

Visual Communication Design for Digital Media
Prof. Saptarshi Kolay
Department of Architecture and Planning
Indian Institute of Technology, Roorkee

Lecture - 10
Design Semiotics and Visual Perception Part-II

Hello students. Welcome to the NPTEL online course on Visual Communication Design for Digital Media. We started discussing designs semiotics and visual perception. So, in the initial previous module, we started discussing design semiotics and today, we will continue the second part of the semiotics. In the previous module, we have discussed the semiotics has three different segments; one is the syntax and the semantics and the pragmatics.

Syntax is the structure or the arrangement of the signage's semiotics. The signs of signage signs or it can be even the photographs; it might not be an icon iconic signs or pictograms. So, the syntax is the structural part and then the meaning part of it is a semi on semantics and then the interpretation the user's communication or the functional part of his that is the pragmatics. So, semiotics we have discussed semiotics different parts which is; and we also discuss the semantics different parts and today, we will discuss mainly the pragmatics and the syntax and different parts of pragmatics and syntax.

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Design Semiotics

Codes

Part of the larger definition of "language"
A code is a specific set of signs agreed upon by a culture.
It is where semiotics and social structure and values connect

semiotics code Social and cultural Values

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Hindu Swastika Third Reich Swastika

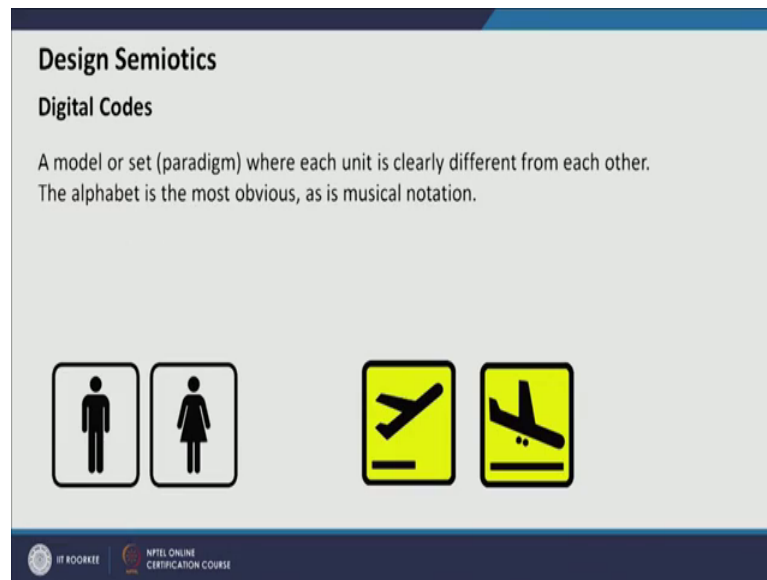
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So, a code; code is a part of semantics. We are started discussing semantics and we have seen that we have discussed icons, we have discussed symbols and we have discussed index and there is another thing is; which is code. So, code is the semiotics and it is cultural and socio cultural aspects. It is dependent on the socio cultural the part which is dependent on the socio cultural aspect is code. So, code is not a direct communication of icon with a user. So, user should have some cultural background learning or cultural backdrop to understand to interpret the code. So, for example, here we have the Om which is associated with the Hindu religion. So, somebody who have seen that sign seen this particular symbol is a will decode the meaning of it.

So, that is a how the code will only communicate with a particular socio cultural the person who has a particular socio cultural learning and even the same sign same symbol or the similar looking symbols can interpret 2 different person differently. For example, if we have this particular icon or sign to Hindu people, it can depict swastika and to people who have associated with the who have seen Nazi movements and the can also associated this, if we rotate that in 45 degree can have a Nazi symbol. So, 2 different thing and for 2 different culture; socio cultural people, it can associate, it can communicate the similar looking sign can communicate differently.

So, code can be of 2 types. One is a digital code and another is analogue code. So, for digital code, what it is. So, it has a particular set. So, if it differs; if the meaning will be different. So, it has a clearly different form of each other. For example, if you have a sign for the restroom or the toilet, if we have a male figure. So, it depicts some male toilet and it is a particular sign.

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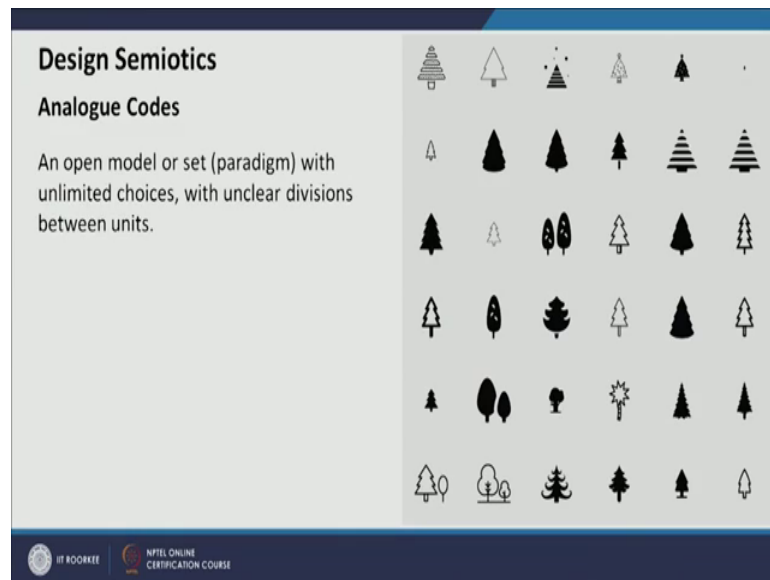


So, it has a particular way to depict this if we change this; the meaning might not be as clear to the people and for the female toilet we have a different kind of set. So, here if this is not this is a very abstract form of a female figure it can be different as well, but we have associated this with the toilet. So, this kind of image has to be there for easy identification for example, for other example we can take a flight departure and flight arrivals logos. So, both has flights and both also has a line which signifies the ground and the position of the flights which has a reference plane reference point. So, if the flight is tilted upward.

So, it denotes arrival. So, we cannot change the flights even the change the flights direction if we change the flights direction it can create a lot of confusion. So, a little bit of change in this kind of codes will differ the meaning and if we add 2 dots that is the wheels of the flights are there and flight is touching the runway. So, that is the arrival of the flight. So, if we change the reaction again it will; the complete meaning will be different and the communication and way fine in design of a airport will be hampered. So, digital code is very particular and we should follow certain kind of norms to represent that.

So, in case of analogue code; we can have a multiple option to depict a analogue code.

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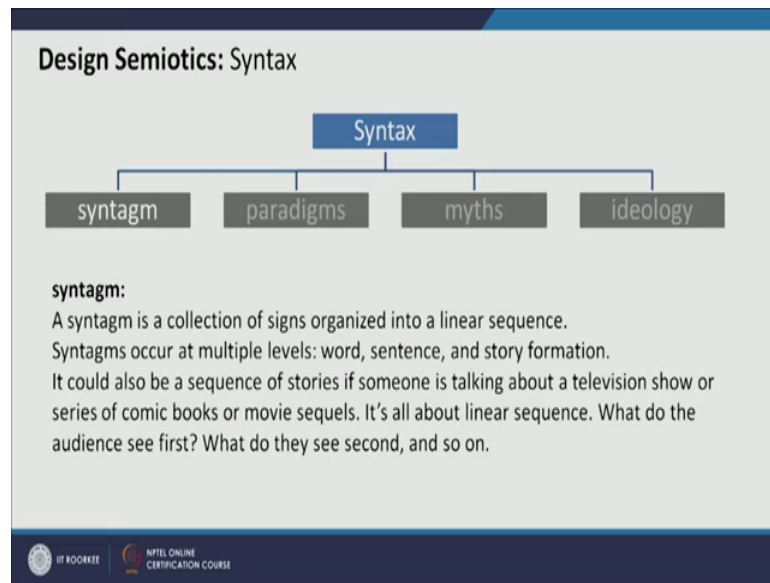


So, for example, if we want to depict a word tree, we can have a different kind of trees we can have coniferous trees we can have columnar trees we can have a globular or circular trees, we can say this; we can depict a tree with the mango tree or pine tree or different kind of trees and they can have a they can have drastically different forms, but still we should just have that stem and that can be part of the tree and that will depict the tree, but if you want to depict a particular kind of tree for example, coconut tree.

So, none of these logos will none of the codes will act only here we can see there is something which resembles the coconut tree will define a coconut tree. So, for coconut tree, all this set, it does not work. So, that is only this is a digital code, but for, but we depicted just tree, we take the word tree then all these thing access an analogue code and depicts the word tree.

So, next we; this also was a part of semantics, right. Now we will discuss the part of syntax and pragmatics. So, we start with the syntax for or which is the structural part of the signs and symbols. So, syntax has a mainly 2 different part.

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Which is syntagm and paradigm and from that we can have 2 other things which is myths and ideology which is a association with syntagm and paradigm. So, syntagm and paradigm is the main 2 different part of syntax and in myths there are syntagm and paradigm acts together and ideology also there is a sum some differences between means and which we will discuss.

So, first start with the syntagm; syntagm is a collection of signs in a particular organization. So, when we understand syntagm it has to be read in a particular direction. So, it has a sequence it has a sequence associated with it. So, if we change the sequence the meaning of the syntax or the meaning of the signages towards the user will be absolutely destroyed. So, that part is syntagm, but in case of paradigm, it is just an association of some signages. So, the juxtaposition and the way it is organized does not matter, but for example, for in the case of syntagm it matters.

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Design Semiotics: Syntax

syntagm:
In this image-based syntagm, based on western conventions of reading left to right, that the syntax of these image makes no sense. It has been rearranged and some images have been omitted, so that the story is confusing or not meaningful at all.



But when the blanks are filled, images are rearranged in the proper syntax (or order) then the sequence starts to make sense and becomes understandable.

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So, for example, we have the IBM's logo by designed by Paul Rand. So, Paul Rand's IBM logo; we see the normal IBM logo which is I B and M is written, this is the second option which we have designed. So, this is a just an eye which is the human eye and then there is a bee and then M is written the way IBM's logo M is written. So, it is the similar thing, but here if we jumble up the 3 different sequence, it does not read IBM. So, it will be just an eye and then B and then M. So, if we; if you think the M comes here and the I comes there. So, it is the B M I, so which does not have an association with the brand IBMs; with the brand IBM. So, the sequence here is very important and the way it sequenced; it depend the meaning is dependent on that.

For example each and every comics strip and each and every for example, we were discussing Patachitras; Patachitras if an each and every frames, if we jumble up that. So, the story will be destroyed and the meaning will not be there. So, here we also have a Deal Bird's comic strip which if we change the first frame with the second frame, the meaning will be the meaning of the complete story will be absolutely destroyed. So, for example, if we want to write the word book, it should be B, then O O K. So, if we jumble up, then it will be absolutely destroyed and then we come to the paradigm, unlike it is the various syntagm was there. So, it was the sequence was very important, but in case of paradigm, it does not matter because paradigm is a similar looking thing and similar sort of icons, if we change the icons position or if we replace the icon with some other kind of icon it does not matter.

So, for example, if we go back to the previous slide where these all these codes were analogous codes because if we think about a particular code it is an analogues code. So, this tree, if you think about a tree and replace this; so, this is a analogous code because it does it might be changed, but if we think about all these trees together and interpret that it is a forests or there are different kind of trees and so that gives us a sensation of paradigm.

So, lot of trees together gives a can depict a phylum or can depict a of flora the community of flora can be depicted with different kind of trees for example, if we have a icons of different kind of animals the community of fauna can be depicted. So, the communication of flora with all different kind of trees is a paradigm and the communication of fauna with all different kind of sorry; call communication of the Ya Fauna with all different kind of animals logo can be a paradigm.

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Design Semiotics: Syntax

paradigms:
The class of all items that can be substituted into the same position (or slot) in a grammatical sentence (are in paradigmatic relation with one another).

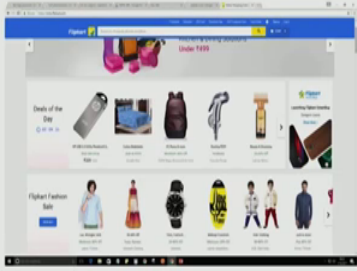
The diagram illustrates syntagm and paradigm. A horizontal row contains four boxes labeled 1, 2, 3e, and 4. A vertical column contains boxes labeled 3a, 3b, 3c, 3d, 3e, 3f, 3g, 3h, and 3i. The box 3e is positioned at the intersection of the horizontal row and the vertical column.

So, here we can diagram grammatical explain the paradigm. So, here also if we think that 1, 2, 3 and 4 comes in a sequence. So, this is what is syntagm and here in the vertical column this is paradigm. So, the horizontal row is syntagm. So, one comes the 2 comes after 1, then 3 then 4. So, this is syntagm, but 3 can be replaced with 3 a, 3 b, 3 c and so on so forth and if we replace 3 e with 3 a, the sequence of the meaning does not change. So, meaning will be similar and all the sets together of 3 is 3 a to 3 i together is a paradigm.

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Design Semiotics: Syntax

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The class of all items that can be substituted into the same position (or slot) in a grammatical sentence (are in paradigmatic relation with one another).



The screenshot shows a web browser displaying an e-commerce page. The page features a grid of product images. The first row includes items like a pink bag, a blue bag, a brown bottle, a white bottle, and a yellow bottle. The second row, titled 'Flight Fashion', shows various clothing items like shirts and jackets. This visualizes how different items can occupy the same 'slot' in a design, representing a paradigm.

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So, for example, if we take an example of an e-commerce website. So, here in the home page they will flash different products together. So, in the first home page they want to grab users' eye users' attention and they will show some product and. So, if we replace each for example, in the second row there are some it is talking about some fashion product products or the apparels. So, if we replace one photograph with different kind of another photograph with different person wearing different shirt or different cloths it does not the meaning the way it the meaning it conveys does not change because it is talking about apparel and everything every photo of apparel can be placed and it jumbles up.

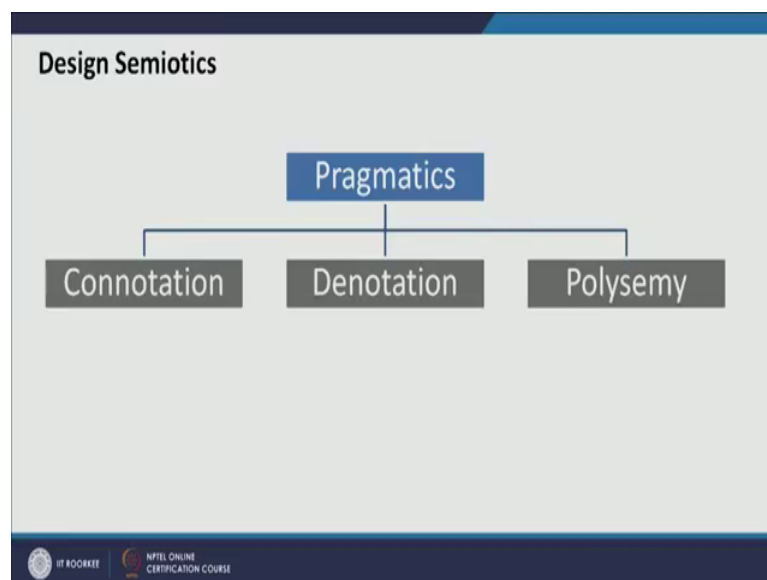
So, which photo comes after what does not change the meaning unlike to unlikely unlike to the syntagm what we discussed that I B and M has to a properly sequenced? So, that the meaning comes here goes to the user mind, but here if we change the sequence, if we jumble up the sequence the meaning does not change and together we can understand that this is a e-commerce website and there are and they have. So, many products and they are also selling watch they are selling means garments they are selling women's garments the sequence here is not important and does is is does not communicate to the user.

Then myth is it is not that important syntagm and paradigm is the most important thing, but myth is when there is a combination of paradigm as well as the syntagm in certain

cases it can happen and so we can think about a cow boy's story or the Roman's story this they are myth and lot of particular sequential storytelling and as well as the different that there can be different options in the story telling as well. So, paradigms and syntagm together creates a myth and ideology is when there is a code and then which has a connection and which rain forces through a structure and which can be interpreted through a common sense. So, there is a socio cultural aspect and which is actually a code. So, which is in which is the interpretation of a particular society. So, that comes under the ideology part

Then we come to the next important thing which is pragmatics or the meaning making thing where the users perception and the how user interprets all this syntax and the semantics what the designer designs and how user right now we have the social cultural context and how users are looking at it. So, syntax we have the sequence and we have the structural part of it them semantic is the meaning part of it and the pragmatics is the communication. So, meaning is there and user's socio cultural context is there users mental model is there. So, together how they are in how what is intraday relationship between that? So, that comes under the pragmatics.

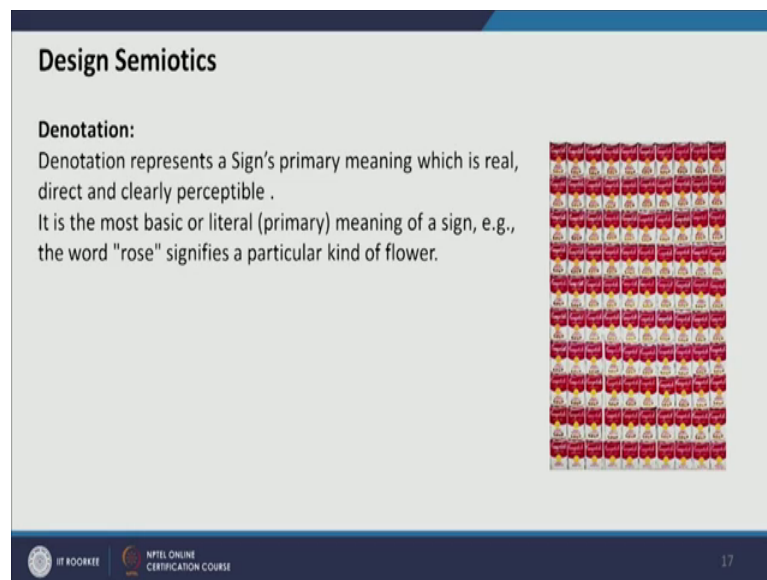
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So, pragmatics has 3 different divisions one is the Connotation the Connotating meaning and next is the Denotation and the third is the Polysemy. So, if we take the first thing which is the first we discuss denotation which is the easiest to understand and most

direct. So, denote denotation is the representation of sign which is very direct and which has the primary meaning and everybody without any cultural context and with lot of visual lot of a cognitive processes without lot of cognitive processing, we easily get the meaning and this is very basic and literal and it has a direct meaning.

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Design Semiotics

Denotation:
Denotation represents a Sign's primary meaning which is real, direct and clearly perceptible .
It is the most basic or literal (primary) meaning of a sign, e.g., the word "rose" signifies a particular kind of flower.

The slide features a grid of 100 identical tomato soup cans, arranged in 10 rows and 10 columns, illustrating the concept of denotation through repetition.

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For example, we were discussing that in semantics part we were discussing that munches scream. So, munches scream is a actually when the meaning goes it is not a denotative meaning because we do not see screen there we just see a person on a bridge and on and on and under a very reddish colored sky. So, that is there. So, that is the denotative meaning. So, that is the direct meaning and when we start interpreting that what can be the meaning of a red sky; what can be the person's expressions; meaning of the expression, then the part scream comes into our mind. So, that is not the denotative part that is the connotative part we will discuss later.

So, here we have gambles can hundred cans its postmodern painting. So, he have repetitively have drawn several tomato soup cans. So, in its denotative meaning; it is just a repetitive tomato soup can; it is a tomato soup can; in a lot of tomato soup cans association, but that is just the denotative meaning, but when we try to interpret the meaning of that. So, it talks about the postmodern modern is repeated daily life. So, that is not the direct meaning. So, in the connotative meaning; so, the hundred soup can has

the post modern postmodernist life it is talking about the life, but in denotative meaning it is just a soup can.


So, next it comes to the connotation a connotation is the signs secondary meaning. So, what it interprets the; for understanding the connotative meaning, we should think and there will be a mental processing the cognitive processing and then from denotative meaning we will come back to the connotative meaning. So, connotative meaning will not come if we do not understand the denotative meaning. So, denotative meaning will be first and then we process through our social cultural contexts through our own intelligence, then we can understand the next layer of meaning and it might not be just a process our intelligence, it can be for sometimes we should have some socio cultural knowledge to it.

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Design Semiotics

Connotation:
Connotation is a sign's secondary meanings. It leverages the viewer's past experiences, learned social rules and conventions. It is the secondary, cultural meanings of signs; or "signifying signs," signs that are used as signifiers for a secondary meaning, e.g., the word "rose" signifies passion.

It is not just "what" is pictured, but "how" it is pictured.



The image shows a painting of a deer with a tree for its horns. The deer is blue and purple, and the tree is black and white. The painting is on a light background.

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For example, here we have gonads particular painting which has social cultural aspects. So, it has a meaning to a particular; it has a particular meaning to the (Refer Time: 20:03). So, they paint the deer and which the horn of this deer is a transformed into the tree. So, the literal meaning will be there is a there is a deer which whose horn is transformed into tree, but only to the people who have associated with the Gond culture and the folklore can understand the meaning and significance of this painting.


Again we have this painting of Nandalal Bose Ardha-Narishwar.

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Design Semiotics

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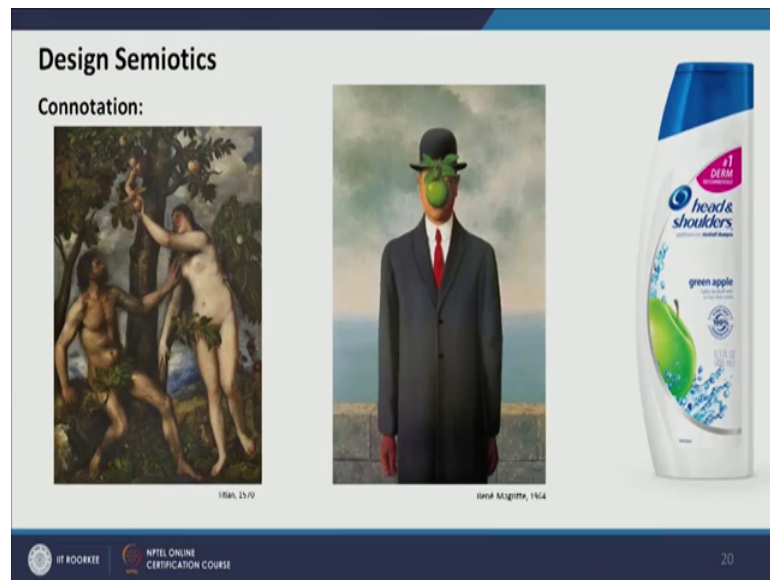


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So, it is Shiva and Parvati together combined in a figure. So, it talks about the holistic combination of the world where we have a female and male together and they are co existence and so, this meaning as is particular to some social, cultural dependent on some socio cultural idea and social cultural knowledge. So, if we do not have that knowledge and if we cannot interpret the meaning and even the color of color used and everything has some meaning associated with it, generally we depict Shiva with the white and he have depicted that the contrast is depicted with blue color and the Parvati has depicted with a red color which also has a cultural connection to it. So, these all these things comes into the connotative meaning.

And again; another example if we take an example of apple; so apple has a particular meaning and apple is a fruit that is a denotative meaning of apple, but if the apple is here in fissions famous painting Adam and Eve is there and the apple is there.

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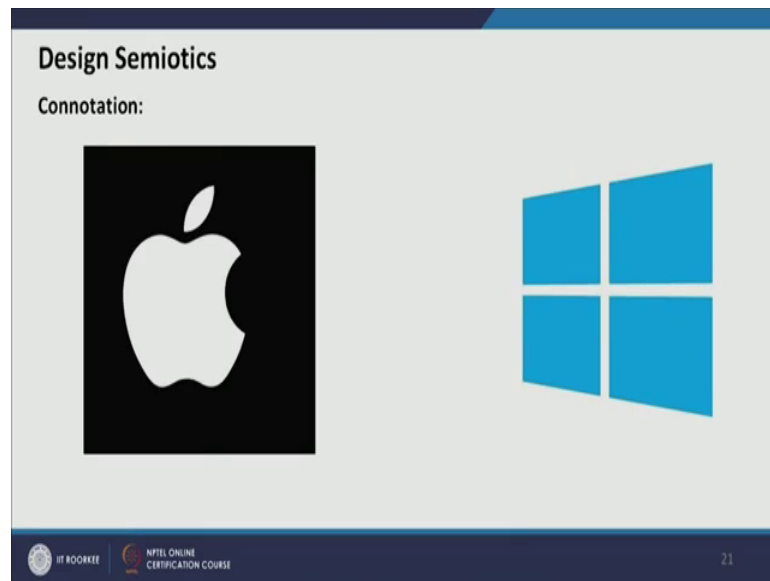
So, that apple here in this painting has a absolute difference connection and it tells a different story to us and if we know the story and then it is revealed to ask and again we have the famous photographs son of man. So, this is this photograph. So, we do not understand the meaning of this if we do not have the store if we do not understand if we do not know the story of Adam and Eve because apple is here from the story Adam and Eve; apple is a symbol of knowledge symbol of curiosity and that is why an man has curiosity and that is why we are different from the other animals. So, our face is not the realistic face it is not a detailed because each and everybody says is different. So, he did not wanted to a give a particular identities. So, it is that is why its son of man and the main thing is a man has curiosity that is why the apple is placed in front of men's face.

So, this is a connection drawn from Adam and Eve's story. So, if you do not know the story, we do not understand the painting and then it can also be depicted a same thing can be depicted in a different context if you put that same green apple in a different contexts, it can have a complete different meaning, for example, we have a head and shoulders packaging design here the apple does not have any connection with the Adam and Eve's story or the way it has been interpreted and it has been showed in the son of man the painting. So, it here the apple is just adjust the fragrance of the it depicts the fragrance of the shampoo bottle and it also shows a freshness and clean it the color of it and the juxtaposition with blue; a bluish tint of the water gives us a look of fresh and gives the

iconic a brand identity and it is just a shampoo bottles design. So, this does not have a connection to this story.

Even we can talk about the same apple. So, here the denotative meaning is if we think about the apples logo it is just apple which is bitten by some person.

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So, it is just a iconic image of an apple, but if we understand that is if somebody knows that this is a logo of a particular brand apple then they will understand this is the logo of this depicts a this does not depicts a fruit this depicts a brand. So, and also there is a second hidden layer into it because as Steve Jobs say that stay hungry stay foolish. So, is this apple the connection of this apple has also a connection with the Adam and Eve's apple because apple also denotes curiosity and it is also; it is not the full apple its half bitten apple because this give the connection of the story of Adam and Eve's apple and mans curiosity towards knowledge and forbidden things and here also we have a windows logo. So, it is for some people it can be just shill out of window, but for some people it is a logo of a particular brand. So, those are the denotative sorry connotative meeting meaning of a particular icon.

Next we come to the Polysemy. Polysemy is if you think about the etymology it is poly means many and semi is the meaning. So, it has the different multiple meaning. So, according to the Semutision Ronal Burthers, he first used this term and established this term that for different people as we have a different cultural social cultural aspects and

we have a condition differently same icon can communicate 2 different people in a different way. So, for instance in the; if we go back to the previous thing and also he says berths says that each and every painting each and every icon each and every images has a different meaning to the different people. So, each and everything is Polysemy. So, nothing is similar the way I am one person interprets a photograph or a image will be little bit different than the other person interprets the image for example, in the if we look at the second painting here.

So, for some people it can be just a person and you can think about the color combination you can think about the other aspects of the painting and for some people he can only think about the apples and this just juxtaposition of this peoples face and even for some people here the head and shoulders brands logo here this apple can be different things to this and even some people can draw a connection to this apple to the Adams and Eve's apple, if the people wants and that is absolutely subjective and depends on the user.

So, we go deep into Polysemy we try to understand how the Ppolysemy works. So, he says in Polysemy, there is there will be 3 layer of a message; one will be the linguistic message if something is written. So, the verbal; the text will be the one layer of message.

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Design Semiotics: Polysemy

He offers three pieces of a system for decoding or unpacking a message.

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graph TD; A[3 messages] --- B[linguistic message]; A --- C[coded iconic message]; A --- D[non-coded iconic message];
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The first is the **linguistic message**, the text itself with its denotations and connotations

The next part in this act of de-coding is the **coded iconic message**. The symbolic message, the imagery, the symbolism that it brings and the connotations. Here the reader starts to participate in the meaning by applying their knowledge of cultural codes and signs. So the reader is bringing all of that cultural baggage with him.

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The next will be non coded iconic message the very direct message which is similar to denotation. So, for example, if we take the example of 100 soup can by Andy Warhol; the

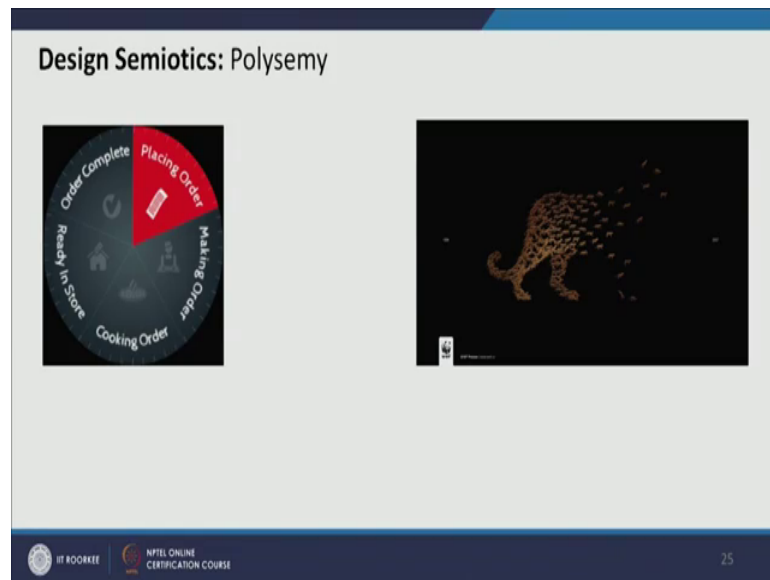
Camble's logo and it is also written that is the tomato soup can. So, that is the linguistic message; the first layer of message, the second layer of message is the non coded iconic message which is very direct which is denotative that is the soup can. So, there is a soup can and people understand that as a soup can that is the non coded and very direct message which we get. So, that is the first layer of interpretation that is the denotative message and the next will be the coded iconic message.

So, if we see; there is a repetitive Andy Warhol has drawn same soup can repetitively. So, then we will question our self why he have done that. So, what is the significance of the repetitive soup can then we can understand if we are diagnostic if we are properly in investigating what is the meaning and what is the context and being that in a post drawn in a postmodern era and being a postmodern painter. So, we can understand the connection, we can draw connection of the post modern concept and try interpreting it and we can find out that he is talking about the repetitiveness of post modern culture and also there is a advertising and public connection with a postmodern pop culture.

So, that also gives us that we are more dependent on the consumerism and we are dependent on can product. So, that also comes into our mind and then we un interpret the meaning of our daily life how our daily life has is becoming a repetition of the same day what we have like the previous days. So, that is the coded iconic the third layer of meaning

So, that has been discussed over here. So, detail of this. So, for example, if we also take the first photograph is the dominos the way dominos gives communicates with the users; what is the position of the; what is the condition of your order. So, here we are taking an example of a design web design or application design social for some people; it is just a timeline.

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So, it tells us what is the; your order is placed and then what is the next thing and what is the next thing what is the next process will come so far; the first layer of linguistic meaning will be people will read it and will interpret that what is the situation of the order of your pizza is and it can also be coded as this is a time frame that is the direct non coded meaning. So, people will interpret this symbolically this is a time frame this is circular time frame and if we read it that is a linguist communication, but for some people as who is giving the order for them; the pizza, the shape of the pizza and the way pizza is cut, everything is known. So, they have seen pizza.

So, they will associate the shape of the pizza with this spice. So, this looks like a pizza and if we have seen that and so that comes into our mind; so, there is association of coded association or coded meaning into it and that has been used in a very interesting designed feature of this dominos pizza delivery mobile application.

Here also we have the WWF's logo and the advertisement over here. So, here the first link meaning which is the linguistic meaning will be; we read that this is WWF is written there. So, we can understand; this is WWF's advertisement and the next non coded meaning is. So, this takes a form based on the adjusters principal and we also have seen shires figure ground relationship we can interpret this is there are lot of tigers and this forms a the outer holistic big picture is also tiger and the smaller fragmented parts are

also smaller parts of the tiger that is a non coded meaning, then if we start interpreting why this has been designed in this way.

So, it could have been just a chill out of a tiger or it could have been just a photograph of a tiger, but if you see from this side. So, we start reading from this side to that side. So, our eyes also move from this side to that side which we will discuss in the next module. So, here there are lot of tigers. So, there is a density of tigers and the density of tigers is reduced. So, it is dying. So, it gives the message that the densities of tigers are reduced because of the human activity and which is negative impact on the echo system of the earth. So, that message is given through a layered and coded iconographic expression.

So, through the figure ground relationship; so, here the general density of the tiger is fading away and even we see the tigers face is this way. So, it is facing this way and it is facing towards a extinction. So, if it is placed in the other way, then we can the meaning could have been absolutely different. So, here there is also a part of syntagm. So, if we change the sequence if we change the face or change the direction the meaning can be different. So, it is the meaning could have been absolutely opposite. So, the tiger in density is increasing, but its density is decreasing because the tigers are faced this way the big picture tiger and also the smaller icons of the tigers are also faced this way. So, it is leading towards or its going towards the extinction that is the message of this advertisement.

So, thank you and in the next module we will discuss the visual interpretation and the how peoples people un interpret not in a sign or pictures or in a particular fragmented a micro level a smaller photograph or pictures, but holistically in a composition will discuss about the composition how we read the composition together in with icons with text with other words together and what is the principles and how our mind act cognitive principles will come. And we will discuss justice principles and other principles and interpretation of a complete visual design.

Thank you.