

Elements of Visual Representation
Prof. Shatarupa Thakurta Roy
Department of Humanities and Social Sciences
Indian Institute of Technology, Kanpur

Lecture – 17

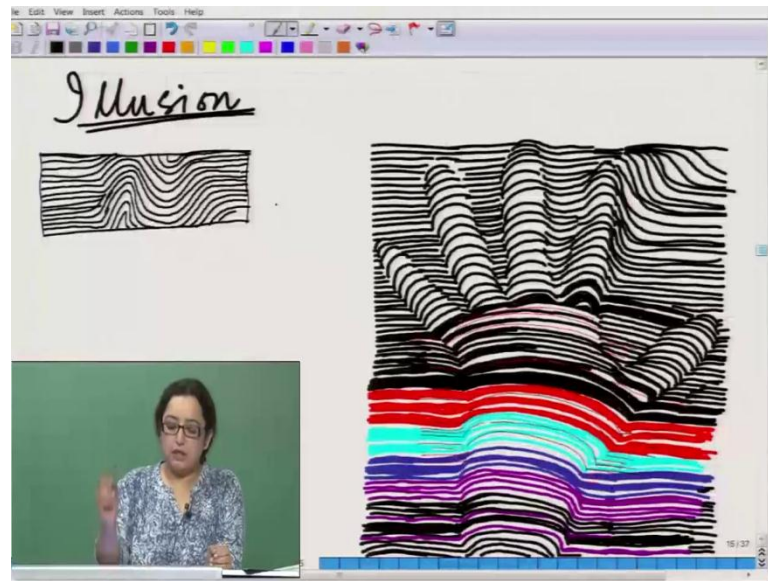
Illusion of motion can successfully be created by using different tricks and techniques of optical illusion and there is a train, there is a movement called apart that was very, very popular in the modern tradition. Now, when we create some optical illusion in a space, we basically use different ratios in terms of value, in terms of intensity. So, color is another very important consideration there. But, we also create optical illusion through shape, through progressive rhythm, through alternative rhythm.

And there are many other devices that are often, when you well calculated scientific and as a result of all those things like put in a picture in a right ratio. What we get is, a result is a very interesting optical grammar and we will try to see that with multiple examples. But one thing we need to keep in mind that there are lots of things that we see in nature, that is exactly not how it is in nature. For example, when we move very fast, we see the objects that are getting moved.

So, we do not see any sharp edge that does not really say that the objects does not have a sharp edge, it is only because of our movement, we get that kind of an impression. So, when we have an impression of a fussy blur area, it also may give us a sense that, we are on move. So, things are perceptual and also highly relative, we also see certain glow sciences that are glowing.

We can create the same effect on one area, where no light is basically evolved, that there is no other things rather than you know, creating a high contrast or a simultaneous contrast using a warmer area with a just opposition of a cooler area somewhere close by. So, there are many different ways to create that optical illusions, let us try out some simple ways to get some optical movement or optical illusion in a two dimensional space.

(Refer Slide Time: 02:31)

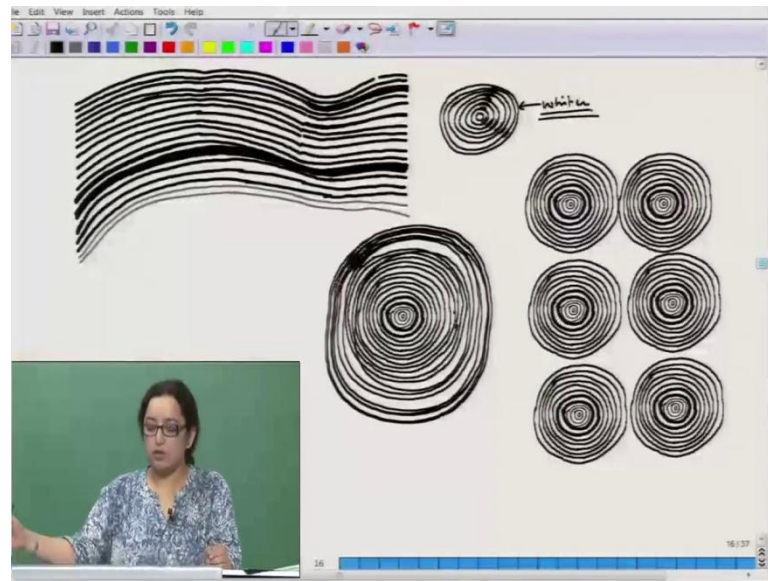


So, showing in the picture are a few lines that is going in an almost parallel order, they are more or less parallel to each other. What is interesting is that, because of different formation, it gives us a space which is three dimensional and it also gives you a sense of movement. It is almost like you know how the ripple or the wave gets generated on water. So, we see a surface which is having a lot of ups and downs in a very smooth order.

So, we are creating a line that might go up, go down again go straight, another line parallel to it. So, it gives us a space with a convex and concave formation at the same go. So, the concave area will look deeper, it will have a sunken effect, whereas the convex area will look as if that is going up, that will create a folder like condition has send in the picture. Now, this part, it is a concave formation that is taking place, it is going deeper, that will create some sunken depression on the surface and that is one way of creating some movement in a space.

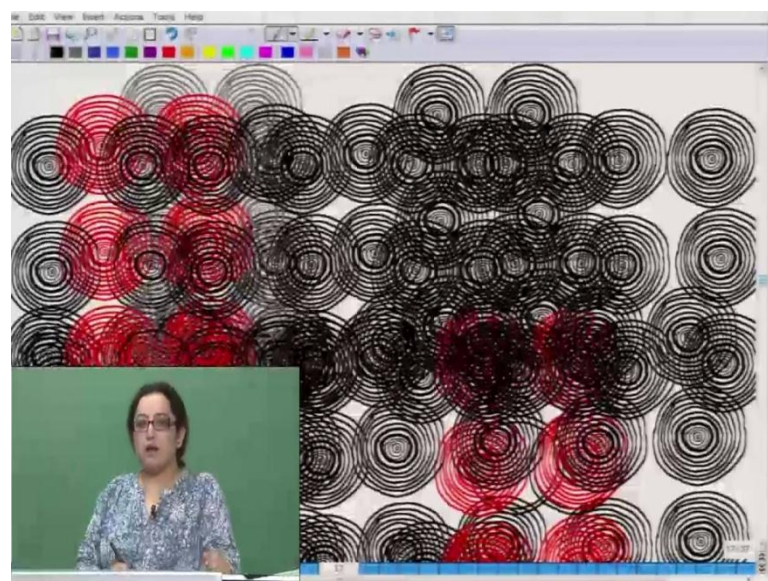
So, it is nothing but the line that is following a particular eye direction and that is giving us some impression, as if this part is going deeper down and the other part is lifted. So, in this way we can create interesting vibration on a plane surface having some three dimensionality into it.

(Refer Slide Time: 05:18)



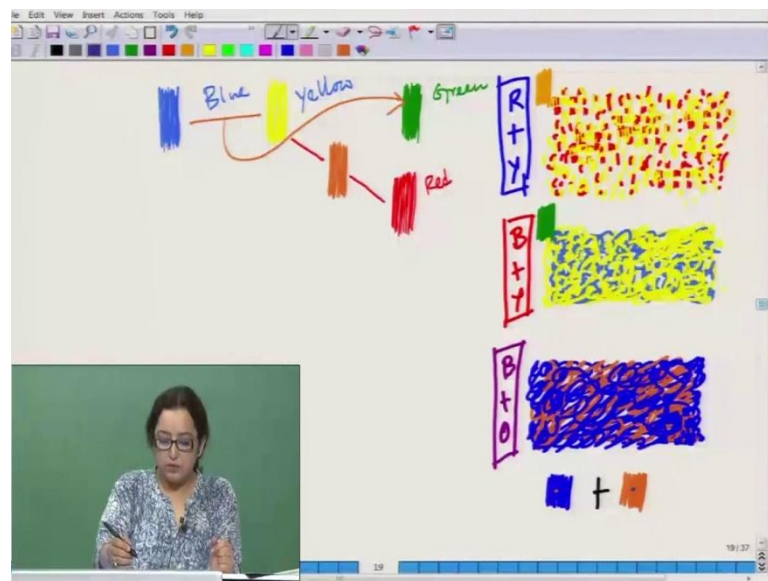
Another example is, when we have a few paddle object that are formed alternatively. Though, I am not using any mechanical tool for the formation, we can still feel that there is a range of white that is getting form, because of the value difference. So, when we have more areas of black, the thickness of the line where it is more will have one area of black and that will create a contrast in the area which is placed somewhere beside it. So, it will get a space which, where white will be whiter, hence that will create a volume a three dimensional space, with repetition we can create a lot of vibration in a space.

(Refer Slide Time: 06:32)



And this example, this is a repetitive pattern with two different colors and a lot of overlapping, that you create a lot of vibration in the space. The space can still remain two dimensional, if you repeated throughout leaving no negative space for our imagination. So, there are N numbers of possibilities, we will try to see it with some more interesting examples, where we can create a simultaneous contrast with the use of color. Now, how to create a simultaneous contrast that there are colors which are may be primary and if it makes the two colors, we get another sheet.

(Refer Slide Time: 07:18)



For example, if we have a blue and we makes this blue with yellow. By mixing blue and yellow, I will get another color that is green. Similarly, if you mix red with yellow, red and yellow will produce orange, blue and yellow will produce green. So, these are the inter relationships. So, when we have a visual area with red and yellow side by side, red yellow, red yellow, more red more yellow.

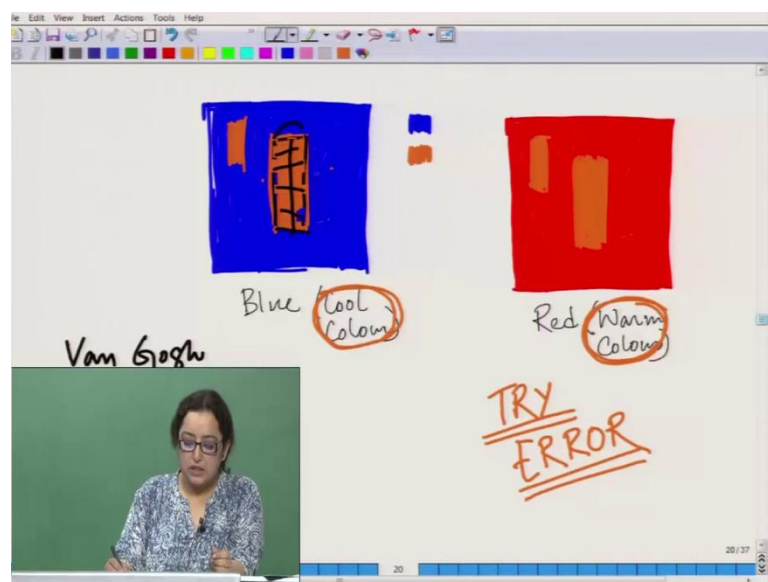
So, when we have a combination like red plus yellow in a space like this, that look much in harmony, because that will automatically give us a sensation of an orange. So, the information that we will get from the red and yellow will make us, remember another color that is orange. Similarly, when we have a combination of blue plus yellow, it will give us a signal of green.

So, this will look more harmonized as a space, because tonight it will reminder us another color, we mix the color mentally or visually may be from a particular distance.

May be, if we go too far this blue and yellow will give us a sensation of green at the end of it. But, when you have another composition, another combination like blue plus orange, it would not give us any sensation of any other color.

Because, if we mix blue with orange, what we get is not any definite colors, it is neither a primary color nor a secondary color, it is not even a tertiary color. So, what we get something like maybe a very muted mustard kind of a brown, that is one possibility, but there is no definite color. So, the combination of blue with orange will give us a different sensation, it will rather flicker. Because, it will create an age, if I show it in a different diagram, we will realize it better, that...

(Refer Slide Time: 12:32)



If we have a blue, so this is one area of blue which is a cool color and this is the area of red, which is a warm color. Now, they are similar in size, the only thing when I place this orange that we have been talking about, we place the orange somewhere here. Like orange window in a blue wall, it will give us an effect of light, it will rather flicker.

The reason is that, because of the contrast of these colors and it is not only the contrast, but you know, when we place the orange in a blue background, it gives us a simultaneous contrast. Our eye does not really read it as any other color, because if we mix orange with blue, we would not get any other color that is much memorable. So, we see them separately and it also happens that in the edge, where blue ends and orange starts.

We get certain effect, where our eye develops some kind of a fatty, because they have no harmony, they are like very high in contrast. So, in the edge of blue and orange, our eye develops certain factor and it does not want to stay there for too long. So, that is the reason, we do not really look at it for a longer time. So, it will give us an effect of flickering effect. So, we will see this part will look much more shiny, let us try it with a red surface and you see.

It is the same orange that I have picked up, write, I will prove it, I am picking it the same place. So, apply on blue, picking up the same orange, applying on red. Do not you think the orange is looking very different here, so why is it? Because, the background is playing a role, this is done on a cool color background, this is on a warm color background.

So, the background influences the foreground, background influences the color that we are using at the foreground and the color changes in it is character. And that is very interesting and observation and there are many other possibilities that you can always try out and with the knowledge of these devices, we end up creating a lot of optical illusion. So, it is like our effort to try and go by error. So, you go by trial and error to get amazing effect.

There are lots of other visual effects that I will tell you; maybe I will refer you to another very famous painting by Vincent Van Gogh. Please, see Vincent Van Night Cafe and many other art works, where he is used this particular combination of blue, which is like a French alternative blue and a permanent orange. Two of the shades are very strong and he has used the maximum possibility of these two colors, where they giving us a flickering effect.

So, he had more like a blue wall and a window with this orange color and it give us an effect, as if there is an orange light on inside the place and the light is coming outside. So, it is more like, it is a flicker that gives us some sensation, at the same time if you place the same orange on a warm color background, which is like a red here, it can be a yellow also. So, there the effect will be completely different.