Chapter - 4

*Flora and Fauna*

*in*

*Mughal Architecture*
FLORA AND FAUNA IN MUGHAL ARCHITECTURE

The human being, by his nature, loves beauty. Even in the earliest times, he used to ornament his tools and implements and decorate the walls of the cave he dwelt in. Necessity was undoubtedly the pre-runner, but as soon as his surrounding conditions had stabilized, his sense of beauty his simple sense of the aesthetic set him to make his surroundings more pleasing and more harmonious, with his very meagre resources and puny efforts, man even in the earliest phase of civilization tried to make the world around him as beautiful as possible.¹

Architecture, born as a science developed into an art. The three necessary requisites of any architecture are its utility, stability, and beauty; that it should serve a purpose, it should be strong and composed of a substantial fabric and should not merely be a structure of the cardboard category; and, above all, the entire structure should appear pleasing.²

Flora and fauna was an integral part of Mughal life, being fully represented in the planning of palaces, forts and tombs. A Mughal habitat could rarely be conceived without trees, plants, birds, animals and running water. Mughal architecture does not merely consist of brick, stone and mortar; it attaches equal importance to topography and environment comprising gardens with water courses, water bodies, and open space, etc.³

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2. Ibid., p. 1.
The depiction of flora and fauna in the architecture was a unique feature of India. Before the Mughals, we often come across to the ancient architecture that the depiction of birds, animals, flowers, trees and many other living beings was alive in the ancient hindu architecture e.g. some animate symbols of the Hindu art were *matsya* (fish), *kurma* (tortoise), *varaha* (boar), *mrga* (deer), *simha* (lion), *asva* (horse), *hastin* (elephant) and *naga* (serpent). Some were mythical motifs as *garuda*, *hamsa*, *makara* and *sardula*. Grotesque creatures and composite animals (*Inamrga*) were also evolved on a large scale. Among the vegetation motifs of the Hindu art *Kalalata, Padma* (lotus), *vata, mala, tala* (palm) and *mucakunda* (honey suckle) are most important. Besides these motifs, a large number of symbolic objects conveying philosophical ideas and concepts were also evolved in Hindu art, among which the *purnaghata* (*Kalasa*), *Yupa, stupa, cakra* (wheel), *svastika, srivatsa, triratna* and *fankha* (conch-snell) were most popularly used.\(^4\)

With the beginning of the Mughal rule India, a new phase was started in the development of architecture in India. Right from Babur and his successors especially Akbar (r.1556-1605), Shah Jahan (r.1628-58) retained the fundamentals and gradually adapted themselves to the climate, the site, the layout, the garden, and the architecture that is the environment, which became the primary determinant of architectural effect. The palace gardens of Agra, Delhi, Lahore and Kashmir, and above all, the grand tomb gardens of the great Mughals at Delhi, Agra and Lahore, developed from the modest beginnings of

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It was in these palaces and tomb gardens that Babur’s grandiose dreams found fruition.⁵

A small sunken Char-bagh (‘four quartered garden’) was laid out on the second terrace, namely the Sahn-i-khas, to the north of the Raniwas or Harem Palace at Fatehpur Sikri (1572-85). It had trees as well as flowering plants. In comparison to this, the palace gardens of Agra Fort and the Red Fort in Delhi—the Anguri Bagh and the Hayat Bakhsh, which may be assigned to 1630-35 and 1638-48 respectively, are large complex gardens. Both are four-quartered with such architectural elements as raised causeways, canals, lotus ponds, cascades, and mountains. Flower plants were mostly favoured in these gardens. But such small trees and bushes as champa (Michelia champaca), gudhal (Hibiscus), kaner (oleander), chandni (Tabernaenaontana coronasia) and harsingar (oleaceae) and such creepers as chameli (Jasminum pubescens), juhi (Jasminum auriculatum), and mali (Jasminum grandiflorum) were also grown on the corners and sides. Jahangir also laid out an indoor garden in front of his palace in the Lahore fort.⁶

Independent gardens which were laid out by the Mughals at Agra, Delhi, Lahore, and most abundantly in Kashmir were plain as well as terraced gardens. The purpose of these gardens and lawns was to increase the beauty of the buildings to make them beautiful. The Mughals laid out symmetrically as gardens which such large fruit, flower and leaf trees as am (mango), amaltas (laburnum), amla (myrobalan), ashok (saraca indica), bargad (Ficus indica),

6. Ibid., p. 150.
bel (wood apple), chenar (Platanus orientalis), dhak or palas (Butea frondosa),
gular (Ficus glomerata), imli (tamarind), jamun (Eugenia jambolana), Kachnar
(Bauhinia variegate), Kadamb (Anthocephalus cadamba), Keitha (Feronia
elephantum), khajur (date palm), khirni (Mimusops indica), lisora (Cordia
latifolia), mahua (Bassia latifolia), maulsari (Mimusops elengi), nim
(margosa), pipal (Ficus religiosa), sal (Shorea robusta), grown alongside the
avenues, and small flowering plants, vines, and creepers such as chemeli,
champa, chandni, gudhal, gulab (rose), harsingar, kaner, Ketaki (screwpine),
malti, mogra (Jasminum sambac), nargis (narcissus), patli (sreereospermum
suaveolens), rat ki rani (Cestrum nocturnum), and Surajmukhi (sunflower) in
the partemes. Kamal (lotus) and Kumudini (waterlily) covered the tanks and
completed the spectacle of a paradise.  

Along with these floras, fauna also came in existence, in wide variety.
Fish, ducks, and swans played in tanks and canals of Mughal gardens. A wide
variety of colourful butterflies flittered among the flowering plants. Trees gave
shelter to the cuckoo (koel), sparrow (gaureya), dove (penduki), weaverbird
(baya), lark (lava), parrot (tota), peacock (mor), pigeon (Kabutar), crow
(kauva), and scores of other birds of the region and to squirrel (gilhari) and
monkeys (Bandar and langur). Partridge (teetar), rabbits (kharghosh),
mongoose (nevla), and deer (hirani) found their habitat in bushes. Separate deer
parks were also maintained by Jahangir at Fatehpur Sikri and Lahore.  

7. Ibid., p. 150.
8. Ibid., p. 151.
Mughal gardening and horticulture was, in fact, a vast discipline. It was in this beautiful way that nature was tamed and cultured by the Mughals and flora was vitally associated with their architecture. 9

Flora and fauna in Mughal architecture can be studied not only as its essential part or constituent, but also as a repertoire of motifs and designs used in its ornamentation. 10

The Mughals used several types of designs for architectural decoration such as arabesques, geometrical patterns, panels of calligraphy and floral motifs, each in a wide variety. Floral designs have been used both in natural and stylized form. While the general inclination of the Mughal artist is to use a floral design in stylized form, and stylization of forms is the dominant theme of Mughal ornamentation, vegetation has also been shown in its natural twists and turns without stylization. In all such cases, it has been depicted as a subject of natural history and not as a work of design. Study of locus, form and purpose of each depiction will decide whether it is a floral subject or merely a floral design for the sake of ornamentation alone. Technically, “flora” must exclude all stylized repetitive floral designs and encompass only natural trees or plants, with trunks, branches, stems, twigs, stalks, leaves, buds and flowers in other words, pure vegetation. 11

The dados of the Kutub-khana (so called Sultana’s Palace) of Fatehpur Sikri (1572-85) depict jungle scenes and natural flora and fauna, carved in red sandstone. One panel has three trees with lush vegetation in absolutely natural

9. Ibid., p. 150.
10. Ibid., p. 151.
11. Ibid., p. 151.
form without any stylization.\(^{12}\) (plate 45) Another depicts a jungle scene with three lions (now mutilated) and five parrots (which too are mutilated but are unmistakably recognizable); two parrots perched on a twig, two on branches of a tree and one shown flying.\(^{13}\) (plate 46) The upper right hand corner has three beautiful *techi* (Chinese cloud forms) which suggest that this panel was most probably inspired by miniature painting. It is pure landscape depicting “flora” and “fauna” as a subject, and the dado is unique in this respect.\(^{14}\)

Two pilasters of this annexe bear pomegranate (*anarkali*) creepers with wonderfully natural twists and turns. The pomegranate is a tree but here it is shown as a creeper to enable it to flow on the mural surface realistically.\(^{15}\)

Plants in natural forms have been painted on the *mihrab* (niches) of *Jami Masjid*\(^{16}\) and more prominently, on the dados of Salim Chisti’s tomb at Fatehpur Sikri.\(^{17}\) There is no doubt that these plants have been depicted here on the full panel as a subject. Beautiful natural plants have also been shown on the arches of this tomb.\(^{18}\) Right since Akbar’s reign the Mughal artist was a master of design, of which stylization, partly under Iranian inspiration, was an aesthetic preference. There are only a few instances when he used natural forms of vegetation, against a vast repertoire of stylized floral designs. To this perception *Ustad Mansur*, ( *Nadir-ul-Asr*) the court painter of Jahangir, made a world of difference. He sought to depict flora and fauna not as design but as a

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12. Ibid., pl. 1, p. 151.
15. Verma, op.cit., Pl. 3.
18. Nath, op.cit., pl. CXLVII.
subject, in a natural rather than a stylized way. As Jahangir's memoirs show, Mansur painted a large number of natural history subjects: birds, animals, plants, and flowers. Of the flowers of Kashmir alone, he painted more than one hundred. His paintings had an overwhelming influence on the art of the architectural decorator who was inspired to translate Mansur's studies on the exterior and interior surfaces of the buildings, particularly on the dados.  

The predominance of naturalism in Mughal art, in fact, owes a lot to the age of Jahangir. This is perceptible even in the first buildings of his reign – his father's tomb at Sikandara, Agra. The north and south iwans (portals) of the main (south) gateway of this tomb have extremely beautiful floral compositions inlaid in mosaic on their facades.  

(plate 47) Though the flowers which look like lotuses (technically, potentially of the Rosaceae family) and leaves appear to have been used in stylized form, they are spread on the mural surface in an altogether natural way, as if in a pond, adjacently similar to the famous painting of lotus pond of Ajanta where too stylized is totally absent.  

Akbar's white marble Cenotaph on the uppermost floor of his tomb depicts lush vegetation on both northern and southern sides. In either case, it is not landscape though it looks like it; it is only a composition of several natural plants with flowers and fruits along with Chinese cloud forms and butterflies.  

It depicts flora naturally and realistically. (plate 48)
The tomb of Itimad-ud-daula in Agra is probably the most profusely ornamented building of the Mughals constructed entirely of white marble; it has inlay and mosaic designs on the exterior and designs in painting and stucco in the interior. Highly stylized arabesque, geometrical, and floral designs have been used on all external surfaces. Some compositions depict wine cups, wine bottles (*surahis*), and flower vases (*guldasta*) and sometimes the motif of the cypress tree has also been used with them in an altogether stylized form. It is only in the interior that some realistic and natural plants with twigs, leaves and flower have been depicted in stucco and painting. Each plant in its full form appears without stylization. It seems that, taking inspiration form Ustad Mansur’s plant studies, professional artists were also attempting to draw vegetation in natural form. Similarly, birds like the peacock and animals like the lion in playful postures have also been depicted in the interior.

It must be noted that the objective of the depiction of natural flora and stylized floral design was the same – to create a beautiful situation or composition on a mural pariel for aesthetic pleasure. Soon it was realized that this could be best achieved by using a natural plant motif (a painting by Ustad Mansur) in the centre of a dado, bordering it on all sides by a repetitive stylized creeper. The dados of the *Mussamman Burj* in Agra Fort (1628-35) provide some of the earliest examples of this depiction. They have double plant motif, in natural forms, one above the other, carved in the centre in medium relief.

25. Ibid. pl. CCXXXVIII.
26. Ibid., pls. CCXLIX-CCLII.
and a stylized creeper pattern composed of flowers and leaves in inlay in polychrome, on the border.\(^{29}\) (plate 49) The use of Chinese \textit{tchi} in the upper part of each panel is again indicative of the fact that the original inspiration for this depiction came from contemporary painting. They look like the plant studies of \textit{Ustad} Mansur, and it was probably here, rather than on a \textit{wasli} (mount prepared by pasting two or more papers for painting thereon), that his art has found the best and most representative expression. Several natural plants with stems, twigs, leaves, and flowers have been depicted on each dado.\(^{30}\)

The dados of the \textit{Diwan-i-khas}, Agra Fort (finished 1636-37), provide later and greatly refined examples of these plant studies.\(^{31}\) (plate 50) Here the \textit{"tchi"} motif has been dropped. The dados of the \textit{Diwan-i-khas} of Red Fort, Delhi (1639-48), mark another stage of the development of this formula of art. While in the preceding examples of Agra Fort double series of plants one over the other were shown in the centre, here the dados have a single plant each with small \textit{"tchi"} depicted in some cases, like butterflies. They appear here for the last time.\(^{32}\)

The main impulse to relate Mughal art to the arts of the medici has come from the use of pietre dure inlays in the buildings of Shah Jahan (1628-1658). From its very first appearance in Mughal architecture this particular form of inlay technique belonged although by no means exclusively to the sphere of

\begin{itemize}
  \item \(^{29}\) Nath, \textit{History of Decorative Art}, op.cit., pl. CLVIII, p. 155.
  \item \(^{30}\) Verma, \textit{op.cit.}, pp. 154-155.
  \item \(^{31}\) Nath, \textit{History of Decorative Art}, \textit{op.cit.}, pl. CLIX, p. 156.
  \item \(^{32}\) Ibid., p. 156.
\end{itemize}
tomb art. Here it reached its nadir in the decoration of the interior of the Taj Mahal, in particular on the cenotaphs of the emperor (dated 1666) and his wife (dated 1631). On the main floor and on the marble railing which surrounds them (1642).  

About the same time or slightly earlier than the first pietre dure of the Taj Mahal the cenotaph of Shah Jahan’s father Jahangir in his tomb at Shahdara near Lahore (ca. 1628-1638) was decorated with inlay work in the same technique. We also find it on cenotaphs of persons of a particular standing such as Asaf Khan, Shah Jahan’s father-in-law who died in 1641.

In July 1663 Francois Bernier describes the interior of the Taj Mahal: “Everywhere are seen the jasper, the jachen, or jade, as well as other stones similar to those that enrich the walls of the Grand Duke’s Chapel at Florence”. Jean Baptiste Tavernier, who traveled repeatedly around India between 1640 and 1665, reports that Shah Jahan planned to enrich the hall of public audiences, the Diwan-i-Aam of the Red Fort at Delhi, throughout by wonderful works in mosaic, like those in the chapel of the Grand Duke in Italy”. But that in the end, the emperor contented himself with a representation of different flowers”.

In this passage Tavernier clearly refers to the place of appearance of the emperor in the audience hall, the so-called jharoka, which here takes the form

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34. Ibid., pls. 5-6.
of a throne. In this throne arrangement we find indeed solid evidence for direct interaction between Mughal and Florentine pietre dure because the wall of the niche behind the throne is decorated with 318 Florentine pietre dure plaques showing flowers, birds, lions and a panel of Orpheus playing to the beasts.  

It is at the Taj Mahal, finally, that dado composition with natural plant motif has been perfected. All the four portals of the main mausoleum have series of dados with plants (composed of twigs, leaves, and flowers with natural twists and turns). Carved in bold relief in the centre in single series and stylized diaper patterns inlaid in polychrome in the border, flowering rhythmically on the flat surface of the panel.  

(plate 51) The dados of the main (octagonal) cenotaph Hall are unique. The Mughal artist realized that the natural phenomenon in the centre could be best represented by _ghata-pallava_ (vase and foliage) motif, depicting a vase or pitcher (_ghata or kumbha_) with overflowing natural vegetation in the centre of the dado, and he used this motif here on these dados most artistically.  

(plate 52) 

The unique development of this art was only possible in India where the _ghata-pallava_ had been used symbolically, auspiciously, and ornamentally, both as subject and as design, for about two thousand years, as at Mathura and Amaravati. This inspiration to use it as a subject in Mughal architecture could have been taken from the extent temples and also from the medieval architecture of Gujarat where the _ghata pallava_ was prominently used in niches of the _minars_ for example, on the _minar_ of Qutub-din's mosque at Ahmadabad.

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39. Ibid., pl. CLXI, p. 156.
Mughal artists used it earlier on incised stucco painting in the vestibule of Akbar’s tomb and on the bases of the Diwan-i-khas pillars in the Agra fort. The ghata-pallava (purna kumbha or purna kalasha) motif of the Taj Mahal is the most distinctively symbolic of flora used in Mughal architecture. After this, stylization takes over and stylized floral designs almost completely replace the earlier natural forms.\textsuperscript{40}

Reference in this connection may also be made to the honeysuckle (muchkund) and palmette (talparna, taldhwaj, talketu, or padmahaslak) which provide the best examples of stylized florals in Indian art. These have been used in ancient Indian art on the torana (gateway) of Bharhut, the abacus of the Ashokan pillar of Sanchi, elephant and bull capitals at Sankisa, and Rampurva, respectively, singly or together in a beautiful ornamental composition.\textsuperscript{41}

Honeysuckle and knop-and flower motifs have been used in Akbar’s buildings at Agra Fort (1565-75) and Fatehpur Sikri (1572-85). The parapet of the eastern court of the so-called Jahangiri Mahal complex of the Bengali Mahal in Agra Fort is decorated with a honeysuckle design. The pillars and pilasters of its porch have palmette motifs on their bases. The interior decoration of the upper pavilions of this palace is also composed of a honeysuckle and palmette design. At Fatehpur Sikri honeysuckle is depicted on the apex of a number of ornamental arches in the Mahal-i-Ilahi (the so called Birbal’s Palace) and also in designs on the mural panels. It is used as well the capital of a pillar in the Panch Mahal. Some capitals of this palace also have

\textsuperscript{40} Verma, op.cit., p. 158.
\textsuperscript{41} Nath, History of Decorative Art, op.cit., p. 85.
knop and flower. The honey suckle and palmette motif has been used most prominently on the bases of the red stone pillars of the *Rang Mahal* and white marble pillars of the tomb of Sheikh Salim Chishti, which were added by Qutub-Din Khan Kokaltash (Khuban) during the reign of Jahangir, around 1605-07. All of them are carved.\(^{42}\)

The third story spandrels of the arches of Akbar’s tomb at Sikandra (1605-12) have, in a number of cases, such medallions which contain the honeysuckle motif. The *chhatris* (pavilion) pillars of the fourth storey have the palmette motif on the bases, also in carved stone. It is noteworthy that it was mostly during the age of Akbar, or contiguous to it, that these designs were used. Soon, the Mughal court artist ingeniously developed his own designs (geometricals, arabesques, and stylized florals) and these extraneous motifs were gradually forgotten.\(^{43}\)

In such a discipline as Mughal architecture, all animation is not fauna. Brackets which have elephant heads (in the eastern *dalan* (verandah) of the Delhi *Darwazah* of Agra Fort); of those which spring from makara-heads or elephant heads (in the northern hall of the *Jahangiri Mahal* annexe of the *Bengali Mahal*, Agra Fort and Central hall of the so-called *Ankh Muchoni* at Fatehpur Sikri); or those which are peacock shaped (in the Mayura mandapa of the *Bengali Mahal* in Agra Fort), Swan shaped (in the *Bagh-i-Nur Afshan* at Agra), or elephant shaped (in Jahangir’s palace in the Lahore Fort), for example, are architectural elements pure and simple. Similarly, rows of swans,

\(^{42}\) Ibid., p. 86.
\(^{43}\) Verma, op.cit., p. 159.
parrots, elephants, and other birds and beasts depicted on friezes, in stone carving in the buildings of Akbar and Jahangir are pure designs, which have not been used as a subject, but for the sake of mural ornamentation only. As in the case of flora, such depictions do not constitute “fauna”, in the real sense of the term.  

Landscapes and wild animals have been depicted on the dados of the Kutub-khanah at Fatehpur Sikri, as has been discussed above. Most important, however, is the depiction of “fauna” in natural surroundings on the picture wall of the Lahore Fort (1612-20) in glazed tiling. A large number of panels show such fauna scenes as lion hunting deer, lions reclining, camel, elephant, horse, deer, and other animals in beautiful landscape, in hunting and other postures. This is a unique series obviously; it could only have been commissioned by such an ardent naturalist as Jahangir who loved nature in its pristine purity. His artist, as has been referred to above, painted both “flora” and “fauna” in their natural forms, not as designs but as subjects of the respective miniatures, and a large number of glazed titled panels of the picture wall also depict them accurately. Jahangir’s time was in fact, an age of ‘flora’ and ‘fauna’.

It must be noted that there is practically no animation, or depiction of ‘fauna’ in the white marble buildings of Shah Jahan – for example, in his palatial mansions in the Agra Fort (1628-38), the Red Fort (1638-45), the Taj Mahal (1631-48), and in the Moti Masjid in Agra Fort (1648-54). It is only in the red stone buildings of Akbar and Jahangir that recourse to animation was

44. Ibid., p. 159.
45. Ibid., p. 159.
taken through several means and “fauna” was freely depicted. An orthodox point of view seems to have prevailed thereafter and animation was excluded from the scheme of Mughal architectural decoration.\(^4^6\)

It is clear that, Mughal art is not a vehicle of any religion, as is the tradition India Art Hindu, Buddhist, Jaina, Rajasthani and Pahari art in them in general, for instance, “flora” and “fauna” appear as celestial being and as a terrestrial phenomena, prescribed to be depicted on three terraces (technically, *bhadrapithas*) of the *samavasarana*, following the Indian concept of *meru* or *someru*, symbolized the cosmos (*jagat*). Mughal art was art for the sake of beauty and grandeur, without philosophical, religious, or ritualistic symbolism. It requisitioned both “flora” and “fauna” only to the extent that these could be used for artistic embellishment, to enhance the architectural effect. The Mughal art which thus developed in the hands of the indigenous builder was mainly a court art depending on the connoisseurship and individual patronage of the emperor or the noble, so unlike classical Indian art, which the art of the people is at large and in common. Mughal art is essentially non-sectarian if not purely secular.\(^4^7\) Mughal art is manifestly a departure from the classical India art; the former strikingly featured the naturalism or at least a naturalistic intention.

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\(^4^6\) Ibid., p. 159.