

# **Landscape and Ecology**

## **Lecture 6**

### **Garden Principles**

Now to understand the Italian Renaissance gardens let's try to understand the mind of the renaissance people, first we will look at the timeline, you might be familiar with this timeline because you could already discussed about the history of architecture. Fall of the Roman Empire happen sometime in the 4<sup>th</sup> century BC , so now to understand the renaissance mind just look at the timeline you might be familiar with this timeline after the fall of the roman empire the middle ages begin, during the middle ages the people focused inwardly culture focus inwards but towards the end of the 14<sup>th</sup> century, the new discovery and the discpovery of new lands happen as a result people start the questions the assumptions about how the world worked so as the result the started questioning or the focus of the inquiry shifted during the middle ages,

### **THE FOCUS OF INQUIRY**

- On the next world
- On the nature of God or of Heaven

Where is during the renaissance period. People focused on present context of earthly life social and political relationship of the real world.

People's View of Nature changed

- As a result people view of nature changed, so they believe that divine could be perceive in the order of nature
- Gardens could be composed to express that order and landscapes could be appreciated for their scenic value
- Geographically also the Italian peninsula the connection to both east and west
- During that time the independent city states were established in Italy, City State is a region independently ruled by a major city examples of such city states include Florence, Nepal's and Venice and this city states had their own government
- Florence is where the renaissance first began and because of the city states identities were defined regionally and power resided with wealthy families
- The wealth of the Italian city state played in the important role in the renaissance, the wealth allowed prominent family to support artist, scientist and philosophers encouraging new ideas and artistic movements

- So similar to renaissance art and architecture the Italian Renaissance garden emerged from the rediscovery of classical roman models. So the designers look back to the roman empire for inspiration and guidance
- Essentially during the Renaissance period people's view of nature changed, so the gardens were designed the focused outward
- Intended for the pleasure of the view of the garden and landscape beyond, for contemplation, and for the enjoyment of the sights, sounds and smells of the garden itself
- To the predominant form of the garden type, the country villa and it is purely design for pleasure. So we can say that the essential character of the renaissance garden lies mainly in the attitude of the life of its creator

Now let's look at the various design principles of design gardens. There are many factors that influence their renaissance gardens. Once it influences writing of Alberti his "The ten books of architecture" was based on the writings of plainly and Vitruvius and he came up with the theories of site selection and planning

### **SITE SELECTION**

- He suggested a well-drained site on a solid ground for the construction of the villa
- Orientation of the site to the sun angles and the prevailing winds needs to be considered because the site needs to get cooling summer breezes and it needs to be protected from the harsh winter winds
- Adequacy of water supply needs to be determined

He also proposed many principles effort designing the gardens. So the villa should be

- Sited on the gentle elevations with the view of the surrounding country side
- Terraces and Stairways he recommended terrace and stairways to overcome the difficulties of uneven terrain
- An Avenue or Axis was also recommended by him to link all the elements and spaces
- Porticos were suggested to make garden space continuous with that of the surrounding

Following this principles the typical Italian renaissance garden followed this principles so the sites were selected along the hilly slopes, the sites overlooked the adjoining city from the slopes both view and wind were important consideration. So many descending terrace were curved at on this slopes as a result the series of garden rooms projecting into the space was designed

### **AXIAL PLANNING**

- Axial Planning is one of the main principle. So in renaissance garden sequence of geometric spaces were laid out and they were linked by a common axis and here this Italian Renaissance gardens
- The garden itself considered as a part of the house
- In the simplest form it was regarded as an extra room, for example it was almost considered as a salon flooded with unlimited light and air

## **LAYOUT**

The layout suggested that of a miniature town, we have long avenues and walks and they were interrupted with open squares and cross avenues

And the crossings were accentuated by fountains and some kind of open spaces with stone works

## **DIFFERENT COMPONENTS OF ITALIAN RENAISSANCE GARDENS**

They are broadly categorized under three categories they are

- WATER
- SCULPTURE AND STONWORK
- EVERGREENS

## **WATER**

Water was everywhere in the Italian Gardens

- Used extravagantly
- It is also used to suggest coolness
- Water was used in different face, this is the typical section of Italian garden, so every pause in the ascend of the hill side garden was marked by a new and varied use of water for example
  1. Reflecting pools and fish ponds were used at the lower most level
  2. They were used for peace and also for rest
  3. Glittering water cascade was used as the ascend begins
  4. And in this case the splashing and roaring water was used for its sound
  5. Monumental fountains were generally located on the top most terrace of the garden
  6. Design depend on the volume of the water available
  7. Generally were enclosed with the garden rooms

Here some pictures of the POOLS, this were used at the lower level of the garden, there is the picture of water casket, here is the water chain and water was used as a fountains at the top most terrace and water was also used for its technical brilliance to delight and surprise visitors, there was no sense of water being used functional or being it was treated with reference. It was used with technical brilliance to delight and surprise the visitor for example

- Hydraulic features were used not only for creating visually interesting water features they were also used for acoustical purposes. So acoustically active device were used for example fountain of Owl in Villa d'Este is an example of acoustical use of water, here the water organ are produced the bird chopping sounds

### **Water Tricks**

Water tricks were another important element in renaissance gardens. So water jets were splashed on to unsuspecting guest in many cases for example in one of the garden

Spouts were hidden in the ground when the visitor accidently steps on the triggering mechanism, jets of water shoot out and it ranches the visitors

### **SCULPTURES**

During the Renaissance period rulings of classical room examined with new attention as a result old ancient sculptures were unearthed. People started to displaying that the garden against the dog green foliage of the gardens. So the notion that garden was the setting in which white marble figures should be seen against dark green foliage was firmly fixed in the minds of all patrons. Sculptures in the gardens were also integrated with the fountains, staircases or also in the garden walls.

### **STONEWORK**

Stonework's were another important element as we see here Huge Pots were displayed in the garden and stone works also include steps and staircases. Architectures form the structure basis of many of the garden features. So retaining walls, pathways, and monumental staircase were become important in renaissance gardens

### **EVERGREENS**

Evergreens were mainly used for shade and also for a sense of coolness because glare in the sky called for cool tones as a result, flowers were avoided in Italian gardens. So plants were used in many different forms such as

- Parterres
- Clipped Hedges
- Avenue
- Boscos

We will look at the examples for these elements now

## **Parterre**

What is the Parterre?

It's a term used to define ground plane composed of patterned garden beds something like this. So here pattern on ground is Owen with low level shrubs and their primarily evergreen and this patterns are created primarily to be viewed from above and many times are simple are related cases become intricate and formal. Here is the view of the parterre in Italian Renaissance garden, another view of the same Parterre we can see intricate pattern formed with low shrubs

In this connection I want to introduce another word TOPIARY

## **TOPIARY**

Topiary is the art of training plants into intricate or stylized shapes and forms and Parterre is an example and typically evergreen shrubs and trees is because they remind the same throughout the year . The next element is the Hedge

## **HEDGE**

Compactly planted shrubs or low growing trees with dense foliage that is clipped so as to form a solid wall is known as Hedge and this hedges can act as a boundary or screen and such hedges were used extensively in Italian Renaissance gardens

## **EVERGREEN**

Evergreen trees were another important element. Evergreen trees were dominant element in Bosco, Bosco is basically a wooded grove with in the garden as we see here, this is the formal garden and there is a Bosco surrounded. This wooded areas surrounded the garden enclosure and they act as buffers. These Boscos also symbolized the sacred woods and gardens of earlier Rome. The next element of Planting is

## **CYPRESS AVENUES**

Avenues carry the eye practically over unlimited distance in the Italian Renaissance garden. So Avenues and Vistas are important part of the garden and generally such avenue originated or

culminated in the house and sometimes the focus was fountain or grotto along with avenues I want to discuss about another technique used by the Italian garden designers that is they understood the effect of perspective they used to increase the dramatic qualities of a view, for example generally to parallel rose are used to create avenues but in some gardens purposely the perspective is distorted because here the effect of distance was obtained by gradual closing enough the elements we can see that in the example the view of this garden is here. So here the elements is not parallel gradually closes in and this increases the effective distance. Perspective was falsified for dramatic effects for example cascade were widening towards the top. So in this case when the visitors looks from above and the effect of added distance is obtained. Whereas from below exaggerates the steepness and brings the top very much nearer. So we discussed about the various elements about of Italian Renaissance garden also some of the techniques were used by the garden designers.

### **Various Examples**

We will start with the villa Medici, Fiesole

#### **VILLA MEDICI, FIESOLE**

Villa Medici is constructed as a prototype garden for Italian Renaissance garden was as we see here it follows all design principles the site selected on a sloping site and it has commanding view of the nearby country side and there are many terraces we can see, porticoes are pergolas. Here is the plan of the Villa Medici the garden has three terraces, this is the top most terrace and the second terrace has pergolas and the third terrace is more formal, the entrance at the top most terrace and the second level from the pergolas and one can go to from the secret garden. So let's now look at the views now, so this is the view of the garden we can see the buildings and this is located on a sloping side and we can see the three terraces. So in the top most terrace along the hill side for the entire the length of the terrace there are rosebuds and lemon trees, here the view of the garden from the top most terrace and here is the another view and in the center of this edge we see a fountain and the fountain is decorated with the stone and stuck and this fountain is the beginning point of the central axis here and this is the view of the second terrace and we can see the pergola and from the second terrace one can go to the secret garden and the third level we have a very formal garden and this can be axis from the pergola through a staircase and what we see here is the view of the secret garden. Let's at the second level and now we see the lower garden so this lower garden can be axes from the second level through a stair case we see here and we can see elements, water elements and we can also see a party and this is the formal garden. So this was designed during the beginning of the renaissance period and it has all the elements of a typical renaissance garden. So more than a working form this garden was constructed as a setting for intellectual

life and demonstration of aesthetic and ideological values that it can be constructed as prototype garden for Italian Renaissance period.

Next we will discuss about Gardens and Villa d'este here is the view of the garden. Garden is located on the sloping site its slopes from back to the front and also from side to side and the garden was laid out geometrically in a grid like fashion and walkway divides the hillside into many banks as we see here and all the elements are arranged along the central axis and there are also three cross axis, the first one is cardinal axis that's very close to the residence, the second cross axis is wall of the hundred fountains and third axis is walk along the fish pools at the lower terrace. The garden is designed to be from the lower most part point and upward. However the grid plan offers a choice of paths and a variety of experiences through the remaining choices available and this is the view of villa d'este gardens and in this view of water features are highlighted as we see here there are many water features and there is central axis and there are also cross axis, so let's towards this garden we will start from the lower most point, this is the view of the garden from the entrance we can see the pergolas and the distant water elements from the lower levels the first cross axis is formed by water parterres, fish ponds are located here and this is the view of the fish ponds and this actually starts from the organ of fountains, this first major cross axis starts from the fountain of organ fountain and these organ fountain produces this sound of trumpets and this is the view of the fishing ponds from the organ fountain and there is the another view of the organ fountain. The second axis is formed along the wall of hundred fountains in this case three parallel ducks are arranged three different levels and they symbolically represents the three tributaries of the river and this particular axis links the oval fountain at one end and the Rometta complex on the other side. This is the view of the oval fountain; it is also known as fountain of Tivoli and top of this oval fountain there is a Pegasus fountain and also a walk way this is constructed as an ideal place to linger around on a hard day and the other end of this axis Rometta – a symbolic Rome. This Rometta has a miniature composition of all the important temples and structures of ancient Rome. This was created mainly because this from the building, the view towards Rome was hidden the building had commanded view of the garden and also view of the country side where is the view towards the Rome was hidden so this was the Rometta or the symbolic Rome was created to be viewed from the low gas of residence and in the center we have a Dragon Fountain

This is the top most axis the cardinal's wall and from here we can see the view of the garden we can see the axis and avenues, so we looked at the important water features in Italian Renaissance gardens but there are many other important small water features so it can be constructed as so is one of the most full featured water gardens of its time in addition to water elements. Water devices are used for making sounds and powering of mechanical movements for example is the fountain of owls in this particular fountain water pressure forced dozens of

mechanical birds to chirp until an owl appears so such hydraulic features were incorporated into in the gardens, so we looked at the important elements of villa at d'este any other interesting features and we learn that is all the elements or organized around the major central axis and the cross axis we can see this wonderful garden to explore and admire not only for its beautiful elements and it's also for its amazing engineering that was necessary for its construction

## **VILLA LANTE**

So the next we will discuss about Villa Lante, here is the view of the villa lante this has two elements both a formal garden and the park. The park has fountains, buildings and also straight lines linking various elements and the formal garden is terraced and it has a central axis along which many other elements are organized. Here is the plan of the formal garden thus the central axis along which elements are organized, this is the view of the both park and the formal garden, there are two viewing sequences are possible this garden one is Entrance through the park gate and other one is through the Parterre gate. So one enters through a park gate, they can travel through the lanes walk through the lanes of the park and then they can reach top of the formal garden and then the visitor can enjoy the garden by descending down various track cases. Varies when visitor enters to a parterre gate, they first enjoy the lower most terrace then they claim to enjoy the other features of the garden. So in this case when the visitor uses the park gate and reaches the top most point of the formal garden. The visitor experience and evaluation from unspoiled nature to a geometrical nature flower bids whereas if the visitor uses the parterre gate then he climbs up in this case he experiences the height of the civilization and artistry and then travels to the time of unspoiled nature and man living in the golden age and it is the experiences reversed. There is the view of the formal garden that's the parterre that's the lower level and all the other water features. Now we will start from the park gate and travel through this garden and look at this various features so when entrance through the park gate first we see here and the fountain of pegasus such features are also found in villa d'este and this is one of the common feature of Italian renaissance garden so after passing the fountain of pegasus through the lens the visitor can reach the top most point of the terrace and from here one can see the garden and this plan suggest that the central axis and all the architectural features are in pairs and distributed either side for example there is a pavilion and there are dining halls here and the architectural elements are in pairs and the distributed on either side of the central axis so the central axis is used mainly for water features and as scene in the section the difference in level between lower terrace and the upper terrace around 50 feet we can see the many terraces are formed here, so from in the top most terrace visitor arrives first he encounters the fountain of deluge, fountain of flood this is flanked on either side by dining pavilions or loggias of the muses and here is the fountain of deluge and in this dining pavilion on the eaves and some water jets are fitted again this is the part of the water trick and



below this fountain of deluge there is fountain of the dolphins and this fountain is enclosed by box, hedges as we can see here and next to it water chain. This water chain links the fountain of dolphins and the fountain of giants the placed next. This is certain symbolic meaning water symbolizes untouched nature, and the chain form here exercises complete control over the water, this entire arrangements symbolizes civilizing of nature by art. So this particular water chain used to link to important fountains, the fountain of dolphin and the fountain of giants. The fountain of dolphins and the fountain of giants

So next we will look at the fountain of giants, this particular fountain has to sculptures that is the statues of Tiber and Arno rivers and the symbolizes the fertility that water brings to the land and in the middle of the next terrace we found the fountain of the table or stone dining table as we see here, the central tap has water, the water flows to the central strap and somewhere views of the fountain of the table and the central tub is used for cooling food and beverages, it is an also for floating the food and next we have the

### **FOUNTAIN OF LIGHTS**

This fountain of lights has upper concave steps and then the lower concave steps, this is around 160 small jets and these jets shoot water upwards and this almost links the second terrace to the lower terrace. So in the lower terrace we have parterre thus water parterre and also shrub parterre in the water parterre, there are small stone boats this small stone boats fire jets of water towards the central fountain that is the fountain of moors we looked at the important features of gardens we looked at the important elements of villa lante and the important principal is the central axis and also Bilateral symmetry.