

Visual Communication Design for Digital Media
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Lecture - 01
Introduction-Visual Design on Digital Paradigm

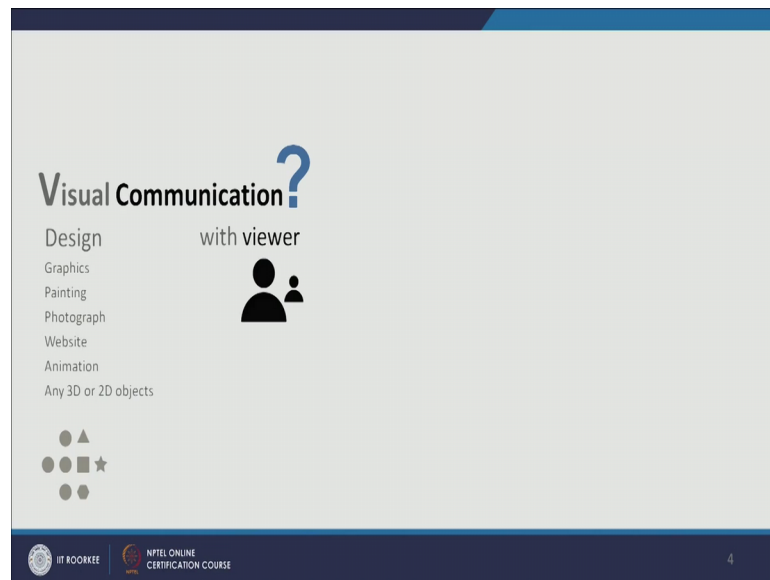
Welcome students to the online NPTEL course Visual Communication Design for Digital Media. This is the first lecture; and in this lecture, we will discuss about the brief introduction and what will be the overall structure of the course. So, here you can see that we will talk about visual communication and that is the subject and we will discuss mainly on the paradigm of digital media.

So, visual communication is a broader fields and it also encompasses any kind of communication happens from the any designed object to with the viewer or the user. And there can be different paradigms, for example, it can be a painting, it can be hand painted painting, it can be drama, it can be photographs, it can be any 3 D object and how people interpret; and through visual interpretation and visual perception and a communication happened between the viewer and the design object.

So, in this complete visual communication domain, we will only a talk about the new emerging paradigms of digital media. In digital platform, there are many other options in within the digital platform itself. So, it can be a website, it can be animation, and game design and it can be any graphics generated on digital media not hand painted, but generated on digital media and it can be anything which we the designers do through digital media and communicate with the user.

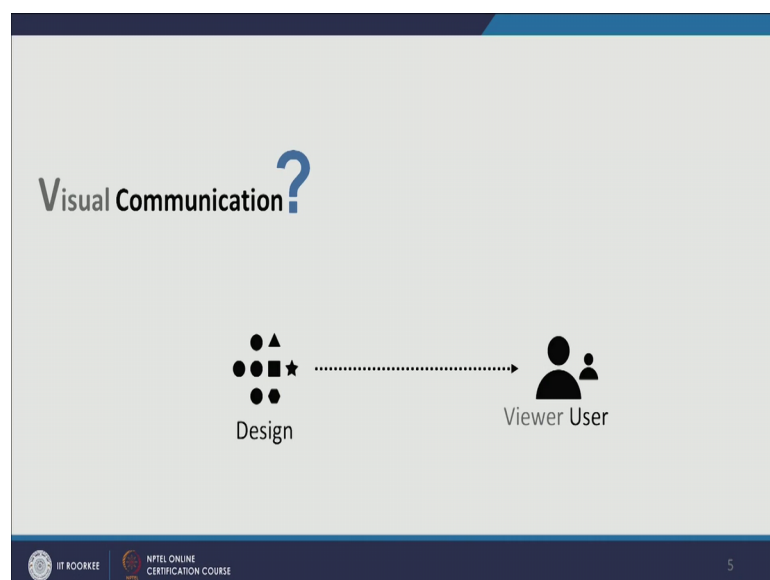
So, let us discuss what is visual communication in holistic approach. So, first visual communication has a first term of visuals. So, visual can be the design. So, it can be graphic design, it can be a painting, it can be photograph, it can be website web application, it can be animation or game design or any 3D object or 2D object we see around ourselves. It can be even the signage's, and the pictograms what communicates with only icons and images. And how we are interpret and those things are the visual and how they communicate with the user.

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So, there is two factor, one is the design and another is a viewer or the user. So, the connection between them, what are the principles what are the theories and how we communicate through the visual and how we interpret that is what the visual communication design is. So, from design to viewer, so here if we think that there are two things one is the design and another is the viewer.

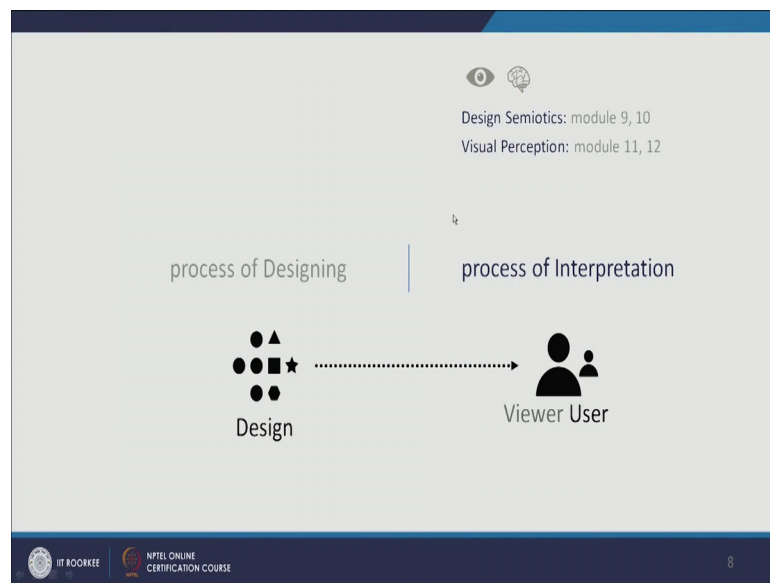
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So, from designers perspective what comes first the design designers first design the thing and then they give it to the then they open this for the audience and then the

viewers perceive that. So, the flow goes from design to the user. But if you think about the users perspective, so users first perceive that and then they try finding the meaning of the design. So, from the users perspective they have their own contextual learning, they have their past experience of the visual; and from that they try to decipher what is the meaning of the visual and then they start understanding the design. So, from user perspective, so it works in the other way.

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So, it has two process. So, process of designing and process of interpretation. For designer: so first process of designing will happen but that has to be based on the process and understanding of the interpretations. So, designer has to know what is the process of interpretation what is the process how people think, how people perceive and but still the process of designing comes first in the designers end and then the process of then they leave it to the user and how they interpret. But for the user, first this start processing and first they start interpreting and then they understand what is the design.

So, there are two things we will discuss in the course. So, in the process of design, so we need to understand; what are the elements of design? So, with what kind of elements what are the different elements there are five basic elements of design line, shape, texture will discuss that and that will be discussed in module 2 and module 3, we will understand what different elements we have, what are the tools we have to create our design. And these tools are very generic, these tools are generic and this tools can be transformed into

animation, this tools can be similar tools with the similar tools we can design website, we can design any other things.

Even the traditional media or the hand painted things has based on the same elements of design. Then the principles of design how we arrange these elements with what kind of theories. And in principles of design it also it is not just the process of design it is also derive from the interpretation process of interpretation. So, how the user perceive it? So, based on that we have to arrange all these elements of design into a composition it can be just 2D composition it can be it can have a timeframe, so that it becomes animation or game design or the same process will follow even in the websites.

So, these principles we then learn in module number four and five. Then there is not just the elements in elements we have shapes colors textures and all these things. We also have some text. So, we need to understand; what is typography and what are the different typefaces available. So, when we select the typefaces from the already available already design typefaces, so we need to understand it should match it should go with the design and what kind of style the typefaces have, so that we can judge what typefaces suits your design better.

And also in sometimes if you are designing logo if you are designing some brand identity for a company, then you might need to design your own typography. For that also you need to understand what kind of typefaces are available, what are the different font families different kind of different visual styles they convey, so that based on that we need to incorporate the typefaces into our design. So, understanding of typography is also very important and this will be discussed in module number 7 and 8.

Then we come back to the come to the process of interpretation. So, we designed something, but we need to know how people will perceive that other. If we do not have an idea of how people perceive a particular design our design, we might think that design will be successful, design can successfully communicate with the user, but they are they might some design can be lost in communication. So, we need to understand; what is the way of communication and how people perceive a visual. So, for that we need to discuss the design semiotics. So, semiotics is the perception of signs and symbols. So, we need to understand if we are using some icons, if we are using some pictograms how people will perceive that that design semiotics is will be discussed in module 9 and 10.

Then we will also discuss about the holistic composition, how people perceive visual composition holistically not only with the signage's and pictograms, but the meaning of photograph, meaning of the complete composition and how people understand the layout in a total composition with typography with all the visuals together and how people read. So, here the principles Gestalt principles, rule of third Gutenberg's diagram and all these things will come and that is termed as a visual perception as module and this module is there are two modules 11 and 12, we will focus on visual perception and people's interpretation.

So, here we have a completed the mostly are the visual communication part. We will discuss about the process of design and we will also discuss about the process of interpretation. So, in process of design will discuss how to design a particular domain and we also simultaneously have to know how people interpret that, so that our design becomes much more user friendly and communicative with the user.

But there is another thing which is like if we were discussing about the visual perception and semiotics and design principles, so these things are very generic and these things does not vary based on different people's perception because here the users factor is also there. So, each and every user has different background different socio cultural backdrop. So, their perception, their understanding is different and they are preprogrammed with some kind of a visuals they have already seen. So, they have their own socio cultural background and we call that in the mental model they have a particular mental model of each and every visual.

For example, if we try to convey some flower, so it can be a very abstract form of a flower, it can be a very realistic form of a flower, but people who see looking at it should be associated with the particular kind of flowers to recognize that. So, if people have recognized about that and people have a different kind of understanding of that we can even abstract even make it more simplistic, even we can deconstruct the meaning of flower we construct the it in terms of elements of design. For example, we can just take the line quality and we can just take the color and abstract shape of the flower, and people who are understand who have seen that can decipher the meaning out of it. So, we will discuss this in a due course of this lecture.

So, what we were trying to say is like it has a contextual connotation and its subjective. In that subjectiveness, we will also discuss in the process of interpretation the in visual perception, but more subjectivity also adds in terms of time. So, some style of design becomes old in due course of time and some style of design becomes new, and we follow on that and some a style of design also has some association with the different a timeline of the design. So, for that we will discuss the contemporary visual language in design and that will be spread in two module number 12 and 13.

In this phase, we will talk about how visual style evolves. So, we will discuss from mostly the contemporary visual style we will not discuss the history of art and design because visual communication design and in digital media is a very new domain, and we will only discuss the contemporary phase, we will start with the renaissance and industrial revolution from where we start discussing the contemporary. So, in between that we will have modern a modernist movements; and post modern movements of art that time as visual digital media is a very new thing. So, we also need to understand what happened before the emergence of digital media that is traditional media. In traditional media, what kind of movements art movements and design movements already happens. So, we will discuss a modernist movements where Baho de stijl and Archnova and all these movements will be discussed and the postmodern pop art and other movements we will discuss.

And then we will come to the digital media paradigms. So, there we have Apple's design for example, Apple's design style and Google's material design style. So, we will discuss about the skeuomorphism that is the design style of Apple and IOS platform and on the other side we have Google's material design. So, what are the different visual qualities they have, and how they are different, and how they are evolving. So, those things we will discuss in this module number 12 and 13.

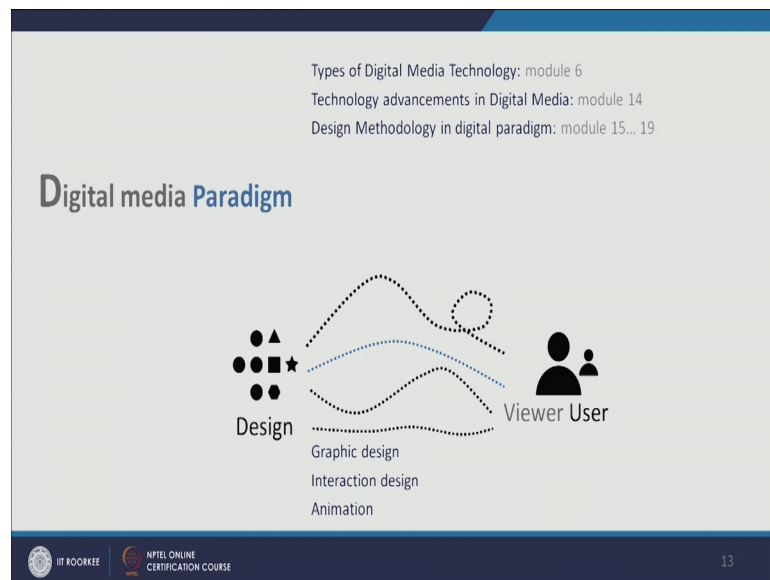
Then we talk about the design paradigm. So, till this phase we were talking in general of in the general terms of visual communication, now we will come to the paradigm of digital media. So, how in digital media paradigm, what are the different modes of designing, what is the tools and technique, because when we talk about a paradigm a particular platform or particular methodology, so we need to understand what are the different tools and techniques available. Because tools and techniques for hand painted visual communication when somebody is painting a poster with brush on canvas, the

tools and techniques are absolutely different, and when we are using digital media the tools techniques are absolutely different.

And they also give us a different opportunities to design like for example, in brush and canvas, we have to go with a free flow of our design skills. And in digital media, we can also tweak that, we can change the design, we can iterate and we can there are some opportunities, for example, we can have user's opinion. So, if the users are liking it, then we can go ahead with the design, but if the users are not liking it, so if the communication between the user and the design is somewhere interrupted, we can change the design and we can create multivariate options. So, different low fidelity prototypes or alpha-beta prototypes we can create in digital media and taste and then select the best option or iterate or create a new option which can be a better suited for the situation and then launch the design.

So, we have lot of other variations. So, the methodology is based on the method paradigm techniques of designing the methodology itself is different, so that we will start discussing.

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So, we have different modes of communication, but we are talking about digital paradigm. And in digital paradigm, we will focus only on interaction design, web design, and graphic design and animation. These three are also very different from each other their methodologies are different, but similar principles and elements of design and

similar concept can be followed. In interaction design, we will emphasis on the interaction design more and will discuss about what is the process. So, how in corporate office how this process of web design works from inductive or the bottom up approach of design. So, from ethnography or doing the user survey, then ideation a method, and then a starting different multivariate low fidelity prototype, and how we gradually start proceed towards the final design, so that will be discussed in the introduction design methodology.

And then in animation, we will mostly focus on the 2D animation because 3D animation takes lot of other challenges like modeling that in 3D and other software learning the software is very important, and how to move those characters in 3D those are very important. So, we will stick to the 2D animations and what are the different processes and what and with some case examples we will discuss that. And also in graphic design, so graphic design in I mean now steel image and posters we will discuss.

So, here in module number 6, we will discuss; what are the different types of digital media technology available, and how this field is emerging and how they are different and that will be discussed. And it is a brief introduction about the field that will be given in module number 6. And then we will proceed further and technology advancement of digital media, what are the different technologies are available, and how what is the future of digital media technology, because this technology is a very a new technology and still emerging, it is changing rapidly. Even the paradigms within the digital media technology are rapidly changing.

For example, right now you are we were seen digital interfaces through laptop, desktops and mobile and tabs, but you must have you might be aware about that there are many other emerging trends and techniques are added in this field, for example, augmented reality, and virtual and mixed realities are also emerging techniques. So, you must have also have aware about that must of heard about the Google glass, and Microsoft Hololens they give us an opportunity to perceive the mixed reality. So, we perceive what we see through our eyes is the physical reality and then in Google glass and Microsoft Hololens, they have an opportunity to superimpose the digital layer in terms of interaction design.

So, we have a combination of physical reality with the virtual reality. So, what we perceive through a digital media and which does not exist the virtual reality. In mixed

reality, they allow us to perceive the physical reality as well as the virtuality and as a layer on top of the physical reality for example, the way Google glass and Hololens let us perceive. So, in that domain if it is not regular display like laptop, and tab and mobile, so in that domain also the visual change has to be there and some kind of tools and techniques will be different in that media. And even there are also completely virtual reality headsets like oculus, rift and vive. So, in that the users are completely cutoff gets completely cut off from the physical reality in terms of visual. So, in those kind of equipments, they will give a complete they will imitate the complete three-dimensional visual as well as the sound. So, people only perceive the virtual reality.

So, then we will also discuss one by one the methodology in the first module number 15, we will discuss the generic design methodology how the inductive process of methodology happens and what are the different methodologies are available there, and how they evolved through time, so that will be discussed in module number 15. And from module number 16 to 19 onwards, we will discuss each and every different, different domains of this digital media, for example, graphic design, interactional web design and animation each and every process design methodology will be discussed in different modules.

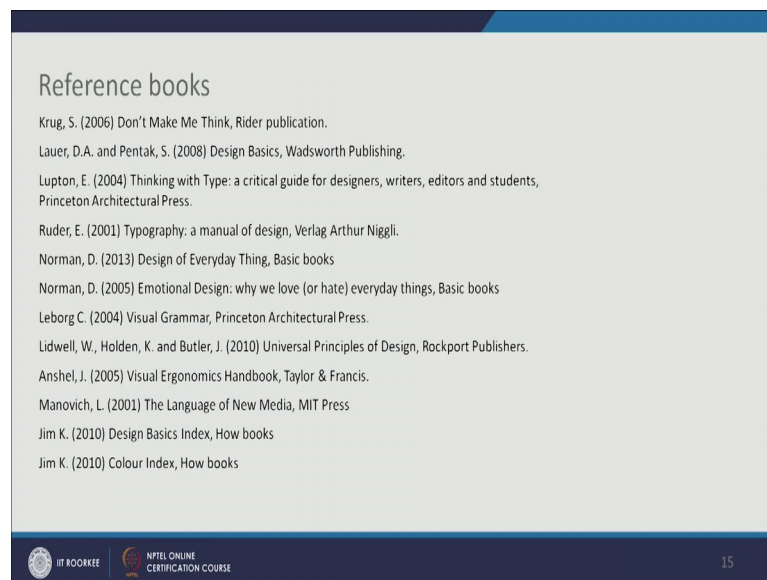
So, in between that also we will give you a software demonstration. So, in interaction design and visual communication or graphic design, it gives us an opportunity to iterate gives the designer the opportunity to understand what user perceive. And whether the communication is happening not only there is just an aesthetic attribute to it because there is a also a functional attribute, so that the visual should communicate with the user properly. For that, we need to understand whether the communication is happening through what we have designed, so that for that we need to understand the user. So, user survey has to be done, so that we are understand our design and then after designing the low fidelity or the initial stage are design we can also have an opportunity to test that with the user whether it is working or not. For that we have some software, some tool, some hardware and software combination to test that.

So, eye tracker you might have heard about this. So, eye tracker gives us an opportunity to track user's eye. So, eye tracker is a glass and variable head mounted eye tracker is we have that in our lab. So, that machine gives us an opportunity to understand where people are looking at and how their eye movements are happening in within the designed

display, so that we will give a demonstration about that. And we will understand how people are looking at perceiving your design and from that how we can receive for what iterations are required and what whether our design is working properly and able to communicate with the user or not. So, eye tracker is usability testing and visual analysis demonstration will be given and this is very important for the interaction designers and as well as a graphic designers.

So, in graphic designers, graphic design we can find out whether the focal point is the acting as a focal point or not, whether people are looking at the focal point, and devoting more time in the focal point or not. Whether the figure ground relationship is properly established, whether people are perceiving the figure and backdrop is actually acting as a ground or not that we can understand, we can interpret from the people's eye movement, so that demonstration has will be given. And also the usability testing for interaction design whether people are following a particular people are going with the information architecture, whether the information architecture is proper or not that can also be tested with the eye tracker.

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So, I would also like to give you some reference books, so that you can follow the lectures better. So, first in the initial stages when we will discuss about the Elements and Principles of Design, then you can follow the second book Lauer and Pentak's Design Basics. And then we when we move to the Typography, then Ellen Lupton's thinking

with type and Emil Ruder's typography a manual of design can be followed. And then when we start discussing about the semiotics and semantics theories and visual perception, then you can consult this book Design of Everyday Things and Emotional Design by Donald Norman.

And Visual Grammar also you can have a look at for understanding visual design principles. And then also you have Visual Agronomics which will also fit into the visual semiotics and visual perception chapters. And then when we discuss about the new media then we you can consider this Manovich, Lev Manovich book of Language of New Media. And then Design Basics Index and Design Colour Index as the very important books for understanding for the new designers to they can give you a guideline of what kind of design you are creating. And Steve Krug's Don't Make Me Think is one of the very comprehensive book on web design and their usability.

So, thank you. And in the next lecture, we will discuss about, we will start with the elements and principles of design, we will start with the elements of design in next two module and we will proceed to the principles of design on the further modules.

Thank you.