Course on Landscape Architecture and Site Planning-Basic fundamental By Professor Uttam Banerjee Department of Architecture and Regional Planning Indian Institute of Technology, Kharagpur Lecture 24 Module 5 Behavioral principle (Continued)

Good morning, so we have discussed about the design principles categorized in a abstract.

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EXPRESSION				
	Spatial	-	Open / Closed / Claustrophobic	
	Contrast	-	Opposite in relation to other elements	
	Scale	-	Grand / Miniature	
	Monotony Overwhelming Mystic Variety Surprise			
NOTE	Ecstatic Extravagant		More than required	
NPTEL				

Now I will discuss about expressions, what is expression? Basically, see abstract principles are whether you agree or do not agree people generally follow these rules or this kind of principles, expression is more connected with users or even by the designers I will just come to these points first then I will discuss one by one. Abstracts are expressions are listed Spatial, Contrast, Scale, Monotony, Overwhelming, Mystic, Variety, Surprise, Ecstatic, Extravagant there are many many actually, I have just try to bring which are more connected with my landscape projects.

Spatial what happens is if you try you know you will see when I will talk about the form or category of the objects or spaces, at that time I will talk about dimensions and other things, but what happens is the moment you look at the landscape the spatial expression comes in the mind of the user and that which is coming to the mind of the user is basically created by you the

designer, okay. Now it is open or closed or claustrophobic if it is too wider landscape it is open and if you find that it is in a limited area is closed.

And if you find it is too small in area within which I provided you a landscape project you might feel claustrophobic, this is purely physiological. Though physiological very much guided by the dimensions you know the mental behavior is always guided by all this parameters where space is defined by again the planes and the dimensions length, breath and the height and the vertical base and base vertical and over plains. If my landscape project is may too small, then you might feel claustrophobic you know why you will fill claustrophobic? Because you expected the landscape project should be large open which you did not get, okay.

Contrast, contrast is basically the opposite to each other, then scale see when I am taking about this contrast say I have said in abstract I think I have said in abstract as well. The point is expression is you think it is contrasting in abstract it is something is contrasting, contrasting with respect to what? But when it comes to expression that you take one as a point of reference with respect to that other one is opposite, okay. The scale here the scale again will come in my form and categories, the scale here is essentially overall scale of the project the expression is it is a grand one, grand on means is a large one the large one is also maybe also open one, large one may also be closed one.

So if you see that there could be a kind of conflicting situations where you are saying spatial and the same time you are saying the scale and if you are saying miniature, miniature may be claustrophobic and the miniature may be grand again, sorry miniature may be open for as a example Japanese one. So the point is that when you are thinking about the scales you are saying with respect to the overall expression of the space, when you are talking about the spatial you are talking about the overall openness of the space or the landscape space, when you are talking about the contrast you are thinking in terms of the spatial one, how you express it.

Then comes monotony, see mine it all these are not ordered in some importance level, I have just placed it one after another. Monotony, what happens is in the whole landscape if suppose you find too many things are almost similar, then you almost get rejected and you think that why should I really see the entire landscape sites and move around the entire space when I know

things are repeated or maybe the way the objects are placed in the site the way the spaces have been organized, you might feel after sometime a feeling of monotony in the mind.

So this is all this that is why is in the categorization of cluster under the expression, how you feel? How the user will feel? Then comes overwhelming, you did not expect something you came to a landscape project site and then suddenly you saw it is a wonderful thing something great it overwhelms you and that overwhelming is you know you did not expect so much. Now if I fall back on the same sensation, perception and intellectual if you remember, there I had given a clue and the clue was you are informed that you are going to see a landscape project, let us take as an example imagine this you where inform that you are going to see a landscape project but you were not informed more than that.

You have been then brought to the landscape project site and now you as an user you entered and you saw the landscape project is wonderful you got overwhelming, there is a "ohh" effect you know, you say wow I did not expect this, this is what is overwhelming. If you try to measure, very difficult I will tell you it will not be measurable how much overwhelming, what did you expect earlier, what did you think that the landscape project would be and where what did you see which by which you are overwhelmed really not that very discreetly measurable let this be left to the you know scope of (psycholo) psycho analyst, not for landscapist, we can only think about how good it is working.

Mistake, mistake is basically the environment that is created various elements which are used in the landscape in such a manner that you have a feeling of mistake affects, okay. It may be sometime you have not created deliberately, but it is only a coincidence that at a particular time when the user has come and experience he is experiencing that particular landscape the daylight fact is such, the climate is such and his mental state is such that it looks mistake to him.

So mistake is also an matter of expression and I can also assure you the same user coming on some other time of the day or maybe some other day will not find this that mistakes. So mistake is very momentary it just suddenly works because of many other items. Variety, when you find is just I would say a little bit of opposite of monotony in monotony everything is same same everything is same. The variety is there different kind of objects with their different characteristics they are all placed over there and when you are looking at it you find that okay I

have seen this I am getting another opportunity to see something different, another opportunity to see something different, so this brings variety.

So here essentially what you have to do is when it is monotonous it is very easy to plan I will tell you very easy, you just do a rubber stamping of cloning it becomes a monotonous land, but when it comes to variety then it becomes a slightly you know you have to look for lot of other elements. Surprise, see there is a picture that I have kept over here I do not know whether you are surprised to this picture, is it a really a very common site in a landscape? No, it is not, a wonderful work of a sculpture that he has designed this and ultimately placed in the mix of a landscape.

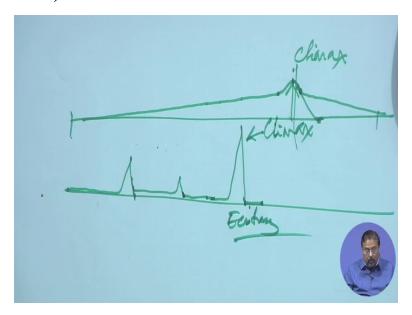
And when you are seeing it suddenly you get surprised my God this is something different something different, shall I put it on the contrast? Maybe, I am not sure but the thing is sculpture is no longer a contrasting element in my landscape. So here what happens is you see this and then you find, "ohh" surprised, it all depends whether you find it overwhelming or you do not like it I do not want to comment on that. But the surprise is suddenly you see something which you did not expect, that is surprising and something you did not expect and if it gives you very positive result then it goes to overwhelming, okay.

Ecstatic, ecstatic is like say a limit up to which it's the climax is the level up to which you have attained your say expression ecstatic is you really feel so good, so good after seeing or experiencing certain areas. It may soon happen see in climax what happens you know in the landscape project design generally we take the user from one point to the next to the next to the next to the end point and at that particular end point his attraction value, his experience, his liking and everything is you know cumulatively increasing and that particular point is the ultimate. Ecstatic is something slightly different, suddenly certain elements somewhere maybe in the mix of it in the whole process is gives you an ecstatic you like it suddenly.

Generally what happens in this like say if suppose sequentially you are going to experiences and then you come to a climatic after that whatever you see next does not give you that level of you know likes or liking that is a climax point that climax is a peak ecstatic suddenly search suddenly search, "ohh my God it is wonderful, it is a wonderful thing" then again you go through other

areas like it, but the thing is suddenly you find another one that may create another ecstasy, but they may not be of equal height since just like spices you know.

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But in climax if I try to draw this try to give an idea in some you know single line diagram you are if this is my base line of experience that I am creating and you are now gradually taking to the better higher level of higher level of liking pleasure and then at one point it is reached the top point that is climax this is what is climax. After that whatever you see it may be either degrading like this or it may be suddenly falling onto it, but this is the peak that has been created.

So here the situation is you there is a start point and there is a end point so it came to this particular point and this we consider almost as a end, but in the ecstatic it is like this that you are there is base line and you are seeing and then suddenly you find that something is good and basically what I am trying to give is a graph of your level of ecstatic and then you come here and then suddenly some other you liked it and it is just like you know what you have our cardiographs similar. And then at this point you got a very high ecstatic level and this may match with your climax I do not know this may match with your climax but this is basically you know we are trying to say in terms of ecstasy.

But I am sure about one if this is the ecstasy which you are going to get here this can never be a climax, never because climax is the end ecstasy can be suddenly surge sudden sudden surges that can happen in your mind so this is what it is. Extravagant, this extravagant is you know what

happens is you remember that economic unity I was talking about, very similar to that what happens is everybody is expecting something in the landscape each landscape is different, agreed each landscape is different, each project is different.

But what people conveyed in a landscape that quantum is probably very very similar quantity, is something like that you go to one landscape one you like it very much, you go to landscape two a different one you also like it very much see if I take like it very much like it very much these two effect had to quantify probably I will find that you like this also, you like this also, okay. But this is so the quantum is barely same, but what happens here is in this kind of extravagant is you like one landscape you like the other landscape too, but you thought that this second landscape which I liked probably they have done something which is not required, too much has been done.

So what happens is if suppose this too muchness is very much apparent in your Italian and French garden styles too muchness unnecessary just put in in the landscape and people people like it because as long as there is a something which is you know away from the normal routine elements people like, all the sculptures that they started adding in the Italian and French landscapes you know and ultimately carried on with the English landscape that carried on to our you know Bengal landscapes as well or even Indian landscapes as well, the sculpture become a part of it.

So all these where basically extravagant because I gain I repeat nature never contributed any sculptures to us in that form in the figurative forms which is depicting the history or the religion or say some other never nature given us this sculpture I tell you it did but in the form of erosion and corrosion of different natural elements, the stone, the (())(13:37) they are some kind of real good sculptures people are trying to emulate it, the rock outcrops people are trying to emulate it.

In many of the landscapes I have seen that where they are trying to create a artificial rock outcrop. That means it is it looks so natural sculpture, okay sometimes you must have also found that a fossil a stoned fossil also a sculpture the thing is nature has created as long as it is nature created even mind you do not think it is extravagant, but once you find that for this particular landscape it was this much was good enough not more than that was required and anything that you put deliberately, forcefully and dominantly that becomes extravagant.

So everything now then it is related to your mind how you react with and how you express this. Then comes a character, this is when you look at the landscape you always try to see is it natural or artificial, by definition what we said? The landscape should be predominantly natural, not artificial but the moment you find that certain things had been done and whether it is extravagant or not I am not arguing on that, but the thing is certain things which have been put within this particular landscape and you are seeing that it is not looking natural it is looking artificial.

So the character also you know it horns your mind that is it natural, or is it artificial? It is because of which the moment you look at the Mogul garden you find it to be it is natural of course every element is natural, but you find it to be artificial because nature will never create such kind of strong actual geometry in the planes. When you go to Italian garden though they have tried to exploit or explore the nature, but still people feel it is forcefully done forcefully it is artificial you create the whole set of nature, but do not follow rules of the growth of the nature or the development of the nature or evolution of the nature, then it will start looking artificial.

So this is where lies all these you know parameters which (())(15:50). So if I summarize this so basically what happened is when you are thinking about the principles you thought about the abstract principles which is very difficult to quantify and very difficult to contest yet people agree with it as they are and there are other principles which are similar principles with expressions where means how people react to it, how people feel about it, how people construe it that comes under expression.

Next is the comes to arrangement of it, arrangement form or the characteristics of the objects because they are elements how you place it, but these two they abstract and expressions are reflecting the reactions of the user. So what next?

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The next you will find the arrangements, okay let me start discussing about this arrangements. Arrangement of what? Object or space? One space next to another space, another space, another space you keep on arranging it within that space objects if you look at a space as an object that is also fine, no problem the space is an object, yes (())(17:25) zone A, zone B, zone C, zone D my one object.

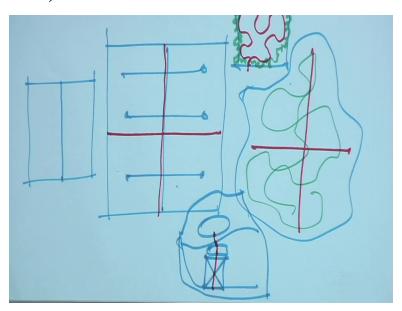
But the thing is where I am referring to the objects as like you know the individual entity not really special not special if you see non special entities, then it becomes a kind of you know such kind of spaces, okay let us see what all are there, let me just bring in on sorry I will come back, okay. First of all in terms of arrangement let us see in the landscape how I am going to place it, it can be a single element one element one space or it can be a group of groups of spaces multiple such spaces arranged. So it can be single, it can be other elements other principles within associate with arrangement is access how it is aligned but happens is the whole space if I show you with respect to this particular picture in access we have options like Non-axial, Uniaxial, Biaxial, Multi-axial, let me clarify.

If there is no definite access, access you know basically are guided by one particular line straight line not curvilinear, curvilinear is also a line but straight line. If suppose we find that in a whole landscape there is one very definite straight line, then that becomes access. Now there may be a landscape in which in which you do not find such kind of straight lines, so it becomes non-axial

that means you do not have really an axis that means axis is basically you know it is a point of reference from start point to the end point means you are supposed to go from here to there or you are supposed to look from here to there or you are supposed to refer from here to there.

So non-axial means a picture like this where you really cannot find out that in which direction the lines are going and is going in different directions that is non-axial. So if I say that in my arrangement I do not want axial so rather I say that I would like to make non axial then automatically this result into similar kind of this landscapes Chinese, Japanese they are all non-axial.

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If you take reference to okay uniaxial very rarely I have found that the landscapes are uniaxial what happens is since the landscape is I will just try to give reference since a landscape site is usually big, usually big I will draw another very irregular landscape site I have drawn two.

Since it is too big and we want this a start point and this maybe the end point and people should experience entire thing then automatically by virtue of the (exper) you know expectations of the people we go by shorts shortcuts. Once we go there we try to have different other functions then maybe I would like to connect these two spaces, these two spaces, and also these two spaces or contrary to it, it may that I have drawn one line here and then at the center I am trying to connect this, this is this red one is very similar to our charbagh cons at the Mogul garden.

And the other one is very similar to our Italian and French garden, but there is one thing very common in this they have access multiple access it is not uniaxial very rarely you will find that something is uniaxial I am just trying to give a schematic reference to it very rarely you will find it is uniaxial because if it is uniaxial and the axis almost guides your path or circulation movements in such case what happens is that you deploy others to axis this and the moment you start putting axis, then it becomes transverse axis.

This axis means connections and this axis means lines, okay so this is what is uniaxial and this is multi-axial and if the red line one that you take as a bi-axial and in this case if you find that people are allowed to move in this direction it is not axial, but here I am just deliberately doing this if suppose I want I have a property something like this and I want to create a line here and a line and then make my landscape, then even if the perimeter or the total profile is irregular I can still make it actual, this has to be understood.

See, whenever I am talking about this principles one thing I would always like to restrict myself from is saying this is right or wrong, good or bad my objective is not say good or bad not to give my judgment, is just to expose to you what is what, okay. What happens is most often whenever you find that there is a irregular geometry within which if you give an axial axis in the arrangement then it jerks, then the expression gives a jerk in the mind such a nice irregular parameter we had and suddenly I am being made to walk to a very discrete straight line path at orthogonal one, that jerks almost everybody has you know they have a feeling like this at the same time if suppose I will just draw another one my sketches are I am trying to do in the same sheet here so that you can correlate all together and everything remains in front of you. If suppose your property is of absolutely rectilinear and then you enter from here and then you went for this kind of non-axial geometry, will the people accept or reject it? Most often people do not reject people do not reject it the reason is very simple.

People may reject this but may not reject this, why they should not reject here? Because you have given them a option to experience the whole site and since they are in different kinetic motions kinetic directions the kinesthetic effect ultimately negates the effects of the rigidity of the edges and that is why the people may not think that "ohh" it is a rectilinear space it should have been very much axial because people do not mind and at the same time if suppose within

this you create such kind of elements in such a way that people do not have I am just trying to draw a very sketchy figure given the time I would have drawn properly a very nice figure.

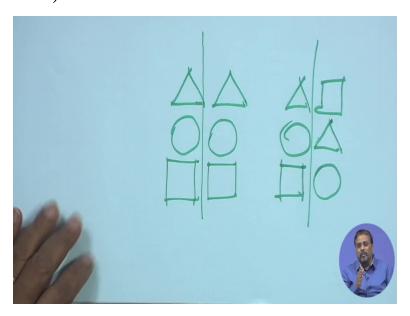
Given this situation what happens is people tend to loss the visual idea of the actual rigid profile geometry. So what happens is you know if you have a rectilinear site or say you know such kind of sites you can always negate the effect of the rectilinearity just by virtue of your circulation patterns and designs. Even in this kind of cases you know what can be done means I have seen I do not have the example over here but if you look towards a earlier historical example I have given and please focus at the example I have given for the jubilee park in which the jubilee park I am just trying redraw the whole stuff there is you know there is road going like this, there is a road going here and then suddenly there is a mogul garden replica and there is a rose garden here.

Actual jubilee park you can see it is of this profile which is not regular profile within which suddenly a Mogul garden very actual they have placed it and that particular this axis goes to this one then again turns to this and then goes to the water body large water body and there are two roads, nothing else is actual in this except this one except this small part of it. So there are different experimentation you can also try, but my objective is to make understand that exactly what we are referring to as axis, okay.

Symmetry and asymmetry this another set of principles, see asymmetry is the opposite of symmetry. Symmetry is what if you have one particular axial line one more point let me clarify, is the axis where it defiantly a path not necessary, not necessary. Axis is what your mind constitute as an axis you may not get any path but the thing is you can always have you know the objects over here on the either sides. Now whenever there is a definition of object you know axis and then you find everything is on either side equally placed at equidistant or may be characteristically equal, there appears to be a symmetry I am saying in terms of objects, in terms of space.

A profile very defined by an axis or multiple axis and then everything is same on either side, then it is symmetrical and then if you have the axis but the space is over here in terms of its treatment, in terms of its finishes, in terms of its elements containing elements they are not symmetric they are not same, then in that case it will become asymmetric I will just try to give an example with respect to by this sketch.

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This is a line this line is axis, it may be physical axis for circulation it may be a visual axis that means you are looking towards this.

And then every element on either side is I am just drawing very sketchily to give an idea, if this is true that along this particular line everything is just opposite to each other may be of different forms then this is symmetrical. And the asymmetry is just the reverse of it, it is a square here and then it is a circle over here and then it may be a triangle over here again there is a circle over here, there is a square over here and there is a triangle over here same elements same pair of elements.

But, they are placed in such a manner that it is on either side they are different at this side they are same opposite to each other, this is what is a symmetry and this is what is a asymmetry. Again, the question is good or bad? No, no question asked because a point is with the symmetry you may create excellent things you may also destroy a good quality. With asymmetry you may create excellent things it may be a reversed, okay.

So the point is not to you know argue on this is good or this is good, the point is what is a asymmetry and asymmetry. Essentially let me summarize till this particular point, whenever you

are thinking of the design principles, you are thinking in three terms, one is abstract or expression another is arrangement whether it is object or space and there is a form or character of object or space. If you understand the entire set of principles and then try to correlate or relate with any element that you are seeing in around you, it will make the best sense.

I am only trying to give you an exposure to this, trying to make you understand and maybe many of you who are studying this subject already know about it and those who are architects have definitely studied about it, I am trying to see this with respect to my landscape and here basically how it can be made use of it and here while discussing this you will find that I have restricted myself from giving pictures much because if I start giving pictures you will be distracted but later on when I will run a series of pictures, at that time I will try to focus that what whatever points that I have discussed I will try to you know draw your attention to this as examples, okay thank you very much.