent that lasted till late 18th century before it gave away to other styles of architectural embellishments.

Kashi Kari in Lahore

A detailed study of Lahori architecture reveals that clay was one of the favorite mediums of expression and there is ample evidence available in the form of ancient pottery, sculptures, architecture etc. (Fig. 9) Even the construction material of Lahore Fort was *kachi matti ki ent* (unburnt clay bricks) for many centuries. Unfortunately, not much archeological evidence is available of Ghaznavide, Ghorid and Sultanate period but the literary writings do mention the construction of beautiful tall buildings that were pride of the city.[36] Since clay was the only material available locally, we can fairly assume that it was used as the primary building material. The author of the book *'Kitab-e-Aadab-al-Harab-wal-Shujaat'* Fakhar Mudabir, wrote about a *Khishti Masjid*. The name implies to the extensive use of bricks, which was the prominent architectural feature of that mosque. This has been considered the first example of Islamic architecture in Lahore, constructed in a locality called *'Arab Muhalla'*.[37] In later centuries, we have references that the mud brick Fort was reconstructed by Akbar with terracotta bricks replacing the old *Kacha Qila.*



Fig. 9 *Clay Tablet with Dancers and Musicians, Found During 1959 Excavation, Pre-Muslim Layer (Department of Archaeology)*



Fig. 10 *Dai Anga's Tomb, Lahore*

During 17th and 18th centuries, the main method for decoration of Lahore buildings was Kashi Kari and the technique reached to such a height that has never been surpassed. One of the main factors for the intense use of Kashi Kari was its colorfulness and water and weather resistance quality. Another reason was the presence of two Persian nobles Asif Khan and Ali Mardan Khan, both of whom were governors of Punjab. Their power and wealth was instrumental in bringing architects, engineers and artisans from Iran to India, specially to Lahore. The earliest known example of Kashi Kari in the city of Lahore is the tomb of Sheikh Musa *Ahan Gar*, who died in the beginning of Akbar's reign and his tomb was built by his mother. The tomb is covered with square blue and white tiles. The art form continued by Jahangir, touched its peak during Shah Jahan's period and we see monuments like *Dai Anga's* tomb, *Gulabi Bagh,* Wazir Khan Mosque etc. (Fig. 10,11,12) all

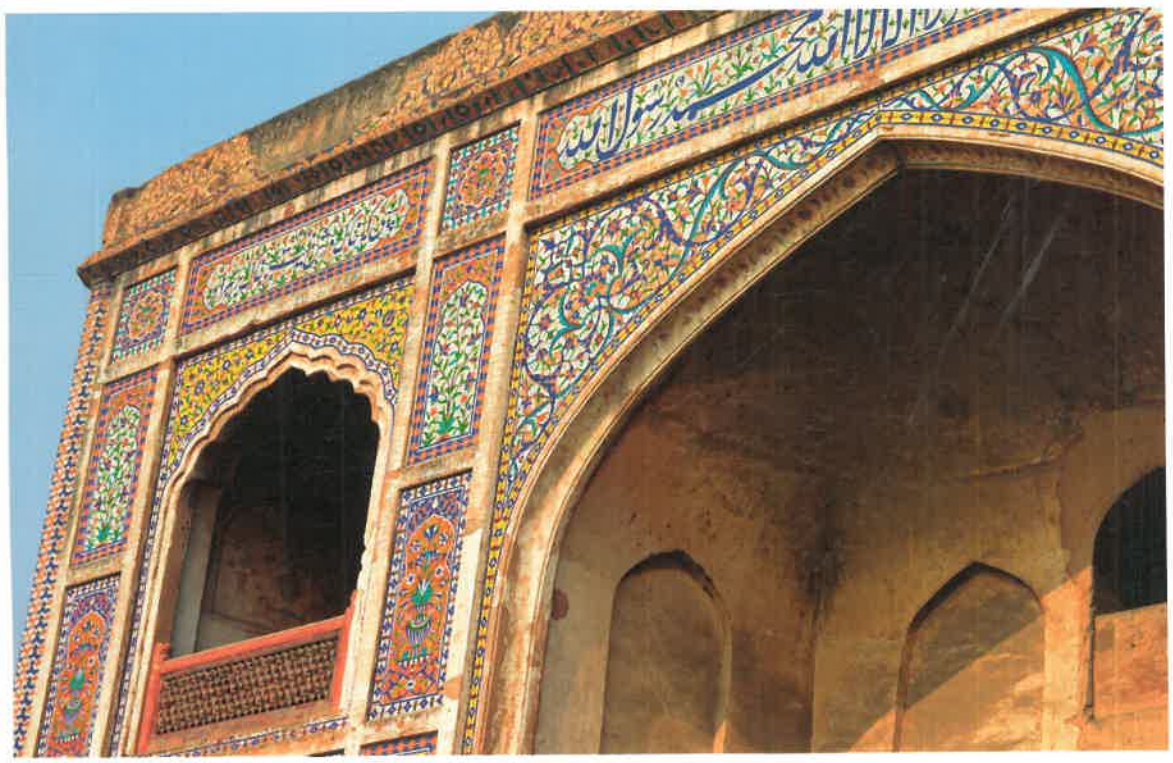


Fig. 11 *Gulabi Bagh, Lahore*



Fig. 12 *Wazir Khan Mosque, Lahore*

employing this technique. Today the tomb of Asif Khan, brother of Noor Jahan and father of Mumtaz Mahal, is completely stripped off its surface decoration but the observations written in older chronicles testify that it was decorated with square and rectangular tiles arranged in slightly sunken rectangular panels, the pattern consisting of flowering stalks of irises and tiger lilies enclosed within scrollwork on a yellow background.[38] It is also mentioned that some specimen of the Asif Khan's tomb decoration, can be seen in the Victoria and Albert Museum.[39]

As mentioned earlier, Kashi Kari, *Chini Ka Kaam* or glazed tiling technique was used in many regions of the world so the materials and techniques varied but there were many commonalities. Basically, there are two types of Kashi Kari;

1. Flat Tile
2. *Muraqa Kashi* (Tile Mosaic, Mosaic Faience)

Glazing is also of two categories;

1. *Achhi Kashi,* transparent glaze
2. *Murdasang Kashi,* coloured transparent glaze

In Lahore, although the main influence was from Iran, but there were differences in the material and execution of the technique. Iranian tile was based on terracotta while the Lahori tile had unique silica sand body plaster base.[40] In Iran, Sindh and Multan, different shades of blue and white were predominant but in Lahore, a vast range of colors was explored. Iranian concept of *Kashi Haft Rang* (seven colored glazed) tiles, which is the hallmark of Shiraz, was applied in Lahore. Blue, turquoise, red, yellow, fawn, black and white are the colors that formulate the *Haft Rang* composition[41] but in Lahore green, purple, orange, brown and many more were added to the over-all color scheme.

The Mughals appreciated Kashi Kari so much that it became an integral part of their architectural endeavors. Although Wazir Khan mosque has been declared the best specimen produced by using this technique but a detailed study of the Picture Wall of Lahore Fort proves that if not better, the Wall is equally an excellent example of the application of this technique.

Muraqa Kashi (Glazed Tile Mosaic) on Picture Wall

Lahore Fort Picture Wall portrays a variety of geometrical, figurative and floral patterns with glazed mosaic tiles. To study the techniques and material compositions, scientific method is adopted by the Aga Khan Cultural Service, to reach the actual traditional techniques of making of these tiles. First of all the samples of historical glazed mosaic tiles were sent for laboratory testing and analysis to different building material laboratories in Pakistan and abroad. These tests included XRD/XRF, Petrographic and mineralogical analysis, hardness tests and analysis of other physical properties, done both on and off site. Apart from the chemical-physical tests, visual investigation and archival data was explored and reviewed with the available resources.

Off-site Experimentation for Manufacturing Glazed Tile Mosaic:

The ceramic body of the glazed tiles mosaic consists of silica sand, pottery clay, glass powder and engobe layer underneath the glaze layer. Compositions of the various ratios were experimented on site to get closer to the test results provided by the lab results.

EX. No.	Silica Sand	Pottery Clay	Glass Powder	Soap Stone	China Clay	Fire Clay
1	2 parts	2 parts	1 part	1 part	-	-
2	2 parts	1/2 parts	1 part	1 part	11/2 part	-
3	500 grms	-	250 grms	250 grms	-	500 grms
4	1 part	-	1/4 parts	1/4 parts	1/4 parts	1/4 parts
5	2 parts	1/2 parts	1 part	1 part	11/2 part	

After the tile body produced with ratio indicated in experiment no.1, it was found that the tile with porosity is less than 10%. The experimented tiles are produced with low porosity and slight harder to overcome the deterioration effected due to higher porosity and soft body.[42] All the information gained through experiments and laboratory analysis helped to understand the chemical combinations and ratios used on the Wall.[43]

The art of Kashi Kari in Lahore declined with the Mughals. In later buildings, the *Mamars* did employ the technique but it lacked the finish and aesthetics of the past. 18th century mosque of *Begum Pura* constructed during the rule of Zikriya Khan is a good example where one can see the defloration of color and form. (Fig. 13) Over time other styles of architectural surface decoration became more popular. But the magnificent architecture experienced with the use of Kashi Kari during 17th and 18th centuries, was never repeated.

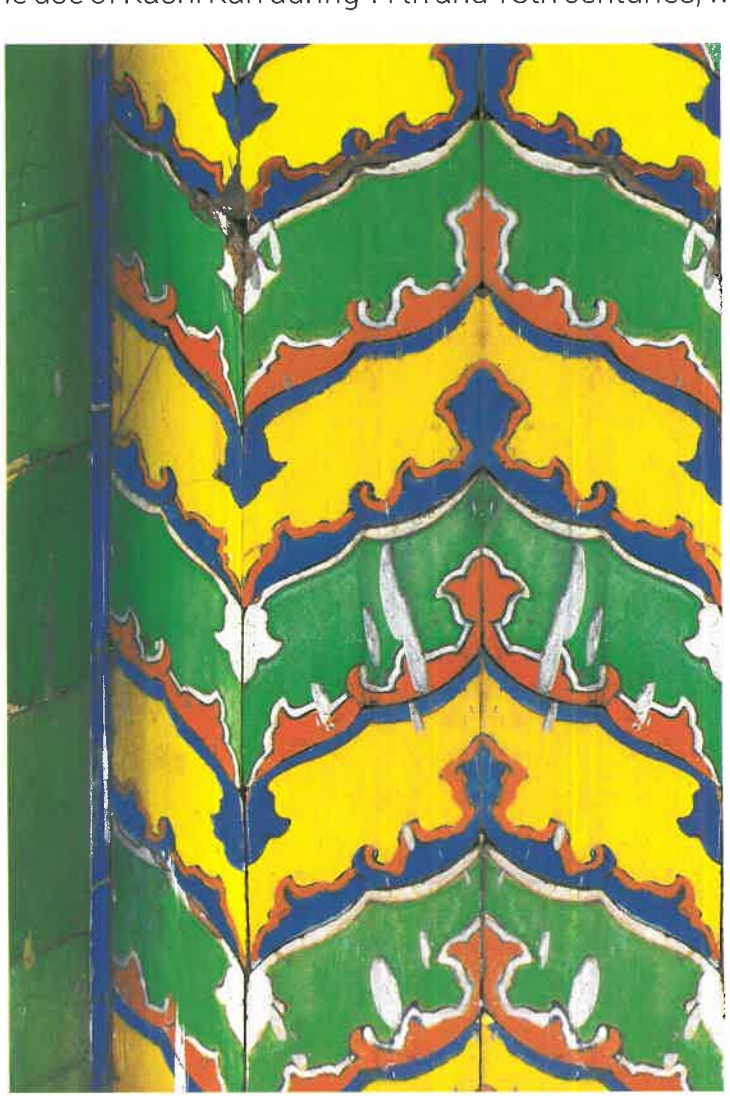
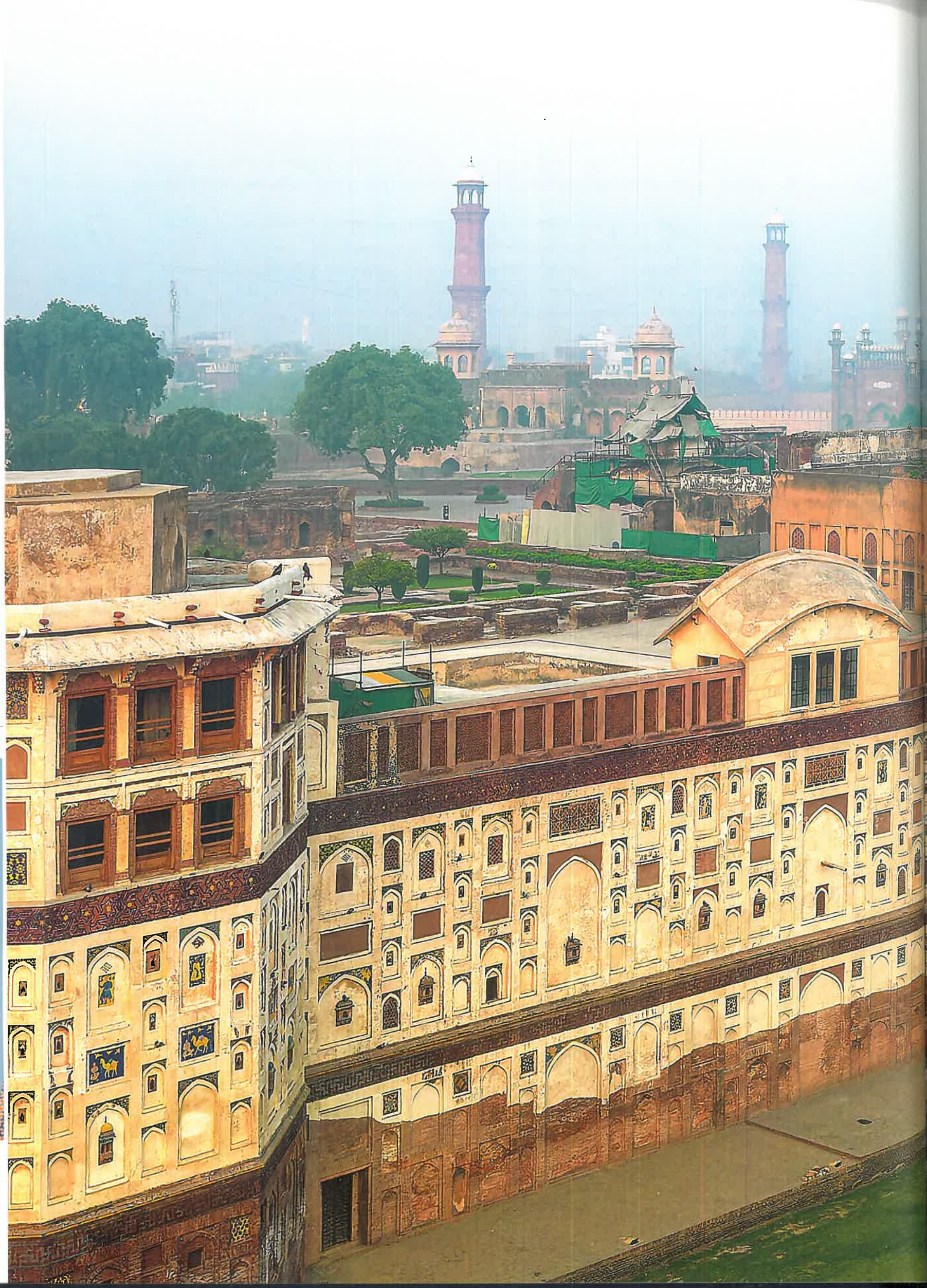
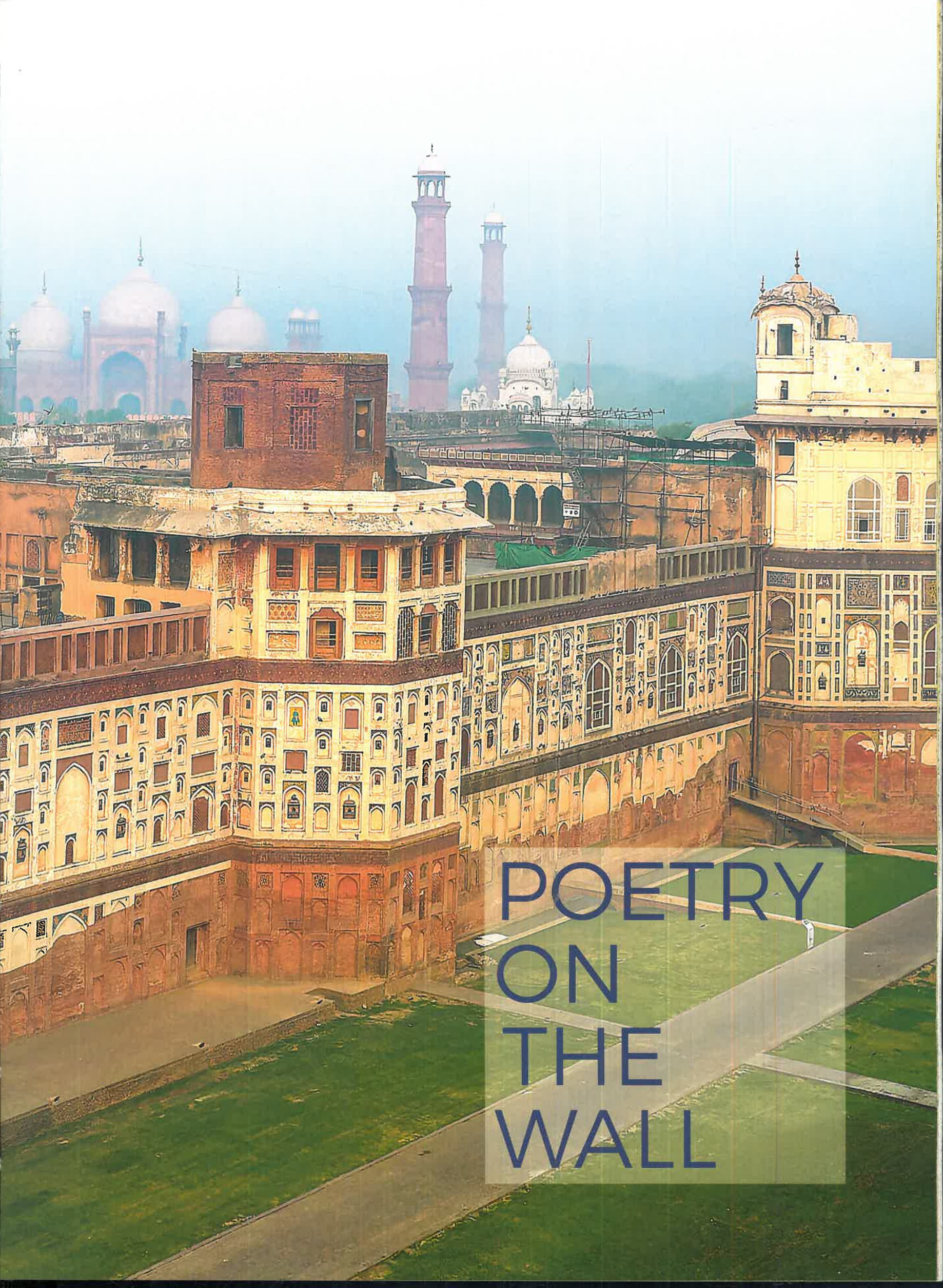


Fig. 13 *Begum Pura Mosque, Lahore*

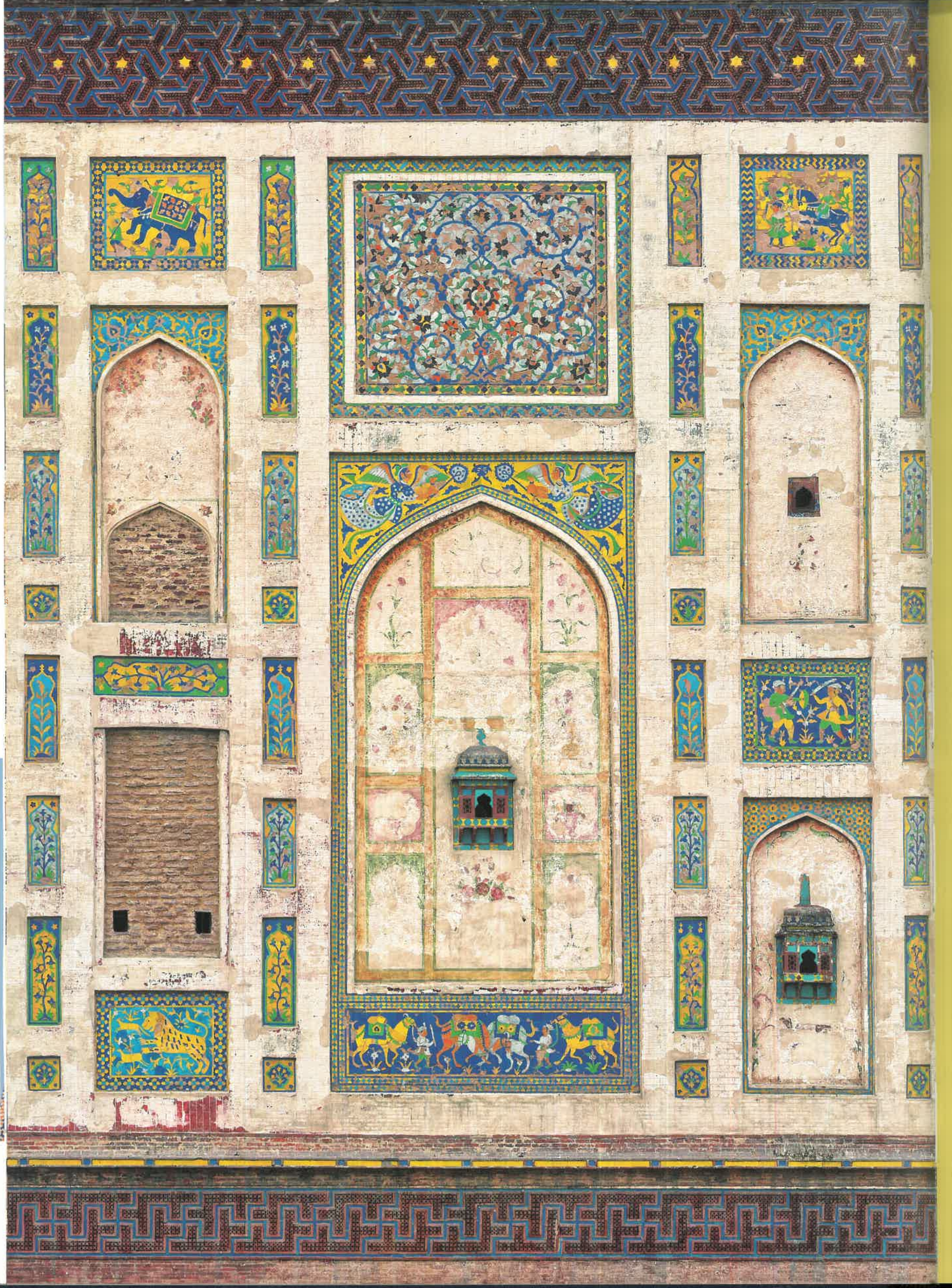
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POETRY ON THE WALL



Subjects

Located on the Western side, *Shah Burj* or *Hathi Pol* or Elephant Gate (Fig. 1) is the most embellished entrance point of Lahore Fort and adjacent to that gate is the Wall that contains a comprehensive visual dictionary of not only Mughal design but it depicts the leisure life of their court. It is also called Curtain Wall[1] or Apron Wall[2] because behind it is the location of the private chambers of the King and his family.

Ram Nath in his book *History of Mughal Architecture,* while discussing the subjects depicted on the Wall, divided them under four headings;

1. Stylized Flora
2. Geometrical Designs
3. *Arabesques*
4. Figurative[3]

But a detailed study reveals that the canvas is not limited to just these four. Many other subjects are explored and depicted on the Picture Wall that show different events along with social and cultural activities and literary inspirations of that era. There are processions, animals, birds, courtiers, musicians, jugglers, equestrians, still lives, games of the time, demons, angels, dragons, *Pari* (fairies/angels) and lovely flora and fauna with beautiful geometric designs illustrated on the panels. This is the representation of the society of Mughal Period with details of fashion, styles and patterns of dresses, variety of features and hairstyles, weapons, utensils, and much more. Previously, such representations of contemporary life was witnessed on the walls of the Ajanta Caves but those were mostly fresco paintings. Here, the main medium of expression is Mosaic Kashi and the world is yet to see anything of this magnitude surpassed by any other example.

To get a better understanding of the compositional coherence of the Picture Wall, the design element is divided in mainly two categories;

1. Figurative
2. Non-Figurative

Figurative

Within figurative, it may again be divided into;

1. Preternatural Beings
2. Natural Beings
3. Animals and Birds

Preternatural Beings

A fascinating depiction of the winged creatures, demons, dragons and human headed figures are a very prominent part of the surface decoration. They are mythological creatures in different postures of protection and aggression. These figures are an evidence of the active imagination of the artists who were experts in presenting these otherworldly creatures.

Natural Beings/Human Activities

These are the representations of courtiers, riders, servants, arm bearers etc. They are the ones going through the daily routine of life. Facilitating each other, celebrating through fairs, parades and processions. Interestingly there is no depiction of contemporary women on the Wall except portrayed as *Pari* (fairies/angels). Although females were a favorite subject of miniature painters but here, no courtier, servant or rider is female. It seems that the Mughals did not want to portray ladies on the Wall out of sheer respect that has a lot to do with *Parda*, which was to protect them from being gazed at by the strangers, on this outdoor expression that was meant to be seen by innumerable strangers.

Feathered Friends and Fauna

An amazing variety of animals and birds are depicted on the Wall. They are made in different poses with all the beauty and grace associated to them.

Non-Figurative

The vast variety of non-figurative art is the essence of the Wall and it can be categorized further into;

1. Flora (Flowers and Trees)
2. *Arabesque*
3. Geometric Designs

Flora (Flowers and Trees)

The art produced under the Muslim regimes took the making of plants, flowers and trees to the next level. The artists were experts at drawing and painting nature's delights and used this iconography in their paintings generously. Picture Wall is full of such examples and the panels are filled with flowers and trees.

Arabesque

Another favorite medium of expression was the *Arabesque* that was employed by the artists. Panel after panel are permeated with lyrical stems, vines and flowers moving on the surface, entwined enchantingly into the prescribed spaces.

Geometric Designs

This is the element that draws our attention at so many levels to the Picture Wall. These designs are not only aesthetically pleasing but they contain a symbolic significance leading to the world of spirituality and mysticism.

In the following pages, a sketch of the subjects of the Wall is presented, elaborating with the symbolic value of the design vocabulary, attached to them.

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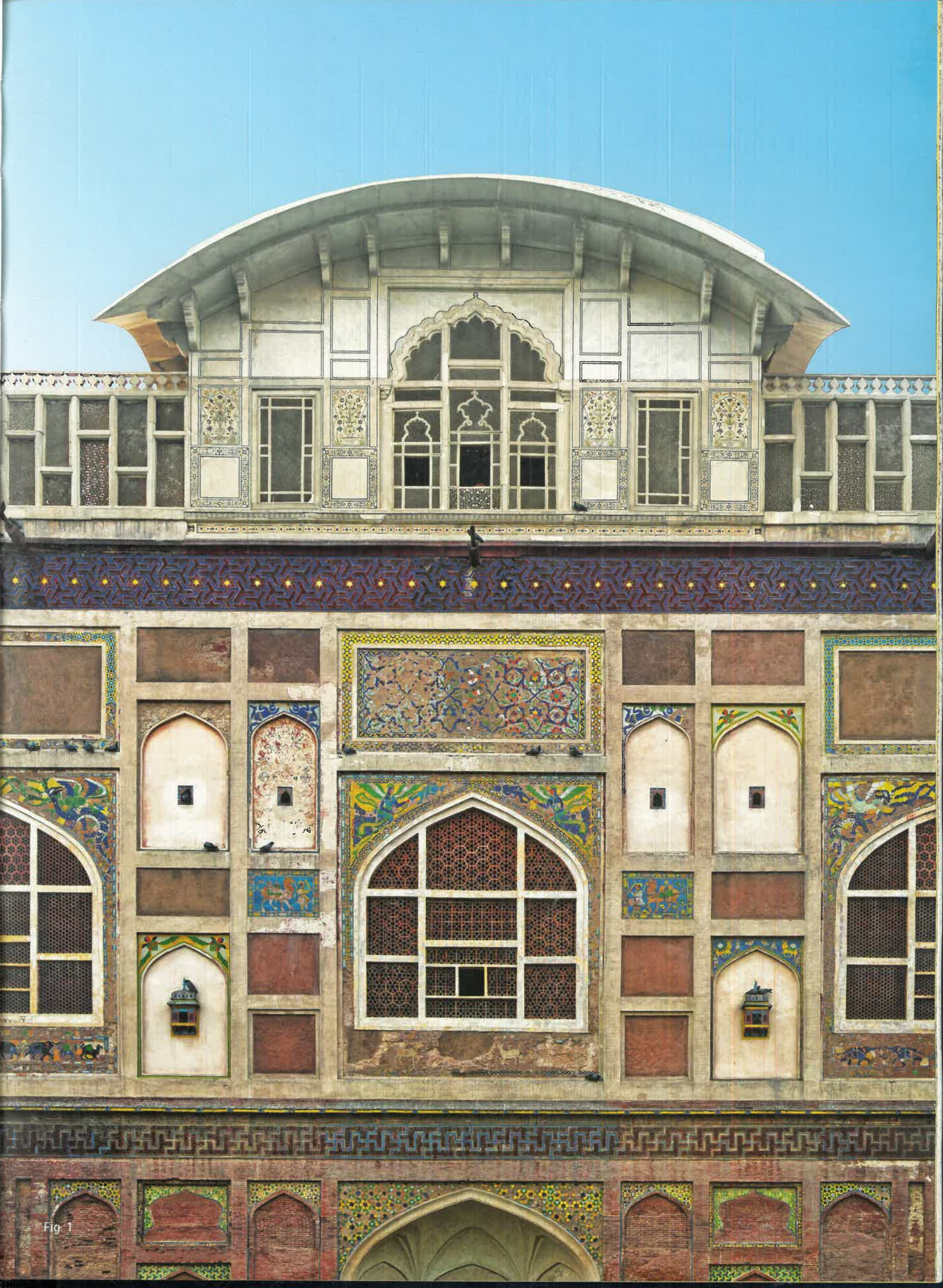
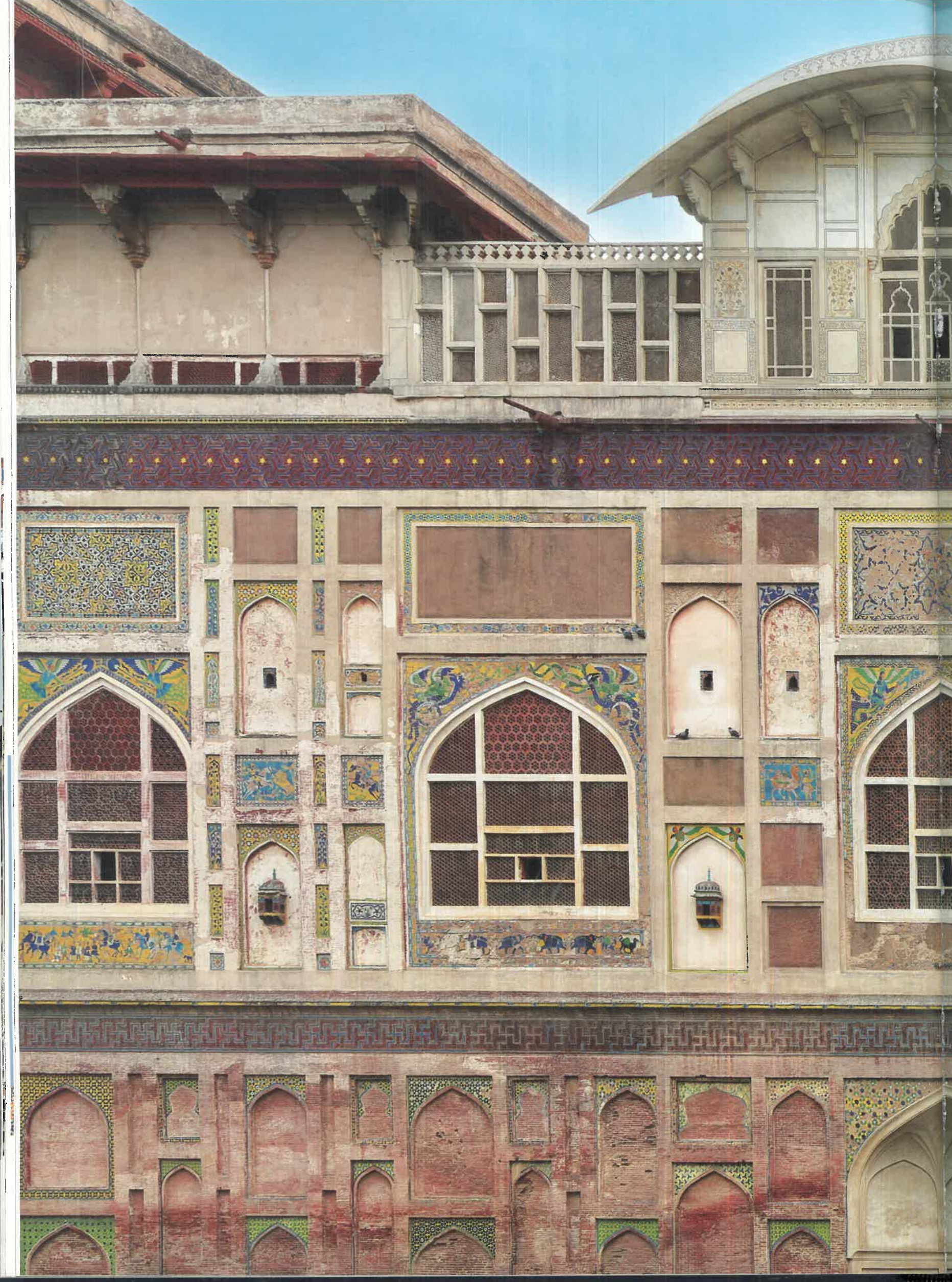
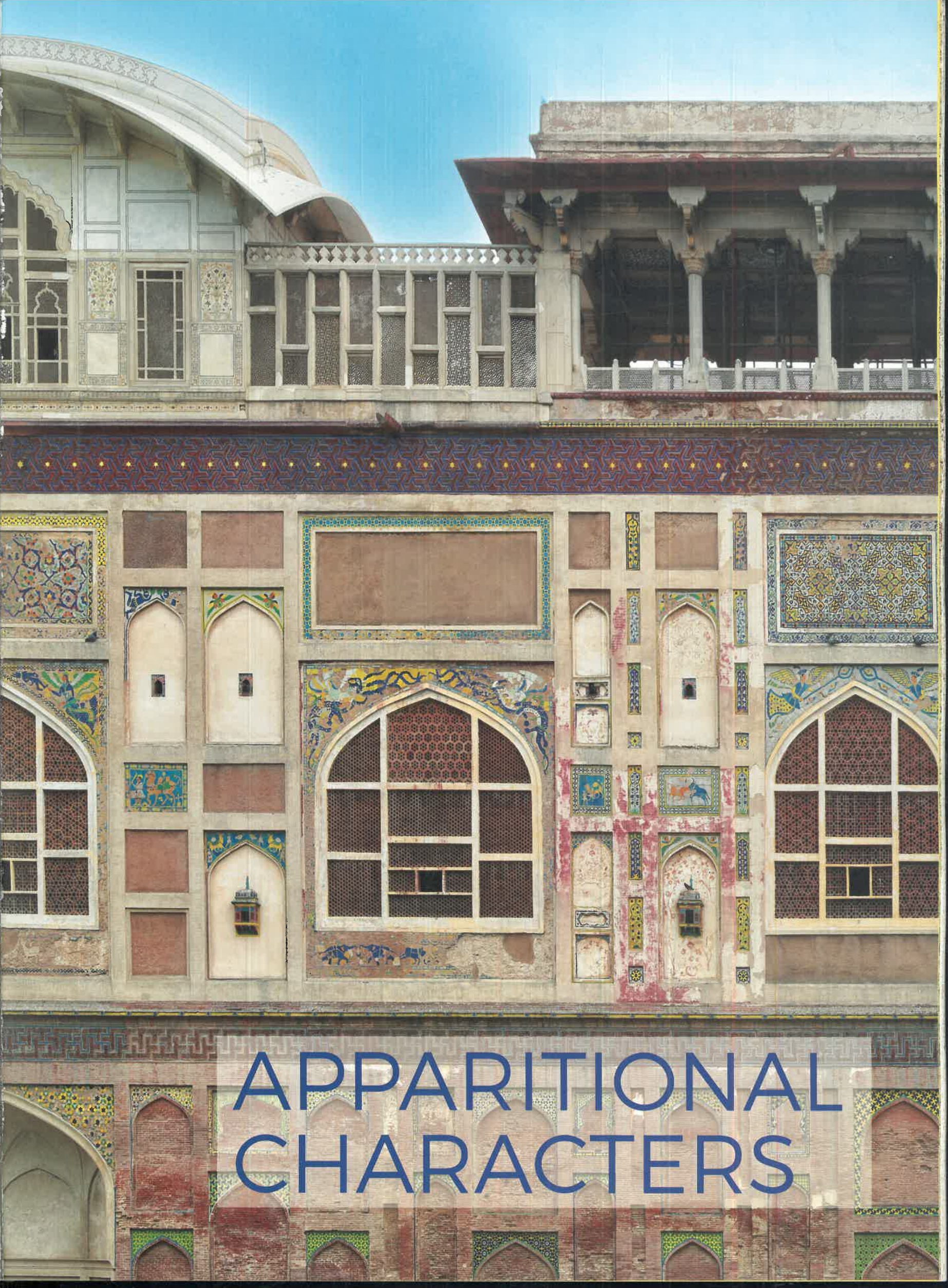
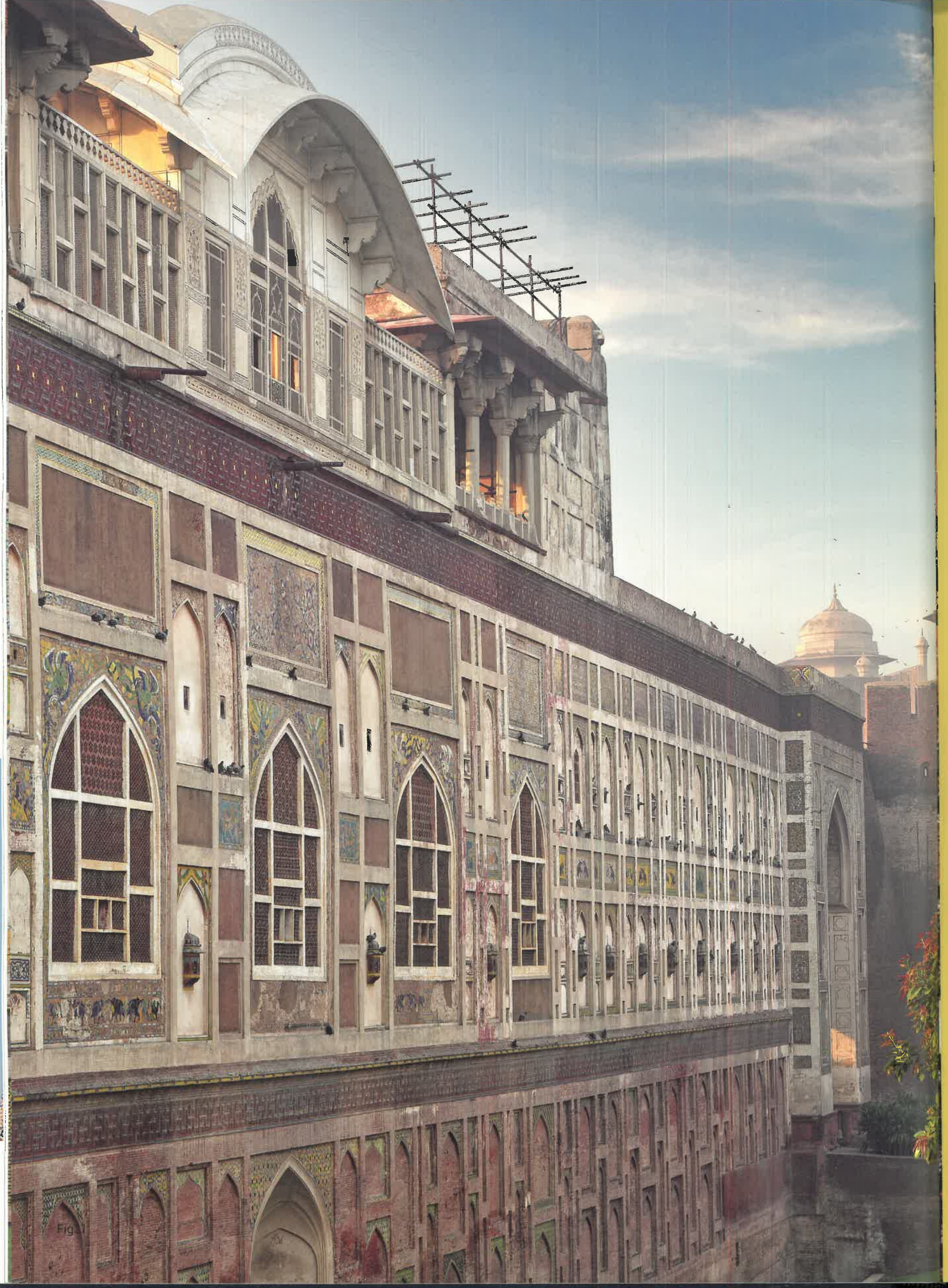


Fig. 1





APPARITIONAL CHARACTERS



A very interesting subject is the depiction of supernatural creatures that adorn the Picture Wall. They are mostly constructed on the arches larger in size, that pierce the Wall at regular intervals. On them are the imageries of angels, *Pari* (fairies), demons and dragons. Portrayal of these kind of creatures was not new and they were created frequently both in the paintings and on the buildings during the Mughal Era but here on this Wall, their forms, shapes, colors and flow of line is exquisite and since they are made in Mosaic Kashi, which was a difficult technique to master, it enhances the value of these masterpieces tenfold.

Angels/*Pari* (Fairies)/Seraphim

Malcolm Godwin in his book '*Angels An Endangered Species*' writes, "Since ancient times, humankind has been intrigued by the angels, those awe-inspiring, luminous beings, who hover somewhere between God and man in their flight through spirit, imagination and, possibly, the sky. Theologians have spent lifetime debating them. Artists have spent careers, painting and sculpting them."[1]

This phenomenon of human like angels was a popular theme among the artists of Mughal era because many stories and myths were based on them. Ancient Indian paintings and Iranian miniatures were the main inspiration and artists have been illustrating them for centuries. They have also been depicted on the Picture Wall in various forms and colors. Some of them have the characteristics of Seraphim that are celestial or heavenly beings originating in ancient Judaism and the term continued in Christianity and Islam. They serve as throne guardians of God.[2] On the Picture Wall, their representation has a very meaningful connotation due to their location that is near the living quarters of the Mughal Kings as if they are the guardians of these 'Supreme Beings' whose Chief was called *Zil-e-Ilahi* (The Shadow of God).

These angels contain many common features and have flowing robes with belts at the waist, wearing either crowns or caps. Wings are a persisting characteristic, which are mostly textured and made by using two or more colors. It seems that they were placed on the Picture Wall to protect the throne of the Mughal Kings. These creatures have been crafted on the spandrels of pointed arches and on every arch, a pair is facing each other. (Fig. 1) Some of them are presented as females, that may represent the age-old concept of *Pari* (fairies) or the female celestial forms. In most cases, smaller arches, panels around the large arches have thematic relationship specially the horizontal panels, right above the arches with angels, have beautiful *Arabesque* designs with the color scheme responding to the tints and shades used in the compositions of angels made below. In the current write up, an analytical interpertation of this imagery is discussed.

Angels Catching Human Headed Birds, *Garudas*

On both the spandrels of the arch, two angels are shown. (Fig. 2) They have blue and yellow dresses with green and yellow horizontally striped sashes. The long flowing skirts have trefoil design. They are wearing crowns that are made prominent with beautiful purplish blue *Kalghi* (plumes). Dominating colors of the whole composition are blue and yellow with a tinge of green. Jewelry around their necks and some traces of ear pieces are visible. (Fig. 3) Of the faces and hands, in a very subtle manner, the skin color differs from the yellow of their dresses.

These angels are holding traps with long handles in their hands and it looks that they are catching some mischievous creatures. Two are caught in the trap while eight of them are perched freely on the borders of the arch. These creatures have boyish faces with blue and yellow colored wings attached to them. It is a combination of man and bird that is probably a representation of *Garuda*, which is a mythological bird belonging to the Hindu pantheon and described as 'golden winged sun bird'. The appearance of *Garuda* varies. It has been portrayed in many forms such as a bird, a winged man i.e. in a hybrid man/bird combination. In some cases, *Garuda* is an ally of man and the enemy of *Naga*, the serpent but it is also identified with the hot sun, causing the streams and rivers to shrivel up and die.[3] This mythological creature is attributed with good and bad and here, it seems, the dominating feature is depravity because they are trapped and stopped from being free.

In this panel angels and *Garudas* are made against a white background. Near the feet of both the angels, we can see the flower named Evening Primrose. (Fig. 4) The flower on the right is quite visible but the left one is damaged. The presence of this flower along with the angels in the same space is very interesting because according to a Scottish legend, if you want to see an angel or a fairy, you must eat a Primrose.[4] For many European travelers and missionaries, the Subcontinent was a favored place to visit. They were coming here for centuries and bringing their cultural traits that were incorporated in many aspects of local life specially in arts. There is a possibility that the presence of Evening Primrose flowers near angels or fairies is the result of European influence.

Pairs of the same bird/human hybrid form appear independently on the nearby smaller arches. (Fig. 5) They are also facing each other. These are the faces of young boys wearing double colored caps i.e. yellow and blue, with their sideburns visible. In ancient texts, *Garuda* is described as emerald in color with golden wings and an addition of blue. Here these two colors are used that strengthens the idea. In *Rigveda*, the sun is compared to this bird in its flight across the sky[5] that dries water sources. Within that capacity, its negative role is highlighted.

This hybrid creature appeared in many panels on the Picture Wall and in some of them they are shown holding a rosary, made with white beads, in their hands. It looks they are chanting some *Talism*. (Fig. 6)

The horizontal panel above the arch has a design, which is the combination of geometric and *Arabesque*. (Fig. 7) The intricacy of the composition is amazing. Interestingly the colors applied in the panel are similar to the ones used in the arch immediately below it. The border, depicting *Arabesque* in blue green colors with such fine detailing, is a miracle in Mosaic Kashi, that has rarely been surpassed ever since. This section of the Wall is in complete harmony.

Fig. 2

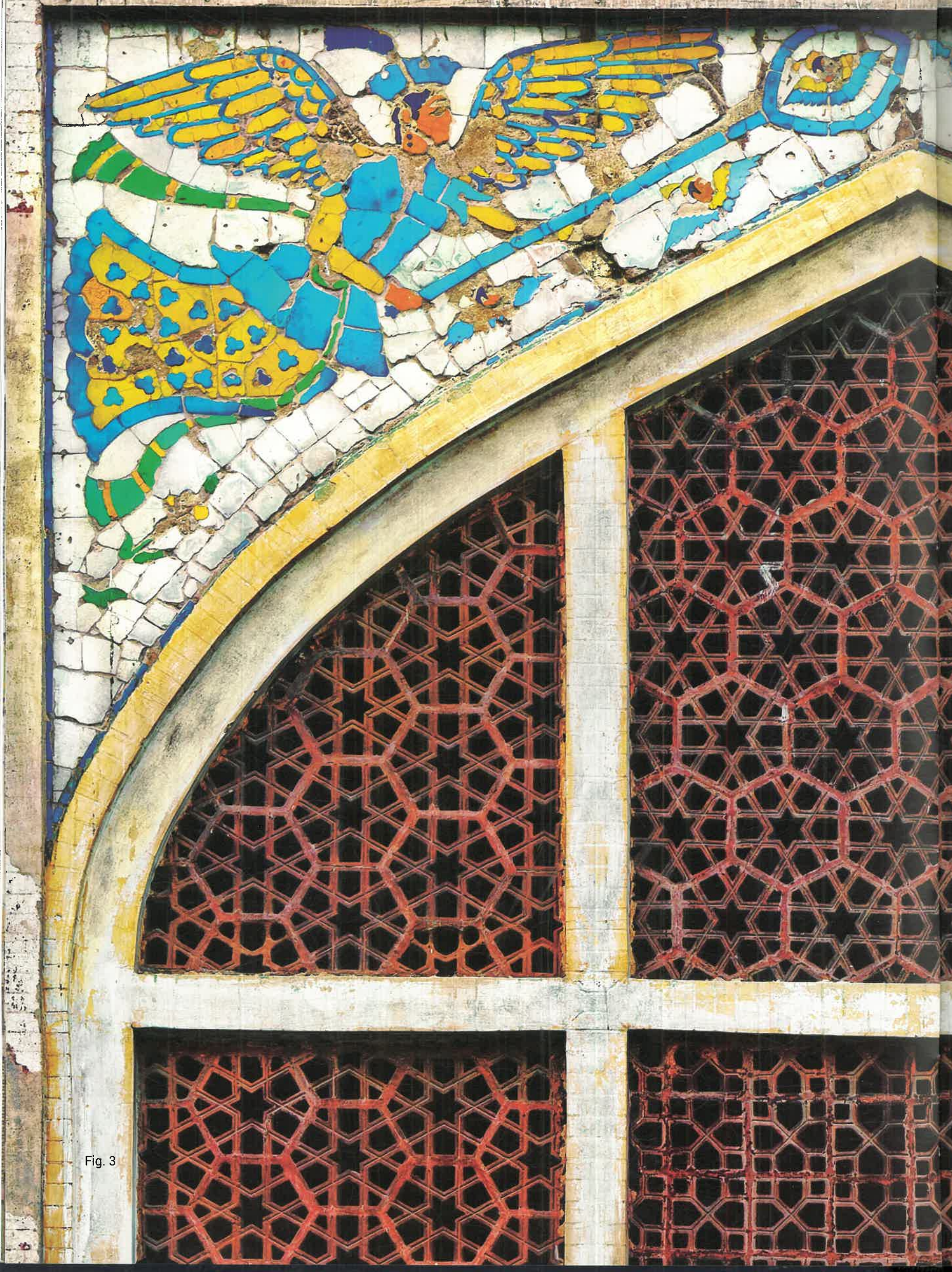


Fig. 3

Fig. 4



Fig. 5



Fig. 6



Fig. 7

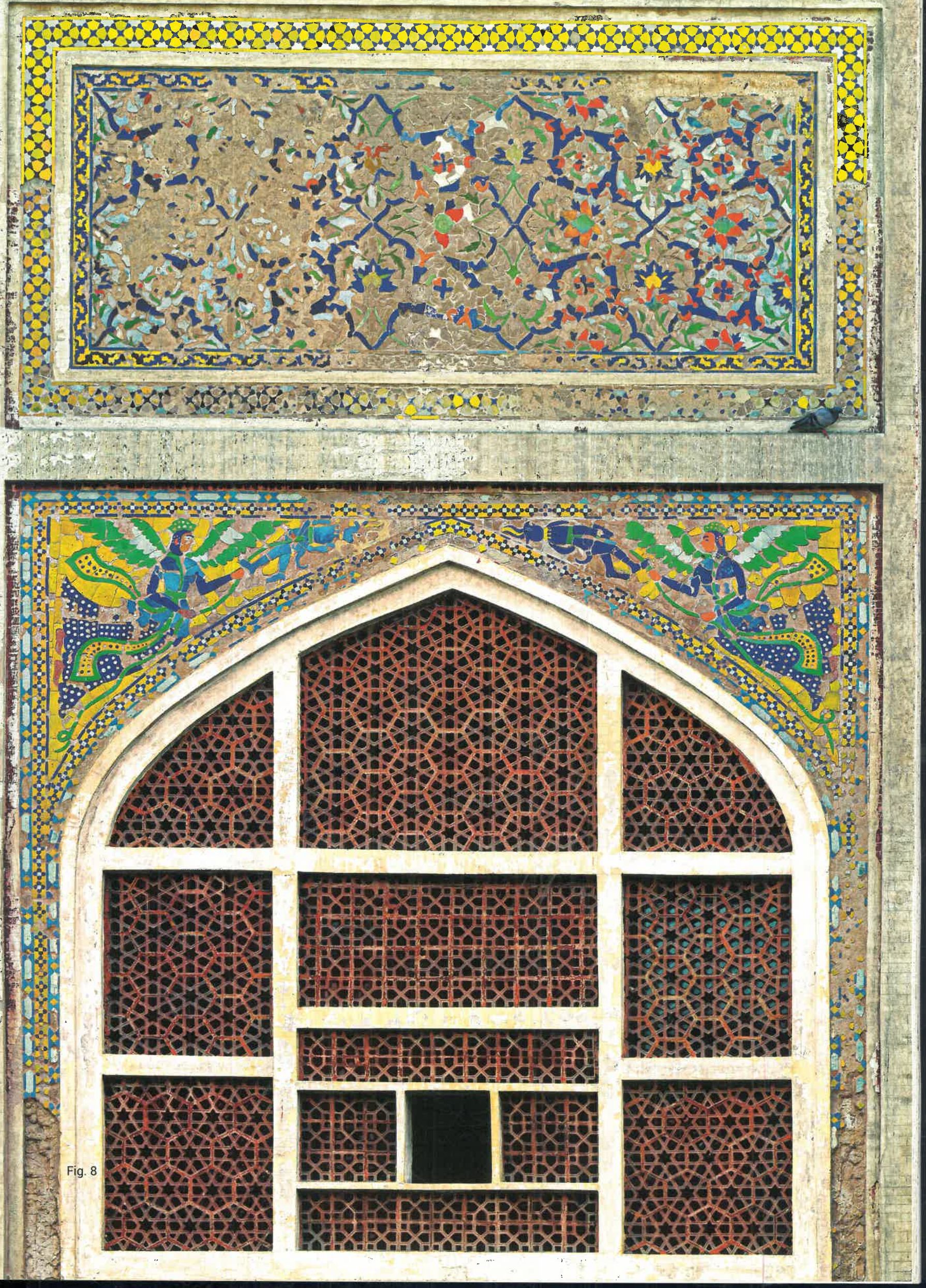
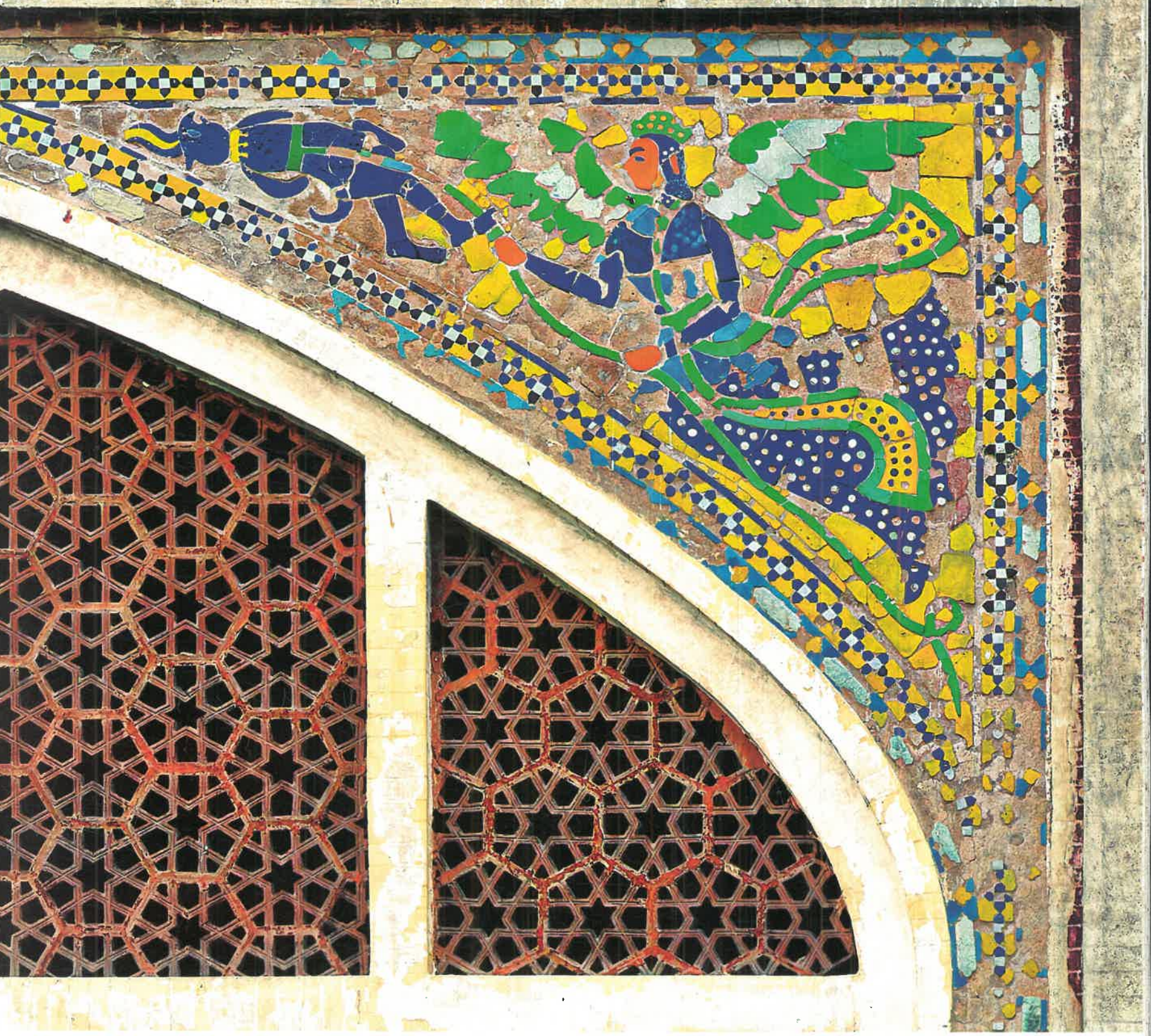


Fig. 8

Fig. 9

Pari (Fairies)/Angels with Roped Genies

Against a bright yellow background, two female winged *Pari* (Fairies)/Angels, draped in double shaded blue dresses with dotted design on the skirts, are depicted on the arch. (Fig. 8) Their yellow waist belts with green borders also has the same design. Both have green and white feathered fairy wings and crowns on their heads without any plume. (Fig. 9) One can see their feet peeping out of their dresses. Mosaic in such fine details, depicted in Kashi technique is amazing.



These are very interesting figures holding two genies with green curling ropes. Basically, the concept of genie (invisible creatures) is from early pre-Islamic Arabian religious systems and later on they were inculcated in Islamic culture and beliefs.[6] Genies and fairies are mentioned simultaneously in many mythologies and they are part of the same realm where humans are not allowed. In stories, most of the time, genies are elucidated as evil creatures that are controlled by fairies and the same is illustrated here. The two genies are made in two different colors i.e. blue and turquoise, maybe it was to identify them because in many tales, genies are of different colors such as *Kala Jin* (Black Genie), *Lal Jin* (Red Genie), *Neela Jin* (Blue Genie) etc. Their characteristics differ according to their color such as *Kala Jin* or *Lal Jin* (black or red genies) are more dangerous and vicious then other *Jins*.

Two nearby small blind arches also have blue colored genies, made in their spandrels. They are in flying posture, holding a femur bone in one hand and a small shield in the other. They have adorned themselves with gold around the neck, waist and thighs because according to stories, their wealth is legendary. (Fig. 10,11)

The horizontal panel immediately above this arch has an intricate *Arabesque*, replicating the colors used on the arch below. (Fig. 12)



Fig. 10



Fig. 11



Fig. 12

Angels Holding Two Blue Deer

In these arches the male and female flying beings are holding blue, white and beige colored deer. On one arch are two angels, made against an ochre/yellow background. (Fig. 13,14) They are wearing berets with plumes, two-piece dresses that are green shirts and blue dotted skirts along with white sashes that have blue stripes, all in curvatures because these creatures are represented in the middle of their flight. Their feathers are also in the colors of blue, white and green. The skirts have a pentagonal design in squarish pattern. The ochre/yellow background is a backdrop for blue and turquoise colored clouds that are Chinese in style. These swirling shapes have filled the empty space and their Chinese descendance is quite apparent.

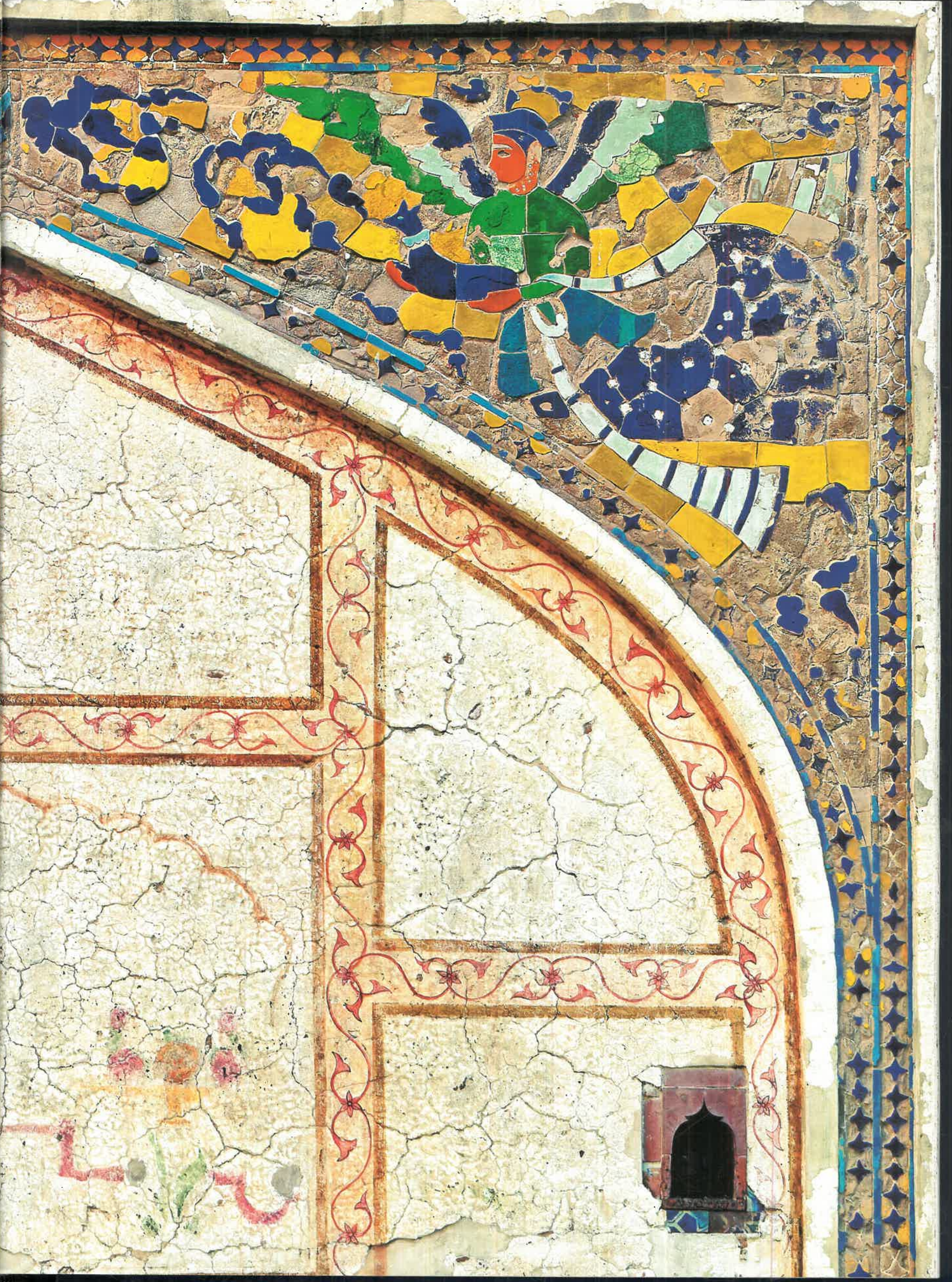
This is a very non-traditional style of making a celestial figure because it seems as if they are presenting offerings to some unknown being. Their arms, holding blue deer, are thrusting outward, towards an unseen power. The animals seem to be oblation for sacrificial purpose. On the other hand, 'In the Celtic pantheon, the deer is thought as another worldly creature, belonging to the world of fairies and having magical powers.'[7] This is very interesting because here, also, the angels are holding this precious creature and flying with them. It can be interpreted in both manners.

The borders of these arches with figuirines are different from each other. Here it is isotoxal star shape in blue with yellow background and turquoise outline, a color plan that corresponds to the main panel that is also based in the same hues and tones. Another visual to notice is a very simple *Arabesque* border inside the arch that is dividing it in separate parts, painted in fresco. All of the artwork on the Wall, using the fresco technique, is damaged. Even here the colors have dimmed over the centuries that have been retouched but the point to notice is the flow and grace of the line and the success of the mathematical calculation to divide different dimensions of the surface so successfully. This is the miracle of this Wall. The artists knew exactly how to handle the corners, the turns, edges and the designs were calculated so accurately, that they fitted perfectly, no matter how big or small that surface is.





Fig. 13



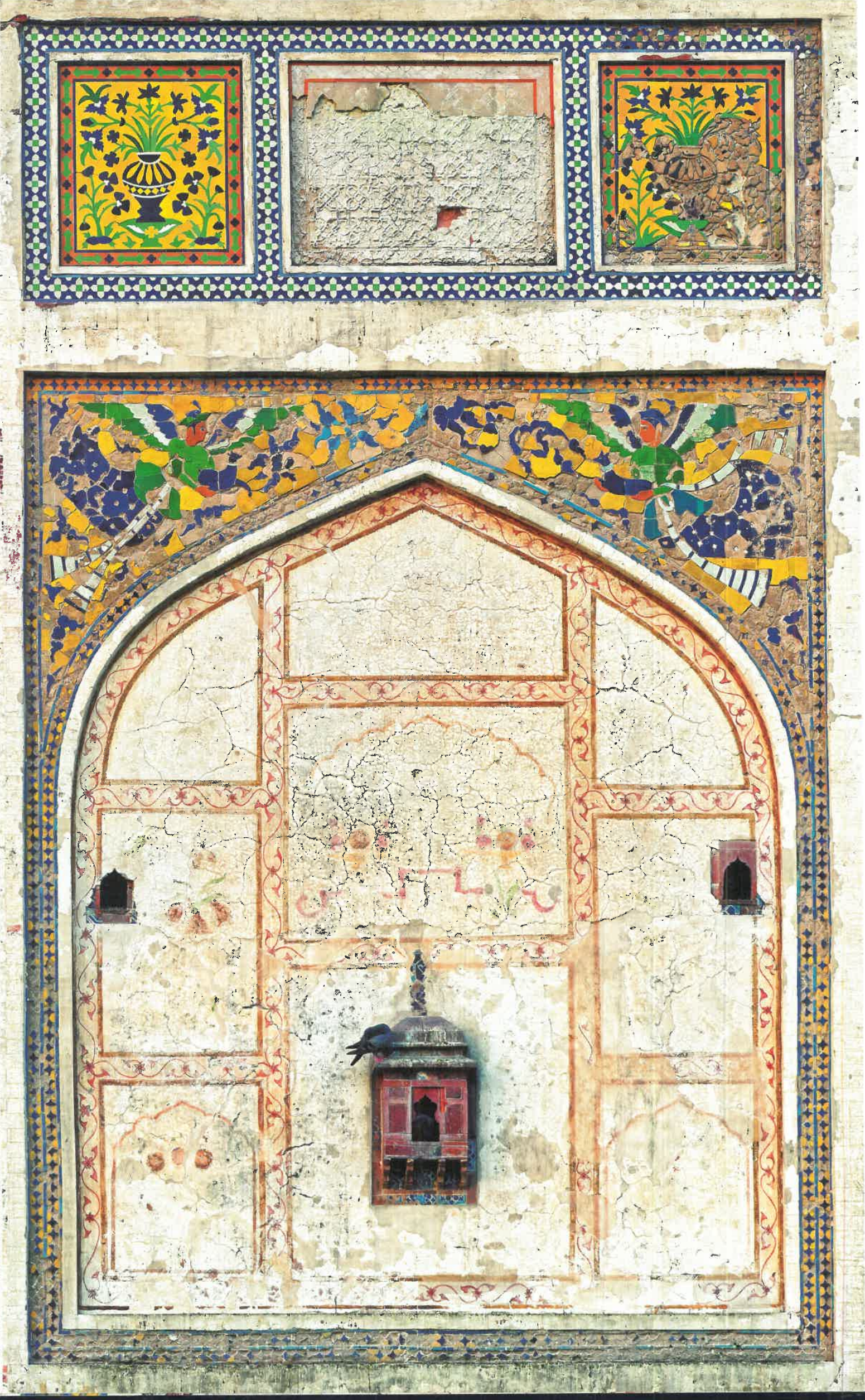


Fig. 14

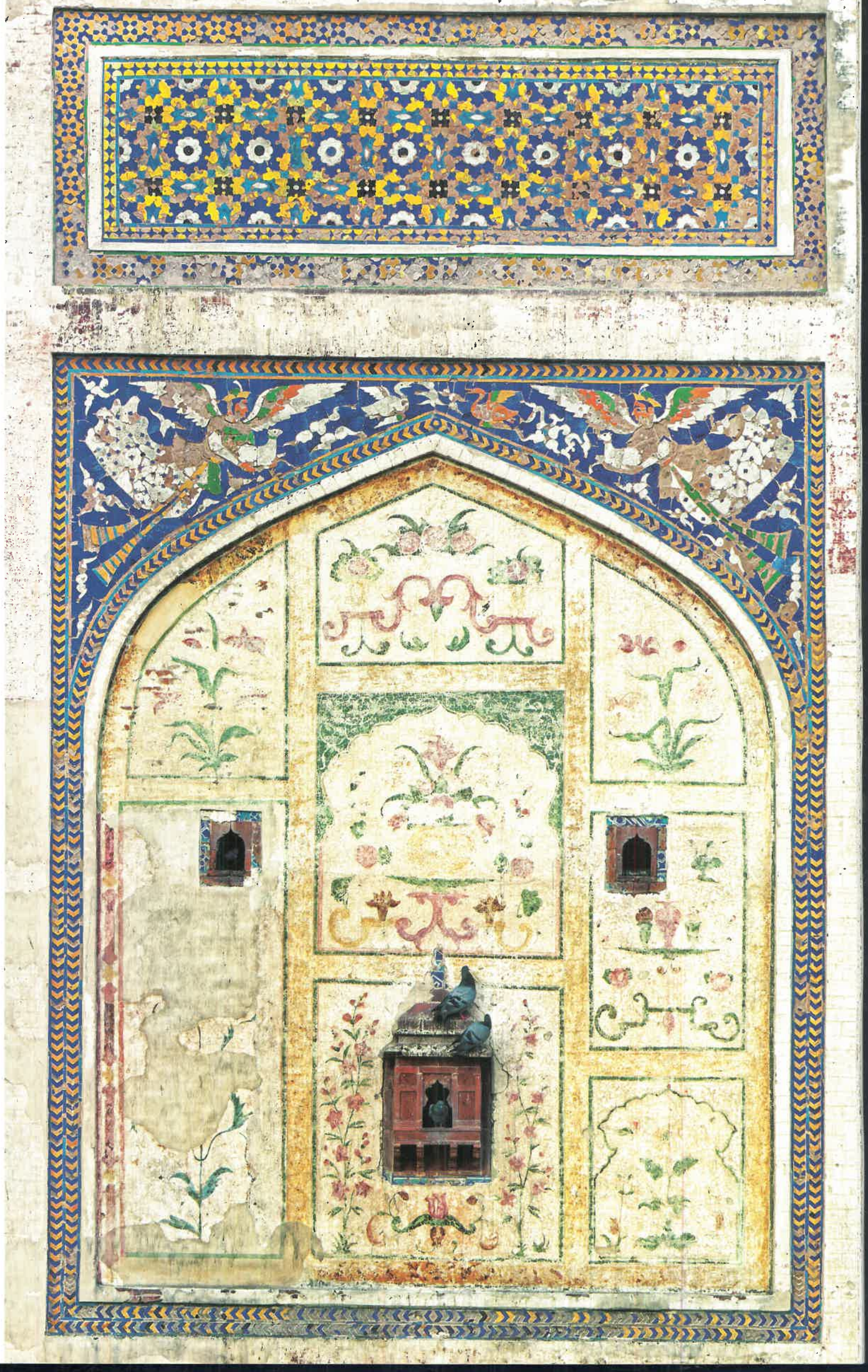


Fig. 15



Fig. 16



Angels Holding The White Deer

On the spandrel of another arch, the theme is the same but the color pallet and border design is changed. (Fig. 15,16) The angels are wearing green shirts that have white sleeves with blue border on the upper arm. The white skirts have quatrefoil design. Figure on the right has traces of orange waist belt with a green and orange sash. As for the figure, on the left, one can make out the remains of a yellow belt with a sash in yellow and turquoise blue, which is a very bold choice of color against the dark blue background.

The deer they are holding in their hands, are white. There are different types of deer in the world, but the white deer is one of the rarest and most beautiful. They are not albino, but rather they have a genetic mutation that causes their fur to be all or mostly white. Since they are very difficult to find that is why in many cultures of the world, white deer are seen as carriers of important messages from the other world or as spiritual guides, leading people towards self-discovery and enlightenment. This tradition goes back to the ancient Indo-European cultures.[8] In Hindu religion, the deer is associated with Lord Shiva. According to theologists, Shiva holding the deer symbolizes keeping the mind under control. The four legs of the deer represent the four *Vedas;* hence Shiva is also called the Lord of the *Vedas*.[9] Buddha also gave his first sermon in the Deer Park of Sarnath.[10] The deer in the hands of the angels on the Picture Wall create a whole lot of different concepts. This may not be just a simple visual presentation but an imagery with a deeper meaning and with angels holding them we can fairly assume that they are meant to symbolize the connection between the two worlds.

The two Swans *(Raj Hans)* at the key of the pointed arch is another interesting element added here. (Fig. 17) Over time, one of them has lost all color but the other one has traces of yellow and green with shade of auburn dominating. This is the bird that has a significant symbolic value in almost every region of the world. They are believed to mate for life and so are emblematic of fidelity, love and loyalty. In the Hindu religion of the Subcontinent, they are believed as creatures that reside between two worlds.[11] The whole composition of this arch is a combination of different forms that are the symbols of connectivity of the earth to the skies.



Fig. 17

Clouds in the background are white against blue Mosaic Kashi tiles and the border of the arch is based on an arrow point design in blue and orange, which are the predominant colors of the whole panel, repeated in the horizontal panel above the arch that has an extremely intricate geometrical design. (Fig. 18)

The inside of the arch, is divided into smaller sections that contain faint traces of flowers, vases and ewers painted in fresco technique. Although damaged intensely, the lyrical flow of leaves and different flowers is amazing to look at.

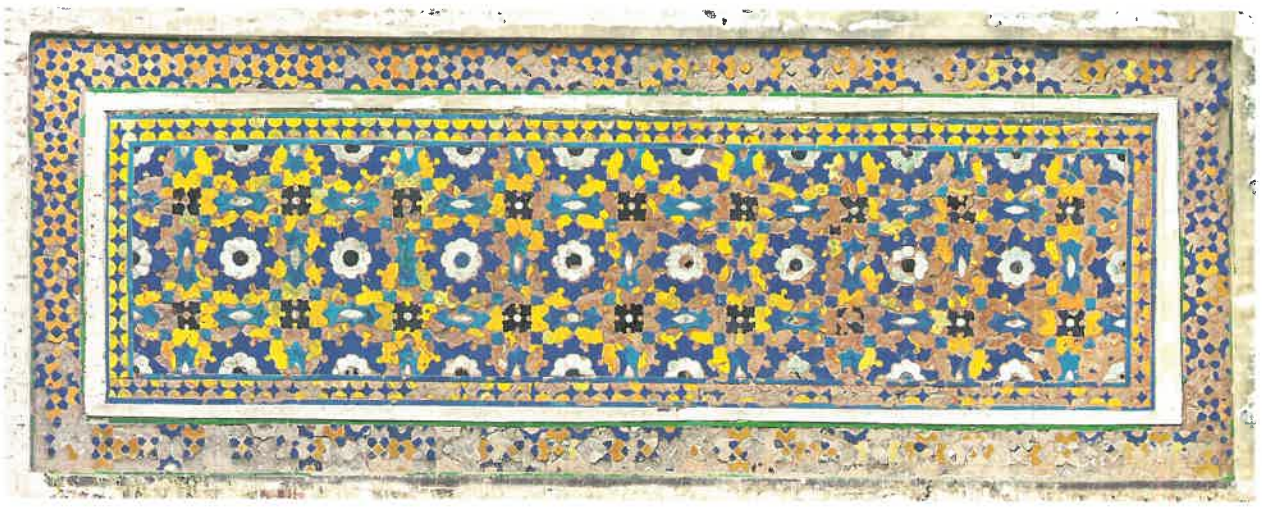
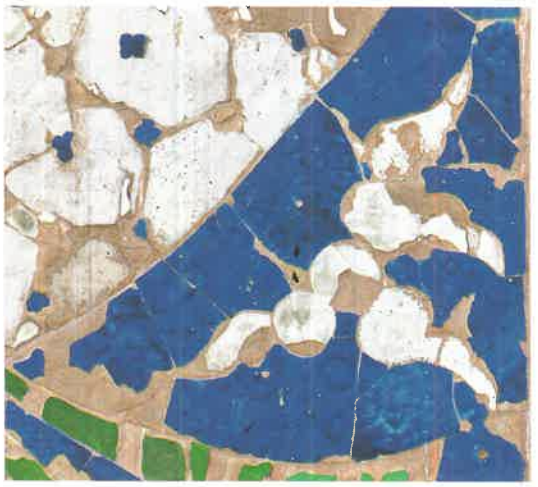


Fig. 18





Pari (Fairies/Angels) Holding Deer and *Aftabgir/Morchal* (Sunshade)

Four other arches have angels holding the deer but now *Aftabgir/Morchal* (sunshades) are added to the scheme of design. These are all female figures presented with beautiful long hair and feminine features. (Fig. 19-23) This could be the representation of a *Pari* (Fairy), an imaginary creature that is popular in the Subcontinent mythologies and bedtime stories. All of them are wearing jewelry, even the anklets are visible on their delicate feet. Their dresses, waist belts and sashes are in different colors with intricate details such as quatrefoil as dominating pattern and arm bands on their upper arms. Another fine detail is the display of the inner of their skirts and shirts, that are different in color. This must have been the fashion of that time.

Four pairs of different styled *Aftabgir* (sunshades) are held by these fairies/angels. Their basic shape resembles the peacock feathers. Sunshades were usually associated with royalty and were either made of peacock feathers, gold or silver, sometimes with diamonds encrusted in them. Since the Picture Wall is directly linked to the Mughal rulers, the presence of a royal emblem makes complete sense. In this scheme of design, no male is shown holding the *Aftabgir* but it is only the females who are presented with this symbol of subservience.

The background color is yellow, which is used to represent happiness and the sun. The blank area is filled with blue Chinese style swirling clouds to highlight the fact that these creatures are flying in the skies.

On the upper side of all four-pointed arches, is a design element, which is placed next to each other. A closer look reveals that here is an imagery of a strange, face like pattern that has eye brows, eyes, hair and horns along with two *Arabesques* style beard strands, flowing downwards, both on the right and left. It is extremely intriguing because this face like design does not look like a coincidence and its inclusion in all four arches must have been a conscious effort. Study of this section of the spandrel also reveal that all the *Aftabgir* (sunshade) are basically aimed towards these faces as if the females are serving this hidden creature. (Fig. 24-27) These faces have a very well-defined similarity with *Kirtimukha*, a creature who in obedience to Hindu Lord Shiva's directive, devoured its own body until only its face remained. (Fig. 28) Impressed by *Kirtimukha's* compliance and determination, Shiva named it the 'glorious face' and ordained that it should forever guard the entrances of his temples. In some cases, it acts as a protective guardian, repelling evil spirits or harmful energy.[12] On these arches, the appearance of such design form, seems to be fulfilling the same role and guarding the kings and their families from a superstitious perspective.

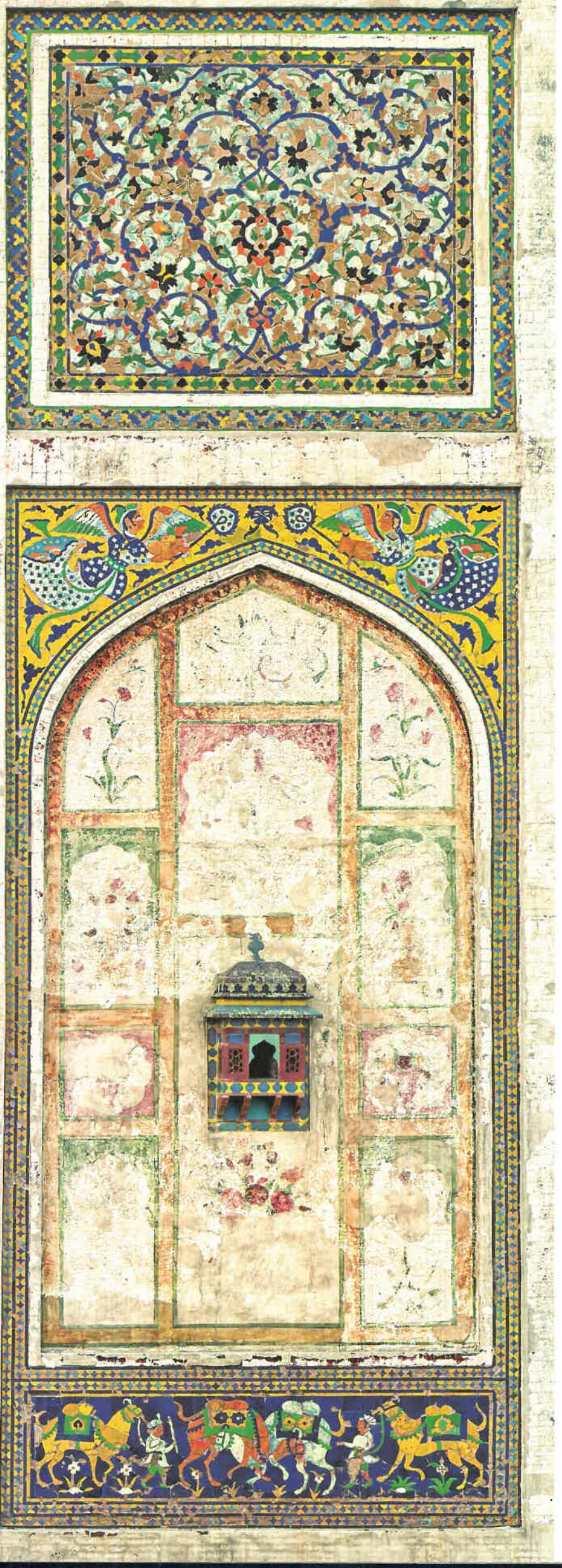


Fig. 19



Fig. 20



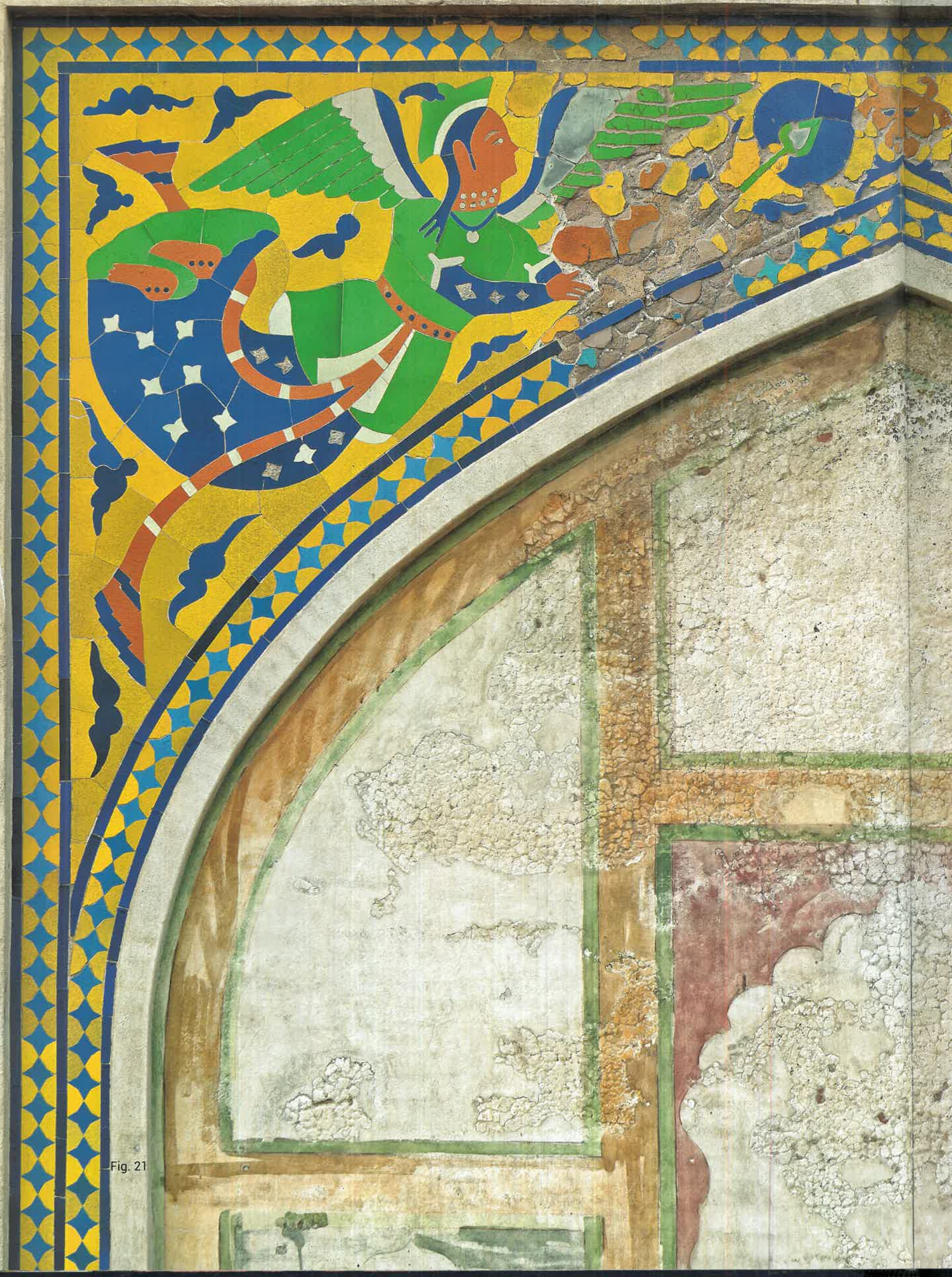


Fig. 21





Fig. 22



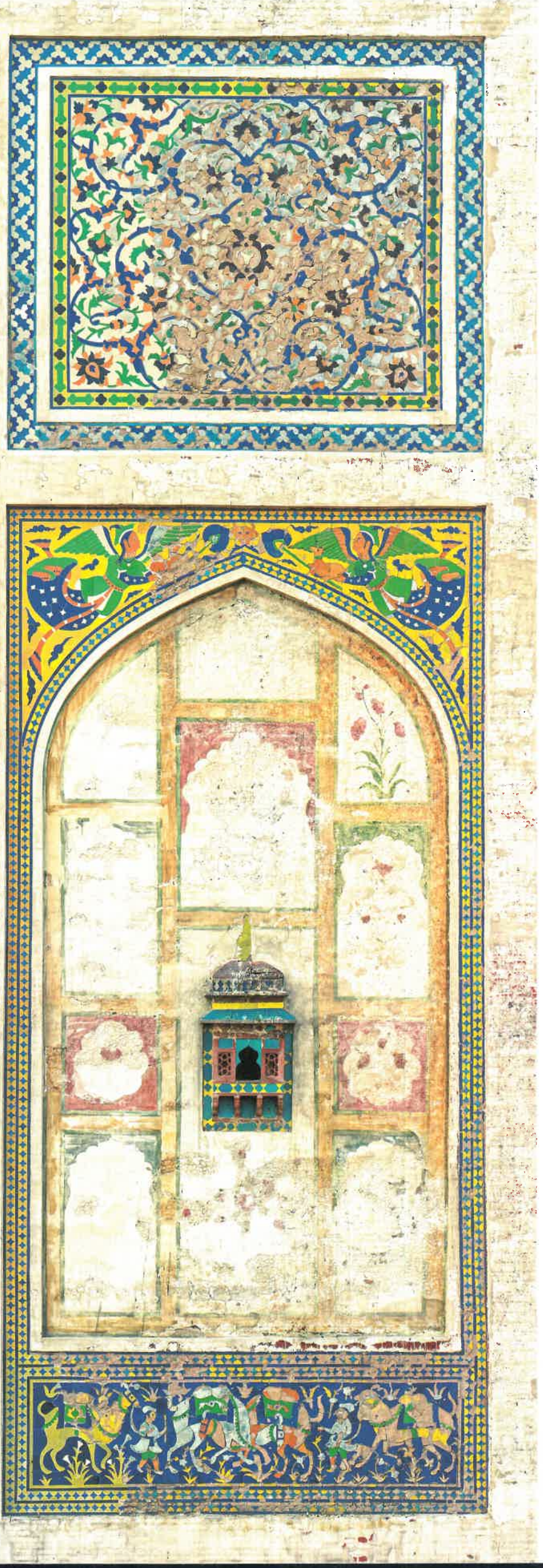


Fig. 23



Fig. 24



Fig. 25



Fig. 26



Fig. 27



Fig. 28 *Kirtimukha (*Image Source https://www.flickr.com/photos/anandajoti/9205261281)

Angel with *Aftabgir/Morchal* (Sunshade)

On a separate arch are two female figures holding the *Aftabgir/Morchal* (sunshade) only. It is a simpler composition as compared to the ones discussed in previous pages. (Fig. 29,30)

Angel with Deer and Fruit Tray

The theme of holding the deer is repeated in another arch but here one of the angel has a tray in his hands that has fruits. (Fig. 31,32) Some local scholars[13] believe that these winged creature are a representation of *Ghilman* of the heaven that are mentioned in Quran. They are young and beautiful, who are to serve and entertain the *Jannat kay Makeen* (the residents of heaven). Quran mentions them in verse 52:24: "There will circulate among them *Ghilman* for them, as if they were pearls well-protected." *Ghilman* are traditionally described as servant boys provided especially for believers in heaven.[14] Here they are holding the gift of fruits and deer, to be served to those who have been granted heaven. Again, there are two swans that symbolizes the connection of heavenly creatures with the earthlings.

Angels with Flower Branches

The spandrel of this arch portray two male angels holding flower branches in their hands against a bright yellow background. In the middle are two swans painted in blue. The Angel on the right side is holding three branches that are barely visible because the surface is damaged intensely but the outline is still visible (Fig. 33,34) and we can see that the top most branch has three Irises, the middle one has a Lily flower and at the lowest are two Blue Bells. Two branches are held by the other figure on the left but unfortunately, they are damaged beyond recognition. There are traces of later restoration but that has destroyed the original shape, which is why it is unrecognizable and we are unable to identify the flower.

In the world of symbology, a blue Iris symbolizes faith, hope and deep trust. It is also a sign of royalty.[15] Lily has significance in Hinduism as well in Buddhism. It epitomizes enlightenment and purity of the soul along with mercy, compassion as well as the aggressive traits of the female nature.[16] Blue Bell, also called fairy flowers, are deeply associated with fairies. The symbolic value varies from place to place but overall it is a symbol of humility and constancy.[17] All these interpretations are universal in nature. These three flowers are of foreign origin. When they entered the Subcontinent, their symbology was also included to its representational value.

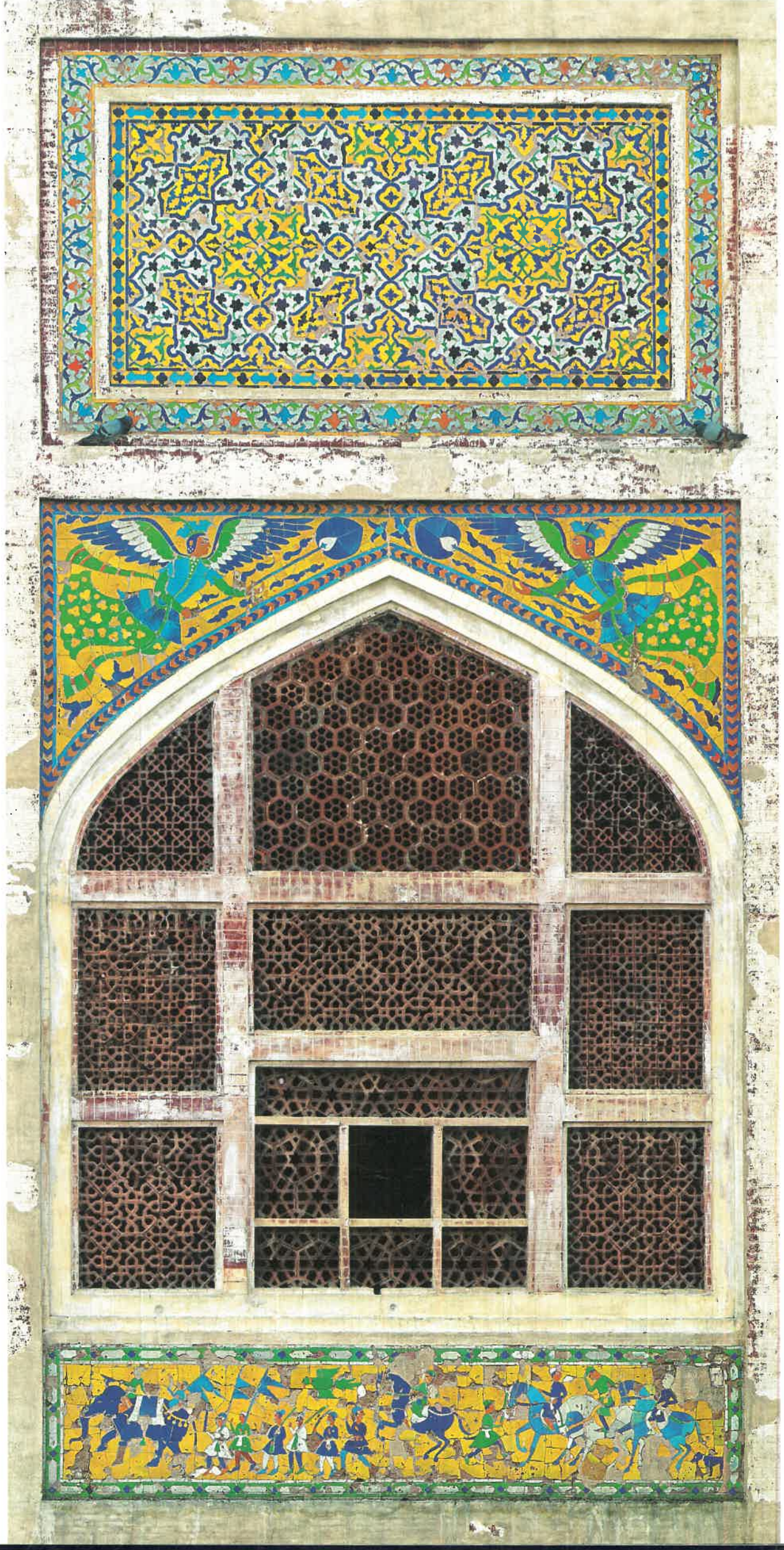
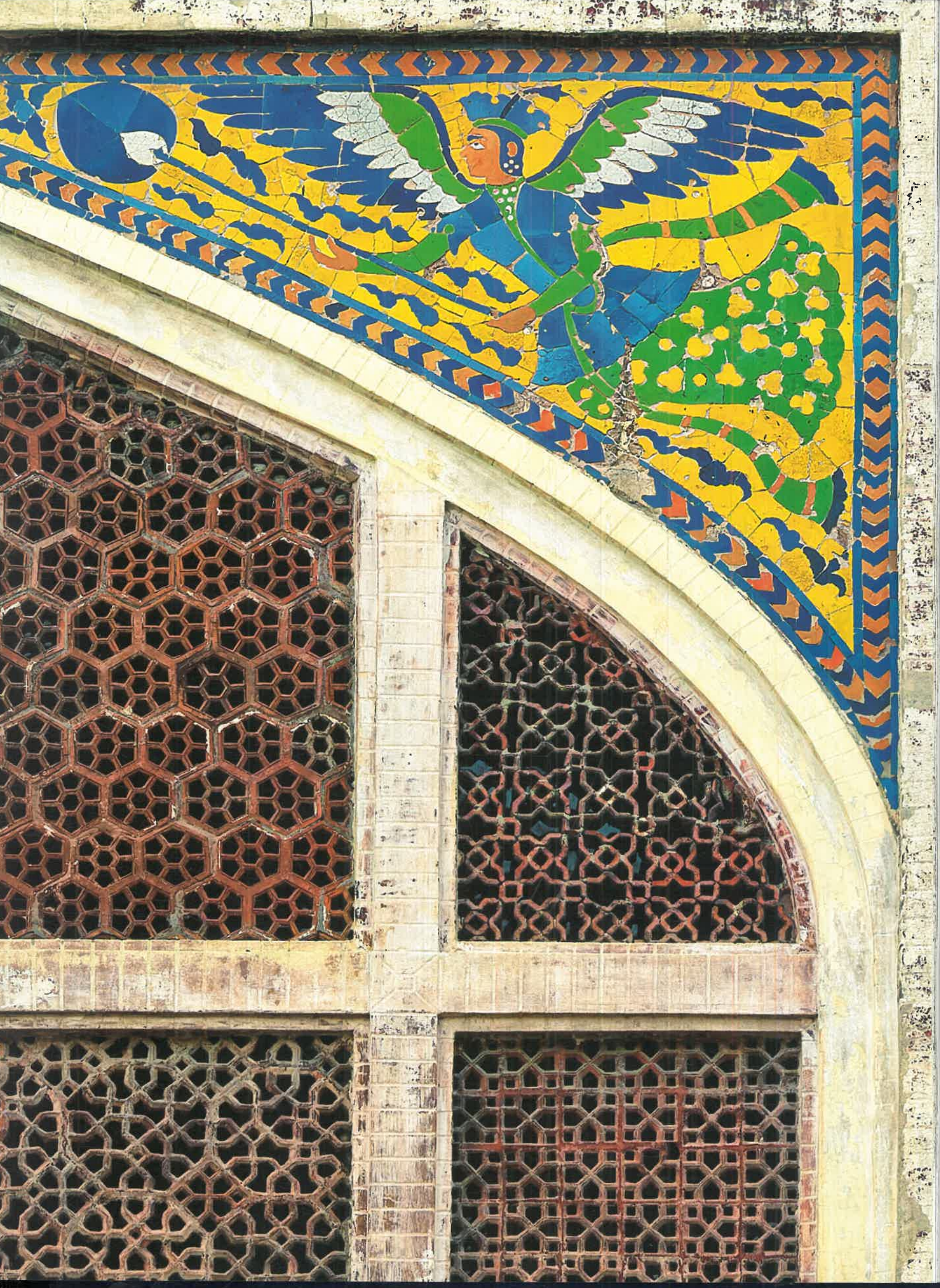


Fig. 29



Fig. 30



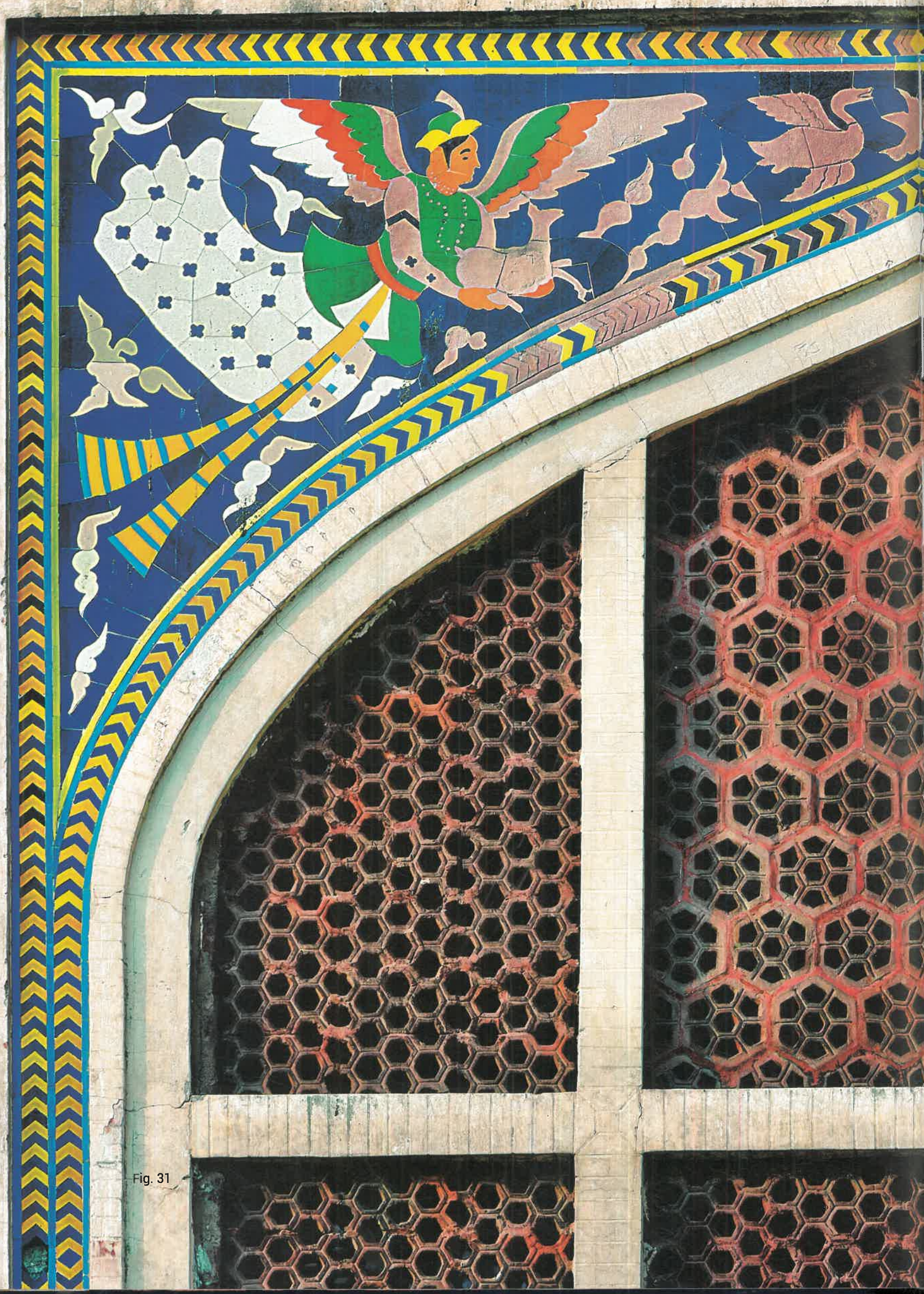
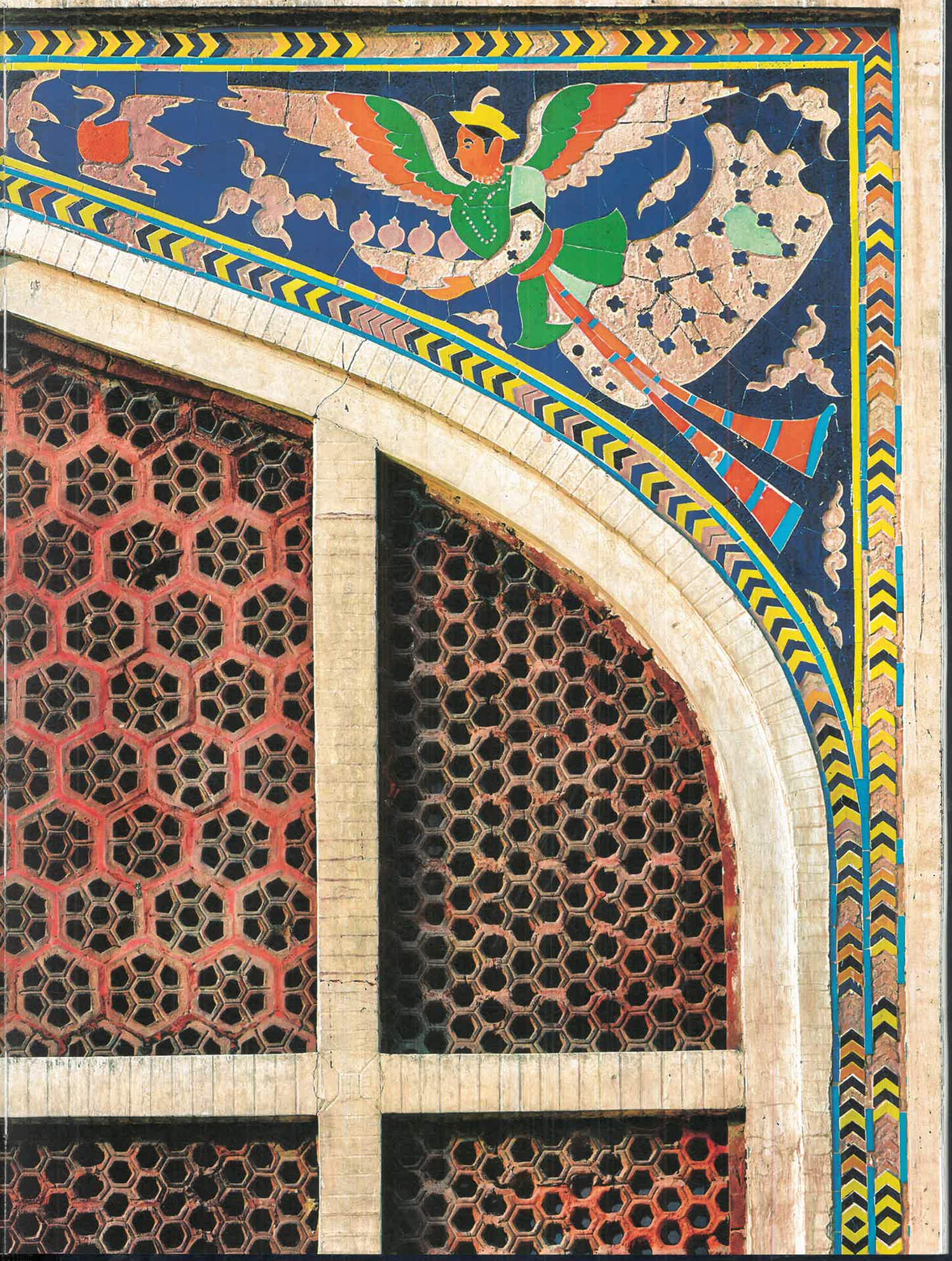


Fig. 31



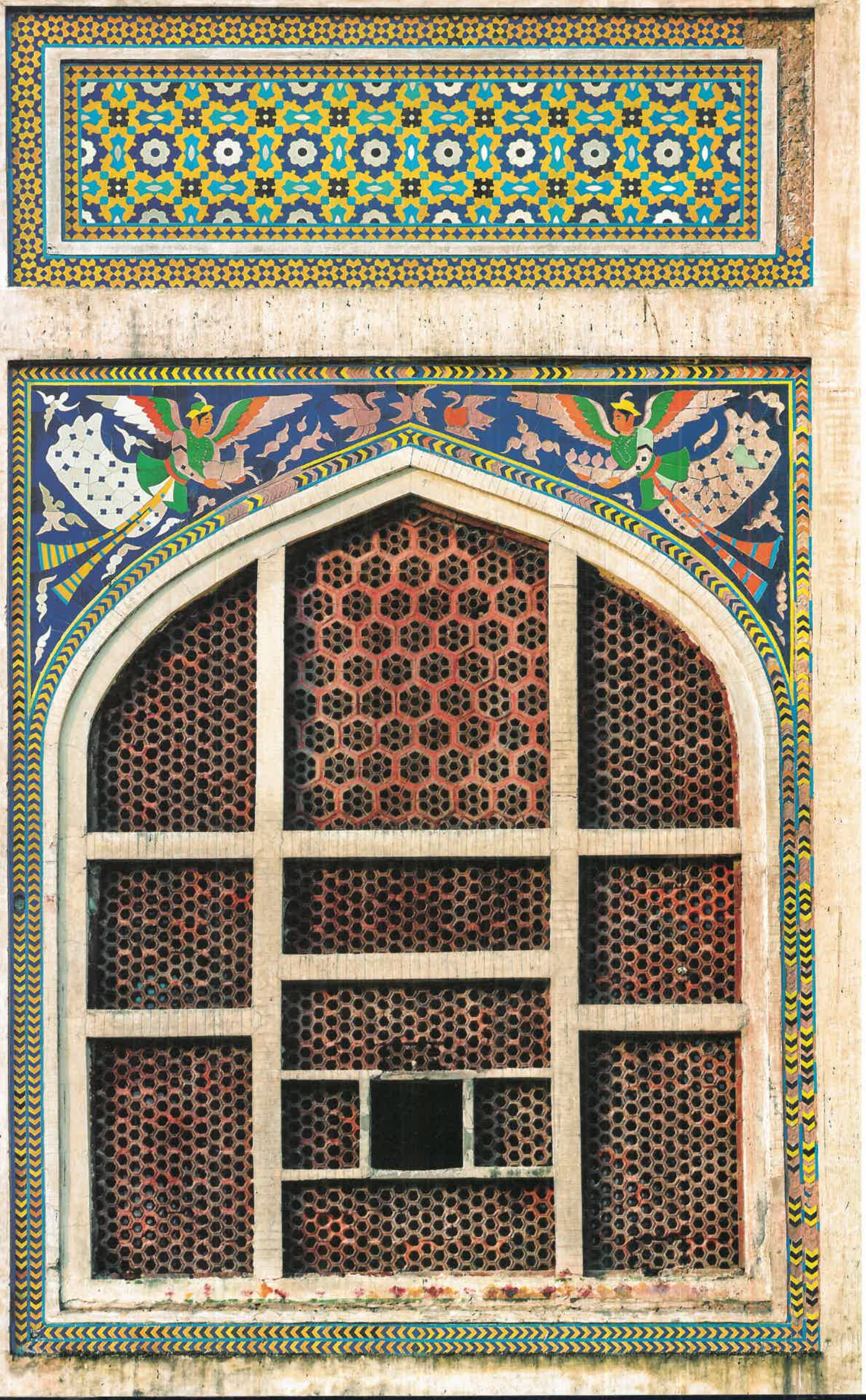


Fig. 32

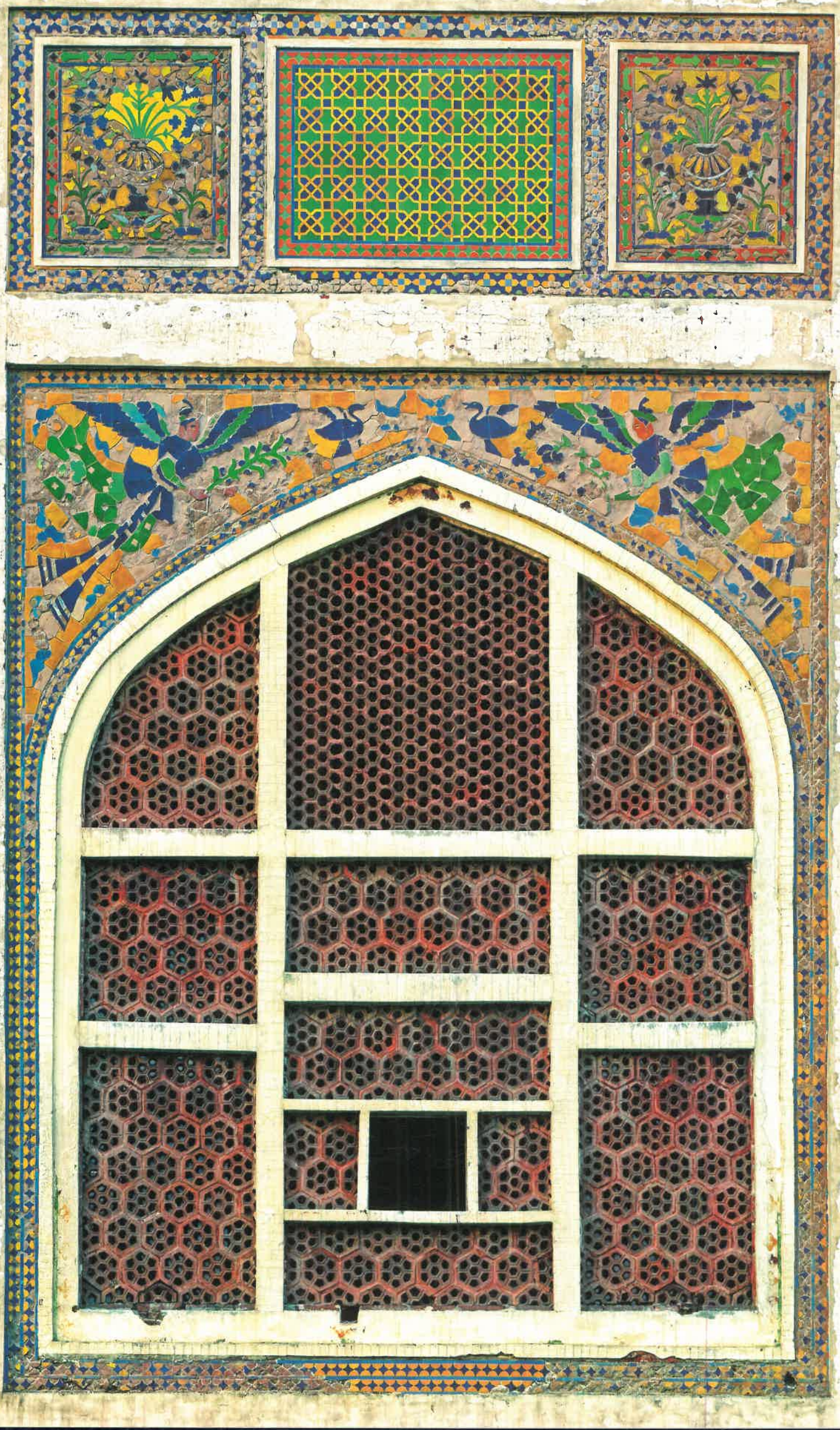


Fig. 33

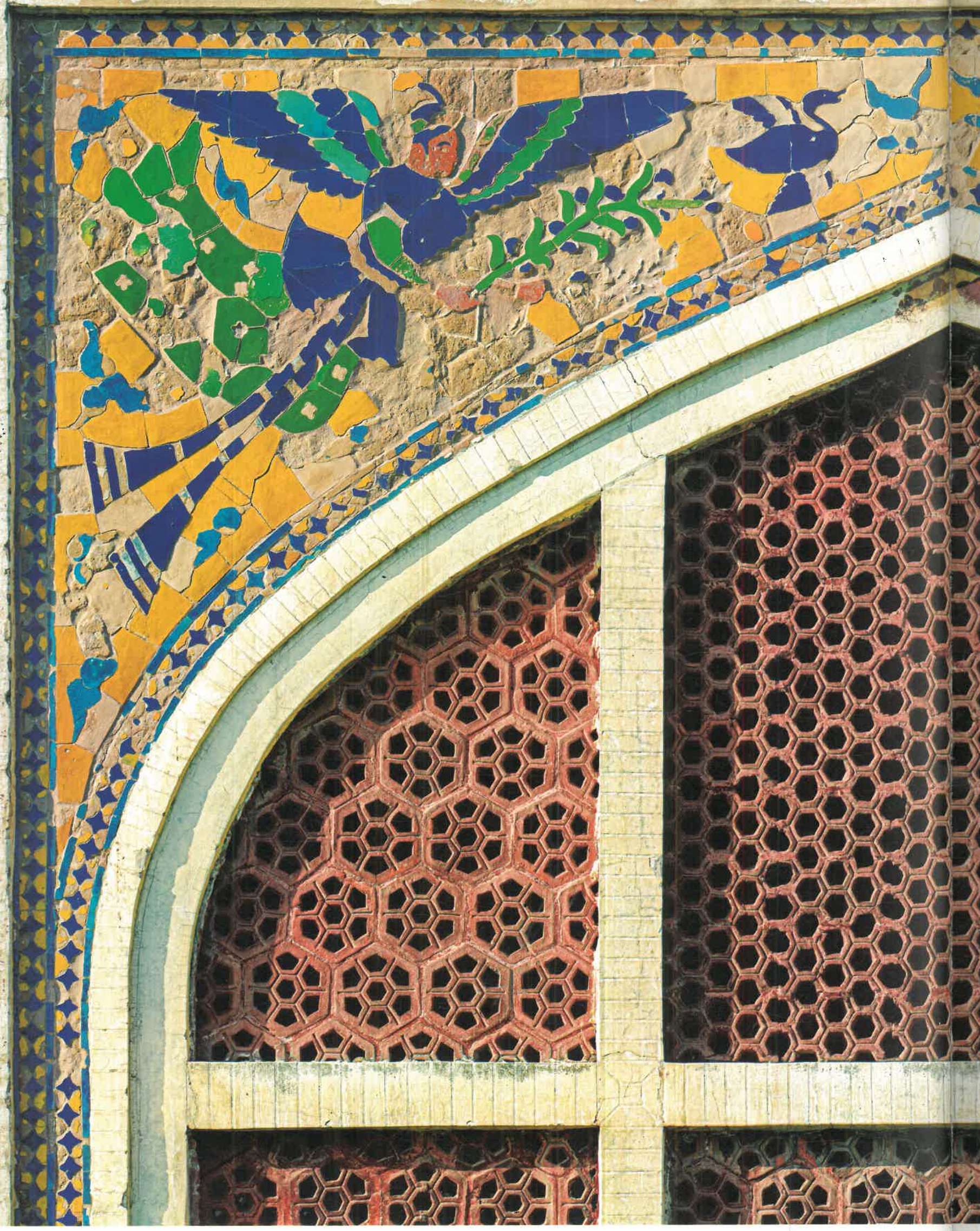


Fig. 34



Seraphim: The Fallen Angel

On the Northern side of the Wall, there are five larger arches. Two of them have *Arabesque* designs, one has dragons, while the other two have male winged beings appearing again with the same postures. (Fig. 35) One pair is wearing green robes with blue and white wings and the other pair is wearing yellow robes with green, blue and yellow wings. Both have blue waist belts and sashes. (Fig. 36, 37) They are holding chalices in one hand and long necked pitchers in the other. Facial features and expressions of these figures are completely different from any other made on the Wall. (Fig. 38,39) They have slits for eyes



Fig. 35

that gives the appearance of evil. Their bald heads also add a malicious look to their faces. Here the background color of Kashi tiles is purplish, giving the impression of darkness. Blue colored clouds are made to break the gloomy look but the foreboding feeling of fear is prominent. This is a complete contrast to other compositions with similarly postured figurines that have bright yellow, white or blue colors in the background that gives a cheerful appearance. But here the look is nefarious and sinister.



Fig. 36

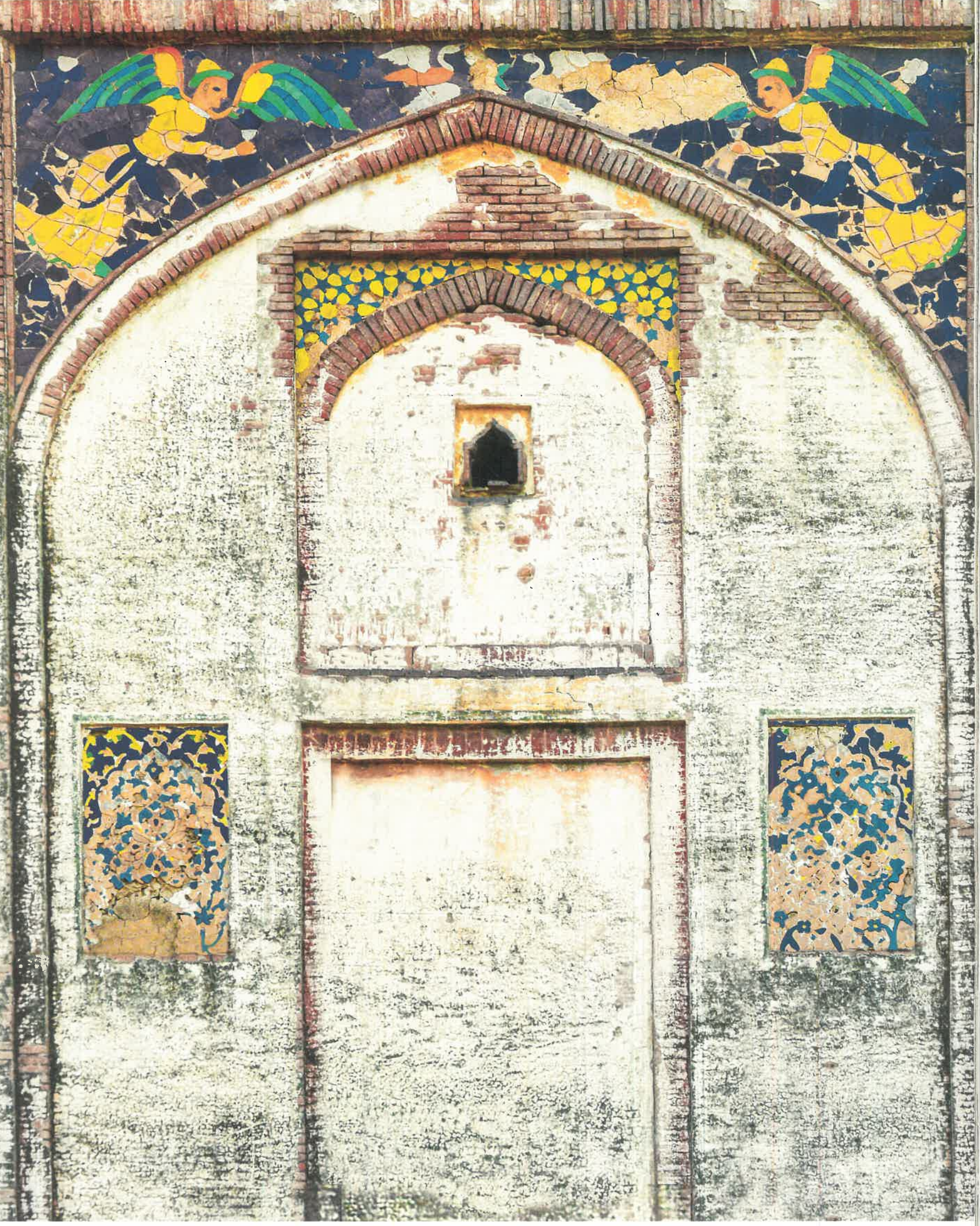


Fig. 37



Fig. 38



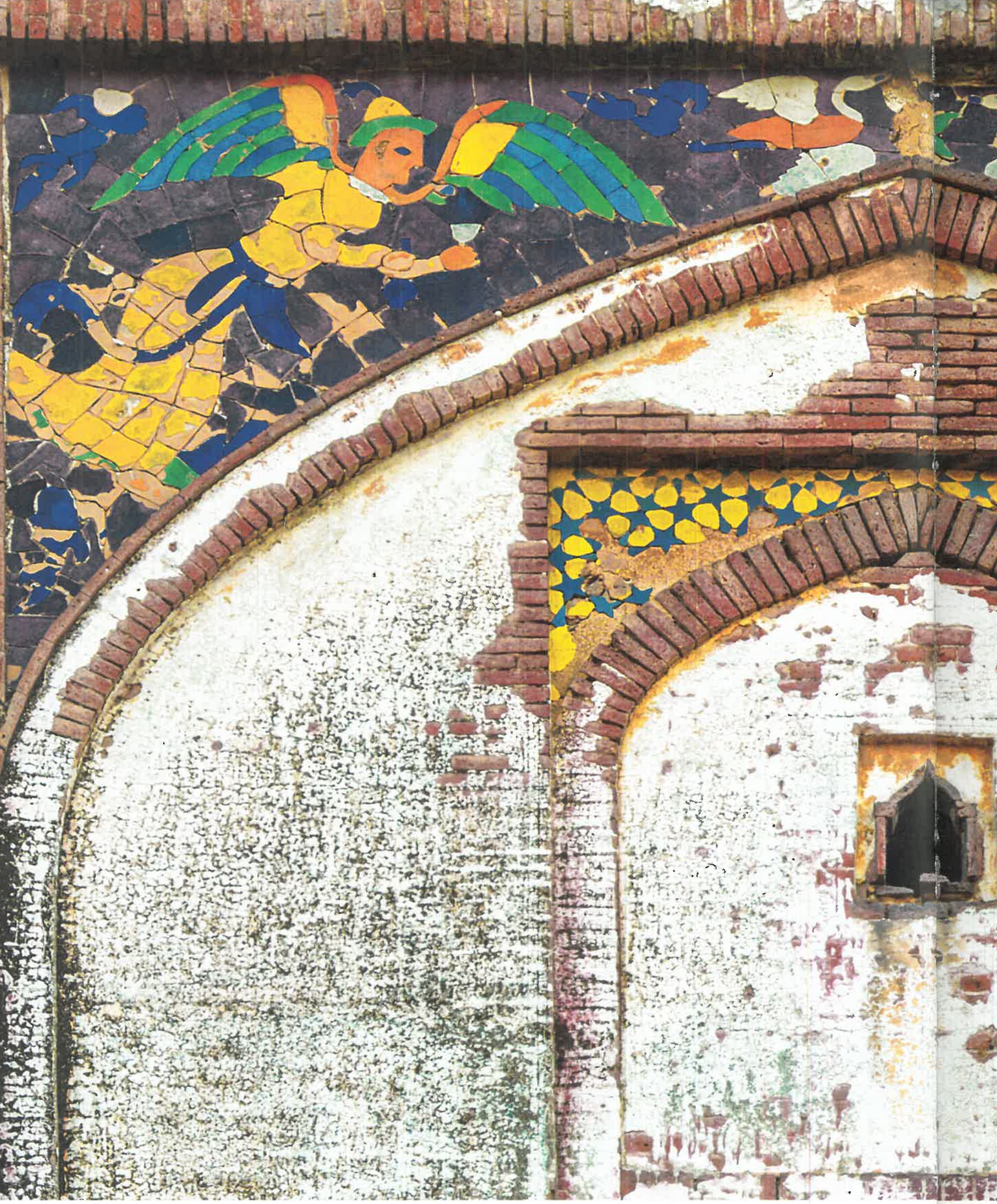


Fig. 39



On both the arches there are two pairs of swans facing each other at their eye level. This beautiful and graceful bird has been part of other arches where they look joyful and happily chirping creatures. But in these two arches, they are frantically trying to fly away from the demons with beaks tightly shut. A telltale sign is the webbed feet of all the four birds, that are stretched backward nervously to gain momentum in flight. A contrast to the representation on rest of the arches where their feet are in a calm pose. This is yet another visual evidence of the negativity reflected on the surface of these two arches.

The art produced during Mughal period, specially Jahangir's era, had inspirations from many parts of the world and the Christian dogma was the dominating one. This can be observed in the fresco and miniature paintings produced during his reign that had plenty of European iconography. Jesuit missionaries from the Christian world were active since Akbar's period, and now they were trying to convert Jahangir to Christianity by gifting him the art produced in their regions, knowing that a good painting was his weakness. Christian themes inspired him enough to be made part of his art and he had the Christian paintings copied.[18] Even on the Picture Wall there are figures that have been identified being of European origin.[19] (Fig. 40,41) It is not possible that the project as large as Picture Wall would miss that influence and as a result, we see Christian theological philosophies applied frequently. One such is the concept of Seraphim, who are declared the closest beings to God. In Jewish folklore, and some later Christian works, the Seraphim are said to be the highest rank of angels. This is probably because of their very close proximity to God. Their position is flying above Gods' throne, unlike the Cherubim who are beside/around it.[20] Seraphim are at least seven in number. It was also believed that Satan was also one of the Seraphim but fell out of favour after his disobedience.[21]

On the Picture Wall, the total number of arches with angels are thirteen. Out of which six are the females. Rest of the seven can be further divided into two categories. Five of them contain cheerful figures while two are portrayed as dark creatures. If we keep all the background in mind, one can fairly reach to this conclusion that this section of the Picture Wall scheme of design, followed Jewish/Christian prototype. The seven panels under discussion are representation of Seraphim with the two showing the fallen Seraphim that are associated with the concept of Lucifer/Satan.

Apart from the thematic presentation or their symbolic value, the sinister look on the faces of these dark angels is very expertly depicted that is not seen in any other similar example. The artisans had been able to capture the malice in the Mosaic Kashi technique. These two panels are the product of an astounding expertise.

The iconography on the Northern side of the Picture Wall is very enthralling with unusual representations. One such example is the depiction of a creature that has wings attached to its shoulders. This type of figure has also been depicted on the Western side of the Wall that has been assumed as *Garuda* but here it is a dark colored human form of an African native, portrayed as a supernatural creature, which is very unusual because it is very rare that we see this race painted or represented at any style of artistic expression produced under the Mughal. (Fig. 42) Unfortunately only one figure has survived the test of time, the other one on the opposite side is completely gone.

These are some of the most fascinating iconographies portrayed on the Picture Wall that are important not only because of their symbolic interpretations but the success of their representational treatment in Mosaic Kashi, increases their significance tenfold.

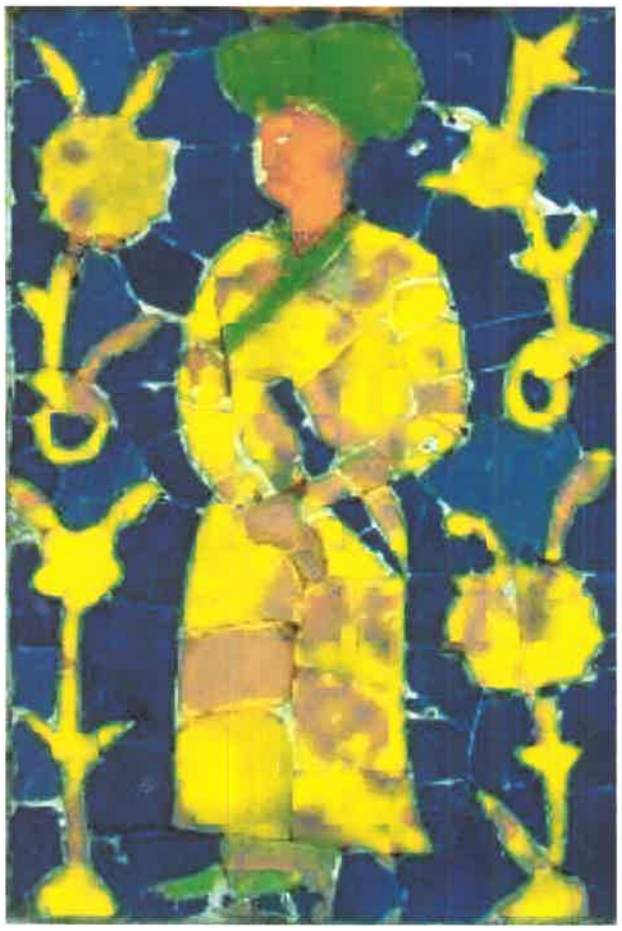


Fig. 40



Fig. 41

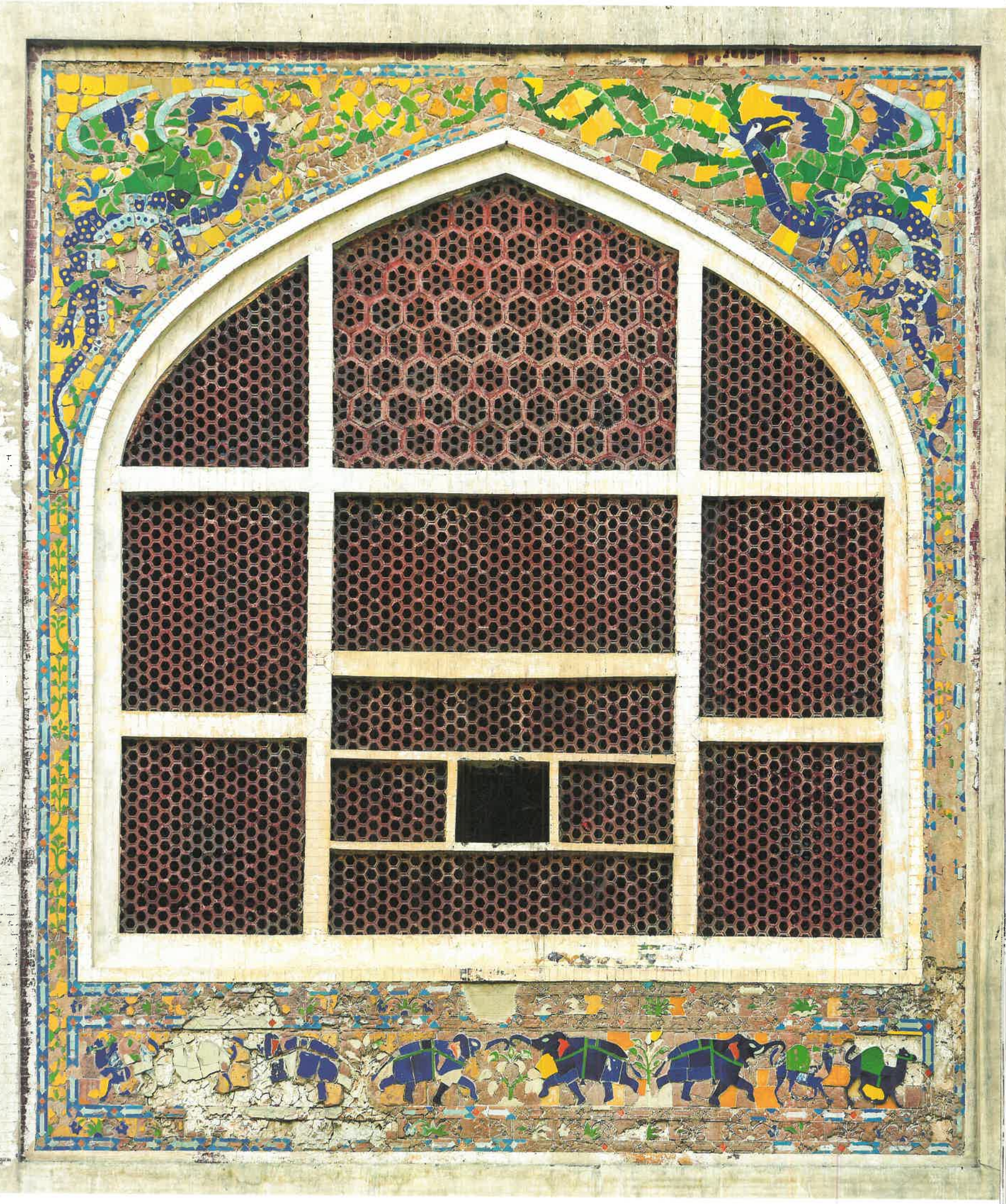


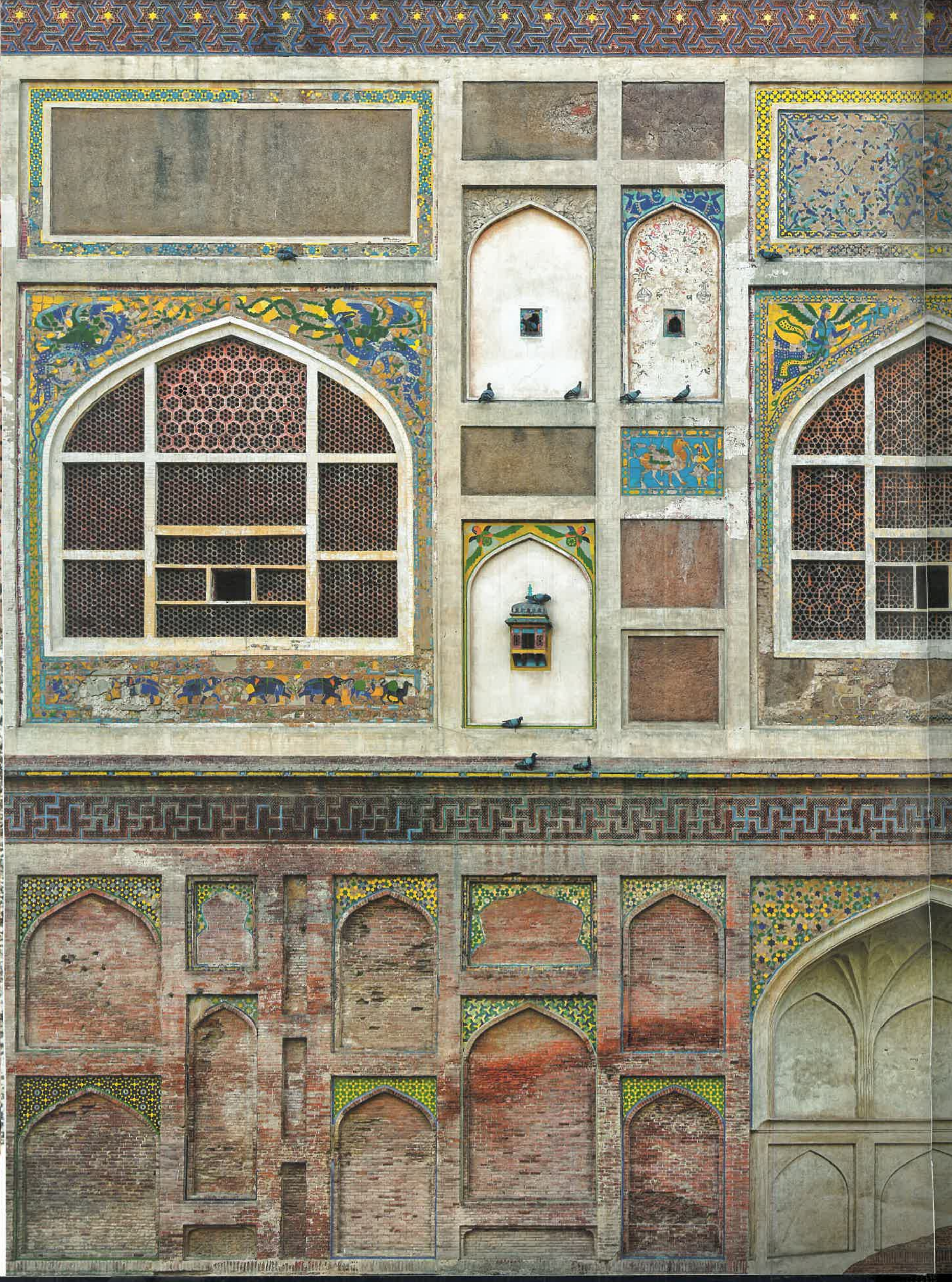
Fig. 42



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Simurgh, Azhdaha & Urial

(PHOENIX, DRAGONS AND ARKARS)



Fig. 1



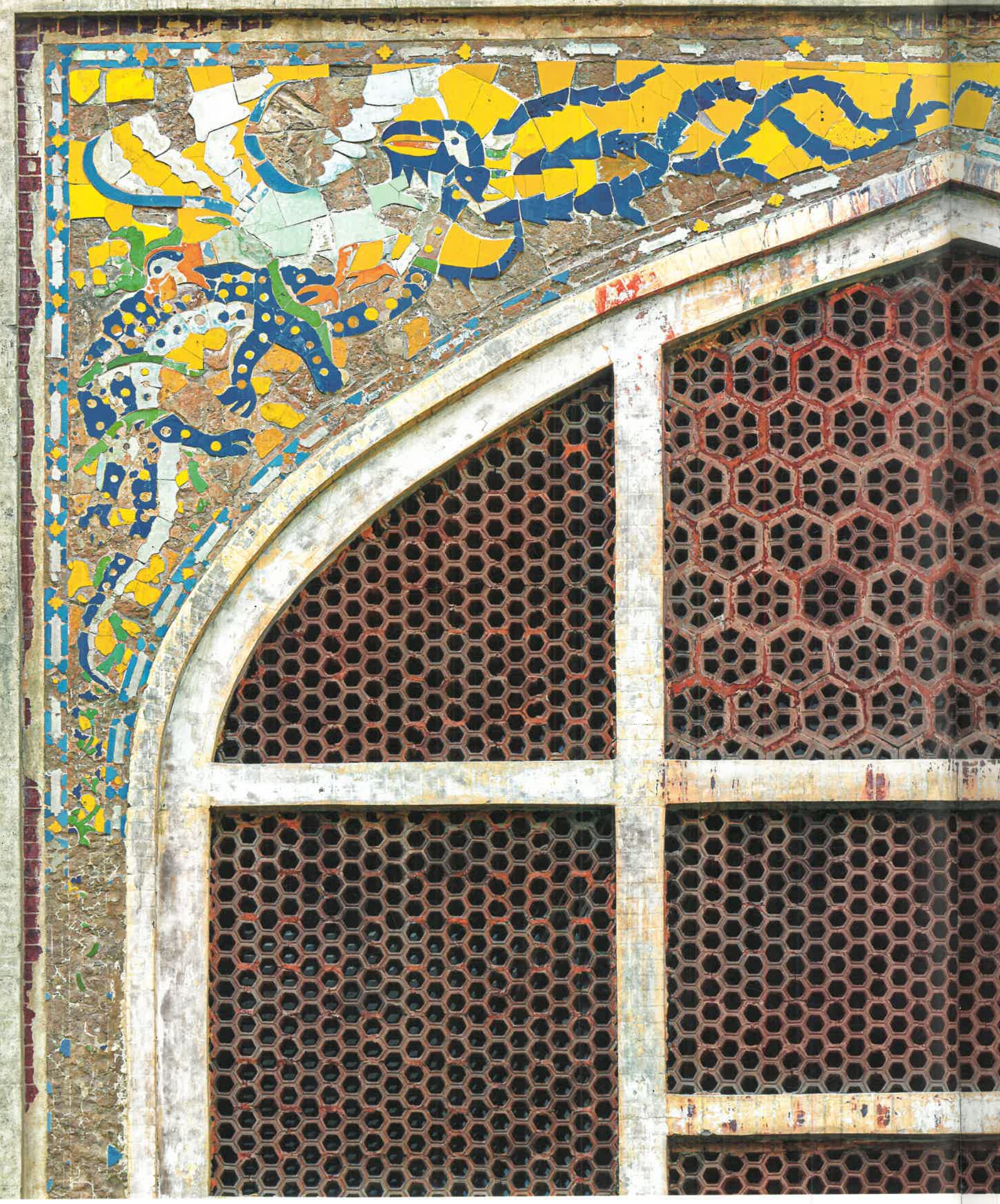


Fig. 2



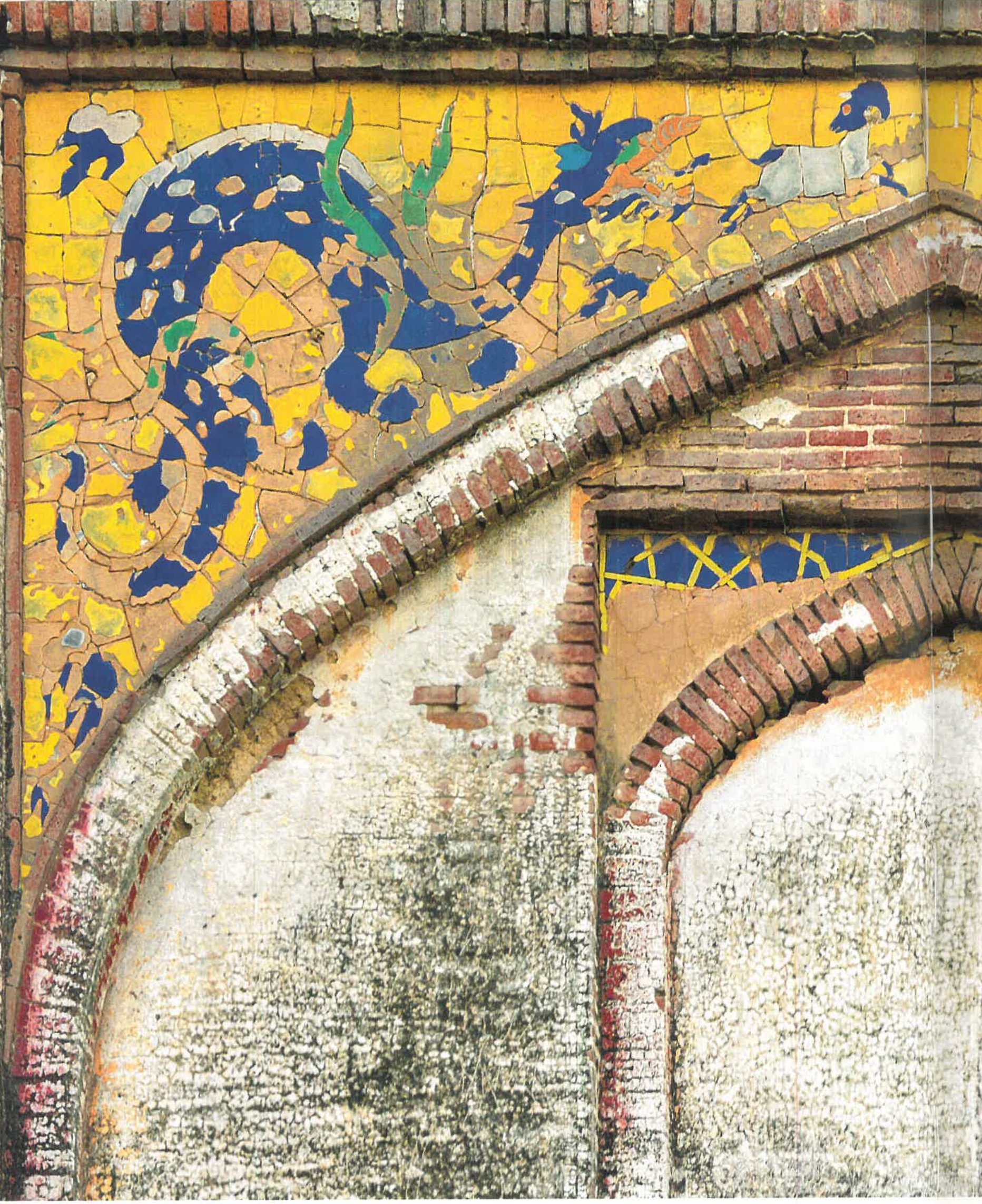


Fig. 3



Another fascinating imagery depicted on the Picture Wall is Dragons and Phoenixes. Three larger arches, two on the Western side and one on the North, have Beak Bird Dragons. On two of them, they are in combat with Phoenixes (Fig. 1,2) and in the third one they are following *Urials*. (Fig. 3) All the dragons are blue in color and with reference to the Chinese metaphor, they are associated with the 'Azure Dragon of the East', which is one of the most famous Dragons in China.[1] All the imagery has the background of yellow colored Kashi tiles with Chinese style clouds hovering over them.

On the spandrels of the two arches on the Western side, one can barely make out the shape of the Phoenixes as they are damaged intensely but even in their lost glory, one can glimpse the skill of the creators in the flow of design. The Phoenix feathers and Dragon bodies are tangled with their beaks open, showing the struggle. Their eyes are beautifully outlined. The Dragons have perfect yellow dots on blue skin and blue dots on white skin of their bodies. The belly curves of the dragons are smooth in execution and their tails, intertwined with Phoenix feathers, are an evidence of the skill of the medium expert. (Fig. 4) Just imagine the executional details displayed on the claws of the Dragon in the context of the larger canvas of Picture Wall. The Phoenix talons are placed on the Dragon throats, the most vulnerable body part of any animal that leads to their death.

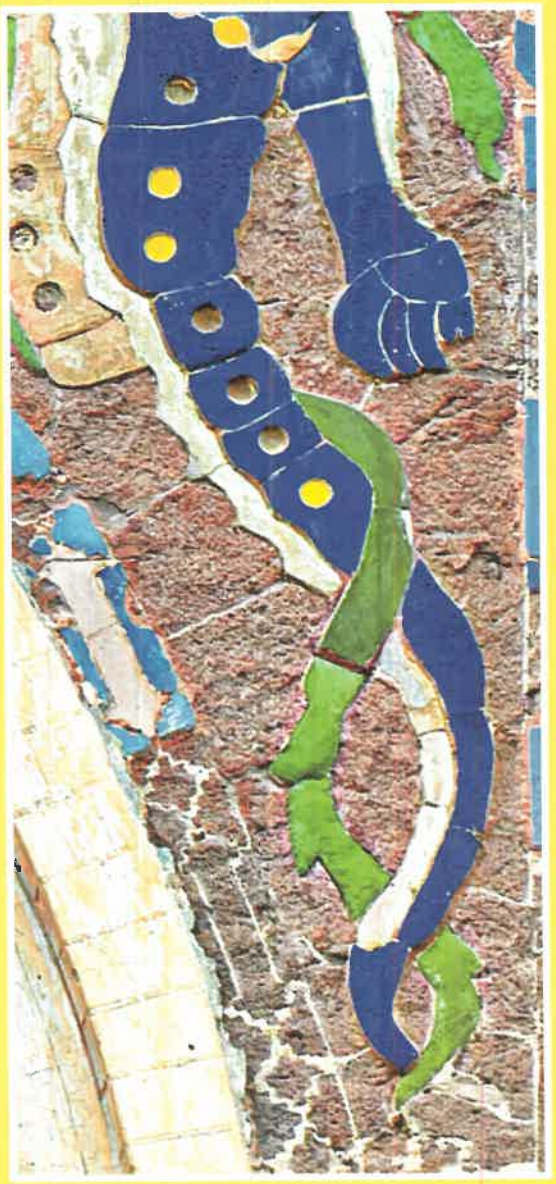


Fig. 4

One arch of the Northern side, situated in the middle of the two Seraphim arches, (Fig. 35 Previous Chapter) is another dimension of observation. This is the depiction of two Dragons. (Fig. 3) They are chasing the *Urials* that have small green feathers with yellow snouts. The one on the right has traces of a brown tongue and white teeth. The zigzag of the fangs sprouting out of their bodies are exquisite in detail. The style of the spots on the body is changed and instead of perfect circles, that were on the bodies of the four Dragons of the Western Wall, here they are oval in shape and white in color. Although much of the glazes on the Mosaic Kashi tiles are gone, the remaining outlines of the shapes testify to the great imaginative powers of all those artists who were engaged in this process. The two *Urials* running away from their attackers are a true picture of terror. Their frightened gazes with heads turned backwards towards their pursuers are depicted expressively.

The presentation of Dragons and Phoenix is a very interesting phenomenon because these two creatures have Chinese origin where they are associated with royalty and wisdom. But here on the two arches of Picture Wall, the Dragon and Phoenix are in combat with each other, which seems an unlikely occurrence but the harmony between them sometimes reverted and the two become enemies because of their opposite formation. According to mythology, when it is time for the Phoenix to die, it burns itself and is reborn from its own ashes. Contrary to that, the Dragon dwells with fire inside and breathes it out. For both, fire is a survival contrivance but in contrasting manner. There are references of their conflicts in which they try to destroy each other. That is the concept created on the arch where the two are ferociously attacking each other.

Interestingly the word 'Dragon' comes from the Greek *Drakon*, for 'snake',[2] which is associated with the fallen angel and Phoenix is portrayed as fighting off Satan. To Christians, the rebirth process of the phoenix is a reminder of the sacrifice made by Christ and his subsequent resurrection and eternal life.[3] So we may fairly assume that the iconography depicted on large arch, located on the Northern Wall, is very much interrelated and can be part of the Christian theology but the tools to portray it is very oriental.

The Mughals were heavily inspired by the Persian artistic iconography in which Dragons and Phoenix were a frequent site and that was because of the Chinese influence on Persian illustrated manuscripts, from 13th to 15th century.[4] In Iranian literature, the Dragons were *Azdaha* and Phoenix were *Simurgh*. Mughals adopted these mythologies in their lives, which was reflected in their arts. For them, Phoenix *(Simurgh),* although an imaginary bird, was the personification of a ruler and they saw the reflection of its traits in their personalities deeply rooted in China and Iran.

From a representational perspective, colorful and flowing lines can be seen in the Dragons that were being made with the Mosaic Kashi technique on the Picture Wall. Their forms and shapes are executed in an exceptional manner. Both Phoenix and Dragon are intertwined, and at places they seem like they are blending into each other, showing the deep connection they have. But their animosity is also evident in their expressions and body language. Traditionally, in the Subcontinent, the Phoenix is the sovereign of all birds. It has the head of a golden pheasant, a parrot's beak, the body of a mandarin duck, the wings of a roc, peacock feathers and the legs of the crane.[5] All these attributes can be seen here. Since *Simurgh* has been attributed as female, the delicacy of the line executed on the Picture Wall, advocates it.

The colors used are rich in manner, which is evidence of the high-level skill of not only the artists but the success of chemical formation applied. Tonal value of yellow, blue and green is very convincing. But the real miracle lies in the feathers and tails of the Dragons and Phoenix. They are flowing like water and till date, the spectators are mesmerized just by looking at them.

Arch on the Northern Wall, which illustrates the particular instance where the two dragons are following two *Urials*, is another illustration of innocent and evil. (Fig. 5) The open jaws of Dragons, with ferocious looking teeth, attacking the poor animals is devious. They are fleeing from them but fearfully glancing back at the same time. The bodies of these *Urial* are white but their horns, heads, tails and hooves are in blue, showing their allegorical value. The *Urial,* also known as wild sheep, has the horns that have texture of mild grooves, and the ever-observant Mughal artist has not missed this small detail

and the slight zigzag on the horn can be seen on the right-side animal. This subtle detail was obliterated from the left side *Urial,* in some later renovation. If looked closely, one can also observe the difference between the two Dragons and one on the right might be a *Drakaina*, which is the feminine form of *Drakon* (ancient Greek for Dragon).[6]

As mentioned above, these attacking angry Dragons are sited on the Northern side of the Wall where the sinister looking angels are located. The arch with Dragons is in the middle, while the Seraphim are placed on the right and left. One can fairly assume that it is not a coincidence. This three arch iconography is inter connected and has symbolic value.

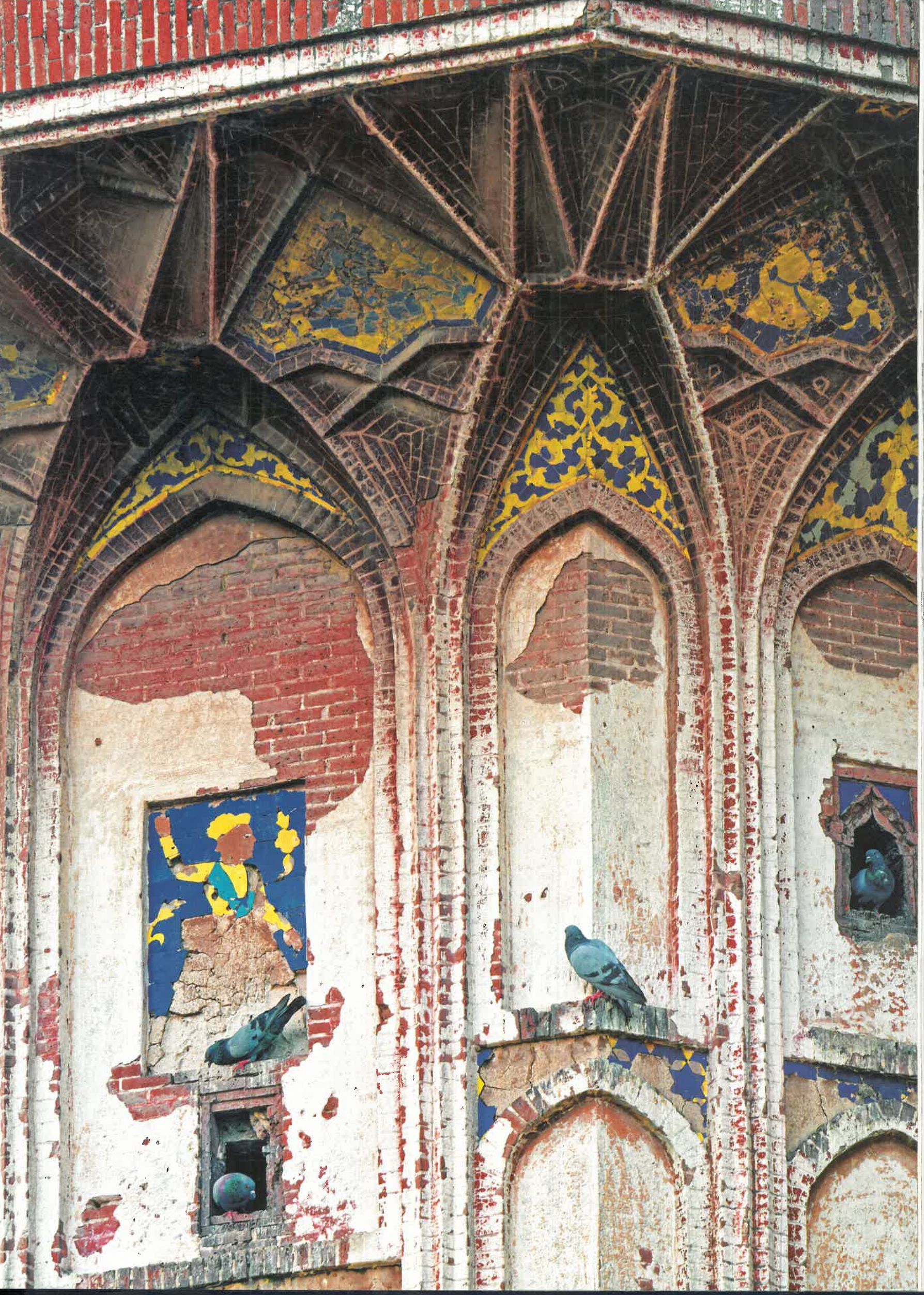
These arches with Dragons, are a beautiful example of how the form is going according to the shape of the structure. The triangular space of the arch is utilized at its fullest by covering it in an aesthetically pleasing manner and filling it to the very last edge. The Dragon tails and Phoenix feathers are covering the whole space in an extremely lyrical manner. These arches are a miracle of design, accurate with mathematical calculations. The standards set by the Mughal artists to be studied and followed.



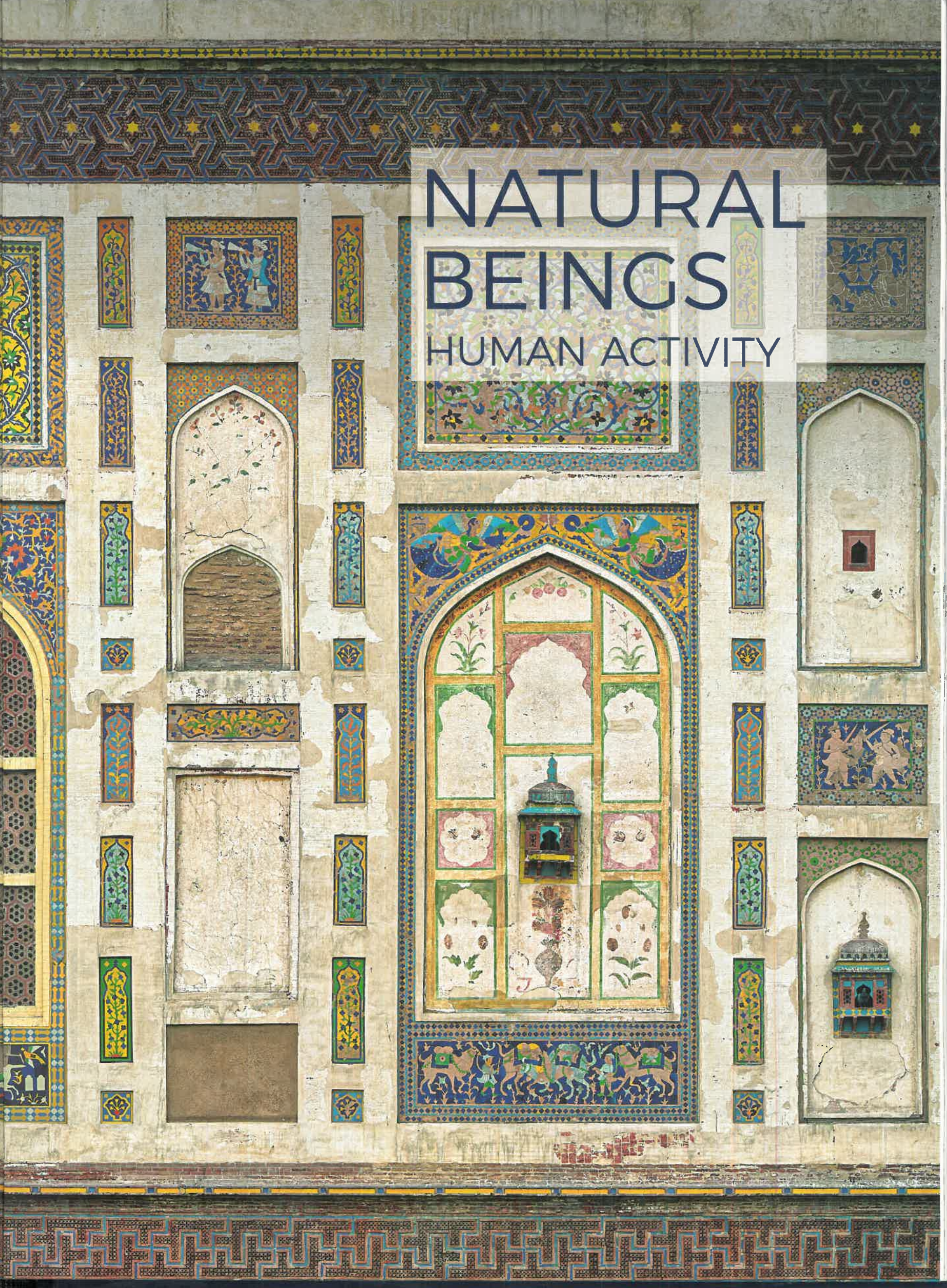
Fig. 5

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NATURAL BEINGS

HUMAN ACTIVITY

Picture Wall is an array of human activities. These are the individuals who are busy in everyday chores that gives a very intimate look into the lifestyle of Mughal Era. Most of the figures depicted on the Wall are not kings or royalty but they are ordinary people, going through their daily routines. These glimpses of the private moments of a commoner are very rare because in most of the paintings, only the rulers or the elite are painted, but here the panels contain the flag emissaries, jugglers, food servers, candle bearers, arm carriers and so many more. They are in war exercises, beating the drums and engrossed in their lives with a beauty and grandeur associated with Mughal Era of the Subcontinent because this was the Era when the Indian economy was at its peak and the people of this region were living comfortable lives, carrying on with their local traditions, foods, dresses, architecture, all that made their lives easier without any kind of impositions that were forced upon them after the arrival of the British that changed everything.

Usually the commoners and ordinary were not a favorite topic of the artists because the rich patrons were not interested in depicting them but in the Subcontinent, we first witnessed the caves of Ajanta and Ellora, filled with activities of daily life with animals, architectures, females, children and commoners busy in their day to day chores. After Ajanta, such a manner of expression was adopted to be displayed, at this magnitude, only on the Picture Wall. The reason for carrying on the ancient traditions of the Subcontinent was that the Muslims were very impressed by the art and architectural achievements of Indians. Many local artists and artisans were employed by them. That is why we see so many Indian influences in the art produced under the Muslim rulers, especially during the Mughal Period. If we look at the world, it is apparent that no other culture has produced a similar masterpiece of this scale in which the life of a commoner is celebrated in such a grand manner. On the Picture Wall, so many professions and facets of every-day life, from dawn to night, are portrayed beautifully.

These figures are a reflection of the fashion, styles and trends of Mughal Era. The headdresses, gowns, sashes, skirts, shoes shown on the Wall, were worn by the Indian population in those times. Interestingly most of the males are wearing *Jamas*, that was Central Asian-Persianate in its origin that was later on associated with Mughal court where it became a prominent outfit for men mostly. It was worn long and short, over a *Pai-Jama.*[1]

Mousiqar **(Music and Musicians)**

Since time immemorial, music has been an integral part of the people of the Subcontinent. It was adopted in each and every dimension of life. They had music for every occasion, season and moments of day and night. In fact, a day at court began with the sound of different musical instruments. One *Ghari* (42 minutes)[2] after the sunrise, *Damama (Naqqarah,* drum) was beaten in front of the palace. Then the sound of *Nafiri* (clarinet) was echoed in the royal residences, followed by *Sarna* (*Shahnai,* flageolet) in which a higher form of music was demonstrated for the listeners. After another *Ghari, Damamas* were beaten again in a specific order, followed by *Nafiri,* which was a delight to the ears.[3] Famous traveler Ibn-e-Batuta wrote that *Nafiri, Naqqarah* and *Sarna* players used to

sit outside the first entrance point of the palace of Muhammad Tughlaq. The moment any courtier or royalty entered the palace, they would start playing their instrument in such expert manner that the name of that individual could be inferred from those music notes.[4] Mughals carried on with the tradition and the musical instruments were part of their daily life and have been portrayed on the Picture Wall as well. Here one can see the *Damama, Nafiri, Daf* and *Sarna* players. These are figures made in simplified forms, wearing colorful coats and *Jamas* paired with tight *Pai-Jamas* in contrasting colors, which was the fashion of that time. They are framed in intricate borders while strong lines of plants are covering the otherwise flat background. The detail of the headdresses, is an evidence of the keen observation of the artist. (Fig. 1,2,3)



Fig. 1



Fig. 2



Fig. 3

Shagird Paisha (House Help)

The palaces of the Subcontinent were a huge establishment with many activities going on day and night. To handle and fulfil daily chores, a large number of men and women were employed who were assigned to perform their duties. Some of the titles given to the people employed inside the palaces were *Aab Dar* (the person in charge of the drinking water for the kings and royalty), *Itr Dar* (person who was custodian of perfumes and sprinkled them in *Darbar* and private *Mahafil*), *Tasht Dar* (ewer holder), *Chatra Dar* (parasol holder), *Shama Dar* (candle bearer), *Pardah Dar* (chamberlain), *Jaamah Dar* (person responsible for dresses), *Silah Dar* (weapon incharge), *Shikrah Dar* (caretaker of falcons), *Khasah Dar* (food incharge), *Saqqa* (cup bearer) etc.[5] The Mughals had *Darban, Khidmatya, Mewra, Lakriyat* and *Piyaday* as their daily help. This whole segment of the palace life was called *Shagird Paisha* by the Mughals,[6] a term adopted by the rest of the Indian society as well. Their presence was mostly omitted from the fine arts but surprisingly many of them are presented on the Wall with the minutest details highlighted. Most are made on the West-North and North side.

Shama Dar (Candle Bearer)

The palaces were lit by using different objects and methods. One of them was *Kafuri Shama.* These were camphorate candles, made of camphor that is transparent white and does not emit smoke. *Fanus* is chandelier while *Fateela* was a brass or tin lamp that was lit with a cotton wick, after adding oil or animal fat. *Shama Dan* were candle holders with a plate and they could be *Yak Shakha, Do Shakha, Seh Shakha* or *Chahar Shakha.*[7] One lighting device was named *Kanwal* in which red paper or *Abraq* (mica) was used to create a Lotus shape and the candle was placed in it. *Qandeel* (lamp), *Qumquma* (lantern) were a common site in the living quarters. *Daghdaghah* is a Persian term used for *Qandeel* (lamp). *Jhar Fanoos* is combination of two words. *Jhar* in Hindi means shrub and *Fanus* is a Persian word. When hundreds of *Kanwals* and *Qandeels* were hung in the shape of a tree, they were called *Jhar Fanoos. Akas Diya* is a Hindi term and it was an Akbari invention for the army camps. Its light could spread up to many *Farlang* and it was mounted on a forty yards pillar.[8]



Fig. 4

The Picture Wall panels contain images of *Shama Dar* (candle bearers). (Fig. 4) These are men holding *Shamadans* (candle stands). This is an intimate aspect of Mughal life shared beautifully. Their costumes are simple but very elegant. Two are wearing *Jamas* with light blue quatrefoil shaped design made against dark blue, contrasting with turquoise colored *Pai-Jama* that are classy and elegant. (Fig. 5,6) They have green waist bands and matching shoes, which were a fashion statement of that era. Unfortunately, the panels are damaged but in one representation, the long burning wick is visible, throwing light at us from across four hundred years. (Fig. 6) This is the success of an ever-observant master who did not forget to add the minutest detail on the 8000 square yards Wall.



Fig. 5



Fig. 6

Aab Dar (Drinking Water In charge)

This panel is damaged intensely and has almost lost all the color but the surviving drawing underneath shows the image of an *Aab Dar* (the person having charge of the drinking water for the kings). The man is holding a pitcher that has a lined design on it. One can even make out the traces of a beard and heavy moustache. This ruin of a panel also helps us to understand the method of making these figures as we can observe extremely accurate drawing lines on his skirts. Much has gone but the bright blue background is vibrant with delightful plants, making the surface a happy one. (Fig. 7)



Fig. 7

Chauri Bardar/Men with Fly-whisk

Many household objects were used in the Mughal palaces. An important one was the *Morchal* that is basically a fly-whisk, made of bird feathers or animal tails. It was used as royal emblem and peacock feathers were greatly favored due to their beautiful colors being associated with royalty. On the Picture Wall are the figures of men with fly-whisk, who were also called *Chauri Bardar (Chauri bearer).* (Fig. 8) The word *Chauri* is derived from the Sanskrit word *Chamara,* meaning a yak because many a times the fly-whisk were made from the tail of the yak.[9] The whitish fly-whisk shown in this panel is probably made of yak tail. The yellow turban and *Jama* of the *Chauri Bardar,* are contrasted with a green sash and *Pai-Jama*. The *Jama* has a small five dotted circular design filled with blue, an amazing detail at such a small scale that gains more value when compared to the vastness of the Wall. Detail of the turban, the fine outline of the facial features and the flowy lines of white fly-whisk are miracles of design. He is standing in a blue arch that has grey borders. Near this figure is another panel, ruined, but one can still make out a figure, wearing a dress of almost the same color scheme, holding a green object that is damaged beyond recognition. The beauty is in the lines of the collar of his *Jama.* Nothing was missed out by the artists of the Wall. (Fig. 9)



Fig. 8



Fig. 9

Silah Dar (Weapon In Charge)/Arm Bearers

The Mughals conquered the Subcontinent in a very convincing manner. They were excellent war strategists but another factor that contributed to their conquests was their efficient weaponry. They used a large variety that included daggers, spears, knives, bows and arrows, swords, cannons, muskets etc. There was a wide range available within these main types. Even swords were of many types, the one used most commonly was *Shamsheer* that was curved in shape. *Khanda* was a double-edged straight sword and then there was *Gupti*, which was a concealed weapon often hidden in a walking stick. The elephants were also considered part of the war machinery.[10]

In the Mughal *Darbar,* it was an honor to be the custodian, guardian and carrier of the arms and weapons of the king. Courtiers would compete against each other to get the position. This was an important duty because the *Silah Dar* (weapon incharge) was also held responsible for the maintenance of the armaments, he was entrusted with. This important segment of the Mughal lives is also displayed on the Wall and we see many figures depicted, holding the swords in sheaths with daggers tucked safely in their sashes. (Fig. 10,11,12,13) In many instances, they are accompanied by the servants holding fly-whisk. Probably, both were always together and near the king.

Nezabardar (the spearmen) were also the ones close to the actual Mughal *Darbar*, who acted as guards to all the entrances that were used by the rulers and their family members. (Fig. 14)



Fig. 10



Fig. 11



Fig. 12



Fig. 13

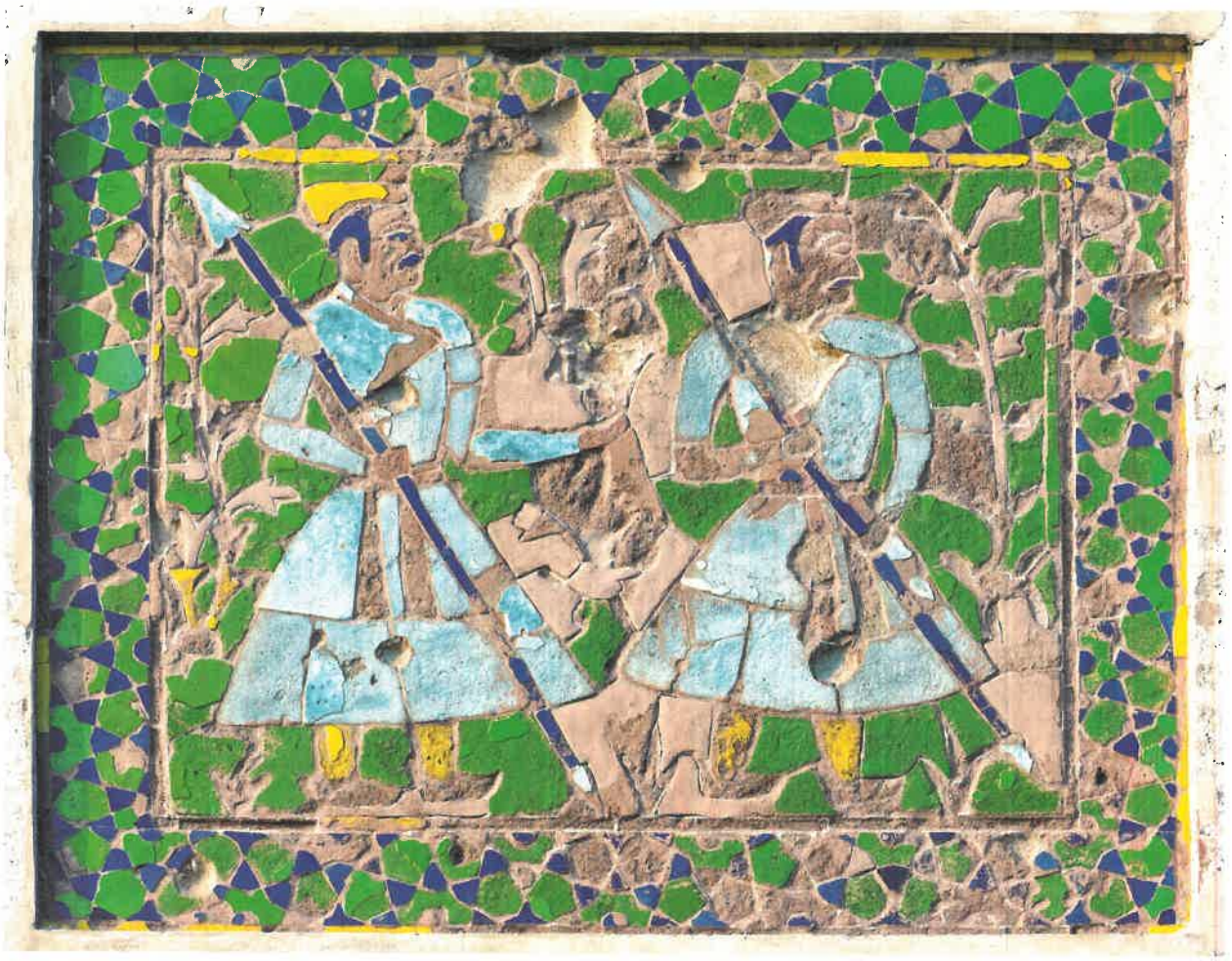


Fig. 14

Alam Bardar / Flag Bearer

For any ruler of the world, the flags of their country is always important. Same was the case with Mughals who were led by the *Alam Bardar* in front of their *Sawari* that were, most of the time, at least five in number.[11] Holding the flag was an honor bestowed upon the selected few. They would lead the processions and wars to represent the king. These flags were always covered in silk when not in use. A man holding the flag is made in one of the panels of the Picture Wall. (Fig. 15) He is wearing a yellowish green dress with a turquoise sash. The flag pole has a support that would have been used to make it stand on the ground. Since the flags were given to a few chosen ones, this imagery is an exception and probably portrays an occurrence mentioned by Jahangir in his memoirs. He writes, "Khurram has appointed Rustam Khan, who is his employee of high rank, the ruler of Gujrat and due to his recommendation, I bestowed upon him an *Alam* (flag), *Naqqara* (royal drum), *Khilat* (royal robe) and *Murassah Khanjar* (studded dagger). It was not the Mughal tradition that the employees of the princes were given this honor and my father has never honored any of my *Umra* with *Alam* or *Naqqara* but I have been so kind to Khurram that I never wanted to do anything against his will because he deserves all of my rewards and kindnesses."[12] There is quite a possibility that the figure presented in this panel is Rustam Khan who was honored with a flag. With this we can assume that the Wall portrays those individuals, animals or events that were exceptional.



Fig. 15

Food and Drinks

This panel shows two attendants. One holding a tray with pomegranates. The other one is quite damaged but still one can make out that the person has a pitcher in his hands. (Fig. 16) Food was a vital part of the Mughal *Darbar*. They introduced a great variety and mannerism in the cuisines, fruits and drinks. Cooks and attendants, from many parts of the world, were always on their toes to serve the Royalty. Mughals were fond of fruits and had them imported from many regions and made them a part of their daily routine. 'Many types of fruits were served during the royal meal. The musk melon from Karez, Badakhshan and Kabul, grapes from Samarqand and Badakhshan, apples from Samarqand, Kashmir and Jalal Abad, pineapples were initially obtained from the European ports but later on when they were harvested in Agra, they grew in a great number.'[13] Pomegranates were greatly favored by the Mughals and initially they were brought from Qandahar, Yazd and Kabul but during the Sultanate Period, Indian pomegranates were introduced. Ibn-e-Batuta wrote that there were plenty of pomegranates in the Subcontinent, which were harvested twice a year. When Sikandar Lodhi was presented pomegranate from Jodh Pur, he declared them far better in taste and sweetness as compared to the Persian pomegranates.[14] The Mughals also shared their admiration for this fruit that has been shown here.



Fig. 16

The Man Leading a Blackbuck

A badly damaged panel holds the image of a man leading a blackbuck. (Fig. 17) This is a beautiful subject made in an extremely sensitive manner. The shape of the animal's face and its long horns along with the harness, partially seen, are rendered so naturally. A fleeting moment captured skillfully in Mosaic Kashi technique.



Fig. 17

Bandar aur Bakri ka Tamasha (Animal Entertainer)

Mughal court was full of activities focused on the entertainment for the Royalty. One such example is the panel of animal entertainer, who is directing a monkey and a goat to show tricks. (Fig. 18) *Bandar ka Tamasha* is an old tradition of the Subcontinent. Even Babur mentions it in his memoirs, "Monkey is a very prominent animal among the Indians. People have it as pet due to its looks and interesting behavior. Animal entertainers tame them and make them dance to earn money."[15] On the other hand, Jahangir giving details of a painting, writes about a goat standing on a narrow wooden tower.[16] Same can be seen in a panel of the Wall, where a goat is on top of a very small platform that is made of two *Dugdugis*[17] while the monkey, all dressed up like a human, with a stick in its hand and a bag on its shoulder, is looking at the whole scene in a very serious manner. The animal entertainer, wearing yellow *Jama* and green turban, is holding the show for the audience. He has a *Dugdugi* in his hand that was beaten to create a rhythm recognized by the trained animals. Interestingly this animal performance, controlled by the humans, can still be seen in the rural areas of the Subcontinent. It is a great source of amusement for children and enjoyed even today as it must have been for the young Shah Jahan or Alamgir or any child of Mughal era for that matter.



Fig. 18

The Swordsmen

War exercises were an integral part of the Mughal life. The kings, princes, and even the princesses were made to learn war skills. There were special teachers who would give them these vital lessons of survival. The panels showing two warriors in the middle of a combat holding sword and shields are a representation of the aggressive dimension of Mughal life. Although deprived of all the colors, one can appreciate the flowy lines of dresses, weapons and flowers around the figures. (Fig. 19,20) Fluidity of the pose is very convincing.

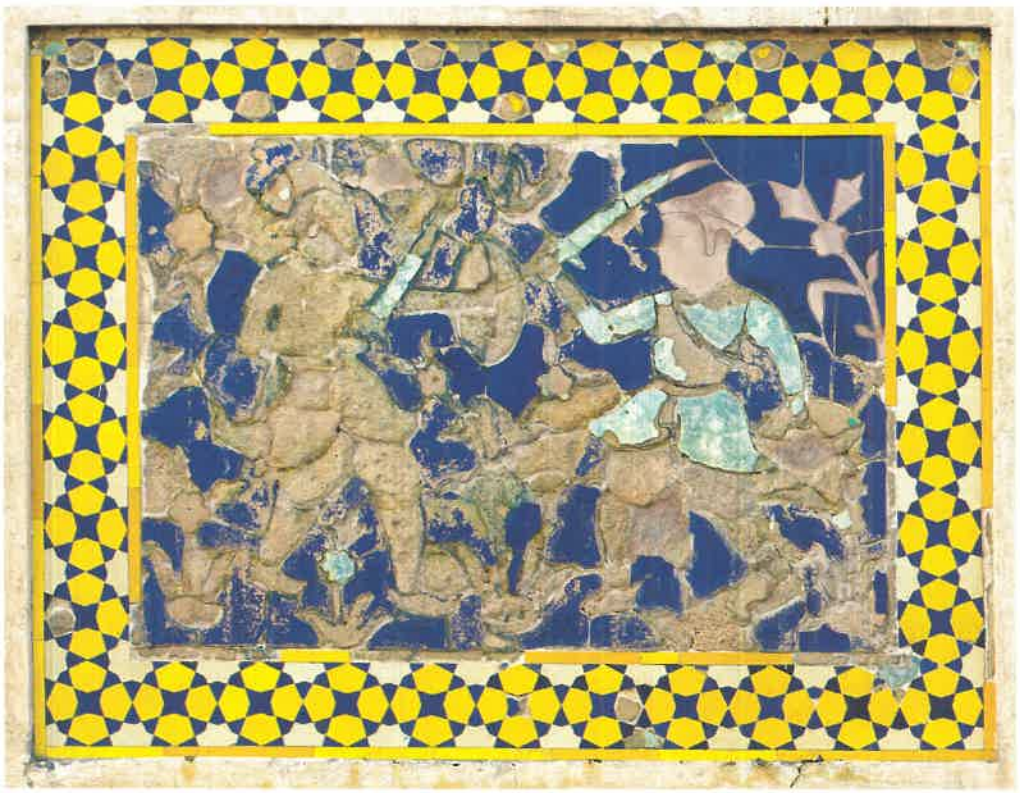


Fig. 19



Fig. 20

Men with Tablets

One of the few instances when we see any sign of written text on the Wall are these two figures who are holding tablets in their hands. One tablet is horizontal while the other is vertical. (Fig. 21) The horizontal one reads *Allah Baqi* (God is Eternal) and the vertical reads *Allah-o-Akbar Ya Fatah* (the great God is the Victor). Vogel describes them as *'Moulvis'*[18] but their physical traits do not support this identification. Both men have identical features with similar dresses as if they were twins. The beauty of their green *Jamas* are accentuated with yellow turbans, sashes, *Pai-Jama* and green shoes.

All of these panels, so intimate in detail, are a peep into the personal lives of the people who were part of the Mughal court, doing menial but extremely important jobs. Many of them were mentioned very affectionately in different memoirs. Jahangir wrote about his caretakers e.g. Fadai Khan, Sikandar Moeen and Khurram's servant Muhammad Baig etc.[19] who were loyal and well respected by their masters. Without them, the Mughals would have never been able to survive.



Fig. 21

Processions

The kings of the Subcontinent greatly believed in the vigilance skills of their armies and efficiency of the equipment related to the wars. These were times when the animals were just as important as the human beings and they were part of the war forces. They were treated with great respect and when mentioning the strength of any army, its number of animals was also reckoned. They were well maintained and admired both by the rulers and common men. In fact, animals were considered as an integral part of the society. For the sake of animal upkeep and to inspect the physical abilities of the men in the army, their inspection was a regular feature in the lives of the rulers. Most of the times parades and processions were held on a daily basis in which men and animals were closely inspected and were either rewarded for a good performance or punished for negligence in performing duties assigned by the king or other authorities. These processions used to take a grand turn on coronations, birthdays of the kings, *Jashn-e-Nowruz, Eidain,* visits of the ambassadors or any other special occasion.

In the Mughal chronicles, much details of these processions are available. About the daily routine of Shah Jahan, it is written, "After the end of the formal *Darbar,* the Emperor would come in the courtyard where incharge Royal stables and his subordinates presented elephants, horses and other animals for inspection. To begin with, few horses marched in front of the king so that he would know how well they were taken care of. Then it was the turn of lavishly decorated elephants followed by other animals. Among them were tamed fighter deer, covered with gold thread embroidered clothes, rhinoceros and bisons from Bengal, who were to fight the lions. Hunting cheetahs were part of the procession who wore gold collars with leashes made of silver. Uzbekistani hunting dogs, eagles and



Fig. 22

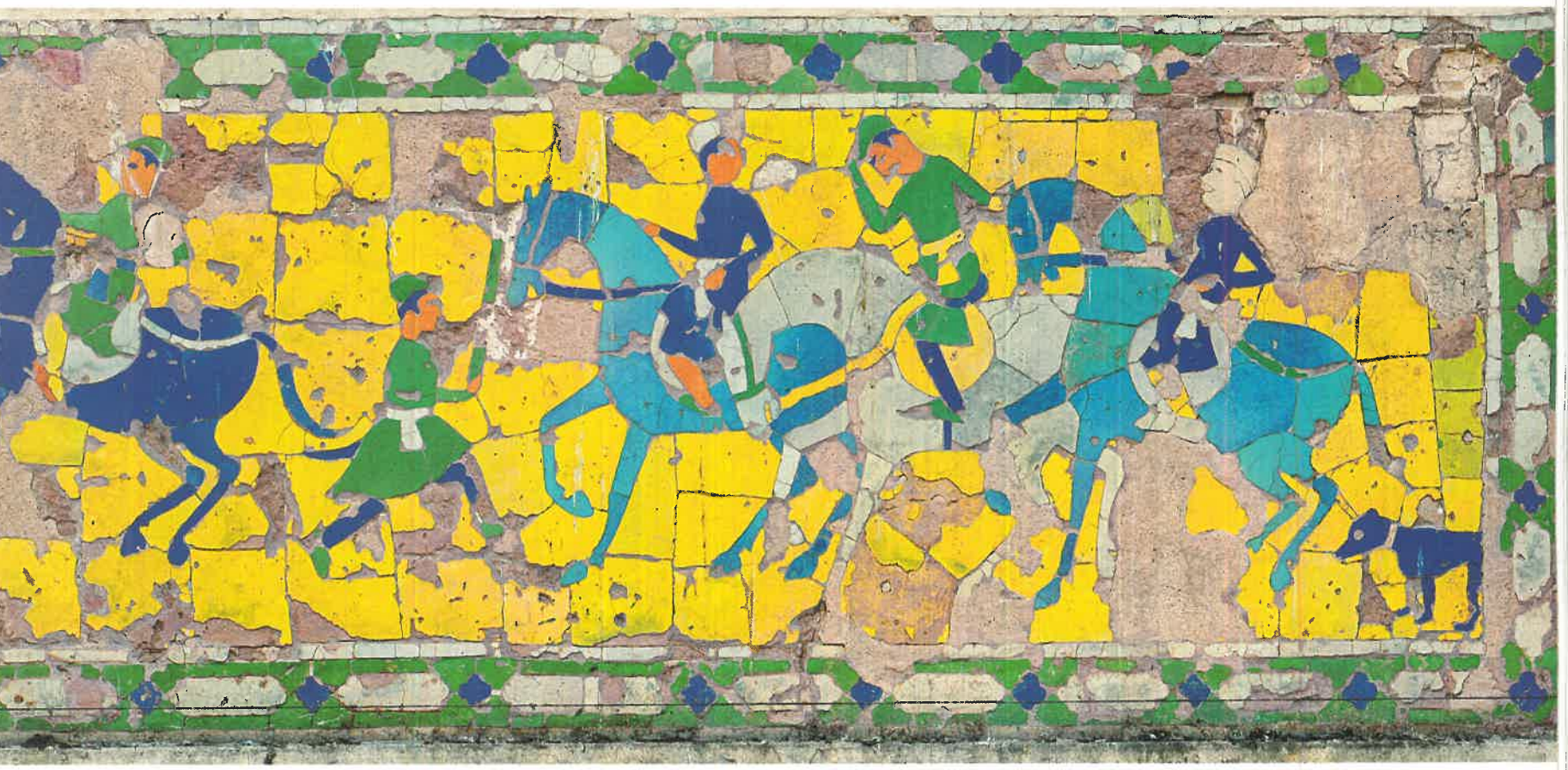
falcons along with partridges, quails, cranes and rabbits were inspected by the king. At least two regiments marched past the king, showing their skills with spears, swords, daggers, horses and other animals. Shah Jahan inspected them closely. Some men were promoted while few were demoted. All these activities consumed at least five *Gharis* (almost two hours)."[20]

Since the grounds under the Picture Wall were used for the parades and games, it was very natural that all such activities were made part of the Wall imagery. That is why we observe many scenes of animal and human processions. They are mostly made on horizontal, rectangular panels with a great display of horsemen, elephant riders and *Piyadahs* (foot soldiers).

Royal Procession

The panel shows an elephant followed by men and horses. (Fig. 22) The head, trunk, legs and belly of the big animal is treated very sensitively. *Mahawat* (elephant rider) and a man, with flag, is sitting on it. Six footmen, following the elephant, are holding flags and swords in their hands. All the four horses and their riders are shown in different poses and moods.

The men are wearing costumes of various color combinations. Even the sheath of the last footman facing the horses, is visible. Three horses are trotting while the fourth one is in galloping posture. Showing such details in Mosaic Kashi is the evidence of the artistís high level of skill.



Last in line is a collared small dog, half hidden behind the panel frame. The reprsentation of concealed animal is very modern in its execution. It is quite a surprise that many Mughal historians do no write about the interest the kings had in dogs. We see them in the paintings and their presence on the Picture Wall proves how important they were in their lives. Jahangir mentions them in his memoirs in a very affectionate manner when he writes, "The ambassador of Iran, Mustafa Baig brought a letter full of love from *Shah-i-Iran*. The *Shah* also sent few horses, camels, silk and woolen clothes from Rome along with nine dogs of *Firangi Nasl* (European breed) that I have been wanting since a long time."[21] At another occasion he gives detail of a *Nazar* (tribute) that was presented to him by Khan Doran which consisted of war elephants, camels, hunting dogs and other animals.[22]

The scene depicted in another panel is also part of some procession and one can barely make out the shape of the figures because it is damaged intensely. But even in this deteriorated condition, the small details of animals and humans can be seen (Fig. 23). On the turban of the man leading, one can detect *Kulghi* (plume) that was a mark of nobility. There is a possibility that he is a high-level Royal courtier, followed by his subordinates. They are holding the leash of animals that are difficult to identify. The lines resemble the shape of a donkey and the idea is strengthened by the long ears. The body shape is neither that of a horse nor a deer but the curve of the neck, bulk of the belly and thin legs lead us to believe that this is the figure of a donkey, a very unusual animal made on the Wall because people from the Subcontinent were not very fond of them. But they were instrumental in Mughal army because they could walk long distances carrying heavy loads and the *Mansabdars* (military commanders) were encouraged to have mules and asses with them especially during Akbar's era.[23]

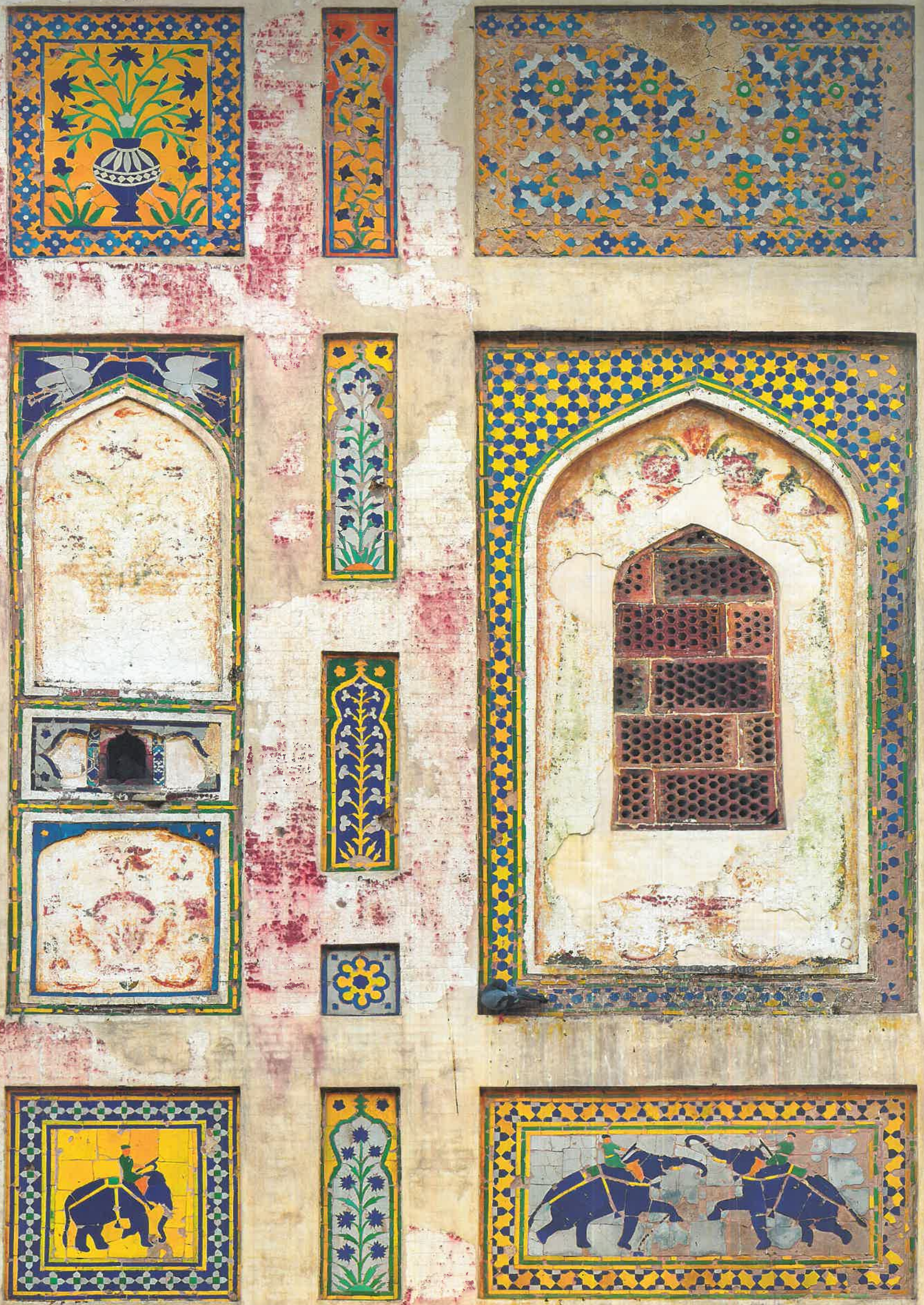


Fig. 23



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FAUNA AND THE FEATHERED FRIENDS

Animals and birds have co-existed with humans since the beginning of times and the tradition of drawing them in human surroundings has been like second nature to the world population. Starting from the cave art, working through the later millenniums, animal and bird forms were everywhere. Apart from being the main source of food, they have been a symbol of power and agility that has inspired the human race till date. Before the induction of the modern technology, they were the main reason for the envy of man who strived to control, imitate and tame them. They were personified and had allegorical values associated to them such as beauty, grace, wisdom, strength, speed, the list goes on and on. Human desire to attain their powers has been centuries old and as a result we see hybrid forms and mythical creatures, which are a combination of man, animals and birds. Lots of technical/combat skills were learnt from them and adopted in daily life.

Initial depiction of animals and the birds, on the walls of caves, led to the frequent portrayal in the palaces, tombs, forts etc. Subcontinent was also part of the same flow and caves of Bhimbetka, Mehr Garh Settlement, Indus Valley Towns, *Vedic* Period, Buddhist, Hindu and later Muslim cultures were filled with this allegory. They were painted/sculpted on religious and secular buildings regularly. Most of the time, animals and birds were treated and presented as fellow creatures who could communicate and share lives. They were so important that their attributes were made dimensions of the gods either in metaphors, where their qualities were shared or they obtained the physical traits such as lion or elephant heads, tails, claws, feathers, beaks etc. They were worshipped and revered by humans in many regions of the ancient world.

Mughals were the flag bearer of two legacies. One, the artistic and cultural heritage of Muslims and the other was the iconographic legacy of the Subcontinent. They carried both flags proudly and their art was an amalgamation of not only local artistic streaks but they integrated Chinese, Persian, Central Asian, European visual idioms and philosophies. This was evident in the crafts and monuments created under their patronage. They inherited the centuries old fascination of nature, in all its glory. The study of Picture Wall of Lahore Fort has proven that it was an optima of that thought process.

Feathered Friends

The artists of the Mughal Era highly appreciated different types of birds and the Kings were also fascinated by them. They would respond and try to document wherever they saw any unusual feathered being. They had them painted and made them part of their painting albums. We find details of them in every ruler's memoirs. In *Tuzk-e-Jahangiri*, it is written, "Muqarab Khan came to my service and I ordered him to go to the port of Kodh and get me unusual and interesting things. He came back with different animals and birds that he bought from the European sellers, many of them I had neither seen nor heard of. I ordered that their details and images should be made part of *Jahangir Nama*. One of the birds was most interesting. It was smaller than a male peacock but bigger than a peahen. In its *Masti* (frolic condition), it would spread its feathers and dance like

a peacock. Its beak and claws resembled a fowl's."[1] With this kind of interest, birds were bound to be on the Picture Wall. Parrots, cranes, goose, swans, pigeons are presented in compositions or individually.

Cranes on the Spandrels of the Arches

Cranes have an extremely important symbolic significance in human history. They are called *'Sarus'* in the Subcontinent, derived from a Sanskrit word *'Sarasa'*, which means 'bird of the lake,[2] these birds have been a symbol of devotion, loyalty and love. Their delicate figures and graceful movement is associated with beauty and charm. Their significance lies in the stories associated to them. 'Legend has it that the poet Valmiki cursed a hunter for killing a *Sarus* (crane) and was then motivated to write the epic *Ramayan*.[3] In *Ramayan* and *Mahabharat*, they are mentioned as heavenly birds.

Cranes also had a special place in the lives of Mughal Kings. Jahangir writes, "During one of my hunting expeditions, I was staying in Dev Gaon and a strange event took place. Before reaching there, my *Khawaja Saras* (eunuchs) captured two crane colts from a nearby pond. By chance my washing area was close to that pond. Parent cranes came nearby and made pleading sounds. When I heard them, I realized someone has been cruel to them and maybe took their chicks. After inquiring, the two colts were recovered and presented to me. When the cranes heard the noise of their chicks, they came to me eagerly and started feeding them. Afterwards they flew with them happily."[4]

Since the Wall is a reflection of Mughal rulers, the depiction of cranes is no surprise and so many symbolic interpretations make their iconography highly desirable. Their form also attracted artists and their aesthetically appealing figures, make them a favored imagery on the Picture Wall. Their delicate necks, expressive eyes, beautiful beaks and detailed feathers created in Mosaic Kashi technique, are the hallmark of their depiction. (Fig. 1,2,3)



Fig. 1



Fig. 2



Fig. 3

Fauna

The Wall is a canvas of popular ideas and concepts favored by the Mughal kings who were very fond of animal as well as hunting to show their strength, bravery, energy, fearlessness and ability to face danger. Many kings were famous for their hunting skills. They would have animals as pets and created monuments in their memory. Animals, as symbols of power and bravery were major subjects that were adopted by the Mughals. Artists under their instructions, illustrated them in the manuscripts and on the walls of secular and religious buildings. This showed not only their passion for the fauna but reflected their behavior towards animals and significance of these creatures in Royal *Darbar*.

Picture Wall is the largest specimen that reflects this philosophy. An important point to notice in the animal representation is the technique employed, which was Mosaic Kashi predominantly. This became the first ever major example of the depiction of animals in this technique, at such a large scale, after the great display of artistic skills at Ishtar Gate. The animal images on the Picture Wall testifies the technical skill of the makers. The selection of poses, colors, background compositions, over all lay out is an evidence of the keen observation and the care bestowed by the artisans.

For the Mughals, apart from hunting, the animals were greatly loved as pets, war assistants and means for recreation. Lions, bulls, horses, elephants, camels, deer, tigers, were all an integral part of their social and personal set up.

Tigers

Tigers have fascinated the royalty and they are painted and sculpted in different forms. Most of the time, they were part of hunting scenes but on the Picture Wall, they are presented mostly as hunters following their prey. Strangely they have blue spots on their bodies. This is very unusual and mostly it has been considered as result of Artist's active imagination but in *Tuzk-e-Jahangiri,* there is mention of a tiger that had blue spots on



Fig. 4



Fig. 5



Fig. 6

its body and this is how it is narrated, "After entering the Agra Fort, Raja Nir Singh Dev presented to me a tiger that had blue spots. I had never seen such a tiger in my life."[5] Probably this animal inspired the king to have it made on the Wall repeatedly. These are the beasts, portrayed in mid-air with jaws open ferociously, just a few moments before the final kill. (Fig. 4,5,6) Their hind legs are planted firmly on the ground while the front paws are almost at the neck of the hunt. The aggression in their pose, is very convincing. The other component of the frame is the deer who are running away, trying to save their life. In one instance, a deer is looking back at its attacker and the delicacy of the turned neck, showing the tantalizing curve, makes its vulnerability more prominent. The tails, bodies and other features of the tiger and deer are beautifully rendered with minute details.

A charming element of many Wall panels is the delightful patterns of curving lines (mostly in yellow and green), adorned with intertwined elements, like vines, leaves and flowers, on blue tiled background. A close study reveals that these are the parts of different plants. But the real charm lies in their presentation that is very abstract in its nature. These are made to recreate the jungle scene but their out of proportion size has added the element of lyricism into an otherwise violent composition. They are large and covering the space in an aesthetically pleasing manner. The flow of the curves of stems, with delicate flowers and detailed leaves is an example of the mastery of the artisans who were playing with the Kashi technique like a pro and that is what they were, artists who had complete mastery on this form of expression. The boldness of line and form reminds us of the background of the Fauvist painter, Matisse's painting 'The Dessert' Harmony of Red' that was painted in 1908. This is the dimension of abstraction, created by the Mughal artists three hundred years ago that was being applied by the 'Modern' painter of 20th century.

If we compare the drawing of the tigers with other images on the Picture Wall, we find it stiff and the flow, seen in other panels, is lacking. It is leaning more towards stylization then being realistic. This is another dimension of semi-abstraction in which the forms are presented in simplified designed shape. We can fairly assume that the Mughal artists were experimenting with their arts. Or the artisans working on these particular drawings were not strong in their skill.

Two Cows in Combat

Although bulls and cows are a very popular visual idiom of the Subcontinent, but on the 8000 square yard Wall, there is only one instance where two cows are depicted. Here their representation is very limited. But even in such small number, one can appreciate the skill of the artist. The panel contains two cows, one in rusty orange and the other is in blue. (Fig. 7) These two are beings entangled with each other in a violent manner. Both have different poses and they are oozing aggression. Their front legs are in the air while the hind legs are firmly planted on the ground.

This is a very intriguing panel because in most of the books, it has been identified as the 'The Fighting Bull'.[6] However, a closer and detailed inspection reveals that they are not bulls but cows because they have no hump and their form is not of a bull. Their horns

may have created the confusion but Indian cows have horns of the same shape and size. Many a time they are cut short to avoid injury. Here the horns of the blue colored cow are visible. Kashi tiles of the other figure is damaged but we can still see the traces of the horns of the cow. In most of instances, it's the male bulls who are famous for their fights and this is a game watched by the masses but here it is the cows who are in combat with each other. Probably this was also a game for the watching crowd who were predominantly the Royalty and courtiers of Mughal *Darbar*.

Very clean in line and presentation, the whole composition is graceful and has the elegance associated with the simplicity of the form. The eyes, belly lines, tails, hooves are the charming details enchanting the viewer for centuries. Similar to other panels, the whole composition is framed beautifully in a border that corresponds to the colors of the subject. Most of the panels have colored backgrounds with many containing either Chinese style clouds or stylized plants but here the figures are standing against white, which is repeated in the border design as well. This creates the harmony between the figures and border lines that enhances the beauty of the expression.

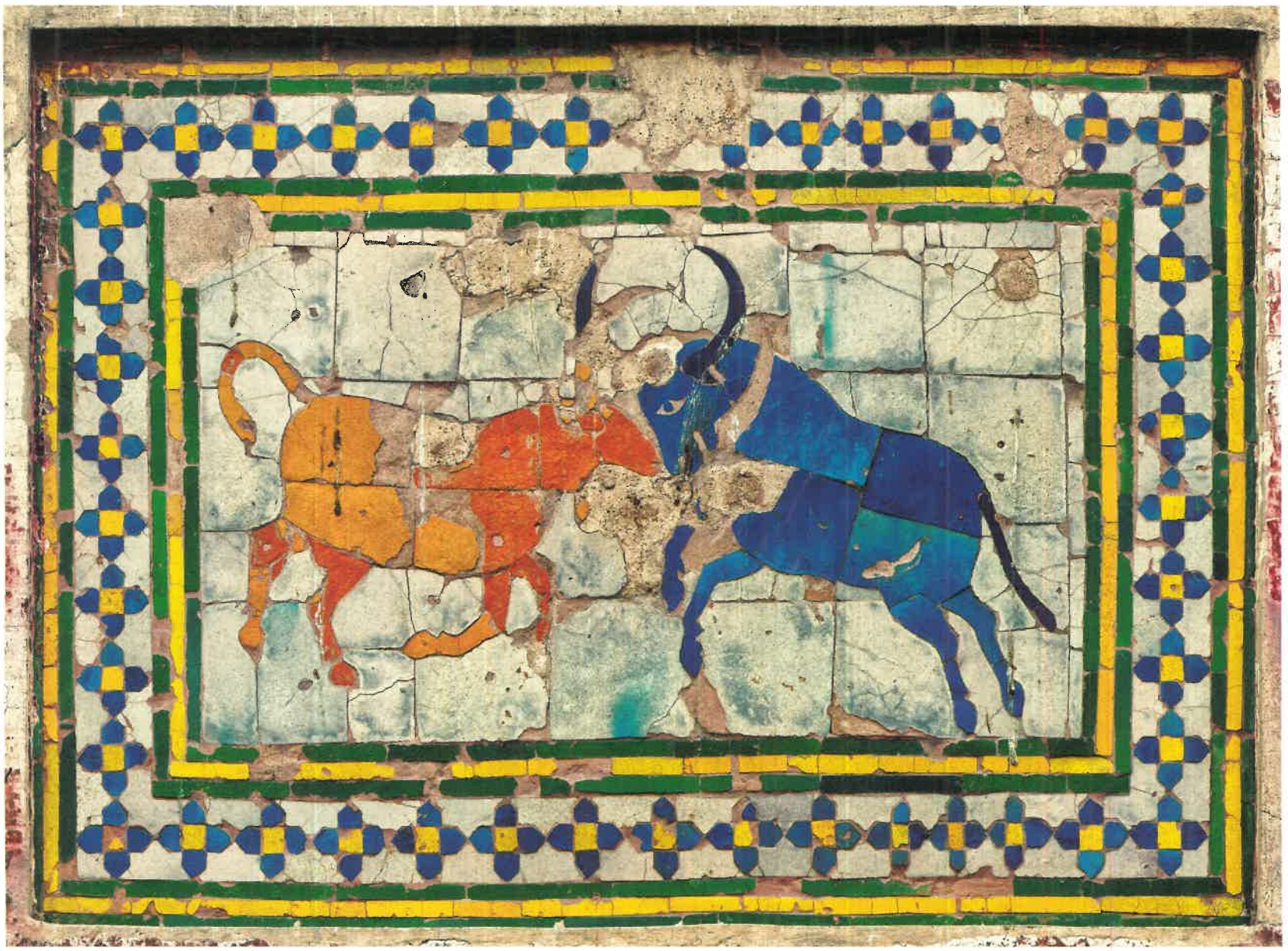


Fig. 7

Camels

Camels were animals of importance in the daily life of the Mughal era. Although slow in pace, they were persistent, patient, powerful, could carry heavy loads to long distances and travelled non-stop for an extended period of time. They were instrumental when the rulers went to war or hunting campaigns with their families and the whole *Darbar* moved with them. The highly valuable jewels of the king and his family, treasury and the precious dresses of the ladies of the *Harem* were loaded on them. When traveling wide and far, few camels used to walk in front of the Royal caravan with small *Angeethis* (stoves), burning aromatic spices and incenses, placed at the back of those camels so that the path of the king and his family was free of bad smells and would be aromatic.[7]

An important feature of the camel is their hump to store fat that is used for energy. On the Picture Wall, both kinds of camels (Dromedary, Bactrian) are made that are depicted in various forms and actions but in most cases they are shown carrying heavy loads, led by the *Shuttar Bans* (camel caretakers/riders). (Fig. 8,9) In one panel, there are four camels with caretakers. Two in the middle are in a fight with their necks entwined while the other two seem to be rushing towards the scene of fight. Overall the composition is balanced and controlled. Yellow and green plants on the foreground are in contrast to the blue of the background. The detail of dresses, camel harnesses, jewels and the plants is worth noticing. Even the gaping mouths of the rushing animals are shown. (Fig. 10)



Fig. 8



Fig. 9



Fig. 10

Elephants and Camels

This panel portrays four elephants and four camels without the presence of any human. (Fig. 11) Although, partially damaged, it still conveys the playfulness of all eight animals who seem to be dancing. The flow of line, the color scheme and the rhythmic composition is a marvel to look at. Both animals are in their flowing form, looking very charming with their harnesses and figurative details. The most admirable is the leg movement of all these animals. To get this naturalistic movement of the non-human form, is a result of the keen observation of the artists who have been very successful in converting their observations into iconography by using the technique of Mosaic Kashi.



Fig. 11

Elephants

The one animal that was greatly loved and appreciated by all the Mughals was the elephant. They were highly revered for their grace, strength and usefulness both in war and peace. The rulers of India were always looking for the better and the best. Akbar was so fond of elephants that they were an important part of his Royal setup. 'Akbar's passion for elephant ride began when Humayun gifted him a very gentle elephant, appropriate for the riding of young children. Akbar rode his first wild elephant when he was fourteen years old and soon developed a passion for them. Once an elephant escaped after killing its *Mahawat* (elephant keeper). Akbar climbed a tree and when the elephant reached under it, he jumped at its back and controlled the animal. On another occasion, Akbar's elephant won a fight, followed the defeated elephant in a mad fury and stumbled in a pit. Akbar's foot was strangled in the rope of elephant saddle and he hung to it for his dear life. At another occasion he almost drowned in the river Jumuna along with his huge elephant *Hawai* but both survived because of the bravery of the rider.'[8] Akbar's early life is full of such events, but all these adventures only increased his passion for this animal.

The Mughal princes and *Umras* presented the best Elephants to the king who kept them and rewarded a few back to the courtiers for their achievements. They were assigned to

Mahawats (elephant keepers), who would raise and train them to serve the king. They were made part of the grand *Jalus* (processions) that were inspected by the kings. Their preparations for the *Jalus* were elaborate. 'The elephants were thoroughly washed and ointments were applied that gave shine to their skin. Two lines of *Sindur* (vermillion) from forehead to the trunk were drawn and two gold bells were hung at the back with silver chains. White and shiny tails of Tibetan cows were hung on each ear. Two smaller, decorated elephants would walk on the right and left of a grand one to enhance its looks and they walked with great style as if they knew how beautifully all of them were adorned. While passing the king, responding to the *Mahawat's* signal, they would kneel on one knee, raised their trunks and trumpet aloud. This was their *Salami* (salute) to the king.[9]



It was the *Shahi Sawari* (royal ride) and the kings would enter the city, head the *Jalus*, lead the war while sitting on elephant. They were given flattering names matching their personalities. Such as *Fateh Lashkar* (Army Winner), *Granbar* (Precious Weight), *Aab Rup* (Water Beauty), *Mithun* (Cattle of Mountain), *Mast* (Joyfully Intoxicated), *Hushiyar Mast* (Happy-go-lucky), *Foj Singhar* (Adornment of Army). *Noor Bakht* (Lucky Light), *Surat Ganj* (Treasure of Beauty), the list can go on because their number and appreciation was high in Mughal *Darbar*.

This beautiful creature is depicted on the Wall in many panels either independently or with *Mahawats*, in animal fights, chasing the horses or part of processions. Many roles are portrayed here to glorify their contributions towards the kings and society overall, in those times. (Fig. 12,13,14,15) They are strong in line and their body movements are captured beautifully, which is not possible without the keen observation of the drawing masters, painters and *Kashi Gars* who were responsible for the end product. The accuracy of the anatomy, features and the detailing of *Saz* worn by them is so amazing that it has not stopped mesmerizing us till date.



Fig. 12



Fig. 13



Fig. 14

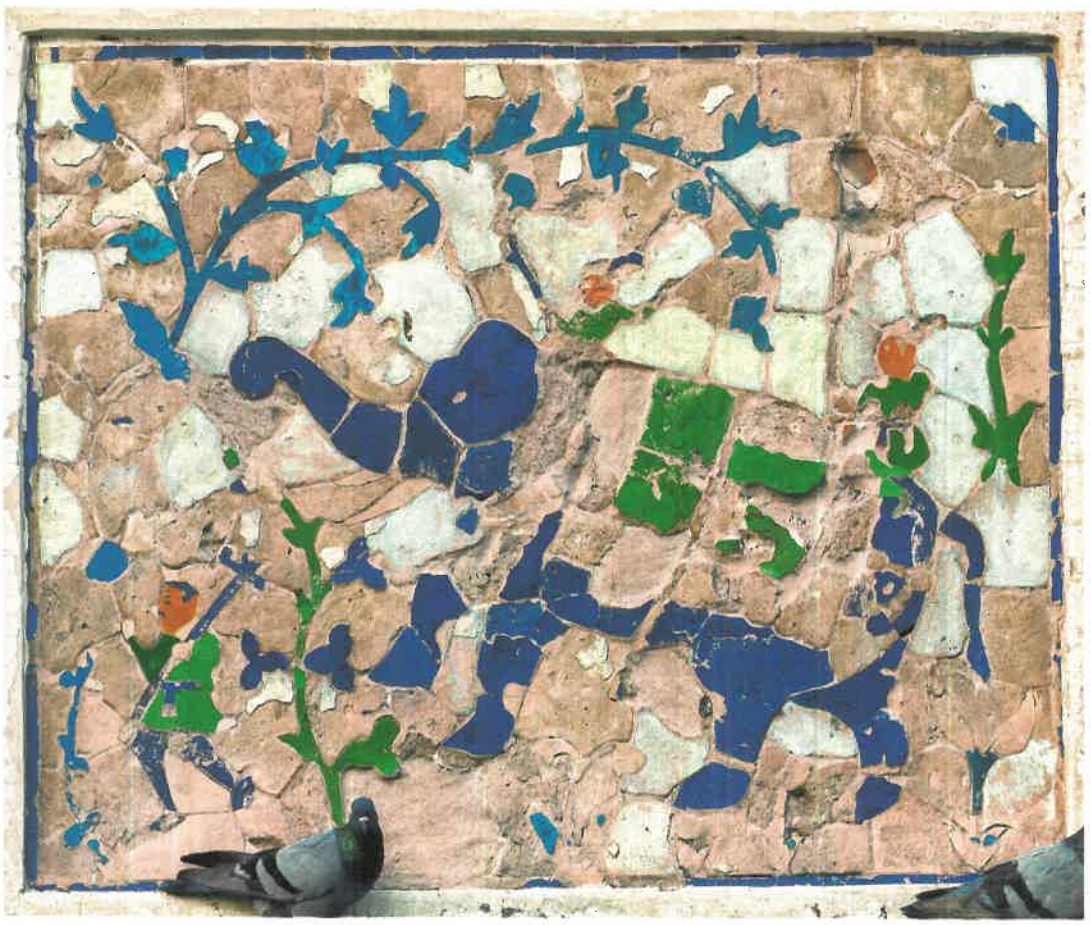


Fig. 15

Elephant Fights

Animal fights were a favorite pastime of Indian rulers and general public alike. Cladius Aelianus, a second century Greek writer/traveler wrote, "The great king of the Indians, appoints a day every year for fighting between men, and also even between animals that have horns..... These combatants are brute animals.....wild bulls, tame rams, those called *mesoi*, unicorn asses, and hyaenas..... Before the close of the spectacle, elephants come forward to fight and with their tusks, inflicting deadly wounds on each other."[10] This is evidence of the fact that elephants were of the highest value and they came as show stoppers of such animal fight festivals. Later on, the Muslim rulers adopted this ancient Indian tradition of animal fights in their daily routine.

On the Picture Wall, a frequent subject is the depiction of elephant fights that was a regular feature in actual life as well (Fig. 16,17,18). This was an animal close to the hearts of Indians since ancient times and their love, regard and utility of this beast was so strong that it also infected the foreigners who conquered this land in later centuries. Under the Mughals, elephant fights became one of the principal recreation of the court. Emperor Akbar is said to have personally taken part in this dangerous sport, at a very young age[11] and many tools related to elephants such as Persian *Charkhi* (Catherine wheel), *Loh Langar* (Iron anchor) etc. are attributed to the Emperor.[12]



Fig. 16



Fig. 17



Fig. 18

These games and fights were not only for amusement but they were meant to train the men and the animals as preparation to fight in battlefields. In Abdu-l-Hamid's chronicles related to Shah Jahan, he narrates the King's love for animal fights, "In this very space, the elephants, mountain shaped and swift like the wind, are caused to run after horses, so that they may get used to attacking brave horsemen in battles."[13] We cannot compare these fights with Roman Gladiator fights that were focused on mindless killings of the animals and humans. In the Subcontinent, they were meant to train men, horses and elephants for the final war combats, which were quite frequent. But with all these justifications, Indians, a nature respecting nation, always condemned such sports. In the rules for Buddhist monks laid down in the *Pali* Canon it is said that they should not attend fights of elephants, horses, buffalos, bulls, he-goats, rams, cocks and quails.[14] Bishop Heber, on his visit to Lucknow in October 1824, notes, "I had the usual compliment paid to me of an offer to have a fight of animals under my window at breakfast, which I declined. It is sight that religious persons among the *Musulmans* themselves condemn as inhuman and I did not want to reckon less merciful to animals than their own *Moullahs*."[15]

Many panels of the Picture Wall, present the Elephants fighting each other with their *Mahawats* sitting on them, maintaining balance and controlling the wild and furious animals. The angry beasts are attacking each other with their tusks that are entwined at some occasions. The anger and the element of aggression is expressed through their body poses in these Mosaic Kashi panels. In some other panels they are in combat with horses and scaring them off with their heavy and powerful bodies. But in this energetic activity, the artist never lost the details of the figures. All of this is conveyed through a very successful imagery. (Fig. 19)

A very detailed and the first ever monologue about the Picture Wall is written by J. Ph. Vogel. Later writers will always acknowledge his in depth study and elaborate descriptions. While writing about the elephant fights, he gives details of a combat that took place during Shah Jahan's Era in which Alamgir showed great bravery by fighting off an elephant after falling from his horse.[16] The young prince received lots of appreciation but I think this was also a realization for Shah Jahan that Alamgir's bravery will definitely become a hurdle for Dara Shikoh in later years because from then on the young prince was never allowed to stay near the family and was sent to far off frontiers to fight difficult fronts. According to Vogel, one particular panel showing a horseman standing in front of a charged elephant may be the depiction of that particular event, which was made part of the Wall by the artisans.[17] (Fig. 20) This write up strengthens the theory that most of the personalities, animals, events depicted on the Picture Wall are the reproduction of real- life events.

The two panels showing an intense animal fight is the optimal of detailing and action. Active lines of the animal and the defensive but encouraging postures of the riders and the attendants are very expressive in their simple lines. (Fig. 21,22) Elephants are adorned with jewelry and one can even make out the thick anklets on the hind legs of the angry and vicious animals. The artist did not miss even a single chance to share their amazing observation and its successful execution.



Fig. 19



Fig. 20



Fig. 21



Fig. 22





Horses

Mughals were nature lovers. They lived and breathed in the real world around them. This made them highly appreciative of the flora and fauna. Trees, animals, birds, flowers, mountains, rivers and streams were their inspiration and this admiration found way into their every creation. Their textiles, paintings, carpets even the weapons were adorned with images based on nature. They also took advantage of natural resources in every dimension of practical life. Within this context, horses were an integral part of their set up. They were not only instrumental for their daily traveling but were very useful in wars. Just like their Mongol ancestors, they treasured a horse because it was their important weapon in war and companion of many adventures. Almost all the Mughal Kings were accomplished riders and had a great liking for this animal.

In *Ain-e-Akbari*, there are seven classes of horses mentioned according to their performance and value. The highest were *Arabian*, then *Persian, Mujannas, Turki, Yabus, Tazis* and *Jangla*.[18] Mughals received high quality horses from all over the world but *Arabian* and *Persian* were their all-time favorites and were called *Khasa* (special, pure). They were given the status according to their breed.[19] It has been written in *Tuzk-e-Jahangiri,* "Of all the horses sent by Shah Abas, the horse named *Samundar* is the best. I gave it to *Khan-e-Khanan* and he was very happy to receive it."[20] At another occasion a horse named *Lal Baha* was sent to Prince Pervaiz.[21]

There were huge markets for the buying and selling of horses. In Lahore, one was at Taxali *Darwaaza*[22] and the other was outside *Akbari Mandi* known as *Nakkas Mandi,* which was the largest horse market in Punjab.[23] Now no horses are sold there but the area retains the same name. Even the rates of horse food was fixed by the government officials. It

proves that horses were a critical element of the Mughal life. It is no wonder that a very frequent theme on the Wall is the representation of horses because the Wall is a reflection of socio/political and allegorical dimension of that era. They are made in different styles but always in a side pose to enhance their grace. After studying the appreciation that the Mughals had for the Arabic and Persian horses, it is no surprise that the design form of most of the horses on the Picture Wall resembles the Arabic and Persian ones. Some smaller panels contain the imagery of single horses, led by individuals in various costumes. In all the panels reproduced here, one is more elaborately created. (Fig. 23) It has two birds and a wide array of plants in the background and foreground. But the real grandeur is in the figure leading the horse. Although, all the color gone, one can still see the outline of a man dressed in very formal *Jama* and a turban that has a big plume. His mustached face is the personification of authority. The horse following him has a saddle very formally designed. All these traits indicate that the person shown in the panel is an individual of high status possibly a king and if we follow the attributes, this might be the face of Akbar, portrayed on the Wall.

Compared to two other panels, one can observe the difference in treatment. (Fig. 24, 25) Both the horses are led by *Shagird Paisha* but the one rider led by the servant, is again of some noble descendance. Faint traces of his figure reveal plumed turban, a formal dress and long shoes. The man walking ahead is holding a flag, another emblem of Royalty as no commoner was allowed to move with flag of any kind. In the other panel, there is only one person, who has the appearance of a *Saees* (horse keeper), leading the horse. The beauty here lies in the form of the horse that is majestic.

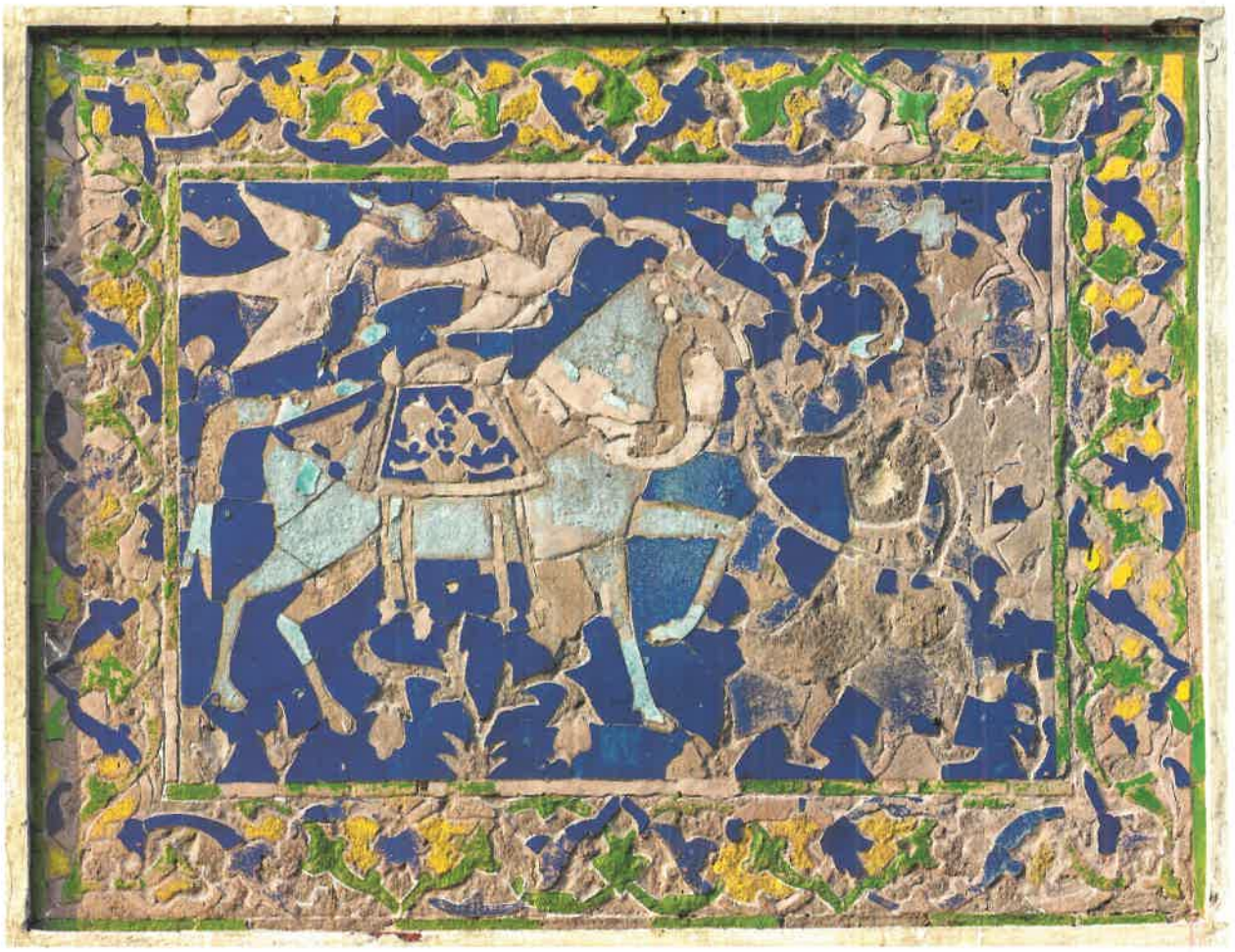


Fig. 23



Fig. 24



Fig. 25

The horses walk in three stages;

a. Trot when horse starts walking fast.
b. Canter is a middle stage between walking and running.
c. Gallop is when the horse is at the peak of its speed.

On Picture Wall, although all three postures are made but most of the horses are in trot and canter position. These horses are elaborately harnessed that were mostly made of gold and silver if they were used by the kings.

There were competitions among the horsemen too. The purpose was to train them for the wars and to improve their control on the spears/swords/bows and horse simultaneously. This particular gesture is made in the panel. (Fig. 26)

Showing the horses in full gallop was not frequent but there are some instances when they are portrayed in full glory of their speed. (Fig. 27) The horses on the arch are running so recklessly as if they would cross the arches and run in the air. On the other hand is the panel with a rider and a *Payk* (runner) leading the horse. (Fig. 28) The horse is in a forward pose with the fore legs raised in the air and the hives of the hind legs barely touching the ground. But surprisingly the *Payk* walking in front of this aggressive animal is in no hurry. He is walking calmly, wearing a formal dress and plume in his turban, with a sword in his hand. The panel is damaged but a closer look reveals that this might be the king on the horse with a prince leading it. But unfortunately, these are all speculations because it is impossible to come to any conclusion with the surface so much damaged.



Fig. 26

The pose of the horse depended on the situation, such as if it is in a procession and a *Payk* or *Saees* is walking ahead, the horse is shown in a calm trotting style. If they are with a rider, their walk will be W but if they are in a thrilling situation like a hunt, animal fight or chase, their posture is in that of a gallop, showing the aggression and fierceness. In another panel, a horse and an elephant are engaged in a fight, with a *Payk* following



Fig. 27



Fig. 28



Fig. 29

them. Both the animals are fully charged and attacking each other furiously. (Fig 29) The rider is hitting the elephant tusk with a lancer and the horse is literally jumping on it. The horse's pose is reflecting the fierceness of the situation and the aggression is evident, a great expressionistic success in the art of Mosaic Kashi.

Although, processions, animals, birds, individuals, games of the time, demons, angels, dragons, fairies and lovely flora and fauna were depicted on the Picture Wall, the horses had a special place as they were important in the daily lives of the people of Mughal Era. 'In fact, the entire track from *Akbari Darwaaza* (gate) curving round near *Mochi Darwaaza* (gate) and going on towards *Bhatti Darwaaza* (gate) was once a long race track, where soldiers and kings raced and played other games on horseback.'[24] A favorite game of the rulers was *Chougan*, a sport meant to increase the horse-riding skills that were necessary in the wars. Abu-al-Fazal in *Aine-e-Akbari* writes, "Superficial observers look upon this game as a mere amusement, and consider it mere play; but men of more exalted views see in it a means of learning promptitude and decision."[25] He also gives details about the night polo, "His majesty also plays *Chougan* on dark nights, which caused much astonishment even among clever players. The balls which are used at night, are set on fire. For this purpose, *Palas* wood (Butea tree) is used, which is very light and burns for a long time. For the sake of adding splendor to the games, which is necessary in worldly matters, His Majesty has knobs of gold and silver fixed to the tops of the *Chougan* sticks. If one of them burns or breaks, any player that gets hold of them can keep it. It is impossible to describe the excellence of this game."[26] A restored panel showing the game is part of the scheme of design of the Picture Wall. (Fig. 30)

The Picture Wall is a great display of horses in different forms. Their shapes resemble either the bulkiness of the Arabic or the sleekness of Persian horses. They are shown in side poses, to enhance the strength and beauty of their elegance. Interestingly all of them are made using blue or white tiles and no other color can be seen today. They are mostly shown in trotting or galloping postures with riders fully in control of their animals. This is the beautiful harmony and contrast of the nature and man and evidence of the synchronization of their co-existence since times immemorial.



Fig. 30

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FLOWERS & TREE LIFE IN PLANTS/ PLANTS IN LIFE

The most popular design idiom in the arts produced under the Muslim Dynasties were the plants of different kind. They were employed in two forms, either in naturalistic shape or stylized. In both conditions, the details associated to them are amazing. These were the artists who were exploring many dimensions of the flowers and trees and they treated them in a sacred manner because the creators and the patrons believed that by making the plants and flowers, they were imitating the Heaven because in Islam, the visuals of Heaven were all about trees, plants, fruits and streams. As a result, the making of plants was not only visually pleasing but they contained the element of *Aqeedat*, sacredness and piety. Portraying them was considered a part of praying. So much so that miniature painters, calligraphs and the illuminists would perform ablution before drawing or painting.

The Subcontinent was famous for its trees and flowers and the first ever reference in Persian language, about the local flowers, was in Ameer Khusrau's poetry in which he declared the local flowers the best in the whole world. He wrote many names of flowers found in the royal gardens. *Susan* (a sky blue flower), *Saman* (Jasmine), *Banafshah* (a herb that grows on snowy mountains), *Kabud* (a kind of Willow), *Gul-e-Bela* (flower of Arabian Jasmine), *Rihan* (sweet Basil), *Marwa* (Marjoram), *Ganda* (Marigold), *Nastaran Shiraz* (White Rose), *Dauna* (Artemisia), *Basanti Gulab* (Primrose), *Zafran* (Saffron), *Nilofar* (Water Lily), *Dhak* (name of a tree), *Champa* (a shrub bearing yellow flowers), *Juhi* (Jasmine Molle), *Kewra* (fragrant Screw Pine), *Sewti* (White Rose), *Gulab* (Rose), *Maulsari* (Spanish Cherry)[1] are some of the flower names mentioned by him. He also informs that *Banafshah*, *Yasmeen* and *Nastaran* were brought from Iran and rest were all local. Muslims did change the names of the flowers into Persian e.g. *Ganda* was renamed *Sad Barg*, *Chambeli* was *Yasmeen*, red, white and yellow roses were called *Gul-e-Surkh*, *Gul-e-Sufaid* and *Gul-e-Zard*. *Marwa* was called *Sapargham*. They also gave names to many of the flora that were previously unnamed. Ameer Khusrau also narrates that if the heaven has the flowers, they would be Indian and if the Romans and Syrians had such flowers, they would show them off to the whole world.[2]

For Mughals, India was the land unexplored and every single one of them wrote about its beauty with special reference to the landscape. Babur, Akbar, Jahangir, Shah Jahan, Alamgir, all mentioned about the local fauna in their memoirs. Jahangir writes, "I stayed in *Mouzah* Amria and next day traveled for hunting. On my way, we went through another *Mouzah* that had huge number of trees including one hundred mango trees. In the same garden, I saw a *Banyan* tree that was so big that its height was seventy-four yards, width forty-four yards and it covered one seventy-five and a half yards." In another location he witnessed a strange Date tree. He narrates, "In this location, a strange tree was observed. Usually Date trees have one trunk but the trunk of this tree was divided in two at the height of six yards while each was ten yards and the distance between the two was four and a half yards. I found it so fascinating that I ordered a platform to build around it and asked my painters to make a painting to be included in *Jahangir Nama*."[3] This was not the first time that the kings asked their painters to paint the flowers and trees. It was a

common practice and many paintings were created with the fauna as subject. When Jahangir went to Kashmir, he was so fascinated with the variety and number of flowers that he ordered Mansur, his prominent court painter, to paint them but 'unfortunately, he could make only one hundred'.[4]

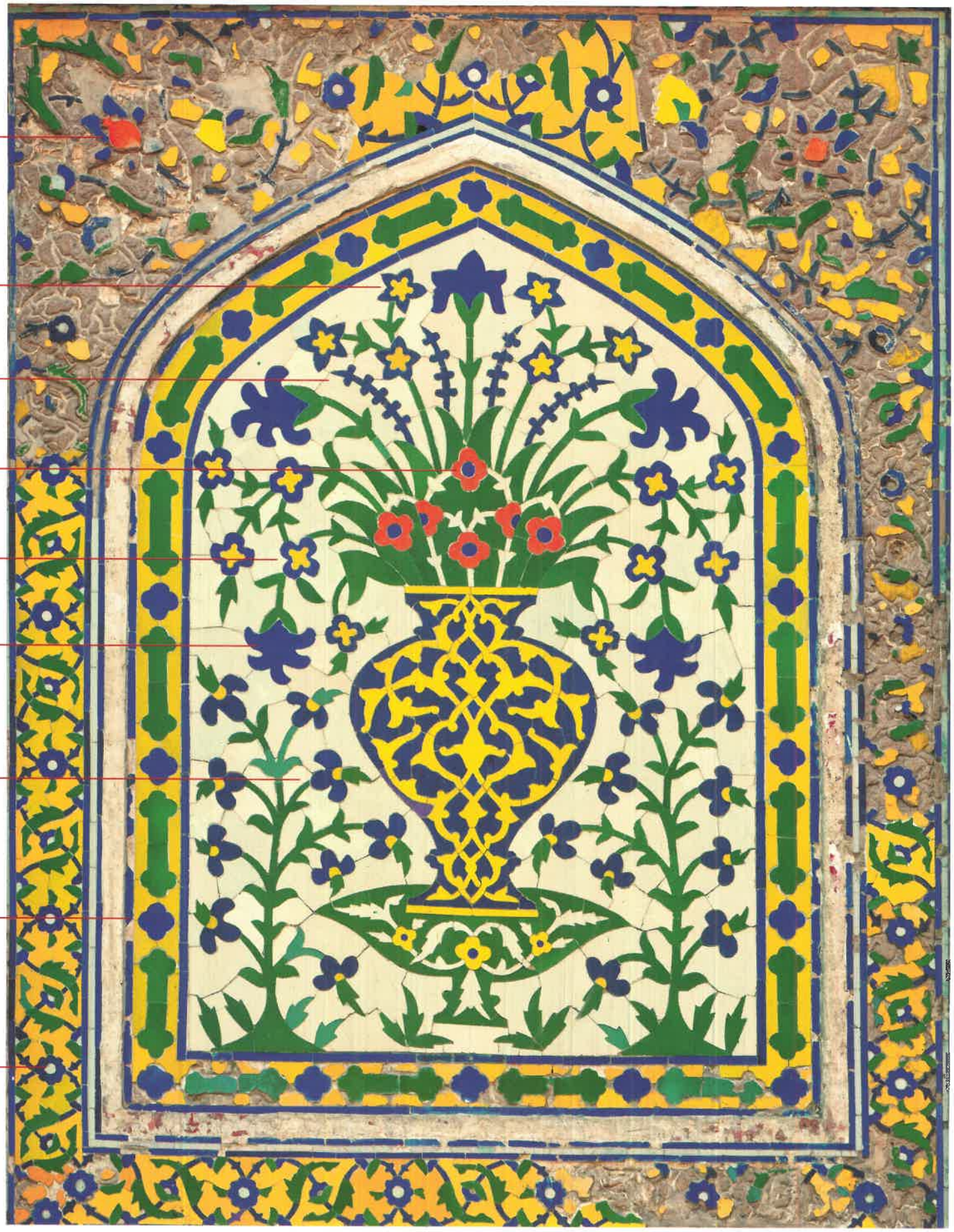
The flowers mentioned by the Mughals in their memoirs included *Jason, Kaner, Kewra, Kaitki, Champa, Raebel, Mongra, Chaltah, Tasbiih-e-Gulal, Bholsari, Haar Singhaar, Kuza, Nawari, Kapur Bail, Aaftabi, Kanwal, Jaafri, Garhal, Ratan Manjani, Kasu, Kadam, Nagasar, Sarpan, Hina, Dopahria, Bhon Chanpa, Sursan, Ratan Mala, Susan Zard, Malti, Karail, Jeet, Lahi, Karonda, Dhanstar, Sars, Kanglai, San* etc.[5] During the Shah Jahani period, Dara Shikoh's spiritual guide Peer Mula Muhammad Shah wrote many new flower names that were never mentioned before such as *Gul-e-Sanjad, Gul-e- Angoor, Gul-e-Khareefi, Gul-e-Taj Khirdas, Qalghi, Gul-e-Makhmali, Gul-e-Abbasi, Aaftab Parast, Gul-e-Dev Raj* etc.[6]

These flowers were used in many forms. Mughal *Darbar* and palace rooms were decorated with flower strings and bouquets. Noor Jahan's chambers were filled with flowers and they looked as if grown out of the walls of the room. Door curtains were made with flowers. Brides and grooms were laden with garlands and the women wore flower jewelry made in an extremely intricate manner by the *Malis* and *Malans*. Trees of *Saru, Shamshad, Sanobar, Chanar* and *Safeda* were planted in the gardens palaces, mosques, tombs and other Mughal constructions. Mughal Kings could not have enough of them so they had the flora painted on the buildings as well. As a result, we see walls and ceilings flooded with floral forms both in a realistic and stylized manner. Picture Wall is no exception in this regard. Flora is a very frequently used design element on the Wall both in larger or smaller panels.

Flowers and Plants on the Picture Wall

The panels contain different flowers, both individually and in bunches. Many were repeated on the Wall. They were made in such a realistic manner that most of them are still recognizable, even after four hundred years of intense damage. I tried to identify them and some prominent ones are highlighted here;




Sunflower
Nerium
Astilbes
Azure
Clarkia
Lily
Buddha Tree
Wall Flower
Sanaria


Carnation
Azure
Asciepia
Lily
Dombeya


Corn Flower

Evening Primrose

Blue Orchid

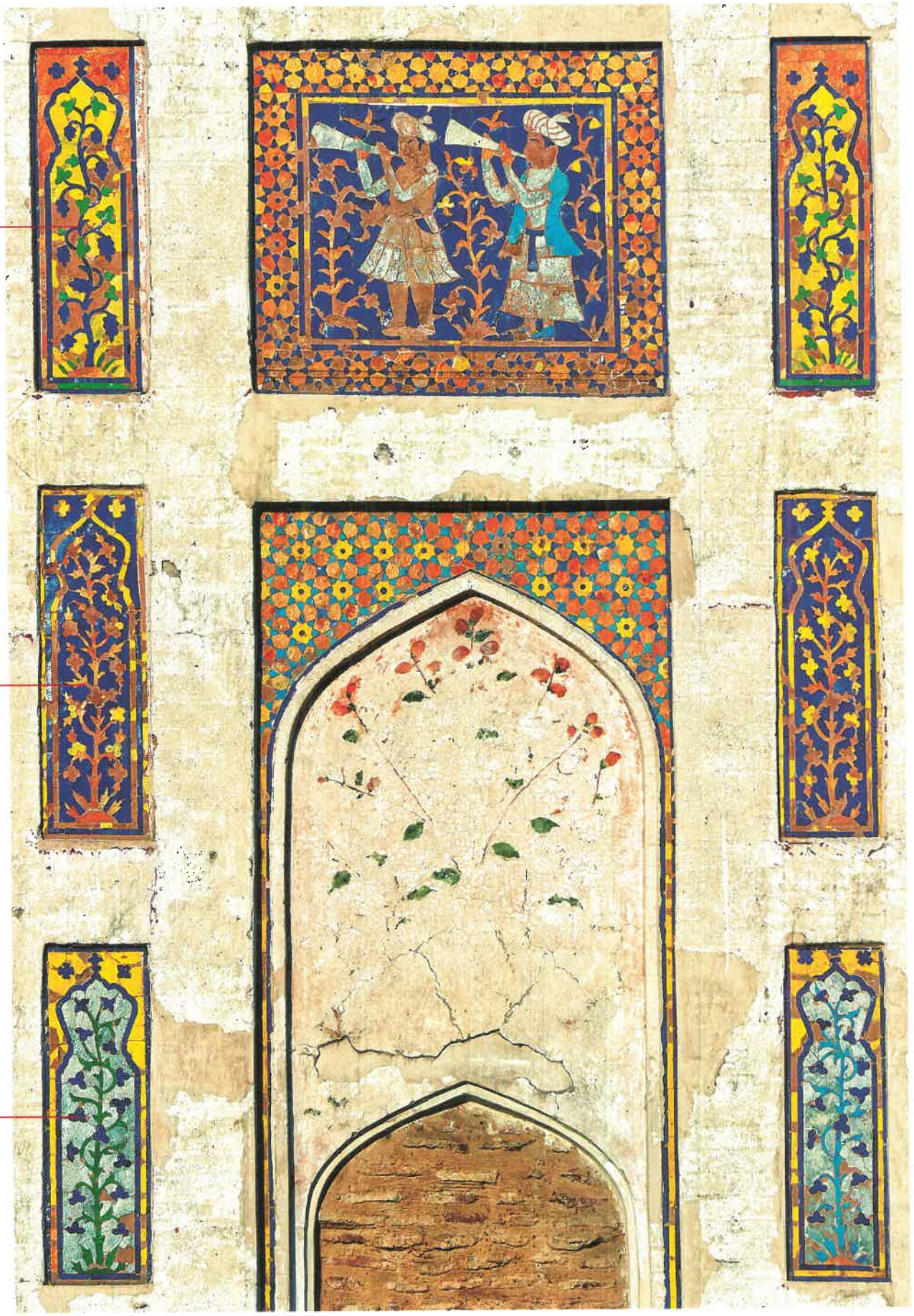


Azure




Iris
Asclepias
Wall Flower
Bougainvillea

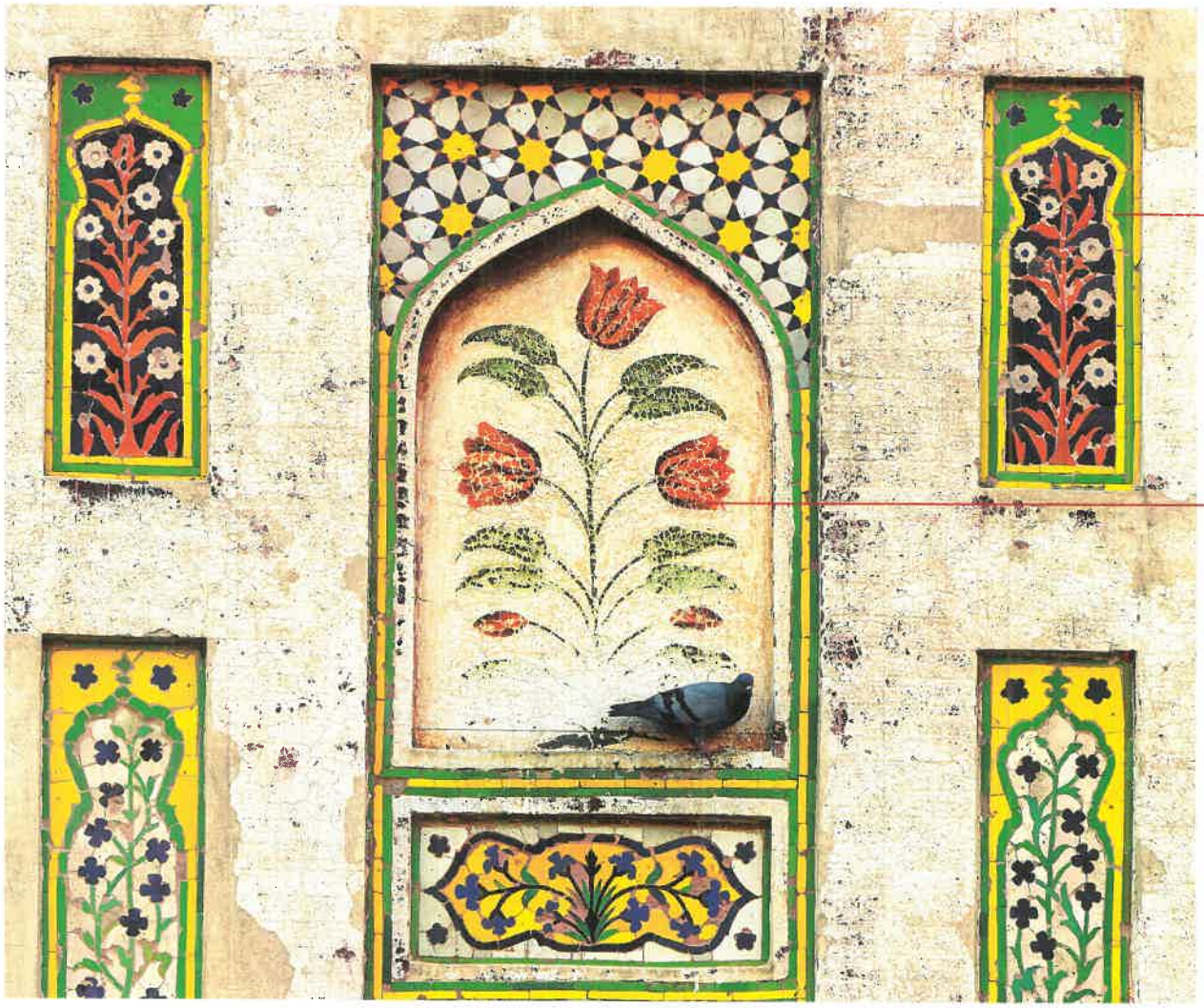

Iris
Nargis



Grape Vine

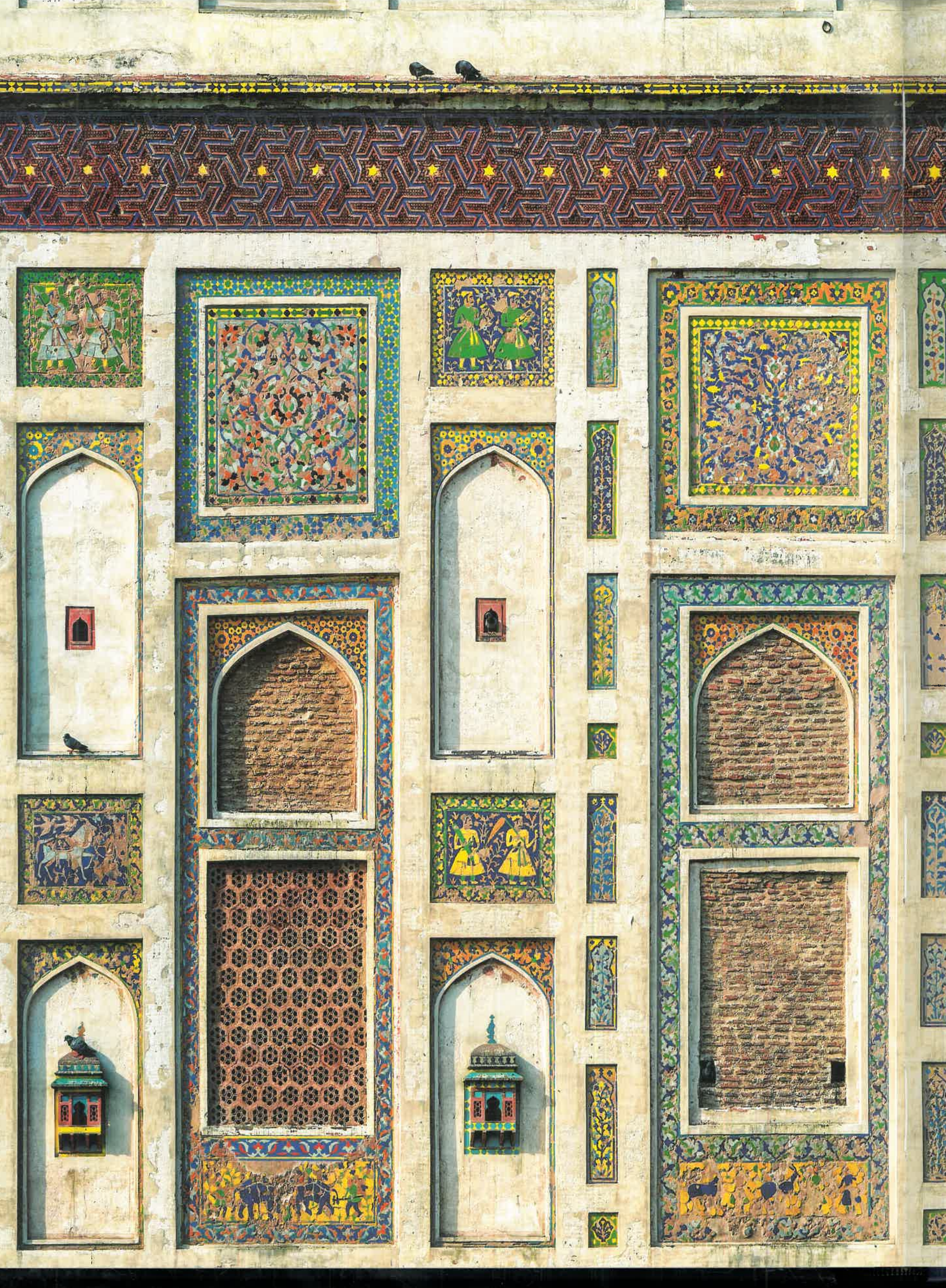
Wall Flower

Azure

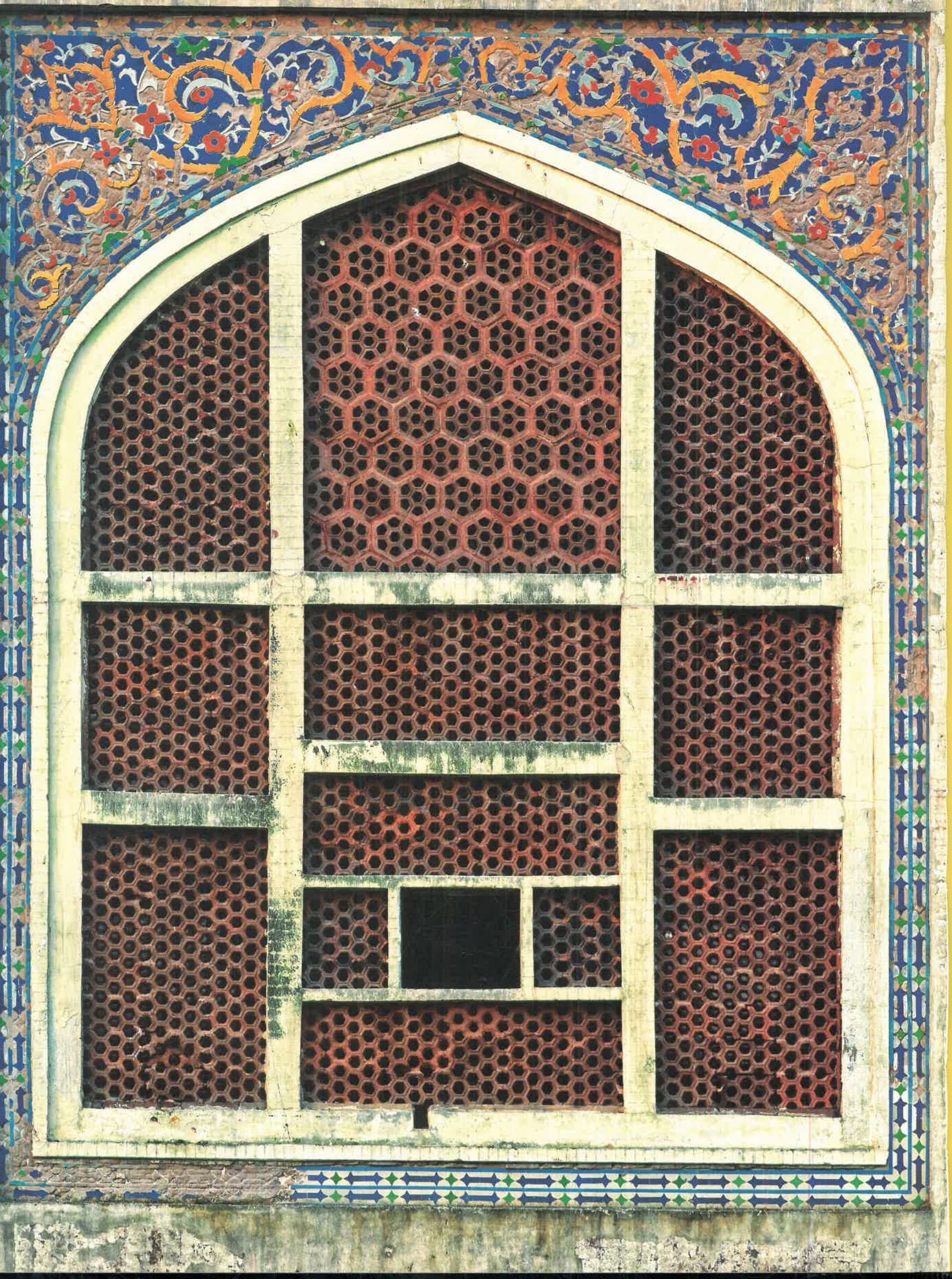


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5. Sayyad Sabah-ul-Din Abd-ul-Rahman, *Hindustan Kay Musalman Hukamranon Kay Ahad Kay Tamuddani Jalway*, 338, 339, 340, 341, 342.
6. Sayyad Sabah-ul-Din Abd-ul-Rahman, *Hindustan Kay Musalman Hukamranon Kay Ahad Kay Tamuddani Jalway*, 347.



Arabesque/ Islimi Design



The Picture Wall contains many subjects such as supernatural creatures, flora and fauna, human activities etc. Apart from that, it also has elements associated to the arts produced under the Muslim rulers. Most prominent of them all are *Arabesque* and Geometric designs that are created using different techniques such as fresco, fretwork, cut brick but most of them are made by using the technique of Kashi Kari. A very frequently motif type employed by the artists is *Arabesque* that is also called *Islimi* 'respectively meaning related to Arab and related to Islam.'[1] This is an ancient art form that was practiced by the population of many regions of the world such as Greeks, Chinese, Iranian, Byzantium and Gothic especially in the manuscripts of both religious and secular nature. In later centuries, it was associated with development of early Islamic Art when the artists, to replace the figurative forms, focused on the design element and took this genre of art to great heights. They added the extra dimension of mathematical and geometrical calculations to produce an expression that was both creative and logically correct as well.

The 'Word *Arabesque* originated in 1610 and takes its name from a form of Moorish ornament. From there, the word became the French *Arabesque*, then into Italian *Arabesco*, both referring to an Arabic decoration or design.'[2] It also falls in the category of Biomorphic design that resembles natural forms but one can hardly identify the specific plant, flower, animal or bird used in it. The forms are, most of the time, beyond recognition, moving away from not only identity and individuality but blending into a unified semi abstract expression.

Arabesque/Islimi usually consists of schematized form of vine leaves, palmettes and flowers that is appropriate according to the sensibility of the artist. These designs are highly stylized and touching the realm of abstraction but without loosing the inherent beauty of flora. One can feel the flow of the flower or *Bail*, like the ocean creating individual waves but blending perfectly in the main stream. Sometimes human, animal or imaginative creatures such as dragon and phoenix were also woven into the design. The abstracted forms of figs, vine leaves, pomegranates, acanthus and many more were exploited by the artists to embellish the buildings, carpets, textiles, manuscripts, pottery etc.

If we study the designs on the Picture Wall, they can be divided in two categories; one is geometrical in straight lines and the other is based on curvy, soft and rounded lines, which are *Arabesque* or *Islimi*. These curvaceous designs are a reflection of the world as created by God because there is no straight line in nature. These designs have few basic similarities. Their composition is rhythmic and goes along the flow of a stem that stems out of a base and spreads in two or more branches, moving in a manner as if a sprout is reaching out towards the sunshine. Along the way, they are beautifully tangled with leaves, flowers and tendrils that represent the individuality and unity of elements.This is an eternal, infinite spiral, without any hard corners, always flowing with gentle curves.

The *Arabesque* on the Wall contains the main elements associated to them such as *Rumi style, Tepelik,* Spiral*, Kapali* etc. 'The development of one of the most common *Islimi* styles;

Rumi (a Turkish and Persian term) was developed by the Seljuks from Central Asian Turk cave paintings of animals and birds. As the Seljuks moved into Anatolia in the 10th century and adopted Islam, they stylized the wings and beaks and developed the *Rumi* motif. This motif was then replicated and developed all around the Islamic world.'[3] (Fig. 1) The *Rumi* motif is complimented with *Tepelik*, a motif that has a pointed top with a dome shape. This was the reason that it was given the name because '*Tepelik* means points or hilltops, it is the other major motif in the *Rumi* style that is used both as a symmetrical freestanding motif and in half form attached the spiral.'[4] The structure of the *Arabesque* could be simple or highly intricate as different elements were added or subtracted according to the aesthetic sensibility of the artist. To understand its formation, it is explained as 'there are two structural linear foundations; the Spiral and the *Kapali.* The motifs are attached to these shapes. The Spiral and the *Kapali* often exist as separate parallel designs one over laying the other but the motifs are placed between the lines observing the other design, this creates an interwoven effect; *Kapali* means 'closed' and *Kapali* forms are linear structural lines, which are usually based on an underlining geometric grid ensuring they reflect or tessellate correctly. (Fig. 2) The shapes are versatile and have architectural properties; the crown shape is used in domes and gateways across the Islamic world. Within a design it reflects itself and motifs, helping patterns slot together.'[5]

Arabesque on the Picture Wall contains all the basic elements and the masters of this craft created patterns that are both spectacular and perfect in calculation. (Fig.3,14) They are applied on arches, rectangular forms and borders of the larger frames. In many instances, it is both context and border that testifies to the ability of the makers who experimented with this genre and were successful in creating masterpieces that have not stopped to amaze the world till date. *Arabesque* could be the context and the border could be in geometric design or vice versa. Sometimes two designs look similar but detailed study reveals that each and every one of them is different with a big variety of shapes, motifs and color schemes. The colors used are many but the predominant is blue and yellow, representing the skies and the *Shamsa* (sun).[6]

These stems, flowers, tendrils and trees were basically a representation of immortality of the Almighty and the beauty of Heaven, the aesthetics and rewards promised by Allah, in life after death, to the pious. These motifs are repeated with such calculation that they can go on infintely. This continuity/never ending quality of the patterns, is the symbol of infinity and illumination, all associated with the Almighty.

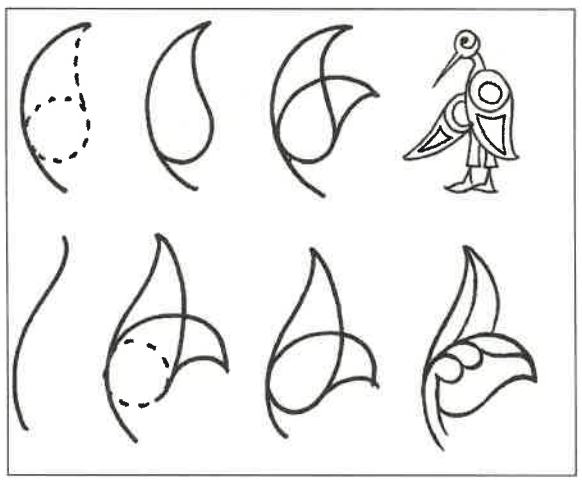




Fig. 1, 2 *Image Source https://artofislamicpattern.com/resources/introduction-to-islimi/"*

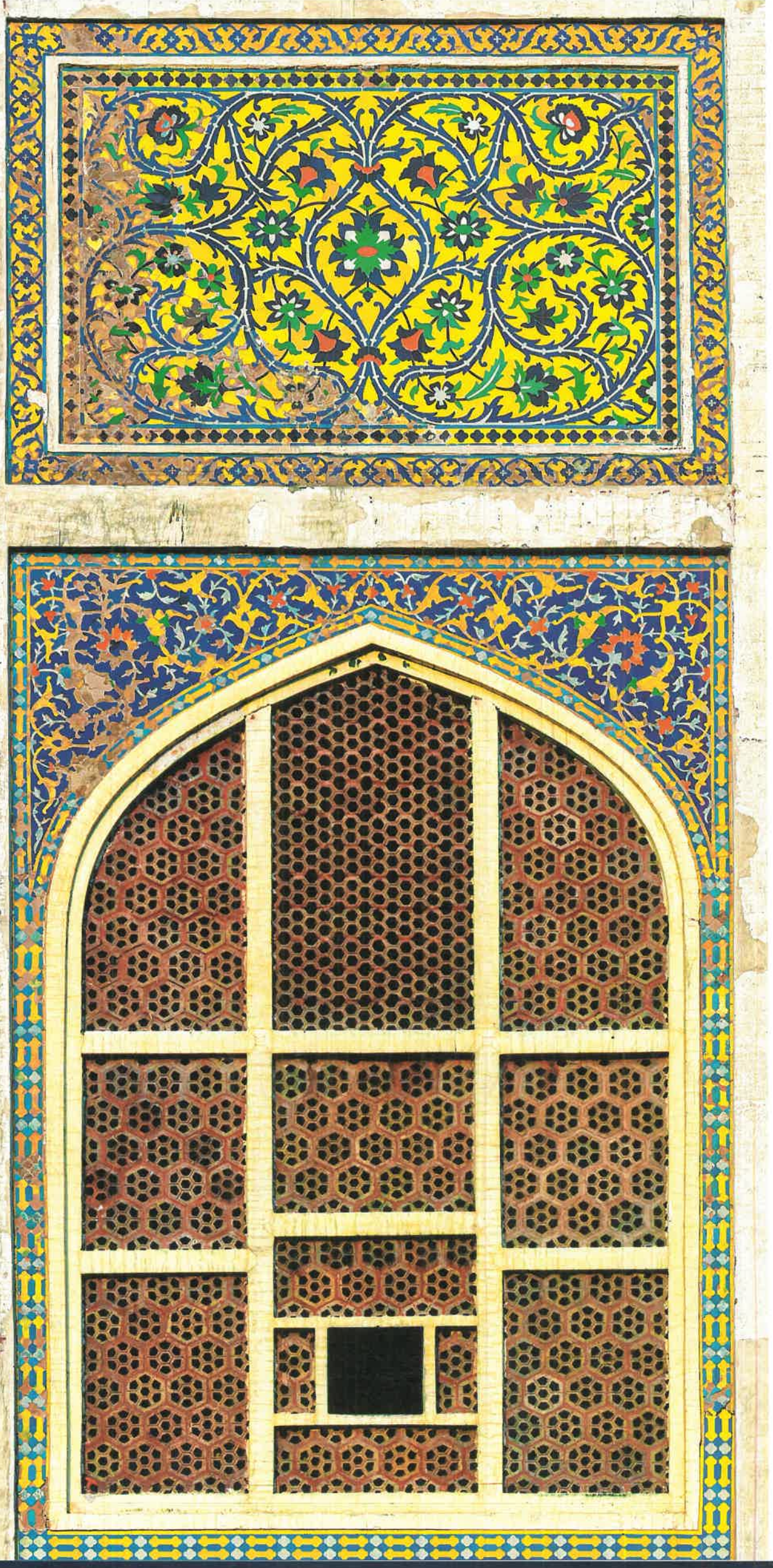


Fig. 3

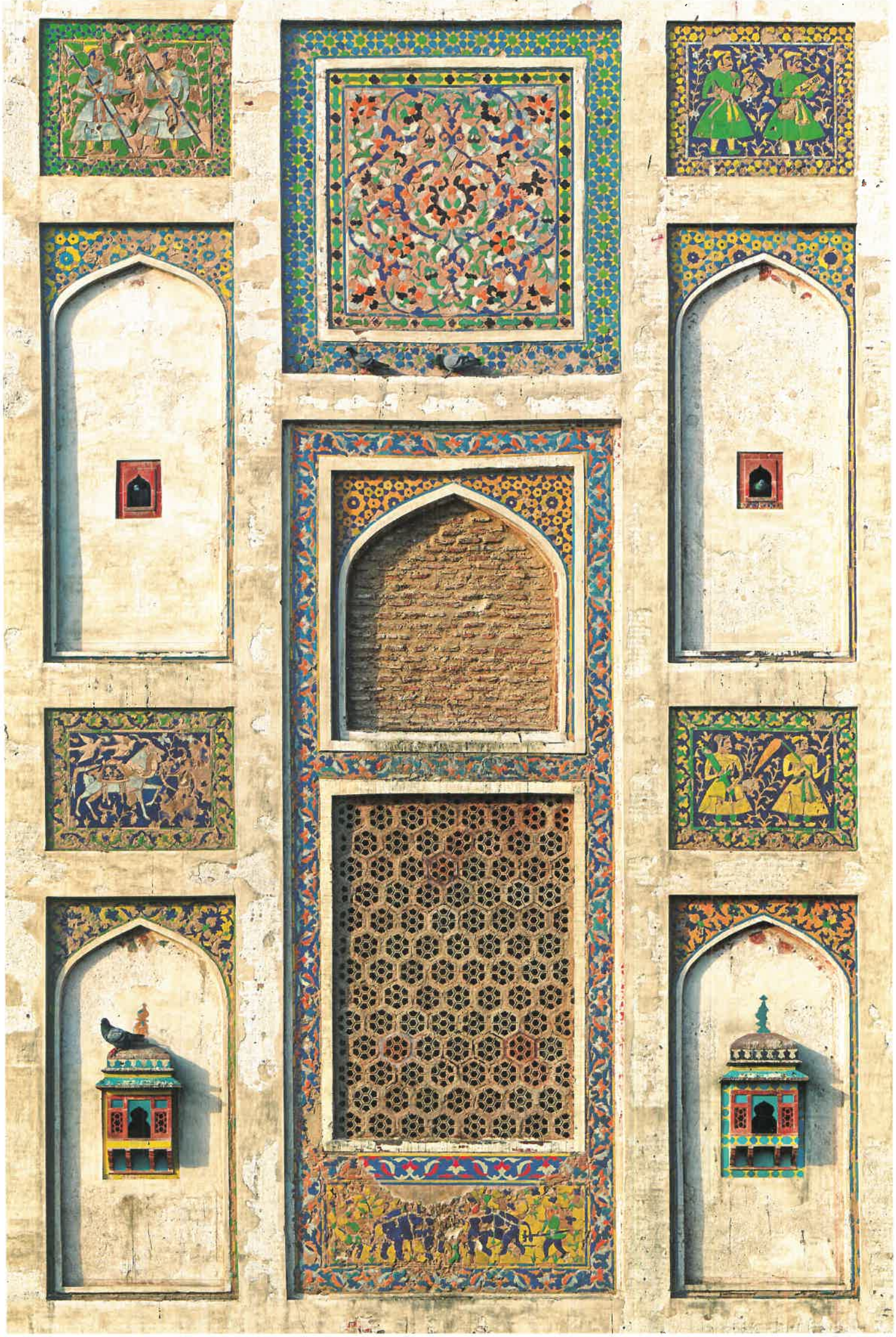


Fig. 4

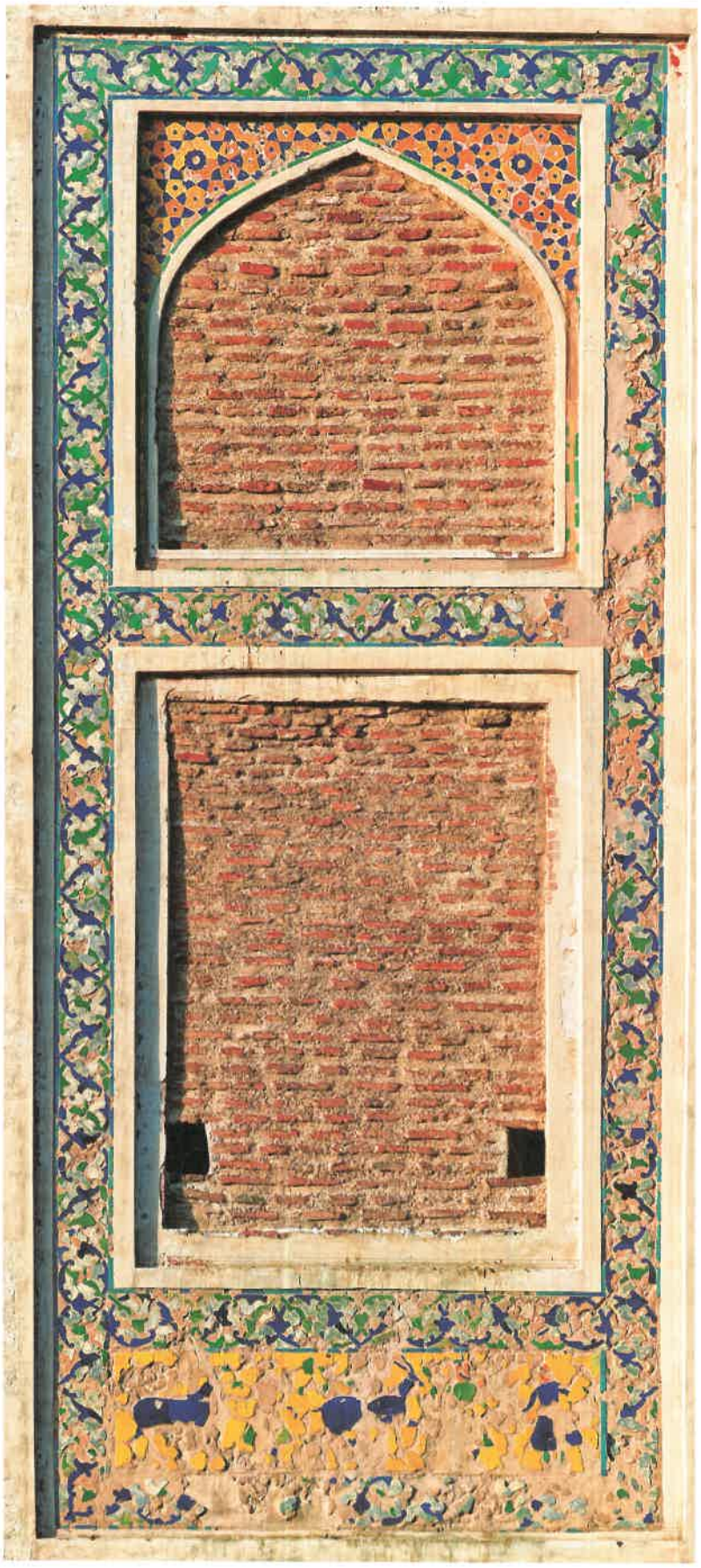


Fig. 5



Fig. 6

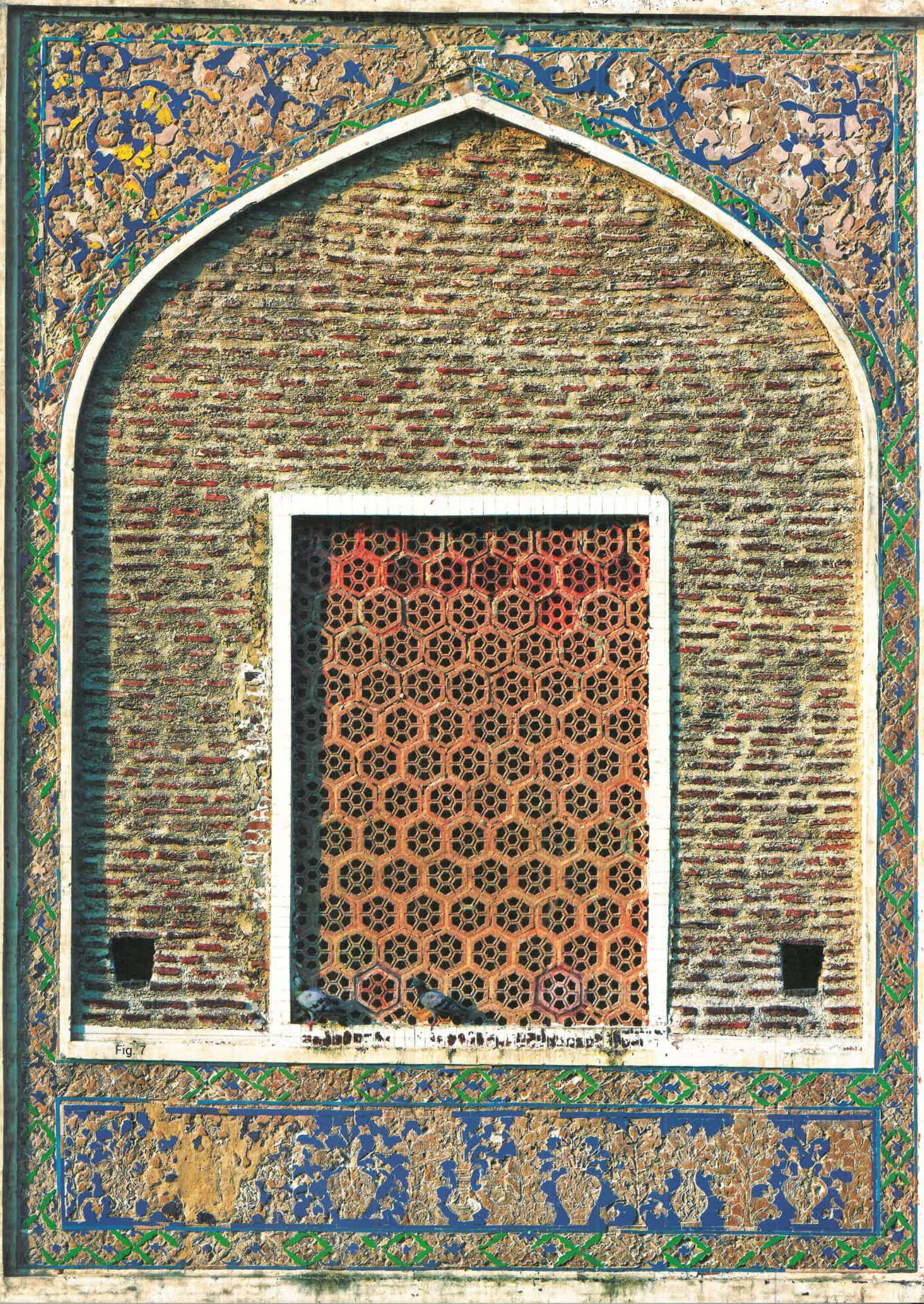


Fig. 7



Fig. 8



Fig. 9



Fig. 10

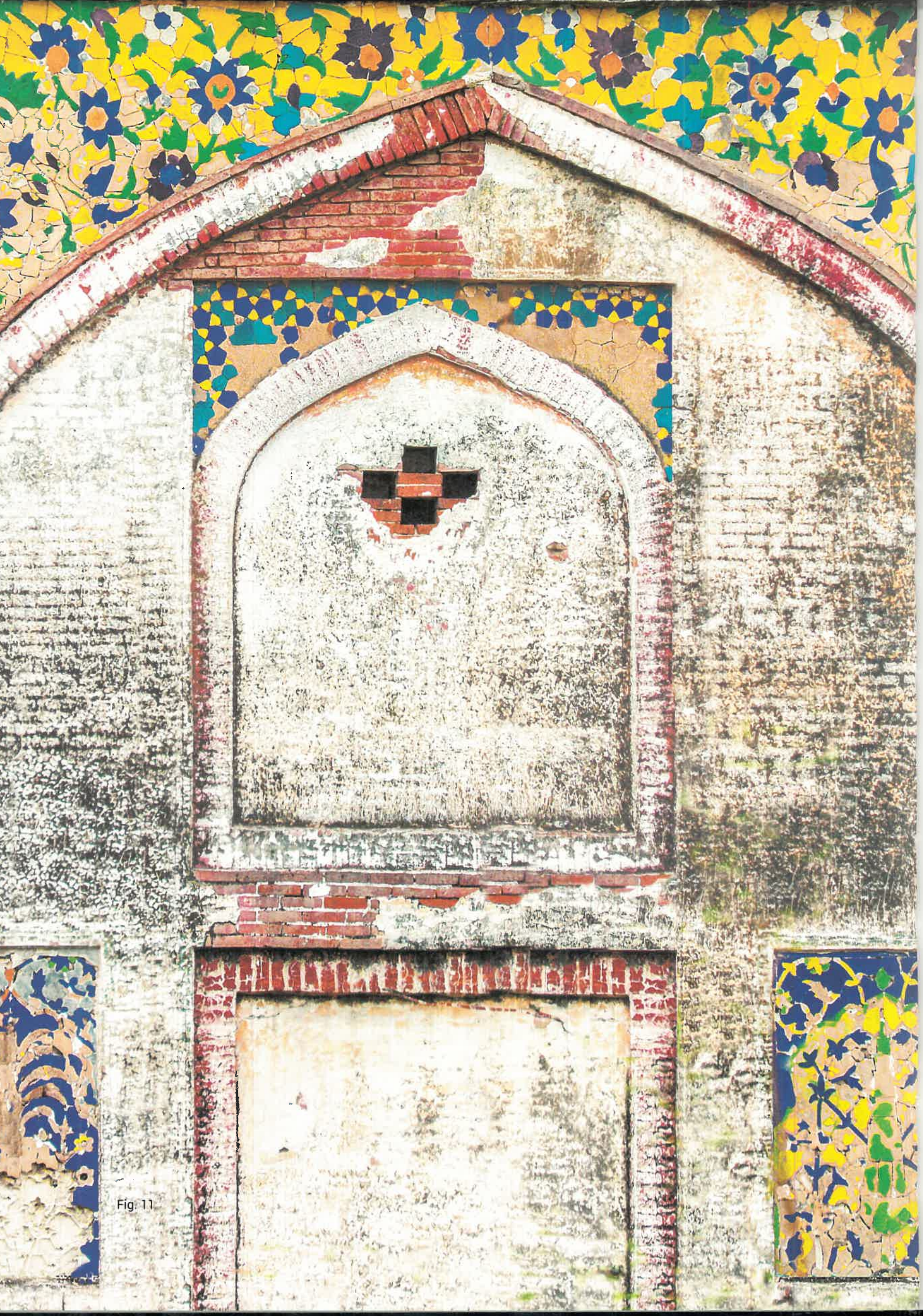


Fig. 11



Fig. 12



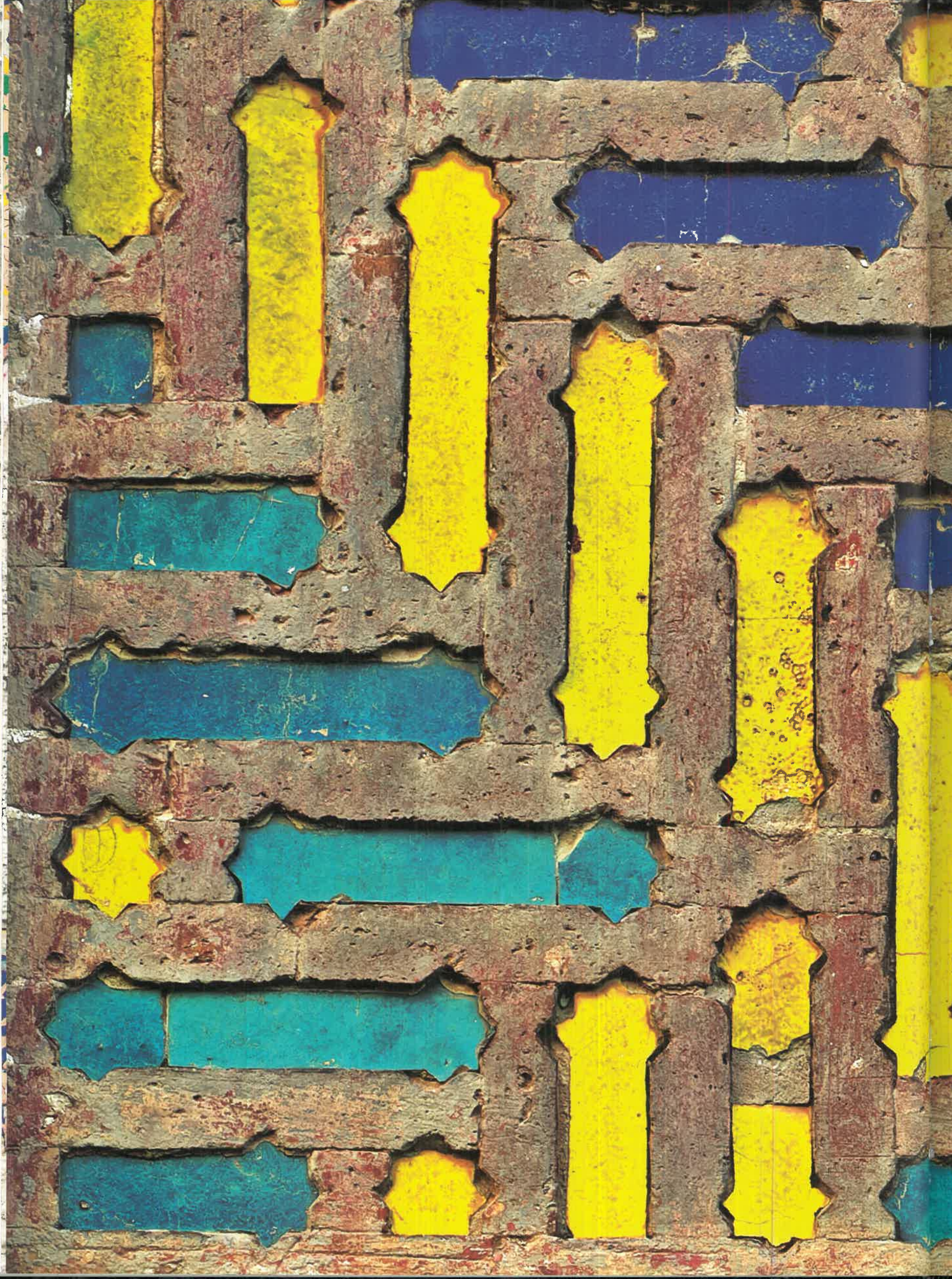
Fig. 13

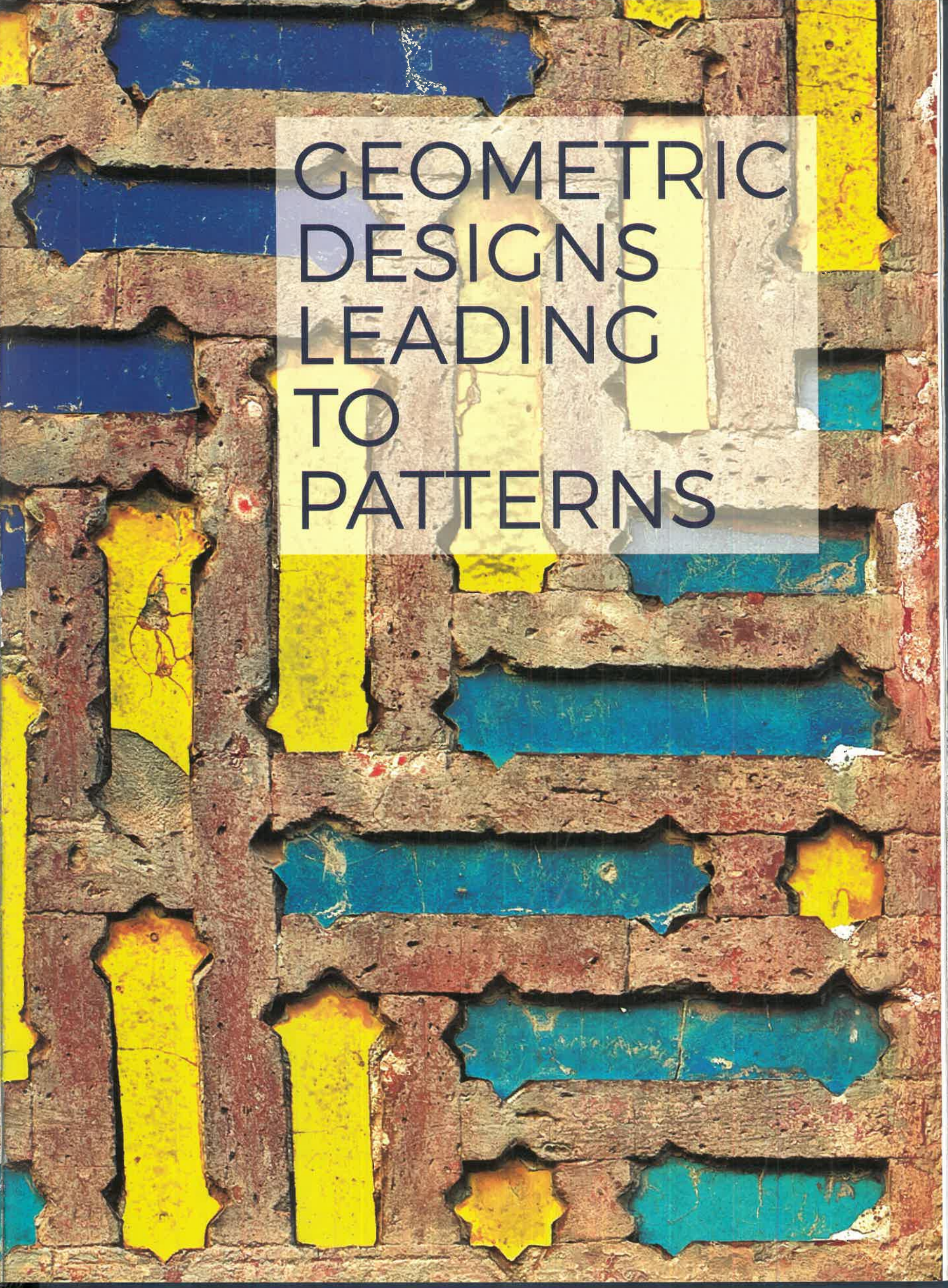


Fig. 14

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GEOMETRIC
DESIGNS
LEADING
TO
PATTERNS

Different genres of surface decoration have been used on the Picture Wall but the maximum number is of the designs that are of many styles. Along with flora and *Arabesques*, there is a big variety of geometric designs, made either in square and rectangular panels or applied as borders. One can even see them on the spandrels of big or small arches and in different sized niches. Variety in geometric designs and color scheme is overwhelming. Vary rarely any design has been repeated on the 8000 square yard. This kind of creativity and variety is unique. (Fig.1)

In the world of art and architecture, designs with linear quality has always been important and generally they are titled as Geometric Designs because they are based on geometry (a branch of mathematics dealing with properties of shapes, space and relative positions of the forms). They were used by the previous generations but Muslims furthered the intricacies and refinement in such a manner that it became an expression of art in its own right. Founding elements of every geometric design are circles, squares and triangles. Artists working under the patronage of Muslim rulers could create an infinite number of designs by using these three basic shapes.

With reference to the geometric designs of the Wall, they are divided in two main categories;

a. Geometric Designs
b. Geometric Designs Made Within Square Form

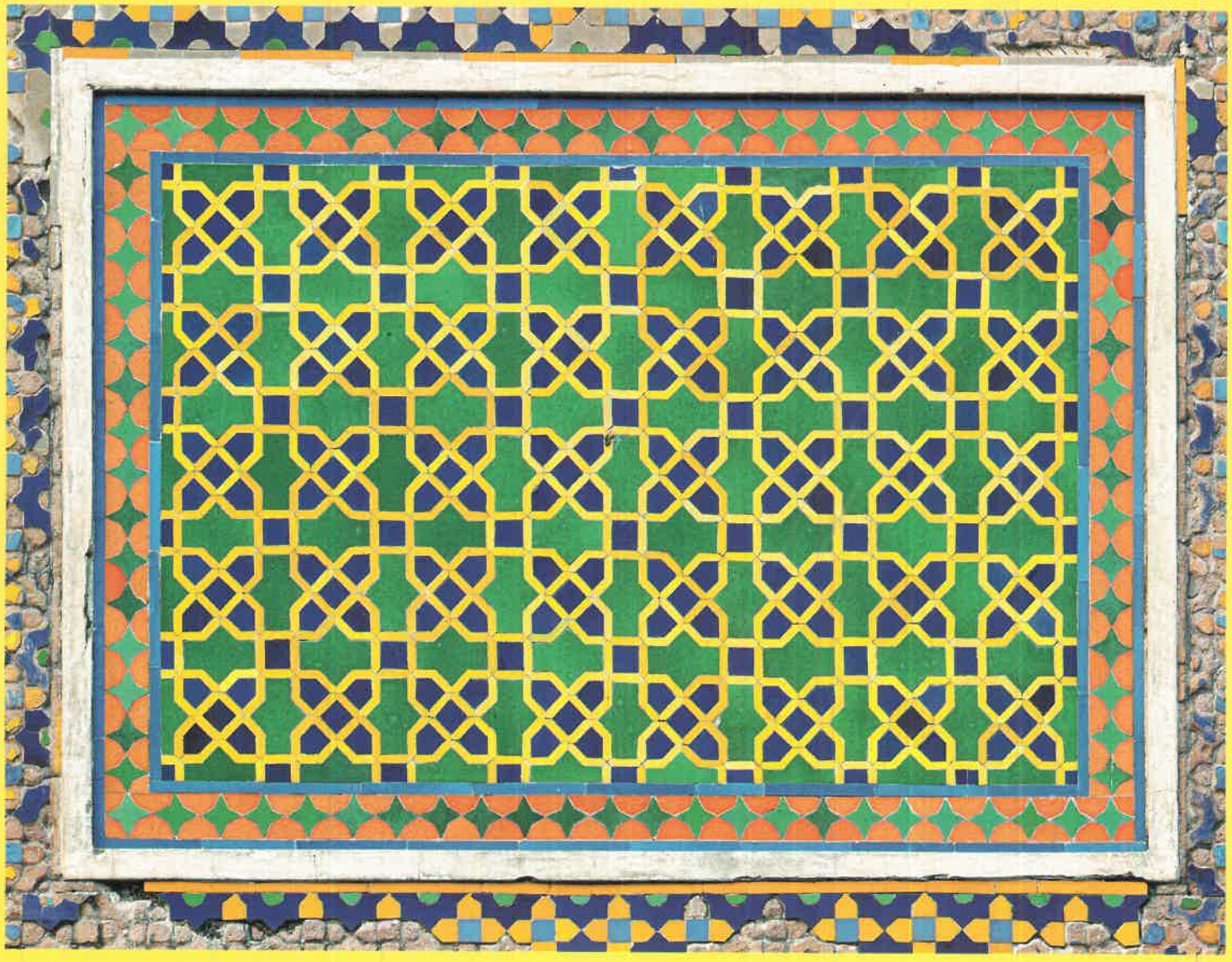


Fig. 1

Geometric Designs

In Islamic Arts, mathematics and geometry played a vital role and we can see the application in architecture and many other artistic expressions. The climax is the Geometric Designs that are found in abundance in the arts produced by the Muslim Dynasties. Interestingly, the starting point of most of these line-based designs is the circle that can be developed into triangle, square, stars of different types, hexagon, pentagon and many more shapes. These shapes are repeated further to create patterns that cover the surfaces meant to be embellished. The main tools used are ruler and compass to create regular grids, consisting of one type of Polygon, which is tessellated together without leaving any gap. This basic formula can create the simplest or the most intricate geometric design.[1] Different in appearance, all these designs have commonalities such as proportion, harmony, symmetry, rhythm, balance and of course repetition that gives an illusion of infinity, which is the attribute, accredited to the God Almighty.

Geometric designs on the Picture Wall (Fig. 2,3) offer a great variety that includes designs as simple as Zigzag and going up to the most complex panels consisting of many advance geometrical shapes such as *Char Murabbaii Girah* (four squared knot), *Hasht Kabutri* (eight pigeoned), *Girah Shashtej* (six knotted), *Girah Shash Pahlu* (six

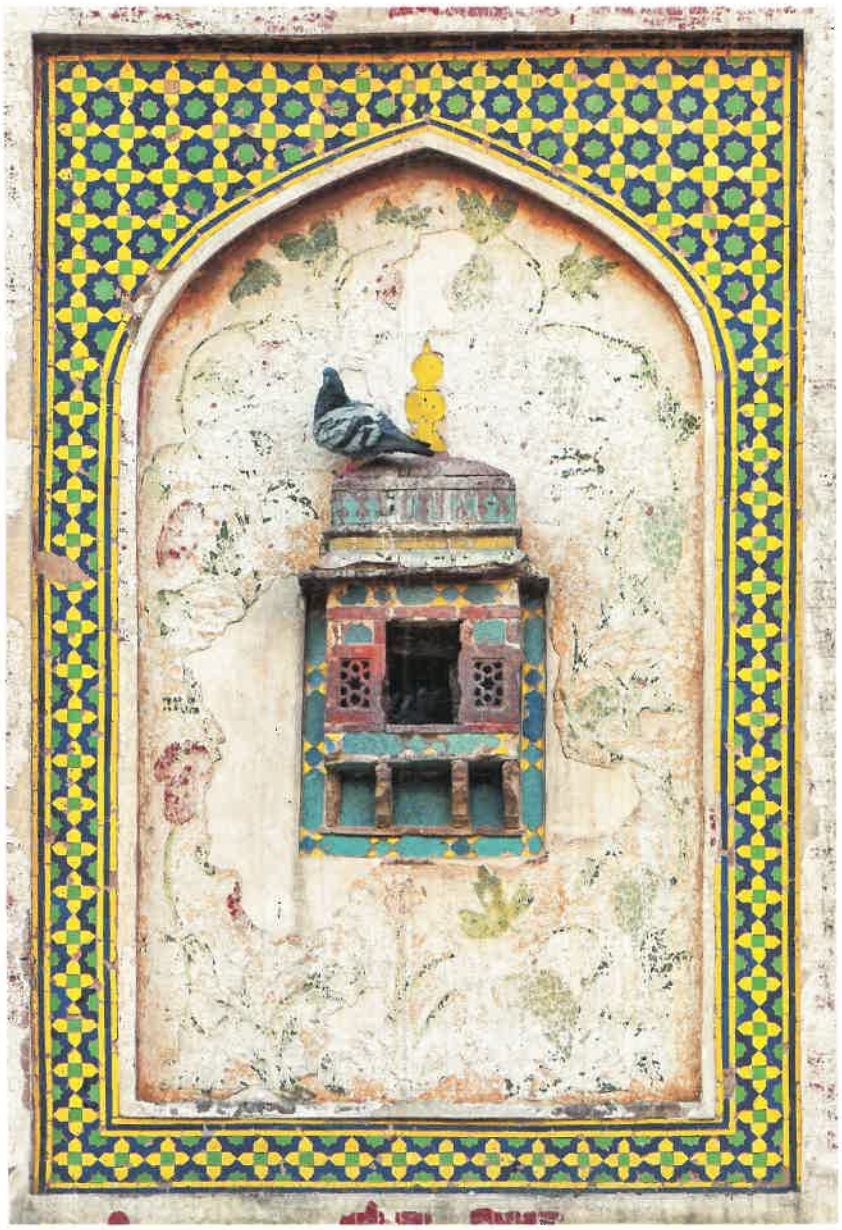


Fig. 2



Fig. 3

knotted corner), *Girah Shash Tara* (six starred knot), *Girah Shash Tota* (six parrot style knot), *Girah Duazdah* (twelve knotted), *Girah Ghan Chakkar* (intricate knot)[2] etc. Most of the designs on the Wall are based on *Girah Hazar Gull* (thousand flowered knot), *Hasht Penchak* (eight quintet), *Char Murabbaii* (four squared), *Ganesh Tund* (tusk of Ganesh) and *Char Goshia* (four cornered).[3] (Fig. 4-11)

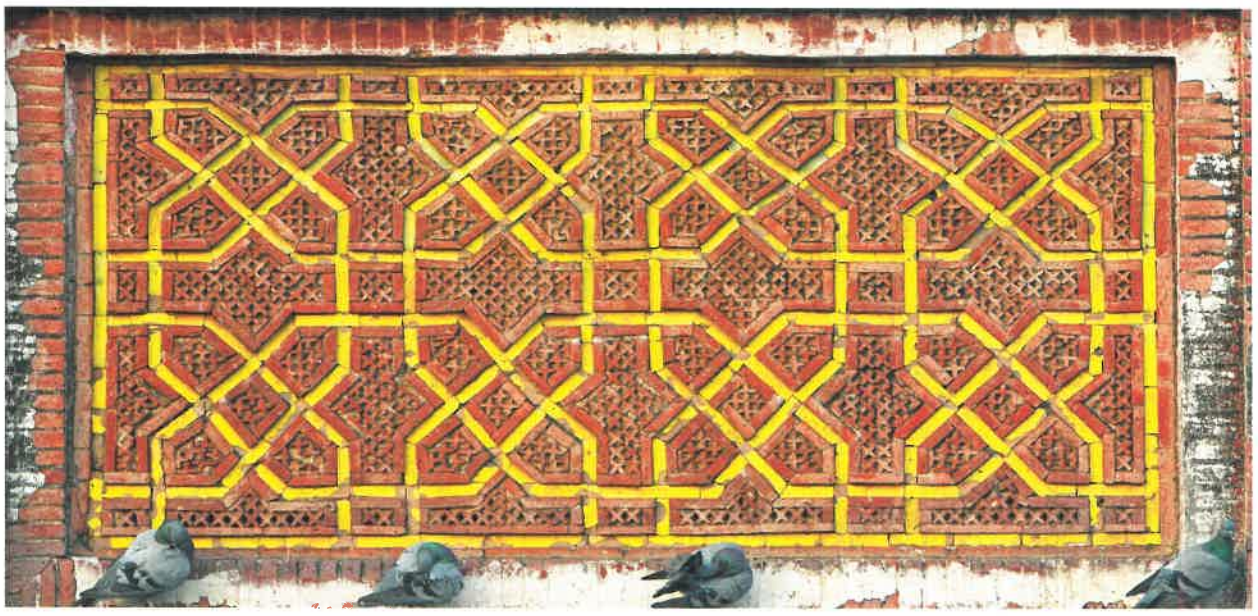


Fig. 4



Fig. 5

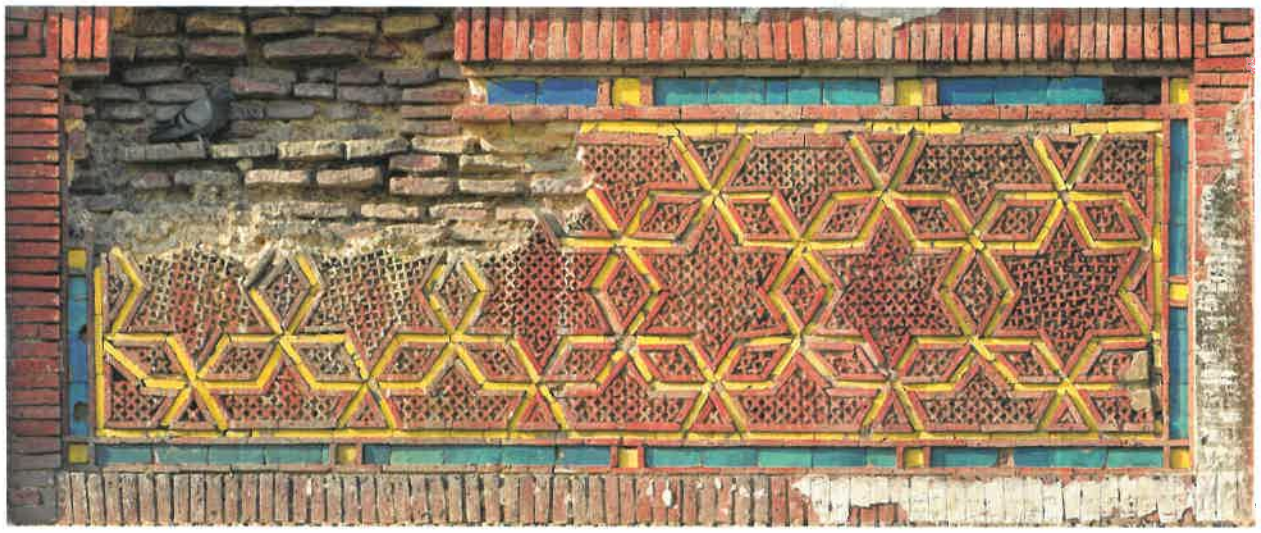


Fig. 6



Fig. 7



Fig. 8

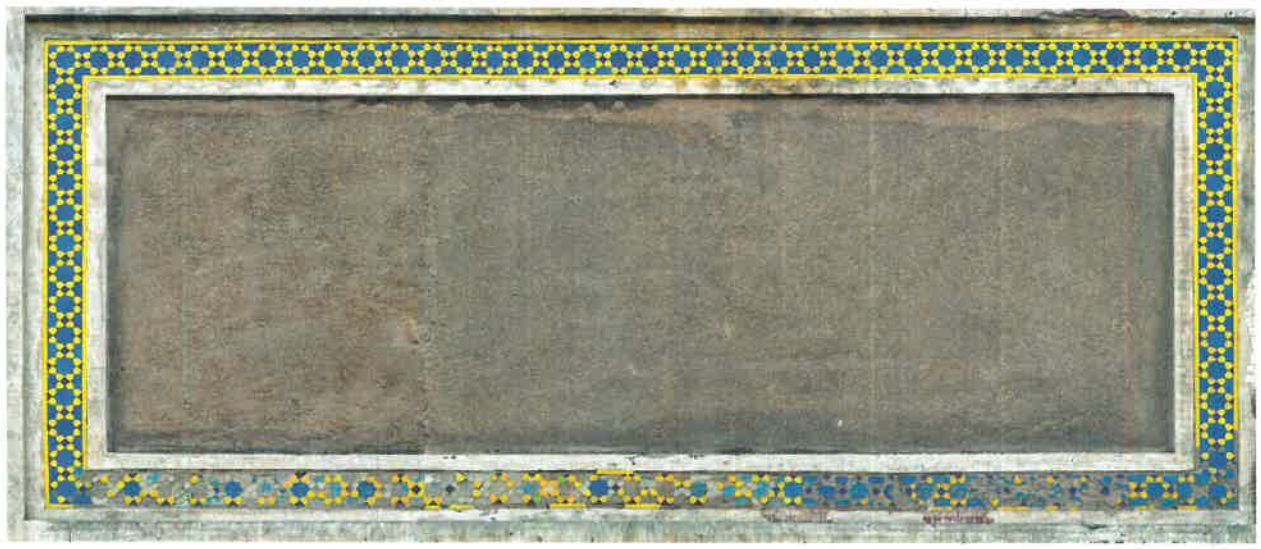


Fig. 9



Fig. 10

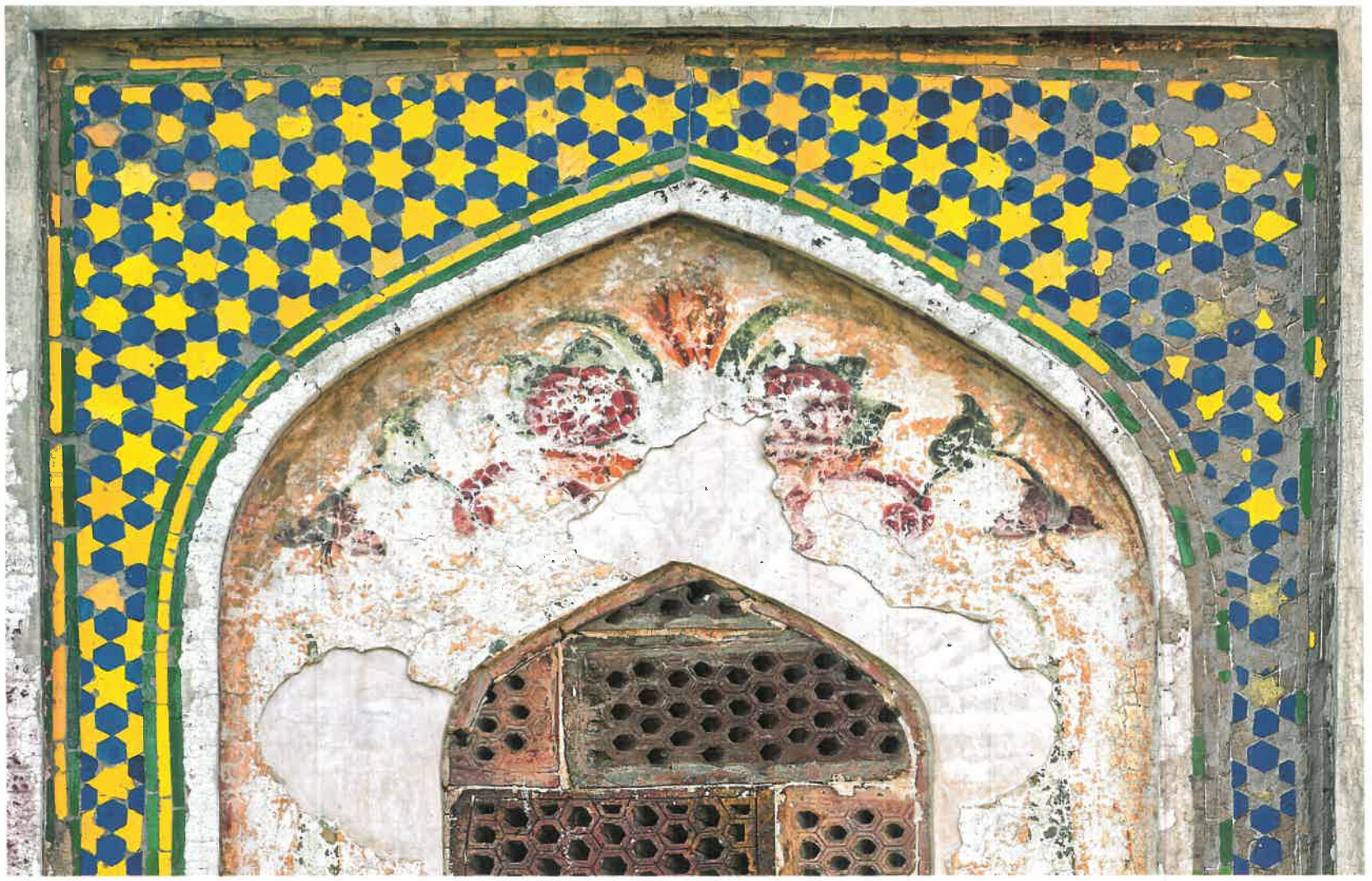


Fig. 11

Geometric Designs Made Within Square Form

Lines, when put together in a specific formation, are converted into designs that are usually meant to embellish any surface but sometime they are used as symbols to convey a message. This practice was very common in previous centuries when designs were created that became symbols. This was a language that was understood by many in the past but very few can apprehend it at present. These symbols were to convert intangible into tangible. The abstract thoughts and ideas portrayed on surfaces, were very much understandable by those who were familiar with the vocabulary of line, shape and form. Artists often refer to the 'Outside' story, which they provide for humanity in general, while the artistic expression retains an 'Inside' story accessible only to those who has the expertise to interpret the symbols. These symbols and signs are presented through designs and motifs.

This method of communication was found in nature. Humans knew the significance of surface designs. They were not treated as meaningless combination of lines just for the sake of aesthetics and beauty. People used these designs to transfer their concepts of revelation, knowledge and information. Till date, symbols are a source of non-verbal communication. Artists have been applying them on every kind of surface and their

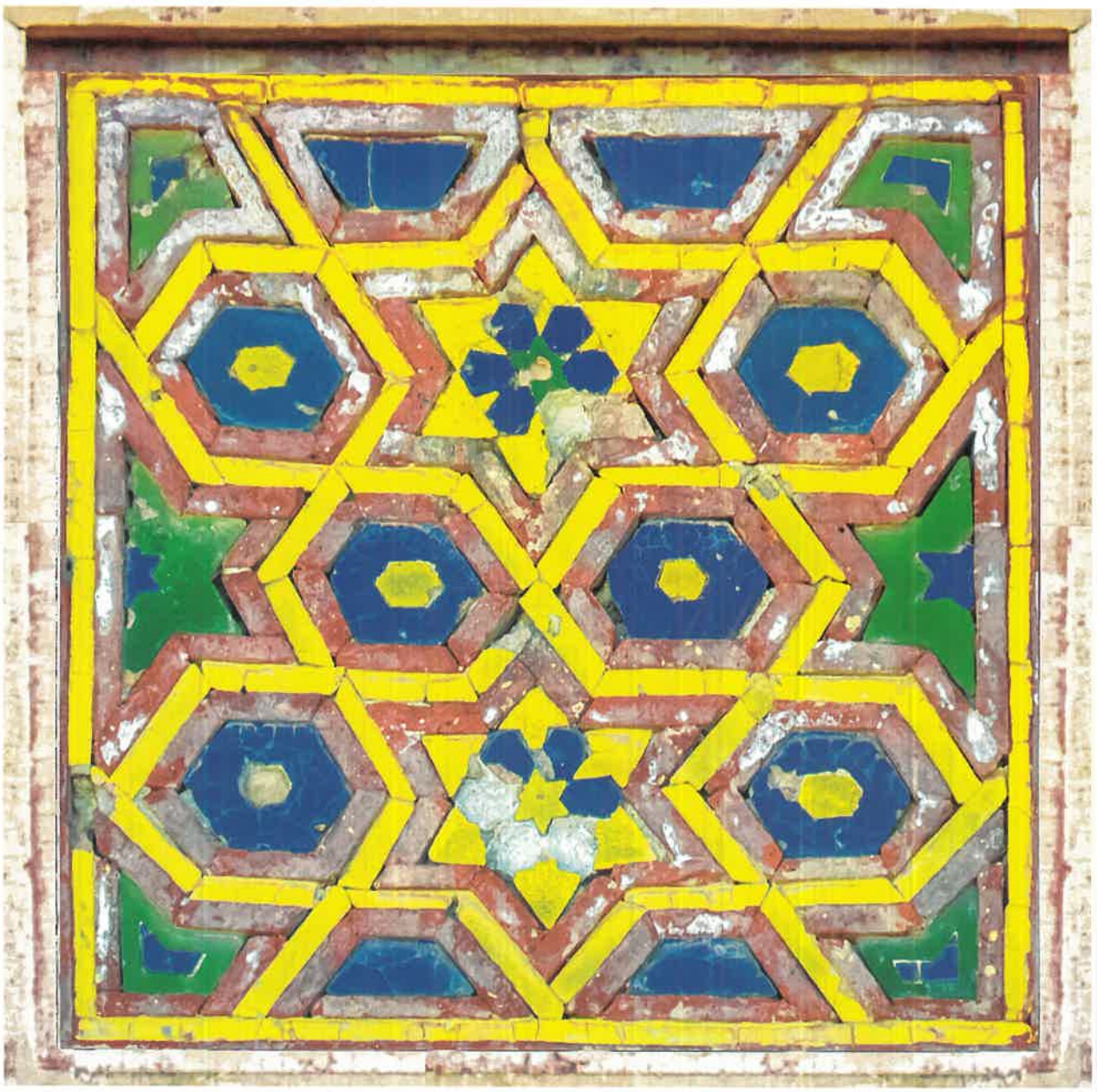


Fig. 12

popularity has never diminished but the kind of significance these designs were given in Islamic Arts is phenomenal. Although, figurative depictions were not formally forbidden but there was an overall discouraging attitude towards the delineation of animals and human forms. This resulted in a limited scope for those arts that were based on figures. But the artists, working under Muslim Dynasties, took it as a challenge and produced masterpieces without figurative forms by creating imagery with the help of simple lines but the expertise of the masters took those simple designs to such heights that they became the wheels of emotion and expressions for the portrayal of abstract thoughts.

Apart from being depicted on different architectural structures of the Wall, there is a series of Geometric patterns made within squares on the Northern side. (Fig. 12-15) They are identical in size i.e. two by two feet but they carry different patterns. In most of the previous publications, no importance was given to them but a detailed study reveals that they contain a symbolism far more complex than their surface beauty. These motifs have great similarity to the designs created through Cymatics.



Fig. 13

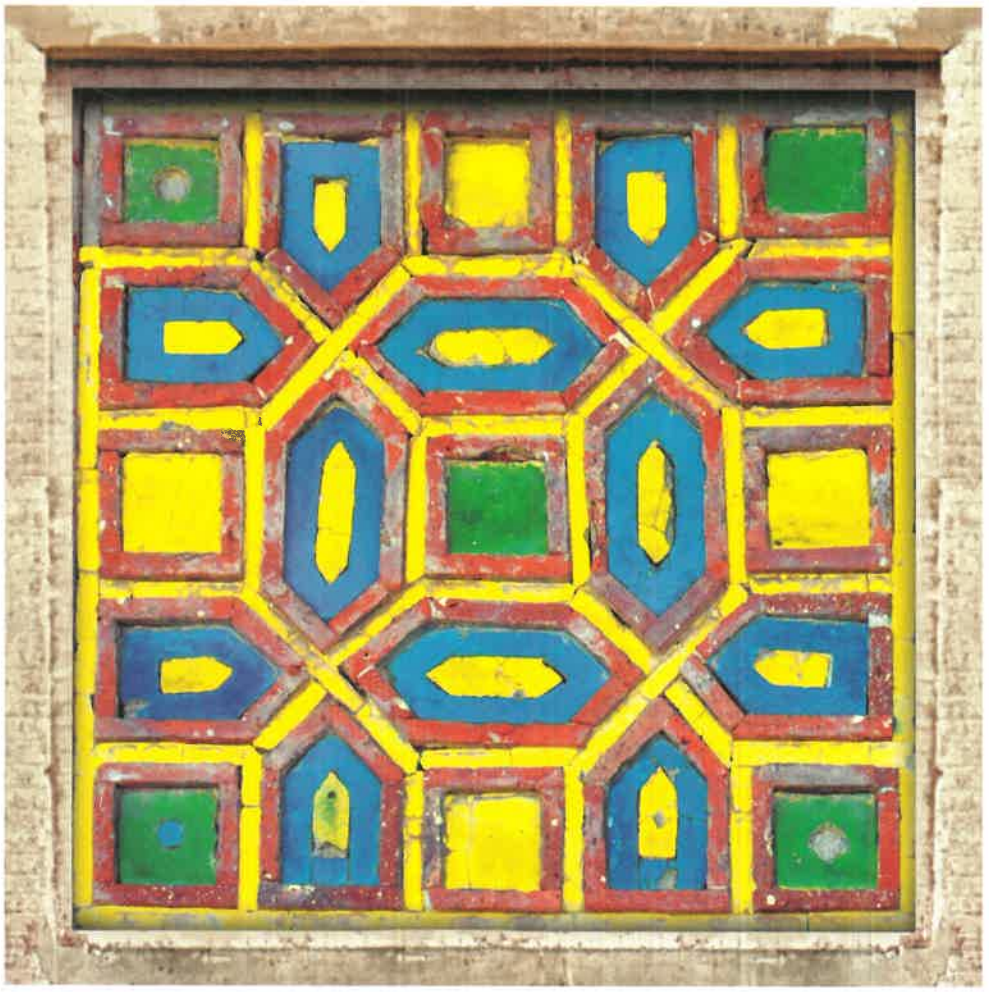


Fig. 14

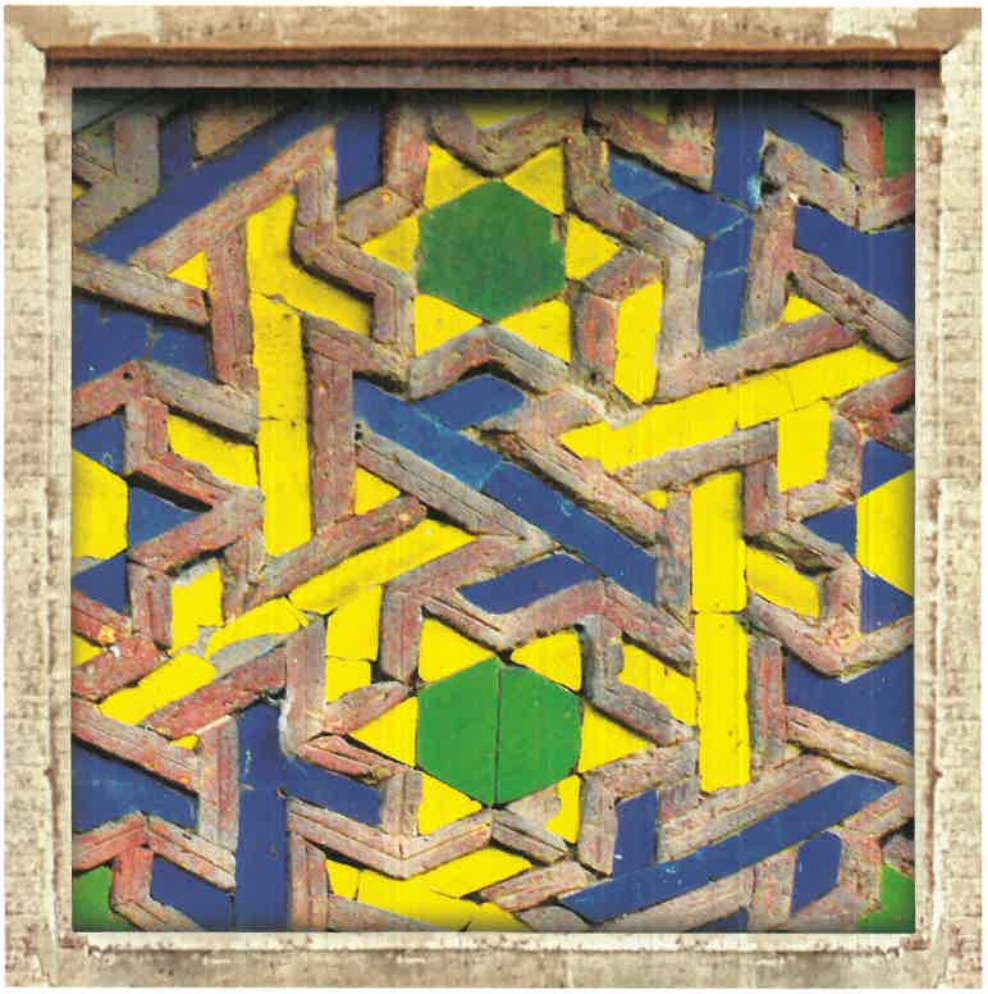


Fig. 15

Relationship of Cymatics and the Geometry Based Patterns of the Picture Wall

Cymatics is a lesser known expression that is associated to the arts. The word is derived from a Greek word '*kuma*' meaning 'billow' or 'wave' to describe the periodic effects that sound and vibration have on matter.[4] It is the study of wave phenomena, especially sound waves and their visual representations,[5] which is a reaction of sound to matter. Cymatics are of two types;

1. Effect of Sound on Matter (sand, flour, powder or any other finely grinded material)
2. Effect of Sound on Water

A taut surface such as diaphragm or a membrane is covered with very fine sand particles or any matter in dust form. A frequency of sound or rhythm is played nearby. The particles react to that sound and form different patterns on the surface, depending on the frequency and beat of the music piece or musical instrument. The matter particles can be replaced with water and patterns can also be created on it with sounds and music frequencies. These patterns vary when the frequency is changed. Designs altar drastically if the base is even slightly altered. The method is used to visualize a sound by vibrating the medium. As the frequency is increased, so does the complexities of the pattern. This proves that sound does have a form that can affect matter and create slopes within matter.[6]

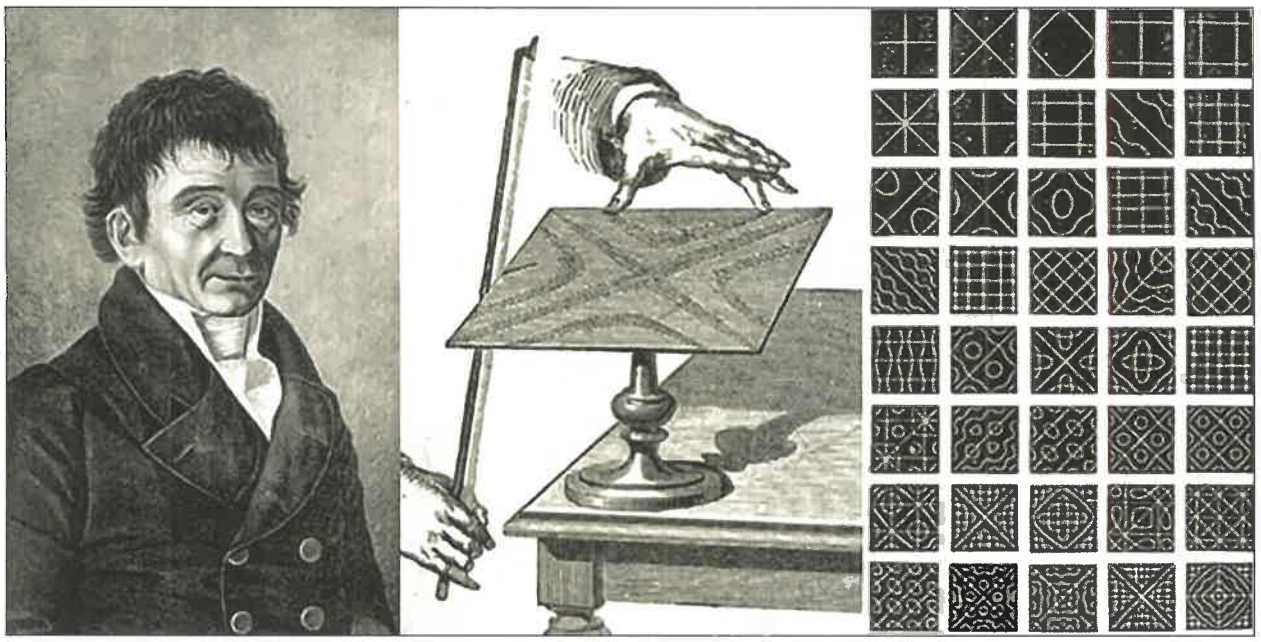


Fig. 16 *Image Source https://www.delamora.life/cymatics*

According to the available sources, "One of the earliest to record that an oscillating body displayed regular patterns, was Galileo Galilei who wrote about it in 1632."[7] In 1680, Robert Hooke, an English scientist, architect and polymath, was the first European to see the nodal patterns associated with the modes of vibration of glass plates as he ran a bow along the edge of that glass plate, covered with flour, and saw the nodal patterns emerge.[8] (Fig. 16) These patterns have a great similarity with the geometric designs that were used in Muslim art long before the 17th century. In fact, 'Many of the Cymatics' shapes remind us of the Indian *Mandalas* (Fig.17) spiritual and/or ritual geometric configuration of symbols typical of Hinduism, Buddhism, Jainism or Shintoism that were re-introduced in the West by a Swiss psychoanalyst Carl Gustav Jung (1875-1961).[9] This evidence leads us to believe that the people of the Subcontinent were familiar with the concept

long before the Europeans. Even if we do consider that all these findings were made in the 17th century, the time period coincides with the construction and embellishment of the Picture Wall. Series of geometric patterns created within a specific shape is evidence that all these designs were inter connected and they were created intentionally. Patterns used on the Picture Wall have an uncanny similarity with Cymatics. (Fig.18)

Most likely, these patterns are a portrayel of the sounds that were created by Mughal Period musical instruments and frequencies produced through different methods. Another fascinating phenomenon associated to these designs was revealed in an interview by Dr. Nazir Ahmad (a renowned scholar and professor of Lahore) that the singers would go for *Riaz* (systematic practice of music), under the Wall of Lahore Fort. Referring to the years 1915-17 and 1920, he elaborated that this was the location used by the singers and musicians for practicing *Yak Sadai* (arias singing). He mentions *Bare* Ghulam Ali Khan, Barkat Ali Khan, Feroze Nizami and Siraj Nizami who practiced this. These were the renowned singers and musicians of the Subcontinent and to test their voice quality, they would stand two, three or four hundred yards away from the Fort Wall and *Taan Lagatay* (do the arias singing). Then they would assess the quality of their voice when it echoed back to know if their *Sur* (note, feeling of pitch match) is *Shudh* (pure),[10] a method that was used to improve the voice quality. This statement indicates the relationship that the Wall had with sound and music. Further research and study from this perspective may lead us to those realms of Mughal arts that are unknown to us till date.

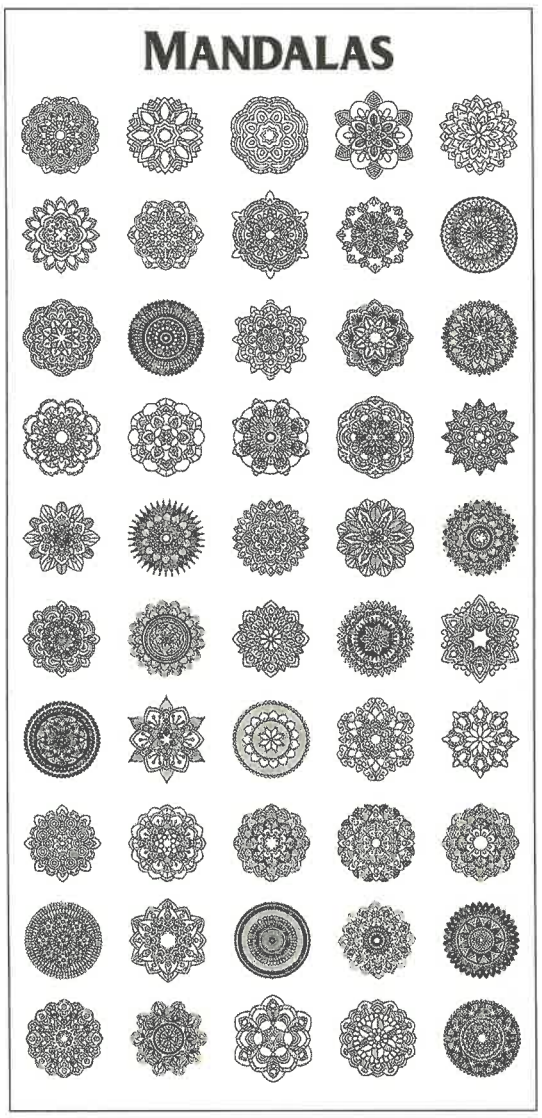


Fig. 17 *Image Source*
https://theteknologist.wordpress.com

On the basis of these Picture Wall designs in square an experiment was conducted with the help of music experts.[11] It was an attempt to convert these deigns back to music and the success of the experiment strengthed this theory that if music waves can create the pattern then those patterns, recreated on any surface can be reverted back to music. This is a revolutionary concept and if applied to the



Fig.18

buildings of the world, that have Cymatics designs on them, it can be fairly assumed that these are not just the building surfaces but different forms of musical notes, based on the notes of various musical instruments, portrayed on buildings. By converting them back to music, we can make the buildings sing.

Some scholars have connected these sound-based patterns to the hemispherical beings. Patterns were created based on the sounds/frequencies received from the planets, (Fig. 19) From another perspective, 'Many believe in the healing power of vibration,[12] considering that our body is 65 to 70 percent water. Since the body directly influences the mind, by changing the body, we change the mind the same way sound waves change water and sand.[13] This concept may explain the excessive use of geometric designs applied on the walls, ceilings, domes, minarets and rooms of the Muslim constructions. (Fig. 20) There is a possibility that the patterns, used for the embellishment of the surfaces, were meant to calm and heal the body and soul. Cymatics experiments have documented the ever-changing forms and designs that also reflect the principles of sacred geometry.[14] (Fig. 21,22)

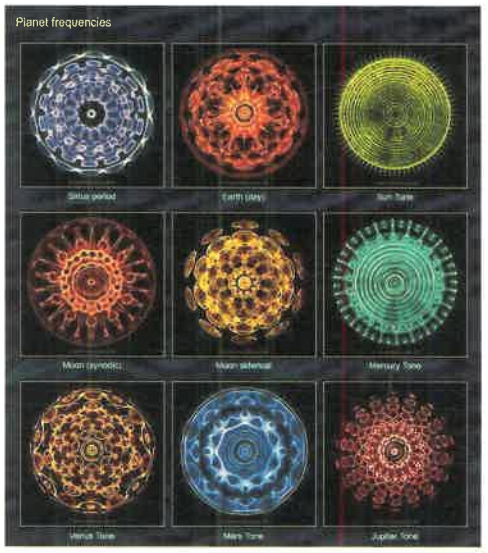


Fig. 19 *Image Source*
https://theteknologist.wordpress.com

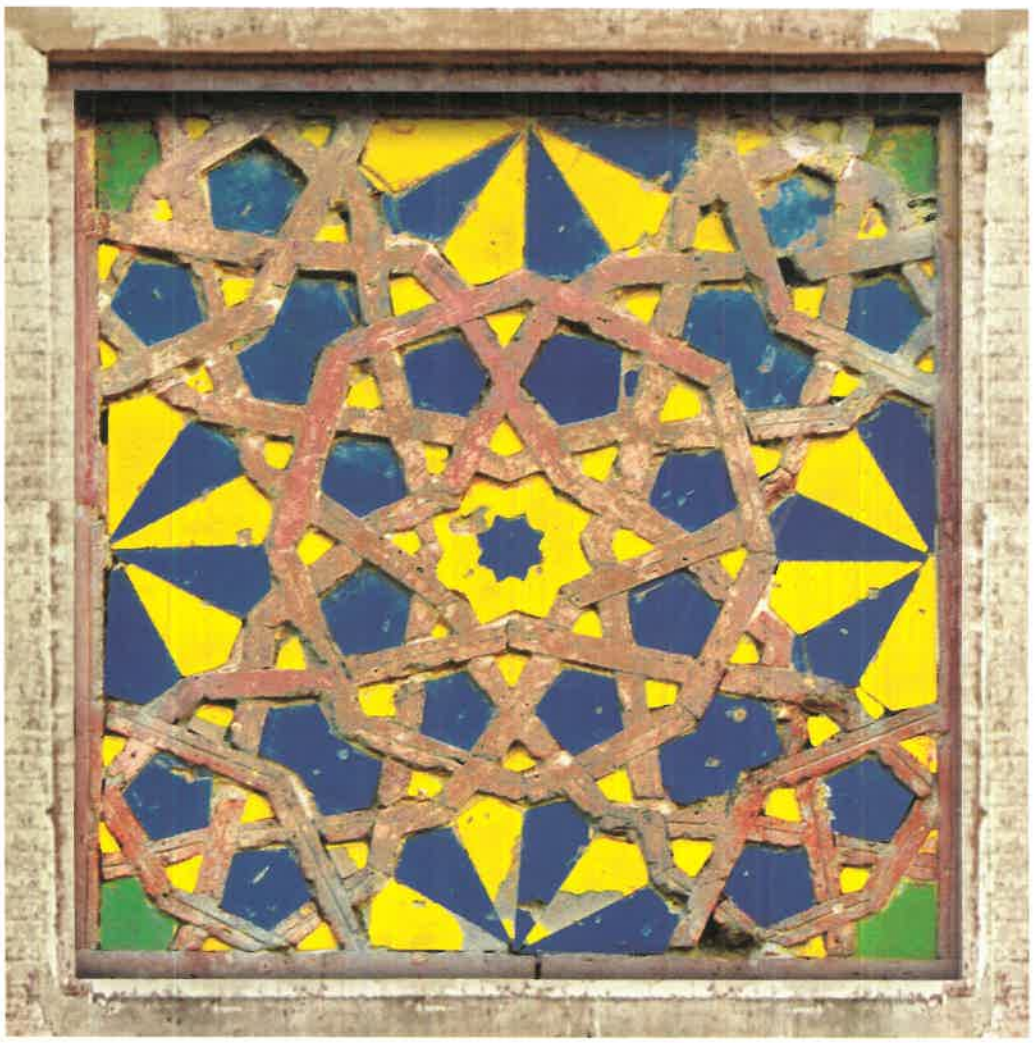


Fig.20

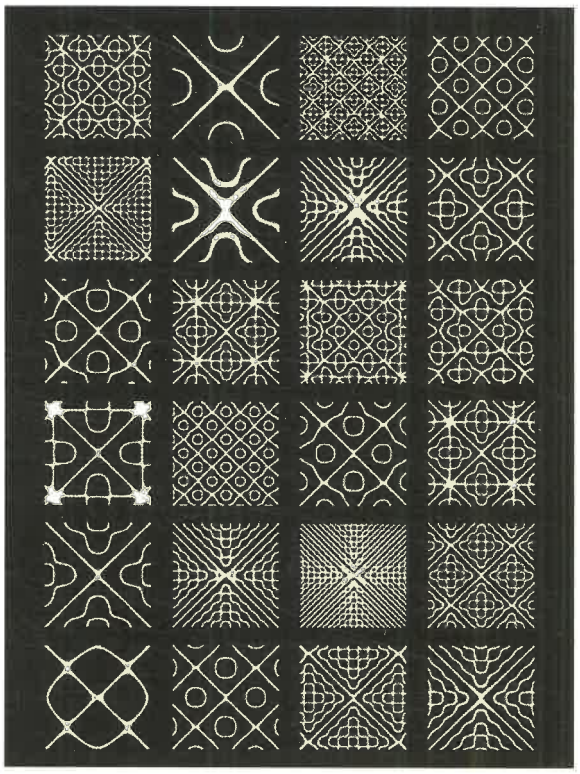


Fig. 21 *Image Source https://d2w9rnfcy7mm78.cloudfront.net/21041740/original_bee87c7ce14024ecb20a8ae14fe711bb.jpg?1679609148?bc=0*

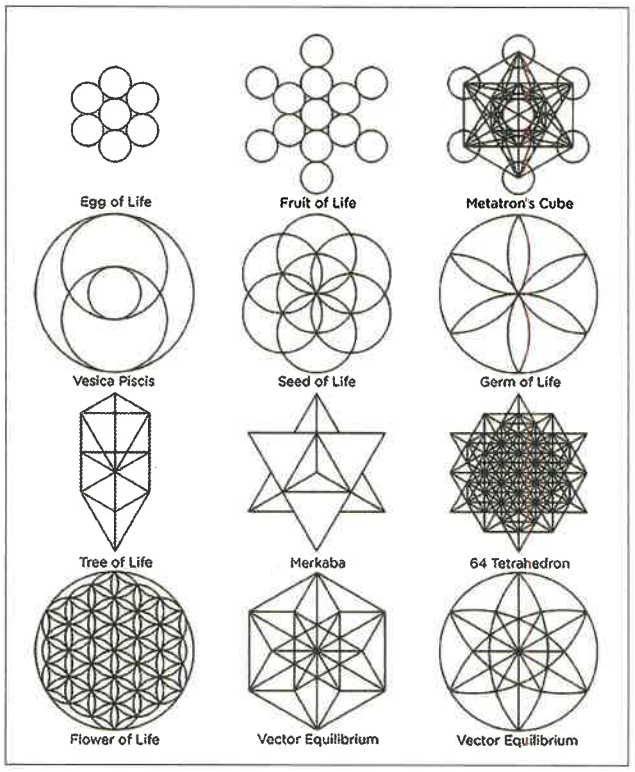


Fig. 22 *Image Source https://www.istockphoto.com*

Let the Wall Sing

Looking at the Picture Wall from this perspective has changed the whole concept of treating the designs as a mere mean for surface decoration to satisfy the aesthetics. This leads us to believe that the motifs and images drawn, frescoed, painted, sculpted or mosaiced are much more than just embellishments. These artistic expressions were used to describe the planets and the stars. Sound waves coming from Space have been deciphered in Cymatics that resemble not only the forms within the Universe and Galaxies but the structural design of atoms, water drops, snow-flakes, flowers, Mandalas and even shapes of energies released from different sources. It can all be portrayed through Cymatics. The unwavering sound of OM that, according to Hindu belief, engulfs the whole universe, can be personified through this process. They all have the commonality of rhythm and balance, initially created through sound either on matter or water. The particles' and water waves' decision, to move to a particular group or in a specific shape, is based on the intensity of sound that determines their decision to cluster at a particular spot in a defined angle, a decision made because sound dictated them. These shapes and motifs were converted into two dimensional designs and applied on the surfaces.

Churches, mosques, palaces, public houses all contain Cymatics and if we convert these designs back into sounds then all the buildings would be converted into musical notes. So, it is not the design on the wall, dome or minaret but it is the music. This rule is applied to the Picture Wall as well. Sounds, melodies and symphonies created by the musical instruments of that era, were portrayed on the Wall and a reverse process can make the Picture Wall ripple with the tunes, tunes that could heal the body, sooth the soul and provide *Ananda* to humans that was a single quest associated to the hominids, to do nothing but try to find peace of mind. By converting those square shaped geometric designs of the Picture Wall, maybe we can get a glimpse of the music or the sounds of the singers, created during Akbar, Jahangir and Shah Jahan's era.

The relationship of Picture Wall geometric motifs with the Cymatics is discernable. (Fig. 23-35) The depiction of such motifs can be an outcome of either the older traditions of India with reference to *Mandalas* or this can be a direct influence of 17th century European discovery that might have been very exciting in those times. Nobody can deny the connections that the Mughals had with different countries and cultures especially with the nations of Europe. Repeated use of iconographies associated to

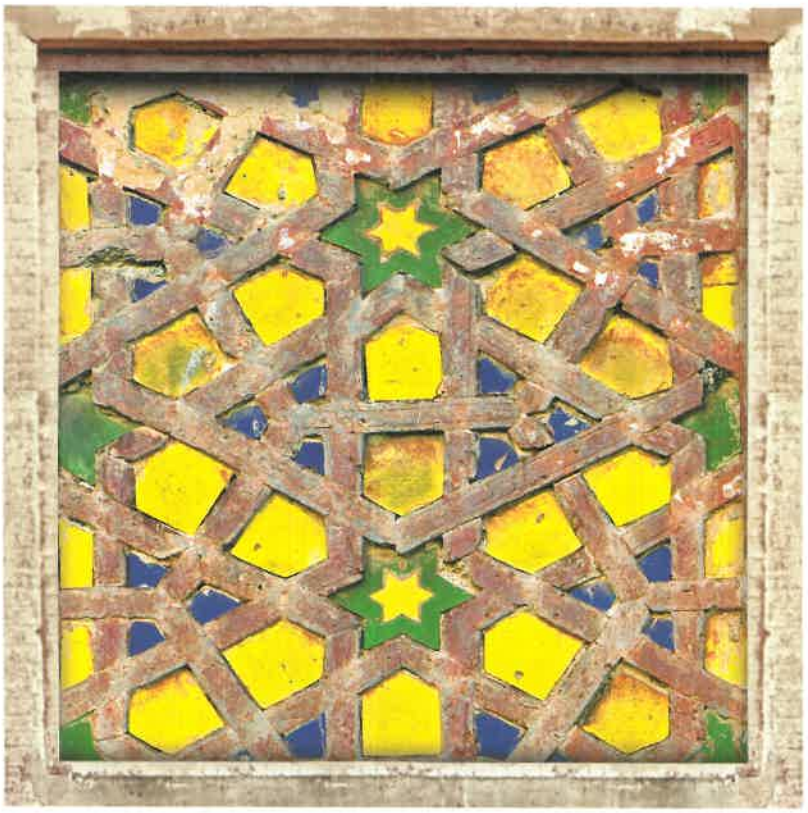


Fig. 23



Fig. 24



Fig. 25



Fig. 26

the European theologies cannot be a coincidence but it was a conscious effort to integrate foreign concepts in local artistic expressions as monumental as the Picture Wall, is a testimony to not only the open mindedness and acceptance of foreign ideas by the Mughals but it also testifies to the high aesthetic sense that is laced with logic, reason and prevailing philosophies along with respect and acceptance for the latest scientific discoveries.



Fig. 27



Fig. 28

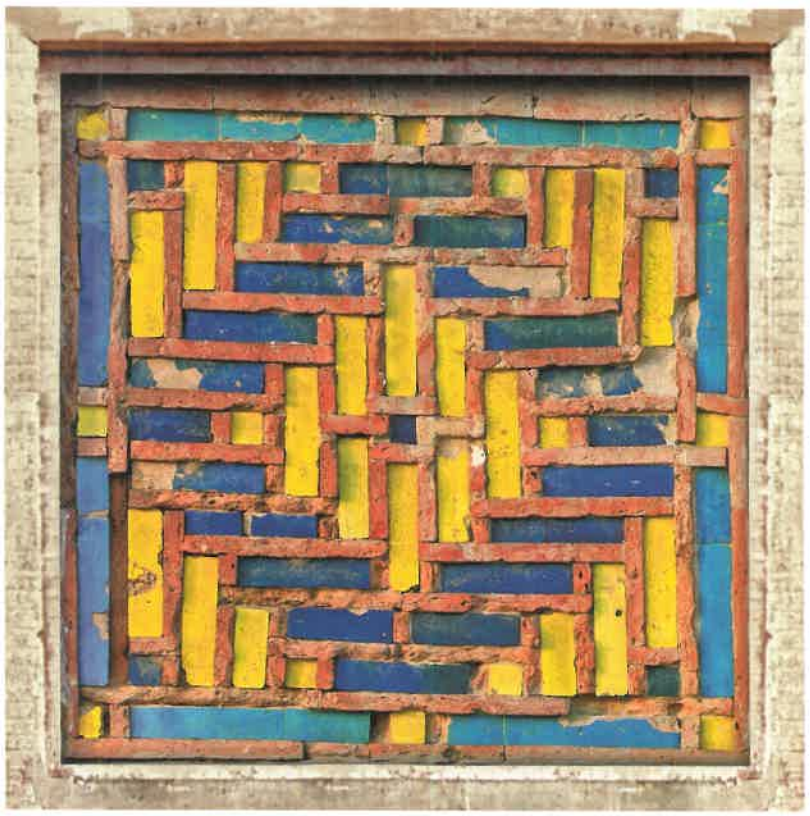


Fig. 29



Fig. 30



Fig. 31

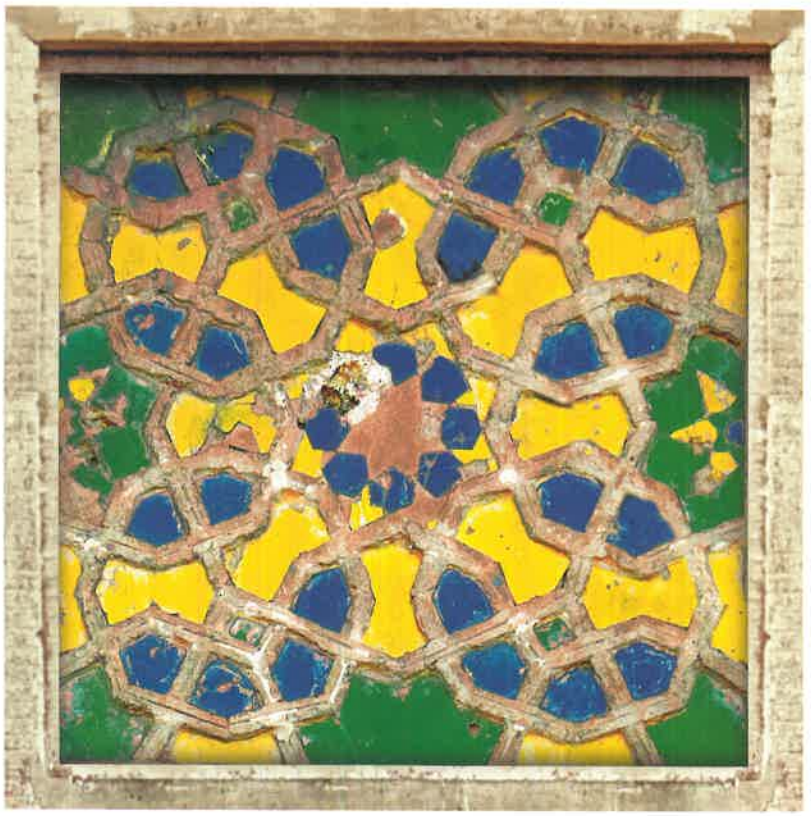


Fig. 33

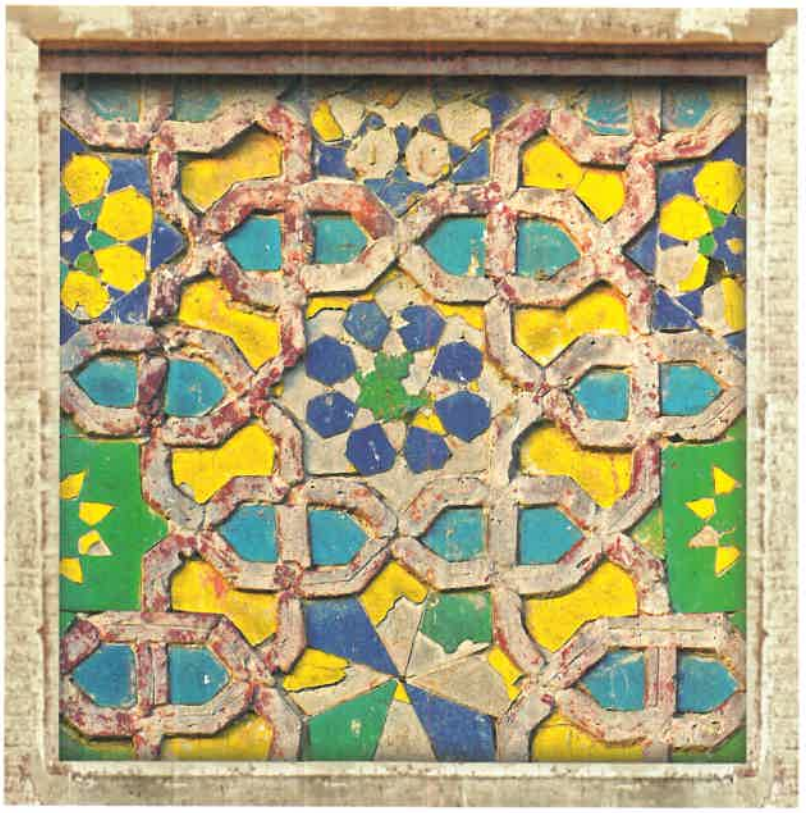


Fig. 32

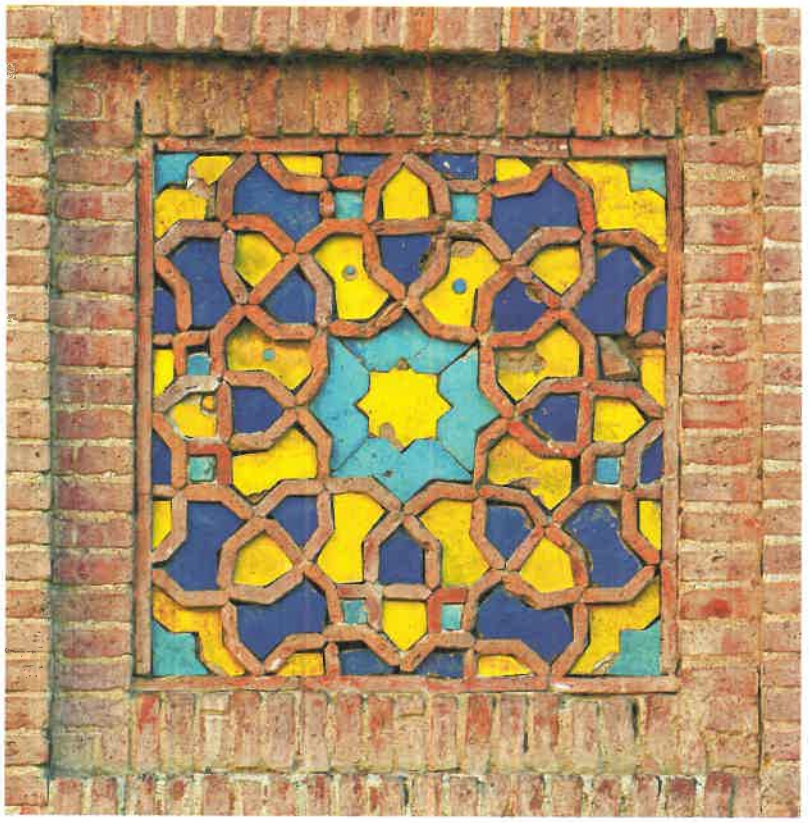


Fig. 34



Fig. 35

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11. I am grateful to my PhD student Usman Rana, Assistant Professor at Music Department in Beaconhouse National University, Lahore, for converting the design to sound by employing the Cymatics technique.
12. For further details https://www.gaia.com/article/cymatics-provides-explanation-for-the-benefits-of-mantra
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14. https://reverievibrationalrising.com/f/cymatics-frequency-and-the-sacred-geometry-of-sound



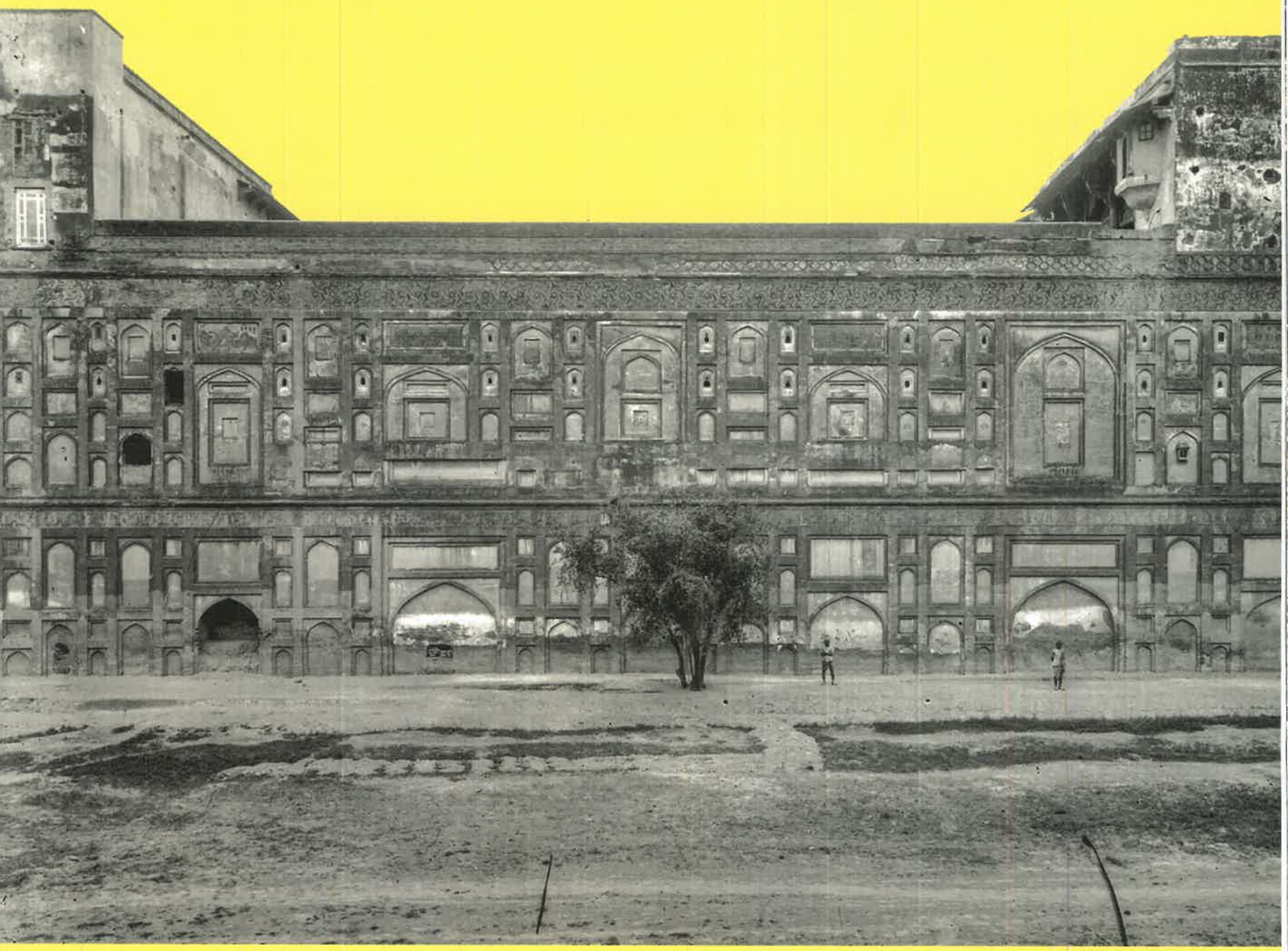
PICTURE WALL OVER THE CENTURIES





This gem of the past faced a lot in previous centuries. Negligence and attacks of different forces on the Fort were the factors that damaged it intensely. Mughals after 17th century were not able to handle the Empire the way it was taken care of by their ancestors. Maharaja Ranjit Singh was the first stable ruler after the anarchy of many decades but he added structures on top of the *Sheesh Mahal* that increased the pressure on the original construction. After the death of the Maharaja, Punjab faced many wars of successions. Worst came in January 1841 when the Fort was bombarded heavily by the arms of Sher Singh who was struggling to take control of Lahore *Darbar*. Excessive use of cannons and firearms destroyed many parts of the Fort and left bullet marks on the Wall. Due to internal political conflicts and external interferences, the Sikh rule was abolished by the British in 1849 that brought Punjab under the administrative powers of the East India Company.

The British took control of the lands and all the structures within. They made changes according to their whims and desires. Lahore Fort was also part of their newly acquired

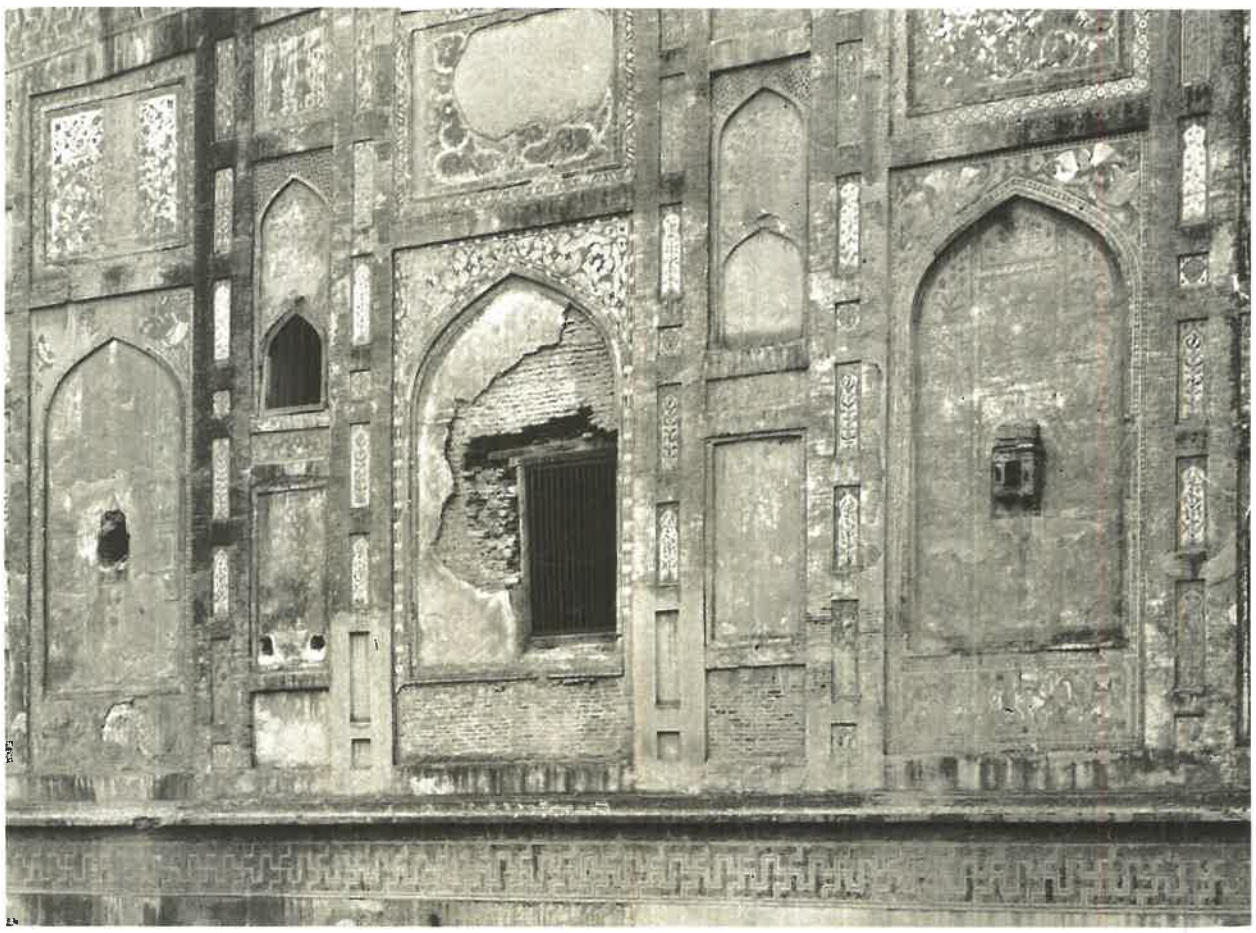


possessions. They constructed many buildings and marred the Picture Wall with an ugly structure without giving heed to the damage that was caused to the art work of the Wall. 'Number of modern structures in the shape of barracks, hospital buildings, kitchens etc. were added in the Fort. A building referred to as the 'Side Arm Store Battery' was constructed in front of the Western façade of Picture Wall in late 19th century that badly damaged the fresco paintings and tile mosaic decorations After the demolishing of these structures, the Wall was never restored to its original look. Some parts were renovated, like the tile mosaic work in spandrels of arches at middle level of Picture Wall, on the left side of *Shah Burj* Gate, was done before 1900. Similarly, in some panels near the openings of the basement, lime plaster was applied, where tile mosaic work was missing.

The missing portion of the tile mosaic work in spandrel of the large arch and top arched panel on the right side of the *Shah Burj* Gate was repaired with *kankar* lime plaster. The decayed lime plaster might have had fresco lining on the soffit of the half dome arch and was also repaired using *kankar* lime plaster. The Filigree work at the base and middle level was badly decayed and missing at places which was restored in simple brick masonry instead of original decorative design before 1900. The openings of the basement (Summer Palace), visible in the Western façade of Picture Wall were blocked by providing wooden windows with iron bars when the basement was used as a store prior to 1900.'[1]

Establishment of Archaeology Department of India

Sir William Jones established Asiatic Society in Calcutta in 1784 to investigate the antiquities scattered all over the Subcontinent. It worked for almost a century and then



Alexander Cunningham, Lord Lawrence and Sir Stafford Northcote were successful in the passing of the act (XX), which vested powers with the government 'to prevent injury and preserve buildings remarkable for their antiquity or for their historical or architectural value'. The Archaeological Survey was revived as a department of the government and Cunningham was appointed as Director General who assumed his charge in February 1871.[2] This gave protection to the monuments that were altered without any consideration to their structural strength or respecting their antiquity or sanctity.

A committee consisting of Army officers was consulted regarding evacuating certain buildings, which the Archaeological Department was anxious to acquire. The committee made some recommendations. One of the recommendation was to demolish the building at the left side of *Hathi Pol* Gate. This was done before 31st March 1911. The environment of the Wall covered with the famous tile mosaic was considerably improved by the dismantling of this building.

Rain water spouts on the Western side of Picture Wall were made of iron. In 1911, the Superintendent Muhammadan and British Monuments Northern Circle ordered to replace the unsightly iron spouts with stone waterspouts of sufficient length to throw the water clear of the Wall. These spouts were laid in late 1911 or 1912.[3]

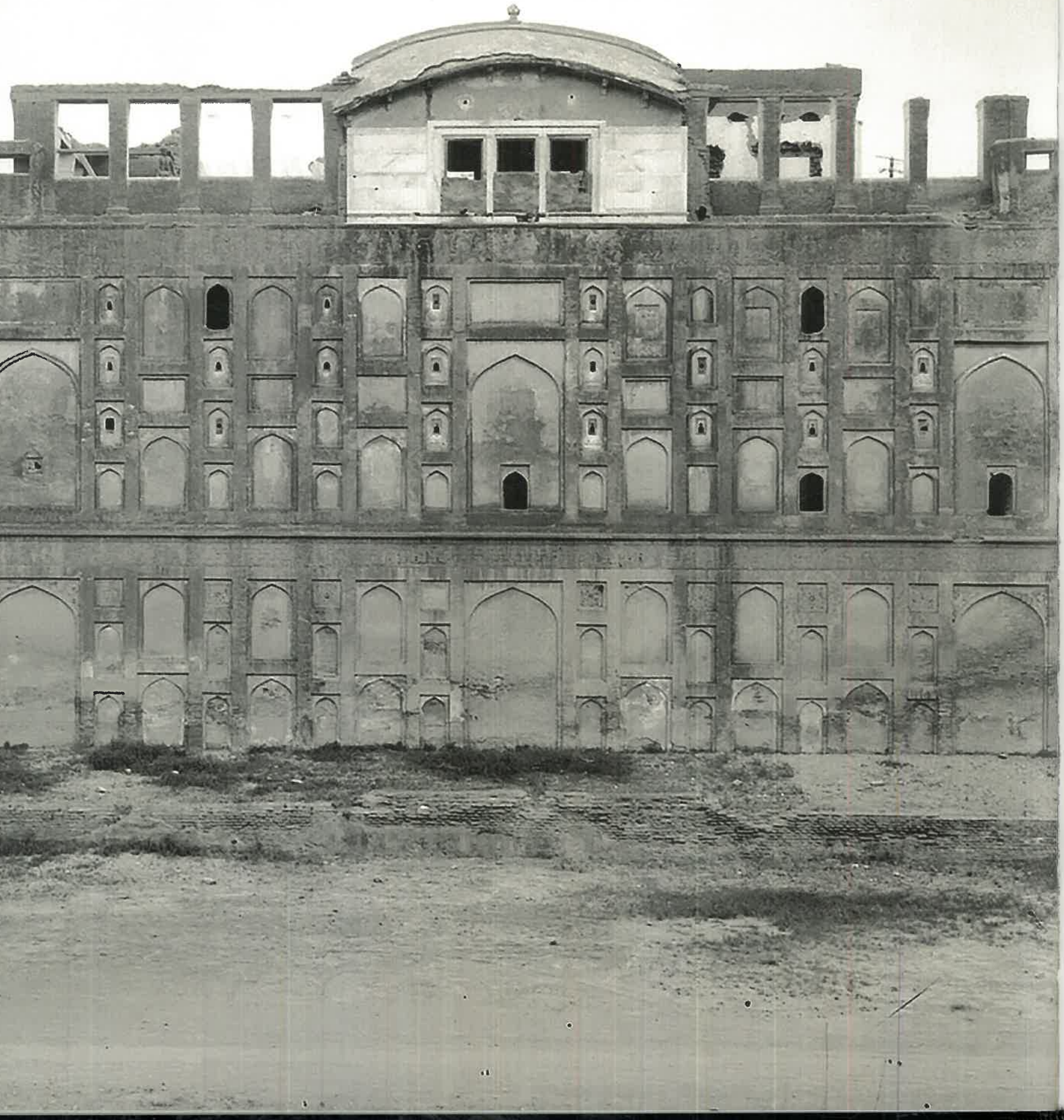
After a lot of deliberation, Lahore Fort was taken over by the Department of Archaeology in 1927. All the modern buildings built during British period, except the custodian's residence, were dismantled, in an attempt to restore the Fort its original layout of the Mughal period.[4]

The efforts of restoration continued after the partition. 'A program of special repairs for Lahore Fort was chalked out in view of the visit of His Imperial Majesty *Shahinshah* of Iran in 1950. The idea was to improve the view of the buildings situated on the proposed route of the Royal visit. The decayed small brick masonry of *Shah Burj* and *Hathi Pol* Gate was restored in cut and dressed brick work. A small portion on the West side Picture Wall was also restored in the same manner.

In later years, the brick masonry about four feet from the ground level was badly affected with salts due to rising damp with capillary action. It was restored in later repairs in the 1960's and was finished with *kankar* lime plaster. The salt affected and decayed cut and dressed brick work of the lower panels on North West side were replaced by new cut and dressed brick work and finished with *kankar* lime plaster. Some missing patches of tile mosaic work were also repaired with *kankar* lime plaster. The central large opening at middle level on North West side of Picture Wall and openings on the sides of the central arched, were blocked with small size brick masonry.

The *kankar* lime plaster was decayed of the West side of the *Dalan* towards the West side of the *Naulakha* pavilion and at the base level of the Picture Wall. This was redone in 1970s.

The basement was used as a Depot of the Civil Defense Department. They made many additions and alterations for this purpose. At long lost the chambers were handed over to the Department of Archaeology in 1973. The openings were closed with brick masonry and wooden windows with iron bars were constructed.

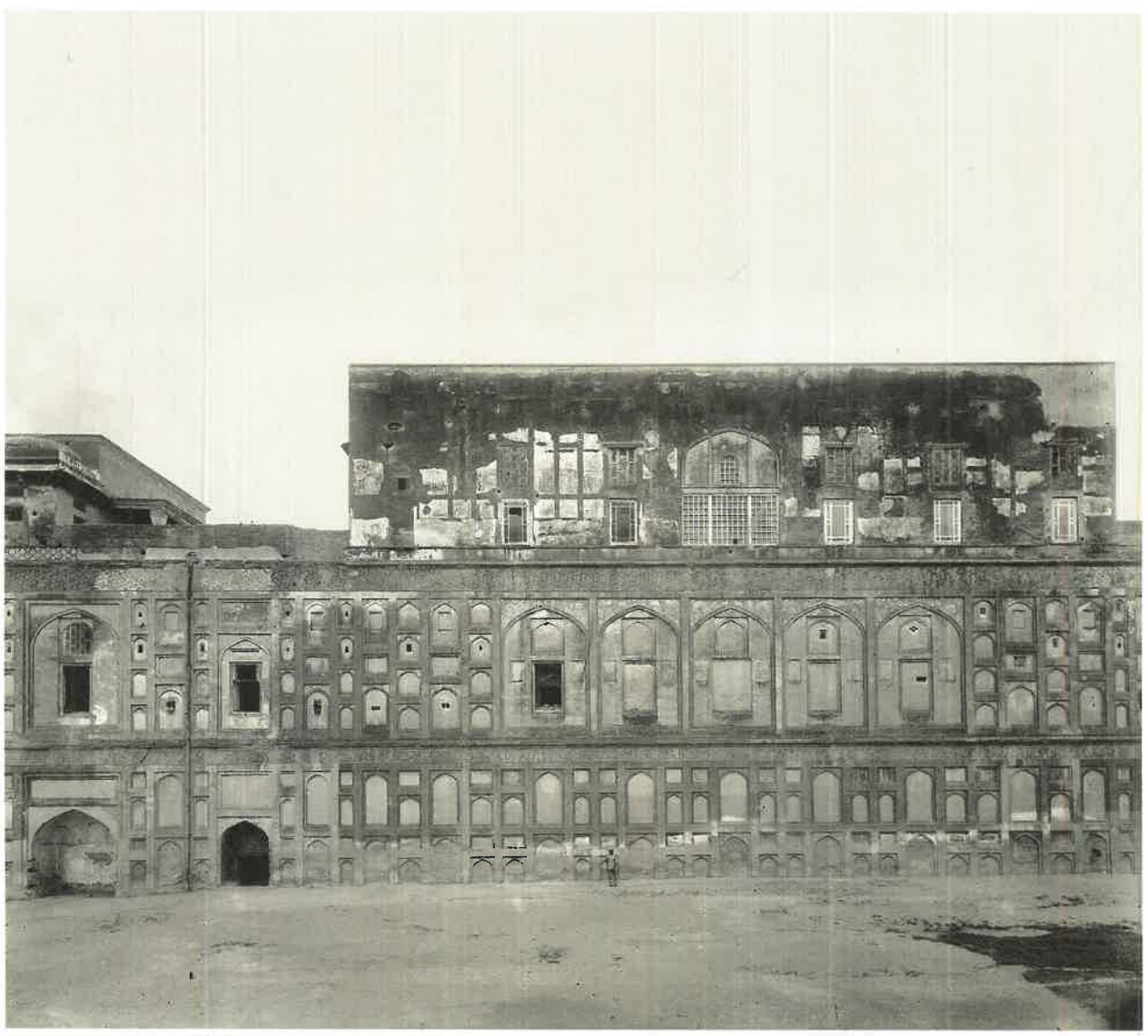


The openings were originally closed with terracotta or red sand stone screens of various geometrical designs. During the unauthorized use of the chamber, however, all the vestiges of these screens were removed. The additions were removed to find traces of brick framing and other original features. The division of the frames were restored in bricks while one arched opening was filled with terracotta *Jali* (fret work) as an experiment.

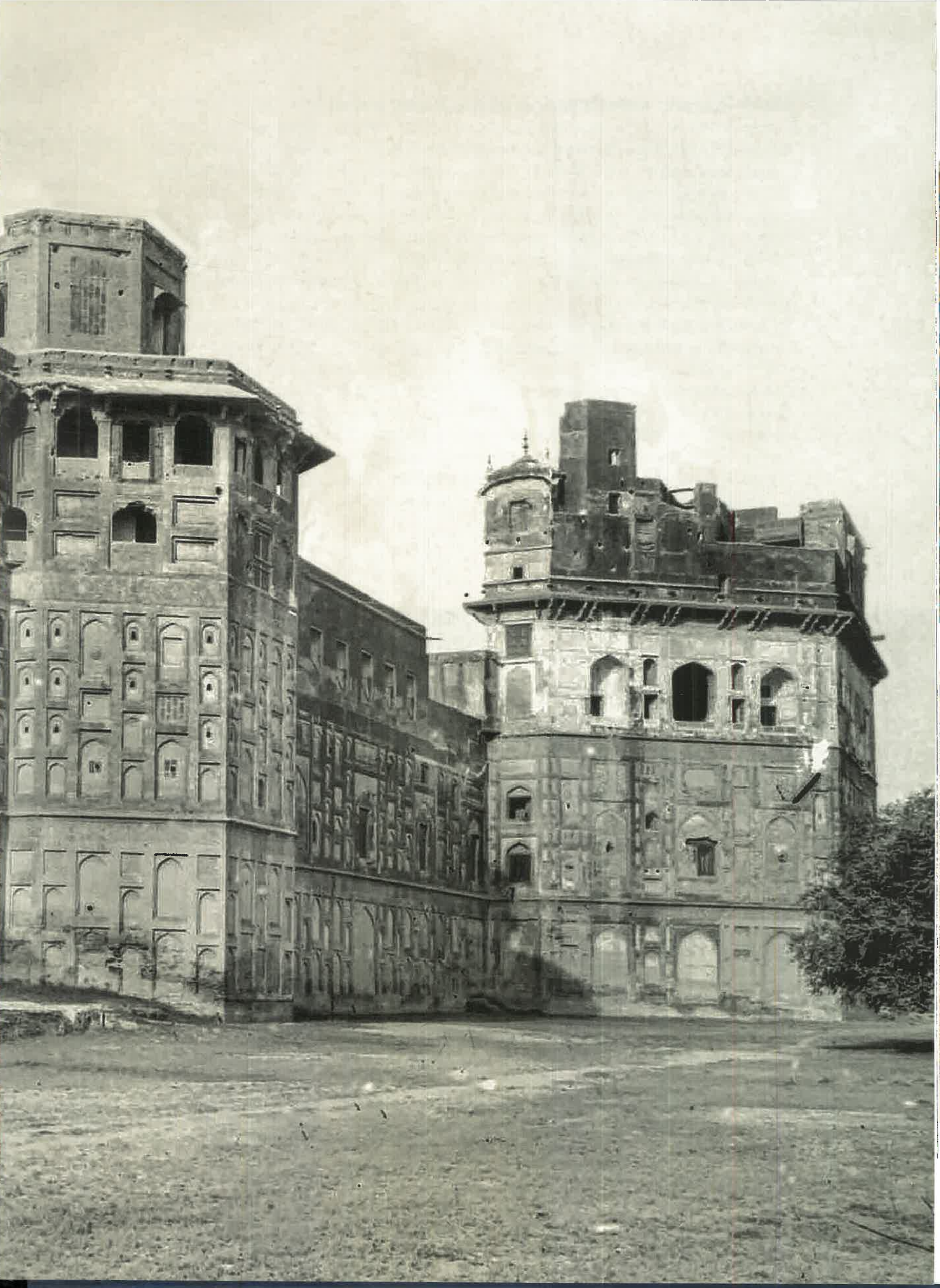
During the 80s, in order to minimize the load over the *Sheesh Mahal*, the structures constructed during the Sikh Period, were removed.

In the 90s, three openings in the Picture Wall from the basement of the *Sheesh Mahal* chamber were closed with terracotta screens. Marble *Jalis* (fret work) were provided in the openings on North-West side of Picture Wall at the upper portion *(Sheesh Mahal)* and at the lower level. The decayed red sand stone decorative slabs at the plinth of the *Shah Burj* Gate on West side were replaced by newer ones, according to the original size and shape.

Some restoration of tile mosaic work was done by the Directorate General of Archaeology, Government of the Punjab on the Western facade of Picture Wall including brick imitation work in 2013-14. New tile mosaic work was done on the spandrels of arched panels and fresco work was made in the narrower vertical panels while brick imitation was executed on the borders.[5]



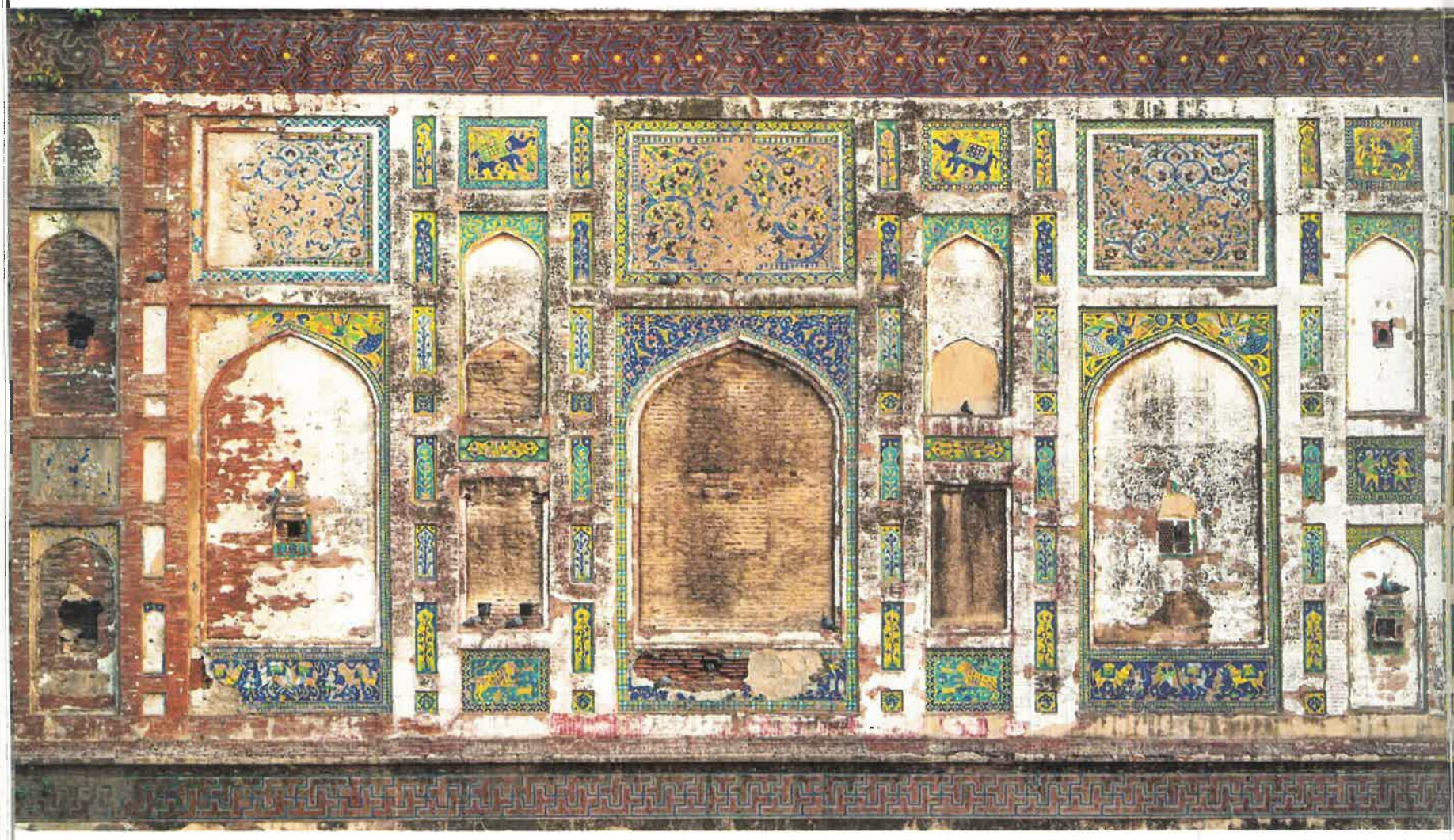




2015 Project: Conservation of the Picture Wall

The efforts made in the past were not enough and a need for comprehensive conservation project, focused just on the Picture Wall, was badly needed. As a result, a collaboration began that was to conserve the structure and embellishments of the Wall. 'Starting in September 2015, the Aga Khan Trust for Culture and its country affiliate, the Aga Khan Cultural Service-Pakistan, under a number of partnership agreements with the Walled City of Lahore Authority, was engaged in the conservation of the Lahore Fort. Detailed studies on the Lahore Fort and an extensive documentation of the Picture Wall, were generously supported by the Royal Norwegian Embassy, and involved using a 3-D laser scanner and Electronic Distance Measurement (EDM) devices, as well as high- resolution ortho-rectified photography coupled together.[6]

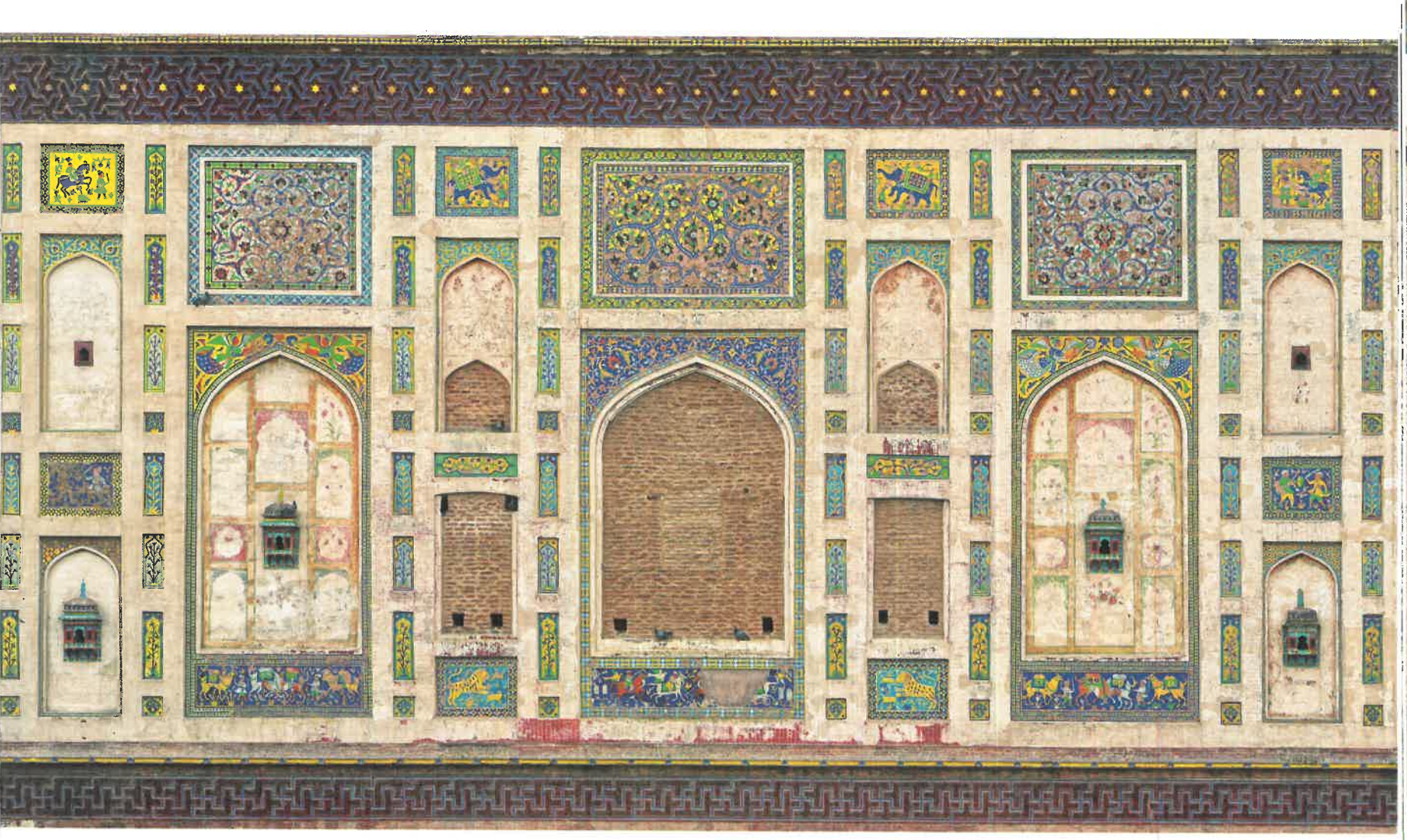
Initially a damage assessment report was prepared that was focused to study the structural, architectural and the Wall decoration conservation status. 'The study was carried out using laser electronic measurement and photo-orthorectification technologies; an accurate highly detailed scaled record was created, depicting the present condition of the Wall. Various tests were carried out on glazed tile mosaic samples from the Picture Wall façade, to ascertain the composition and materials.'[7]



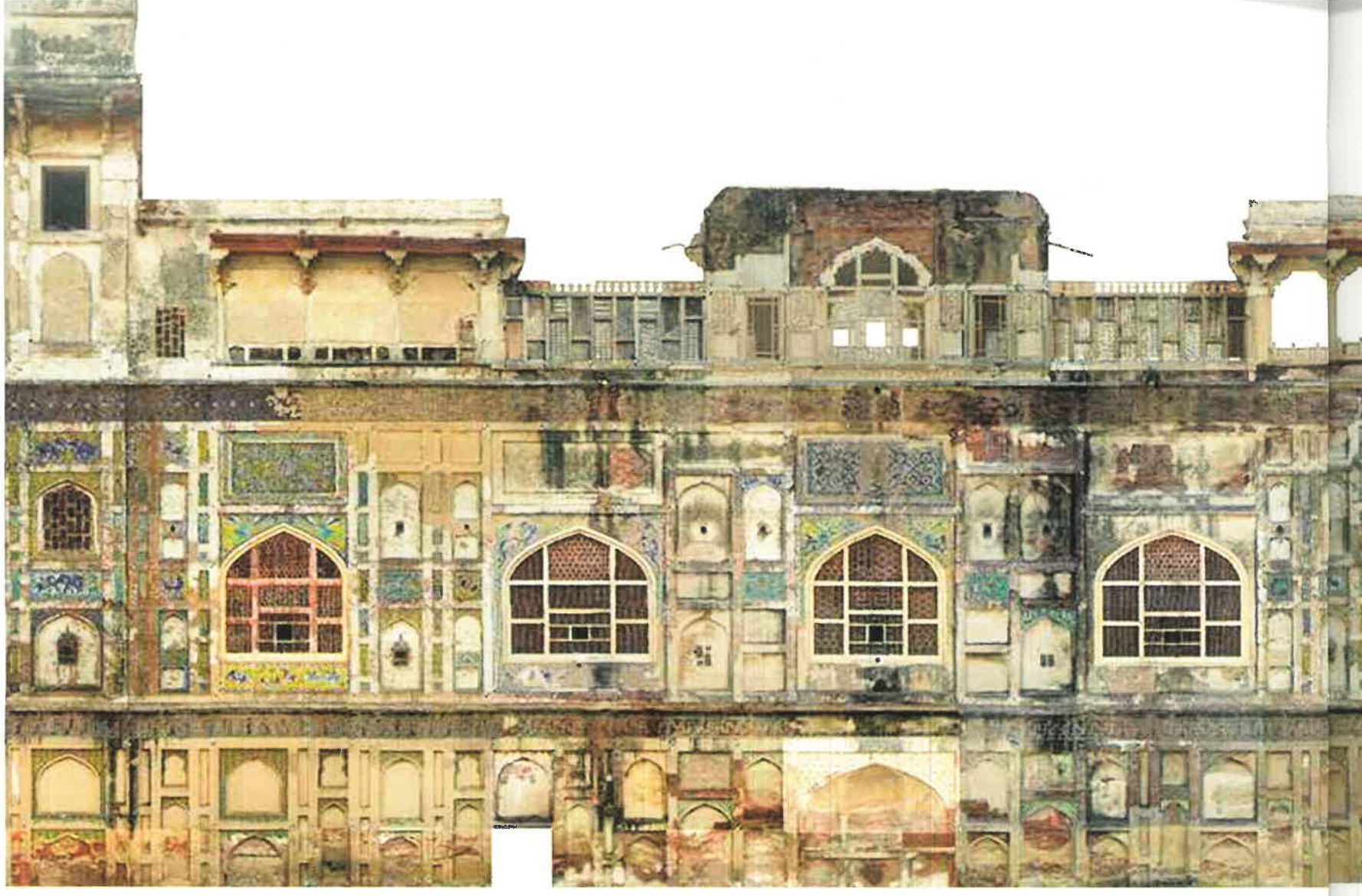
Before

After the completion of detailed documentation, a technical review of the challenges pertaining to the conservation of various decorative elements led to the selection of a 10-meter-wide and 15-meter-high (30 feet wide and 45 feet high) section of the Western façade of the Wall for prototype conservation, which was to inform the conservation principles and methodologies of Picture Wall. This commenced in late November 2016 and culminated in an International Workshop held at the Lahore Fort in January 2018.[8] The two institutions, Aga Khan Trust for Culture and the Walled City of Lahore Authority, involved the experts from Italy, Switzerland, Germany, France and Sri Lanka as well as local consultants to avoid any mishap.

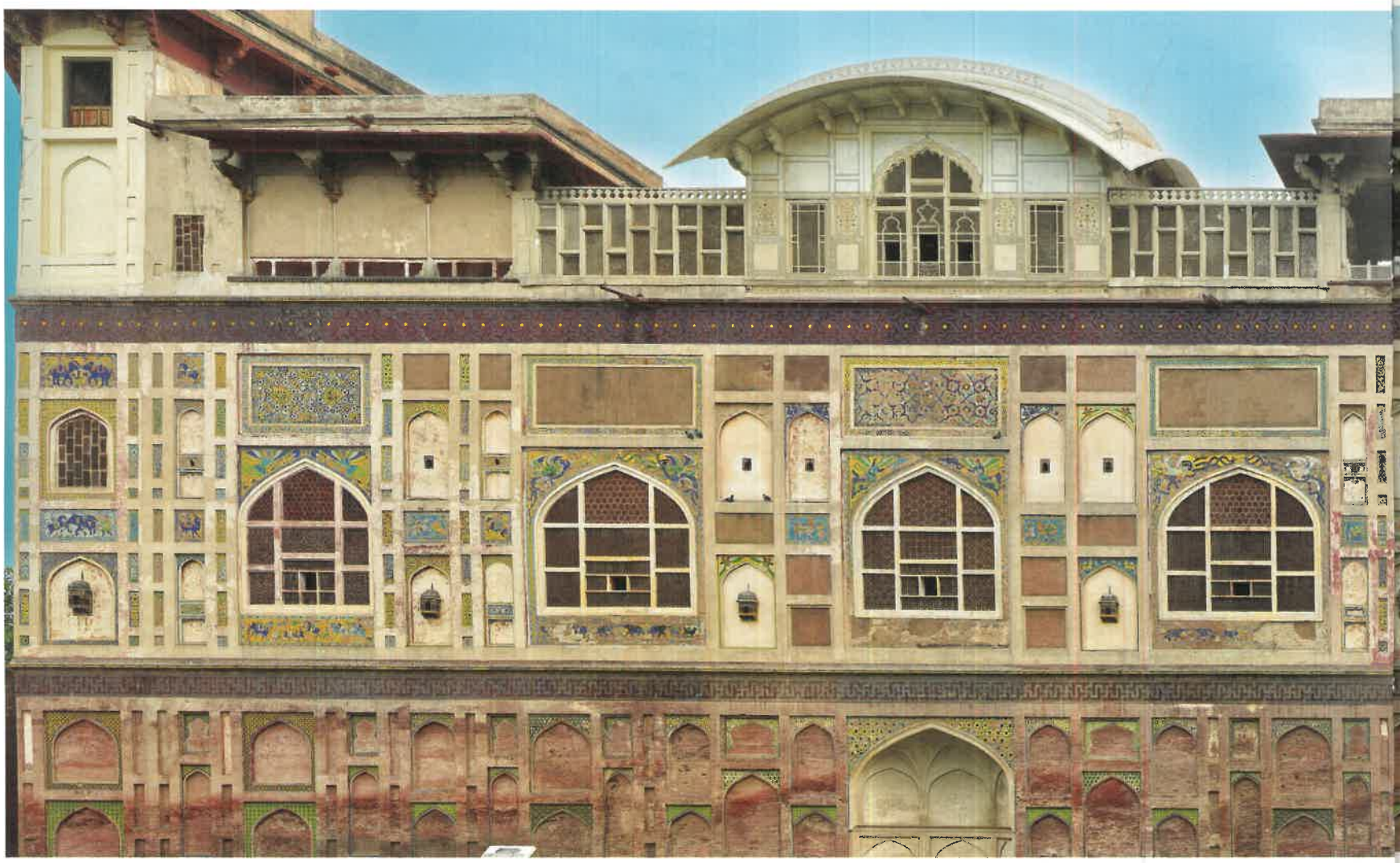
With the assistance of international experts, laboratory tests were conducted in Germany on the tile and mortar samples from the prototype area. The test results helped in understanding the physical and chemical properties of the panels on the Picture Wall and accordingly allowed for the assessment of the main causes of decay and deterioration. In this way, under expert guidance, a detailed restoration plan has been experimented in order to treat micro-gaps and deconsolidation of the panels of the Wall. Furthermore, a laboratory was developed on site so that future investigations into the physical properties of the materials, soil and mortar analysis and identification of deposits on the Wall and monuments can be conducted on site.



After

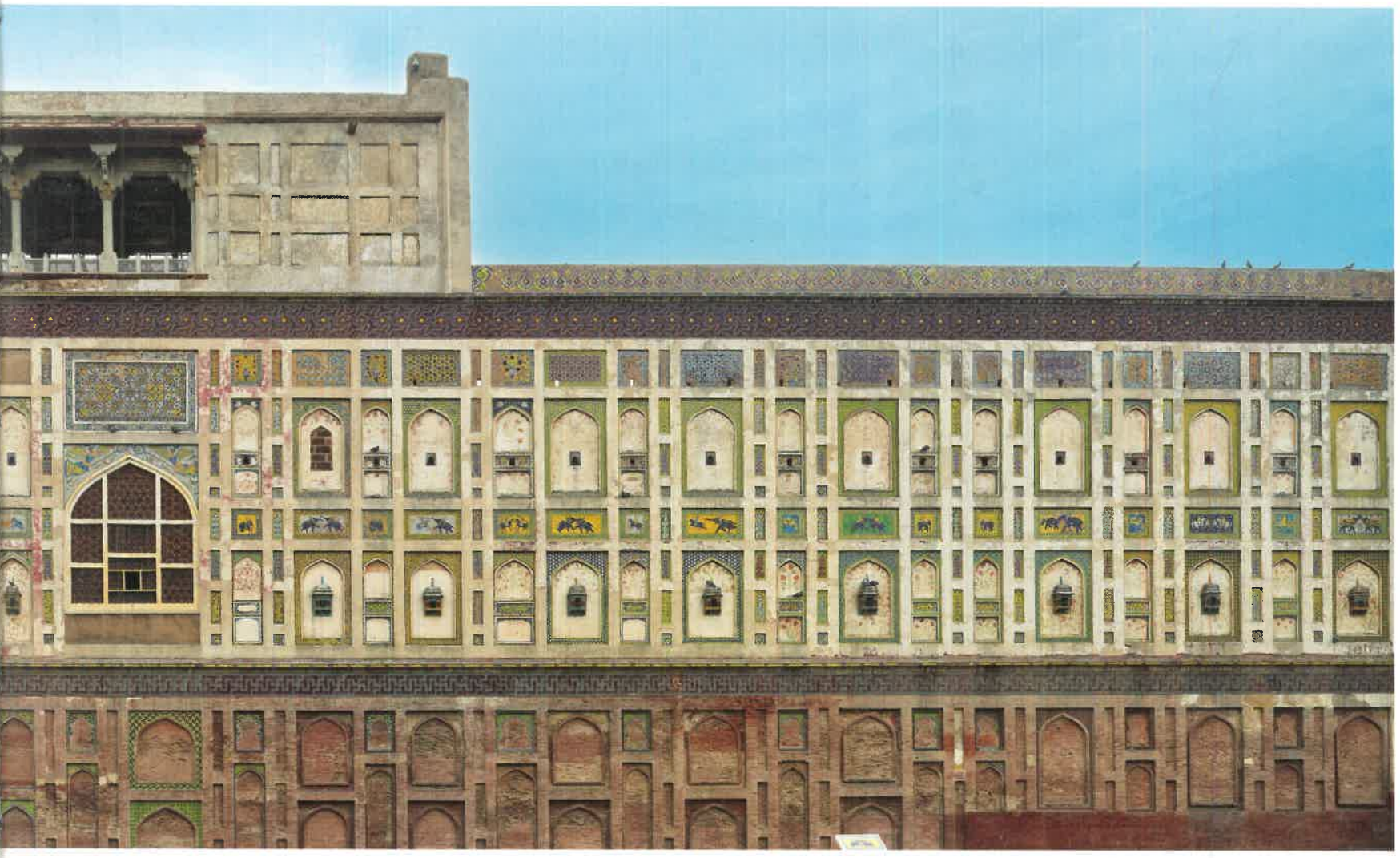


Before



After





Before

After

On the basis of these reports and the lessons learned by the execution of the prototype, guidelines and strategies were devised to undertake the mammoth task of the conservation of the Picture Wall. In the process, following steps were taken;

a. Stabilization and Consolidation of Decorative Panels
b. Removal of Plaster from British Period
c. Treatment of Bacterial Growth
d. Consolidation of Tile Bodies
e. Plaster Work on all Exposed Masonry
f. Reconstruction of Filigree, Pigeon House and Cut and Dressed Brick Work
g. Renewal of Stalactite Work *(Ghalib Kari)*
h. Restoration of *(Kashi)* Glazed Mosaic Tiles with Historical Techniques

'Conservation in this part of the world has traditionally involved the reconstruction and replacement of decayed or displaced sections of the original work. However, given the nature of the project, the site of the Picture Wall, an inherently museological monument meant for an observational experience, was conserved in a manner that does justice to the impact of the original exquisite craftwork. Similarly keeping this in mind, the material authenticity, archaeological approach based on the concept of 'minimal intervention' was adopted as agreed in the International Workshop. The focus was largely on preservation where techniques and methodologies were experimented to establish the most conducive way of 'freezing the existing condition' and enhancing its aesthetic beauty. Considering the need for supporting and reviving the traditional crafts, reconstruction was also done for some parts but only with very particular guidelines. The decay of the decorated surfaces was too advanced to justify major reconstruction since evidence was lacking.



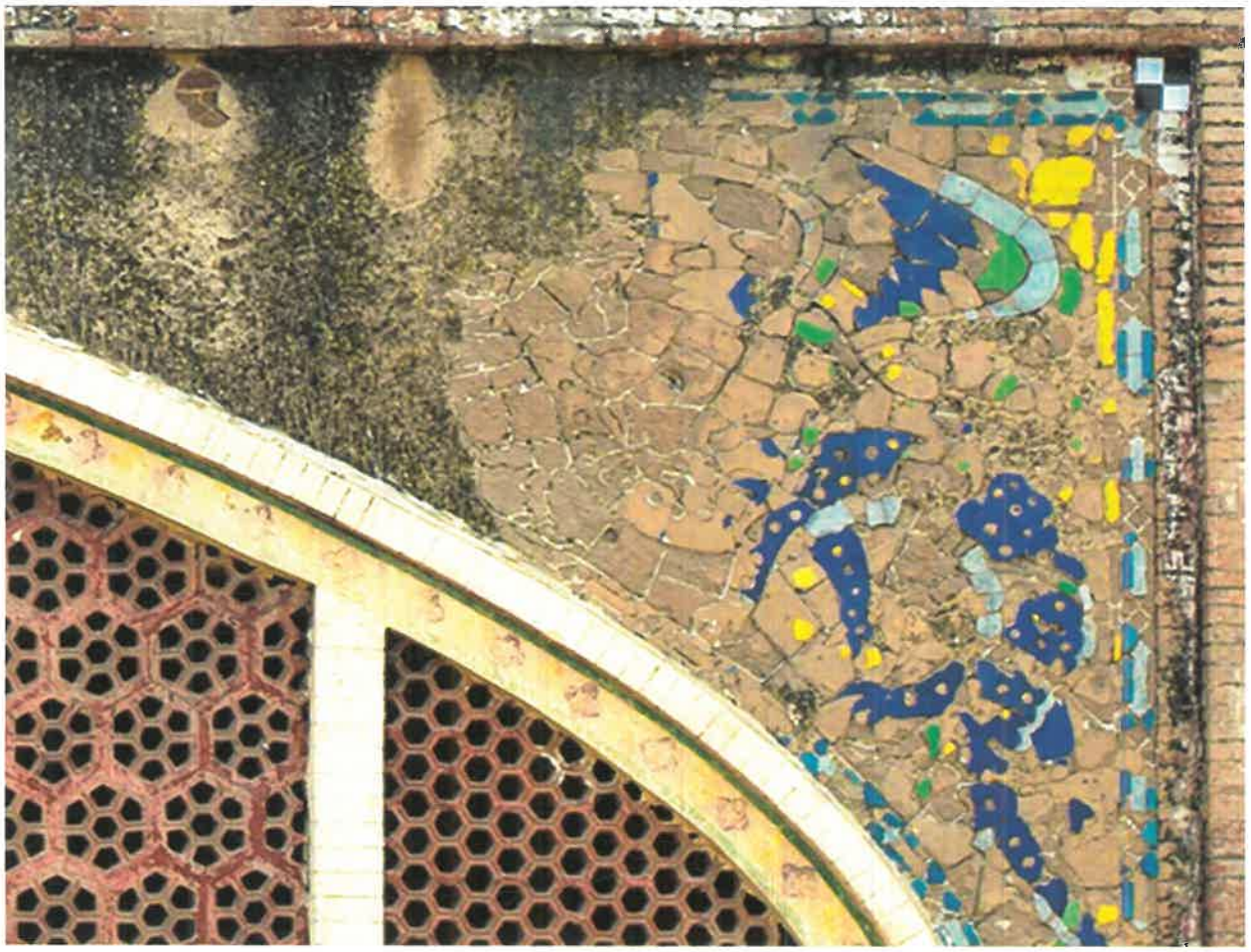
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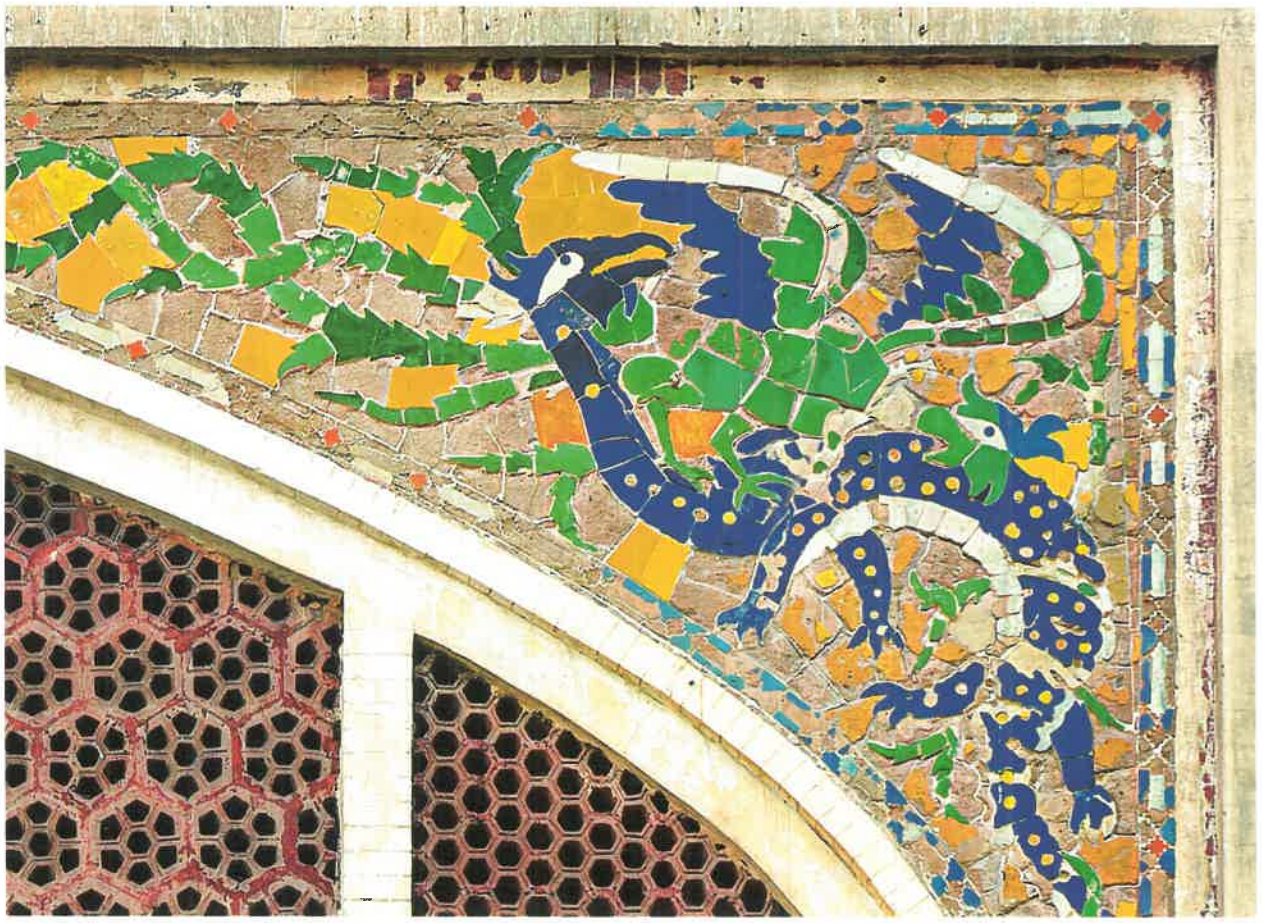
During



After



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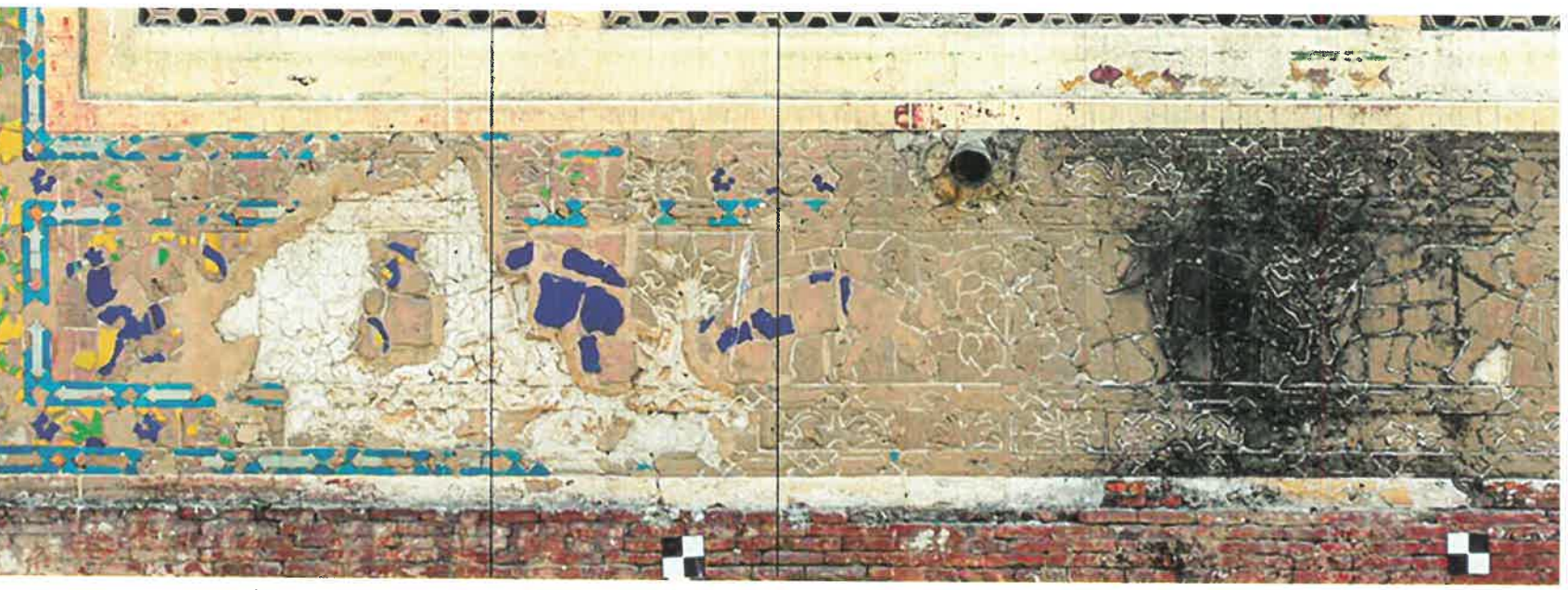


After

Reconstruction was done where evidence was sufficient, particularly for geometric replications like the filigree. It was also only considered where the original decoration was totally lost and was implemented only where there was a clear aesthetic benefit.'[9]

Excavation Work

During the proto-type project and the entire documentation process, studies revealed that the original floor level is 2.1 meters below the current ground level. The outcome of these studies was to remove the latter added fill to expose the original proportions used in the Mughal Era and to reduce the perculation of water which was compromising the structural strength of the Wall. In this particularly area, decayed and structurally weak masonry work was replaced. The excavation work also exposed buried structures from the Sikh and British Era. These newly discovered pottery pieces and artifacts, are now part of the exhibit for the visitors. [10]



Before



After



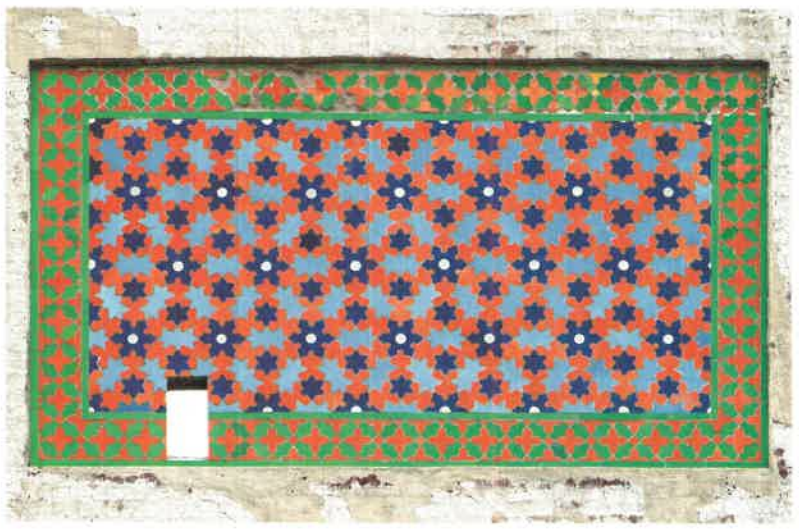
Before



After



Before



After



Before



After



Before



After



Before



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Before



After



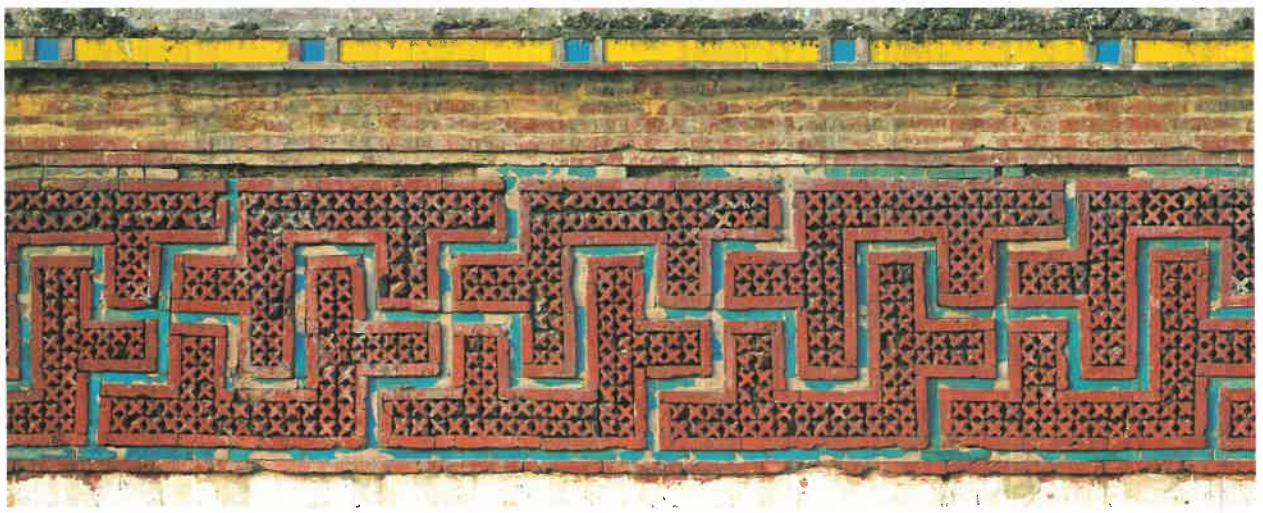
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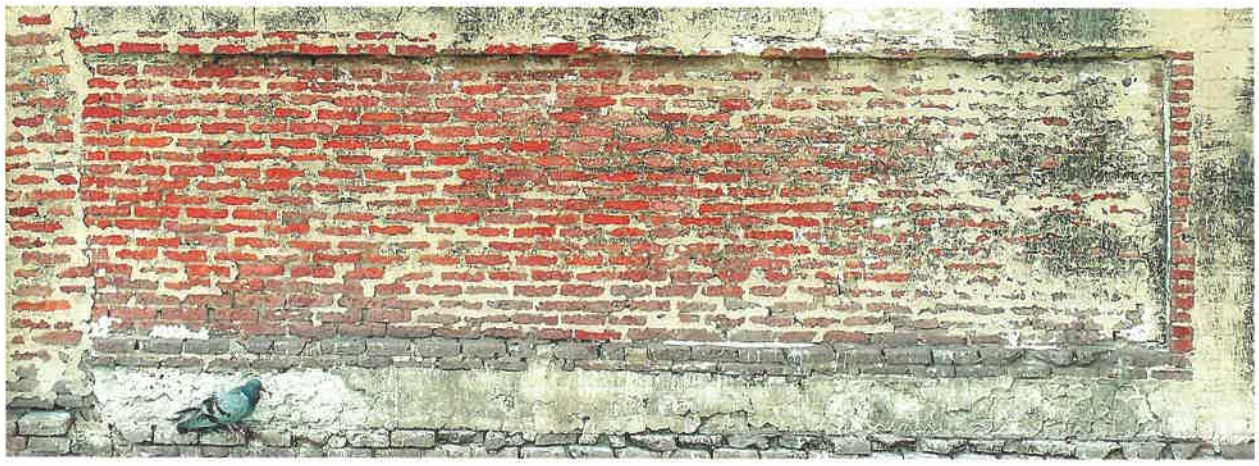
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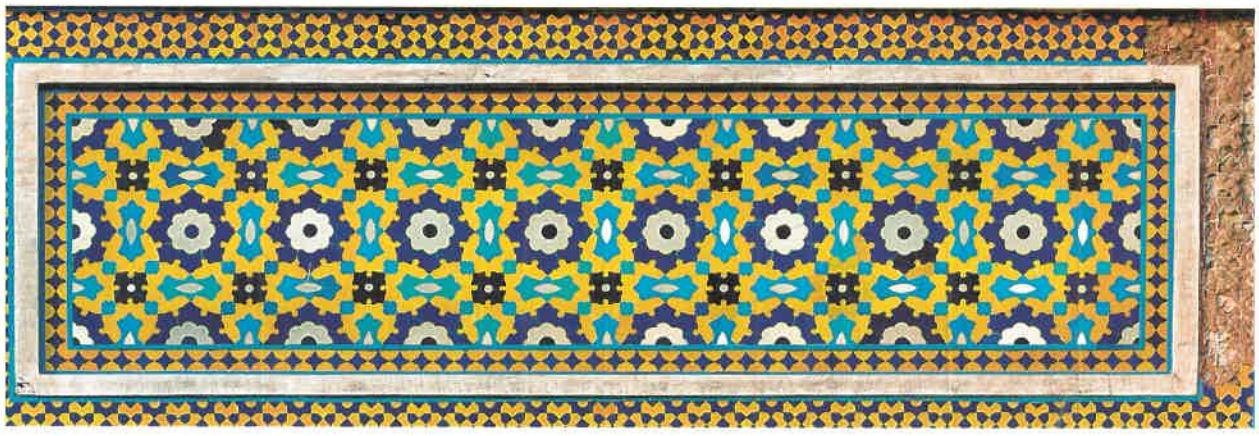
Before



After



Before



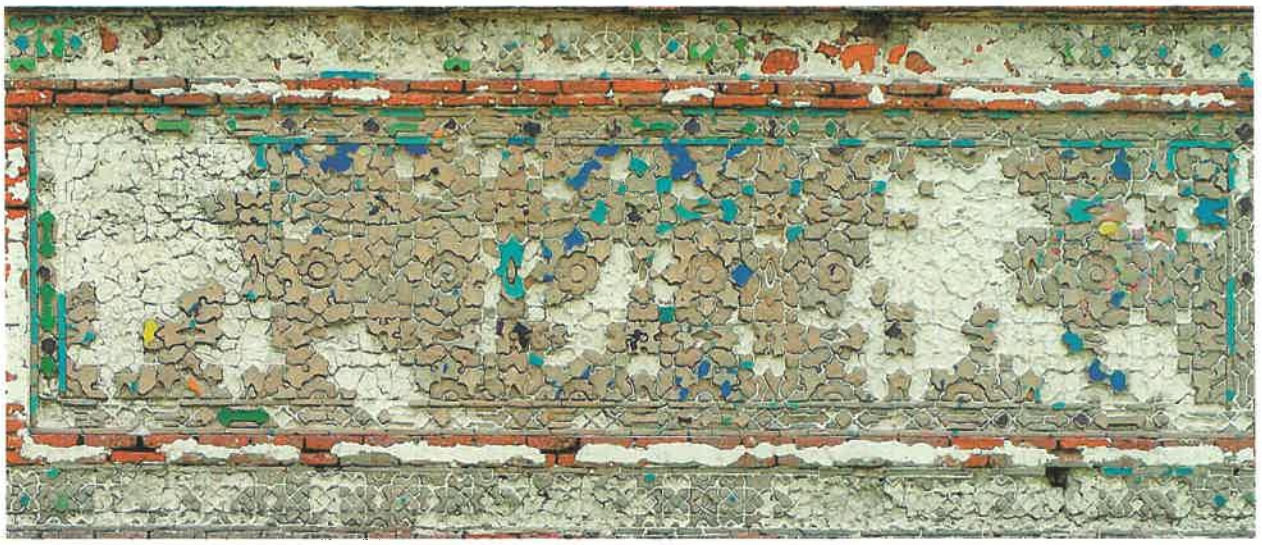
After



Before



After



Before



After



Before



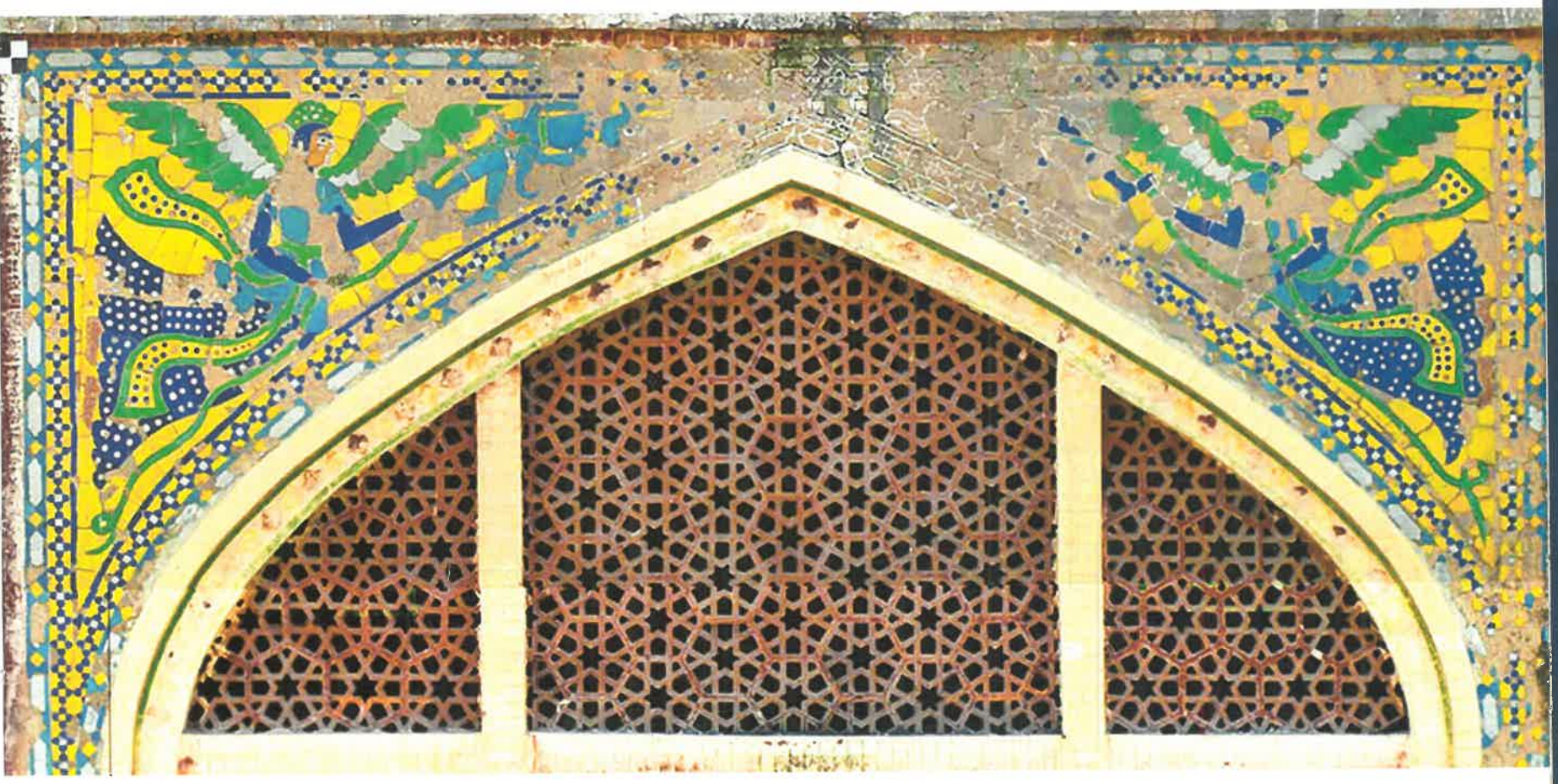
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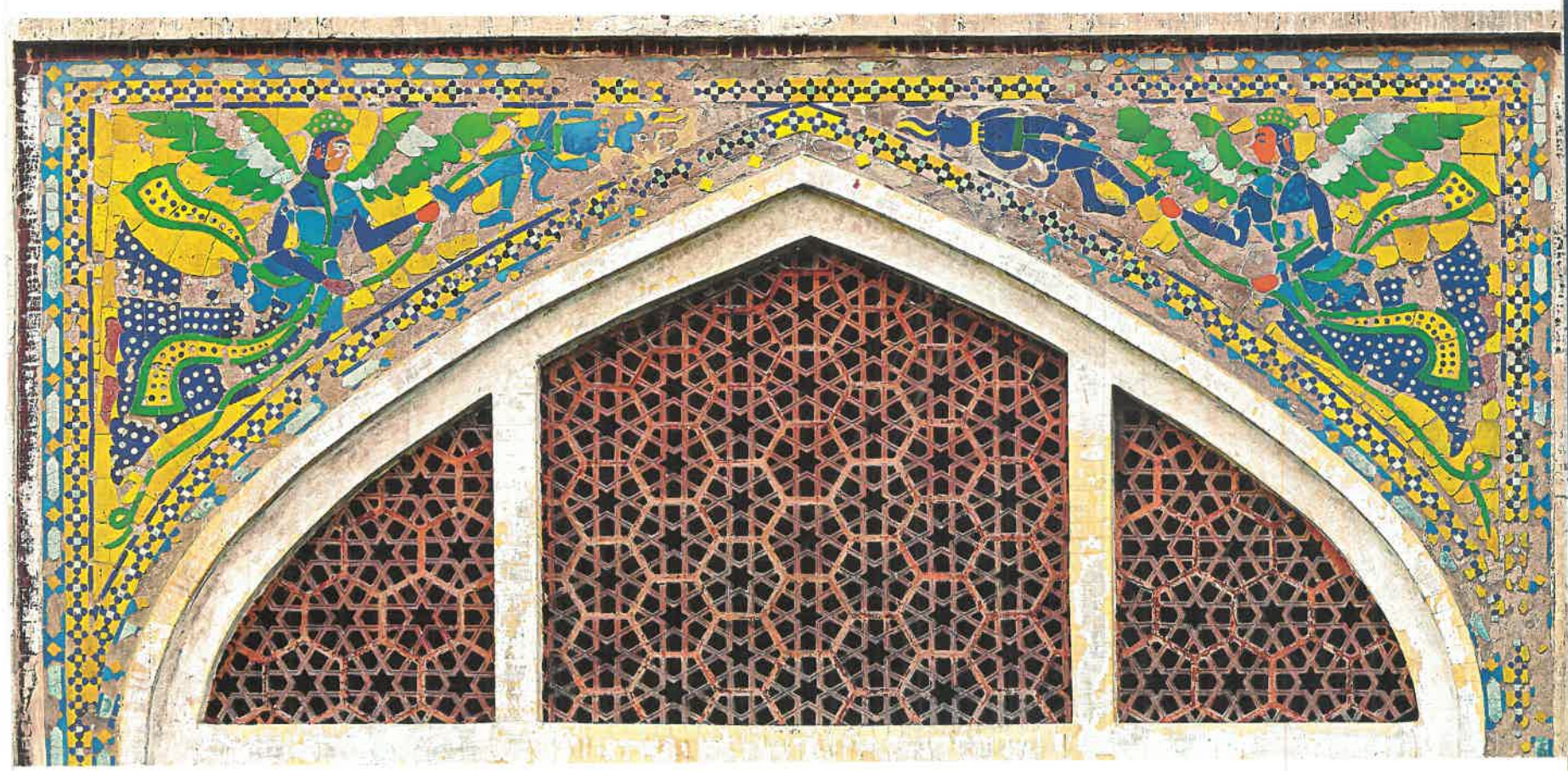
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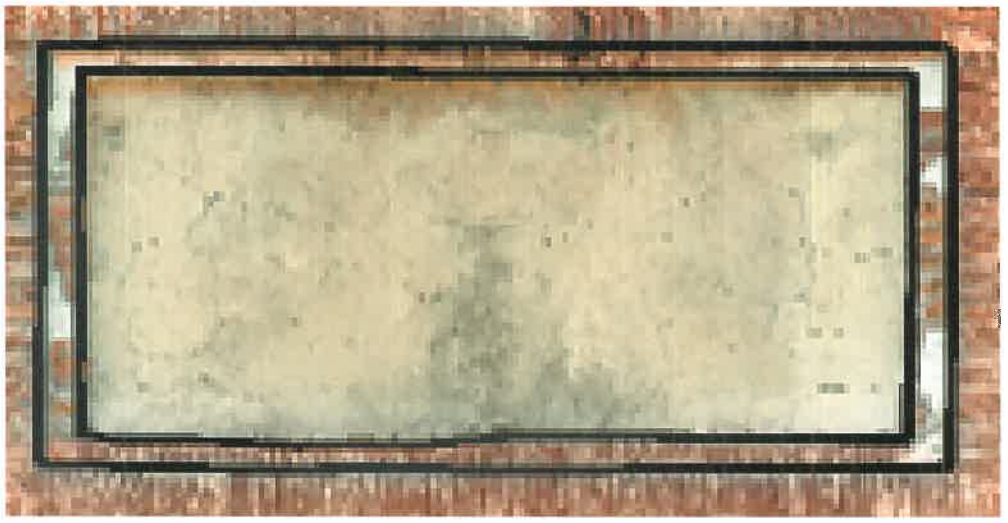
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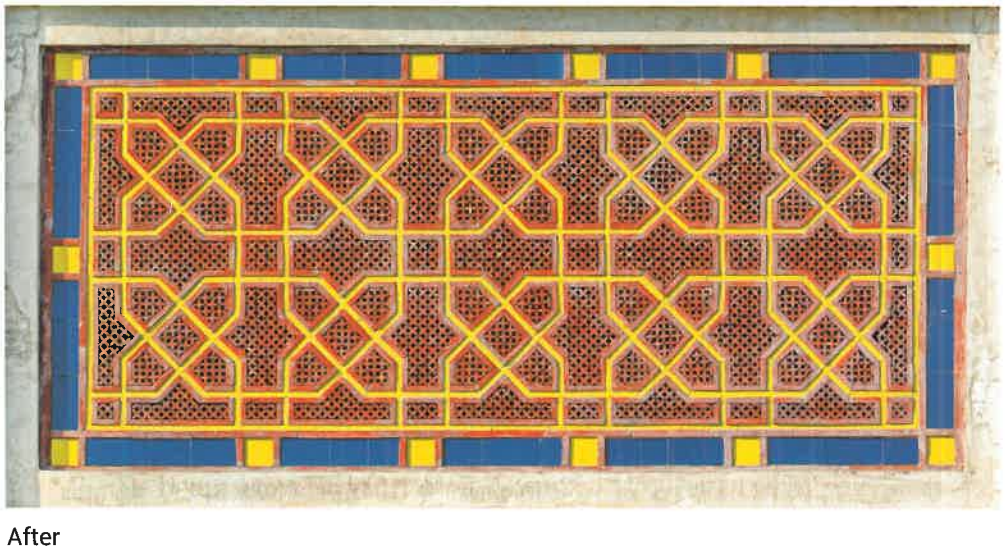
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After



Before



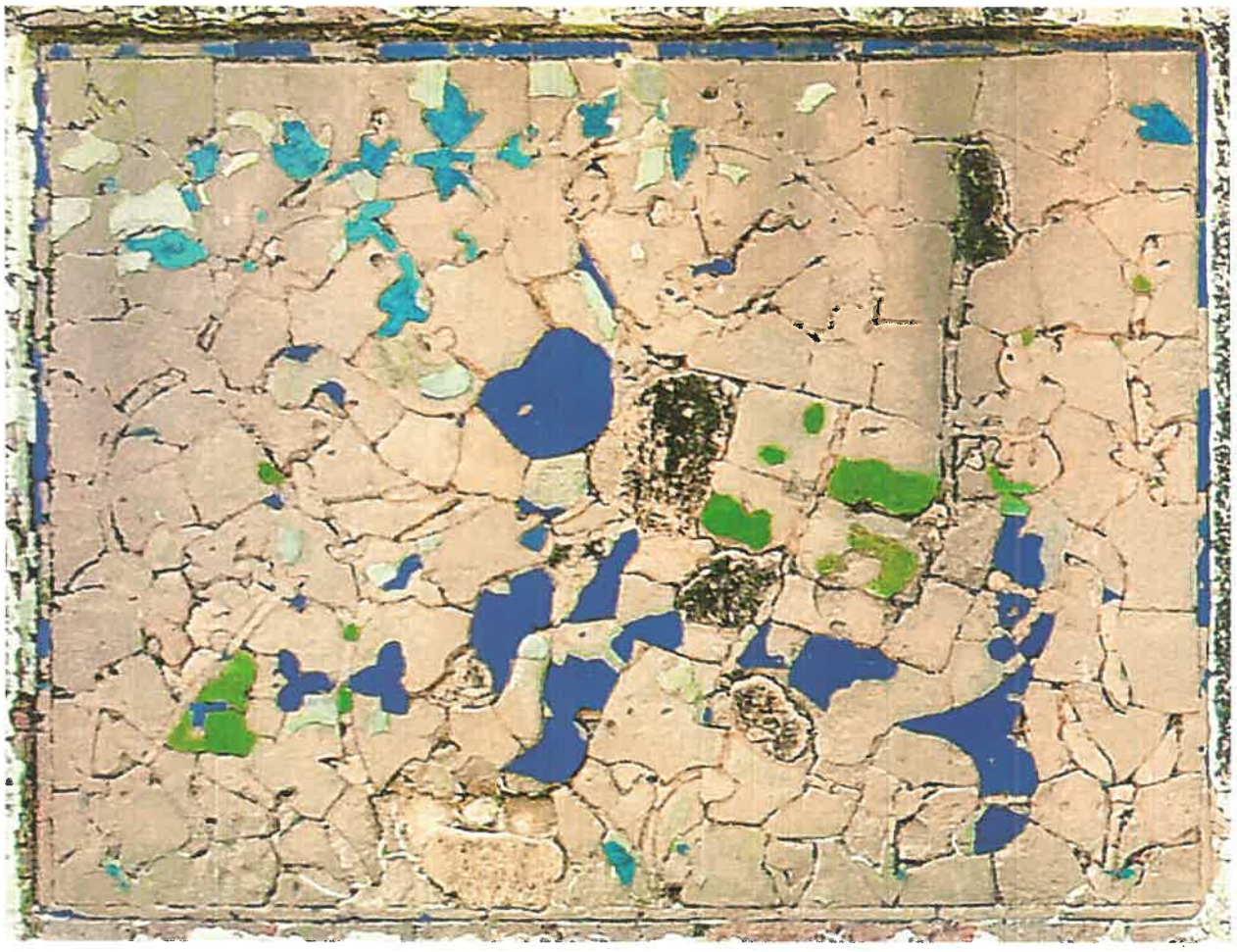
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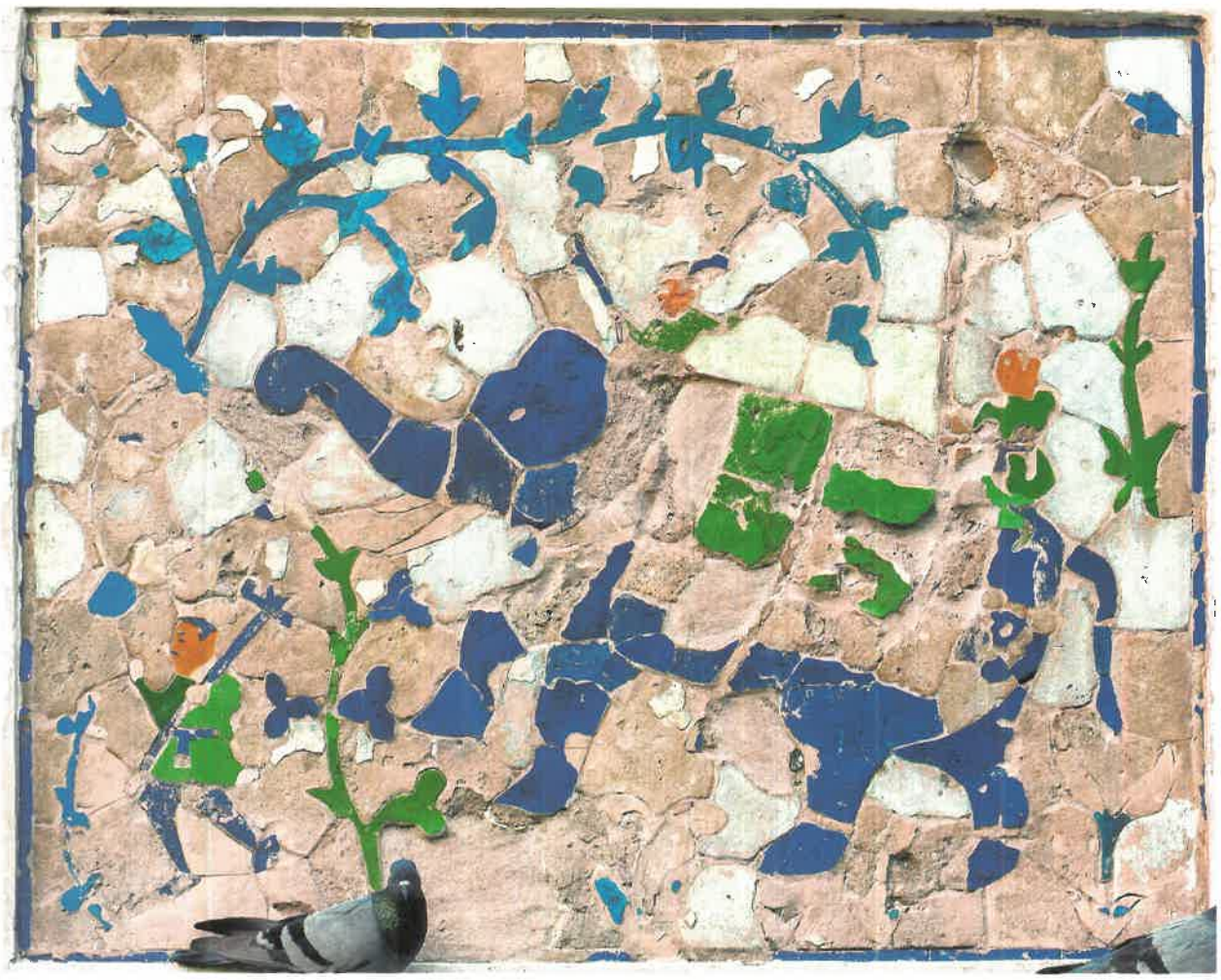
Before



After



Before



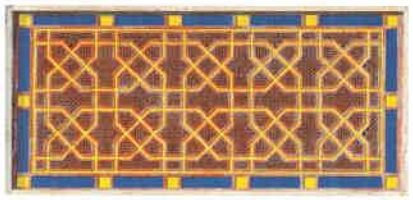
After

Inauguration of the Restored Western Facade

The conservation efforts culminated on 4th May 2019 when Imran Khan, the then Prime Minister of the Islamic Republic of Pakistan, inaugurated the restoration and conservation of the 240-foot-long Western façade. Physical conservation of this section of the Picture Wall was carried out from July 2018 to March 2019, with funding from the Royal Norwegian Embassy, the Government of Punjab, the Federal Republic of Germany, and the Aga Khan Trust for Culture.[11]

Ongoing Work on Northern Side of the Picture Wall

Currently the Northern side of the Wall is under the process of conservation and the Project is reaching its conclusion. This has been one of the largest conservation projects in Pakistan and the tremendous effort invested by the Walled City of Lahore Authority and Aga Khan Trust for Culture [12] has achieved a goal that was highly sensitive in execution, but the end result is a monument that has been preserved for the future generations of not only Pakistan but the world.



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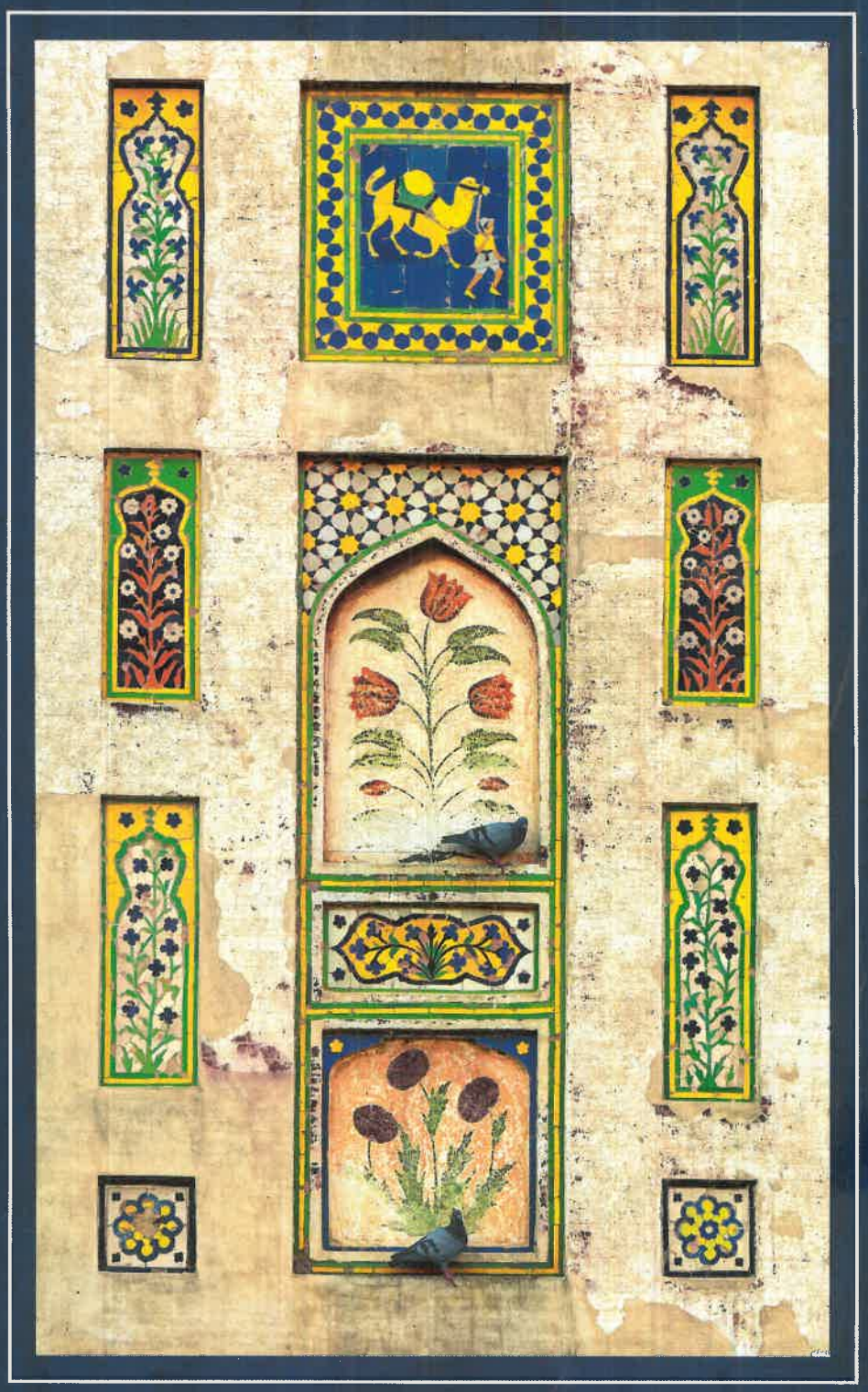
11 https://the.akdn/en/resources-media/whats-new/news-release/prime-minister-imran-khan- inaugurates-400-year-old-historic-ipicture-walli-lahorefort#:~:text-Lahore%2C%20Pakistan%2C%204%20May%202019,Fort%20UNESCO%20World%20 Heritage%20Site.

12 Before Images courtesy AKTC









WALLED CITY OF LAHORE AUTHORITY
WCLA

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