

User Interface Design
Prof. Saptarshi Kolay
Department of Architecture & Planning Engineering
Indian Institute of Technology, Roorkee

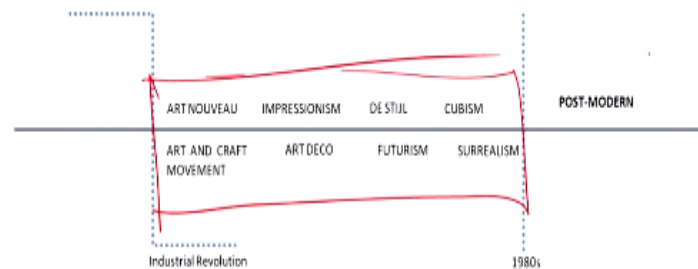
Lecture - 13
Contemporary Visual Language in Design - II

Welcome students to the online NPTEL course, User Interface Design. In the previous class we started discussing about the art and design movement so that you can understand, you can select the visual style based on the contemporary design and art movement and based on also the requirement of your design and what kind of visual language you want to portray in your design after finalizing the wire-frame.

(Refer Slide Time: 00:55)

Contemporary Movements in Visual Design

Modernism

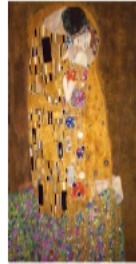


So today we will continue with that and we started discussing the modernist movement. We will just recapitulate that and then move on to the postmodern design movement. So modernist movement, these are the main modernist painting and design movement in modernism which happened after postindustrial revolution.

(Refer Slide Time: 01:13)

Art Nouveau

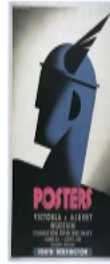
Art Deco



Gustav Klimt



Alphonse Mucha



Adolphe Mouron
Cassandre



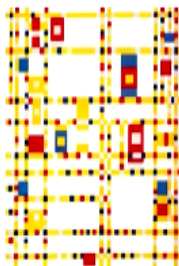
Tamara de Lempicka

So we will see side by side what are the, we will compare few modernist movement side by side. So this is the Art Nouveau movement where we see lot of ornamentation and biomorphic lines and this is Art Deco movement. Art Nouveau is just pre-modern postindustrial revolution and pre-modern movement and Art Deco is a modern movement and Art Deco we see lot of emphasis in the machine made aesthetics. But still it is very ornate.

(Refer Slide Time: 01:40)

De Stijl

Bauhaus



Piet Mondrian



Theo van Doesburg



Wassily Kandinsky

Now next is De Stijl and Bauhaus movement. De Stijl and Bauhaus movement together talks about the purity of design and minimalism and also he talks about one particular design style which is either rectilinear or curvilinear and mixture of only mostly the basic geometric shapes

and primary colors like red, yellow, blue and with juxtaposition of achromatic color like white, black and grey.

(Refer Slide Time: 02:09)

Expressionism



Edward Munch

Now the expressionism is another movement where this is Edward Munch's painting screen where painters started expressing their feelings and metaphorically with different lines, colors, and textures they started expressing the meaning of the painting which is opposite to the Bauhaus and De Stijl movement because Bauhaus and De Stijl movement mostly talks about just the combination of different shapes. It does not convey any meaning.

So this painting by Edward Munch talks about the phobia of screen and we can see lot of abstraction and deformation from the actual human face. It looks like a skull and the lines of this on the sky and the river and the bridge are quite shaky and then this kind of line quality and the tonality of the color the red vibrant red and other warm colors gives feelings of the screen metaphorically.

(Refer Slide Time: 03:16)

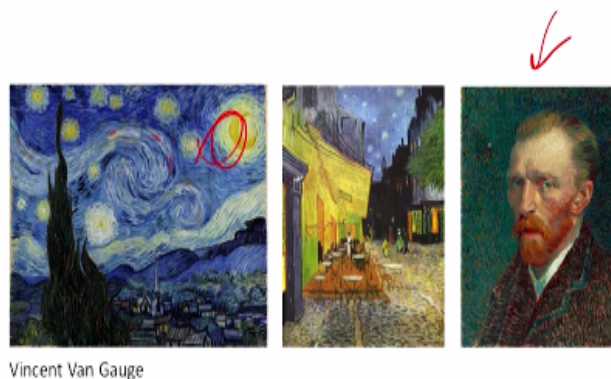
Impressionism



And then the next movement is the impressionism where we see Monet's painting and Van Gogh's painting and this is the style here is called Impasto. So you can see a tactile texture is being created within the canvas. So you can touch and feel the texture because of the application of very thick color. And this impressionism talks about different color tones when we see from far we can perceive the painting but when we see from near, so this is a patch work of different colors. So this is the style of impressionism and this is Van Gogh's painting Starry Night.

(Refer Slide Time: 03:57)

Impressionism



So we can see juxtaposition of lot of different colors and when we perceive from far we can comprehend the meaning of the painting but this is a, when we look closely, so this is part of the Starry Night which is somewhere here and we can see this patches of colors from near it will just

appear like a blue and orange and yellow color patch but together it communicates the meaning. So it does not look realistic. This is a high abstraction.

So this is Van Gogh self portrait and here also we can see this contrasting color which is opposite in the color this orange and blue is juxtaposed. So together we can see a very shimmery effect of the portrait and together we can perceive the face of the painter.

(Refer Slide Time: 04:49)

Impressionism



Paul Gauguin

Georges Seurat

(pointillism)

So another other painters like Paul Gauguin and Georges Seurat is there in impressionism and this is also called pointillism when instead of applying the Impasto technique of color they are different points of color and we can see, if we zoom in we can see different dots of different colors and together it conveys landscape portrait, conveys the scene of a river front scene and when we see from far and perceive it holistically.

So next movement is, another movement is fauvism. Here also we see lot of addition of different color patches but this colors are very vibrant.

(Refer Slide Time: 05:36)

Fauvism



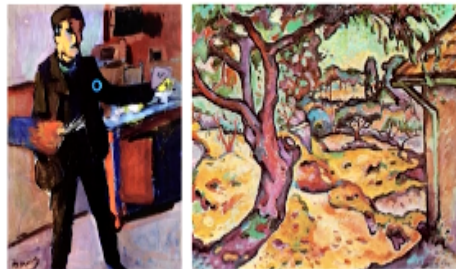
Henry Matisse

(wild brush stroke and vivid colour)

And they are quite vivid for the eyes and they have more attraction value and they are not toned down colors. So the fauvist, the name fauvism comes from a wild beast. So it looks very wild in terms of the tonality of the color and with a vivid brush stroke and which is visible from the far and which is not, the brush strokes are not merged with each other.

(Refer Slide Time: 06:09)

Fauvism



Andre Derain

George Braque

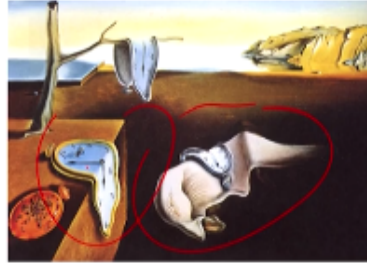
Some other examples of fauvist painters and then the next movement is surrealism.

(Refer Slide Time: 06:14)

Surrealism



Rene Magritte



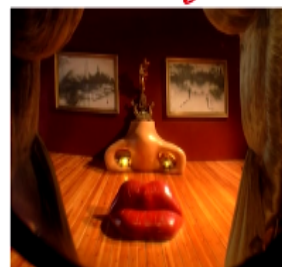
Salvador Dali

Realistic precision and blend of non-sequitur elements

Rene Magritte's 'Son of Man' and Salvador Dali's painting are persistence of time and space and this is here we see very realistic rendering of the painting. So everything looks very realistic, but the composition itself is nonrealistic. So all this elements and everything is not realistic. The setup is not realistic but the way it is painted and the color mixture and the tonality and the line quality everything is very realistic in nature.

(Refer Slide Time: 06:51)

Surrealism



The Mae West room



Furniture design by Salvador Dali

He have also designed, Salvador Dali have also designed some furnitures. So this is Mae West, the actress Mae West's room which is in the Salvador Dali museum which is based on a Salvador Dali's painting, very surrealist painting of Mae West. So this is a composition when we can see this is actually like a combination of different furniture like a room but this also depicts Mae

West, the actress face and also the furniture design depicts metaphorically the combination of human body elements.

This is Boca sofa which mimics the lip of human and then this furniture mimics the arms and legs of human body but this is actually a chair. So this kind of dilemma of what it depicts is there in the surrealism in furniture design. So another movement cubism which we have discussed earlier which breaks down the composition in different cuboidal forms and highly abstract and also sometimes depict the time.

(Refer Slide Time: 08:04)

Russian Futurism



Cyclist, Natalia Goncharova



Poster design, El Lissitzky

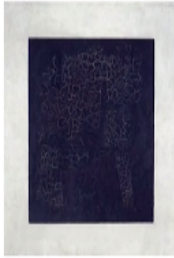
So few other examples of cubist movement and Russian futurism where time dimension is quite important in the painting.

(Refer Slide Time: 08:09)

Suprematism



Kazimir Malevich



Lazar Khidekel

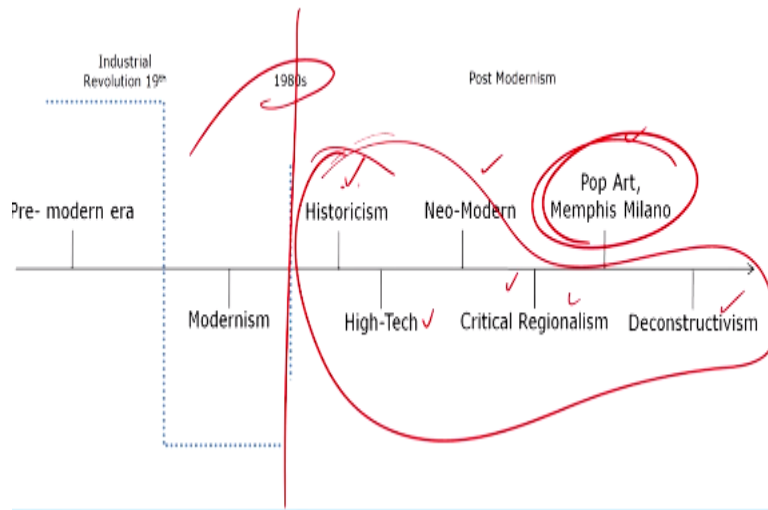
Another movement is suprematism. Suprematism also somewhat similar to Bauhaus and De Stijl movement. They are the composition of pure geometric form but unlike Bauhaus and De Stijl movement they are the combination of this elements are in different angles. So they are not positioned in 90 degree angles with each other and they have more dynamism in the composition and sometimes this is very abstract simplification is there.

And one of the famous painter is Malevich and he sometimes painted only black patch on black, white patch on white and wave only with the achromatic color and sometimes he also has paintings with different colors and which might not be all times it might not be primary colors. They can be application of different other colors as well. And Lazar Khidekel is one of the architect who transfers this suprematism the combination of different box into a 3-dimensional depiction.

So this is the concept of this 3-dimensional space or 3-dimensional object which can be a architecture, which can be of small product or any scale but this has lot of different cuboidal elements juxtaposed with each other. So this is much more complex than Bauhaus and De Stijl movement but superficially if we look at it looks quite similar but it is idealistically it is a different movement. Now we come to the postmodern timeline.

(Refer Slide Time: 10:08)

Post-modern timeline

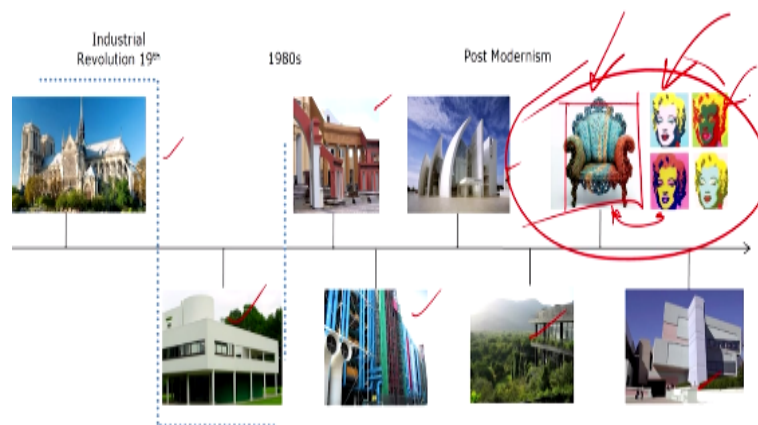


So after modernism around 1980s this postmodern style started evolving. So in architecture these are the styles in postmodern movement and this is the art movement and rest all are the architecture movement. So parallelly with these architecture movement some of the furniture design and product design started evolving. So if you are interested you can read about these architectural movements and that will give you a better understanding of this design style.

But we will focus on this pop art and few examples of Memphis Milano which is also product design. So we will focus on the pop art movement which is the predominantly postmodern art movement.

(Refer Slide Time: 10:56)

Post-modern timeline



So these are few examples of this architecture styles and this is pop art by Andy Warhol and this is Memphis Milano's designs, Proust chair which is quite similar. So you can see lot of vibrant color. The elements are (()) (11:10). So this is not modern minimalist design. Neither this painting is minimalist. So lot of different colors, lot of attractive color palette is selected which is striking for the eye and has much high level of attraction value.

(Refer Slide Time: 11:31)

Pop Art

DESIGN FEATURES

✓ 1950s in Europe (Britain) and America.

✓ Based on popular culture.

✓ People centric fine arts

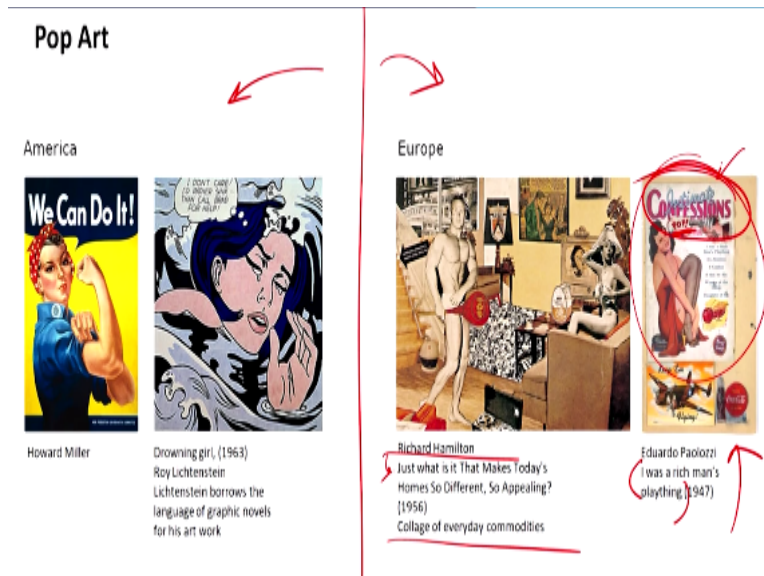
✓ Advertisement, Typography, Branding,

✓ Graphic design, ✓ Comic-strip,

✓ cinematography, ✓ Print-media

So the design features is 1950s in Europe, Britain. So in architecture it is mostly 1980s but in painting, so it goes back and forth and Britain and America based on the popular culture. So it talks about the people, what people like. So it is more generated from the users and users perception and users liking. So it is people centric fine arts and then it flourished and these are the domains. Advertisement, typography, branding, graphic design, comic strips, cinematography, and print media.

(Refer Slide Time: 12:04)



So this is the pop movement in America. This is the pop movement in Europe. Pop movement in Europe has more gradient shade and lot of eclectic composition like collage. So this is Richard Hamilton's painting, just what it takes that makes today's home so different so appealing. That is the title of the painting and this collage which is juxtaposed with the everyday commodity and again it is talking about the people's lifestyle of that particular time which is 1950s.

And Eduardo Paolozzi's painting of I was a rich man's plaything. It is talking about a girl and how modern society perceive a girl and then here also we can see the typefaces are here it is also written pop and typeface is quite it is a derivative of the comic strip. We can see similar kind of typefaces in the comic strip and lot of elements are added from the comic strip as well within this painting. So it has lot of similarity with the comic strip.

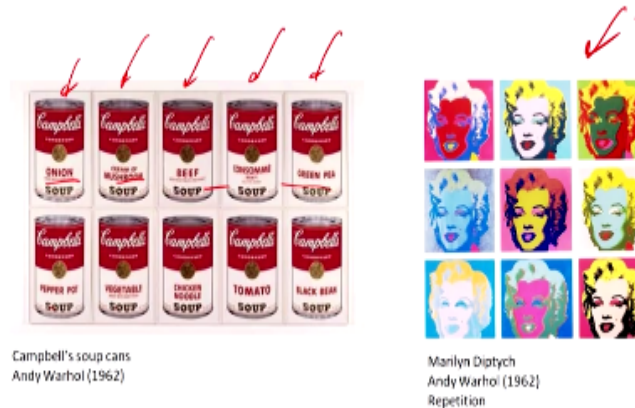
And in the America if you look, so this is few of the examples where from digitally generated, it looks like a digital design and this is a printed copy from the comic strip. This is designed by Roy Lichtenstein. This kind of style we can see in the comic strip and it gives more digital look in the design. So there is a flat one particular color tone is applied here and then on top of that this another black lines are printed.

And when the black lines are printed there are some dots of the black lines in few other examples if you look at it comic strips you can see a homogeneous dot are painted to give a darker shades.

So you can see this if you zoom in, so this might be lot of blue dots which creates this patch. So it looks, it does not look hand painted. So we are going towards the more machine generated print technology and this is Howard Miller's posters again this has a lot similarity with the comic strip art style and even the fonts used over here in every painting has a similarity with the comic strip.

(Refer Slide Time: 14:37)

Pop Art



So this is Campbell's Soup Cans painted by Andy Warhol. This talks about the everyday repetition of same work. So this repetitive painting of different soup cans. Only the flavor of the soup can changes in the different days. So this talks about the repetition of everyday human life and the boredom of the life with the painting and this is a print of Marilyn Monroe, the famous actress Marilyn Monroe's face.

And this is again the repetition is one style of his design and lot of vibrant colors are used and the color changes in every print and together it gives a collage of the same painting in different colors.

(Refer Slide Time: 15:22)

Pop Art



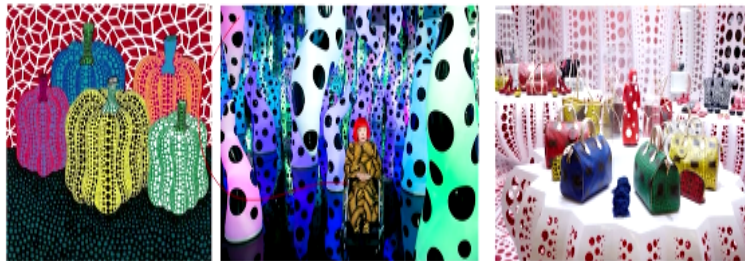
Sigmar Polke
Visual aesthetics inspired from mass media
and consumerist culture

So another painter Sigmar Polke in much later time uses this dots and printed technology into the painting and this is also a juxtaposition of different color patches and the polka dots which uses in the painting.

(Refer Slide Time: 15:42)

Pop Art

Art in consumer product



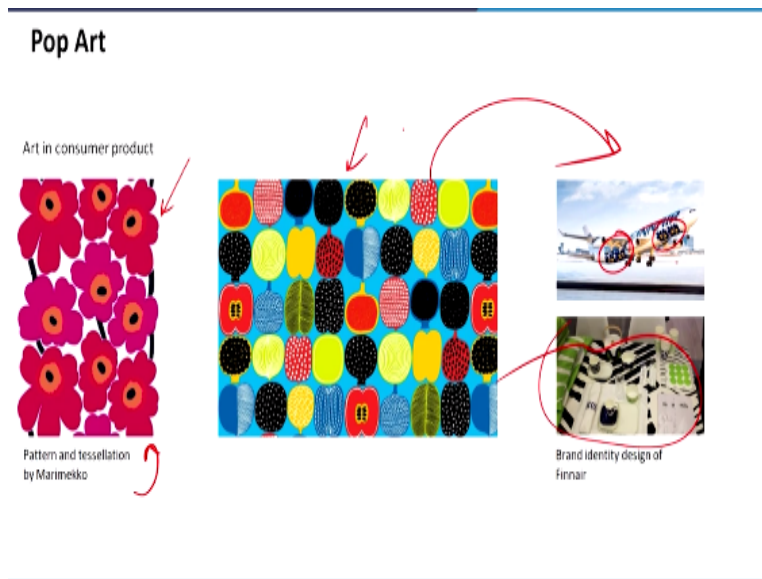
Yayoi Kusama
Usage of Polka dots in Art, Installation and fashion design

Louis Vuitton bags

Another examples of painter Yayoi Kusama. So she uses this polka dots again to create the installation as well as the graphic design and she also have collection in the Louis Vuitton bag and accessories collection and this also she uses this polka dots. Polka dots become very famous in pop art movement and lot of polka dot has been used in fashion and graphic design and creation of background pattern in pop art movement.

And also we can see in her painting this polka dots are there and lot of patterns are created and these are flat patterns to distinguish different elements in the painting. So if you want to create a website which talks about the pop art, pop postmodernist movement, so these are the main design elements you should look at. So this polka dots and this vibrant colors repetition and a particular kind of typography will help you to design this pop art movement. So a pattern is also quite important in this pop art movement.

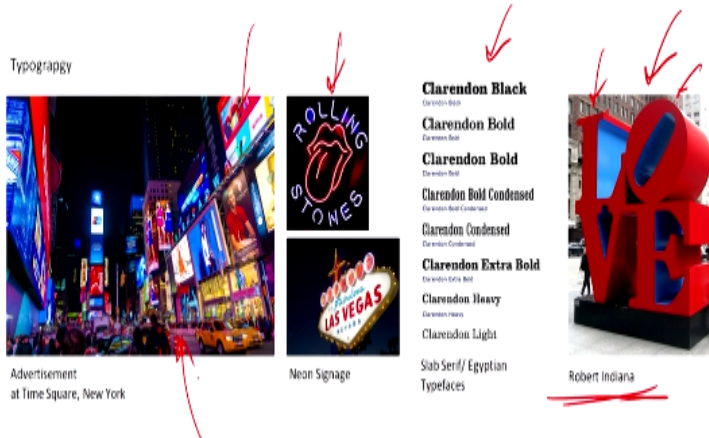
(Refer Slide Time: 17:08)



So this is Marimekko one of the Finland based company, design company and they design the textile. They have tagged with the Finnair airline and they design the accessories and merchandise and also they have the prints on Marimekko on the cargo of this flight and so these kind of patterns and tessellations are there in the Marimekko's design.

(Refer Slide Time: 17:38)

Pop Art



And in typography, we will discuss typography in the next 2 classes but the mostly in this pop art style the typography of this neon lights and more dramatic combination in the typefaces was there. And Clarendon is one of the very famous typefaces. This is called Slab Serif. We will discuss this when we discuss typefaces is there. And Robert Indiana have designed installation which is called love.

And he have also used a very drastic color combination which is vibrant red and blue and with the Slab Serif fonts which is iconic pop installation. And if you look at New York's Time Square, so all this colors and this neon lights and the advertisement gives a very pop feeling of the space. And also few of the signages which has if you look at the pop signages you can understand what is the style of pop art movement in a better way.

So now let us move into the digital media which came in the much recent era. What happened in the digital media and what is the visual style. How it evolved in the digital media.

(Refer Slide Time: 18:55)

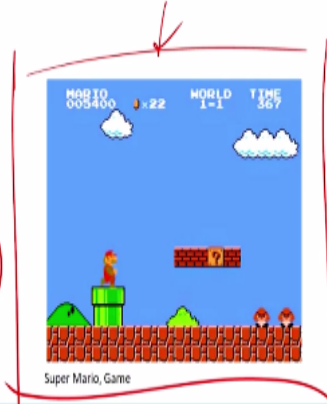
Contemporary Movements in Visual Design

Digital Media

Initial phases of digital graphics

Low resolution pixelated graphics

↓
ABCDEFGHIJKLM
NOPQRSTUVWXYZ



So in the initial stages, the digital graphics has a low resolution pixelated graphics. So if we look at the first typefaces which was there in the initial GUI or the graphic user interface was pixelated graphics and also the first gains of this prints which is the first initial part of Prince of Persia and the Super Mario. We see these kind of video games and computer games.

And windows logo was also a pixelated logo which right now is much more refined and has a gradient tone. And here we see pixelated style become a visual design style of game, websites or the web application. And then based on that some recent movie and recent game was also designed based on that particular style which we had in the early 90s, 1990s.

(Refer Slide Time: 19:55)

Contemporary Movements in Visual Design

Digital Media

Initial phases of digital graphics

✓ Low resolution pixelated graphics :
as a contemporary inspiration of design



Mine-craft, Game



wreck it ralph, Animated film by Disney

So this is low resolution pixelated graphics is translated into the few of the contemporary design. This is not because this style in Mindcrack game if you look at is a 3D game where you can create different objects and elements but this Mindcrack game gives the feelings of low resolution 3D design. But this is not because of that they cannot use the contemporary technology. It is just that they have selected that particular visual style to depict the design idea.

Then there is another movie by Disney, Wreck it Ralph. This is an animated Disney movie. If you look at the movie, this 3D animation mimics the style of the old pixelated style design. So it is not again, it is not just their incapability of using the new graphic tools. It is just the style. So they have a particular design style when it is a, pixelated style has its own beauty. Every design style has its own beauty.

So you have to, as a designer you have to select which particular style I want to put in my mood board. So that is very important. So any style can work for your design but you have to think what kind of communication you want to give with the users. So which particular style will work better? So it depends on your design idea. It depends on what customer want and what you want to portray from your design. So the next another style which developed from the iPhone and iOS device is skeuomorphism.

(Refer Slide Time: 21:43)

Contemporary Movements in Visual Design

Digital Media

Skeuomorphism

In digital media it is much known as visual language of ios platform

Greek skéuos: container, morphé: shape

The graphic resembles another material by applying visual texture of the material

Use of texture, beveled rounded corners, drop shadow, usage of gradient shades are some features.

Skeuomorphism is connoted in the initial iPhone design style when Steve Jobs started talking about a particular design style where it will be different from this pixilated design style and it will mimic, the GUI will mimic the exact texture, color of a particular material. So skeuomorph, it comes from a Greek word Skeuos which is a container and morph is shape. Whatever is the container of this design or the graphic user interface, it will take the shape and texture and color of that particular container.

So this in digital media is much known as the visual language in iOS platform. So graphic resembles the another material which is applied as a visual texture of the material. So use of texture, beveled round corners, drop shadows, usage of gradient shades are the some of the main features of the skeuomorphism.

(Refer Slide Time: 22:43)



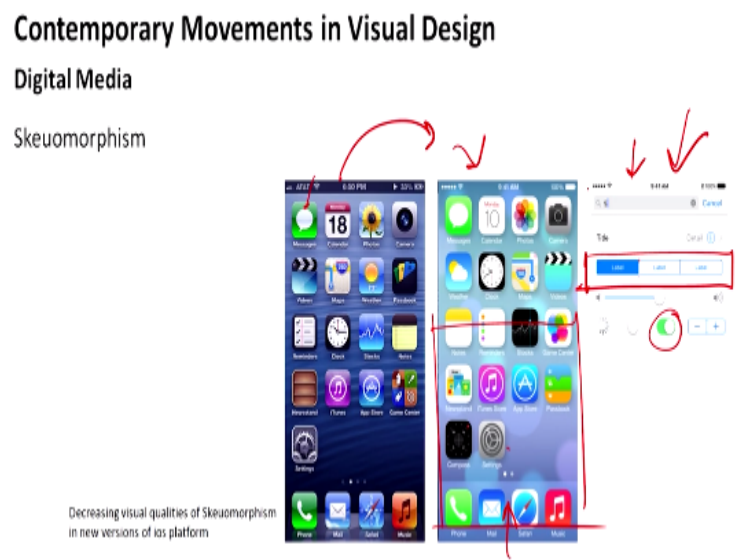
So if you look at the earlier iOS devices, so this is a MacBooks, iPads, iBook app. So when we open the iBook, this is in the previous iOS devices. Right now it does not look like this. It looks like a book shelf and all this front page of the books will be stored like, it is stored in the bookshelf and it gives the visual texture of the wooden cabinet. Now also in the earlier iOS if you look at the button, it has a light, each and every button has a lighter shine on the top.

And this has a beveled edge and there is a drop shadow on the bottom. So it looks like a button which is placed and this is 3D and it has a gloss. So it looks like a glossy button placed on your

screen. Each and every button looks like that and if you look at, so this looks like a reflective table which also gives a shine of the button on the reverse side. So this is how the iOS skeuomorphism look like and each and every button if it looks like this.

This looks like a 3D line. So there is a shadow going on from both the sides and this has a depression and all this is designed in detail to mimic the exact 3D look and feel of this particular design.

(Refer Slide Time: 24:16)



Now later when this skeuomorphism is a style which was in the previous iOS but later we are moving from the skeuomorphism and right now skeuomorphism is not in the visual style. So iOS also changed their skeuomorphic style and they have shifted from the skeuomorphism which they have earlier envisioned and right now their buttons and everything does not follow this skeuomorphism as strongly as it used to follow earlier.

Now this is much more contemporary iOS devices look, maybe in the iPhone of the new generation iPhones. So they have deleted all this shines and it looks more flat. It does not look like a 3D button and the drop shadow is still there but it is much lighter and many of the cases when you swipe from bottom it might look like glass screen on top. But it does not give you all this detailed mimicry of the exact texture which used to happen earlier.

This is right now another iPhones device and if you look at the buttons and this breadcrumps and the buttons and all this tabs it does not give you the textures and shapes of a beveled skeuomorphic style which was there in the earlier style. So this is much flat and one single tone is there. The bevel is there but still it is diminished as the skeuomorphic style which was there earlier.

(Refer Slide Time: 25:53)

Contemporary Movements in Visual Design

Digital Media

Design guidelines in ios platform

<https://developer.apple.com/design/>

You can go to this link to see the developers guide of apple's skeuomorphic design if you want to read further.

(Refer Slide Time: 26:02)

Contemporary Movements in Visual Design

Digital Media

Material Design

The visual language evolved by Google

Minimalist, pure geometry, bold flat colour without gradient

Flat icons

Focusing on UI transitions



So there is another design style which is called material design. It is visual language evolved by Google. So this is quite different from the skeuomorphism and material design is much newer style and skeuomorphism came before material design. So you will see lot of design. Right now is in the style of material design rather than skeuomorphism and after material design flourished, apple started changing their skeuomorphic visual language.

And that is why the apple's new visual style does not follow skeuomorphism as it used to follow. So this is minimalist in nature, pure geometry, bold and flat color without gradient and flat icons. In skeuomorphism we have seen beveled icons, drop shadows and here there are drop shadows but in very different way and bold flat colors are there and there the colors were selected based on the material. So texture was more important than colors.

And here different flat vibrant colors are more important in material design. Focusing on the UI transition. So lot of different UI transitions are there. So UI transitions are when you click or interact with a particular button, what it does. So sometimes it will flip, sometimes it will give a dropdown. Sometimes it will swipe. So all this transition to go to the next action is called UI transition, so user interface transition.

When you interact with something, some action will be taken. But before this action how it will be animated. So that is called the UI transition. So they have focused on UI transition a lot to give a little bit of gamified experience in the web application.

(Refer Slide Time: 27:49)

Contemporary Movements in Visual Design

Digital Media

Material Design

The visual language evolved by Google

Minimalist, pure geometry, bold flat colour without gradient

Flat icons

Focusing on UI transitions



So this visual language is evolved by Google and these things are there. Now you must have also seen Google have changed their logo. So when Google talked about this material design and earlier Google's logo was not following with the Google's material design style so Google had to change their logo to go with the material design style. So this was the earlier logo of Google and this is the logo of Google which goes with the material design.

Now you can see in this logo, this is actually a Serif font. We will discuss what is Serif. But these are the ends which are, protruding ends are called Serifs and there are no protruding ends so this is Sans Serif font and here we can see a lot of change of tangents and lot of change of thickness of the particular font and typefaces and this is more ornamental font and here we can see a pure geometric font and one particular the color is used and there is no change and no tilt and this is a very simplistic minimal logo which goes with the material design.

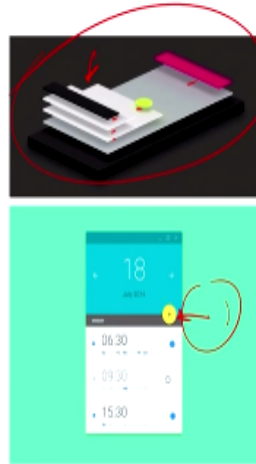
(Refer Slide Time: 29:00)

Contemporary Movements in Visual Design

Digital Media

Material Design

- ✓ Material as metaphor
- ✓ One on top of other, visually represented by adding drop shadow
- Content can displayed on material without changing its form
- They never bends or folds



Now this is the material design's few of the examples. So material as a metaphor they are using so each and every tab and everything looks like a metaphor of a particular material. They are like different plastic materials on top of each other and they have a particular shape and they can go near another material. They can elevate from another material and the drop shadow and their relative position will give the feelings of this material.

So we can see this animation how this circle is going, blinking and going and transforming into the another shape, becoming a square. So one on top of another. So here this is in 3D visualization of the material. So if you look at, so this drop shadows will give you the relative distance and yeah visually represented by adding a drop shadow. This is one to represent that one material is on top of another material. Content can display on material without changing its form.

They never bends or folds. So one material cannot bend or fold on top of each other. They can transform and become, take the shape of another material.

(Refer Slide Time: 30:24)

Contemporary Movements in Visual Design

Digital Media

Design guide for Material design

<https://material.io/guidelines/motion/material-motion.html>

So this is the guideline of all the material design's detailed guideline. So you should look at material design and skeuomorphisms guideline if you want to know more about this visual style and these are major visual style which is going on in the visual communication part of the UI design. So you must look at this two different styles and read detail about it. Thank you.