




Landscape Architecture and Site Planning – Basic Fundamentals
Professor Uttam Banerjee
Department of Architecture and Regional Planning
Indian Institute of Technology, Kharagpur
Module-03 Lecture-15
Introduction to History of Landscape Design

Now we have discussed about Italian and French, now we will go towards another very important one that is English landscape style. If we discuss all these three together, that will cover our idea about the European landscape styles.

(Refer Slide Time: 00:37)



BASELINE INFORMATION	
Location	United Kingdom
Period	1600 - 1800 AD
Latitude	52 ° North
Longitude	1 ° West
Climate	Temperate maritime Mild with temperatures not much lower than 0°C in winter not much higher than 32°C in summer
Terrain	Low hills and plains, in central and southern England Uplands in the north and in the south west



English landscape styles, location, UK, United Kingdom. The period is 1600 to 1800 AD. Now you see there had been a change, there had been a kind of follow-up. First, Italian, then with a hundred year of lag, French landscape style begins and then with about a hundred year of lag, the English landscape style starts and it continues.

Usually, the English landscape style that we see in the history, the typical or the, you know very identifiable English landscape styles, they are between, they have been developed between 1600 to 1800 AD. But I can tell you one thing, all these landscape styles that we are citing, they are also undergoing gradual change and the evolution is still going on. It is, it has not really ended.

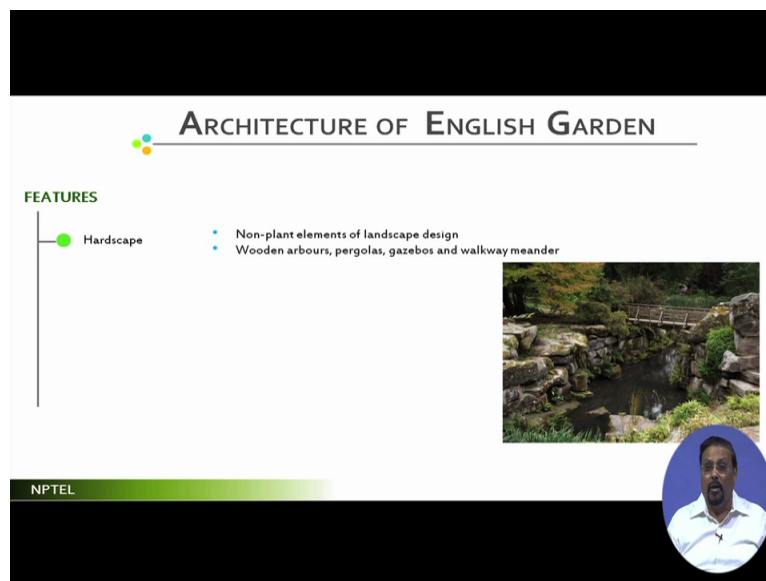
Now 1800 AD, if you see, then it is not too far back, is not it? At this particular century, when you are looking at it, we will find that there are, you know the urbanization has taken place,

human evolution has taken place, technology started growing. Of course, the technology has grown manifold from 1800 after but still you will find that there are many signs of something which are or some elements which are being used today, but they can be contributed or attributed to the European landscape style example that we have seen.

Okay. The latitude is 52 degree north, longitude is 1 degree west. The climate is temperate maritime. I would say compared to the other continents, the UK is a, it is that particular country is not very large. Of course, even French landscape style where we find France is also not very large compared to other like Germany and all.

But however, since the geographic location of that is such that it has created a temperate maritime kind of climate. Mild with temperature, not much lower than (hundred) 0 degree Celsius in winter, not much higher than 32, so if that temperature is from 0 to 32, is normal temperature which our body can really adopt to, they are blessed. And the terrain, low hills and plains that is in the central and southern part of it and uplands in the north and in the southwest. Okay. Now, so it is basically uplands and then basically plains and the low hills.

(Refer Slide Time: 03:09)



What is architectural style in this? Features, let us first focus up. They have adopted or rather they have experimented with hardscape and also softscape. The hardscapes which are non-plant elements, rocks, steps, such other which are non-plant, that means non-vegetative elements that they have used for landscape design. They have used wooden arbors, gazebos, and walkways and

meanders. Basically what they have done is they have, now if you see, the gazebos were created in different form, in small form in the French landscape. Arbors, which is an extension of trellis, I just explained that also came from the French.

The pergolas which is also mix of trellis, arbors, is a, it has been (bo), I will not say borrowed, it has been adopted from the French landscape styles. But one thing is very interesting, the gazebo what we see in the landscape, in contemporary landscape what we understand as gazebos is a structure with a roof and no walls around with a structural supports and the base.

Our understanding of the gazebos and its creation, we can always attribute this to the English landscape styles. Basically what happened is English (lands) English landscape designers or I would say promoters of English landscape, they always created English landscape as a sort of you know more natural scenic views. If anybody wanted to experience the English landscape, they had to come out, come out of the house, not like what we saw in French landscape that you stand on your terrace, stand on your balcony, stand on your window and you see the whole garden.

No, in English landscape, it is slightly different from this kind of landscapes and that has given a distinct identity to the English landscape. Of course, there are examples where English landscape is almost a true copy of the French landscape. I am not citing those examples because citing the same thing which has been copied makes no sense.

Here I am trying to highlight that what is that specialty of the English landscape styles which we always appreciate, that is what I am going to highlight. Here arbors with, wooden arbors, pergolas that they have created, gazebos, the structure that they have created in the midst of a greenery mainly for retreat. In case, there is a bad weather or poor weather or in case, there is a resting time required for the people who are moving around in the gardens and they require a place to sit or if it is raining suddenly, they want to retreat, such kind of spaces for which the gazebo got generated.

And this gazebo which they made with stones and other structures has taken a different shape in contemporary landscapes with different kind of lightweight materials. I will show those examples later in some other lecture, now I do not want to mix up. Okay. So the gazebos has become, I would say a contribution to the English landscape styles.

(Refer Slide Time: 06:23)

ARCHITECTURE OF ENGLISH GARDEN

FEATURES

- Hardscape
- Softscape
 - Formal planters
 - Raised ornamental stone pots with bright coloured flowers
 - Symmetry of colour and strong lines of pathway



NPTEL

Like hardscapes, they also have softscapes, they have created softscapes. Nowadays, if you see that we always talk about hardscaping and softscaping in the landscape. More of hardscapes makes a landscape less natural and more of softscape makes it more natural. What English landscape style has offered to us is this like formal planters. So they made different formal planter groups and they had raised ornamental pots. These ornamental pots which are slightly raised from other parts and they are covered with bushes with colorful flowers. That gained popularity.

In fact, I have seen that this particular idea is also now being emulated almost all over the Europe, wherever they have opportunity they will put pots. And originally, they used to make it with stone pots and nowadays, they are making with different kind of ceramic and other fiberglass and such kind of pots. So the thing is material got shifted a bit but the element we are discussing, so element remained. Okay. And the symmetry of color and strong lines of pathways, that they have created.

(Refer Slide Time: 07:35)



Landform, very interesting here, most often the English landforms are highly romantic. If you recall, I was talking about the romantic, classic and such things. Most often, the English landforms are very romantic. What is this landform? Landform is nothing but this earth surface that is profiled. Landform design when I will discuss in one of my lectures, essentially there are different ways of using this particular activity in different terms. Some people call it landform, some say, call it as ground form, so it is basically the land's profile. And English have really experimented with this kind of landform. Now, let me compare at this point with other landscape styles.

Spanish landscapes, we did not see anything of landform profiles, no experimentation with landforms. Chinese, they created the landforms as naturally as it is available. Japanese have created the landforms which in a very low key, it is not landforms in profiles but they gave different shapes, irregular shapes. Mogul made it very, very rectilinear, flat like carpet, maybe terraced at different places in Kashmir.

Italians, they did not really play with the forms in very small scales. They played with a rolling meadow, and then to the next, to the next, to the next like tiers or terraces. French made it very flat. English made a change, they created a profile on the land in such a way that it looks very natural but mind it they have planned every square foot of it. This is the excellent part of the English landscape styles. Okay. It is consisting of romantic elements.

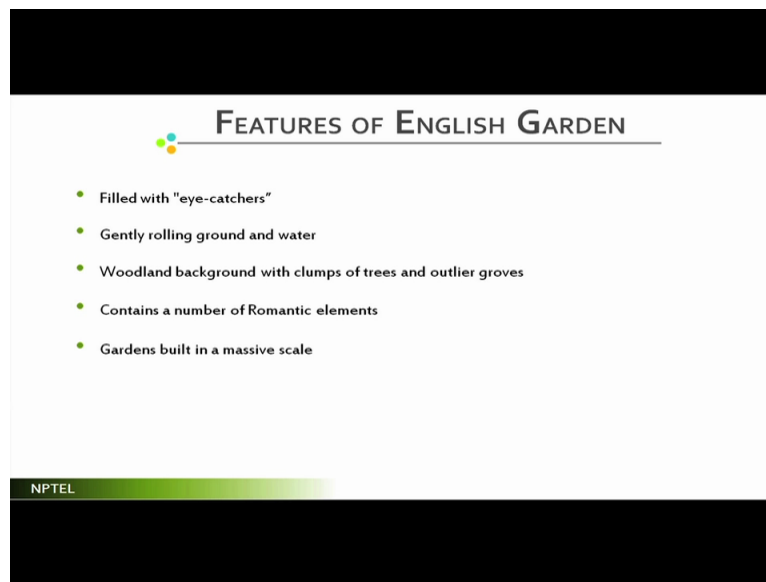
Then, ponds with piers and bridges that they have integrated within it and then ponds with polygonal pavilions that they integrated within it. So that is the kind of landform, the picture that we are showing here basically a small small mounds, (09:44), crest and such things which they have created.

(Refer Slide Time: 09:48)



Then water, they also have used the still water as a reflecting pool. Now, the surrounding landscape is green, there would be a building, could be a building and also the at the foreground, there is a water body which will reflect the building, the sky and other landscapes. Here, we do see a little bit of similarity with the French landscapes.

(Refer Slide Time: 10:14)



Then, the English landscapes are filled with ‘eye-catchers’. What are these eye-catchers, let me tell you. Landscapists here, the designers here, they created some, certain surprise elements in the landscape. That means, you move from one place to another, suddenly you see something, it catches your attention or else you go from one place to another, at a distance you see a certain element which catches your attention.

These eye-catchers were basically the surprise that the ruler wanted to create for their visitors. And they used to invite just like Italian garden if you recall that we have also said, mentioned this that they used to, the rulers or the owner of the gardens, they used to invite guests and visitors to enchant them with the kind of creation that they have done. English people have created eye-catchers. That, you go from one place, suddenly between the groves, you see one element catches your attention. So these eye-catchers are one of the concepts which English people have used.

Contrary to Japanese, in Japanese landscape what they have done is the Japanese, they have created, they also created not eye-catchers but they also created surprise but in a very low. Gently you move from one path to, one way to another by meandering paths or whatever and you get a kinesthetic effects where your whole body responses, gets activated or reacts with the kind of things that you do see in front. But here, it is very deliberate that you are made to walk through

certain paths and suddenly something will be exposed to you. That is what is eye-catchers, so it is a concept.

Gently rolling ground and water, this is really a true contribution of the English landscapes. Whenever you try to create any landscapes, we can always emulate any but when you go for rolling grounds or water, you have to plan for it, you have to tactically plan for it. The landform has to be designed in such a way taking into conjunction of landform and the drainage together. These aspects, I will discuss in some other lectures for in technical terms. At this moment, we are focusing on the history and what we have learned from the history.

Woodland background with clumps of trees and outlier groves, that means just like Japanese landscape you have the foregrounds and others and you also have the backdrops. Here, there the backdrops used to blend with, in Japanese landscape the (back) or Chinese landscape, backdrop used to blend with the nature as if it is natural. Here, they deliberately cover it. Here, I would say that whatever they are doing for these landscape purposes, of course they also had a very strong functional requirement of that, that was a security. If you remember that for Mogul gardens when I was discussing, they had the high walls and high walls before that in the foreground, they have the large trees. Essentially, they were all for security and same is here.

If you have seen there in English landscape, they have got the very strong groves. Please do not think it is only for the beauty. No, it is also for the security. And beyond that, there may be something which is protecting the whole area, whole region, so it is very functional. And the English landscape contains lots of different number of romantic elements.

The gardens built in a massive scale, the gardens not full with, not like French or Italian. The gardens which are not having too many elements, gardens which is very smooth, with a smooth transition from one kind of elements to another kind of elements gently rolling from the ground to the water, you have a chance to walk with the grass of the landmass, slope in gradually down very close to, reach close to the water body and then you can even touch the water which is not there in French landscape.

In French landscape, the water body was a very definite, very strongly maintained water body. Here in English landscape styles, it became really human. This human aspect which I was mentioning in my earlier lectures that in this landscape styles you have, you almost feel that you

are at home within this particular place. So the landscape is meant for you and you are the user of this particular landscape contrary to French and Italian. In French and Italian, you are only a viewer, you are seeing it, ruler is the owner. Here, in English landscape style as if you own this, you belong to this place, and you possess this particular area and you feel free to walk. This is what is the most important part of the English landscape style which should not be missed.

(Refer Slide Time: 15:02)

The slide is titled "CHARACTERISTICS OF ENGLISH GARDEN" in a serif font, with a small logo of three colored dots (green, yellow, red) to the left. Below the title, there is a bullet point: "Lake -". Underneath this, there are three lines of text: "Man-made lakes but all appeared to be natural forming basins", "Meandering and irregular edges", and "Often had pathways weaving through the trees and close to the water's edge". Below the text, there are two side-by-side photographs of English gardens. The left photo shows a stone bridge over a small lake with a path leading to it. The right photo shows a lake with a small house in the background and trees. In the bottom right corner, there is a circular video feed of a man with a beard and glasses, wearing a light blue shirt. The NPTEL logo is visible in the bottom left corner of the slide.

The characteristics, again here now focusing on this, they have lakes, they have created lakes. Look at these lakes, these pictures. Do not they look like a natural lake? We can ensure you they are not natural, they are manmade, they have been created very, very deliberately. This deliberate creation of the landscapes or the water bodies, very nicely designed but constructed in such a manner it looks like natural. This is one of the interesting and most important part of this particular English landscape styles. What happens is, why we are learning these historical examples? When we get an opportunity to design a landscape, then in that case we will decide at the discretion of our requirement of the design that which kind of landscape we can emulate.

It is not necessary that you have to just make a rubber stamp of different kind of landscapes in your own one piece of landscape that you are working on. No, the idea is which landscape suits the best for the kind of purpose that you are trying to serve because if you remember that our (def), in the definition I have said that every landscape design must have a purpose. So this

purpose, whichever purpose you have, that based on that you will select what kind of historical styles you can emulate.

Okay, here see all these edges are meandering, irregular. They have deliberately kept it so that it looks natural. So in the English landscape, though everything is highly constructed but they look so natural. And often, we also had the pathways leading to you know that, you know from one particular part, let us say from one particular structure you might have a pathway leading through the rolling mounds and all that and leading to the water. So that is a surprise kind of things that they have really created and this is interesting.

In this I would just cite one example. If you look at where I am focusing at with my arrow here, cursor arrow here, this is technically what is called gazebo. In the whole landscape you will find, in this particular picture, the whole landscape you find green vegetation and water and suddenly a place of retreat which is an architectural element. But it is not so dominating that it overshadows the entire landscape. This is the excellent part of the English landscape styles in which suddenly a structure, a small structure which becomes a small element in the overall naturalness but very, very functional. This is what is the gazebo. But later on, I will show you what different forms of gazebo people are building nowadays late in some other lectures.

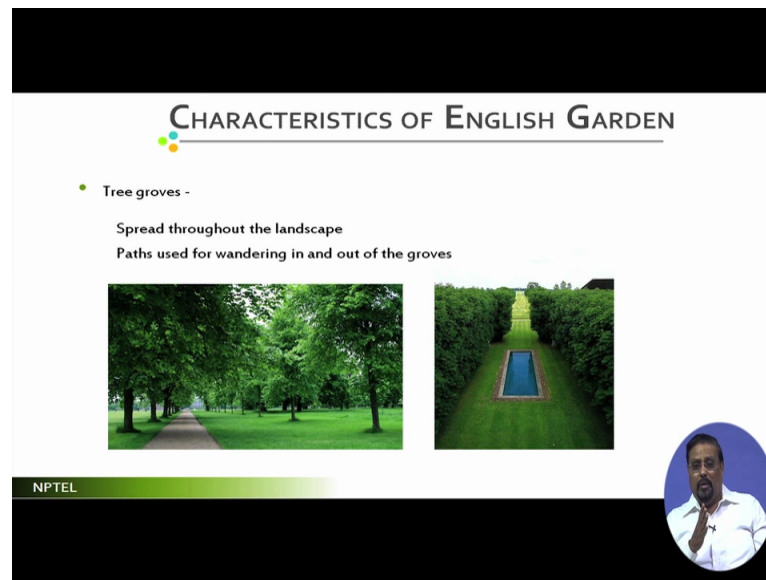
(Refer Slide Time: 17:46)



Rolling lawns, same picture I have used here for two reasons. The first picture, the same picture you have seen in the other one in which you have seen the water body, irregular edged water

body. And in this, I am citing again the same picture to show that how the green lawn gradually rolls down to the water and gives access to the common people. And that is the excellent part of the English landscape styles. Here look at this, almost flattish green leading to the water body here and ultimately almost merging with water body. Now this is what is the interesting part.

(Refer Slide Time: 18:23)



Okay. Tree groves, now another set of elements. If you really compare means if you rerun my these presentations over and over again, you will see, if you start from the Italian, then come to French and then come to English, you will find that Italians have played with the greens but they are as if too mechanically placed, too mechanically done. French have played with same greens also very mechanical, very geometric, very patterned, very symmetric but English have played in a different role.

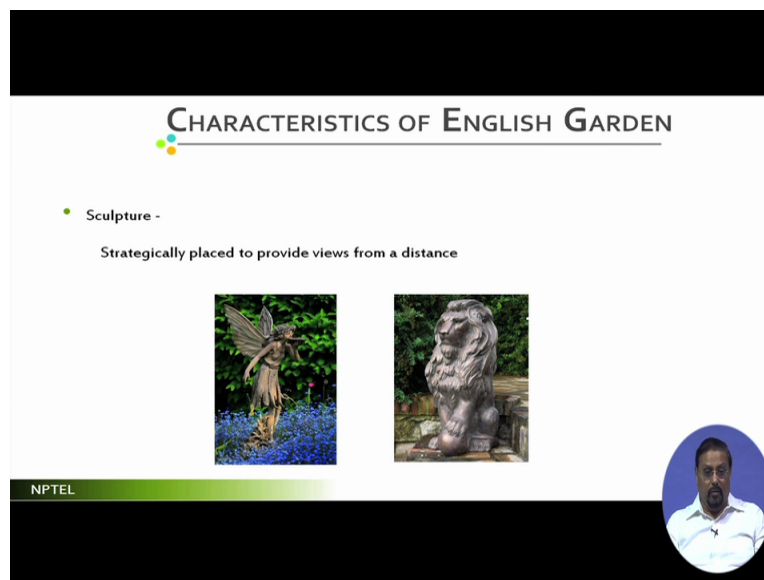
They have used this green in a different manner. What they have done is they have brought the green as if the whole area is naturally green. But of course, since you are dealing with larger spaces, in such cases some bit of geometry will come in place like an example here, the pathway. If the pathway is straight, naturally there has to be a straight edge which will make a very strong geometric perspective, no doubt about it. But look at the plantations which also has to be at the same distances on this side as well as on this side.

But if you look at the whole of this particular frame, this pathway never gives a jerk, visual jerk and this kind of geometry never gives a visual jerk as a strong geometry. Rather in the whole

picture if you see the green is dominating, this is what English people have done it. This picture I have shown here essentially to show that they have at places very geometric paths, geometric plantations but most often they have made it very, very natural. So they have both the examples in their landscape styles.

Here, these are groves that they have created in between and then a water body and the grass lawn at the base. This, if this picture is taken from the tub, if suppose if you stand on this particular line on this particular level, then you will find the water body surface, water surface you will see very scantily and there were large vegetations on the either sides which makes you feel almost you are in the midst of a forest but well regulated forest.

(Refer Slide Time: 20:29)



Then sculptures, the sculptures were used by Italians, sculptures were used by French, sculptures also have been used by English. They have used the sculptures very strategically placing it. They have, all these sculptures, each sculpture has something to depict, maybe historical or mythical or religious or whatever, something to depict, some philosophical issues. But the thing is they are very strategically placed in the landscapes so that it you can view it from a distance.

So sculptures is not here, in English landscape, the sculptures are not placed in such a manner that you can, you just come close and suddenly you see and get a surprise. No, you can see very strategically that from there you can see a sculpture, from here you can see another sculpture, gradually walk towards this. When I will discuss about in the next lectures the user's behavior, I

will highlight the principles behind this. They have done it historically. I will try to explain to you how methodically and technically and principally they should be viewed.

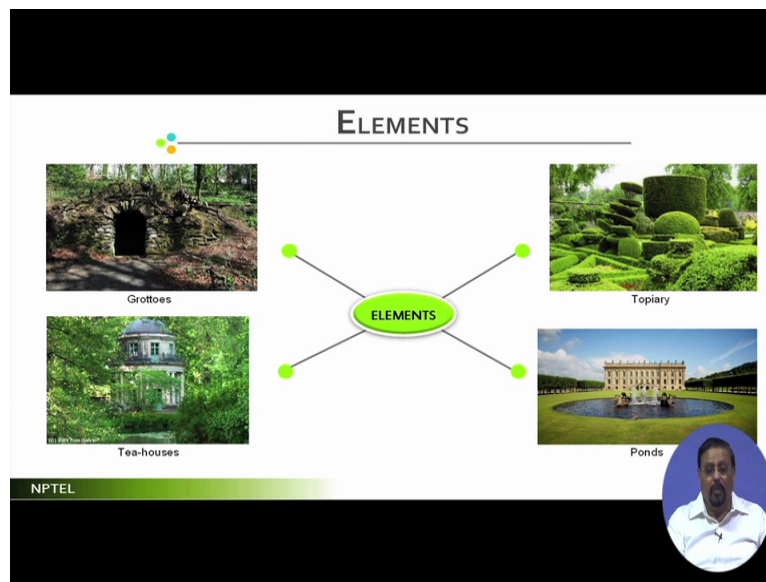
(Refer Slide Time: 21:38)



Then the grottos, grottos are nothing but a kind of caves as the picture depicts. This grotto has now become almost an integral element in any of the religious places like Churches and all. This is a cave kind of places which they have introduced. Grotto was not element anywhere else, so grotto was introduced by English. And these caves are used for different purposes. Here the purpose is it can be a retreat. But this is not gazebo, mind it. The gazebo is something, a structure with no walls around, almost no walls around. It is colonnades, columns or such fences.

Grotto is one of the caves that you have a space within, where you can sit, so they have the seating. Or you can have a very deep caves like this. So these are all grottos which are essentially used for, as hideouts. Hideouts for the users just to sit there, be out of the sight of other people and relax or chat or just communicate with others or enjoy the beauty of the nature. So these are the grottos which they have built.

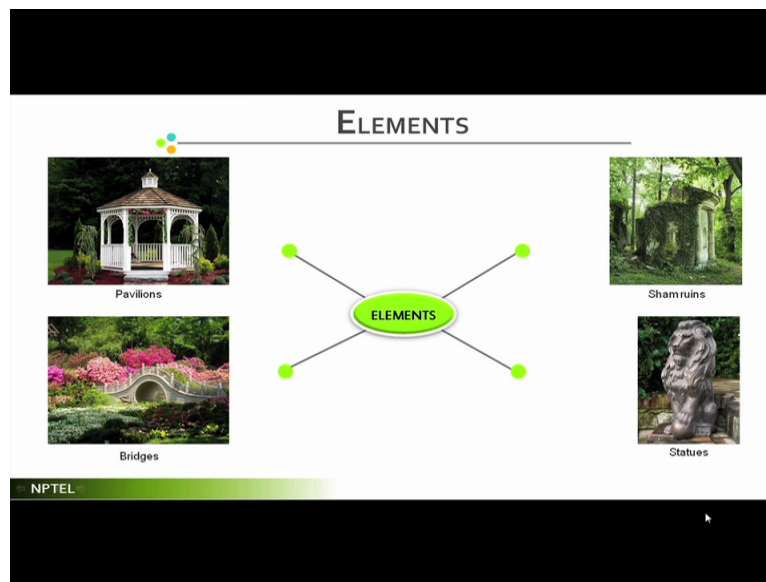
(Refer Slide Time: 22:47)



Now, then other elements. I explained about these grottos of different shapes and different forms. Then topiaries. If you recall, topiary I discussed when I was talking about the Italian landscape styles. In fact, historically if I, if you go chronologically, of course the topiary must have been developed by Italians first. And the topiaries also we have seen in different forms in the French landscape as well, not in so strongly but English people, they have used it. And in our country also, in India also we have seen historically in the old gardens which are now almost vanishing, I have seen examples of topiary in many of the public gardens which are created by the authorities or the government or federals. Now this concept is I would say borrowed from Italian, fine.

Next, tea-house is also one of the elements but do not confuse this with the Japanese tea-house, tea rooms because Japanese tea-house has a rituals, they have some religious or some kind of rituals or some of kind of some rituals associated with it. Here it is not, it is only a place of retreat. Here English people have used this for relaxing there, moving away from their home, being in another structure for tea purposes. Then ponds, ponds, lakes and such other.

(Refer Slide Time: 24:19)



Other elements. Pavilions, this I would say very much resemble what I was trying to talk about gazebos. These pavilions were there in Chinese landscape as well if you recall. These pavilions were there in Japanese landscape as well, these pavilions were there in Spanish landscape as well. So the thing is pavilion as an element is not an introduction by English but it is the element that got introduced by English which got a name called gazebo. This kind of pavilion, it is in a small garden. This kind of structure with a little bit made of stones and others, stones and bricks and all others in a large landscape were basically a place of retreat which are the gazebos. Sometime even the tea-houses also became such kind of pavilions, it all is a matter of scale.

Then another very important element, sham ruins. Look at the picture and try to recollect. This must have been one of the ruins of old structure. Here lies the real catch of their introduction of something new in the elements. What they have done English landscapes, landscapist, they have created this, a newly constructed structure looking like ruins. This is a interesting part which we have learned from the history. You create something looks like a ruins and construct it and grow it and maintain it in such a way as if it is a ruins. So this is called sham ruins.

This structure is quite recent, is not the old structure ruins. And then to make it or give it a look of the oldness what is done is all creepers and all other things are very well planned and then they are planted at the base and allowed it to go surfacing on this particular structure so that it

looks like as if the old ruin against which all other creepers which are rooted to the structure and growing. This is one element got added by them.

Then comes bridges. The bridges here, this structure, you have seen this, it is a very common element. The bridges, we did not see much in, very much in Italian and French because they had so much of grandness that the idea of the bridges did not exist. Bridges, we have seen in Chinese, we have seen in Japanese, we have also seen in some parts of the Spanish but the bridges become a very strong element in our English landscape style as well. Then the statues. These structures, the statues, they have introduced here.

(Refer Slide Time: 27:17)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

- Famous for its rich history, historic and modern waterworks and sculptures, the Victorian rock garden and the maze
- Area of 43 Ha
- Garden continues to change till date
- The famous waterworks include the 300 year old Cascade, the Squirting Willow Tree Fountain and the impressive gravity-fed Emperor Fountain
- Over eight kilometre of walks with rare trees, shrubs, streams and ponds

NPTEL

Now, we look at an example. The best example that could be cited for English landscape styles is the Chatsworth House in Derbyshire, England. Okay. It has been built in 1549. But interestingly this particular example which I am citing here is still continuing and it is still evolving over time. See, the first is it is very famous for its rich history and also the modern waterworks.

Basically what happened is in this particular landscape styles, you will find that the technology has started coming in and the technology which has aided different materials like glass and other frames, they had been used, the fountains have been used with more better technology. Okay, the, okay. Now let us first see how is the profile of this particular garden. It is not very large, it is about say 43 hectares.

If you now compare with the French lands, Versailles that we had shown, it was huge landscape. In this, landscape is not very large, it is small. Okay. The famous waterworks that we found in this is about 300 year old cascade and also the Squirting Willow Tree fountain. This Willow Tree fountain I will explain but let us hold on. Let us see the other parts. Okay. Now over eight kilometer walks with rare trees, shrubs, streams and ponds, that is what the whole landscape bases. The Chatsworth is, if you have to really experience Chatsworth, you have to move around the entire areas through the paths that the designers have evolved over.

(Refer Slide Time: 28:58)



This is how it looks like. Let me get all its details in the pictures here. Okay. It has the Early Garden, then it has a 6th Duke and Paxton. Then we have the Modern Garden and then we have the sculptures in the garden. Now this is how the whole Chatsworth landscape style can be understood.

If you see in terms of time, 1540, the Early Garden and now it is, it has gone even (29:30) deep. What is interesting in this is it has evolved over time. Of course, we have seen that almost all the gardens have evolved and what chronologically we have found is most of all the European gardens have almost evolved over say about 200, 300, 400 years. English garden is still evolving.

(Refer Slide Time: 29:51)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

Early Garden (1549-1811)

- Formal plot to the south with ponds and fountains
- Hill to the east was terraced
- High wall enclosed a deer park
- Classical style with an influence of French, Italian and Dutch gardens
- Numerous parterres cut into slopes above the house
- Comprises of fountains, garden buildings and classical sculptures
- Less of topiary and avenues
- Terraces were levelled and replaced with grass
- Grotto House built for Duchess Georgiana in 1798 was a later addition

NPTEL

Quickly going through different elements of this, Early Garden. There is a formal plot to the south with ponds and fountains, very formal. Then, hill to the east was terraced, that means some formality, formal parts and some terrace part. High wall enclosed a deer park, now animals came in. And nowadays, if you see that many of the public gardens also has a compartment which is a deer park or animal parks or zoo. That means the gardens and the zoo almost adjacent to each other. This is a kind of things. So animals started coming in into this in very formal form.

Classical style with almost the Italian and French influences that was there. So as I said earlier that the essential or interesting part of the English garden which I was trying to highlight is the rolling meadows, rolling lawns and then leading to the irregular water body edges. These are the excellent part of this but there are examples where some parts were just the copy or emulation of the French and Italian landscape styles. But there are also different kind of parterres. The parterres are nothing but parts, different zones but they had been cut to slopes and different parts. Okay.



(Refer Slide Time: 31:17)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

Early Garden (1549-1811)

- Salisbury Lawns The lawn to the east of the house is called the Salisbury
Total area 2.3 Ha



NPTEL

Other ones like say in Early Garden, let us take this example. Salisbury Lawns, if you look at this, it looks like a structure and then just in the foreground a landscape and then rest is flat meadow. Now this lawn which is at the east of this is called the Salisbury Lawns, Salisbury Lawns which is about 2.3 hectares, very flat resembles Italian landscapes.



(Refer Slide Time: 31:53)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

Early Garden (1549-1811)

- Salisbury Lawns The lawn to the east of the house is called the Salisbury
Total area 2.3 Ha
- Canal Pond & the Great Fountain Fountain is highest in the country, reaching 28 metres



NPTEL

The Canal Pond and the reflecting pools, they are also a part of it. The fountain is, probably this is one of the highest fountain in Europe which at that point of time which was built. Now, the fountain was a part of the water body called Great Fountain.

(Refer Slide Time: 32:14)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

Early Garden (1549-1811)

- Salisbury Lawns** The lawn to the east of the house is called the Salisbury
Total area 2.3 Ha
- Canal Pond & the Great Fountain** Fountain is highest in the country, reaching 28 metres
- Cascade** Established tradition of using water in amusing ways, to surprise and delight visitors



NPTEL

And then the cascades, the water cascading from one level to another. Look at the right side picture. The water is cascading from one to another. This cascading water which you also we have seen in Mogul gardens which are available in Kashmir, this cascading we have seen in Italian. This cascading we have seen in, we are seeing in English garden as well. So the flowing water is one of the element that makes it very strong element of the English landscapes. All these were made essentially, the cascading, and then flowing water to create surprise to the visitors. This was very deliberately made. As I, I have mentioned earlier that objective of the ruler was to enchant the visitors and show their sense, their own sense of creation.

So the cascade was for surprise, for delight and such things. So it was almost a sort of I would say a demonstration of their sense of art or extravaganza in terms of creating landscapes. That is it.

(Refer Slide Time: 33:19)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

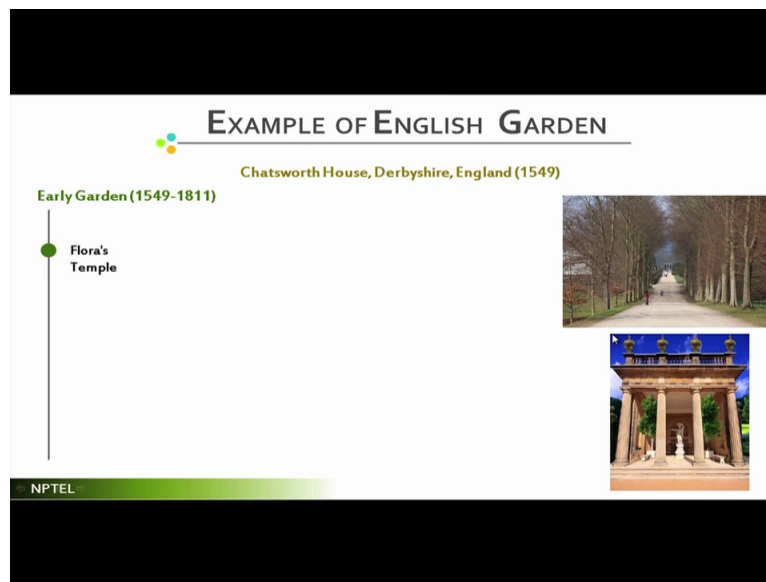
Early Garden (1549-1811)

Salisbury Lawns	The lawn to the east of the house is called the Salisbury Total area 2.3 Ha	
Canal Pond & the Great Fountain	Fountain is highest in the country, reaching 28 metres	
Cascade	Established tradition of using water in amusing ways, to surprise and delight visitors	
First Duke's Greenhouse	Housed tender 'greens', or evergreens, during the winter. They were also referred to as 'orangeries'	

NPTEL

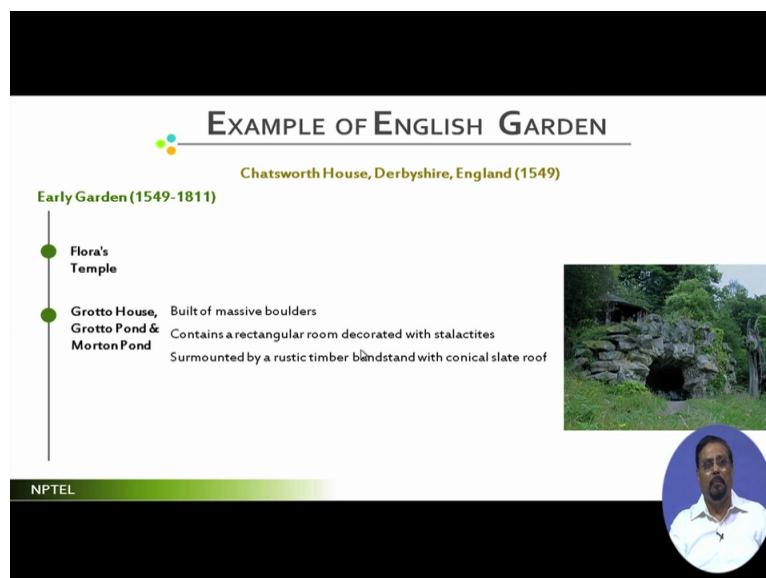
Greenhouse, the First Duke's Greenhouse, this greenhouse, the concept of greenhouse that we do use today essentially represents the plants and they have also done with the same way. They, because of the climate they wanted to create a proper environment for the plantations and for which the greenhouse was created. So the greenhouse element, as an element in the landscape which we do see in many of the botanical gardens in our country and also all over the world, we feel this is a contribution of the English because we did not see really greenhouse in other landscape styles. So this is, appears to be very strong contribution of the English landscape styles.

(Refer Slide Time: 34:01)



Then Early Gardens continuing, the Flora's Temple, this particular pathway leading to the temple, focused, very well created. When I will talk about the plantations along the avenues, at that time I will highlight the profiles. I do not want to switch from here to the profile plantations but what they have done is they have created the plant paths and along which they have the tall trees which are very focused, very geometric and leading to a visual focus.

(Refer Slide Time: 34:34)



Then comes the Grotto House which I have already discussed.

(Refer Slide Time: 34:41)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

Early Garden (1549-1811)

- **Flora's Temple**
- **Grotto House, Grotto Pond & Morton Pond**
Built of massive boulders
Contains a rectangular room decorated with stalactites
Surmounted by a rustic timber bandstand with conical slate roof
- **Willow Tree Fountain**
'Artificial tree of brass' with branches with spouts to sprinkle water
Appearance is exactly like willow

NPTEL

And then Willow Tree fountain, this is one thing which I want to draw your attention to. The idea or creativity goes, has no limit, it is unbounded. What they have done is they have created this artificial tree with a brass. So they have made shapes or branches with the brass tubes and then they have welded, soldered and made a brass tree, brass tubes and then they have started flowing water through this.

So what happens is when it works and the entire water is flowing through all the edges and the ends, they splint out just like the spouts and then they look like a willow tree. And this is one artificial tree which looks like, this is a replication of something. When I will talk about the unity in my principles, I will highlight this particular point if you still at that time keep in mind that there is something called unity. Here, it is a matter of attention, catching attention.

Remember when I talked about eye-catchers, they are something like eye-catchers. Means people get, people have a 'wow' feeling once they see this and they say wonderful creations, but this is not natural. Water is natural but the whole concept of making a tree of some other material and then allowing the water to flow through and looking like a willow tree is not natural. However, wonderful thing that has been gifted to us.

(Refer Slide Time: 36:15)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

6th Duke (1811-1858) & Paxton

- Arboretum and Trout Stream** Vast enterprise, comprising Trout Stream, natural stream, for more than two km from its original course on the East Moor



NPTEL



Then 6th Duke and Paxton, this is a time when they have created arboretum. Basically it is streams, natural streams, all they have started creating. So originally, there are certain things in the English landscape which might have been almost a replica of French or copy of French, gradually started getting a different kind of profiles.


(Refer Slide Time: 36:47)

EXAMPLE OF ENGLISH GARDEN


Chatsworth House, Derbyshire, England (1549)

6th Duke (1811-1858) & Paxton

- Arboretum and Trout Stream** Vast enterprise, comprising Trout Stream, natural stream, for more than two km from its original course on the East Moor
- The Case** The structure is 91m long, and protects figs, peaches, nectarines, apricots and various shrubs



NPTEL



The Case, the structure that they have created which is again for protecting the plants. This is a place where they used to keep the plants for its germination, for its growth, for its health check,

for its propagations and then ultimately bring it down to the outside. This is, this particular idea, The Case which like (green) greenhouse is the contribution of the English landscapes.

(Refer Slide Time: 37:17)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

6th Duke (1811-1858) & Paxton

- Arboretum and Trout Stream** Vast enterprise, comprising Trout Stream, natural stream, for more than two km from its original course on the East Moor
- The Case** The structure is 91m long, and protects figs, peaches, nectarines, apricots and various shrubs
- Coal Hole & Tunnel** Horse-drawn carts brought coal from the railway station, entered the garden above the Stables and took the track that went under the Cascade and on to the Coal Hole
From here the coal was taken in small wagons along the underground railway

NPTEL

Another thing which we have found in the example of the Chatsworth is the coal hole and the tunnel. The coal hole and the tunnel, in this what happened is basically they had a chaise that is to carry the coals through this particular tunnel and that became a part of the landscape because that is to pass through the large area. So the idea was that the horse-drawn carts will bring the coal to this area and then ultimately small small containers will carry this coal through.

But this coal hole became an integral part of the landscape but it has not been really identified as an element that which is a must for English landscape. But of course, in Chatsworth we have found this as an example.

(Refer Slide Time: 38:05)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

6th Duke (1811-1858) & Paxton

- Great Conservatory**
The building was 84m long, 37m wide and 19m high, the largest glass building



NPTEL

Other examples, great conservatory, again the greenhouse, the glasshouse. The building was very long 84 meter and 37 meter wide, is very long, 19 meter high. That means now technological evolution in terms of making large structures, large palace structures had already started coming in. Now that got blended with the landscape and this has been put to use in the landscapes.

(Refer Slide Time: 38:33)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

6th Duke (1811-1858) & Paxton

- Great Conservatory**
The building was 84m long, 37m wide and 19m high, the largest glass building
- Pinetum**
Gardens continued to develop in their complexity, scale and importance
Eight acres added to the garden from the south park
Comprised of collections of coniferous trees



NPTEL

Then is Pinetum, basically this is the kind of landscape which they have created. Here if you see, I will show you with respect to this here, different kind of coniferous plantations that they have placed over here, they created a kind of wilderness within the landscape. So when we see English

landscapes, now we see there is a blend of wilderness, groves, rolling meadows, slopes and the water bodies. That makes the true English landscape. So if you now try to ever create an English landscape, you do not try to emulate the French influence in the English landscape because English landscape gradually shifted from that very (rudi) very regimented design to the naturalness and that made it an excellent contribution.

It is because of this when you want a kind of naturalist landscape that you want to create, unless it is very much I would say manicured like Japanese landscape, then I will suggest that you can go for English landscape which speaks more natural.

(Refer Slide Time: 39:53)

The slide is titled "EXAMPLE OF ENGLISH GARDEN" and features a timeline of developments at Chatsworth House, Derbyshire, England (1549). The timeline includes three key points: the Great Conservatory, Pinetum, and Rock Garden & Stride. A photograph of a garden with a waterfall and a bridge is shown on the right. The NPTEL logo is visible in the bottom left corner, and a small circular inset shows a man speaking.

EXAMPLE OF ENGLISH GARDEN	
Chatsworth House, Derbyshire, England (1549)	
6th Duke (1811-1858) & Paxton	
Great Conservatory	The building was 84m long, 37m wide and 19m high, the largest glass building
Pinetum	Gardens continued to develop in their complexity, scale and importance Eight acres added to the garden from the south park Comprised of collections of coniferous trees
Rock Garden & Stride	14m high and has a waterfall running down it. There is a maze of paths threading round and beneath the rocks

And then rock gardens and the strides. Rock garden was also a part of our element of the Japanese landscape, but here what happened is this has gained its popularity by virtue of its naturalness. The rock gardens are created with naturalness. Even the rock gardens has undergone a tremendous evolution in technologically, I will discuss in other lectures. But here essentially as if rock or (())(40:16), rock structures, water bodies, some vegetation that is how it is.

(Refer Slide Time: 40:23)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

6th Duke (1811-1858) & Paxton

- Great Conservatory**
The building was 84m long, 37m wide and 19m high, the largest glass building
- Pinetum**
Gardens continued to develop in their complexity, scale and importance
Eight acres added to the garden from the south park
Comprised of collections of coniferous trees
- Rock Garden & Stride**
14m high and has a waterfall running down it. There is a maze of paths threading round and beneath the rocks
- Vinery**
Glasshouses constructed specifically for orchids



NPTEL

And the vinery. This vinery that they have created, this has a different purpose. You do not consider this as a vineyard. This vinery was created essentially to shade the understory plantations for its protection. Basically it is nothing but a kind of greenhouse with vegetation at the top, so they got double benefits. First of all, they created a semishaded zones below which the plants can be protected from direct solar radiations and allow it to grow. And above that, along with that you have the grapes.



(Refer Slide Time: 40:58)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

Modern Garden (1858-Present)

- Cottage Garden**
Contains topiary 'rooms' and 'furniture' created out of box, privet, yew, a formal 'front garden' and a pair of vegetable plots at the back



NPTEL

The Modern Garden in which here there had been some very difficult kind of things that we have seen. See, the hedges we have seen which were strongly used in the French parterres. Here they have used, in English, in Chatsworth example we do see. They have emulated our building structures. This is almost like a dining table and a chair or say boundary walls, low height boundary walls. These ideas of hedges, properly trimmed, geometrically trimmed, replicating boundary walls or the globes over the posts or table chairs, these are seen mostly in French and English landscapes. Looks a little regimental, looks a very geometric and many people have contrary opinion about it. Some people like it because of its excellent artwork, some people do not like it because it looks so artificial.

(Refer Slide Time: 42:03)

The slide is titled "EXAMPLE OF ENGLISH GARDEN" and features a timeline of garden types. At the top, it mentions "Chatsworth House, Derbyshire, England (1549)". The timeline includes "Modern Garden (1858-Present)" with two entries: "Cottage Garden" and "Display Greenhouse". The "Cottage Garden" entry describes it as containing topiary 'rooms' and 'furniture' made of box, privet, yew, a formal 'front garden', and vegetable plots. The "Display Greenhouse" entry states it has three controlled climatic zones: Tropical, Mediterranean, and Temperate. An image of a large glass and metal greenhouse is shown next to the "Display Greenhouse" entry. The NPTEL logo is at the bottom left, and a small circular inset shows a man speaking at the bottom right.

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

Modern Garden (1858-Present)

- Cottage Garden**
Contains topiary 'rooms' and 'furniture' created out of box, privet, yew, a formal 'front garden' and a pair of vegetable plots at the back
- Display Greenhouse**
It has a controlled three climatic zones, Tropical, Mediterranean and Temperate

NPTEL

Display Greenhouse, now this particular greenhouse has been created with very technical insights. For different seasons, the climate can be controlled within this. So this has different climatic, three climatic zones essentially, the tropical, Mediterranean and temperate. So within this greenhouse, they have that system in which different kind of climatic situations that they have created and within which they can grow the plantations.



(Refer Slide Time: 42:34)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

Modern Garden (1858-Present)

- Cottage Garden**
Contains topiary 'rooms' and 'furniture' created out of box, privet, yew, a formal 'front garden' and a pair of vegetable plots at the back
- Display Greenhouse**
It has a controlled three climatic zones, Tropical, Mediterranean and Temperate
- Kitchen Garden**
Raised beds were built from old bricks, new paths were bordered with railway sleepers
Iron arches were installed to support fruit trees



NPTEL

Then comes kitchen garden. This kitchen garden is almost a common element for any of the small small single-story houses in our country and everywhere. Essentially, these are all for vegetables which are edible, so it is generally at the backyard. So kitchen garden, we started seeing from English garden style itself.



(Refer Slide Time: 42:52)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

Modern Garden (1858-Present)

- Cottage Garden**
Contains topiary 'rooms' and 'furniture' created out of box, privet, yew, a formal 'front garden' and a pair of vegetable plots at the back
- Display Greenhouse**
It has a controlled three climatic zones, Tropical, Mediterranean and Temperate
- Kitchen Garden**
Raised beds were built from old bricks, new paths were bordered with railway sleepers
Iron arches were installed to support fruit trees
- Maze**



NPTEL

Then the maze. This maze which is nothing but the labyrinths. In some cases, you must have seen that these mazes are created with a little higher height and the kids if they are moving in the

maze, they cannot see the other end regions. And that creates a kind of wonderful hide and seek games generated within this maze. So English gardens have shown us these examples.



(Refer Slide Time: 43:16)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

Modern Garden (1858-Present)

- Cottage Garden** Contains topiary 'rooms' and 'furniture' created out of box, privet, yew, a formal 'front garden' and a pair of vegetable plots at the back
- Display Greenhouse** It has a controlled three climatic zones, Tropical, Mediterranean and Temperate
- Kitchen Garden** Raised beds were built from old bricks, new paths were bordered with railway sleepers
Iron arches were installed to support fruit trees
- Maze**
- Summer House**



NPTEL

And then Summer House, you have shades, semishade during summer.



(Refer Slide Time: 43:23)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

Modern Garden (1858-Present)

- Quebec** A long-overgrown area below the Canal Pond



NPTEL

Then Modern Gardens, quickly going through it, Quebec which is a long-overgrown area below the Canal Pond. So basically what happens is they have allowed this, the long-overgrown is basically vegetations has been allowed to grow along this water bodies and such areas. So if

there is a canal which is natural and that they have regulated the water and allowed the vegetation to grow over these particular areas.

(Refer Slide Time: 43:50)

The slide is titled "EXAMPLE OF ENGLISH GARDEN" and features a timeline of garden design at Chatsworth House, Derbyshire, England (1549). The timeline includes the following entries:

- Modern Garden (1858-Present)**
- Quebec**: A long-overgrown area below the Canal Pond
- Ravine & Azalea Dell**: It was designed in a 'woodland garden' fashion. A stream was dammed at intervals form make several pools

A photograph of a lush, green garden with a stream and a dam is shown on the right side of the slide. The NPTEL logo is visible in the bottom left corner, and a circular inset image of a man is in the bottom right corner.

Ravine and Azalea Dell, ravines are, see essentially what is a ravine, ravine is basically the larger sizes of channels which are flowing all the water from the regions and ultimately leading to the river. Now these ravines they have created, ravines is a natural phenomena, it is a geomorphological results. But here they have deliberately created the ravines to give natural look. All these are experimentations worth mentioning.



(Refer Slide Time: 44:17)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

Modern Garden (1858-Present)

- Quebec: A long-overgrown area below the Canal Pond
- Ravine & Azalea Dell: It was designed in a 'woodland garden' fashion
A stream was dammed at intervals form make several pools
- Rose Garden



NPTEL

Then comes the rose garden, specifically for different kinds of roses.


(Refer Slide Time: 44:22)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

Modern Garden (1858-Present)

- Quebec: A long-overgrown area below the Canal Pond
- Ravine & Azalea Dell: It was designed in a 'woodland garden' fashion
A stream was dammed at intervals form make several pools
- Rose Garden
- Sensory Garden: Garden of five senses – sight, smell, touch, hearing and taste



NPTEL

And then the sensory garden, this one of the styles which many of the architects or landscape architects are following very, very ritually. They are trying to create the gardens of five senses. English garden styles, in Chatsworth we have seen this example. They first introduced the idea of this, gardens of five senses. All the senses are through different means, different designs that they are generating. And I think in Delhi you have, in south Delhi, we have a place very close to Saket where we do see the, it is they have deliberately mentioned as place called gardens of five

senses. So idea is that you create such kind of () (45:05). This is I would say emulation of the English gardens.

(Refer Slide Time: 45:11)

EXAMPLE OF ENGLISH GARDEN

Chatsworth House, Derbyshire, England (1549)

Modern Garden (1858-Present)

- Quebec: A long-overgrown area below the Canal Pond
- Ravine & Azalea Dell: It was designed in a 'woodland garden' fashion. A stream was dammed at intervals form make several pools
- Rose Garden
- Sensory Garden: Garden of five senses – sight, smell, touch, hearing and taste
- Serpentine Hedge

NPTEL

The slide features a list of garden elements on the left and a photograph of a garden with a path and hedges on the right. A small circular inset in the bottom right corner shows a man speaking.

And then serpentine hedges. They created the hedges with a different kind of shapes. You have seen the hedges given shape of the mazes and also this.

(Refer Slide Time: 45:22)

What have we LEARNT

NPTEL

The slide is mostly blank with the title 'What have we LEARNT' in the center. A small circular inset in the bottom right corner shows a man speaking.

So basically if we now look back, what have we learned from this, let us go a little backward from English. In English landscape, we have found that they have created kitchen garden, they

have created rose garden, they have created gardens of five senses, they have made the gardens accessible to common people.

Though historically English gardens have grown over ages, more and more it has evolved and the all these places became a public property, common property. That means common people are allowed to use it, enjoy it, experience it. More and more our entire constitutional system has come to that, that even a common people has the right to see a common place or the natural spaces. The landscape got gradually modified. And English gardens, since it is very recent, very latest, in such cases we have seen that it has adopted this philosophy.

If you look back earlier English gardens, they were slight emulation of the French. French landscapes, emulation of the Italian. At the same time, the Mogul gardens grew. If I focus on this itself, English gardens we have found that now contemporarily most of the people are no longer adopting French or Italian landscapes. Most often, you will find since all our landscapes are public gardens or public places or public squares, they are almost a replica or representation or a reflection of the English gardens, garden trends or the latest trends.

If you go to the gardening styles of the houses, kitchen garden has entered into the houses. This is one very interesting point to note that it has evolved over time historically. If you follow these two series of lectures which I focused or rather dedicated for you, understanding the history of landscapes, run it repeatedly, listen to my deliberations repeatedly, see the pictures, give time, see the pictures, try to understand what I have tried to communicate to you.

One thing is very sure, landscape originally was for the rulers either a single person or his family or friends. Landscape has now changed to a different dimension. Now the landscape is for everybody, common people, anybody. So landscape has entered into public places and English garden reflects that. That, within that English landscape period time only the landscape came out of the individual ownerships to the public ownerships. And when you will be planning for today or tomorrow, it is all the more democratic planning that will come into. So that is what we have learned through the entire history.

I hope you have enjoyed this. If you have any further clarifications to see, please feel free to write in the forum. Let your question be very brief and to the point so that we can understand your question well and also give you the feedbacks very crisply. We do not want to overload the

forum with too much of answers or too many questions. If you are very focused, ask your question very briefly and to the point and we will try to answer your questions to the point so that your points are clear and our objective is fulfilled.

What lies ahead? In the next series of lectures, we would like to discuss about the various behavioral issues associated with the landscape design. Let us wait for it. Thank you for joining this. See you again.