Course on Landscape Architecture and Site Planning-Basic fundamental
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Lecture 22
Module 5
Behavioral principle (Continued)

Good morning, now if you have understood the static view and the dynamic view phenomena, now let us go forward with a little more illustration.

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This picture I have shown you once earlier I am showing again look at this here just follow the cursor if you start from this particular point and keep on moving along this particular direction it is a straight body heading line. If you stand at this particular point I am just trying to give different kind of situations where a user could be.

The best way to understand this is you emulate yourself you think that you are the user and then listen to me and then try to understand exactly the phenomena as I am explaining. At this point you have entered stand at this point, look at the entire area if your body heading line is along this or the body line is along this I would not say heading line body heading line will come when it is dynamic, but I will say body line, yes body line, best.

If your body line is this, then what will happen is if you draw a line at 30 degree on that side and as well as on this side this is the elements that will contain within your view cone and that is a view. Now standing at this particular point body line remains the same along this line and your view line which was originally aligned with the body line here is now is getting panned over this in this direction then what happens is this is your body this sorry this is your body line and this is your view line and then the cone shifts in this direction.

So any element that (wa) that are within this comes within your view cone and the other elements which you have seen earlier goes out of your view cone panned stand at this point body line is this the view line is this you move your head towards a right and your view angle now shifts this is the left line, this is the view line and this is the next line within which your 60 degree is this within this 60 degree what happen is all the elements that you saw earlier went out of your view cone and any elements that is also not within your landscape site came within your view cone, this is the interesting thing.

Landscape is designed within a very definite boundary like this in this we have planned. If you plan within this you have very painstakingly say the landscape is has very painstakingly designed the whole thing and if a person stands here and looks towards this direction the whole landscape is out of his sight. What happens is we know when this will happen that people are not attracted to this landscape because there is something better or something more interesting to view on the right hand side people will look towards this at this moment in this picture it is white.

But suppose there is something which is more attractive visually, then your design landscape then what will happen is people will come here, but they will just have a glance from here then reject it and then look towards right this is the dangerous thing that will happen to your design, okay. Coming back to the theory, if suppose the person now starts moving body heading line body heads towards that and the view line, same situation you consider that at this point, at this point, at this point, at this junction then the next here, next here at very point the body heading line is straight and the view line is also straight.

So what happens is all these elements which were distant were looking small now come a little with a bigger size in the view image, but mind does not work or does not get regulated by others mind is free the view sight is free. So what happens is now you consider that you are coming

from here, body heading line is this come to this particular point then turn left. So your body heading line now shifts from here to this direction, if the body heading line is now shifting towards this direction original view cone of 60 degree now has the shifted by 90 degree it was a left now the view cone is guided by these two lines and you are seeing these objects.

So originally what you saw within your view cone these objects may be standing at this particular point, now as soon as you turn 90 degree left, then all this entered into your view image view cone and the rest of the things got rejected. If you find as a user that it is more interesting to see something here and it attracts you and anything that were there you saw but did not attract you. Then what happens is you change your body heading line what you do is you shift and keep on moving towards this direction and more you go towards this serial visions sequentially coming as planned by the designer.

Suppose you come to this particular point where my cursor is now and then you turn right, what happens is you may argue saying I saw this before but actually you did not see the way you should see now you know it is not. At this point when you saw you saw something at the edge of your 60 degree view cone and they were in different angle so the object is static the place or space is static, the pattern is static but when you are viewing it, thing is you saw from a different angle, you did not see really from front angle as you would see from here now.

So what happens is your whole experience or exposure to that particular object changed very serious issue I will tell you in the landscape in a larger area when you are putting different things people are going to view it from different directions, with a different angles and with a different view projections. So the thing is how that particular object will be reacting in the mind of the viewer it is matter of your original visualization that what will happen to the people then when they are seeing it, okay.

Now come back to the picture again, say you came to this point then turned left and then came here and then instead of coming towards a right you select at the left. The moment you select at the left, then you came to this particular position and then you are walking still the body heading line moves, you are seeing different things along a curvilinear path whichever way you walk. Imagine that no, you did not take the left path, you came to the right path and then came here then you will find the paths are very straight, very actual, very orthogonal things changed the

mind works differently, the experience is different, the registration in your mind is different and the retrieval also will be different, this is interesting.

And never ever disregard this phenomena because when you are designing a landscape you know irony of our design is we always try to see how good it looks in plan, it looks very patterned very nice very patterned but I will tell you the person will user every user of your landscape will never see this in plan never unless you put it as a board in the front, at the entry you put a board in which you have given the plan that you are where or say it is written I am here and then you are showing that how the path moves in the whole landscape site just to give a (com) you know initial comprehension of the whole site and then you decide where you would like to go.

But mind it none of them will ever experience the landscape the way the plan looks like, they will always experience when they will walk. So my suggestion is you know I always use this as a (())(8:35) when you are planning do not get impressed by your base plan how good it looks, how colorful it is and how it is patterned, no always try to judge it with the experience that a person is going to have when he is going to see the whole plan in from his standing point. And then the whole thing becomes different what look like a sort of a green patch over here might be a wood lance which becomes a vertical plan when you are seeing from here.

This is this is very very serious issue in landscape it is true in urban design as well, but I am focusing on landscape. The point is make a good plan for all its functional allocations and circulations, but always visualize your own plan as if you are standing about 1.5 meter above the ground because your eye is only that point. And then if you feel what you have created which will be viewed by others in three dimension and if you feel that what you have created should be generating a good experience to him, be happy but never ever analyze in plan in terms of visibility. You analyze in plan in terms of functional allocations, space allocations, distribution of functions, circulation everything is fine experience is never through done, fine.

Look at this particular work, I have selected this picture from a store from my store storage of pictures because I am going to show you one very similar sketch after. Imagine this, you remember I was saying view heading line in this case view heading line is straight view heading line is straight but from this particular point if you see the view heading line is curvilinear. What

happens here the view heading line looking at plan is curved and view heading line in verticality in 3d is also curved.

So there is a trajectory if you focus on this particular picture, please in your memory when you will see that next picture then you will understand that how it works. Let me sight you with respect to this but before that I will take you to that sketch and then again come back to this picture, okay.

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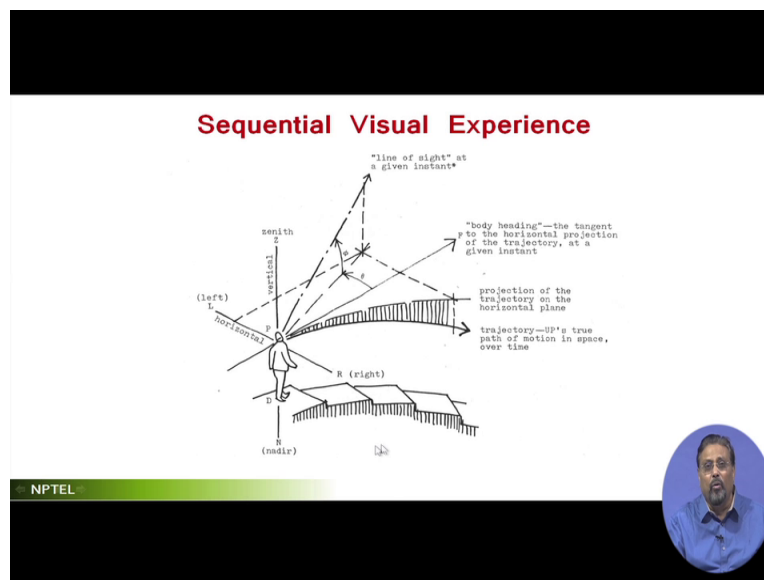
Look at this picture this sketch it is a collected one if you stand at this particular point and this is the path which is also stepped and turning towards a right, then this is your eye point this is your feet point and the top portion top direction is called zenith and the lower direction is called nadir this is theoretical.

When you are standing at this particular point the (perpendicu) a line perpendicular to your torso straight is the body heading line and the line that is connecting to the object which has in place maybe at a higher (dir) altitude at which position let us say it is from here at an angle horizontal angle and then at a vertical angle. That means this particular position has a z value different xy of this and the z value of this, okay. So the xyz value of this particular position is the real position of the object your xy is different but your z value of the eye is 0 the verticality vertical value is 0, 0 with reference to your eye not with reference to your feet and we will always consider this all this phenomena with reference to your eye level.

So your eye level is if this is 0 level, then this is z0 and I am just trying to emulate with my head trying to replicate what is there that this is my body heading line, this is my xyz position of the eye and then I am turning my head like this and then I am looking upward and that is the particular position in which I have a xyz something where the object is if you have understood this, then it will be easier for me to explain further. You have the left direction you have the right direction, now it all depends that in which direction people will move.

Here very definitely a path has been created which is moving towards a right, so the body heading line will always be guided by the right. And since it is stepped also it will not only turning right, it is also stepping in such case your body heading line is not a curve line alone, it is a trajectory it is a path. That means your body heading line is going to go like this, now if your view line is aligned with the body heading line, then the trajectory of a view line is also same.

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But unfortunately it never happens as I said in landscape no it will be seen in this form, now this is the one which I am going back to my earlier slide to show you this is the situation that your stepped it is stepping towards a right and going like this is this picture which I have shown you here come here, go step down, step down, step down, step down step or ramps you know like say especially a trajectory turns turn towards a right step and like this.

So if you are now experiencing every time to understand this if you draw a body heading line and a view line aligned and then body heading line shifts goes in this direction and a view line

aligned body heading line shifts so this particular point and then it goes in this direction and the view line aligned in this direction.

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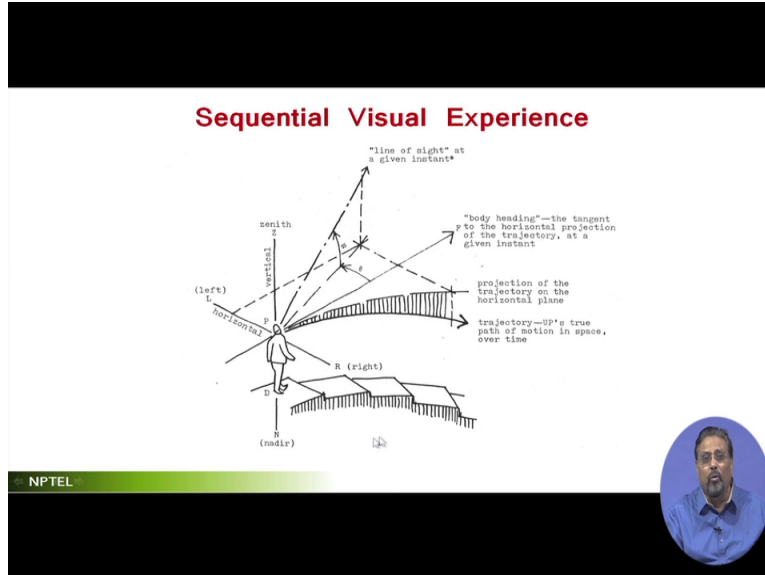
This is the reality, but beyond this one now happens is imagine this with respect to this picture let me tell you, your body heading line is moving and also lowering my trajectory your view line is moving and also lowering my trajectory.

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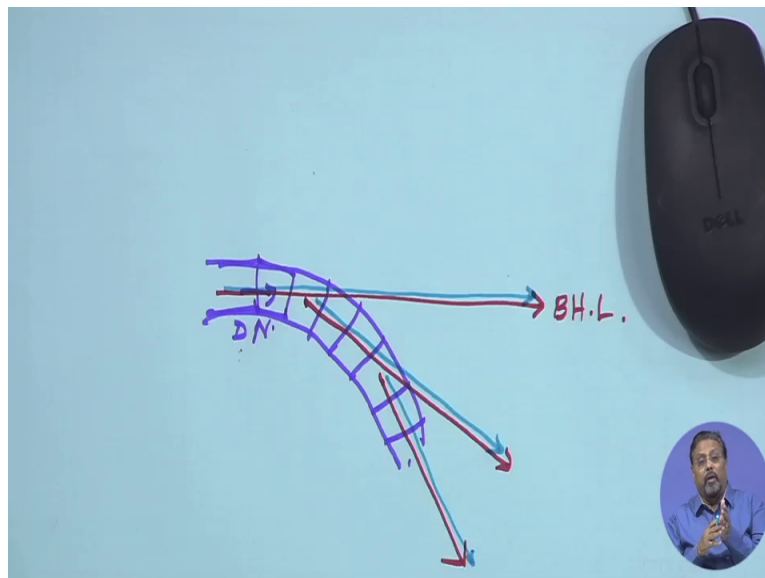
Now just look at my sketch I will give a I will just put a point forward the one that I have shown here in this in that particular picture I am trying to draw that in plan let see I will just draw it very fast so that it does not take much time to understand and this is stepped all these are stepped, that means it is stepping down. Initially, with my red color I will draw a yes with a red color I will draw the body heading line initial at this particular point the body heading line is this at this particular point the body heading line is this.

I think it is clear it is the BH line body heading line, okay with blue color I am trying to draw the view line, at this particular (plan) point if it is a line I am drawing parallel to it at every time it is parallel to it and here these are view line. So fine experiences what is the kinesthetic experience? Wherever my body is body is moving view line is also moving on that direction whatever is coming within my 60 degree view cone I am experiencing it and I am getting stimulated, okay.

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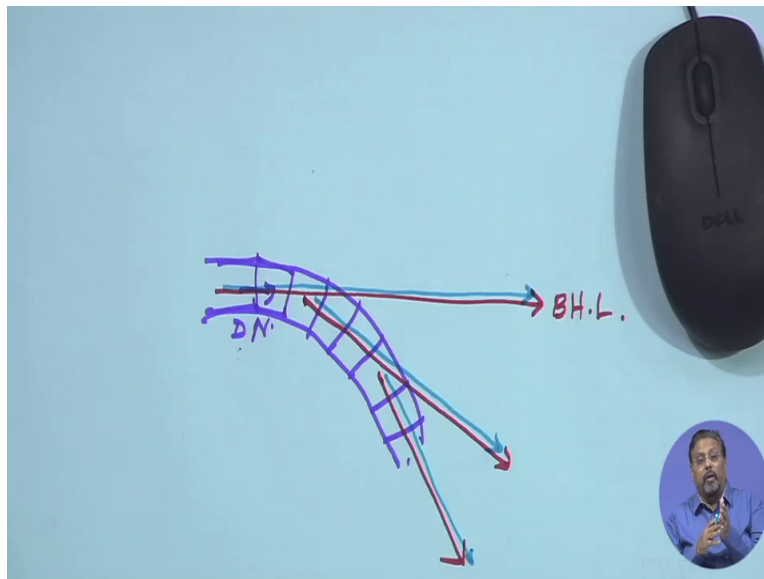
Imagine now by virtue of your planning you have created, okay another line I need to draw at this particular point all that particular point this is 60 degree this is 60 degree and this is 60 degree, do not go by the quality of my sketch because I am doing it very fast, okay this is 60 degree. If you have placed one interesting object accentuating element maybe a tree, maybe a flowering tree, maybe a sculpture or something which you have put in this position. Then what happens is the person now has the freedom to view this because is attractive you have created an attractive element let us look at it let us think of it as a wonderful sculpture, okay.

Then what happens is the view line even if it is this, it will tend to move in this direction even if the body heading line is this, the view line will tend to move at this. If I draw another line probably it will become very useful for description purposes, imagine a situation where before turning at this particular point your just a minute your view cone was in this direction say, why I have drawn this particular one just to differentiate, now let me explain at this particular standing at this particular point within 60 degree you saw very interesting object by plan you came forward and turn a bit because of the turn of this particular panel and your body heading line shifted towards this your 60 degree cone also moving aligned, the view line is moving your 60 degree line is moving.

But interestingly your attraction value of this has not reduced, if the attraction value has not reduced then it is going to compel you to detain your view line towards that hook towards that object, but your body heading line has shifted, I hope this you have understood what I mean to say, let me repeat. Go towards this direction this is my 60 degree angle within which an object is placed by the designer by design very attractive, my body heading line shifted so naturally my view cone also is supposed to shift and interestingly the objects quality still is hooking the user to attract and then what happens is body heading line moved in this direction, but the view line still remained within it, hook to this.

Body heading line turns further by virtue of this particular sketch that I have shown you still moving at one point when your body heading line and a 60 degree cone has come to that level that your object has gone out of your eyes 60 degree cone, there the problem starts. If the quality of the object is so great that it still can see hooked, then what happens is you turn the body but your head is towards this direction. Another thing happened, from here to here when you are shifted you have come closer to the object, so originally what you saw as an object from a distant and now you are come to this particular point you have you have seen more details of the objects and maybe it is more interesting it is drawing your more attention.

Now once you are seeing this, then what happens is you remain hooked and your body has moved, your body is moving your view cone was supposed to move but view cone did not move it got hooked to that your body heading line is this and the view line is view cone is this. I will tell you I will guarantee you if you are still remaining hooked after sometime when your body

has moved towards this direction your head still remains you start having a stress in your cervical and this is undesirable medically this would be undesirable.

That means you know what I am trying to say mean by this is you have given a by we say let me explain a wrong design, you have given a path in this direction but the object is at the back body heading line is this by your design and object has been placed at the back, then you know what will happen? People will either keep on moving do not allow him to stop, do not allow him to turn his body, body goes like this and the head still turns towards the back and trying to see the object, now you have a stress here this is a bad design.

So what happens is in your whole design when you are placing objects you are also deciding that how people are going to view it, how long, how close and in which direction with what angle, this is the total kinesthetic experience that the person is being instilled with by your design. So your design must take or rather respect the users this phenomena if you are giving if you are placing several objects which are of equal importance or good importance, then you also definitely give a link or circulation path to lead those points to see them experience them and like it because the objects that you have designed you have designed for creating a pleasure in the mind of the user, otherwise you would not have done it and if you have really done it and allow people to use it visually see them.

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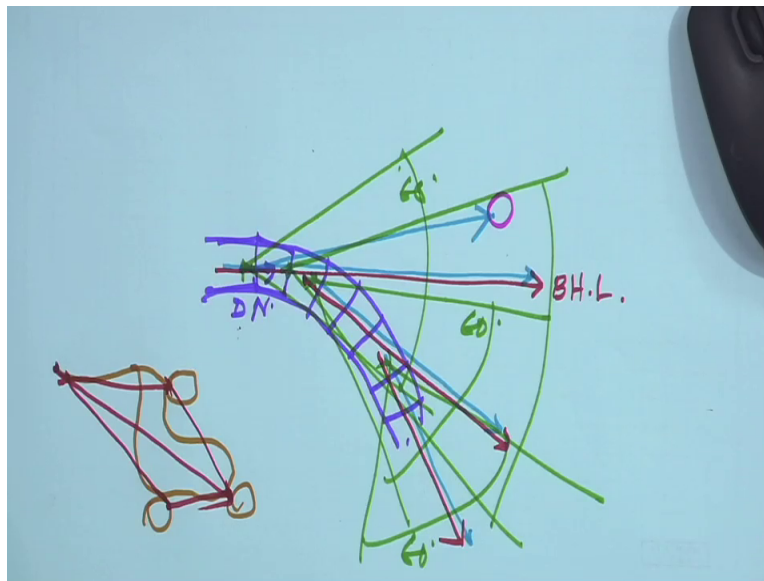
And that is why what happens is quite often you will see in some plans it is I am drawing it here itself that if the path is start point is here you have placed one object here, another object here, another object here, then generally you will find the pathway gets connected and gets rerouted connecting to all these places, if you do not then the user will now have a freedom either to go like this or to go like this and to go like this, then here and then here. So the red line which I have shown is the most expected path to be created by the user guided by the expectation, tendencies and behavior of peoples movement in which people always try to minimize their distance of travel to minimize their energy.
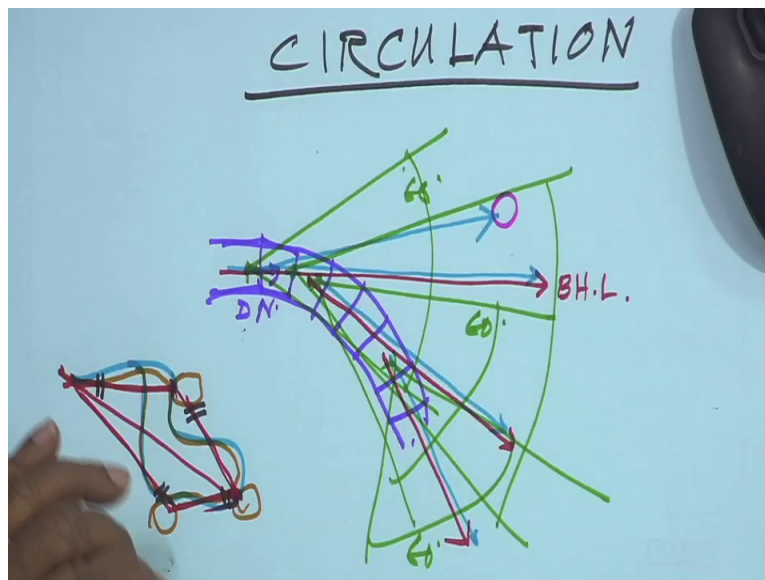
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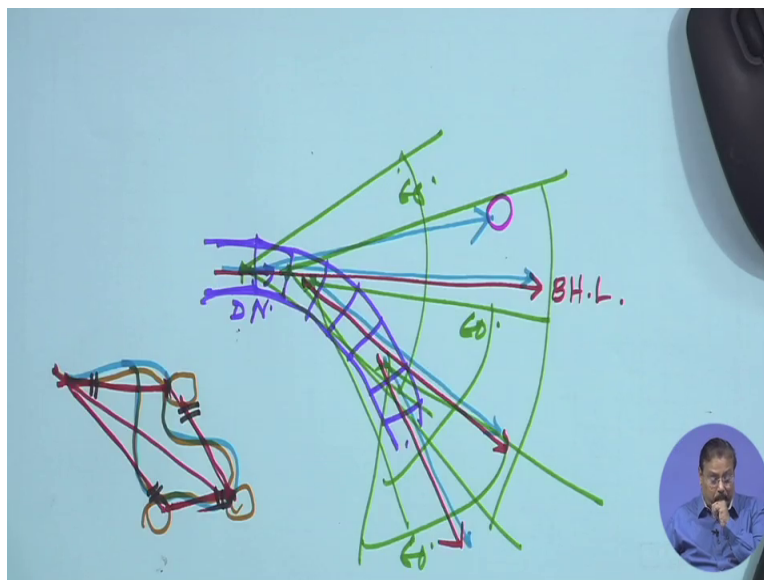
So if look at this picture again I am just drawing here look at this if you have designed this path and collected them like this, now we are guiding them people still will have a tendency I can ensure you people still will have a tendency to not follow your path go by this, not follow your this curve path, go by this, this and this since it is in the human (tendenc) behavior, then what you have to do is put something in terms of elements so that people are discouraged to follow the path which they expect to travel to.

For which what you do? Finally, if this is the blue path which you have wanted them to go for and the red path that you do not want put an impediment here, put an impediment here, put an impediment here and also an impediment here so that they are discouraged to follow the expected path, this is how the whole circulation plan is designed, it is minded it is not arbitrary, it

is very very designed defined walked out by the designer the way people should be seeing it. I have a suggestion, whenever you are designing a landscape I said this earlier also try to emulate the behavioral pattern of the people and try to respect as far as practicable, as far as acceptable, but not beyond.

So what you should do is when you are planning, you emulate yourself as a user, you put the functions, spaces, elements, and then you make a start point and you feel like we are the user how do you want your user to view it in which sequence, which order which I will discuss in my next level of principles that is your choice, but once you do that you start following that route and design accordingly and give the path accordingly.

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So the circulation is one very important thing I write it very boldly circulation is one very important element in your creating kinesthetic experience in the mind of the user.

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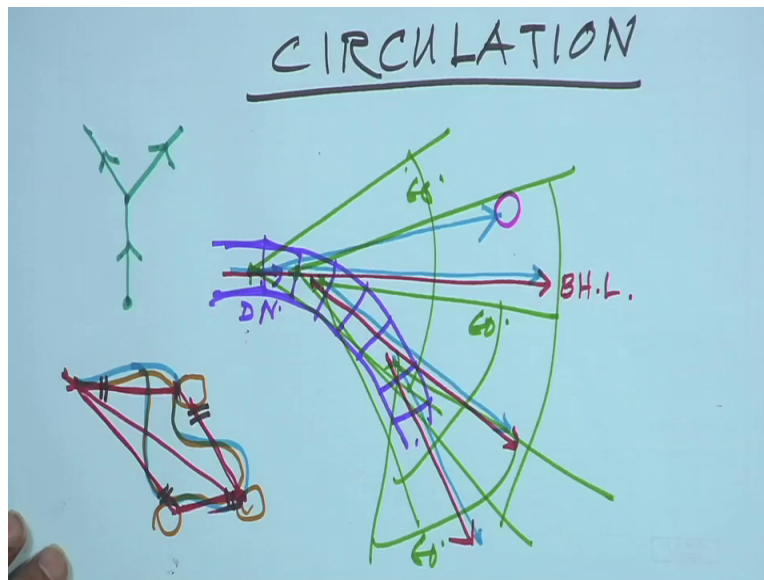
So when you do that essentially all your plans should be having a very clear cut define path, let me also caution you just to respect the behavior if you have created an option means you have created a situation where a path comes from here start point here, came to this particular point and then you have given two parts. Now you are splitting the decision of the mind of the user, he does not know which one to follow he has now equal options either to go to the right or to the left in the (())(26:13), okay

When you are splitting these routes if you want that one should follow the right path, not this so this makes you make it primary and this make this secondary, to make the primary and secondary you change the scale or the character of the routes or the circulation paths. That means you make this wider and make this narrower the moment you make this narrower and this wider you know y junction immediately the mind starts reacting to it and then infuse this wider route probably is meant for as a primary road and the second one is secondary one.

If you plan it in this form what happens is you get a very clear idea about how people are going to move in the whole situation, this is what is the kinesthetic experience I will draw reference to this quite often when I will go to the next part of my discussion, but idea is decide the circulation path well, very very carefully so that your entire set of (exp) experiments that you have done or creations that you have done people do not miss it and I can also tell you caution you a very nice

arrangement of all the functions which are not properly connected with a circulation path may lose its visibility and hence the project's failure.

So this is the point which I had to put forward, what next? Next we will discuss about series of design principles if we come across all these points try to understand what people are expecting since we are designing for the people you are not designing the landscape for yourself, you are designing for people and user. Then in such cases, these behavioral principles are going to be your backbone of the entire exercises. So next, we will discuss about various design principles, thank you very much.