

Architectural Re-Fragmentation of Lahore Fort

Tracing the 'Flat-Arched' Accessways within Lahore Fort to Re-Investigate the Timeline

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An On-going Research Project @ CROMLahore

This research was initiated under the collective of CROMLahore. The idea was to Re-Examine, and Re-Learn, the historicity of early Mughal Lahore through various architectural and artistic aspects, with the following identified research perimeters:

- Early Mughal Lahore, meaning the timeline starting from Babur, a Timurid and Khanate Royal¹, who came from Fergana Valley to Hindustan in search of a land where he can establish his dynasty, the Mughal Dynasty.
 - ♦ The collective decided to explore the timelines of Babur, Humayun, Akbar and Jahangir, in its 1st Phase of research.
 - ♦ Considering Lahore and the creative / constructive activities during the rules of Akbar, the 3rd Mughal Padishah, and Jahangir, the 4th Mughal Padishah, major research began to concentrate around these two rulers.
- Early Mughal Structures, mainly existing at the Lahore Fort.
 - ♦ Through archival maps, documents and archaeological exploration, it has been established that during the reign of Emperor Akbar², when he made Lahore the capital city for 14 years, the north-east part of Lahore Fort was developed as a Royal Residency³.
 - ♦ Buildings such as the Daulat Khana Khas-o-Aam, Akbari Darwaza, Akbari Mahal, Akbari Hammam, and parts of Jahangir's Quadrangle, constitutes of these early structures.
 - ♦ The collective decided to research on these structures, selecting the structures of Bangla (commonly known as the *Sehdara / Sehdari*), Daulat Khana Khas-o-Aam, and Kala Burj, as the initial buildings for their research. The selection was based on the following facts:
 - Among the earliest surviving structures
 - Fragility and urgency to conserve
 - Artistic Richness and high Heritage Value

Some of the common interests among the collective were to:

- Explore the Frescoes - their style, subject, imagery, composition, uniqueness and trace the individualistic signature style of the Ustad who drew them.

¹ Ziad Zeenut (2002), pages 3-5

² Robinson Francis (2007), pages 125-137, and archival Map from Punjab Archives, Lahore, and ASI Report 1902, and Rehmani Anjum (2016), pages 80-109

³ Rehmani Anjum (2016), pages 80-109

- Conduct Scientific Investigation - of Frescoes, various construction materials, testing of colour pigments, and Infra-Red photography.
- Investigate the Architectural Uniqueness - observe the character defining elements (CDEs), the unique architectural design / layout / assemblage, identify architectural linkages and associations with other similar structures having identical features or belonging to the same timeline.

This research paper attempts to investigate the historicity of various structures within Lahore Fort, by Re-Fragmenting them into smaller, more observable elements, finding similar elements in other parts of the Fort, and contextualising them.

Format of the Research Paper

This Research Paper has a format of an on-line Publication, which will be considered as on-going research. The Paper is complimented by a PDF of the PowerPoint Presentation which was developed for the official presentation of this paper. A YouTube link for the event has also been provided along with these two documents.

It is aimed that each and every on-line publication of CROMLahore will have its own unique formatting style, in order to provide a wider opportunity to publish in a holistic manner, in case of the researcher, and in order to provide a complete experience and essence of the research, in case of the reader.

The text mentioned in *Italics* is reference text for connecting this paper with the PowerPoint Presentation Slides.

Parts of the Research Paper

The focus of this paper is divided into three parts:

- The 1st Part comprises of the basic information about the Area of Research, the Subject and Time Period under investigation.
- The 2nd Part focusses on introducing the basic concepts and terminologies addressed during this research.
- The 3rd Part comprehensively traces the chosen Architectural Element, that is the Flat-Arched Accessways in Lahore Fort, and later focusses on two main structures:
 1. Daulat Khana Khas-o-Aam
 2. Bangla Pavilion

A Brief Spatial Introduction of the Lahore Fort and its Quadrangles

Symbol of national identity, a World Heritage Site (WHS), and a fount of diverse heritage Values, the Lahore Fort stands witness to the creative grandeur of the early Mughal rule. The entire Fort complex is composed of many grand structures, grouped around central courtyards, creating well-defined Quadrangles. The following Table lists down the Quadrangles along with its structures:

1 Diwan-i-Aam Quadrangle	2 Moti Masjid Quadrangle	3 Jahangiri Quadrangle	4 Shah Jahan Quadrangle	5 Paien Bagh Quadrangle
<ul style="list-style-type: none"> • Diwan-i-Aam • Daulat Khana Khas-o-Aam • Jharoka / Takht • Kharrak Singh Haveli • Akbari Mahal • Zenana Hammam • Rani Jindan Haveli • British Steps 	<ul style="list-style-type: none"> • Moti Masjid • Makatib Khana 	<ul style="list-style-type: none"> • Central Courtyard • Khwabgah • Bangla • East Dalans • East Burji • Eastern Palace • West Dalans • West Burji • Western Palace • South Iwan 	<ul style="list-style-type: none"> • Central Courtyard • Khwabgah Shah Jahani • Imperial Hammam • Arzghah 	<ul style="list-style-type: none"> • Kala Burj • Lal Burj • Central Tank • Pavilion • Foundations of Rooms • Central South Chahar Bagh • Temple
6 Shah Burj Reception Court	7 Shah Burj Quadrangle	8 Hathi Pol	9 Picture Wall	10 Akbari Quadrangle
<ul style="list-style-type: none"> • Entrance to Shah Burj Fore Court • British Garage / Jail • Entrance Hathi Pol 	<ul style="list-style-type: none"> • Shah Burj Forecourt • Athdara • Shish Mahal • Naulakha • South Dalans • SW Baradari • NW Baradari • NE Baradari • Central Water Tank • Central Marble Mahtabi 	<ul style="list-style-type: none"> • Staircase • Entrance to the Basements of Shish Mahal • Ghulam Gardish 	<ul style="list-style-type: none"> • Western Picture Wall • Northern Picture Wall • Main Arched Darwaza 	<ul style="list-style-type: none"> • Akbari Darwaza • Akbari Hammam

The Fort has 10 such identifiable Quadrangles⁴, from which the Jahangiri and the Akbari Quadrangle are considered the earliest surviving areas of Lahore Fort⁵. Both of these quadrangles are located in the north-east of Lahore Fort.

Through this research, two other Quadrangles will also be explored as possible additions in the earliest surviving areas of the Fort. These quadrangles are the Diwan-i-Aam Quadrangle, and the north section of Paien Bagh Quadrangle.

Slide 3 of the presentation illustrates the Table above along with the Map of the Lahore Fort, which has been marked with the numbers of respective quadrangles. This Map was developed during a

⁴ Lari Yasmeen (2003), pages 7.1-7.30. Further additions to these Quadrangles were made during the 2005-2006 NORAD-Norway-UNESCO-GoPakistan-Heritage Foundation of Pakistan Project for "Conservation of the Shish Mahal Ceiling". Rehmani Anjum (2016)

⁵ Rehmani Anjum (2016), pages 89

Heritage Foundation of Pakistan project, funded by Norway, and conducted in collaboration with the Federal Department of Archaeology, Northern Circle (as it was called then).

A Brief Introduction of the Ancestry of Babur, the founder of Mughal Dynasty

A detailed ancestral line from both Chingiz Khan and Timur, has been shown in Slide 4 of the Presentation.

It becomes vital to contextualise the Mughal dynasty in order to understand their desire to amalgamate within their newly conquered land, to adapt its culture and creative expressions, yet retain their Central Asian identity.

The Ancestry of Babur⁶ (1526-1530) comes from two grand and powerful dynastic lines:

- Babur's father, Umar Shaikh Mirza II (1456-1494), was a Timurid Ruler of Fergana Valley. Umar Mirza was the 3rd son of Abu Sa'ad Mirza (1424-1469) who was the Ruler of the Timurid Empire. Abu Mirza was the son of Sultan Muhammad Mirza, Ruler of the Timurid Empire. Sultan Mirza was the son of Mirza Jalal-ud-Din Miran Beg (1366-1408), known as Miran Shah, Emperor of Timurid Empire and 3rd son of the mighty warrior Timur (1336-1405), the founder of Timurid Empire. Babur was the 5th generation decedent of Timur.
- Babur's mother, Qutlugh Nigar Khanum (?-1505) was the daughter of Yonus Khan (1416-1487), the Khan of Mughulistan (the western Mongol Empire). He was the son of Uwais Khan (?-1429), son of Sher Ali Oglan, son of Muhammad Khan (?-1415), son of Khizr Khwaja Khan (1363-1399), son of Tughluq-Timur Khan (1312-1363), son of Aisan Bugha Khan (?-1318), son of Dawa Khan (1282-1307) who was the Khan of Chaghatai Khanate (the eastern Mongol Empire), son of Ghias-ud-Din Baraq Khan (1266-1271) who was the Khan of Mughulistan, son of Yesun Tawa Khan, son of Muatukan (?-1221), son of Chaghatai Khan (1183-1242) who was the founder of Chaghatai Khanate and the 2nd son of the mighty Chingiz Khan (1162-1125). Babur was the 14th generation decedent of Chingiz Khan.

Belonging to a grand historic family, not one but two, came with its consequences. Babur had many contestants, each had similar goals - to expand their ruling territories and create a mighty Empire of their own. Babur was no exception. He first sort support from his paternal Timurid family⁷, failing which he established links with his paternal family, the Khans of Mughulistan. Babur was defeated from Samarkand (thrice) and upon his return he found himself also alienated from his own ruling territory of Fergana Valley. His paternal uncles supported him as he travelled southwards into the region of Kabul and Kandahar⁸. Once he found his footing, he began advancing into Hindustan, a land known for its diverse wealth.

This research paper will focus on the grand and great grandson of Babur - Mughal Emperor Akbar and Jahangir.

⁶ Beveridge Annette Susannah (2006), pages vii-viii, 9, 12

⁷ Robinson Francis (2007), pages 115-116

⁸ Latif Muhammad (1892), pages 19-22

Post Medieval till Early Renaissance Lahore: 100 years rule of Akbar and Jahangir - 1526-1627

During the 49 years reign of Emperor Akbar (1556-1605), Lahore became the capital city of the Mughal Empire, a status it retained for 14 years (1584-1598). The Mughal Court was held at the Lahore Fort, whilst Emperor Akbar commissioned extensive building, strengthening and ornamenting of the Fort⁹ and its linked Walled City along with its 13 Gates.

Several structures within Lahore Fort have been attributed to Akbar's commissioning, such as:

- Parts of the eastern Fortification Walls and adjacent chambers
- Akbari Darwaza within the eastern Fortification Walls
- Akbari Mahal, and underground Akbari Hammam
- Corner Burjiyan - 1st and 2nd Burji starting from north-east of the northern Picture Wall
- Daulat Khana Khas-o-Aam

A number of structures located within the Jahangiri Quadrangle are also attributed to Akbar's era, including:

- East and West Dalans
- East and West Palaces
- Basement Chambers
- Zenana Hammam (located at the base / ground level of Rani Jindan Haveli of Sikh era)
- South Dalan (currently serving as the Fort Archival Library)

During the 22 years reign of Emperor Jahangir (1605-1627), Lahore remained a central city to the Mughal Emperor. Throughout his life and travels, he frequently visited and held his Court at Lahore. In 1622, he formally established his Mughal Court in Lahore. He added a number of significant structures within the Lahore Fort, especially the Jahangiri Quadrangle¹⁰.

Emperor Jahangir is also credited for establishing Sheikhu-pura, a town named after his moniker used by his father, Emperor Akbar. In this town, Jahangir commissioned the Hiran Minar and a hunting fort. He, along with Empress Nur Jahan, are also accredited to have ordered the gardens of Dilkusha Bagh¹¹ at the Akbari Serai, in Shah-dara (literal meaning - royal doorway), a suburb town of Lahore and a royal entry point to the city from the direction of Kabul and Kashmir. This garden complex later became the burial place for the Emperor, and later, also for the Empress. Jahangir is the only Mughal Emperor who is buried in Lahore, within the Shah-dara Tomb Complex.

During the reign of these two Emperors, Hindustan witnessed 100 years of Mughal brilliance. Complemented by royal patronage, the artisans, ustads and creative individuals experimented extensively in the fields of Fresco, Arts of the Book, Architecture, Building

⁹ Rehmani Anjum (2016), pages 80-89

¹⁰ Rehmani Anjum (2016), pages 128-148

¹¹ Stuart C M Villiers (1913) reprint (2007), pages 129-136

Ornamentation, *Kashi Kari*, Calligraphy and Nature, among many others. Lahore Fort and its magnificent structures stand proud witness to their great achievements.

A Basic Understanding of Heritage Values

Slide 7 of the Presentation provides a comprehensive infographic for developing an understanding of Heritage Values.

The 2nd Part of this research focusses on understanding the basic Concepts and Terminologies set / identified / used during this research.

Starting from the basic understanding of Heritage Values, the universally accepted definition to explain this term is developed by the English Heritage¹², stating that “People may value a place for many reasons beyond utility or personal association; for its distinctive architecture or landscape, the story it can tell about the past, its connection with notable people or events, its landform, flora and fauna, because they find it beautiful and inspiring, or for its role as a focus of a community”.

An Urdu word for Heritage Value, “*Ahmeait*”, or “*Kaddar*”, best explains the localized understanding of this term.

Heritage Values are defined by the People who are the heritage custodians, who are the stakeholders of that heritage, and who benefit from it.

This research employs an inclusive approach for identifying the types of Heritage Values. It uses the concept of **5Ps**¹³, which is usually used for grouping the Sustainable Development Goals - SDGs. The 5Ps are:

- People - the communities, societies, stakeholders, experts, etc
- Planet - landscape, flora & fauna, etc
- Prosperity - economic, educational, etc
- Peace
- Partnership - between various organizations / professions / expertise

¹² English Heritage (2015) page 27, point 30-32

¹³ <https://en.unesco.org/culture-development/transversal-approaches/culture-and-sustainable-development> and <https://ocm.iccrom.org/home>

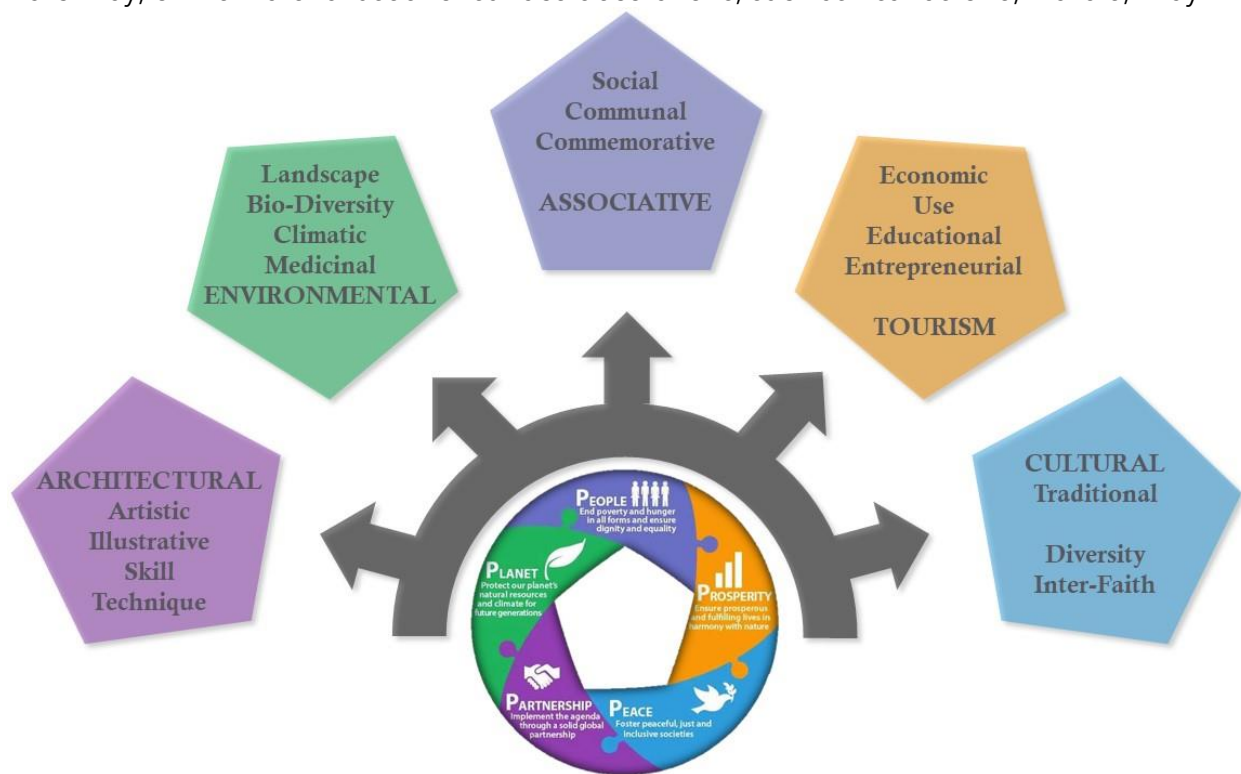
Following is a comprehensive infographic showing the 5Ps and the respective Heritage Values:

The above Heritage Values can be identified through Re-Fragmenting a complex heritage element into smaller comprehensible elements which define the character of that heritage. In short, the Heritage Values can be identified through the Character Defining Elements - CDEs, of any given heritage.

Character Defining Elements - CDEs

A particular architectural style is distinguishable by its "character defining elements"¹⁴, in short, the CDEs.

These elements are unique fragments of a structure forming part of an architectural composition. For instance, the type and style of an Opening - a doorway, a window, an archway, or the Material used for surface decorations, such as - sandstone, marble, inlay



of various materials, or a symbol / motif, or a supporting element such as a bracket, a railing, or an intricately carved marble *jali*.

Every dynasty had a particular architectural style, distinguishable by its unique CDEs. The Mughal dynasty was no exception.

They came from a land rich in architectural features, into a land even more diverse in its architectural traditions and symbolism.

¹⁴ Conway Hazel and Roenisch Rowan (2005), 167-192

The early Mughal era structures present a story of the evolution of a unique Mughal style of architecture in this region. These early Mughal Emperors created a new kind of architectural composition of elements inspired by either their home country, or by the areas they conquered here in Afghanistan and Hindustan¹⁵.

It is aimed that through Re-Fragmenting - taking one particular CDE at a time and cross referencing it with various timelines, architectural styles and regional influences - the historicity of a given structure can be Re-Evaluated.

Architectural CDEs of Mughal Emperors

Each Mughal Emperor had their own unique set of preferred elements which later defined their individual architectural signature and its CDEs. The architectural evidences, archival documents, historians and historic timelines have linked the particularities of these elements with its respective Emperor. For instance:

- Babur was famous for introducing the Central Asian *Chahar Bagh* layout for a garden, which is enclosed within Walls.
- Humayun brought the Central Asian Timurid Arch and Drum Dome to Hindustan, along with the later Persian Style
- Akbar was famous for his Fatehpur Sikri Style:
 - ♦ Richly carved Red Sand Stone
 - ♦ Openings created with richly carved solid Red Sand Stone slabs supported through Brackets, which are set upon Columns
- Jahangir was fond of intricately inlaying Red Sand Stone panels with White Marble motifs, recessed Wall Panels, and Frescoes, along with the use of Column-Beam-Bracket ensemble, similar to the preference of his father.

At this point of research, it is acknowledged that Nur Jahan, Queen Consort of Emperor Jahangir and an active participant at the Royal Mughal Court and numerous other creative endeavours, had a significant hand in developing the architectural style of the Mughals. However, her contributions require dedicated research of its own.
- Shah Jahan extensively experimented with White Marble and Pietra Dura / *Parcheen Kari*, using precious and semi-precious stones. He was also fond of using rich variations of Marble.

Terminology of the CBB / BCAB

For this research, the Character Defining Element comprises of a unique architectural assemblage which follows the basic principle of a trabeated opening, supported by a corbelling bracket, which is rested upon a column. However, to term it as a simple column and beam opening would discredit the entire creative process of its evolution, whilst reducing its significance.

This Column-Beam-Bracket (CBB) assemblage has a profile of a flattened Arch but a different visual vocabulary. Some of its compositional aspects can be compared with a

¹⁵ Koch Ebba (1991), pages 10-14

classical Greek Entablature, yet the architrave is shaped as a bracket, the Frieze comprises of a solid stone Slab, and the Cornice is in the shape of a corbelled outline framing the entire assemblage. Visually, it is far more intricate, complex and symbolic than the Entablature.

The existence of two types of CBBs in the Lahore Fort, further complicates the process of defining a terminology of this assemblage. Following are the two types:

- Type 1: Solid Beam of either Red Sand Stone or White Marble, supported by solid one-piece Bracket carved out from similar material, resting on a Column created from similar material.
- Type 2: Bricks placed at an angle of 45-degrees, similar in construction to a Jack Arch, however, the flat arch is supported over intricate Brackets made out from moulded Bricks. All of this is placed upon a Brick constructed Column.

These two types of CBBs are different in construction material and technique, however, both have similar visual profile and design.

For this research paper, following terminologies will be used with an understanding that these will be considered as evolving terms:

- For Type 1 - **CBB** - Column-Beam-Bracket
- For Type 2 - **BCAB** - Brick-Column-Arch-Bracket

Slide 10, 14, 16, and 18 contain images of CBBs, and BCABs.

CDEs of Type 1 - **CBB** - Column-Beam-Bracket

1. Richly carved Red Sand Stone Column
 - Square Base
 - ♦ Square Padding
 - ♦ Cubic Base with floral *boti* within a 'crown' motif
 - Octagonal Shaft
 - ♦ Vertical lines running along the length
 - ♦ Zig-zag / floral *bail* / vine motif
 - 3-Tiered Capital
 - ♦ Circular base
 - ♦ Conical body
 - ♦ Square top from which the Brackets corbel outwards
2. Richly carved Red Sand Stone Beam
3. Richly carved Red Sand Stone Bracket
 - Two double-Brackets running parallel with the Beam
 - One single-Bracket placed perpendicular from the Beam
 - ♦ Highly ornamental
 - ♦ Animal / bird sculptures
 - ♦ Symbolic and stylistic motives
 - ♦ Rajasthani / Rajput influence
 - ♦ Fatehpur Sikri Style



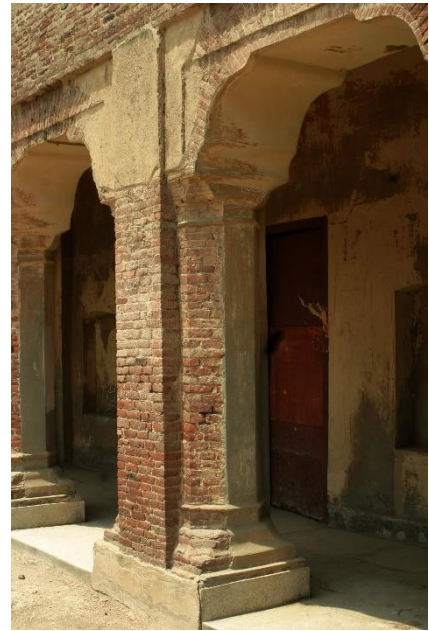
OR

1. White Marble Column
 - Square Base
 - ♦ Square Padding
 - ♦ Cubic Base with a 'crown' motif outline
 - ♦ Created out of solid cube of Grey Marble
 - Octagonal Shaft
 - ♦ Created out of a solid cylindrical piece of White Marble
 - ♦ Vertical lines running along the length
 - 2-Tiered Capital
 - ♦ Circular base
 - ♦ Octagonal body with recessed corners
 - ♦ Square top from which:
 - Brackets corbel outwards
 - Extended Frame outline is created
 - ♦ Created out of Grey Marble
2. White Marble Beam
3. White Marble Bracket
 - Two double-Brackets running parallel with the Beam
 - Same profile / elevation as CBB
 - Carved with intricate *boti*



CDEs of Type 2 - **BCAB** - Brick-Column-Arch-Bracket

1. Richly decorative Brick Double-Column Pilasters
 - Square Base
 - ♦ Conical in shape
 - Octagonal Shaft
 - ♦ Vertical lines running along the length
 - Octagonal Capital
 - ♦ Intricate Brick mouldings
 - ♦ Cusped corners
 - ♦ Square top from which the Brackets diagonally corbel outwards
2. Highly skilled Flat Arch
3. Highly skilled Bracket
 - Two double-Brackets running parallel with the Flat Arch
 - ♦ Same profile / elevation as the CBB



Tracing the **CBBs** and **BCABs** in Lahore Fort

The 3rd Part of this research paper attempts to trace the existing locations of surviving Flat Arches within the Lahore Fort. This will provide a basic contextual information linked with the structure and its respective Quadrangle.

The Google Earth 2023 satellite image of the Lahore Fort, shown below, marks the tracible locations of these architectural elements.



The RED dots mark the locations of CBB / BCAB, whereas the GREEN dots mark the existence of Timurid / early Mughal Arch, and the YELLOW dots identify the location of later CBB / BCAB. At this point it is crucial to mention that this is on-going research with a possibility of finding additional CBB / BCAB assemblages, or reconsidering the presented data.

Considering the current position of this research, it has been observed that the following structures, listed down within the respective Quadrangles and color-coded according to the Map above, had fully or partially intact CBB / BCAB assemblage:

1 Diwan-i-Aam Quadrangle	2 Moti Masjid Quadrangle	3 Jahangiri Quadrangle	4 Shah Jahan Quadrangle	5 Paian Bagh Quadrangle
<ul style="list-style-type: none"> Maidan Diwan-i-Aam Daulat Khana Khas-o-Aam Jharoka / Takht Kharrak Singh Haveli Akbari Mahal Zenana Hammam Rani Jindan Haveli British Steps 	<ul style="list-style-type: none"> Moti Masjid Makatib Khana 	<ul style="list-style-type: none"> Central Courtyard Khwabgah Bangla East Dalans East Burji Eastern Palace West Dalans West Burji Western Palace South Iwan 	<ul style="list-style-type: none"> Central Courtyard Khwabgah Shah Jahani Imperial Hammam Arzghah 	<ul style="list-style-type: none"> Kala Burj Lal Burj Central Tank Pavilion Foundations of Rooms Central South Chahar Bagh Temple
6 Shah Burj Reception Court	7 Shah Burj Quadrangle	8 Hathi Pol	9 Picture Wall	10 Akbari Quadrangle
<ul style="list-style-type: none"> Entrance to Shah Burj Fore Court British Garage / Jail Entrance Hathi Pol 	<ul style="list-style-type: none"> Shah Burj Forecourt Athdara Shish Mahal Naulakha South Dalans SW Baradari NW Baradari NE Baradari Central Water Tank Central Marble Mahtabi 	<ul style="list-style-type: none"> Staircase Entrance to the Basements of Shish Mahal Ghulam Gardish 	<ul style="list-style-type: none"> Western Picture Wall Northern Picture Wall Main Arched Darwaza 	<ul style="list-style-type: none"> Akbari Darwaza Akbari Hammam

This data provides a clear picture of the developmental timeline of Lahore Fort with respect to its structures and Quadrangle formation.

Slide 12 till 22, of the Presentation, provides a comprehensive visual support for the above Table.

Focusing on Individual Structures

For this research paper, following structures will be observed contextually whilst taking into account the unique CDEs they represent, and the regional influences they incorporate. This observational information will act as the baseline for evaluating the historicity of that structure.

- ♦ Daulat Khana Khas-o-Aam
- ♦ Bangla (*Sehdara / Sehdari*)

Focusing on Individual Structures - Daulat Khana Khas-o-Aam

For visual images, consult Slides 24 till 33, from the Presentation provided for this research paper. The black and white images have been acquired in 2006, by the Heritage Foundation of Pakistan, from the then Federal Department of Archaeology. These digitalized images are from the prints of the archival Glass Slides developed by the British.

The dauntingly impressive central structure of Daulat Khana Khas-o-Aam, is located within the Diwan-i-Aam Quadrangle, occupying the south-east side of the Fort. It is adjacent to the surviving structure of the Akbari Mahal.

The Daulat Khana Khas-o-Aam comprises of many important spaces, such as:

- The North Façade
 - ♦ The outer assemblage of CBB
 - ♦ The inner assemblage of CBB
 - ♦ The crowning Burji
- The South Façade (internally joined with the Diwan-i-Aam)
 - ♦ The *Jharoka / Takht* (imperial throne)
 - ♦ The spatial division through CBBs in Red Sand Stone, placed in the east and west sides of the *Jharoka*

Through the Glass Slide Prints, it can be seen that the base of this structure was once hidden behind a massive British structure (*Slide 24-25*). The Burji was also damaged due to British additions. However, the outer CBB and the inner CBB remain fully intact. A later Glass Slide Print shows the restored Jahangiri Quadrangle with the central water tank fully functional.

The most significant element in the north façade of Daulat Khana Khas-o-Aam is the central CBB assemblage, which is also mirrored inside. This contains:

- Three CBB assemblage (outer) created in White Marble
- Three CBB assemblage (inner) created in White & Grey Marble

The CDEs of both of these CBB assemblages are:

- Similar design vocabulary as the CBBs found in Jahangiri Quadrangle
- Intricate *boti* design on the Brackets
- Similar in design and material with the *Jharoka / Takht* located at the south façade

Visually, the architectural elements used in the central portal of the Daulat Khana are in harmony to each other, whereas the east and west chambers and Arch style is much different and belong to late Jahangiri era.

Due to lack / unavailability of historic records, and numerous haphazard additions and transformations by the Sikh and British rulers, it can only be speculated that the central part of the Daulat Khana provides visual / architectural and artistic evidence of a much earlier construction than the rest of the outer structure. Contextual link with the *Jharoka / Takht* feature further supplements the possibility that the central portal can belong to the Akbari reign.

Furthermore, the above possibility is strengthened by the existence of similar design vocabulary in other parts of Hindustan, belonging to the Sultanate era (1206-1526). For instance, the Shrine of Jalaluddin Surkh Posh and Shah Shams Shabzwari, in Multan, have similar CBB assemblage created out of Wood. The visual vocabulary is identical. Going even earlier, the wooden columns of the central courtyard at Baltit Fort (8th century CE) in Hunza Valley, also has similar visual vocabulary, although the *boti* is more intricately designed.

The south façade is still more complicated than the north. This side of the Daulat Khana has the imperial *Jharoka / Takht* set in the centre of a balanced composition of 5 CBBs on each side.

Starting from the east, this façade has:

- 2 Red Sand Stone CBB assemblage, followed by
- 6 Red Sand Stone CBB assemblage, 3 on the ground level, and 3 on the top level. This opening also contains the only existing staircase of the Daulat Khana.
- The *Jharoka / Takht* having White Marble CBB assemblage
- 3 Red Sand Stone CBB assemblage, on the top level
- 2 Red Sand Stone CBB assemblage, the west end of the Daulat Khana



The visual vocabulary and the CDEs of this entire assemblage is similar to the CBBs found within the Jahangiri Quadrangle. The *Jharoka / Takht* is similar in design and material with the two White Marble CBBs at the north façade of Daulat Khana. This visual evidence reinforces the possibility that this structure, especially the central portal and the south façade, belongs to Akbari reign. There exists a possibility that this was one of the structures commissioned to be rebuilt / strengthened by the Emperor for establishing his Court.

The Glass Slide Prints of this area shows drastic interventions constructed during the British rule, which were later removed, as confirmed by the ASI Reports 1937-38. However, the *Jharoka* top, the CBBs forming the *Jharoka*, and some of the marble railings survived.

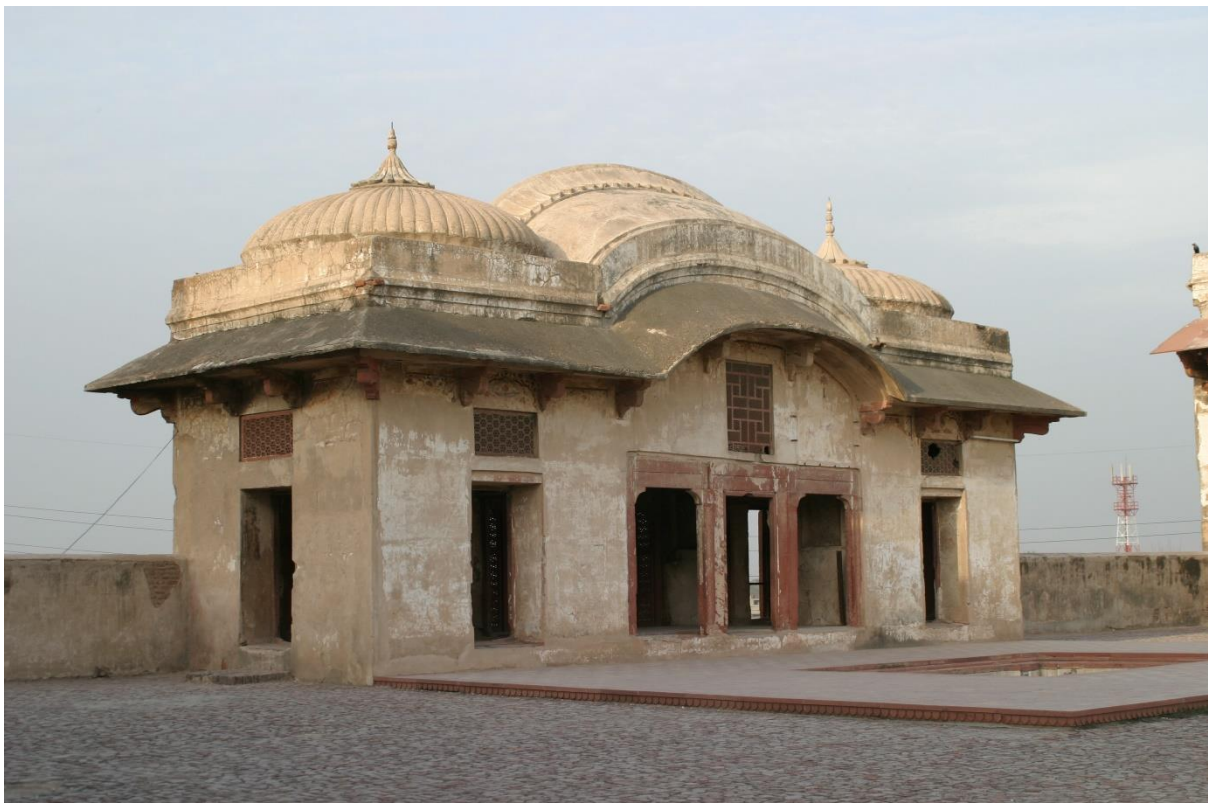
Through the above CDEs analysis and contextual references, it is recommended that this structure should be considered as an Akbari structure having early Jahangiri outer additions.

Focusing on Individual Structures - Bangla

For visual images, consult Slides 34 till 45, from the Presentation provided for this research paper. The black and white images have been acquired in 2006, by the Heritage Foundation of Pakistan, from the then Federal Department of Archaeology. These digitalized images are from the prints of the archival Glass Slides developed by the British.

The miniature structure of Bangla, popularly known as the *Sehdara / Sehdari*, is located within the Jahangiri Quadrangle, occupying the north-east side of the Fort. This structure has many unique aspects, such as:

- The roof Design
- Its place of importance at the North Picture Wall
- Its Name
- Its transformation and survival throughout history
- The Frescoes painted within this structure (these have been analysed and investigated in detail by Dr Kanwal Kahlid, Usman Saeed and Saamia Vine, three of the eight founding members of CROMLahore)



Through the Glass Slide Prints, it can be seen that this structure was once hidden behind a massive British barrack (*the green arrow in Slide 35 of the Presentation indicates the hidden structure*). One of the Glass Slide Print shows the east corner projection of the Bangla Pavilion (*Slide 36*).

The Archaeological Survey of India (ASI) Report 1902-03 prints a black and white photograph of the north-east corner of Jahangiri Quadrangle, showing the dismantled British barrack, and for the first time, the Bangla Pavilion becomes visible. A detailed photograph of this structure shows the amount of damage it had suffered during the process of getting constructed over and then removal of that construction.

The ASI Report 1937-38 prints a black and white image of this structure again, however, this time it shows the process of restoration and the restored structure. The existing Bangla Pavilion is the restored form of this structure. Some vital elements, such as the three central Red Sand Stone CBB entrance doorways, the side doors, the central *jali*, and a major part of the structure visible from the North Picture Wall, survived this devastation.

The central CBB entrance doorways survived these numerous transformations. In the process it lost its entire decorative features from its south façade, whereas the north façade still retains them.

Three main research questions were posed under this research:

- **Question 1** - Why is it named Sehdera / Sehdari, when it has 12 openings? In Persian language, *Seh* means '3', and *Dar(i)* means door. The name *Sehdari* imply that the structure has 3 doors. In total, the structure has 12 openings:
 - ♦ 3 central CBB of Red Sand Stone - south facing - doorways with a central *jali* carved out from Red Sand Stone
 - ♦ 3 central CBB of Red Sand Stone - north facing - elevated windows, visible from the North Picture Wall
 - ♦ 2 western doorways created from simple frames, one facing west and the other facing south
 - ♦ 1 western elevated window created from Red Sand Stone frame, facing north
 - ♦ 2 eastern doorways created from simple frames, one facing east and the other facing south
 - ♦ 1 eastern elevated window created from Red Sand Stone frame, facing north

Considering the central CBB assemblage of Bangla Pavilion, the name might have gotten associated with the structure. However, an archival panorama sketch of the city of Lahore, showing the Fort and the city Gates (*image can be seen on Slide 44 of the presentation*), labels the structure clearly as a 'Bangla'. What is the background of this name? does it have something to do with the shape of the Roof? This leads to the next question ...

- **Question 2** - Where does the inspiration of the Roof Design comes from? (*Slide 42-43 contains images relevant for this question*)
The Bangla Pavilion is not the only structure with such a complicated Roof design. Royal Mughal structures such as the Naulakha, Naqqar Khana Pavilion (Shalamar Bagh), and the Khilwat Khana in the Paien Bagh Quadrangle (Lahore Fort), have

similar Roofs. This Roof design can be traced to the Mughal *Subah* of Bengal (Bangladesh).

This Roof design was evolved through agriculture, for providing a protective shelter for grains and other harvest. This shelter was called a '*chala*'. One sloped thrashed straw covering was termed as '*chala*', while a double slopping covering was called '*do chala*' (two *chala*). This later developed into a temple sheltering divine deities. An assemblage of 4 to 8 *chala* was termed as a '*vangala*', which was later Persianized into '*Bangla*'.

The Roof design in context with the religious Frescoes created inside this structure, provides ample evidence towards the possibility that this structure was initially named as a Bangla.

Furthermore, the presence of similar structures at Amber Fort (1592-1700s), Rajasthan, further strengthens this possibility. Amber Fort was commissioned by Raja Man Singh I, who was the Mughal Subahdar of Bengal, General in the Imperial Mughal Army of Akbar, and an influential member of Nau-Rattan of Akbar's Court. A similar, yet much later, structure is also present at the Lal Bagh Fort, Bangladesh. This Fort was commissioned by Azam Shah (1678), son of Emperor Aurangzeb. However, the Bangla structure was created much earlier, and was used to accommodate the Mughal *Subahdar*, and was later used as the Governor / Viceroy House.

- **Question 3** - What is the significance of this structure for it to be placed at such a visibly important location?

The Bangla's association with the *Subah* of Bengal, the eastern limit of the Mughal Empire, can be linked with the political intention of creating a symbol which represents the vast extent of the Mughal Empire, yet it can also symbolise an Empire with an inclusive approach towards the native states and their architectural vocabulary.

In both cases, placing a Bangla structure within the composition of the North Picture Wall, gives it a visual prominence which can prove to be beneficial for both parties - political gain for the Mughals, and an elevated status for *Subah* Bengal for smooth administration.

At this point of the research, the founding members of CROMLahore have initiated an online process for changing the name of this structure from *Sehdari* to Bangla.

It is also recommended that this structure should be considered as a later Akbari - early Jahangiri structure, considering the CDEs discussed in this research.

To Be Continued Research @ CROMLahore

Through time, the Lahore Fort has seen many transformations, much has been lost, but a lot still survives. It is our duty to complete the narrative of the historic property through researching and investigating for unique clues.

A number of concerns, issues and questions, still remain to be investigated within this research paper. It is expected that many reviews and concerns will be generated after this paper has been published online through the CROMLahore website. It is hoped that these queries will facilitate to further this research.

The Kala Burj still remains on-going research, perhaps to be investigated next. Once again, through the platform of CROMLahore, this research will be disseminated under the Volume 2 Series.

Bibliography

- Akhtar Said (2011) *Selected Research Articles on the Mughal School of Architecture and Painting*. Azeem Star Printers. Lahore
- Akbar Siddiq A, Rehman Abdul, Tirmizi M Ali (1991) *Sultanate Period Architecture*. Anjuman Mimaran. Lahore
- Annmarie Schimmel () *The Empire of the Great Mughals*. Sang-e-Meel Publication. Lahore
- Beveridge Annette Susannah (trans.) (2006) *Babur Nama: Journal of Emperor Babur*. Penguin Books. Delhi
- Conway Hazel and Roenisch Rowan (2005) *Understanding Architecture: An Introduction to Architecture and Architectural History*. Routledge. London
- Koch Ebba (1991) *Mughal Architecture: An Outline of its History and Development 1526-1858*. Prestel. Munich
- Latif Muhammad (1892) *Lahore: Its History, Architectural Remains and Antiquities*. Sang-e-Meel Publication. Lahore
- Robinson Francis (2007) *The Mughal Emperors: and the Islamic Dynasties of India, Iran, and Central Asia*. Thames & Hudson. London
- Rogers J M (2020) *Mughal Miniatures*. The British Museum Press
- Rehman Abdul (2013) *Mapping Lahore: Tracing Historical Geography of a City Through Maps*. Al-Mezaan Publishers. Lahore
- Rehmani Anjum (2016) *Lahore: History and Architecture of Mughal Monuments*. Oxford University Press. Lahore
- Lari Yasmeen (2003) *Travel Guide Lahore*. Heritage Foundation of Pakistan. Karachi
- Malleson G B (2005) *Akbar and the Rise of Mughal Empire*. Rupa Publications. India
- English Heritage (2013) *Conservation Principles Policies and Guidance for Sustainable Management of the Historic Environment*. English Heritage. London
- Eraly Abraham (2008) *The Mughal World: India's Tainted Paradise*. Phoenix.
- Eraly Abbraham (2004) *The Mughal Throne*. Phoenix
- Stuart C M Villiers (1913) reprint (2007) *Gardens of the Great Mughals*. Asian Educational Services. New Delhi
- Ziad Zeenut (2002) *The Magnificent Mughals*. Oxford University Press. Karachi