

Architectural Conservation and Historic Preservation
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Lecture – 38
New Buildings in Historic Settings

Today, we are starting with New Buildings in Historic Settings. Remember in our last lectures we have talked about the delineated historic zones or historic areas which have a certain significant characteristics. Which also talked about that these areas though its designated historic area, but there has to be living areas they are not museum cities, so that means, people will work there, they will stay there, some activities will go on and obviously, there will be some structures we need to be demolished or the open spaces are there. So, some of the new structures have to come up.

Now, the question is that that if an area is designated as a historic zone because of some significance and characteristics then what how these new buildings will come up in that area. Are there any guidelines? What are the guidelines then? How they will be designed? Whether there will be just an imitation of the old buildings, but the old buildings are also from various time periods, of various styles it can be.

So, this is the question and these are the examples we will see from some of the places that whether there can be it can be implemented through laws, by laws rules and regulations or there can be some guidelines. So, these are the this is the topic of today's discussion.

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Now, here we can see the two cities one is from Kolkata this one the Kolkata from a during the second world war time, and this is the second world war time Kolkata is there and it is one of the very busy street the Chowringhee street. And the same street not from the same location we see it today that multi stories have come up there is certain buildings which are old which are probably they listed as a heritage structures. But definitely the new higher structures have come up and now if you go there you will is high structure long apartment has come up very high it is apartment.

Now, we see the oxford street which was also very busy commercial street in London in 1920 and 2010. Now, when we see 1920 and 2010, 2010 also some changes have done, so probably you can see that this is a new building which has come up there also far away some new structures have come up in this area. And this is a, and they are also old buildings so for different nature different type, but we do not see that the change what is happened in London is as drastic change as Kolkata one, Kolkata also there are some low rise building.

Now, so, this is the that if we have to meet in historic area, historic spine or street into a living area definitely there will be the new buildings. The question is that what will be the design of the new buildings, what will be the activities all of that. So, you can see that I mean I think both of these are new buildings and they are not at all copy they are very much of today's building, but they have the chain is not drastic that the change will

definitely happen, but it is something they should be a dialogue between the old and the new structure. So, let us take some of the other examples also.

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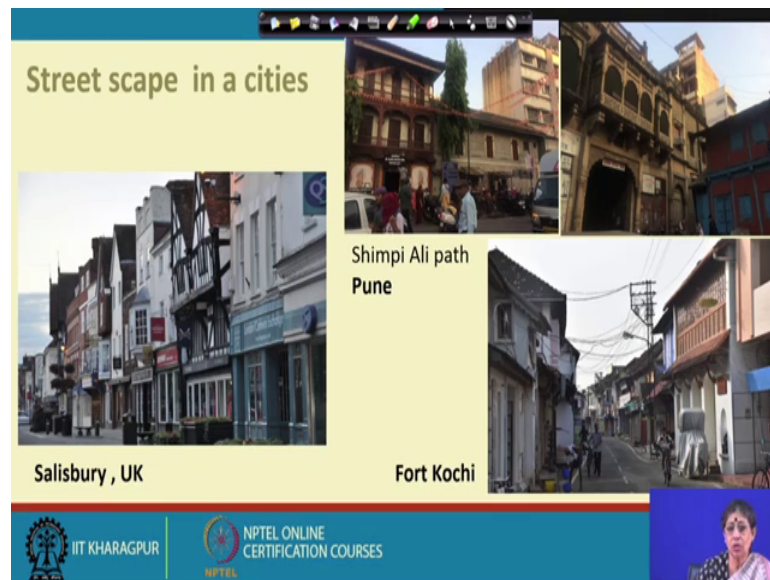


Again London and Kolkata the changing cityscape; So, as I told you in London that what is happening is that the new structure has come up there, so this the new sorry, the new structure has come up there. So, you can see that it you can make (Refer Time: 03:50) that is a new structure, but it is not a copy or imitation of the old structure, but there is some sort of a harmony, some sort of a dollar a continuity between the old and the new.

And when you see Kolkata these structure which has come up in even the Chowringhee road only because of the metro station which has come up there it seems to me awkwardly within that historic cityscape. It may not be a beautiful city scape, but there is a character of those apartment houses which are there and this is also more drastic that there is a new structure in the this is not Chowringhee road. But in near the Ganges and there a new structure has come up which is totally sort of a disregarding the character of the old structure.

So, this is something which probably is not desirable when we designated an area in a historic zone.

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Let us talk about some other cities in India this is Shimpi Ali path in Pune. You can see that beautiful structures which are there and not one, quite a few of them, but then behind or some other structures which are coming up which is actually nothing in common with this old structure.

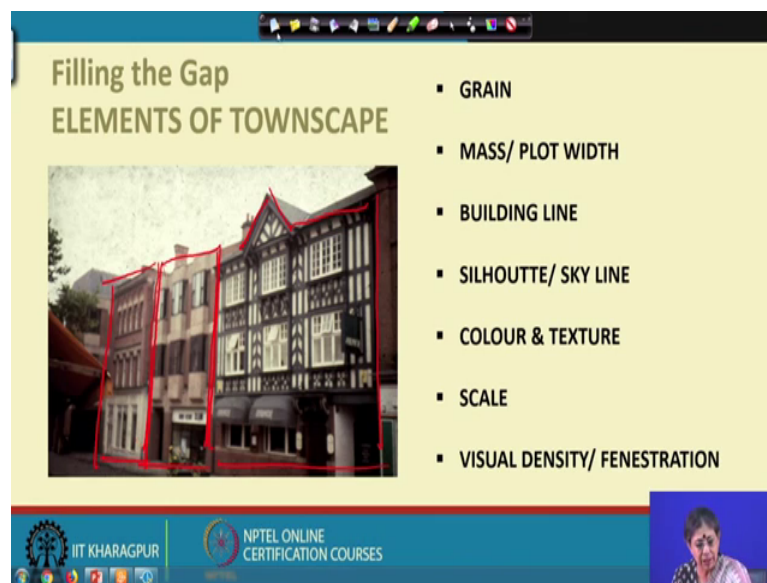
They are almost from that least two different a worlds almost and that is what if this continues to happen and the this old structure will be there maybe they are listed structure. But if there is no sort of a character of that structure for which it has been a designated as a heritage zone that character will be totally lost. And it is not only visual stock character what we are talking about we are also talking about the activities therefore, example in Pune this area there are particular types of craftsmen, the copper craftsmen, and other craftsmen which are there and still they are there and they are also important for those type of activities.

The situation is always not so bad this is like Fort Kochi, we have seen this earlier this is a designated heritage zone and as a result what we see is that that type of higher structure or what we see incompatibility or unsympathetic structures have not come up. But still what we can see is that still the structure the lot of overhead wires are there, the all those structures are not in good condition there probably is a scope for much improvement of that area keeping the characteristics and some sort of a development can come up.

We see this as Salisbury in Europe, and which is a very distinctly different from that because here we can see the layers of structure. They are timber structures, they are the brick structure, they are sloping roof, they are the flat roof structures. They definitely is a shopping area, some of the residential area or hotels or the may be there, but these has sort of kept the character the layers of the historic character and it is a very much sort after array it is a commercially very viable area and it has not only kept his own significance. But it also has been able to keep a mark of his own distinct identity of his own and it continues to live continues to develop and continues to preserve also.

So, this is something what is possible to be done and because it has his own identity and characteristics changing some of the changes are happening. But it becomes a very people like to go there this has attained its identity it is not similar with the other parts of the city or these light is not so good, but it is a very good example of what we call new building in old city, now city of Salisbury in England.

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The slide is titled "Filling the Gap" and "ELEMENTS OF TOWNSCAPE". It features a photograph of a street scene with several buildings, including a prominent timber-framed building. A red line is drawn along the top of the buildings, highlighting the building line. To the right of the photograph is a list of elements:

- GRAIN
- MASS/ PLOT WIDTH
- BUILDING LINE
- SILHOUTTE/ SKY LINE
- COLOUR & TEXTURE
- SCALE
- VISUAL DENSITY/ FENESTRATION

The slide also includes logos for IIT KHARAGPUR and NPTEL ONLINE CERTIFICATION COURSES at the bottom.

So, now we have to see that if we have to ensure that if an heritage zone has been delineated and what will be the new buildings in that. I always said it cannot be a copy and copy of what because it can be the layers of different types of buildings can be there so that means, we have to do some analysis and that type of analysis should guide an architect innovative architect, creative architect, to design something a new structure which will handhold the old structure.

This is a very good example of hand holding because as you can see here that this is a timber frame structure where this a very very well decorated structure there. There which is a different color different materials, and there is another structure which is non sloping roof or break structure there, which may not be the proportion and everything is different only the height has been maintained and there a new building has come up which is belonging to this time. And this building is almost hand holding the two generation almost like two friends from two sides and this hand holding is what we are talking about.

So, if we have to ensure that this happens of course, the legalities are there it has to be designated some sort of a guidelines bye laws are to be there. But more than that what is required is to have an analytical mind, and a creative mind and a sensitive mind that what should be the new building since this whole setting. So, this is some of the points which help in the analysis of certain heritage zones.

For example, crane mass oblique plot width, a building line, silhouette or skyline, color and texture scale visual density or fenestration. So, we will take up all this points and it is not that all of these have to be followed. These are certain helping it helps to analyze and see the existing structures and then see that how the new structures can be designed. We will come back to this example later on.

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The slide is titled "Filling the Gap" and "ELEMENTS OF TOWNSCAPE". It features a section on "GRAIN" which explains the texture of historic property with topography, morphology, built form etc. Course grain, Fine grain. Below this text are two photographs of street scenes. To the right, under the heading "Urban fabric and form comparison", is a 3x3 grid of nine black and white images showing the street patterns of different cities: Mississauga, Barcelona, Copenhagen, London, New York, Paris, Rome, San Francisco, and Toronto. The slide is attributed to "@RehinkUrban". At the bottom, there are logos for "IIT KHARAGPUR" and "NPTEL ONLINE CERTIFICATION COURSES".

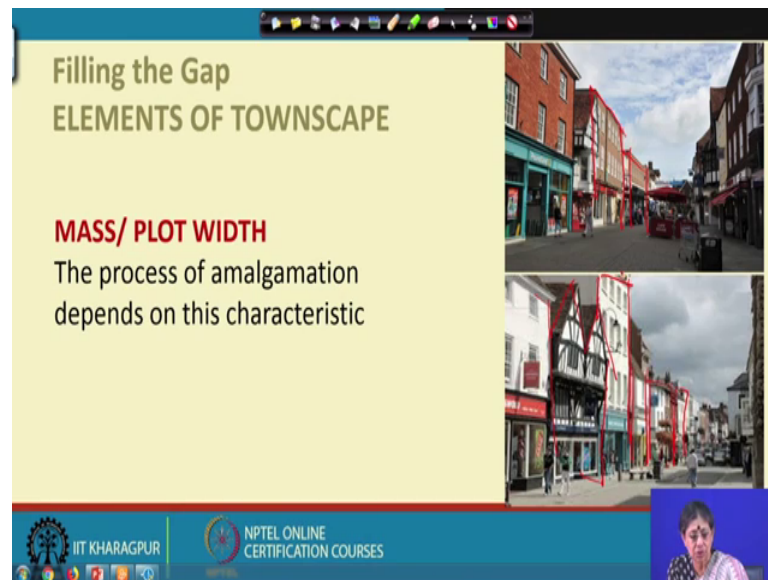
So, first one is the grain. We are saying filling the gap the elements of townscape, they are designated as a special area one of the reason definitely it has got a distinct town scale value. So, one first point is the grain. What is grain? It explains the texture of historic property with topography, morphology, built form and it can be a coarse grain and it can be a fine grain. So, you can see that there are from the various towns have taken that from Copenhagen or Paris or New York or San Francisco, Toronto or London or Mississippi.

There are different types of grain what is a grain it sort of talks about the topography, it talks about the street pattern, whether regular, irregular, open spaces versus built form, the roof scape everything comes within the grain, but basically is that can be the course grain, fine grain and it can be a different. It likes if you move your hand over the city or the built environment how you feel like that.

And that is you can see these two one is from Ahmedabad, this is from Ahmedabad you can see that the here the relationship of the open space to build form is very different and here it is another town on a sloping topography. So, the proportion the how the buildings are there is very different. So, the grain is one of the thing which can be analyzed and that also gives a distant.

We do not look at the plan, but when you move in the city and other it definitely will be felt that what is the grain type, and it can be has to be understood independently from each space or heritage zone.

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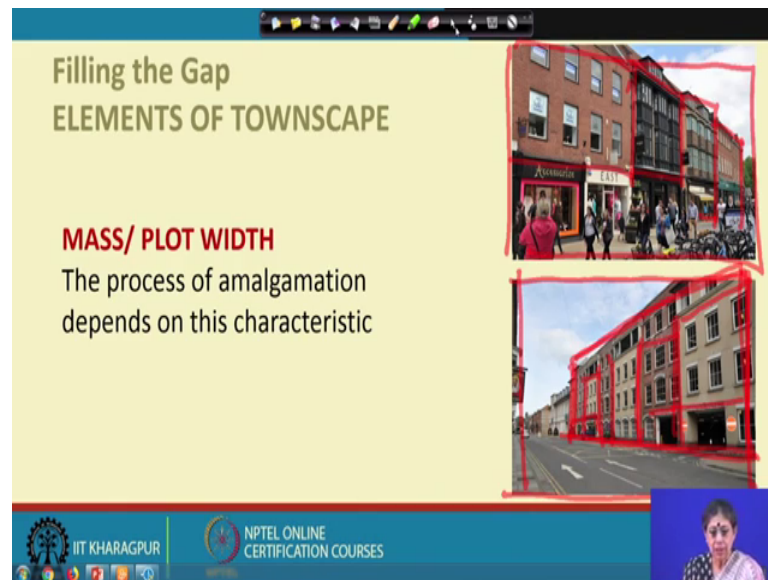


Second point is mass oblique plot width that means, what is the sort of a frontage of the building what is their skill and again it may not be uniform because it might have changed over the years. But there is a certain character of the mass and plot width and this becomes a very important tool for the process of amalgamating the new structure within the whole structure.

So, the first one is from Jyvaskyla from Finland and this is from sleeves Salisbury from Europe; you can UK. So, you can see that in this structure the this city it is a downtown area there are the buildings from the old timber structure, then there is a big building and there are, but also what you can find out that if you see the frontage the proportion of the frontage this is a sort of almost not much variation. And layers of history have been preserved there and similarly here Jyvaskyla what you can see this one of the pedestrian street and there you can see a new structure has come up and the new big structures of course, the height is definitely have kept there.

But you see that always the height is not uniform for example, here in this case there is certain variation. But this variation is a part of the character of that area and this can be maintained a new structures can come up there and also you can see the different in the color and other thing member that I will talk about another this another point in that. So, this is the point it is the mass and or the plot with which is there.

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It continues and this is a very interesting example this is from the first one is from New York this is from New York, this is from New York. So, here you can and this is from again Salisbury. Now, Salisbury case is very interesting we have seen some other pictures.

Now, these entire structure is actually an apartment and this apartment needs the parking area. So, what they have they have the parking area, but rather than this (Refer Time: 14:14) tilted partition, but they have given this basement or the ground floor parking, but they have not kept it open and they have divided the entire facade into smaller segments to give an impression or to match with the that smaller frontage mass and plots width. And that is why it sort of fits in well, otherwise it is actually a huge apartment block which has come up in that new building. And here also in New York you can see that that the new structure this is a new structure which has come up and with the shopping area and this also a new structure is come up.

So, they have almost matching that proportion of the frontage not only the proportion it has also continued or remain retain the building line what we call that will come to the next one. So, this is very important and that the new users like in this particular case of size really the parking area has to be incorporated for the ground floor, and how it is been kept is that who it has been kept is a very what is called a very intelligent design of intelligent conservation for this area.

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Filling the Gap
ELEMENTS OF TOWNSCAPE

BUILDING LINE
Major and minor building lines need to be identified

The slide features a photograph of a multi-story brick building facade with white dashed lines overlaid to indicate building lines. At the bottom, there is a logo for IIT KHARAGPUR, a logo for NPTEL ONLINE CERTIFICATION COURSES, and a small video inset of a presenter.

So, and we have talked about the building line. What are the building lines? There are sort of a details or the different historic (Refer Time: 15:36) can identify what are the major and the minor buildings line. (Refer Time: 15:40) cannot be a predominant line, but one has to understand that which are these lines and one can sort of start trying to find out this building lines and then in a new structure it can be incorporated.

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Filling the Gap
ELEMENTS OF TOWNSCAPE

BUILDING LINE
Major and minor building lines need to be identified

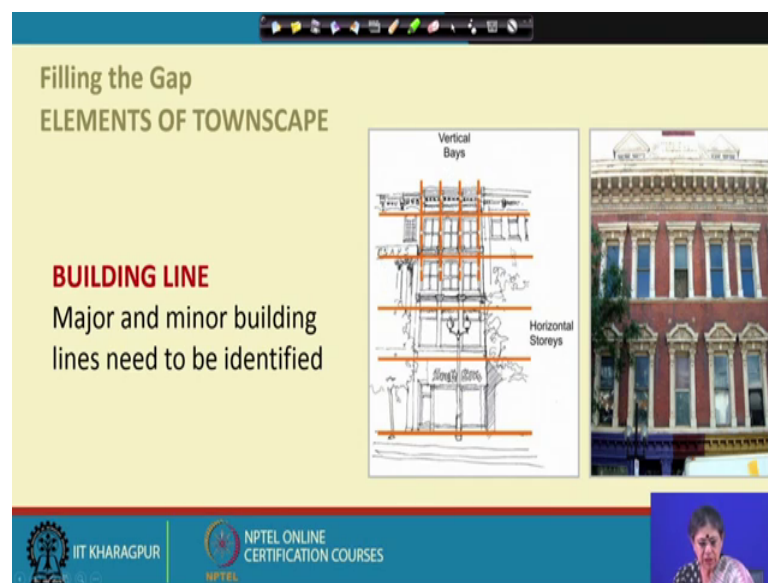
The slide displays three diagrams illustrating building line analysis. The top diagram is a photograph of a street scene with a red line tracing the building line. The middle diagram is a line drawing of a row of buildings with a red grid overlay. The bottom diagram is a line drawing of a row of buildings with a red line tracing the building line. At the bottom, there is a logo for IIT KHARAGPUR, a logo for NPTEL ONLINE CERTIFICATION COURSES, and a small video inset of a presenter.

And this is how the analysis goes for the building line. For example, this is from I think Hamilton in Canada. So, what you can see that one has to take the elevation first, a

streetscape what has happened there and then one has to sort of find out that what are the different proportion of this.

And then one has to keep this the major building blocks and then one can take out that and one is left with this type of pattern or guiding lines which can be. It does not mean it has to be a homogenous one it can be heterogeneous also there can be a variation, but this type of analysis based on the total streetscape is possible to be done and this is what is required when we are talking about the building block.

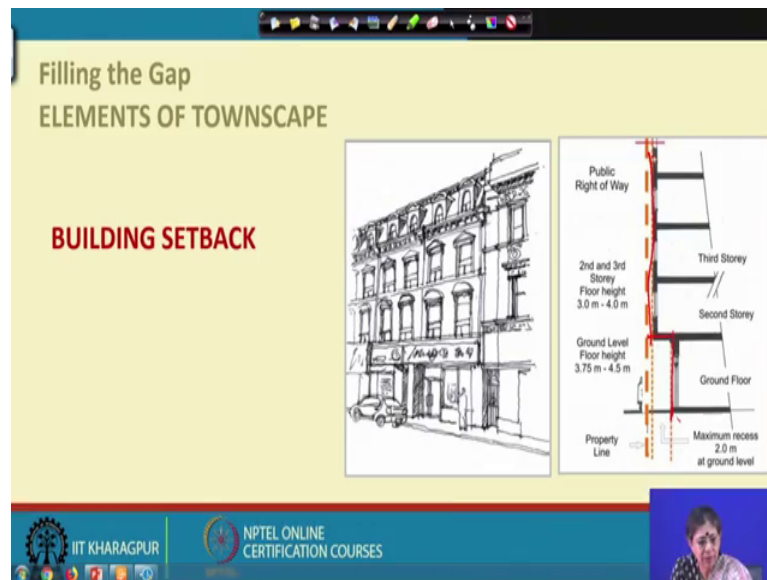
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Now, this is the continuing with the building line building line. So, what we say that in these particular structure we see that they are the major building lines, the horizontal stories and on the top floor they are also subdivided into a smaller part into the vertical base. So, this has to be understood.

So, you see that on the vertical base on the top floors there are certain smaller divisions which are happening there and the also that has to be integrated. And there in one street there can be a various types of that and that lines and understanding of that that how these building lines are their major vertically horizontally major, minor, and how this is also changing this just has to be understood first.

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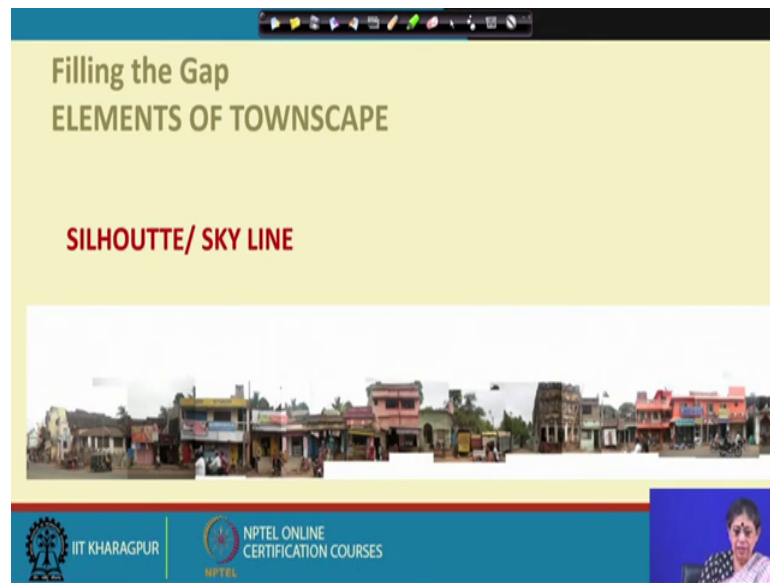


Then comes the building setback in many of the historic area what happens is that the buildings actually form a sort of a continuous wall there is no setback. And in this case also you see that there is no setback except in the ground floor there is a point here that where there is a setback at the ground floor this setback is there and then it continues. And sometimes the building is there is a setback some of the buildings are kept away from the front line mandatory setback.

Now, if a heritage zone has this type of particular type of setback or no setback or a combination of both one has to understand that because that has to be maintained, because these type of features or attributes contribute to the characteristics of that area.

You may not follow a I mean you should not really copy the details ornamentation and other, but if you just take these attributes and try to incorporate some of them and it depends on the architects how is done, then the if there is a continuity there is a dialogue between the old and the new and that is very important to understand. So, these gives a sort of a guidelines for this the building setback. There can be front set back, there can be sight setback also.

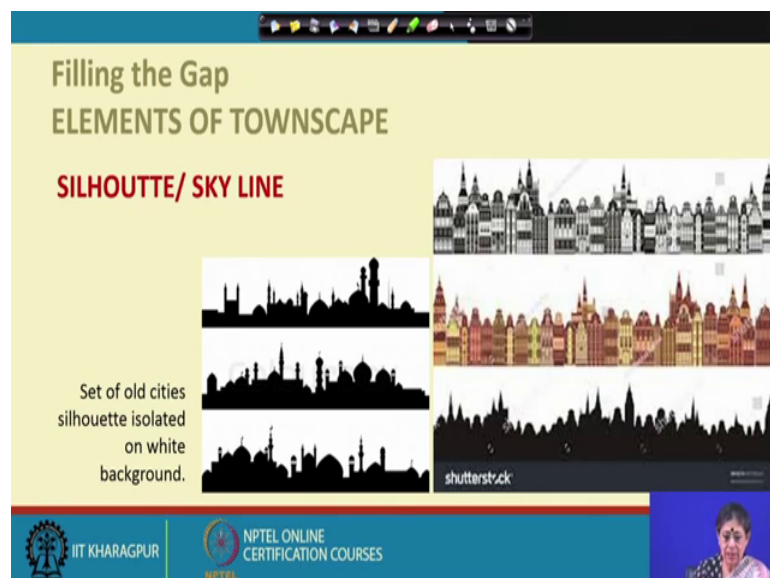
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Silhouette and skyline, this is from Bhubaneswar the old city of the Bhubaneswar's. When you put that the silhouette talks about basically the roof line where we are not talking about color, we are not talking about texture at all. It just talked about that how the silhouette forms and this is our the skyline, this maybe as continuous skyline, there can be the breaking of the skyline.

So, these silhouette also gives a very important characteristics of an historic, of a historic area.

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So, this is some of the studies what we say that we are not considering anything else building lines color texture just trying to see that how these roof lines have been formed. So, there are these different areas where you can see that sometimes it can be discontinuous, sometimes their way interspersed with spears, sometimes there will be a in many cases it can be just a continuous line. So, one has to understand this silhouette and skyline what is the characteristic.

Now, what does that mean? Does that mean that if there are domes and towers and all these things we copy that thing? No. They can be again that how we can in the modern design how we can try to incorporate this breaking or this rhythm or this form, but functionally how we can incorporate there, there is also a lot of possibilities and that has to come from the designer itself, himself.

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Another thing is the scale when we are talk scale and proportion one is related to the human dimension and another is its own scale. For example, if you see the cells were in North Carolina here that the most of the buildings here they are forming a sort of a group very strong group and certainly this building has come up there which is totally breaking and it is totally out of scale and it is it.

Some areas it this itself can be a character, but here probably it seems like it is an sort of an alien intervention not a very happy intervention in that area.

Now, but suppose we say that if there were two storeyed or lower storeyed do we have to follow that the lower storey country have the more floor area ratio. So, let us say this is I am not saying an ideal example in this case, but here you see what is happen is from the floor the road level one if you can look at that and it has also has broken the huge mass into parts and there behind with a setback the higher structures are there.

So, actually when you are walking along this street level you do not see that highers, but it has been able to create that more floor area behind and taking the scale of the building same. So, scale can be done by the high, scheme can be done by the relationship between the internal. So, what has been done and sums of therefore, features also we are kept. So, scale is a very important part of this type of attribute when we are talking about the historic areas.

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Color and the texture, many of the old structures were built with break or stone machinery and with a different types of detail does not mean that we have to follow that. We can have the modern material, but to see some sort of a if there is a harmony there is a uniform character in most of the buildings were made with a particular type of tone, and their texture or a then it can be followed.

This is an example of oxford we say as you know at an university, and there are a lot of new addition extensions are required and here you can see that it is done with the modern

material. But some a little bit of features, and some sort of rustication, some sort of a color has been incorporated there to harmonize between the old and the new structure.

So, the color and texture is also very important part we do not have to always take we do not have to take the old details or imitate the old details or old structure. In the some details some ornamentation some sort of a rustication and it can happen to match to sort of establish a harmony between the old and the new again.

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Again so, visual density and fenestration; This is also important because I am again bringing that the old structure, and visual density and penetration comes from the type of details and ornamentation, and the openings size, and the proportion of the opening size, grouping of the opening size, and how and the sometimes ornamentations were also there. So, these also it becomes a very important part.

So, let us look at that example from the Salisbury. So, I said that this structure is hand holding between the two. Now, it is a very on one side it has a huge team built in structure which is a dark color with a lot of ornamentation and another side it is a brick one which is a very simple one. So, what it has done is that this is a plane façade and this is a decorated and other thing what is it is taken the middle path.

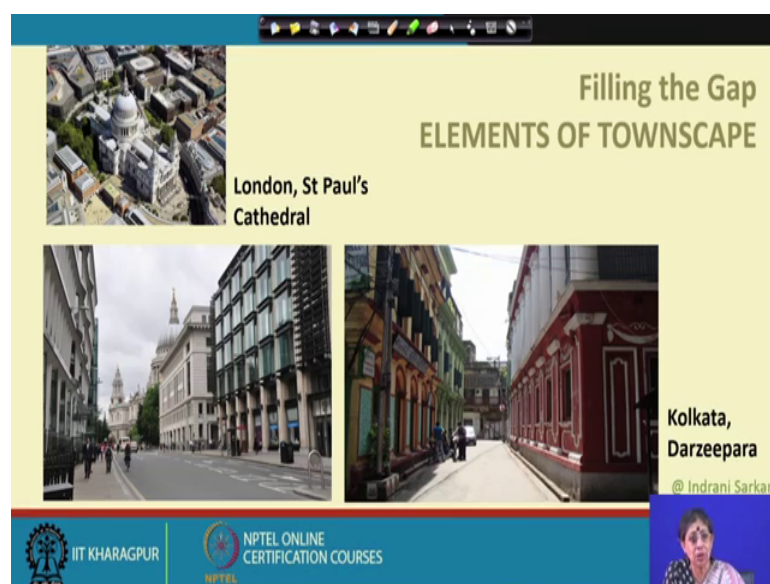
So, what it has done rather than a flat thing it is done some sort of a projection and this color of the details are it is not an ornamentation. But the how it is done in the façade the

projection and the recession it gives a sort of a character which matches it is not a replication of that, it say a some gives a some sort of a detailing some sort of an ornamentation with these old structure.

But again you see that the roofline has been maintained, the building line has been maintained, this way at the material wise for some it is to looked for towards this and some other it has looked towards that. And that is why it is able to hand hold that. It is neither, though the and it is a new structure and it belongs to this time and that is very important. And then we can also talk about this one now we say that this is actually not this one that how we see the openings and the how the openings are grouped together and definitely what is also important many of such areas are being converted into the shopping areas commercial areas and they need a huge display of window and that actually sometimes break that.

So, if you have to have the display window then also one has to see that within the display window how sort of a breaking the scale can be maintained, the signage system is very important, there is some regulation restriction of the signage system this is a very important when we are talking about the this historic area. So, this is what you call the visual density. Visual density is that how much of details within there, whether they are plane façade and other and how we can combine these two.

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So, these are broadly the elements of townscapes. So, we can see that how this is an area near the Saint Paul's Cathedral in London which is heritage area. Very important area very busy area and all it is a lot of market value, but here also we can see that the there is no the form of the Cathedral it has been maintained, it has not been sort of an obstructed and by the other highway structures.

But within that we can see that new structures have come up the new structures have come up with very interesting detail which is a different types of ornamentation, which is which has its own language. But that language is not is definitely not same as this one, but it is not very sort a not very very drastically different from that well as. So, that is very important.

And then, so we still have in India many parts of in India many beautiful areas like this is from Darzeepara in North Kolkata. I mean they are all there. And they have a particular significant character and beautiful characters, and without any set back but particular types of details it has been crooned because a particular period of the history. And these are the areas which need to be designated as a heritage zone which special bylaws.

Remember the bylaws is only not enough this type of understanding or analysis of the townscape under its different aspects needs to be done if some new building has to come in that area. So, that it can have some sort of a sympathetic and it can handle, there is a hand holding between the old and the new.

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And there is so many ways I am again bringing that the glass is a very important feature because many of the areas that glass and then how you use the glass, and what type of glass like in this is again the Saint Paul's Cathedral here; That where the glass actually reflects the old structures, it is a reflective glass and this also is a very again intelligent way of creating the character.

This I have already discussed the glass is there, but the glass now becomes a sort of a background and which highlights the historical façade and these are sort of a clever ways of how you can. And nobody can dictate that just bye bylaws bye laws needed to be there.

Now, these has to be discussed this has to have a strong a heritage committee, and a review committee which will see and with the present simulation techniques all this can be tried before it is build or before it is a approved.

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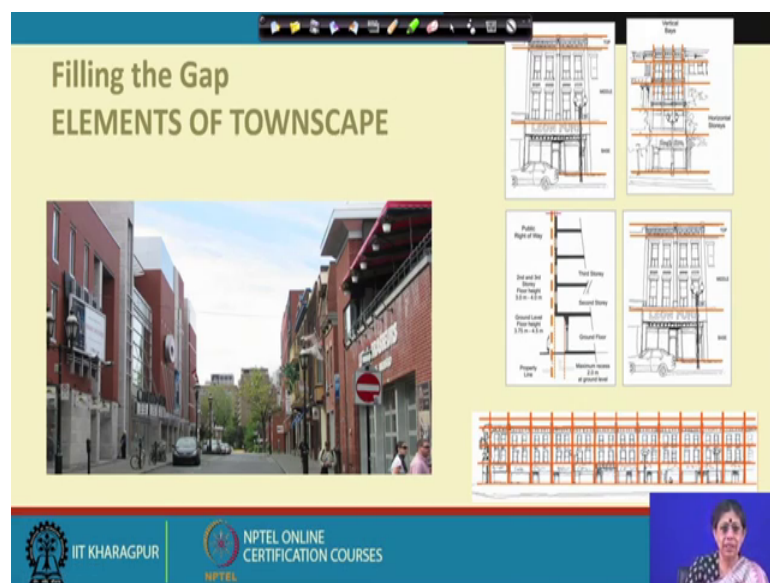
So, we are talking about the elements of townscapes and actually a dialogue between the old and the new. So, there are various example these I have already talked about and these dialogue between the old and the new this is from Finland, Jyvaskyla and this is where we can see that.

This is very interesting structure which the turret, with the turret which is there a very interesting structure and with a very own a big things and you can see the new buildings

have come up another new building has come up. You know these building is again is very ornamental in his own way, and it is having as I say I was should say a dialogue between the old. One ornamental building is talking with the other ornamental building and it is possible its one of the it is the downtown area and this is possible it because the use of the color how it has done it has making its own statement.

This is very interesting again it is from I think its Hamilton in Canada and where they are all the old structures these are the old structures. And here the new structures have come up, and how they are very intelligently combined the red brick façade with the concrete structures the broken, it is not just one huge façade they have broken the scale and used the detailing in such a way that it has its own way of complementing with the old structure.

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So, again I am saying this filling the gap the elements of townscape we have to need this type of analysis to see that how this can happen, and how we can analyze that and then I say the bye laws has to be there, the designation has to be there, but this analysis of townscape elements. So, that in today's time one can contribute.

So, that that hand holding is there and the elements of townscape as I see there should be a strong bye law say incentives should also be there and the change of use can also happen. But the this analysis depends on the individual architect, but approval of that also has to go through a proper review committee a strong a instrument should be in

place a process should be there in place to see that which is possible and which is not possible and with some special bye laws for that area.

So, we will continue with this elements of townscape that how the heritage impact assessment when a certain new structures. Coming up how the what should be the way to do the heritage impact assessment in such an heritage zone, and getting the guidelines from the old structure, again contributing in the contemporary time, in the contemporary language. So, we will continue with that with the next lecture.

Thank you.