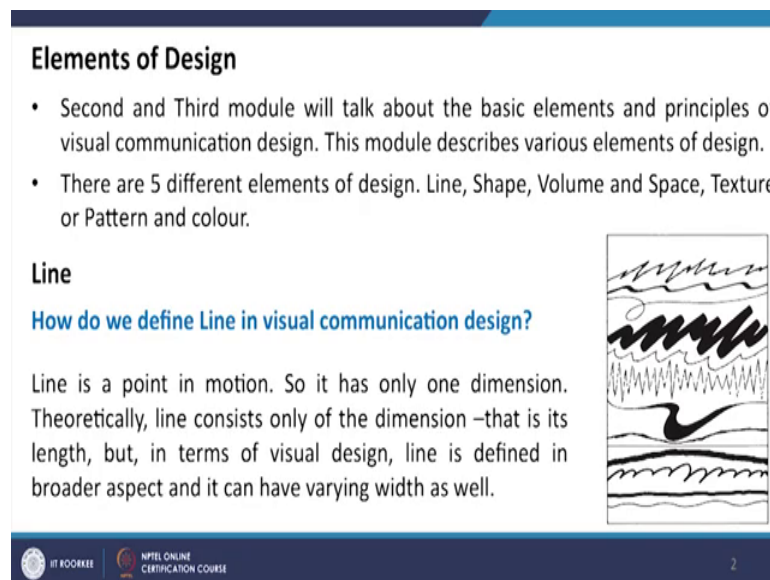**Visual Communication Design for Digital Media**
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Lecture - 03
Elements of Design Part-II

Hello students. Welcome to the course NPTEL course Visual Communication Design for Digital Media. So, in the last previous module we discussed about some of the elements of design. So, we will continue from there, and we will discuss about the other elements of design in this presentation.
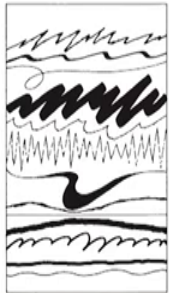
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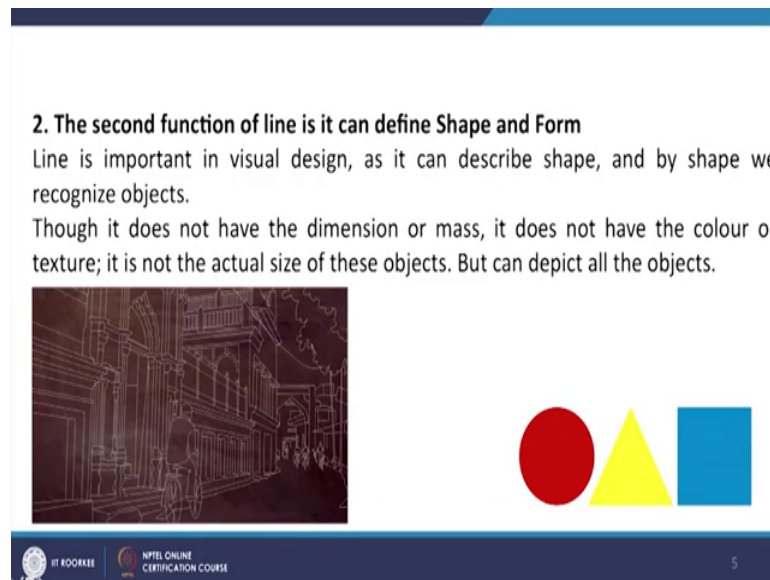
So, in the previous module we have discussed about three elements line, which is one dimensional then shape which is two dimensional.

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And we are we also I have discussed about on texture and pattern. So, here we will in this module we will discuss about space, which is three dimensional and we also we will discuss about colour.

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But space in digital media will be actually an illusion of space, because we are not dealing with a three dimensional art form like product design and automobile design we can we actually have can create three dimensional spaces. But here in digital media uiux design or animation or visual communication visual art we can only have a illusion of

space. So, here by the usage of colour texture and other attributes, we can create a illusion. If you are talking about augmented reality then we can have a real space real, we can deal with real space, but in terms of other digital media platform we can only have a illusion of space.

So, how to a present to the depth of space, are the depth or the illusion of space in digital media. So, we can do it by three different ways one is by varying size.
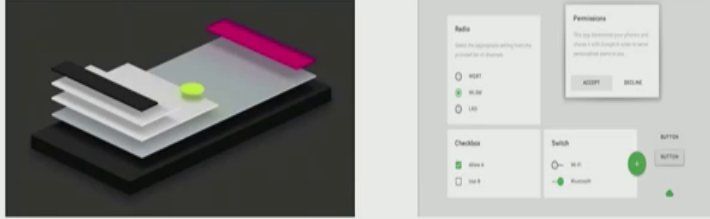
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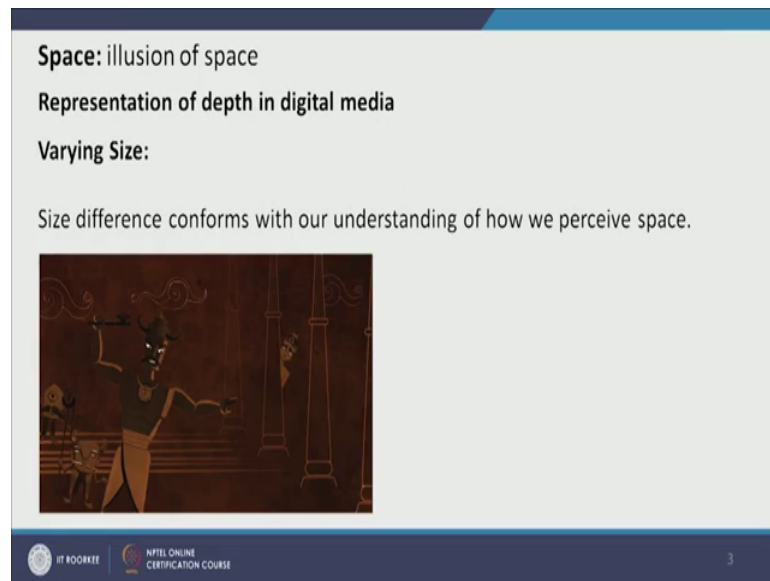
So, if there is one object and the object size is varying in size is different, then we can have a illusion of space. For example, if you see this composition we have 3 4 columns, here the column is smaller and the column is becoming appearing bigger and also there is a change of colour and the colour becomes dull there and. So, we have a illusion of space and this two dimensional art appears three dimensional, and there exist a depth feelings of depth.

So, another way can be overlapping. Overlapping shapes on top of other can create a illusion of depth to here the best example in my mind is material design by Google, Google's material design talks about illusion of depth a illusion of space by overlapping.

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So, in the right hand side we can see there is a red plus which appears like a button is on top of the rectilinear shape, and here in this rectilinear shape has a drop shadow. So, that actually appears light on the background this rectilinear shape is overlapped on the background. Here if see the concept this is the concept design of a material design which is available in Google site. So, all these different tabs and buttons appear on top of each other.
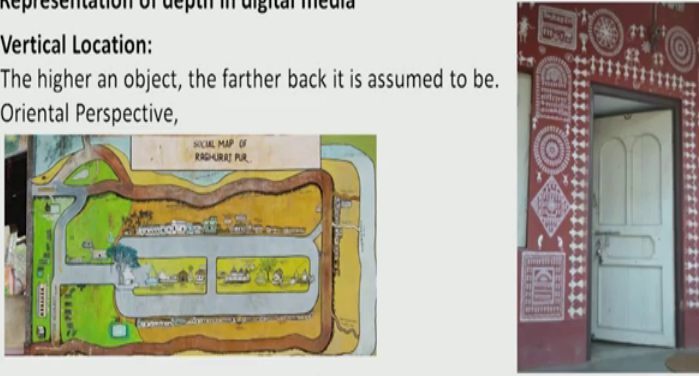
So, that is how by overlapping different shapes material design creates illusion of space. So, here another way of creating depth of sense of a space is vertically allocating different objects.

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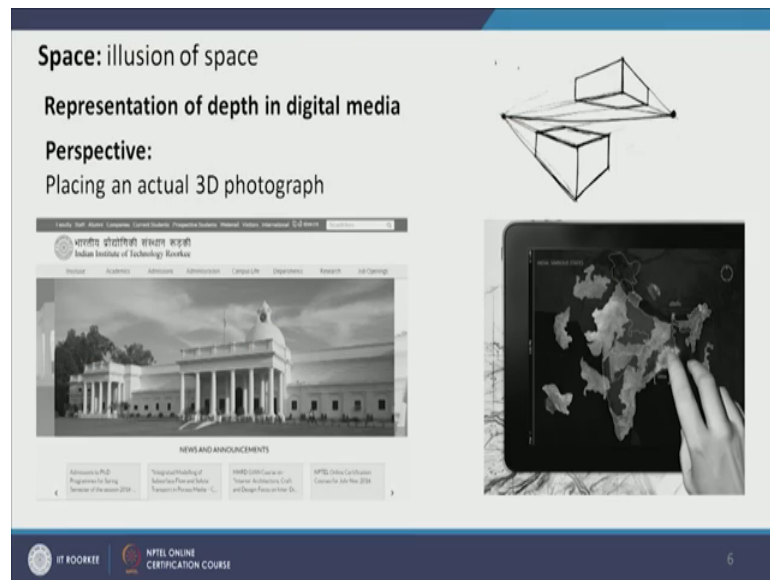
So, here on the right hand side we have a Warli painting which is actually from Maharashtra, but this Warli painting is done in Raghurajpur Orissa. So, these Warli paintings we can have see different formations of human and animals on top of each other. So, they are actually a far the object appearing on top is actually of the object which is farther and which is appearing bottom is actually nearer. On the right hand side also we can see a map of the same place where we can see elevations of a small buildings appearing on top of other. So, actually the building which appears on top of the other objects is farther so, that creates a sense of depth in a 2 d composition.

So, another way of representing a sense of depth is perspective, which is which looks more realistic. So, perspective in the terms of a digital media we can use a real photograph which actually follows the perspective drawing. So, here we can see a website of Indian institute of technology Roorkee and there is a the perspect the photograph actual real photograph of the main building. So, that creates a sense of depth the because that is a photograph of a actual place and that follows perspective.

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Now, also on the right hand side we can see your hand appearing on the ui design. So, that add adds to the three dimensional quality of a 2 d space here,

So, their perspective can be of different qualities, one is one point perspective; the first example on the top is one point perspective where every point vanishes on the single point. The next example is two point perspectives where two different points will be there.

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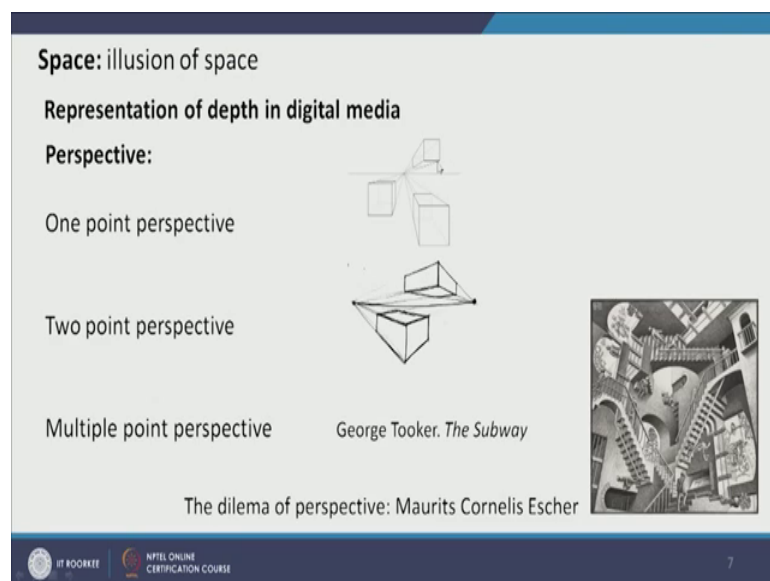
And all the lines will be vanishing on the in this two point, they can also be multiple point perspective; for example, George tuckers the subway, you can see the painting in the net and there can also be created a dilemma of perspective. So, perspective will be altogether confusing.

So, again the example of a Escher's painting, if you if you see in this painting on the right hand side the painting creates lot of confusion of perspective, but yet it has a sense of depth, but the space is not perceivable, the space is confusing because the staircase appears as a plan and plan elevation and everything is twisted in this example. So, apart from perspective there are also two other ways of showing space depth of a space one is a isometric projection.

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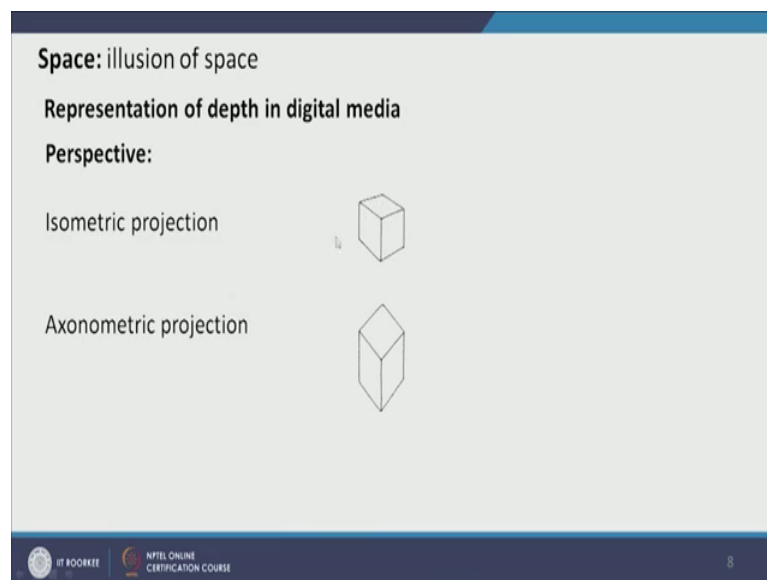
The first example is isometric projection, another is axonometric projections where all the lines does not vanish in a single point like perspective they are actually parallel although planes appears parallel.

In isometric projection there are 30 degree angles and axonometric projection there are 45 degree angles, here and the next element of design is colour.

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So, colour has three attributes one is hue, the next is saturation and another is value the hue is hue as it is described is the visual sensation of different colour spectrum. So, each and every hue is associated with different light wavelength of light. So and different examples of hue will be purple red blue sayan green they are different hues, and they are associated with a particular wavelength of a light. And saturation is or croma can also be described as colorfulness or dullness of a particular hue.

So, here in this example we have taken blue as a hue, and the saturation on the left hand side is less. So, at a certain point we cannot recognize the blue as a hue, it appears as a grey. On the other hand in the right hand side the blue has the highest saturation, what is value? Value is referred as the lightness or darkness of a particular hue. So, here unlike saturation the particular colour particular hue will be either we can add more black to a particular hue and it will be called shades and we can add white to a hue and it will call it will be called tints. So, white if we add white to a particular colour. So, value increases, and if we add black to a particular colour the value decreases.

So, here we have a Newton's colour wheel all the hues are present here. So, and we will discuss about the colour scheme. So, in this Newton colour wheel be as we all know if we combine all the colours we get white. So, in terms of light that is the additive addition of lights we get white light.
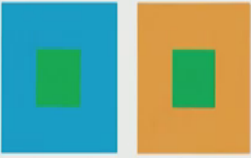
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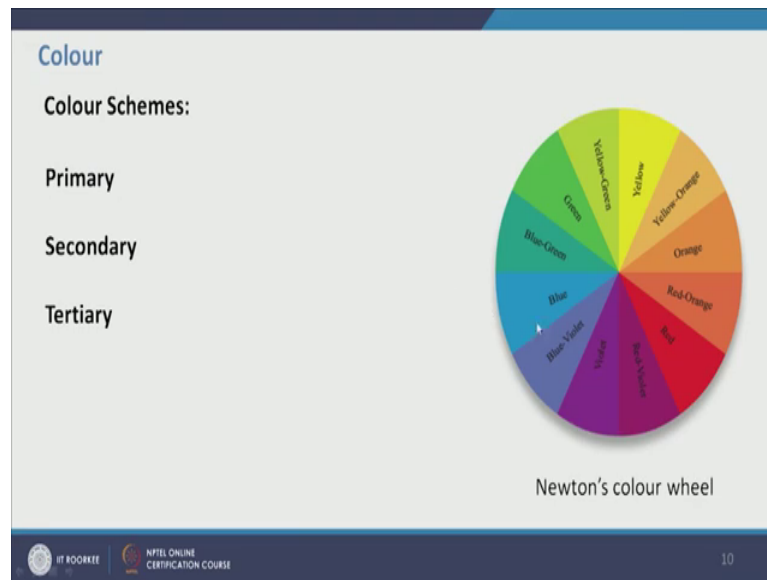
So, here if we talk about the primary colours we have red yellow and blue these are the primary colours. We cannot create red blue and yellow by combining other colours. And what are the secondary colours? If we combine two primary adjacent primary colour we get the secondary colour position in between them. So, if you combined blue and yellow will get green, which is appearing in between and if we combine yellow and red we get orange and similarly if we combined blue and red we get violet. So, these are the secondary colours.

If we combine one primary colour and another secondary colour, then we get a tertiary colour. So, for example, if we combined blue and green we get blue green bluish green that is the tertiary colour and similarly if you combine red and orange, orange which is the secondary colour red which is the primary colour we get a red orange that is the tertiary colour. So, if we talk about if we divide the colour into two different two sectors warm and cool depending on the sensation, what kind of a sensation they evoke we have a warm colour which is on the right side of the colour wheel red orange yellow, these are the warm colour which gives evokes the sensation of warmth in the users eye. And on the other hand blue green and blue violet evokes the sensation of coolness in the users eye, and that that is a visual perception they give.
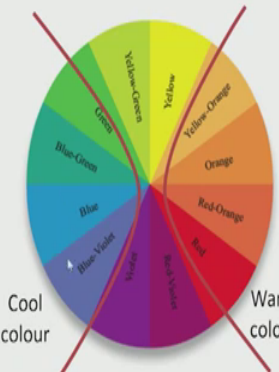
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So, these are called a cool colour; and another interesting feature is one single particular colour if surrounded by a warm colour here in this example, it appears cooler and on the other hand these two greens are actually the same green. And the same green is again combined surrounded by a cool colour which is blue and the green appears move warm. So, that is one feature and. So, next we will talk about the colour schemes. So, one colour scheme is complementary colour scheme. Complementary colour scheme has the term denotes the colour which are actually is situated on the opposite side of the colour wheel, radially opposite is called complementary colour. If we combine two complementary colour we will get again white light.

So, again for example, yellow and violet are complementary colour scheme and they are the most contrasting colour schemes you again red and green, there if we apply this complementary colour red and green in one composition, we will get a very contrasting and striking colour scheme and which will be very impactful on users mind.
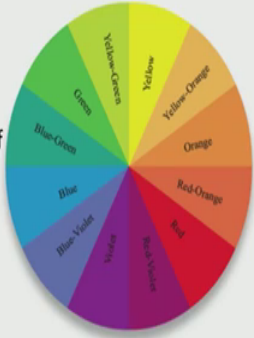
So, another example another colour scheme is split complementary colour scheme, which is not as striking as complementary colour scheme, but associated with the complementary colour scheme.

So, for example, this split complementary colour scheme means the opposite side of the colour will the colour will be taken, but just the and adjacent colour not the opposite colours just the adjacent. For example, yellow if we consider yellow and the complementary colour violet, in split complementary colour scheme will not take violet, but we will take blue violet or red violet, will not go exactly on the opposite side of the colour wheel, but the analogous at the adjacent of the colour scheme.

Another example is triadic colour scheme; triadic colour scheme if you see the colour wheel again colour, triadic colour scheme talks about the colour which is a three colours which is equidistance equidistance in the colour wheel. So, for example, triadic in the if you look at the colour wheel we are the triadic colour scheme will be red blue yellow or if we take violet, there will be violet green and orange because these are equidistant. Three colour scheme which are three colours which are equidistance from each other.

So, if we take one primary colour the always the triadic colour scheme will be the other primary colours. If we take one secondary colour the triadic colour scheme will be other secondary colours and similarly if you take tertiary colours other triadic colour scheme will be always tertiary colour.

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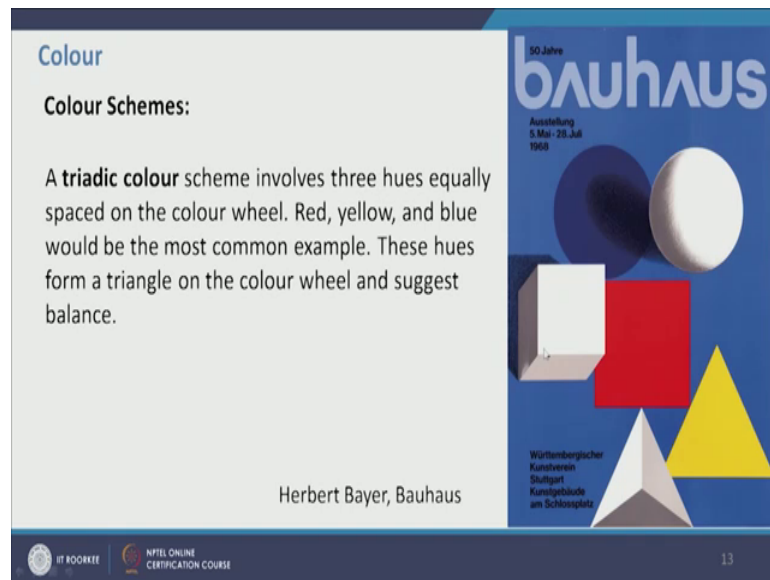
For example if you take a for tertiary colour blue green, then the colour scheme will be blue green yellow orange and red violet. So, here we have a example of a Bauhaus poster design by a famous visual designer Herbert Bayer, here we are seeing blue yellow and red these are the primary colour, and these were actually the colour of Bauhaus and de stijl movment, which we also see in a Mondrian's Broadway boogie Woogie which we have seen earlier in this module.

So, another colour scheme is analogous colour color scheme. So, analogous colour scheme will have the colours which are adjacent to each other. So, if we go back to Newton's colour wheel, analogues colour will be yellow, yellow green, green or blue blue violet, violet which are adjacent to each other, which gives a very soft and soothing effect here we have a example of analogous colour scheme.

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So, this is an screenshot of a animation, here we can see blue violet a bluish violet and reddish violet is used, which three colours are analogous. Also if you are if you see picassos blue period painting, then he used all the analogous colour. So, when he will be depicting rate he will not use the colour rate, he will use a blue shade of red thats violet when he will use when he will depict yellow in his painting of blue period, he will not use yellow he will use add a blue tint in yellow and that is why we he will use a green. So, green will actually be depicted as yellow and violet will be depicted as red. So, if you can check in later because of blue period a painting and you will understand more that in detail.

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So, also we have monochromatic colour scheme, in monochromatic colour scheme we have one single hue and the variation of the variation in value. So, we can have the tint and shades of that is particular hue, we can add more white to get tints and we can add more black to get shades of the same hue. And we can play with the saturation of the hue we can add more grey and more impurities, and actually if we think about the colour then we can add the comp if we add the complementary colour. So, that colour has lesser saturation. So, if we start adding green with red, then the red will have lesser saturation it will appear it will go towards the great own. And if we add more green to the red and then it will go to the greener shade and red will decrease in and the identity will be lost and gradually will go to the greener side.

So, here we have the example of same painting in different monochromatic schemes, one has bluish tint bluish blue hue and then the variation of tints and shades and another have purple green and brownish hue. So, this is it. So, we discussed about a different elements of design, those align shape form shape and form illusion of space colour and texture and pattern. So, if you play with this and with the permutation and combination of these elements we can create different kind of visual style, and which will be this which will be discussed later and the next module is principles of design, and how with different elements of this design elements we can create different design, that we will see in the next module.

Thank you.