

Landscape Architecture and Site Planning – Basic Fundamentals
Professor Uttam Banerjee
Department of Architecture and Regional Planning
Indian Institute of Technology, Kharagpur
Module-03 Lecture-12
Introduction to History of Landscape Design

Good morning. Till the last lecture, we had discussed about sociopolitical history, the expressions, the styles of the Italian landscape. Now I will show you some examples of the Italian landscape styles, Italian gardens. As collected from the historic documents, we will not be able to cover all but some of them which are noteworthy to understand the Italian gardens, I am going to present now. Please follow through.

(Refer Slide Time: 01:05)



Let us just see a little more detail in the Medici Villa. I will go a little faster in this. This villa which has been placed in the hills, hill edges almost reminds me of the Spanish garden that generally lie. Now similar line but each one of them has a different character. This is regarded as the first true classic Renaissance villa in Tuscany, simplicity in design and harmonious in proportions. Design is simple but very harmonious. There are ornamental pleasure gardens. Now at different places, they have placed it.

The gardens had to be laid out at various levels because it was in the hill edge. This gave rise to one good style. In this, they had the pergolas which came in. Here if you look at it, they are

natural pergolas. But later on, we have found that this pergola has become one of the strong structural element in our, I would say landscape elements, in our normal current landscapes and contemporary landscapes.

(Refer Slide Time: 02:25)



Let us look at the section as we found in the references. We have the villa, we have the caretaker house. And this level changes were structurally made stable with the buttresses of the buttressed walls, stone walls. Okay? So this is the upper terrace, then the lower terrace. These are retaining walls. And priority was landscape site that they have created.

It did not have a grand staircase. It was a villa, not a grand public building or you know the palace or something. So it has grand (stai), did not have grand staircases but it was connected, all the levels were connected with small small staircases with you know intricate details. So from reception rooms on first floor, the guest could go out to the loggia and from there to the garden.

So it is from here you go to this, then to this. That means you have the exposure to multiple such levels. And the (log) loggia connected again the interiors and the exteriors. So that is how they have done it. They, here they, I do not see that they have blended the architecture and landscapes but they created a connectivity from an architectural space to the landscape space, again to the architectural spaces that was created here.

The typical picture of this particular crosssection if you look at it, these levels are, the first level is here. This building you see at this particular picture as if you are looking at straight at this particular building, at the upper level, upper terrace and then the lower terrace. In this if you look at it, the upper terrace, then the lower terrace and then the green zones.

(Refer Slide Time: 04:29)



Look at this which we have tried to highlight. The lawns were long rectangular and they were, they had the potted lemon trees. This was placed at the highest level and then the next level and the next level and there is another garden here. Okay, let us see one by one. On highest level in front of this, the placement is very appropriate, the access is from this particular side. And this avenue is lined with cypress trees. And then, we have a view from this particular point to the front.

(Refer Slide Time: 05:29)



Next is the secret garden which has a large fountain at the center. Now let us correlate. First, we come here, we have a foreground and then we have the structure at the base and then we have a secret garden aligned. Next level, we shift to this. This is that secret garden which you can see in the picture of the secret garden, you would see here.

(Refer Slide Time: 05:56)



Then comes the next one. This is built quite later in 20th century. Now another garden which has been created very geometric, with a very geometric, strong geometric styles and geometric patterns but most often you will find that they are of very flat grass lawns. In between what they

have done where my cursor is now, they have created pergola. This pergola you can see here. So basically if you look from this particular point towards the right, this is a view that you have the pergola in this left hand side and then you have the lower garden which is at this particular point which is well parterred.

(Refer Slide Time: 06:37)

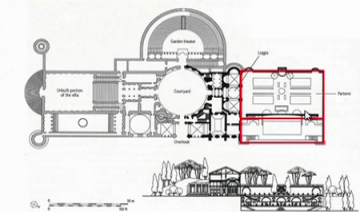


The pergola, if you look at the pergola from this particular side, you have a view of this. Here I had pointed out earlier that the pergola that they created was essentially you know to protect the orchids. But later on the pergola became one of the important feature because it also not only protected orchids, it also protected the people from strong sun exposure.

(Refer Slide Time: 07:10)

EXAMPLE OF ITALIAN GARDEN

The Villa Madama, Rome (1516)



Gardens on the **three terraces** at **northeast** side of villa

Upper terrace beyond the secret garden of loggia is a hippodrome shaped curved end


Chestnut trees were planted in upper terrace

Below these trees, the **orangery** was planted

Terrace of the other side had a **formal garden**

Consisted of **square potted plants**, **fountains** and **semi circular exedra**

NPTEL



Let us look at the Villa Madama. The garden is placed here in three terraces. The upper terrace beyond the secret garden of loggia, it is curved. Chestnut trees were planted in upper terrace and below these trees, the orangery was planted. Now if you look at this, essentially again the levels, the level changed from one to another. The other side had the formal garden and the potted plants. See, essentially again correlate with the classical style of Italian, terraced, very formal potted plants, multi-levels, formal.

(Refer Slide Time: 08:16)

EXAMPLE OF ITALIAN GARDEN

The Villa Madama, Rome (1516)

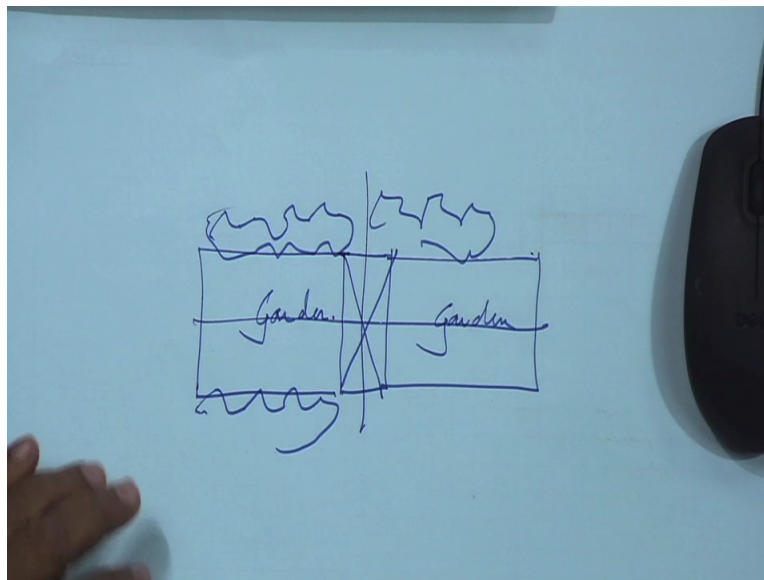


NPTEL



This is artist impression of the Villa Madama and there is a true picture of this Villa Madama. If you look at this, you will find that they have very strong garden here at this behind. They have very strong garden here and the building sits in the center. What is comparing with other elements of Italian garden is they have large plantations over here. But when it came to the garden, it was very low height. They did not create a kind of jungle or woodlands in the foreground. So essentially if you try to see how it looks like, I will just try to give a sketch on this particular paper.

(Refer Slide Time: 08:55)



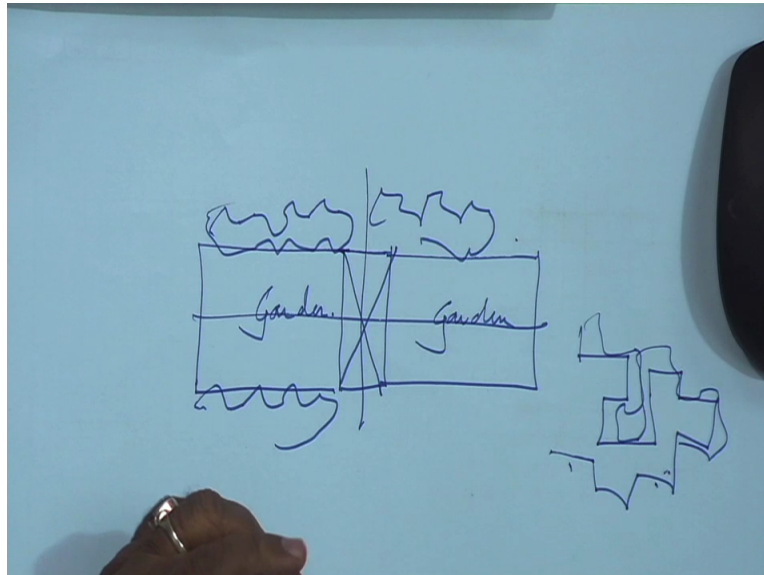
Conceptually, the building is here. There would be landscape on this side, there would be landscape on this side and the rest of the edges are filled with large plantations. This is the building, it may be in the center or it may be at the edge. This is a garden and here again the garden. Very geometric, if you look at it, it is very, very geometric, very formal.

(Refer Slide Time: 09:30)



Okay, then different pictures of these gardens. Let me point out something here. In this picture, see this is parterred with one particular garden but in between they came, they have subdivided into small small squares and different kind of labyrinths. So the labyrinth, one of the maze that came in here.

(Refer Slide Time: 09:53)



What is a maze? Look at this particular sketch that I am doing. Basically it is a different kind of you know movement patterns in which people play hide and seek. So people move around all

this and ultimately play hide and seek. So this is what is maze or the labyrinth. And the labyrinth became one of the landscape elements.

I have seen this use of labyrinths in many of the landscape styles in our contemporary situations. So here we have such parterre with small small labyrinths. These labyrinths where you can see one and other but the paths are you know very much in the maze form. Then, we have the structures and the path which is going towards this. And then we have the hedges in front, besides they have the walls.

Then also there are grottos having an overlooking water body in front or the structure in front of that, a garden. So I have shown you this picture earlier. Okay? Now this is a kind of situation that you do see in Italian landscape style. I can assure you one thing that when the Italians they started building, they started building each of these particular portions in almost independently. So there is no symmetry or balance between all these things. That could be various different kind of formations.

(Refer Slide Time: 11:08)



If you look at the other examples of Castello, this is one of the very important example. The garden plan was based on harmony and order. If you look at the geometry, if you look at the actual things, yes, it is there, very much there. But if you look at the whole garden, it never holds together. It is a grandness which they wanted to demonstrate. So it was slightly political wisdom

of the people. They wanted to show their dominance or the rulership to the common people that the ruler owns, ruler possesses, it belongs to him or her.

That is a kind of idea that was there. So it was a slightly political with the pleasure of course. It was the, I would say it is a demonstration of political power through a pleasure garden that was a kind of thing that was there in the Italian garden styles.

(Refer Slide Time: 12:00)



The garden was filled with lots of statuary historical as well as if they had to demonstrate or highlight the actions of somebody or maybe the they want to appreciate somebody that is what they have done.

(Refer Slide Time: 12:25)

EXAMPLE OF ITALIAN GARDEN

Villa di Castello, Tuscany (1538)



The garden plan was based on **harmony and order**

The garden was filled with **statuary** associating the virtues of ancient Rome

The **citrus garden** contains more than five hundred pots of lemon and orange trees.

NPTEL



They have the citrus garden. This citrus garden which contain more than 500 pots of lemons and orange tree, so basically one is citrus garden, another garden with the statues, another garden with, another parterre with hedges, another parterre with flower beds, that was a kind of thing that they built. So it was, it was never really a very strong harmonious thing.

(Refer Slide Time: 12:51)

EXAMPLE OF ITALIAN GARDEN

Villa di Castello, Tuscany (1538)



The garden plan was based on **harmony and order**

The garden was filled with **statuary** associating the virtues of ancient Rome

The **citrus garden** contains more than five hundred pots of lemon and orange trees.

Hydraulic system of the garden was one of the wonders

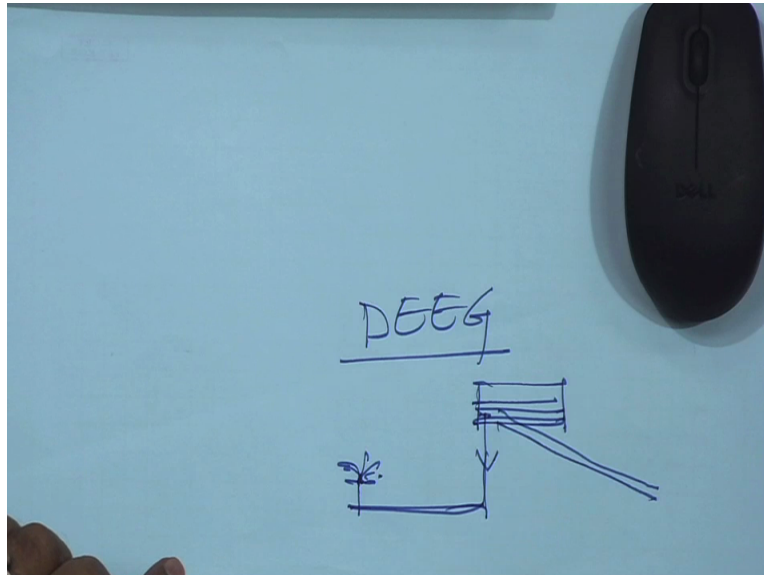
NPTEL



One interesting thing that is to be noted here, the hydraulic system that the movement of water that was very interesting here in this case. I will now bring some reference with earlier examples that I have cited. Here, what they have done is they built a large reservoir at the upper elevations,

filled it up with water, then allow this water to flow down by gravity and that water flowing down through gravity through bronze pipes ultimately came to all these spouts or fountains wherever they wanted. So water was first stored at the higher elevation, it was not natural.

(Refer Slide Time: 13:41)



Interestingly, this example I have seen in one of our historic examples of India that is in Deeg garden, Deeg very close to Bharatpur sanctuary. If you ever get a chance, please see this. It is almost a hybrid of many of the landscape styles but still I feel that it is very much common to or you know very close to Italian styles that they have done, scale is small.

What they have done is they have built a reservoir at the upper level and through a ramp they had allowed the cattles to carry the water and ultimately pour water in this reservoir. And this reservoir then, water is released through pipes to the fountains over here and then fountains would be spouting the water at this particular point. So this is the (())(14:26) signs that they have adopted in Deeg I am referring to. Given an opportunity, some time I will show you the picture, the plan that I have somehow managed to get of Deeg. But here I found this is nothing but emulation of what Italians have done long long back. Okay, so here the hydraulic system which was basically wonder at that point of time that the water is coming from higher elevations by gravity.

(Refer Slide Time: 15:03)

EXAMPLE OF ITALIAN GARDEN

Villa di Castello, Tuscany (1538)



- The garden plan was based on **harmony and order**
- The garden was filled with **statuary** associating the virtues of ancient Rome
- The **citrus garden** contains more than five hundred pots of lemon and orange trees.
- Hydraulic system** of the garden was one of the wonders
- The garden was designed to deliver a **political message** alongside of being a **pleasure garden**

NPTEL



As I mentioned just now that it was, the garden was designed or you know created to show political message or send the political message but in the guise of the pleasure. So they were guests who were invited and the guest were taken around the garden to show a power of that particular ruler or the garden owner, interesting.


(Refer Slide Time: 15:31)

EXAMPLE OF ITALIAN GARDEN


Villa di Castello, Tuscany (1538)

FEATURES

- Fountain of Hercules and Antaeus
 - Marble pool and base of fountain had eight sides.
- Fountain of Florence
 - Around the base were marble statues of children, life sized and in full relief
- Grotto of the animals
 - Statues protected by the tazza, or basin above for sheltering them from the rain.
- Citrus garden
- Herb garden



NPTEL



What are the features? Let me go a little faster. The Fountain of Hercules Antaeus, the Fountain of Florence, grotto of the animals, citrus gardens, herb gardens, they were different elements in this Villa di Castello in Tuscany. Look at this particular picture. It is that Fountain of Hercules

and Antaeus in which the actual sculpture is placed at the top and then here we have the stone fountain. Then we have the base, so the water used to go up to this level and then ultimately flow down from here to here to here. So basically it is a you know flowing of water from one point to another. And around the base also we have the marble statues and this is the basin into which the water used to come in and that is to flow down to the different places.

(Refer Slide Time: 16:33)

EXAMPLE OF ITALIAN GARDEN

Villa di Castello, Tuscany (1538)

FEATURES

- Fountain of Hercules and Antaeus
- Fountain of Florence
 - Originally located in upper garden.
 - Made to complement the Fountain of Hercules and Antaeus, lower in the garden.
- Grotto of the animals
- Citrus garden
- Herb garden

NPTEL

In Fountain of Florence, sorry, this was located at the upper garden. This is almost like you know to emulate or complement the Fountain of the Hercules and Antaeus.

(Refer Slide Time: 16:50)



EXAMPLE OF ITALIAN GARDEN

Villa di Castello, Tuscany (1538)

FEATURES

- Fountain of Hercules and Antaeus
- Fountain of Florence
- Grotto of the animals
- Citrus garden
- Herb garden

- Cave in the upper wall of the garden.
- Walls of the cave were covered with limestone moulded to resemble a natural cavern, embedded with stones, mosaic and seashells
- Each chamber contained a large sculpted marble basin



NPTEL

Then comes the grotto of the animals. This is the grotto, the cave that has been created in which they had placed the animals and this (anim), here this particular basin has the water which spouts through. Now there are many such kind of grottos over here in which that there are different such kind of animals that they have created and the basin that has been created over here.

(Refer Slide Time: 17:15)

EXAMPLE OF ITALIAN GARDEN

Villa di Castello, Tuscany (1538)

FEATURES

- Fountain of Hercules and Antaeus
- Fountain of Florence
- Grotto of the animals
- Citrus garden
- Herb garden

- Five hundred dwarf citrus trees, especially lemon trees
- Grown in large wooden tubs, and put under shelter in the winter



NPTEL

Then comes a citrus garden. Huge number of citrus trees over here and they are grown on wooden tubs, so wooden tubs, stone tubs and such kind of pots came into our elemental list.

(Refer Slide Time: 17:34)

EXAMPLE OF ITALIAN GARDEN

Villa di Castello, Tuscany (1538)

FEATURES

- Fountain of Hercules and Antaeus
- Fountain of Florence
- Grotto of the animals
- Citrus garden
- Herb garden

- Ortaccio is a separate walled garden east of the main garden
- Aromatic and medicinal herbs were grown, along with exotic species of flowers



NPTEL

And then comes the herb garden. This particular herb garden which nowadays we are also emulating in many of the landscapes, we are trying to create a garden, we call herbal garden full with medicinal plants. So that, they have created long back, so many years ago.

(Refer Slide Time: 17:56)

EXAMPLE OF ITALIAN GARDEN

Villa di Castello, Tuscany (1538)

Water Features

Most Important Aspect of this garden

Statue of Appenino- symbolizes the mountains of Tuscany, portrayed as an old man shivering, with water pouring over his head. Located in centre of reservoir above garden in the "sacred wood".



NPTEL

(Refer Slide Time: 17:56)

EXAMPLE OF ITALIAN GARDEN

Villa di Castello, Tuscany (1538)

Water Features


Most Important Aspect of this garden

Statue of Appenino- symbolizes the mountains of Tuscany, portrayed as an old man shivering, with water pouring over his head.

Located in centre of reservoir above garden in the "sacred wood".

Water flowed down from reservoir through bronze pipes

Emerged in two fountains built in the retaining wall on either side of grotto representing rivers of Florence



NPTEL

Quickly going through the water features, the statue Appenino is here which is sitting in the midst of this lake and the water flows (from) up here and ultimately pours water from this particular point which is connected with the pipes. Highly technical and they have done it. These particular positions of the statues is very specific but essentially this flowing of water from the higher elevation that they have adopted in all these fountains here.

Okay, let us see the other highlights. Water flowed down from the reservoirs through bronze pipes. This water then they connected with the grottos and all other walls and there were spouts. So this idea of spouts though we have seen in the grotto long back, this idea of spouts through animal faces that became almost synonymous with European landscape styles.

(Refer Slide Time: 19:05)

EXAMPLE OF ITALIAN GARDEN

Villa di Castello, Tuscany (1538)

Water Features

Most Important Aspect of this garden

Statue of Appennino symbolizes the mountains of Tuscany, portrayed as an old man shivering, with water pouring over his head.

Located in centre of reservoir above garden in the "sacred wood".

Water flowed down from reservoir through bronze pipes.

Emerged in two fountains built in the retaining wall on either side of grotto representing rivers of Florence.

All fountains depended upon gravity, elevation of the water source was above the fountain.

Water source for fountain of Hercules and Antaeus was on the hillside high above fountain.

The garden consisted of ingenious giochi d'acqua (water jokes), to entertain the duke and his visitors.



NPTEL

So the fountains worked on gravity, so the water was taken to different levels. So I am just showing you one by one these examples. Just to highlight the water feature here essentially, this slide has been created for you. But idea is that at different parts of that particular garden, they have created different kind of fountains, different level of fountains at different heights and the water flowed from one to another, to another, to another. That is how it has been designed.

(Refer Slide Time: 19:47)

EXAMPLE OF ITALIAN GARDEN

Sacro Bosco at Bomarzo, Lazio (1552-1584)

Park intended to portray an element of astonishment

Positioning of statues in haphazard manner

Layout of the park is mostly unknown



NPTEL

Quickly going through Sacro Bosco at Bomarzo, Lazio, this is another example that we have picked up for a reason. This is a landscape in which they did not intend any very specific plans.

So if you see all those geometry, formality, the orderly, the harmony that I have talked about in the Italian landscape style is absent here, is not there. They have placed things at different places wherever they could. I will just give some examples.

What they have done is they have introduced the different kind of sculptures. The sculptures are not harmonious. Whatever was imagined by the ruler or the sculptor that was created, appreciated and placed in the garden. So they were placed in different parts of the garden almost (un) you know unorganizedly but that also became one of the landscape style. But this particular landscape style is not true reflection of the Italian landscape style.

So I have just given you the example for one reason that it should not be treated that (lands) Italian landscape is non-harmonious, non-geometric. Here it is just one occurrence or maybe I would say it is just the chance that by which they have been created. But it is also very much liked, liked by people, the visitors, even today they visit this and they prefer. Now here, I find one very interesting blend.

The blend is what? As in the Japanese garden we have found that they are different components which we have to experience by moving. And that movement which we call as kinesthetic movement and that kinesthesia that has been generated, it is also being generated here. So if I see that or if I try to be bold enough to say that this has been probably created with the emulation of the Japanese garden style, I am not very sure. I am just trying to think aloud that, have they also tried to break away from the typical geometric formality to little informality but with their specific elements to be within it.

So the statues are placed very haphazardly wherever they could and this is also being tried today. In nowadays, statues of the stones, of the rocks to emulate as a rock (21:57) are being placed slightly haphazardly so that it looks natural. Maybe that they wanted to create something like natural but once the statue came in, the naturalness totally got destroyed because nature does not create statues. So this landscape style if you try to, if I correlate with or maybe try to compare the Japanese landscape style and try to say it is a similar, I would strongly disagree on one point, the statues are the spoiler.

If they would have done the whole thing with greens and other things, probably it could have been slightly a reflection or maybe an emulation of the Japanese garden style but here it is not.

So the layout is really, this is a tourist map from which we have collected, so the actual layout we do not know. But however if this is a kind of track where people do move, it simply indicates that it is absolutely haphazard.

(Refer Slide Time: 22:55)



And quickly going through some of the elements, if you look at all these examples, you will find there is no correlation. No one statue or any element is in conform with other. It was a pure unique creation of each of these elements which either the ruler has conceived, then crafted or drafted by the sculptor or the sculptor or artist has conceived and created, ruler liked it and said put it here, bring it within this particular site. It happens like that. So it does not this, only thing is what is important is to note is the sculptures became important element in the Italian landscape styles.

(Refer Slide Time: 24:00)



Some more. I am just holding this slide for a few more seconds so that you can see this: small theatre of nature, turtle back. I have found this kind of sculptures or similar kind not the same emulation or copy of the sculpture but the similar styles. Basically it is thematic. Each sculpture speaks of something, some themes, some historic evidences or maybe some principles or some philosophies. So each sculpture remained independent but they had the siting within this landscape sites.

Hence whatever you have discussed over the Italian gardens, let me just quickly summarize this. Italian landscape style which is to our chronologically quite recent, it is on a grand tract of land generally stepped in nature. It was developed through the concept of Renaissance during the Renaissance period. They were strong expression and exploitation of the nature. They used grand paths, very symmetrical layouts, large plantations at the back.

They have introduced sculptures within the landscape and they very intelligently used the water flow from the higher elevations to the lower elevations reserving or rather storing at the higher level reservoirs and then allowing it to flow by gravity and activating all the fountains, so the fountains becomes very, very strong element.

Comparing to the Moguls and the Spanish, the fountains were the low keys. They did not have higher fountains but in this they have used the higher fountains. Now this is the character of Italian garden. Profiles are very geometric, very orderly not blended with just architecture but or

the structure but is just sitting next to the structure either in the front or the back, maybe flowing further down frontward. That is a kind of landscape that we have seen.

It is maybe similar to Mogul landscape style but very concurrent to Chinese and Japanese landscape style. But we have seen one example which is very similar to Spanish landscape style. So what is happens is the whole set of landscapes gradually got you know evolved over time, but the identity through sculptures became the identity of Italian landscape style. Thank you.