

## **Landscape and Ecology**

### **Lecture 7**

#### **Mughal Garden**

The concept of Mughal garden was derived from Persia

Paradise Park or paradise garden was an important part of Persian Art and tradition. This is the Persian garden where we can see the depiction of paradise park or paradise garden and this Persian corporate. So typically a paradise garden symbolized paradise that described in Quran. It consists of a cross symbolizing the division of the world into 4 sections with the pool of life in its center

**The four sections are interpreted as four elements such as**

- Fire
- Air
- Water
- Earth

Four rivers of paradise flow into the garden they are the rivers of milk, honey, water and Wine.

This concept of paradise garden was brought to India by Babur. He conquered Delhi and after conquering Delhi he laid out gardens. This miniature painting shows the typical garden Babur layout. He supervised the laying of the garden. We can see the charbagh division and also water here and the gardens were used for entertainment. They were used as outdoor living spaces as we can see here the court is entertained in the garden. Babur's grandson Akbar conquered Kashmir, so the Mughal empire expanded as its height. The Mughal empire stretched from the Himalayas to the Bay of Bengal and later other Mughal emperors, Shah Jahan and Jahangir, constructed many Mughal gardens here especially in Kashmir. Now we will look out the layout of Mughal gardens. They followed the charbagh pattern, the garden is divided into four quadrants and the garden is divided into four channels by a main water course and also they were also secondary water courses and important junctions were accentuated and water is an important theme here. Plants filled these quadrants; these are the typical elements of Mughal gardens.

#### **Mughal Gardens - Locations**

These Mughal gardens were located in different places. Mainly located along the river side

- So such gardens developed on the banks of the broad river

- And this gives the charm of complete seclusion such gardens were enclosed on three side and open on the river on one side
- So that gave the commanding view of the river gardens examples of Mughal garden located along the river sides are
  1. Humayun's Stones garden
  2. Tajmahal
  3. Agra fort
  4. Delhi fort

After Akbar conquered the Kashmir valley gardens were developed in the valleys of Kashmir also so gardens were located in the foothills of the Himalayas

### **FOOTHILLS**

- Such sited on the shallow slopes of the foothill
- Such gardens had commanding view of the lake
- In this garden the distant view became a visual component of the garden whereas in the earlier garden along the riverside they were enclosed and it was open only on one side whereas here the distant view came the visual component of the design landscapes
- The examples for foothills gardens, the gardens of dal lake such as Nisha Bagh, Shalimar Bagh

### **MUGHAL GARDEN - DEVELOPMENT**

Now we will see the Mughal garden elements developed over the century, initially water course is an important element in all Mughal gardens. Initially narrow hills were developed and later on narrow hills developed to wider canals, So here we see Humayun's tomb and the garden here as very narrow hill whereas in the Tajmahal garden we see white canals and the initial garden were enclosed as we see here Humayun's Tomb enclosed by wall whereas in the later gardens especially in gardens in Kashmir, they were no enclosure it was open and During the development face Simple stone thrones were used in the garden for enjoying the view later on such elements were developed into elaborate pavilions.

So now we look at important elements of Mughal gardens the first one is Watercourse

### **WATERCOURSE**

Water is an important element in Mughal Gardens; water was used for reflective qualities and also for its cooling properties

So water channels in a typical chabba ran and divided the garden into four quadrants and such water channels were raised for irrigation and that is because water through weep holes it penetrated in to the soil and water the plants

### **WATER CHUTE OR CHADAR**

Water Chute or Chadar is a slope surface with interesting patterns for water to flow in so we can see a slope surface with interesting patterns here, here are some more patterns. So the chadar means shawl. So here water flowing over the fine carving of marble resembles a finely woven Kashmir shawl hence the name chadar. So this is like shawl. There are some more examples of water chute or chadar. We can see elaborate details of such chadar especially in gardens of Kashmir where there are many terraces we can see the slope surface with many different intricate details

### **CHABUTRA or STONE PLATFORM**

At the junctions of the water channels, stone platforms were placed this is mainly for the emperor to enjoy the view but later on such junctions were actionchivated by larger elements such as pavilion

### **CHINI KANAS which means PIGEON HOLES**

This are mainly niches in the caskets, The series of niches can created overwhich the water flows, so during the date time this niches were filled with flowers at night time lights were place here, so chini kanas were mainly illuminated niches. As we see here such elements are mainly found in the pleasure gardens

### **FOUNTAINS**

Fountain is another important element in Mughal Garden

- Fine sprays, plumes or as mist are created using water and they add moisture to the dry air and that was used to cool the garden so it has functional purpose

### **VEGETATION**

This Painting shows the vegetation around Tajmahal gardens and what we see now is very different originally fruit trees and shading trees were planted in the quadrants of typical Mughal gardens. The trees that were planted generally are

- Chenar
- Cypress

- Willow
- Poplar

As shown in the miniature painting, there are trees here cyprus and willow can be seen. Flowering plants were also used and such plants were used for their color, scent and also for symbolism. Champa and jasmine were some of the flowering plants that were used and planted in Mughal gardens.

### **Types of Mughal Gardens**

Next we will discuss about the types of Mughal gardens.

Based on the context and function

Mughal gardens can be categorized into three. First one is a tomb garden, such tomb gardens were mainly located in the plains by the side of river Yamuna in Agra and Delhi.

The next type is the pleasure garden; such gardens were mainly placed in hills of Kashmir.

The third type is courtyard garden within the fort and palaces, such gardens are located in the forts of Agra and Delhi.

We can start with the characteristics of Tomb Garden.

### **TOMB GARDEN**

Tomb Garden is a typical Char-bagh paradise garden. So it had square or rectangular plan and main watercourses, they were also secondary water courses and important junctions were accentuated by stone platform or any other element. That is in typical Char-bagh garden and junctions are accentuated by stone platforms whereas in the tomb garden. The tomb is placed at the center. So first we will start with characteristics of Tomb gardens. Tomb garden is a typical Char-bagh paradise garden so it was either square or rectangular in plan and it was divided into quadrants with main watercourse and secondary watercourse. In a typical Char-bagh important junction is accentuated by a chabutra or a stone platform whereas in tomb garden the tomb is placed at the center of the garden. Examples of such gardens include gardens of Taj Mahal and Humayun's Tomb.

### **Humayun's Tomb Garden**

Humayun's Tomb is based on the 9 square concept, the entire garden is divided into 9 squares. We can see here this is one square, the entire garden is divided into 9 squares and the tomb is placed in the center of the garden in the center square and each of the nine squares forms a Char-bagh. We can see the watercourses. So here are some important elements in Humayun's

tomb garden we can see the narrow hill we can also see the fountains and here the junctions we have water elements and also we can see the water chute or chadar, we can see the patterns in the chadar as a sloping surface in the intricate pattern which the water flows to create interesting patterns.

### **Another example for a Tomb garden is TAJMAHAL GARDENS IN AGRA**

- This garden departs from the other Tomb garden because in this case the tomb is not placed in the center of the garden because this is the typical chabba
- The tomb is placed towards one side this garden is enclosed on all the three side and its open on one side to the river Yamuna
- The garden is a typical char-bagh

Here are some elements, so when the visitor enters the tomb building is framed by the arches and then other are few steps when visitors descends down then the focuses more on water channels and the stone platforms here is the chabutra. So here we can see the Taj shaped patterns or parterre and typical Mughal chabba garden.

The causeways are slightly raised for irrigation as we see here the original vegetation has fruit trees and shade giving trees and none of this exit today and now we have mainly lance in and some avenues. This is the Ariel view of the gardens of Tajmahal

### **PLEASURE GARDENS**

Such gardens are located in the hills of Kashmir, we will discuss about the characteristics of pleasure gardens. Gardens are developed in the hill side of Kashmir, summer resting places for the royal family. The pleasure gardens are also follow

- The Typical chabba concept
- Due to the topography of the site because of the sloping site garden was divided into many different types of terraces
- Each of the terraces followed the chabba concept, so there was a water flowing and water concept in the center and also there were the fountains and other interesting water elements were created in pleasure gardens.

### **GARDENS OF DAL LAKE**

All the gardens around Dal Lake in Kashmir are examples of Mughal Pleasure gardens. They include

- Nishat Bagh
- Shalimar Bagh

- Nisi Bagh
- Achabal
- Vernag

We will discuss one important pleasure garden that is the Shalimar Bagh

## SHALIMAR BAGH

- This is set on the lower slopes of the mountains, so we can see in the Shalimar bagh. The Mahadev Mountains can be found in the background, so this is the plan of the Shalimar bagh we can see three terraces, one, two and three, this is the lower most terrace and each of the terrace forms a chabagh. So at the lower most level we have a public garden and the second level we have a emperor's garden or private garden and in the third level we have the ladies garden or zenana. Here we can see the section so each garden was level to fit the sloping side
- Now we look at the interesting elements in this garden. The lower most level is the hall of public garden and here the hall of public audience, the originally the lower level was much bigger but it was cut off by a modern day road so it's rectangular in plan. Here is the another view of the hall of public audience, here in this hall of public audience the emperors are unhim at the visitors and in the second level we have the emperors garden and in the center we have the hall of private audience so what we see here is a stone platform, originally elaborate pavilion was designed but it doesn't exist anymore what we see is just see remains so we can see the stone platform in the center we can see the water elements and we can also see avenues of trees and we can also see that in the picture. So here is the view of the second terrace where we can see the water course and the pathways and the avenue trees.
- Here is the another view of the second terrace her again we can see the water channel we can also see the cause way and we can see the third terrace where the entrance is marked by two pavilions. This is clearer here the entrance of the terrace is marked by pavilions.
- Here is the another view of the garden the second view of the emperor's garden. The third level is an zenana garden so in the center of this there is a black marble pavilion, this is the view of the black marble pavilion there are fountains all around, there is the another view of the fountain so we can see elaborate water elements in the zenana garden and this is view of the second terrace and the pavilion from the black marble pavilion we can see the stone platform we can also see the cause face, so in this black marble pavilion there is an inscription which says
- If there is a paradise on the face of the earth it is here, it is here and it is here true to this Shalimar bagh stands for a very fine example of a Mughal pleasure garden and this

here in the view shows of background of Mahadev Mountains and all the other elements of typical Mughal pleasure garden. The pavilion the water features such as fountains, pools and watercourse, the caskets we looked at to

### **Types of Mughal gardens**

- The tomb gardens
- The pleasure garden
- The third type is the courtyard garden with in forts and palaces

We are discussing about the types of Mughal gardens based on the context and the functions. Mughal gardens can be divided in to three types we discussed about tomb gardens and pleasure gardens and now we discuss about courtyard gardens within forts and palaces. Such gardens are located in the forts of Agra and Delhi

### **PALACES**

- Palaces were constructed along the riverside terraces
- Gardens were created inside the palace

Such palaces were forts were enclosed on all the sides may be on the river sides it was open to get the cooling breeze and also gain access to the water.

### **RED FORT, DELHI**

This is the plan of the Red fort, Delhi here is one of the gardens which is known as Hayat-Bakhsh bagh which means life bestowing garden this garden is divided into squares with water channels, pools, fountains, causeways and pavilions. Here are some of the views of the pavilion and the Red fort. This shows Chini-kanas are the pigeon holes we already seen such details where the water flows over this and the sheet of water is eliminated from behind using the light. Though this is known as life bestowing garden most of the features today are destroyed and only few features of the garden remain. We will conclude the description of the Mughal gardens in India and the important features there. So in unit III we learned about three different types of gardens in history we learned about Japanese gardens and then we learned about Italian renaissance gardens and today we discussed about Mughal gardens in India

### **Recap of Various Gardens**

In Japanese gardens, we discussed about different types of gardens such as landscape garden the dry gardens and the tea gardens important elements in Japanese gardens included the stone arrangements, stone bridges other elements such as stone lanterns and water was another important theme in Japanese gardens. Represented water using dry pebbles and sand

in temple garden so they were different elements in Japanese gardens we learnt about the types various elements in Japanese gardens and how they developed and changed over the years. Initially they were landscape gardens then the influence of the religion the Zen Buddhism the temple gardens were introduced and later on with the introduction of the tea ceremony, the third type of garden the tea ceremony were introduced but most of them had important elements such as stepping stones, stone bridges and stone arrangement, stone lanterns and pebble and water. Then we learnt about Italian renaissance garden. In terms of planning it followed an axial planning there was a central axis and all the other elements were organized based on their central axis and garden was almost constructed as an outdoor living space and the typical Italian Renaissance garden layout resembled something like a miniature town there were main axis and main avenue and there were also cross axis and in terms of location Italian Renaissance gardens were mainly located on the sloping sides. So the site has the view of nearby city or the country side and also it allowed some of breeze to flow into the garden spaces and also it was protected from the harsh winter winds. Elements of Italian gardens included water was a main theme that was running along the central axis in most of the gardens and the elements included the fountains, caskets and water pools we can see two of the elements here pools and the water fountains in addition stone works also an important elements and the next element was evergreens. Evergreens as parterres are as hedges are as avenues these parterres we can see intricate patterns of low shrubs and finally today we discussed about Mughal gardens. Mughal gardens followed a typical Charbagh pattern and it was influence by the Persian garden in the typical Mughal garden and there was a main watercourse there was a secondary watercourses and different types of gardens were developed along the centuries initially they were located along the river side and they included mainly the tomb garden and gardens in palaces forts whereas later on Mughal gardens were located in Kashmir valleys along the foot hills so they had many different terraces still charbagh was the main theme after garden and that include elements such as chabutra or chini kanas and also evergreen trees for providing shade and also for fruits so these are some of the we can see some of the similarities and differences in these three different types of gardens. For example we can compare the relationship between the house and the garden in different historical gardens. For example in Italian gardens how is was the starting point garden was almost construed as an outdoor space whereas in case of Mughal garden. Gardens were living space on its own as we saw in the miniature paintings, water, gardens were used for entertaining the guest and mainly as a living space and the use of water and water is an important element in all the gardens in Italian renaissance gardens it was the central element it was the all the different kinds of water elements are arranged along the central axis as we can see here along the central axis.

In Mughal gardens also water was the central theme there was the watercourse in the center but the way in water was used was very different in these two types of garden. For example



Italian Renaissance garden water was used with technical brilliance there was no sense of being functional or being treated with reverence whereas Mughal garden cherish the water elements because the concept of Mughal garden was developed in hard dry plane as a result water was cherished in Mughal gardens. So initially there was used for irrigation and then water was available in plenty particularly along the plain hills of Kashmir elaborate water elements were used in Mughal gardens

Nature was respected in Mughal gardens and Japanese gardens and religion was another influencing factor in Japanese and Mughal gardens and geometric patterns were mainly used in Italian and Mughal gardens and Japanese gardens were more informal whereas Italian renaissance gardens and Mughal gardens followed very formal plan