

Indian Institute of Technology Kanpur

National Programme on Technology Enhanced Learning (NPTEL)

Course Title

Visual Perception and Art: A survey across the cultures

Lecture – 05

Visual Perception and Creativity 2

By

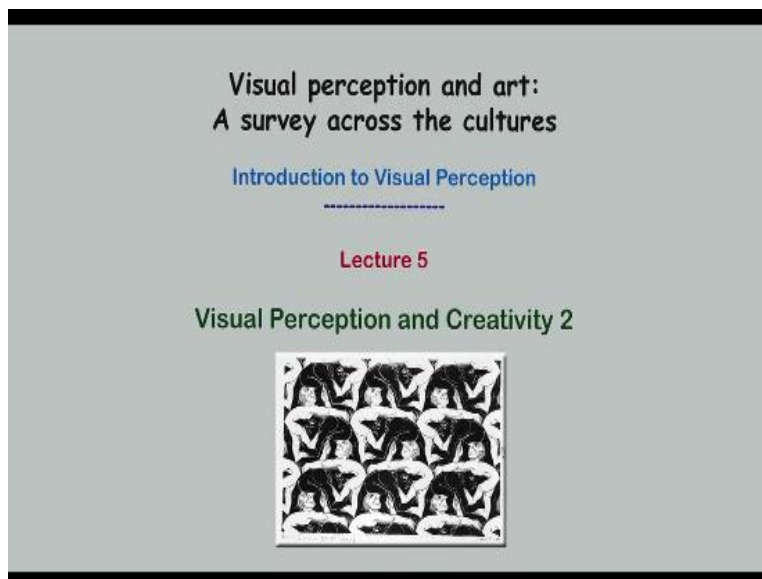
Prof. Soumik Nandy Majumdar

Dept. history of Art, Kala Bhavana, Santiniketan

Visva – Bharati

Hello viewers welcome to MOOCs online course on visual perception and art a survey across the cultures.

(Refer Slide Time: 00:21)



This is lecture number 5 and the topic of this lecture is visual perception and creativity part two I told you in the previous lecture that today we will be looking at what a very well-known artist

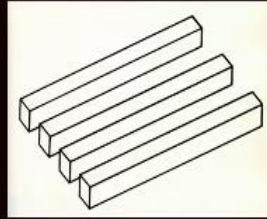
from Netherlands called MC Escher had explored addressing this in regular concern about visual perception and more specifically he was interested in the optical illusions that a visual perception is generally involved with.

Because when Escher was doing all his very interesting and fascinating drawings the idea that visual perception is not merely a passive biological phenomenon the idea that visual perception is rather a very complex phenomenon involving almost unexplainable visual illusions optical tricks and various kinds of ambiguities and the valances this idea was already established or at least this idea was already being studied so in that sense action was very much a part of his time but at the same time because of his singular concerned with the illusions of visual perception.

The history of art took a long time in recognizing Escher as an artist 1/4 mostly he was considered or he was assessed as an artist with fascinating but unlimited kind of concern never the less when you look at his works you know the world that he is drawing using to all that we cannot really ignore not just because he makes the world very fascinating in his drawings but also because at the end of the day he is able to connect his pictorial world with the real world outside in certain philosophical base we will come back to that later on.

(Refer Slide Time: 3:22)

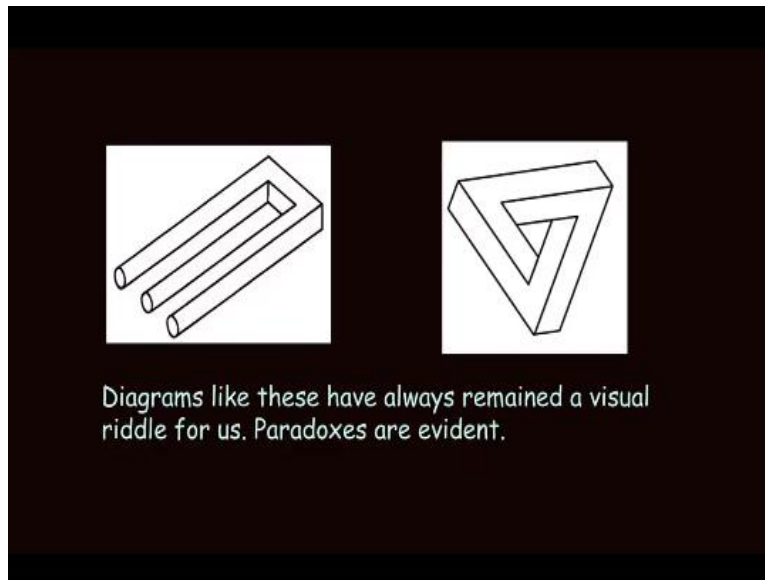
Optical illusions, or pictures playing a trick on our eyes have been variously experimented by many.



Now before we begin to look at the specific examples of Asia's works let us once again quickly look at some of the kind of examples which can be associated with the concerns that reflect in Asia's work. And I am talking about optical illusions in particular I am talking about those pictures which actually play a trick on our eyes and which has been variously experimented by many.

for example when you look at this drawing if you look at the right side of this drawing you will have this visual knowledge that you are looking at three rectangular pieces but the moment you look at the left-hand side of this drawing you see not three but five so which one is two three or five it entirely depends on the angle from which you are looking at this object. So visual or optical illusion has definitely got something to do with the way a particular diagram or drawing is constructed but it has also got something to do with our chosen angle or chosen perspective or what we choose to see and what which was still ignored.

(Refer Slide Time: 4:47)



Right now look at this one again looking at these drawings or diagrams from different angles will result in different kind of experiences. They will give you absolutely different visual data look at the left-hand side diagram when you look at the diagram from the left corner you see three circular rods. It is the end tips of three circular rods. Look at the same object from the upper-right corner you see one single rectangular end.

No circular tips at all in the same drawing now again how it is possible of course there is a trick in the drawing. But again there is a kind off reek or ambiguity that is going on in our brain when we are looking at. And this is precisely what visual perception to a great extent is all about so diagrams like this have always remained a visual riddle for us. And the paradoxes in these dried diagrams are also evident so.

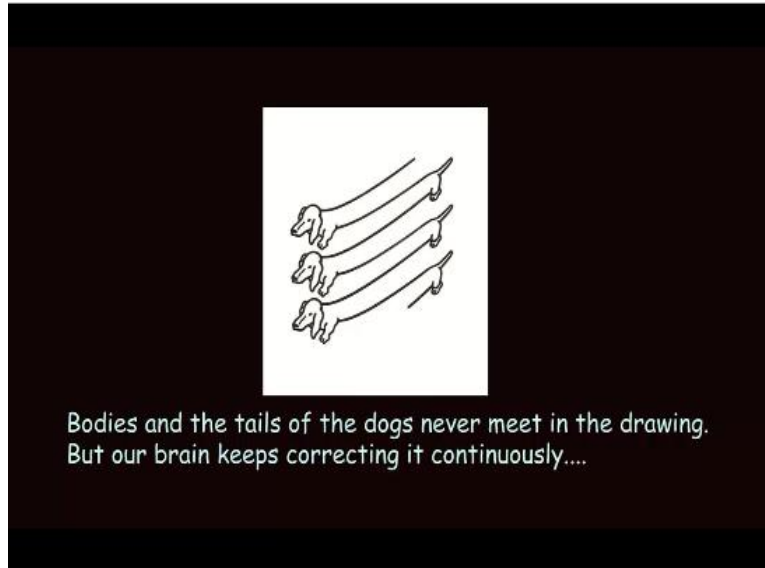
(Refer Slide Time: 6:00)



For example, impossible stair cases it is an idea that will be explored by Asia MC Escher in his drawings quite a few times so this is just a kind of 3dmodel of his idea where you can see this kind of staircase is actually impossible. You can't have that you are going down but actually you're climbing up you are climbing up but actually you're going down. It has to be either this or that but this impossibility has been drawn in a very convincing in this diagram.

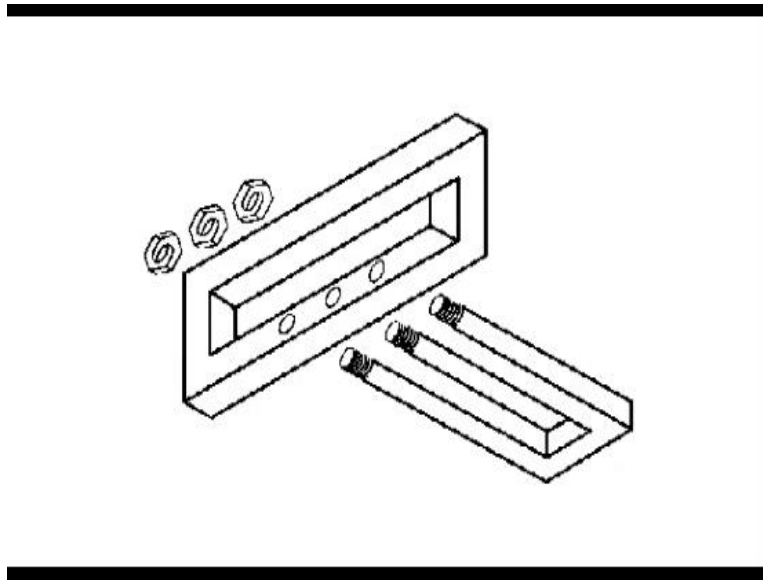
So there is this possibility of using visual perception in the way that we tend to see things which are not shown we tend to interpret a certain diagram in a way that is actually absurd and impossible in daily life or in real life.

(Refer Slide Time: 6:59)



For example this one there are three dogs and of course three tails no problem in that but when you look at the three tails of these three dogs they are located in a way that does not match with the location or position of their heads. So how do you go about it so the bodies and the tails of the dogs never meet in the drawing but our brain keeps correcting the real mistake continuously and make us see something very convincing. So there is a trick that is happening in the drawing itself. And I ask you to figure out the trick how exactly it is being drawn and why it is creating that kind of effect on our eyes.

(Refer Slide Time: 7:53)

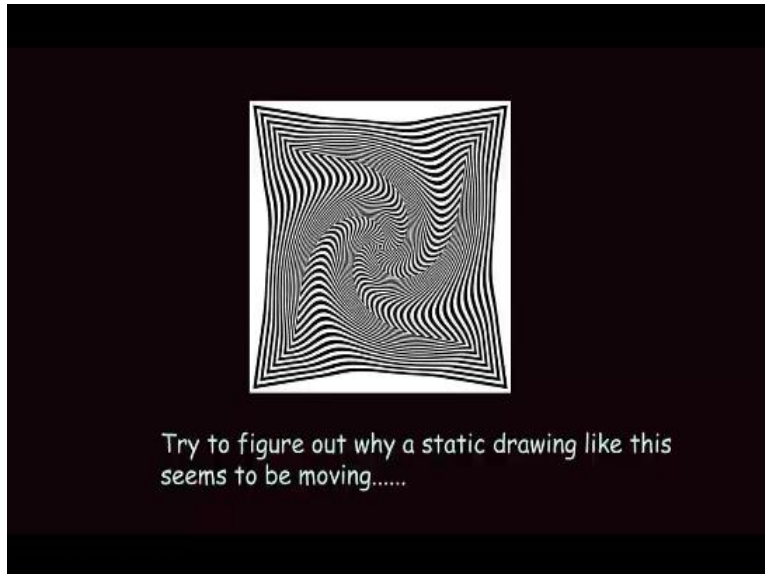


Or for that matter this one what is the perspective what is the position of these objects look at this object very carefully and try to figure out interestingly you will never be able to settle on one particular conclusion you will never be able to say that. Okay this is the drawing of this object from this particular perspective because immediately not that. I will be showing you will be able to see the same object from another perspective very next moment.

In other words the visual complexities these drawings are trying to demonstrate suggest that apart from illusions and visual tricks and visual riddles. Visual perception is also involved with a lot of ambiguities that is multiple possibilities in the same time. So when we say that one important aspect of visual perception is interpretation, now let us make it very clear that it does not really suggest.

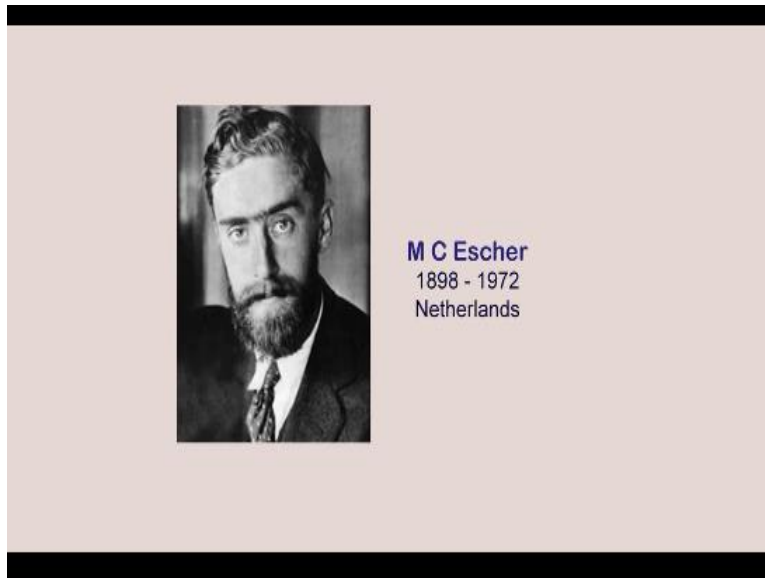
That intervention has to be one single interpretation this is particularly true in case of finance. When you look at paintings art works sculptures of any kind you know the despite the fact that the main subject matter still may remain same you can have different interpretations. So this multiple possibilities are actually a result or an extension of the ambiguity visual ambiguity that a visual perception is always in fosterage.

(Refer Slide Time: 9:39)



So try to figure out why a static drawing like this seems to be always moving though there is no movement physically as such. It is a result of a certain kind of visual perception.

(Refer Slide Time: 10:02)



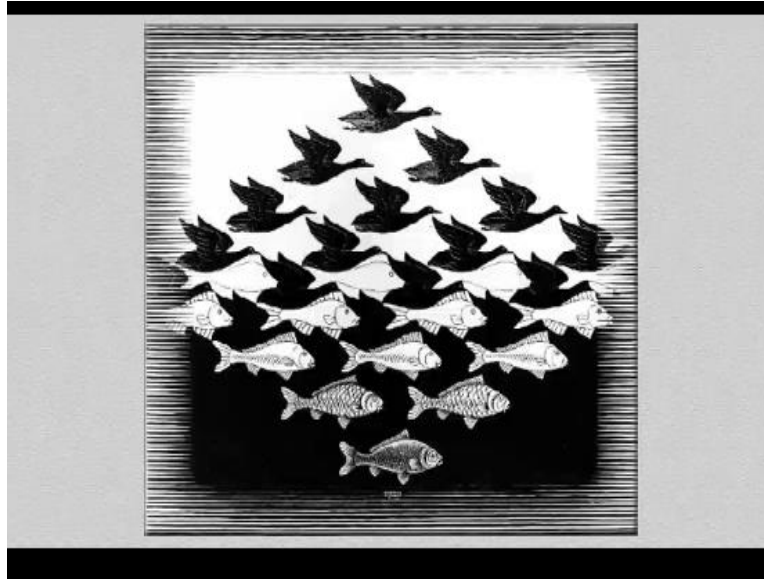
So MC Escher here he is a very intelligent and a superb kind of a person with an ability with the super vanilla to expand these ideas of visual perception and actually demonstrate them in his drawings. He lived from 1898 to 1972 in Netherlands there is a Dutch painter and when you look at this kind of works drawn by him.

(Refer Slide Time: 10:46)



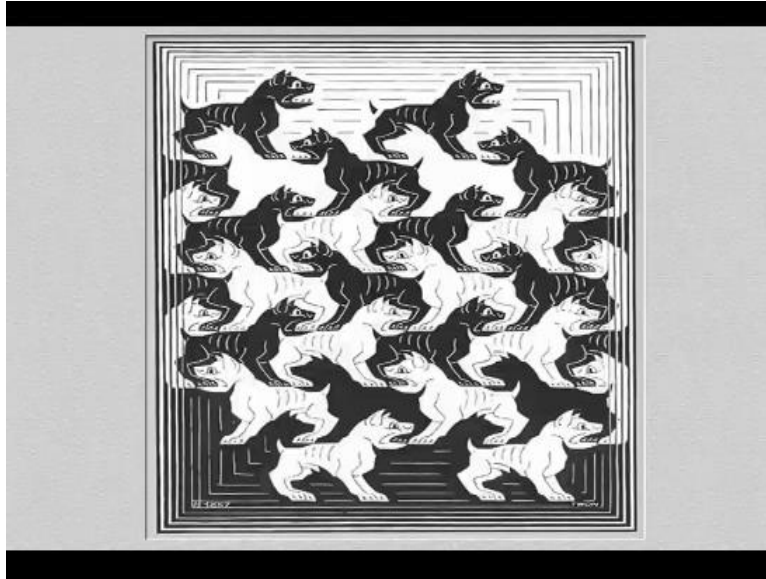
It immediately gives you an idea that not that you are looking at something that is an illusionary kind of drawing it doesn't really create an optical illusion. But it creates a conceptual illusion that the hand that is being drawn on the paper becomes a kind of life and draws the hand itself. So something about the circularity of life something about the circular motion of life is being suggested but optically and in terms of a drawing language no doubt that it is a very difficult project it is a very difficult attempt which in which is succeeded in a very very meaningful way.

(Refer Slide Time: 11:28)



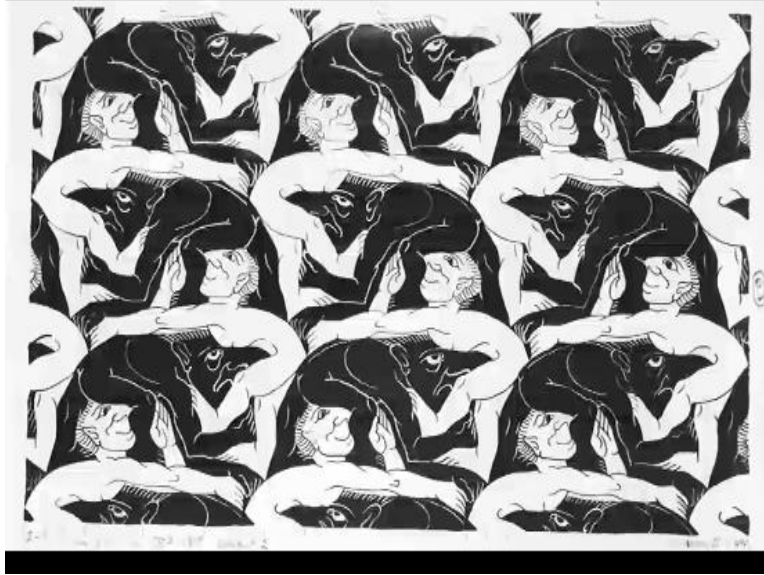
MC Escher's in drawings like this also succeeds in changing the identifier or the identity of the object simply by changing the shapes of the objects as a result what you identify as a flying bird at the top of the picture becomes actually a swimming fish at the bottom of the picture. And he transforms the identity of the object simply by playing with the shapes by playing with the black and white shapes by playing with the contours in other words by playing with many visual principles of visual perception and dilution.

(Refer Slide Time: 12:24)



Similar kind of idea has also been explored in this drawing where the black tiger and the white tiger on this whole group of black Tigers. In this whole group of white tigers exchange their identities by simply exchanging the black or the whiteness of their shapes easier said than done because when you set out doing something like this you will realize that how difficult it is to actually demonstrate the transformation so effectively in visual terms.

(Refer Slide Time: 13:16)



Another example almost exploding a similar idea in order to understand what exactly is going on in ashes drawings you cannot rush. You have to look at each and every drawing by paying a lot of attention to them and visually you should be able to figure out the end also isolate one figure from the other in other words to unlock the visual illusions that is happening in your mind and figure out the details and the process of transformation that is taking place or unfolding in these drawings.

(Refer Slide Time: 13:57)



So more or less following the same pattern and the similar idea Asia has made a number of such drawings where simply by juxtaposing, shapes simply by juxtaposing black and white simply by juxtaposing different movements and positions of certain animals or figures he actually transforms the identity Of the objects or figures himself. So what looks like a bird in the beginning becomes a fish at the end.

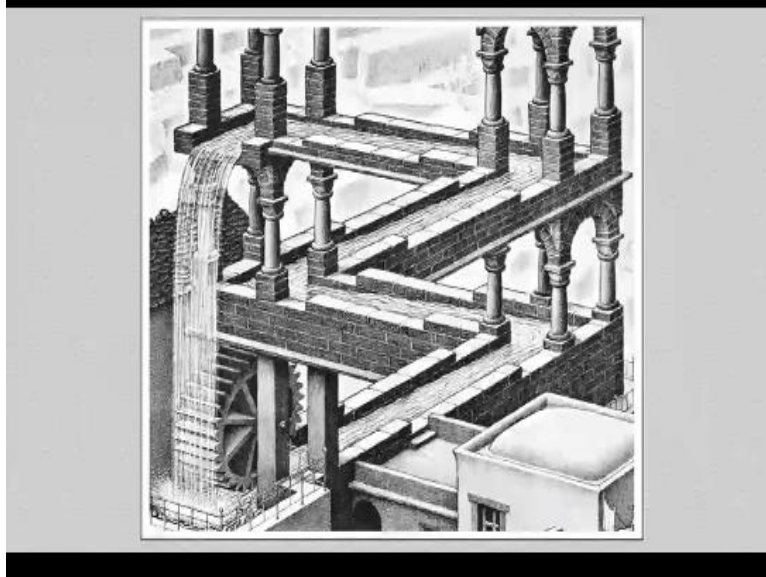
And this transformation happens right in front of your eyes. He actually the genius why inflation is considered to be one of the most talented artists in this field is simply because he had this impeccable talent or skill of demonstrating this transformation right in front of you. So he is not hiding his tools he is kind of laying them open in front of your eyes in order to figure out how exactly he is doing it.

(Refer Slide Time: 15:21)



Another simple example of that kind is again where the not only changing their shapes but is changing their identity changing their color black and white. And it is the process that he is focusing on and this is what he wants us to enjoy.

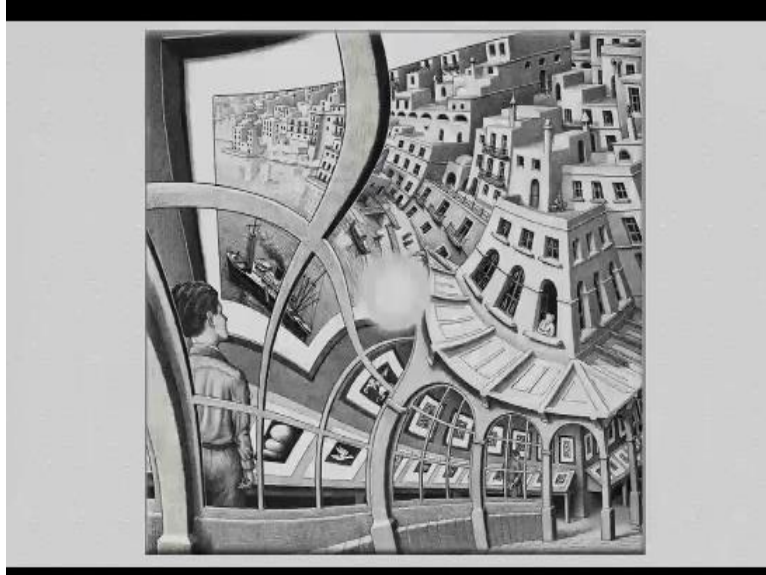
(Refer Slide Time: 15:48)



Really speaking when you go through SS words you naturally feel that Asia does not really want us only to enjoy the conclusive moment of his art but he wants us to enjoy the process that is being demonstrated in his art. Now apart from the transformation from one particular ship to another or from one particular identity or to another Escher at also made some fantastic and fascinating drawings of how perspectives , distance and angles keep kind of playing certain very short tricks on our eyes like this one.

Here when you are almost convinced that you are tracing the flow of water from a higher level to the lower level very next moment you are made to fill that actually you are moving from the lower level to upper levels. So the order of or the progression of level is kind of get upset and it creates ambiguity and you are never sure about the perspective or direction all the layers and levels in which this entire thing has been registered.

(Refer Slide Time: 17:18)



So not only with shapes and identities Asia explores the possibilities of creating ambiguity through space and perspective mainly addressing distance and depth and optical perspectives from different angles like this one.

(Refer Slide Time: 18:29)



In this work – the reflection itself may become an illusion of the real by making the real an illusion. In other words by using this very strange principles of optical illusion with any visual perception involves MC Escher is trying to say that what looks like an illusion could be a reality and what looks like real could be an illusion. So he is making a very very profound statement on the way we understand or discriminate between reality and illusion.

He in fact tries to confuse us with these two concepts. He in fact tries to make us believe that it is possible at certain moments that illusion and reality they extend their places. And they again come back. So it is this ambiguity that a shell caves on playing way like this one again.

(Refer Slide Time: 19:30)



So it is this ambiguity that a shell caves on playing way like this one again.

(Refer Slide Time: 19:48)

M.C. Escher:

Escher's lifelong subject, in a way, was the dramatised artificiality of the created image.

Of his 1945 picture *Balcony*, with its weird bulging central distortion, Escher commented: "Surely it is a bit absurd to draw a few lines and then claim 'This is a house.'" The theme of *Balcony*, he said, was "this odd situation".

Now MC Escher really speaking picked up this as his lifelong subject. And in a way it was this dramatized artificiality of the created image on his 1945 picture balcony we have seen a few examples you see one more lately with his weird bulging central Distortion. Escher commented surely it is a bit absurd to draw a few lines and then claim. This is a house the theme of balcony Li said was this or situation. Let us go back to this painting once again.

(Refer Slide Time: 20:37)



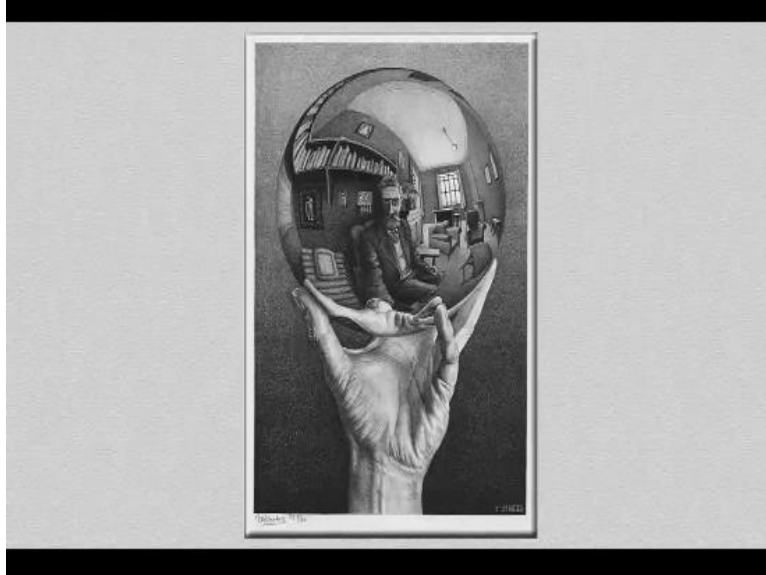
This is the one that he was referring to. So according to him balcony is not a very simple subject it is a very complicated subject because Asia believes in the fact that representation itself is very complicated and representation excuse any kind of simplicity because simplicity fails to represent the idea properly.

(Refer Slide Time: 21:18)



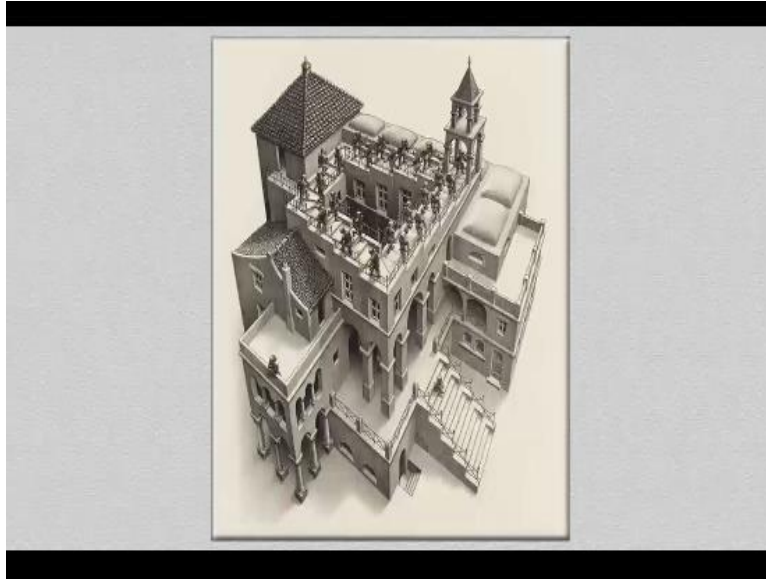
And that is why when you look at his drawings which address this impossibility of certain perspectives or let us put it this way the artificiality of the laws of perspective. He makes it again very clear that okay we may have this tool its fine that we have a tool called perspective applying which we are able to create certain illusions. But it is by itself. It is not the end it may lead us to certain very complex and tricky results if we challenge the laws itself the laws of perspective precisely. So this is what happens when as a challenges the laws of perspective themselves.

(Refer Slide Time: 22:09)



And going through this kind of practice needless to say Asia acquired some incredible skill of depicting certain kind of distortions or distorted perspectives esthetical perspectives things like that in very simple tool like a pencil in pencil drawing like this one.

(Refer Slide Time: 22:35)



Or look at this one again what looks like a very simple well-established perspective drawing of a building is not actually so. Look at the building properly and then it will find out something strange is happening over here something is terribly wrong that is precisely those perspective is terribly wrong in real life and architecture way north cannot have a perspective which never takes us anywhere. It is like a kind of a fate that you are bound to keep moving round and round in the same path.

(Refer Slide Time: 23:46)

The mathematical trickery in Ascending and Descending's staircase is not the subject of the image.

Escher was never a surrealist.

But in this picture, it becomes clear that he was a kind of existentialist.

He had long admired Dostoyevsky and Camus, and in a letter to a friend while he was working on Ascending and Descending he explained: "That staircase is a rather sad, pessimistic subject, as well as being very profound and absurd. With similar questions on his lips, our own Albert Camus has just smashed into a tree in his friend's car and killed himself. An absurd death, which had rather an effect on me."

So the mathematical trickery in ascending and descending staircase is not the subject of this the images of this kind drawn by Escher because Escher was really speaking never a surrealist painter. He was not really addressing the absurdity of life he was actually after addressing the absurdity of certain visual tools and perception. So in this picture it becomes clear that he was a kind of existentialist. I am referring to the drawing we saw just now this one.

He had long admired Dostoyevsky and Camus and in a letter to a friend while he was working on ascending and descending I should explain that staircase is a rather sad pessimistic subject as well as being very profound and absurd with similar questions on his lips our own Albert Camus has just smashed into a tree in his frame scarred and killed himself. And after death which had rather an effect on me. So it is interesting to see how Escher is able to see certain predicaments of life in this absurdity of visual perception.

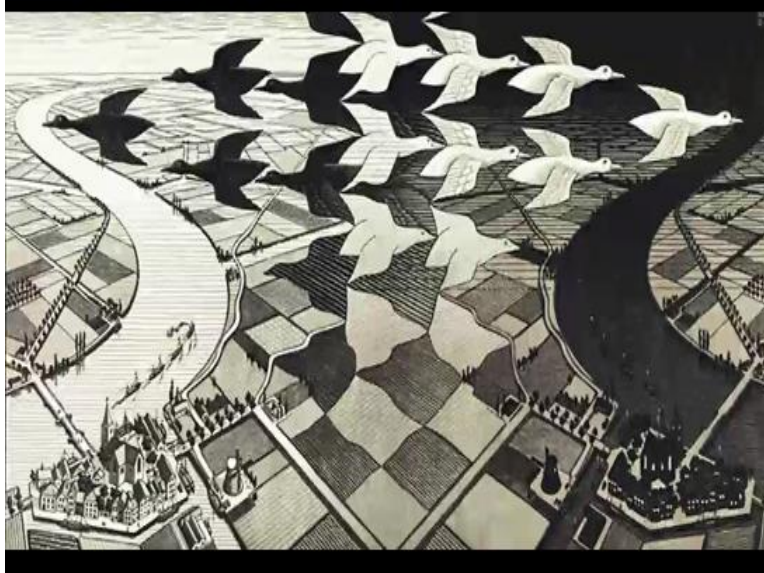
(Refer Slide Time: 24:48)



Yes, yes, we climb up and up, we imagine we are ascending; every step is about 10 inches high, terribly tiring - and where does it all get us? Nowhere.

So he says that yes yes we do climb back up and up and we imagine that we are ascending. Every step is about 10 inches high it is terribly tiring because I mean it doesn't take us anywhere where does it all get us. That is what he asks himself and answer is nowhere. Now this is just a hint to say that is his drawings do not want the face value are about optical illusions or about certain problem at rates connected to visual perception also have some very serious and profound visual philosophy or philosophy of life or philosophy of death.

(Refer Slide Time: 25:40)



That is why when you look at As us drawings after having figured out the process of ambiguity and illusions he is creating in his drawings you can feel that he is just not a skilled draftsman but he is a great philosopher who was able to comment on the problems of visual representation on the problems of visual perception on the problems of visual illusion almost like a great philosopher thank you.

Acknowledgement

Ministry of Human Resources & Development

Prof. Satyaki Roy

Co – ordinator, NPTEL IIT Kanpur

NPTEL Team

Sanjay pal

Ashish Singh

Badal Pradhan

Tapobrata Das

Ram Chandra

Dilip Tripathi
Manoj Shrivastava
Padam Shukla
Sanjay Mishra
Shubham Rawat
Shikha Gupta
K.K Mishra
Aradhana Singh
Sweta
Ashutosh Gairola
Dilip Katiyar
Sharwan
Hari Ram
Bhadra Rao
Puneet Kumar Bajpai
Lalty Dutta
Ajay Kanaujia
Shivendra Kumar Tiwari

an IIT Kanpur Production

@copyright reserved