

User Interface Design
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Lecture - 16
Design Semiotics and Visual Perception

Welcome students to the online NPTEL course, User Interface Design. In this class we will talk about the visual perception and semiotics. So semiotics is the science of how people interpret signs and this subject came from linguistics and how we interpret the language of iconography or the sign but it is widely used in the visual communication design and user interface design and also the product design.

So when metaphorically we represent something or when we put a particular color what is the significance of that and how people interpret and how people psychologically perceive a particular color, icon, or the overall composition and how people read the narrative and also website can also have a narrative. So how from the starting page what are the information you give to the people and what is the next layer of information.

So the information gradually unfolds. So you can think about it like a small storytelling. It depends on the typology of the website. So website also can be a gamified interface. So there it will be more towards the narrative style, a narrative style will be more strong but throughout a particular process of the task flow. So for example a ticket booking. So there is a journey of the users. So user start and launch into the first homepage.

And then start thinking about the next so where they will go and then different flights or available trains or buses comes. And then the select and then they look at the timing or the cost and then they pay and then they do. So there is a journey and so that is actually a narrative. So that is a task going on and you can think that the task as a narrative. And also when you order food and everything so there is a process going on.

So there is a sequential task which is going on and how people interpret that and how all the informations together are helping people to remotely do the particular task which websites are

designed for it. So what websites or web designer wanted the task to happen, the way the task to happen. So user should understand that and then they should follow the similar way how designers have designed.

So initially we were discussing about the users designers conceptual model and users mental model. So that should match in the system image of the design. So for that all these metaphors and how people interpret design how people perceive the design the icons and colors is very important for designers to understand.

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Design Semiotics

Design Semiotics (signs)

- Theory of Semiotics
 - Ferdinand de Saussure
 - Charles Sanders Peirce
- Syntax, Semantics and Pragmatics
- Icon, Index and Symbol
- Codes: Digital and analogue
- Connotative and denotative meaning
- Structure: Syntagm and Paradigm

So in this class we will talk about the theory of semiotics, a brief history of semiotics and how it is divided. So we will discuss the Ferdinand de Saussure's theory and Charles Sanders Peirce's theory and how briefly we will talk about it. And then we will go to the main three part of semiotics which is syntax, semantics, and pragmatics. These three parts are three different parts of semiotics. So semiotics is the bigger umbrella.

Within that syntax is there, how different things are sequentially arranged and the semantics of the meaning part of it and the pragmatics and how people interpret and also we will discuss other things which is there within this three parts.

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Design Semiotics

Introduction to semiotics

Learning the various ways that designers can empower meaning and motivation by the visual choices



Semiotic analysis involves identifying the constituent units in a semiotic system (such as a text or socio-cultural practice) and the structural relationships between them (oppositions, correlations and logical relations).

So the main thing of the semiotics analysis involves identifying the constituents unit of semiotic systems such as the text, socio-cultural practices, the structural relationship between them, the opposition, correlation and logical relation. So there are based on the socio-cultural background of people the perception of icon might differ. So what the way, so it also depends on the target audience. So who is the target audience, based on them the design should change.

So not only the UI UX design also the visual design should change based on the particular target audience. So based on their socio-cultural context, their liking, their lifestyle, their perception of color is different, their choice of colors will be different, the way they read that is also different. For example we were discussing about the Gutenberg's diagram.

So that might not work for the people who read from the opposite side which is who read and write from the other side which is from right to left, for people from the Middle-Eastern country. So the Urdu and Arabic, they write from right to left. So they are conditioned in that way. So their reading habit will be different and if your target audience are them so the design principle should differ.

And also based on different region, different socio-cultural background, the color preference the meaning of different icons might be totally different. So the learning of various ways designers can employ the meaning and based on the target audience is also you should learn through the

semiotic interpretation. So there is two component, one is we have already discussed the design component and the design methodology. Now we are talking about the users.


We also talked about the users based on the user research and we will talk about the user feedback. So there we need to understand how we need to also understand how their perception is different. So we should not only be based on the user feedback on the last moment. So beforehand we should be able to understand what they might like and we should give the design, we should create the design based on their perception.

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Design Semiotics

Introduction to semiotics

Semiotics is the way we can pull an emotional response out of a word.
It is also how emotion happens with imagery.



In Design, **Semiotics** is:
The study of communication through signs and symbols; their use, interpretation and meanings.

The study of *how* meaning is created, *not what* is created

- Semiotics is the science of signs.
- It is the science of design communication.

So a semiotics, what is semiotics? Semiotics is the way we can pull an emotional response out of the world and it also helps how emotion happens in the imagery. So after looking at a imagery what kind of emotions and what kind of perceived interpretation can happen within the user. So they are different design elements. So all these design elements and how people react to it that is the main thing of the icons and the semiotics.

So it is the science of, semiotics is the science of signs and it is the signs of design communication and so this is where the semiotic plays a role. So between the design and the perception of the user, so what is going on? So that is the semiotics talks about that. So for example if you look at these two examples.

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Design Semiotics

Introduction to semiotics



So one is FedEx logo. So FedEx is the movers and packers. So they transport goods from one place to the another place. This is if you look at the logo of the FedEx, so you can see based on this figure-ground relationship and the solid and void, so there is a arrow created within this just a typographic logo. So that signifies that it is something to do with the movement. So that has been created based on this.

So in the first go we read the FedEx the typographic logo and then this orange acts as a the first when we read this white acts as a background and this blue and orange acts as figure and then if we look at the orange then orange becomes the background and this white again becomes the figure and then we see this arrow which signifies the meaning of the company. And also the basic example can be the color of red. So the color red for most of us signifies the danger.

And it might not signify danger all the time when we type it with the typographic the phonetics of danger or the letter of danger and then with the skull and bone then it strongly communicates the meaning danger. So if we just take red color it might be just a red signal or something it can also signify passion. But when we combine that with the type letter and also some icons which is the skull and bone then it together it communicates this letter danger.

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Design Semiotics

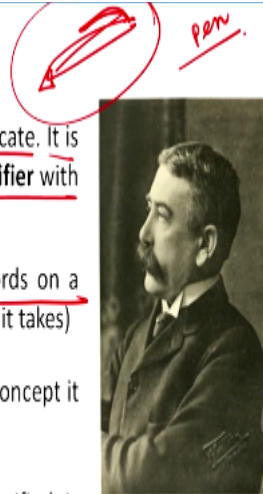
Theory of Saussure

Sign is the smallest unit of meaning used to communicate. It is the whole that results from the association of the **signifier** with the **signified**.

Signifier is any material thing that signifies, e.g., words on a page, a facial expression, an image. (the form in which it takes)

Signified is the concept that a signifier refers to (the concept it represents)

The relationship between the signifier and the signified is referred to as '**signification**'.



And the historic background if we look at, so Ferdinand design Saussure was the father of modern semiotics. He used this, he defined these terms in the beginning and later Charles de Peirce developed the similar philosophy and based on the socio-cultural concept. So based on their theory so there are few terminology we should discuss. One is the signifier and is the signified. And together what is it? So we are the signifier and signified are talking about a sign.

So sign is the smallest unit of meaning used for to communicate. It is the whole that results from the association of the signifier with the signified. So signs are the smallest unit and signifiers and signified are together helping the users to understand the meaning of the sign. So what is signifier? It is the material thing of the signifies, example the word on the page or the tactile expression or an image which are signifier.

And signified is the concept that signifies wants to refer. So for example if I say pen, the phonetic expression of pen is actually depicting the actual condition which is the signified. So the phonetic sound of pen becomes the signifier and the actual pen becomes the signified. So when I say pen, so that the image of this pen actual pen comes into people's mind.

And it can if people understand English, then only they will interpret this image of a actual pen will come into their mind. So the sound is just a signifier. The actual concept is the pen, the actual pen. Similarly, we can just draw a pen, icon of a pen. So that becomes the signifier. This

icon becomes the signifier of an actual pen. So it can be a very or it can also be a photograph of a pen. So photograph of a pen is not a pen. So it is a photograph. That signifies the actual pen.

So signifiers can be the photograph or the icon, or the phonetics or just writing the p and pen. So all these are signifiers and what we are signifying, so that is the signified which is the actual pen or something which comes into people's mind. So that is the actual signified thing is there in the mental image. So that is the mental image of the mental model of the user.

That is the signified is there and all this phonetics, the text or the photographs or the icons are signifier which is helping the users to recall that thing which is there in their mental model. So all this relationship between the signifier and signified is called signification. So that is the process.

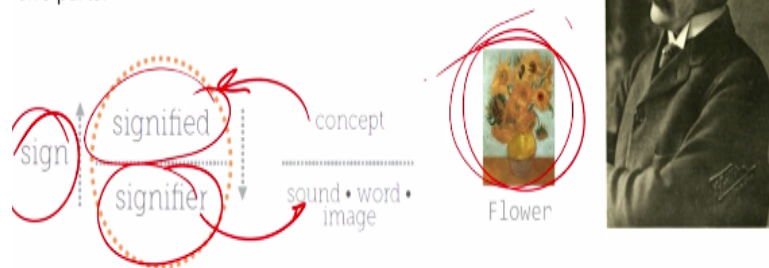
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Design Semiotics

Theory of Saussure

A sign is comprised of two parts: The signifier and The signified

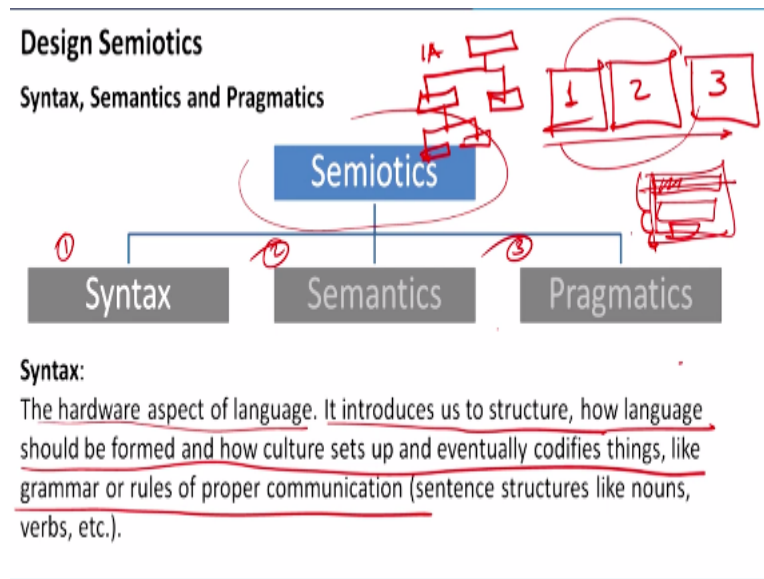
The complete sign is a result of the relationship between the two parts.



So here if we look at the sign is the element. So sign can be text icons and everything as it came from the linguistics. So initially that is the source of genesis of this concept. Then signified and signifiers are interacting between it. So signified is the concept which is the mental model and signify can be sound, word or the image and it can be flower. So this is a painting of a flower and then actually we think about the flower which we have already have in our mental model.

So this is a painting of something like some flower and then if we look at this the mental image of the sunflower will come into our mind. So this is the concept of semiotics, the process of how signifier signifies a signified. So that signification, process of signification is called semiotics. So it is a science of signs and this signs are not iconographic signs. It can be real picture, photorealistic picture the abstract painting or figurative painting or icon, very minimalist icon or can be text or can be word or the phonetics.

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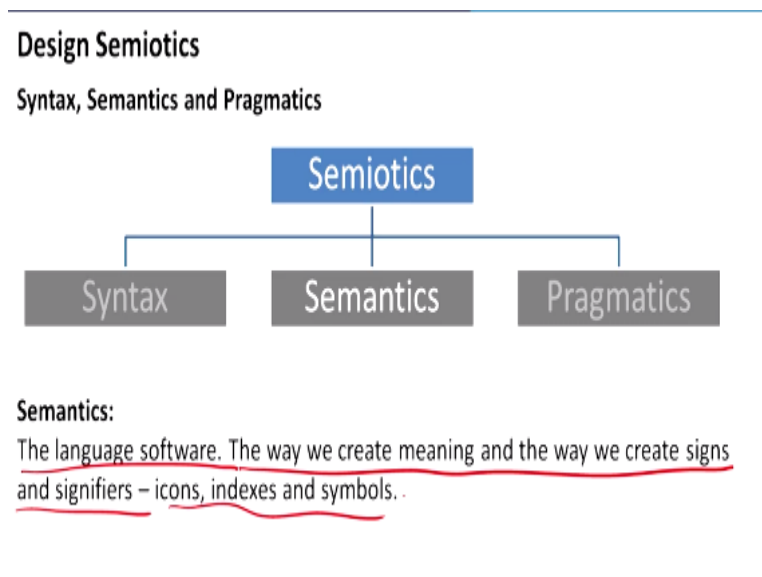
And so within that semiotics, semiotics can be divided into 3 different segments. So one is syntax, the second is semantics and third is pragmatics. These all 3 component together creates the semiotics or the science of signs. So what is syntax? Syntax is the hardware aspect of the language. It introduces us with the structure, how language should be formed and how culture setup and eventually codifies things like grammar or rules of proper communication.

So this is the structural part of the meaning. So there has to be in a proper sequence to make a meaning. So for example if we look at a storyboard or the animation or a narrative comics or the visual narrative, so each and every storyboard should have a proper sequence. So we cannot jumble up the story, then the narrative sequence will be destroyed. So if the first sequence is drawn, first sequence should be drawn here.

The second sequence should be drawn here and the third sequence should be drawn there so that we have we can understand what is the flow of the total story. So if the first sequence is here, third sequence is here or it is jumbled up then the total meaning of the story might not be perceived. For example and if we are designing a website, if we start reading from top the first information which users need first should be on the top.

The next level of information which user need should be on the next level and so it has a proper sequence, top to bottom vertically and also when we think about the total website, so all the sequence should confront with the task flow of the user. So what is the first task people will do that should come in the first hierarchy of information architecture. The next task should be on the next hierarchy and the other task should be on the other hierarchy. So it should also be based on different hierarchy of the task flow.

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So the next part of the semiotics is the semantics. Semantics is the language software or the meaning. So the way we create meaning and the way we create the signs and signifiers, icons, index and symbols. This is the part of it. So the meaning part of it is associated with the semantics.

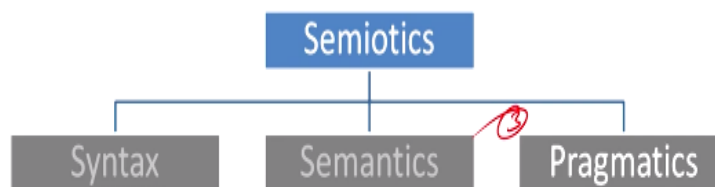
So first is the sequence, in which sequence the total task flow or the way we read a particular website or the holistically how the website's different pages are layered in different hierarchy,

that is the syntax part of it. So how the way it has been designed in different hierarchy based on the task flow is the syntax, and now the meaning part of it is the semantics.

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Design Semiotics

Syntax, Semantics and Pragmatics



Pragmatics is the relationship between signs and their effects on the users' mind.

Function and context of use for signs. – McCoy

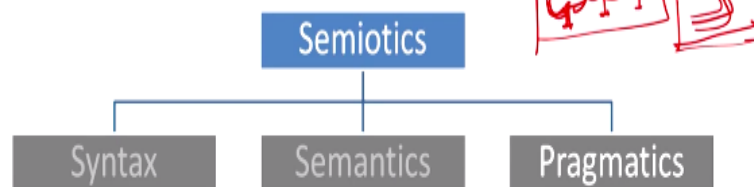
Study of the ways in which signs are used and interpreted. – Morris

And the next part is the pragmatics. Pragmatics is the relationship between the signs and their effect on the users' mind. The function and the context of the use of signs that is how the McCoy told. The study of the ways in which signs are used and interpreted. So one part is semantics is what is the meaning and other part is the what is going in the peoples' mind. So when we design, the design elements are the semantics and the way it will be interpreted is the pragmatic part of the semiotics.

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Design Semiotics

Syntax, Semantics and Pragmatics



Pragmatics The study of the ways in which signs are used and interpreted; the context in which language is used and the function of language — the everyday way we use words and images to communicate. How do they function and in what settings do they function properly?

So pragmatics is the study of the way in which signs are used and interpreted, the context in which language is used and the function of the language and everyday way we use the word and image and communication. How do they function and in what setting do they function properly. So in semantics when we are talking about the icons, index and symbols the small elements and in pragmatics what we are talking about is in different context or the same icons and elements might differ.

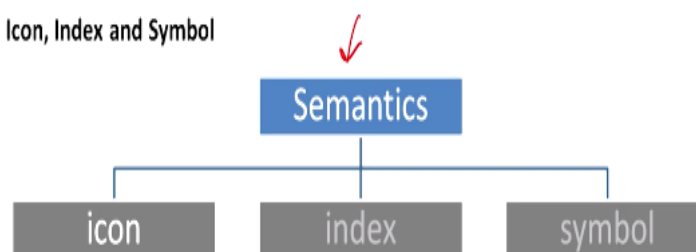
So for example if you look at the icon of a tree, one icon of a tree and then this might signify tree. And then if you see 2, 3 different icons of tree similarly juxtaposed by each other, then it will signify a forest. So in the context with the setting that changes. Now the semantic part is it is all the same icon and based on its composition it might change. Now if we see the icon of a tree with the icon of another flowy lines which might signify river and then 2 triangles which is there which might signify mountain, then this will be signified as a landscape.

So their meaning based on their juxtaposition is different and also based on the people's perception will also be different. So they might, few people might even look at it in a different way and perceive something else out of it. They might perceive this like a village and something else based on their previous perception because everybody's mental model is different.

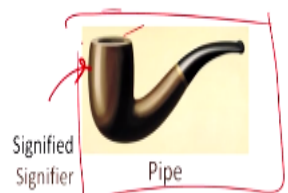
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Design Semiotics

Icon, Index and Symbol



Icon is a physical resemblance to the object or concept. Very realistic – photographs, realistic statues, maps, diagrams, etc. Easily understood and recognized.

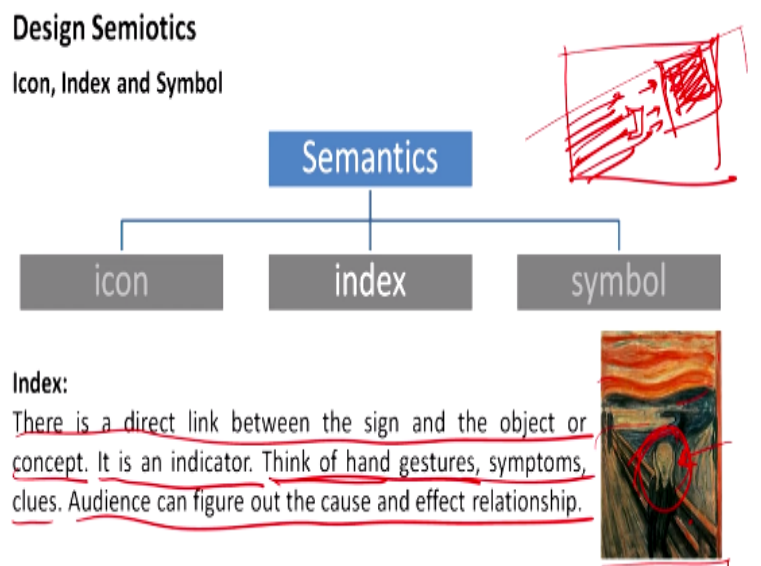


So within semantics, first we discuss the semantics. Then we will discuss pragmatics and syntax. Within semantics there are 3 things. One is icon, index and symbol. What is icon? It is a physical resemblance to the object or concept is icon. It is very realistic photographs, realistic statues, maps, diagrams etc which is easily understood and recognized is icon. So it will be more photorealistic or very figurative drawing.

So a detailed drawing of something which of a signified is a icon. So this is a painting, This Is Not a Pipe. So the name of the painting is This Is Not a Pipe by; the name of the painting is This Is Not a Pipe and here you can see this pipe is painted in a very realistic manner. So the painting of the pipe is, so why the painting is named as This Is Not a Pipe because it is a painting of a pipe and that is why the concept of signified and signifiers are touched upon here in this painting.

So the painting of the pipe is a signifier and what is it signifying is the actual pipe and the way it is drawn has a very figurative approach of drawing. So the painter of this painting is Magritte Rene.

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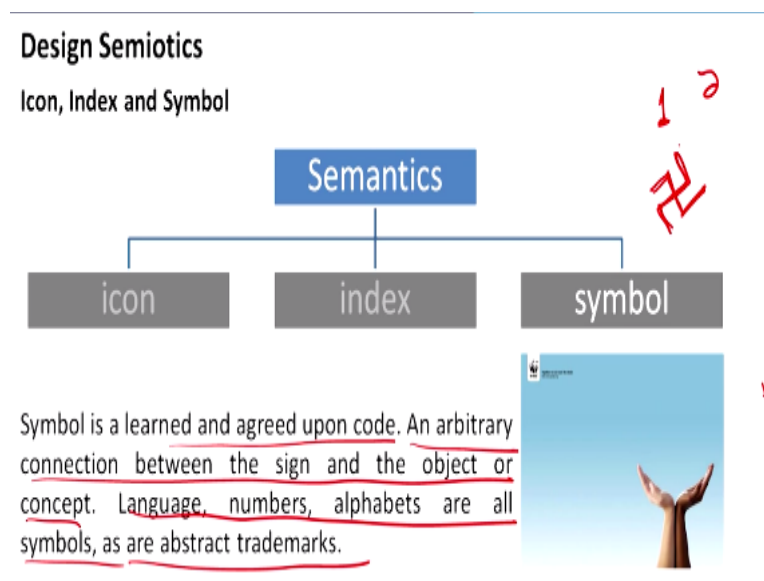
And the next thing is the index. Index is little abstract form of representation. So there is a direct link between the signs and the objects or concept. It is an indicator and so it can be hand gesture, symptoms, clues. Audience can figure out the cause and effect of the relationship. So these are

not so direct. Index are little indirect than icon but more direct than symbol. So this can be gestures, symptoms and clues which will give the clue of relationship.

For example if there is a composition and this composition is directing to something and then the focal point is created over here which becomes a protagonist of the concept. So those all things are kind of like hand gesture. So this lines are directing towards this. So that also adds as a hand gesture. So together that creates a composition. And maybe something metaphorically represented. So for example this is Edvard Munch's Scream.

So in this painting all this flowy, scratchy lines and the warm color tone and the type of image of expression is there within the face of the person painted over here. And everything is giving an expression of scream and phobia. So the way it is painted is not so figurative. And all this skies and flowy lines. So this comes within the expressionism of painting and it expresses the concept of phobia which is scream.

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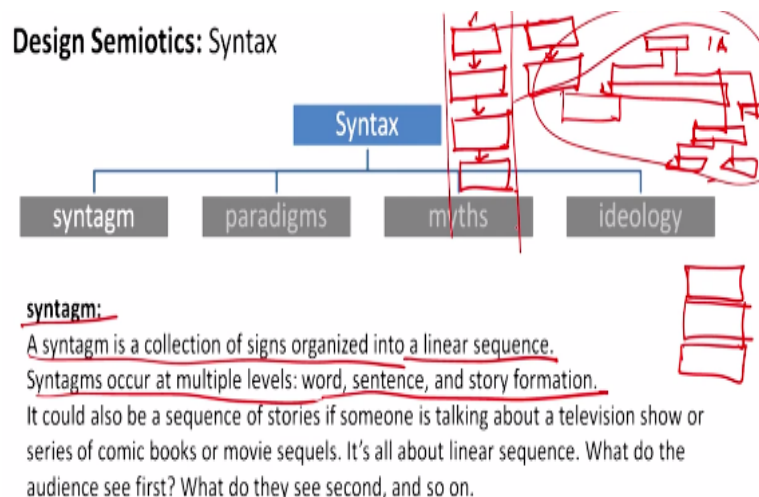


The next is the symbol. The symbol is the learned and agreed upon code. So an arbitrary connection between the signs and the objects or concept can be language, number, alphabets and all other symbols. There is an abstract trademarks. So all this symbols if we do not know the meaning of it. So that requires a background knowledge, in-depth knowledge to interpret a symbol.

For example if you look at the symbol of this alphabet, Roman alphabet 1, so people who can understand this, read English can only read it as 1 and this has nothing to do with just a number which is 1 if you do not know. And if I write in some other language, so this is how 1 is written in Bengali. So if you do not know how it is written in different scripture so conceptually you will not know what it signifies.

So you need to know a particular, you need to have a lot of background knowledge to interpret this. And it can be also different from different people. So if I just draw this symbol and people who are more associated with the Indian context and with the Hinduism, they might interpret this as Swastik symbol. But maybe people from Germany will interpret as a Nazi symbol. So same kind of composition, same icon can be interpreted in a different way based on the people from different background knowledge.

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So if we now syntax, in the syntax there are different elements of within the syntax. So which is the hardware part of it or the how the sequentially everything goes. So one is the syntagm. Syntagm is a collection of signs organized into a linear sequence and syntagm occurs at multiple levels, word, sentence, story formation. It also occurs in multiple levels of website design as the syntagm is there in one particular hierarchy of website.

So if you are in one level of information architecture there is a syntagm and then the next level of hierarchy there is again a syntagm. And syntagm is when there is a particular one way. So when it is just going linear, in a linear fashion then there is a syntagm. But in information architecture generally it can bifurcate from different sides and so there is no particular linearity, it goes back. So that kind of information architecture is not part of syntagm because it is not going linearly.

So there is lot of connection and from where you can bifurcate. But there are some websites which you might have come across, so where there is just one option of scrolling down. So if you look at the main page of Facebook, you just scroll down. So there is just a linear flow of the hierarchy of the, the way you are going, the information has been shown. So also if you think about the Google search engine, so there is a one linear way it is going on.

So that comes under the syntagm. So there is no bifurcation. So you see the first layer of search. You go to the next layer. So it is a continuation. So it is just broken into the pagination. It is not a continuous scroll like Facebook but it is like a broken in different pages like if you click 1, 2, 3, 4. But there is one linear option. So you can come back to from 7th layer of search to the first layer. But there is a one particular linear direction.

So it is not information architecture, it is not bifurcating from different place. So also in few website you will see, you just scroll down and there might be some animation and UI transitions, but it just scrolls down from top to bottom. And you go to the previous page, it will just go up and go to the next page, it will just go down. There is a one single layer of linear sequence. So how you want to design, how the sequence of your website or the information architecture is so that should be thought about based on the function of the website.

So if the website is following a syntagm or a linear sequence, the website's information architecture should look like this. So it should just go like one single direction. So Facebook is not exactly a similar example because if you go to the home then this is one and then you go to your next profile then it will be like that. But when you think about a news feed how it is coming. So it is something like that. You just go deep into the website.

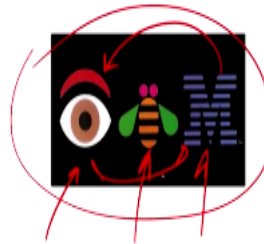
The examples of syntagm is, the syntagms perspective is when the linear sequence is broken you change it then the meaning might change.

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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.

For example a comic strip where the first information should be at the first and the second information should be at the second and third and it should be arranged in that way. So if you change it, the total meaning will be totally different. And also if you look at the Paul Ryan's design IBM's logo design. So it is one iteration of the IBM's logo.

So IBM and this is signified in different icons which is metaphorically representing something which is nothing to do with the letter IBM which is the actual signified but this is creating a metaphor of some other element which is phonetically similar to IBM and this is how the logo is designed. But if you change the sequence, then you cannot read it as a company's logo of IBM.

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Design Semiotics: Syntax

syntagm:

Order is crucial to meaning:

- obko vs oobk vs book
- boy bites dog vs dog bites boy
- Syntagmatic conventions form over time, resulting in grammar.

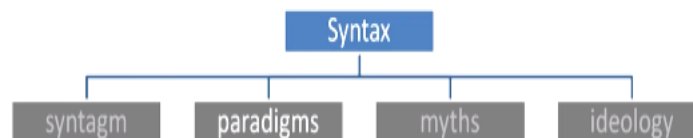
Think of syntagms, or syntax, as running horizontally:



So the order is crucial for meaning in case of syntagm. So if we write like this it might not have a meaning. But if you write this then it will have a meaning and even in the sentence and the paragraph there has to be a syntagm and in linguistics. So syntagm will be a proper sequence of horizontal and vertical sequence.

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Design Semiotics: Syntax



paradigms:

paradigm is the class of all items that can be substituted into the same position (or slot) in a grammatical sentence.

It can be considered that paradigms are running vertically:

A set of items that form mutually exclusive choices

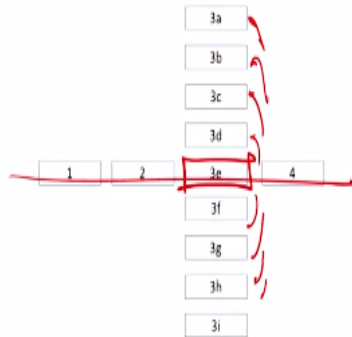
Now the next is the paradigm. Paradigm is the class of all icon that can be substituted into the same position or slot in a grammatical sentence. So it can be considered that paradigms are running vertically. A set of items that form mutually exclusive choices.

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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).



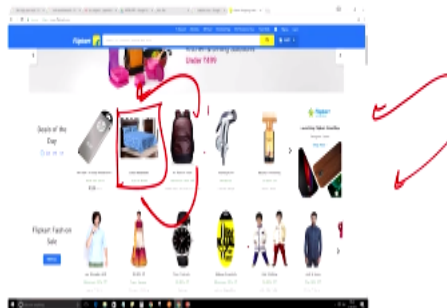
For example, if there is a system so which is a syntagm and maybe option 3 can be replaced by many other things. So that creates a paradigm so which can be interchangeably replaced. So that creates maybe you can that gives a multivariate options in design, so maybe instead of that page something else if you put the holistic meaning does not change.

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Design Semiotics: Syntax

paradigms:

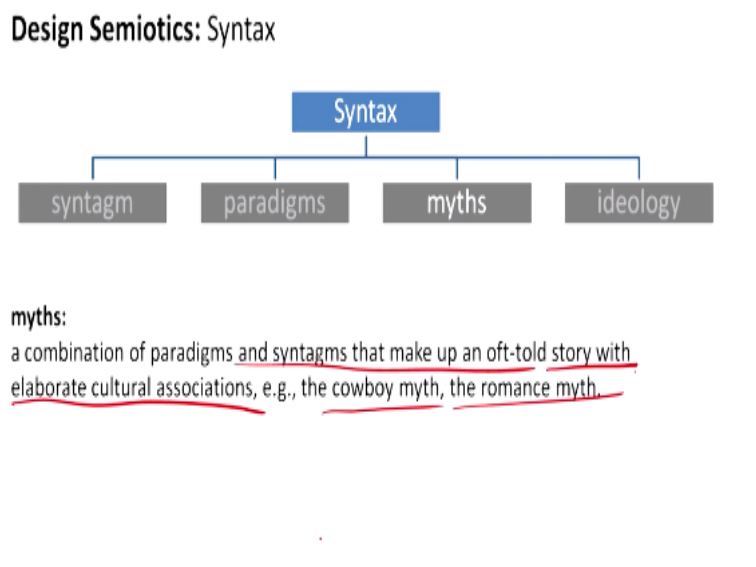
The class of all items that can be substituted into the same position (or slot) in a grammatical sentence (are in paradigmatic relation with one another).



For example if you look at the website of a particular search engine or a particular e-commerce websites, so if total meaning of the e-commerce website, how it functions that will not change if we change this icon with something else because it is just showing what are the different products in this website. So if you even replace this, that will also not change and the meaning of this total website will not change.

But definitely the process of purchase, the clickbait or the probability of clicking on that particular product will change but total meaning of the structure of the sequence will not change if we just change the image or the product in a e-commerce website. Similarly, in Youtube if the videos get replaced by some other video then the total meaning of this website will not change. Then the next is myth.

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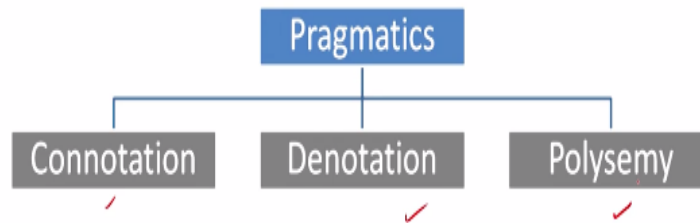
A combination of paradigms and syntagm that make up a soft-told story with an elaborate cultural association for example cowboy myth and romantic myth. So these are coming from linguistics. So these are the genre of different style. So this combination of syntagm and paradigm together creates a narrative. So it might change. So for example if we think about the folklores, so the same folklores if the syntagm is similar.

And then in different regions, the folklores has a minute change which is the change of paradigm can also has a similar genre of the folklore which is the total holistic meaning is same but there are minute iterations. In website giving a similar analogy might be difficult but if you can think about when you are creating a multivariate options so if you have a concept of myth that might help.

For example if you start with one particular design, change few options which might not change the total website of this design and then which also has a similar task flow and then it can create a different design which might act and function better based on user testing.

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Design Semiotics



Next part of the semiotics is pragmatics. And pragmatics, within pragmatics there are 3 things, the connotation, denotation and polysemy. As we have discussed the pragmatics part is how people interpret all this sequential part which is the syntax and all this icons which is the semantic part of semiotics.

So the structure which is the pragmatics and the semantics which is the icons and how these two things are interpreted which is the pragmatic part where the users perspective is coming to picture. So there can be connotation, the way the meaning is transferred it can be connotative meaning. It can be a denotative meaning and there can be polysemy.

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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.



First let us discuss denotation. Denotation is representation of sign's primary meaning which is real, direct and clearly perceivable. It is the most basic literal primary meaning of the sign example the word, any word which is written like that. So first meaning will be signified as that particular thing. So if we take the example of a particular flower like rose, so that signifies only the flower rose.

So that is the first layer of meaning, the first meaning of it if we just write that name of the flower or just phonetically pronounce it then the flower's image will be the first layer of the basic meaning which is denotation. Next it might have a signification of romance. That particular flower might have some connection in particular in few people's mind. So that will not be denotative meaning. That will go to the connotative meaning.

So that is the next layer of meaning. So for that you need some other background knowledge or background perception about that particular flower. But the denotative meaning is that just the particular flower rose. And even for few people it might be, they might think about sex peers, those lines like whatever you call the flowers that name, so those many other things can come into people's mind. So it can go on. But the first layer of meaning is just the basic meaning.

So this is Andy Warhol's painting of soup can. So if you look at this, he has just painted different soup cans and within the pop painting, pop style painting by Andy Warhol. So this is different

soup can has different flavors are written over there. If you see the actual painting you can read that. So it is just, it talks about the monotony of everyday life. So it is represented with the soup can. So if you consume, it is like everyday we consume, in urban life we consume one can soup and then just the flavor of the soup changes.

But it is kind of a repetition of everyday life. So it is signifying that. So signification of the repetition of everyday life is not the denotative meaning. The denotative meaning is the soup can. So many soup cans are drawn like that. So the first layer of the meaning, if you look at this painting, the soup can will come into your mind. So this is not the soup can, this is the painting of a soup can but when you look at this painting, soup can's image will come into your mind.

The next if you start connecting all this soup cans, why it is drawn like that and if you read about the painting's theme and if you look at the different flavors are drawn then you can connect with the monotony of the life, of everyday life in this painting. So that becomes a connotative meaning, not the denotative meaning.

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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.



So the connotation or the connotative meaning is the second layer of the secondary meaning which is not direct, indirect meaning and it needs some background knowledge and it depends on the culture, secondary meaning is dependent on the culture and it depends on people's

perception. So this is painting basically from Madhya Pradesh, the central part of India which is Gond painting.

And if you look at the painting, so this is a deer and the deer's horn is transferred into the tree. So this is coming from a folklore of a particular sign. So if you know the folklore then you will understand why this is painted like that and how the flora and fauna interacts with each other and based on that the story is there. So otherwise this is just a deer with a horn, whose horn is turned into tree. So the next layer of meaning will be only understood or interpreted by the people who understand this style of painting.

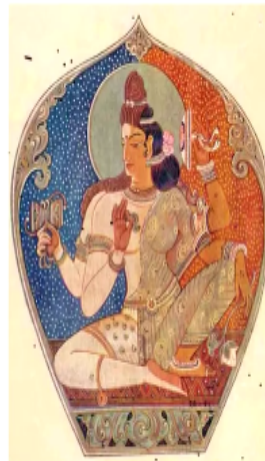
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Design Semiotics

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.



So this is again coming from the Indian mythology of Ardhanarishvar painted by Abanindranath Tagore and so why it is painted like that, so that needs some background knowledge of this painting of Abanindranath Tagore or the Indian mythology. And again some example of connotation and connotation might vary how you based on the setup. So that is what we were talking about when we are talking about the pragmatics, the setup or the position of a particular icon which comes from the semantics might vary.

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Design Semiotics

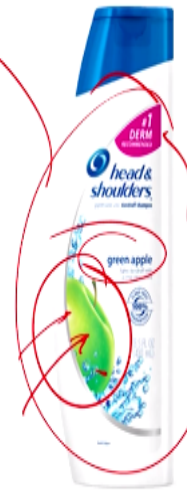
Connotation:



Titian, 1570



Rene Magritte, 1964



So semantically these are all apples. So semantically that particular painting of this particular painting or the photograph of if you look at this particular imagery they all signify apples which is a fruit but the context, based on the overall context of this apple the pragmatics changes. So the connotative meaning of this total painting or the packaging design changes. So the first is the Titian's painting, Adam and Eve, they are having this apple.

So here this is the meaning of apple and the story and everything evolves around a particular Christian story. So that changes if you know the particular story. Now this is Rene Magritte's painting in 1964. So Titian's painting was in 1570 and if you know the story then you can interpret the Rene Magritte's painting. So if this is the first story in connotation wise these are different. So this is the first initial story. So this is borrowing.

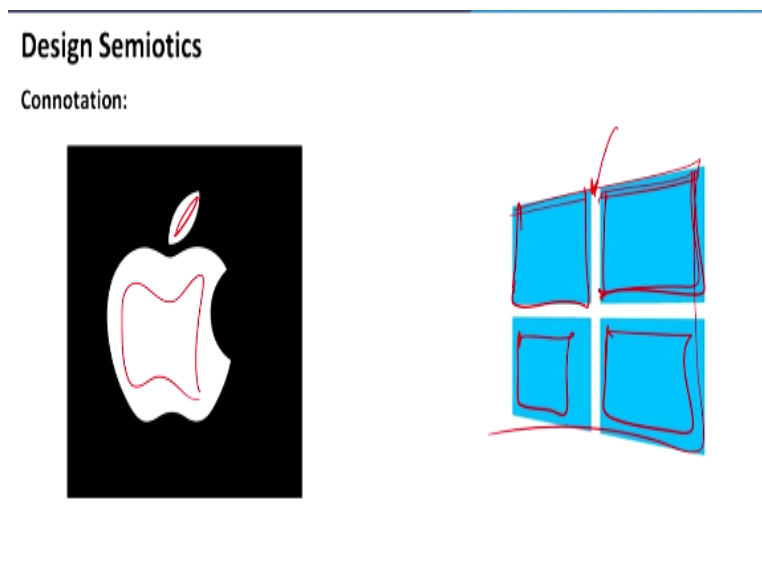
This Rene Magritte's painting is borrowing this concept of Adam and Eve and then this painting is drawn like that. So this painting's name is Son of Man. So what he is painting is painting an apple in front of a face of a man. So there is no facial elements is shown. So it can signify any different man because all the features are not shown. So instead of that apple is shown. So everybody is son of Adam. That is what the painter wanted to convey.

So that also depends on whether you believe on that particular story or not and then if you know the story and based on that this painting will be interpreted. And the same green apple can also

be painted on a package design to just show freshness and the green apple flavor of a particular shampoo brand. So this has nothing to do with the particular story. So they are based on the context.

So nobody will interpret that or connect this particular image with the story of this Adam and Eve. But here with the placement and the context, they will connect it. So it is based on how, because of this all this brand and the green apple flavor and all this water splash it just signifies freshness and the flavor of that particular fruit. So the same apple, green apple in two different context they are acting in a different way.

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So also apple can act in a different way if you look at a particular logo if you know the brand so you will understand. So this apple is not an apple. It is a brand apple which creates iOS platform mobile and other computer devices. So if you just see this composition of 4 squares and also you can similarly interpret this is the (()) (42:58) of window and the blue window sachet and this is talking about the window, the Microsoft Windows operating system.

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Design Semiotics

Polysemy:

Polysemy translates to "many meanings"

French theorist & semiotician Roland Barthes says all images are polysemous, all images have multiple meanings.

Poly = many. semy = meanings

He talked about media, image and culture, a lot.

He says that all images are polysemous, all images have multiple meanings. That thing that is pictured is what is pictured and can go in multiple directions of meaning.

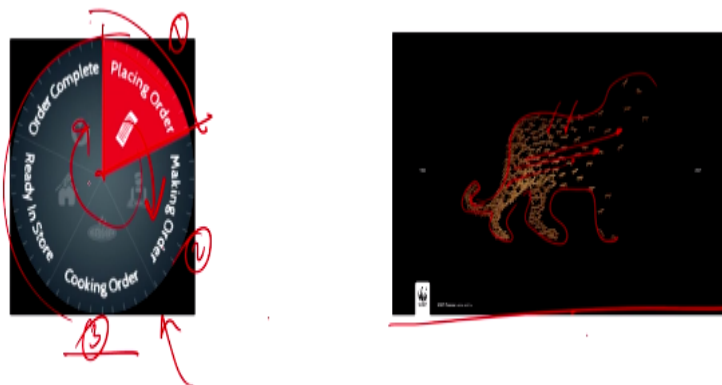
For instance, the portrayal of wine drinking in French society as a robust and healthy habit would be a bourgeois ideal perception contradicted by certain realities (i.e. that wine can be unhealthy and inebriating).

He found semiotics useful in conducting these critiques.

So another is the polysemy. Polysemy is, there is a multiple meaning, where there is a multiple meaning going on simultaneously. So poly means many and semy is meaning.

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Design Semiotics: Polysemy



So if we take an example of this WWF poster. So this is, there is a small lions over here. And that creates a silhouette of a lion and so the first one meaning is this lions moving and they are fading away. So it is talking about the, that is an endangered species and they are gradually moving in this direction of fading away and diminishing. And together also they are creating the silhouette of the lion.

So when we look at the picture, so you cannot read this lion's icons because they are very small. But holistically, in Gestalt's principle it is creating the silhouette of the lion. So that gives the meaning of the lion and then the meaning that they are leading towards extinction. And also if you look at the pizza order, the way it is ordered in Pizza Hut. So this is the timeline. In this particular image, the first meaning is the timeline. So this acts as the timeline.

First is the pizza order, then making of pizza, then cooking, the order is getting cooked and then gradually the sequence is there. So it has a particular linear sequence in the syntax and then also it gives you a feeling of the pizza, the way pizza is divided in different pie section. So that also gives, one meaning is the timeline and the second meaning is the pizza. That creates the holistic meaning of the pizza ordering timeline. So this can be one example of the polysemy.