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**Course
On
Visual Semantics for Visual Communication
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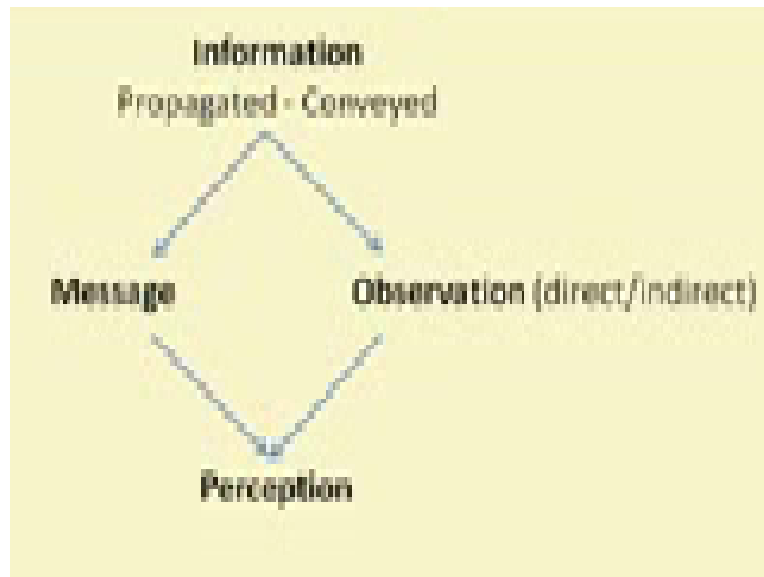
Lecture 06: Visual Semiotics for Visual Communication

Hello students welcome to the course on Visual Semantics for visual communication. Today we are going to talk about visual perception and visual communication. We have been discussing about information, communication and media in our last class and before that we have been discussing about human communication.

Now one very important aspect which came up in all through this lecture series is that, whenever we are talking about communication or information conveyance. We are relying on visual perception, when it comes to visual communication. There are many various media or various modes of communication we talked about it there it could cut across languages, written, auditory many other sort of media, visual is one part one of the many and too for that matter many other media is also reliant on visual communication and visual perception.

So in today's lecture let us try to understand how this whole visual perception and visual communication takes place not only that how visual communication has evolved over course of time in human civilization?

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So if we go back to our earlier slide which we discussed in last lecture where information is being propagated or communicated that could be done by two mechanism one is the by message, messages and by one is by observation. If you look at it now both of them are relying on perception, so the perception plays a key role when it comes in terms of communication or information being communicated inform of messages or in form of observation.

I have made a quick sketch to you last day about a person seeing a sunset or a sunrise, now this form of observation is actually based on your perception based on what you are looking at and then what you are looking at is processed in your mind and hence you form an idea of what is happening around you in other words when we have an object here so we have a particular object situated here and this is a human individual looking at that object, the light source emits light which falls on this object and reflects the light rays which hits our visual organ, which is our eyes.

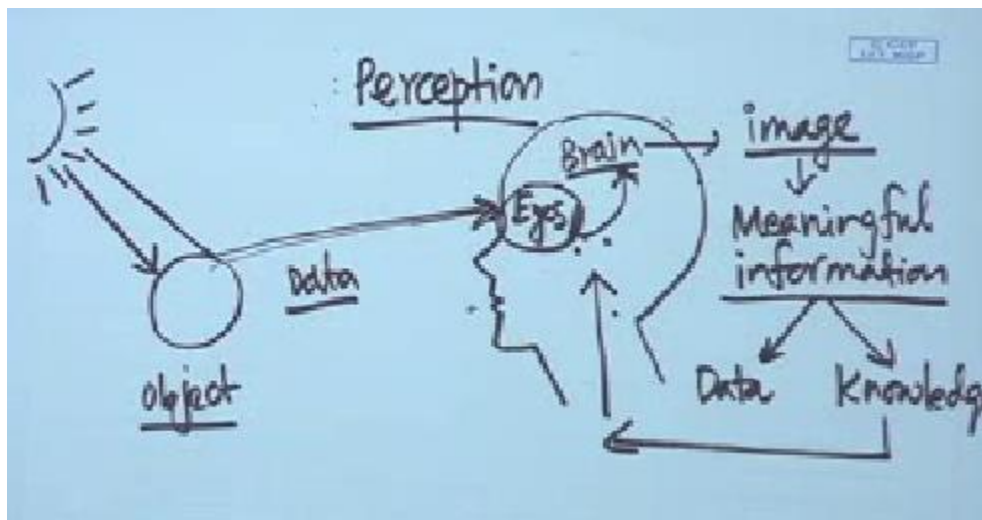
So the eyes is a sensitive sensory organ that human beings possess which records or captures the light which is being reflected from other object and once it records this particular data it sends it to the brain, so through various physiological and biochemical mechanism this particular light

which with falls on to our retina which is our brain and our brain does some kind of processing with that information or with that data and makes an image and an image is nothing but a meaningful information to us.

So the brain based on the light reflected from various objects around us reaches our brain and our brain works towards it forms an image and the image is nothing but a meaningful information and if you remember information is based on some kind of data and the knowledge that this individual that this particular individual holds.

So it is the amount of data that reaches us, which is processed and then it maps back to the knowledge that this particular individual holds and that creates the perception. So this forms the perception for this particular individual.

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So this sets up the understanding for perception what happens to us all the time, when we as individual is observing the environment and taking some kind of decision.

In this context I would I love a quote, which says we see many things but we actually look at very few. So when we are looking at something we many a times do not see that so when you are seeing a scenery you are or when you are looking at a scenery you actually do not see all of it but maybe a particular aspect of that scenery, what that essentially means is?

When you are looking at the entire environment all of the light rays is hitting your eye, it reaches your brain, and the image is processed and that leads to some kind of meaningful information and this information is selective and this information forms of perception which is very very selective in nature. So the information is selective in nature and you are actually looking at only a few things even if you are seeing it all.

So you are seeing it all but you are looking at or you have perceived only a few things for your particular requirement or need, so this this sets up how we perceive but perception is a process as you can understand by now it is? It is a biological, biochemical, and physiological process very very unique to human individual many other animals also for that matter, see but the way we perceive our environment perceive the world around us is very unique, very very evolved and it happens through a process.

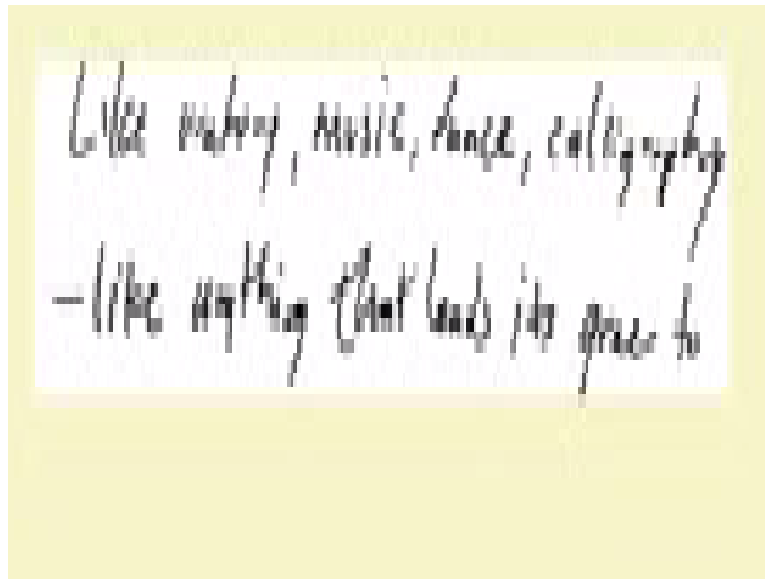
So let us now look at how the process takes place, now on your screen you see something within two seconds try to understand what this means, what this word is all about? You try to look at it and try to read it?

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You are finding it a bit difficult right you have some kind of ambiguity you have some kind of uncertainty with you right, so now look at the same word and see if you can make it out, now immediately the initially the time you spend for understanding this particular word or to make meaning out of it to make a meaningful information based on what you have seen is made so easy as soon as I have given in the larger picture.

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So this gives us an idea, how the process of perception taking place. So at one instance you are referring to what you have been shown you are trying to gather the stimuli from that particular object which is in front of you, you are trying to make a meaningful information out of it based on the image that is formed inside your brain, whereas in the second case as soon as I gave you the bigger context your eyes actually saw the entire thing and quickly took a decision which has taken much lesser time than the previous case which we were looking at, so what exactly has happened in these two cases.

Now this is referred to as the bottom-up process, which has been developed by Gibson or the other process the second process was the top down or direct indirect process which has developed few years later by Gregory.

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- Bottom-Up/ Direct
(Gibson 1966)
- Top-Down/ Indirect/ Constructivist
(Gregory 1970)

So what it means by bottom-up process is when it is more direct approach. It is the approach the way physiologically seeing takes place, that means that the light is reflected on to an object it hits my retina, it is being processed the image is formed inside my brain and I am trying to perceive and make meaning from that image. So this is the straight forward bottom-up process but as you understand that this process takes larger time to process because there is a learning load associated with this particular mechanism.

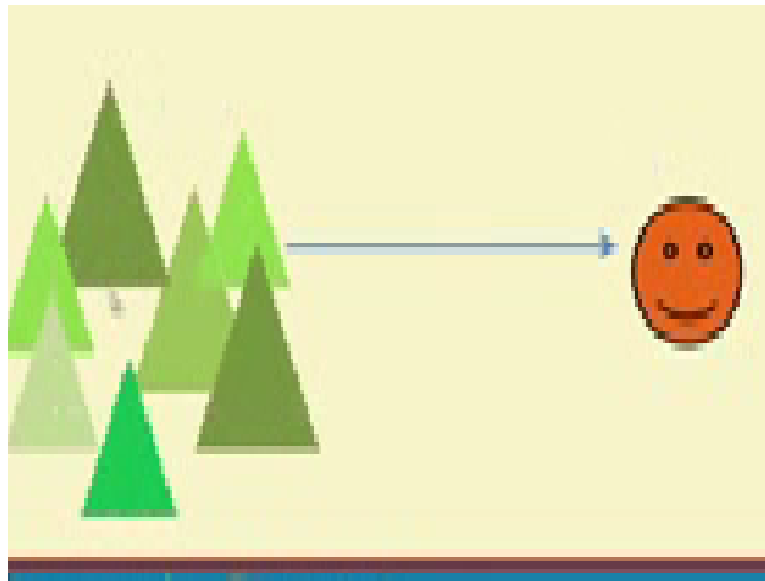
So you are trying to cognize and recognize this particular image whereas, in the second case in the top down approach or in the indirect approach it relates to the observers expectation background experiences and the intentions, so based on that your perception also is a tea owned to see through that or rather look into it and form the information which is much quicker in process.

So in this particular case you have relied on your memories expectations and intentions as soon as there were other words related relating to music and other performing arts or culture your memory or your expectation immediately mapped it with the word that this word is nothing but dance which was not happening previously you are going by the bottom-up process in the

previous case that in the latter case you went by your memory and overall intent of that particular visual and very quickly you formed a decision and you took an action that this word is dance.

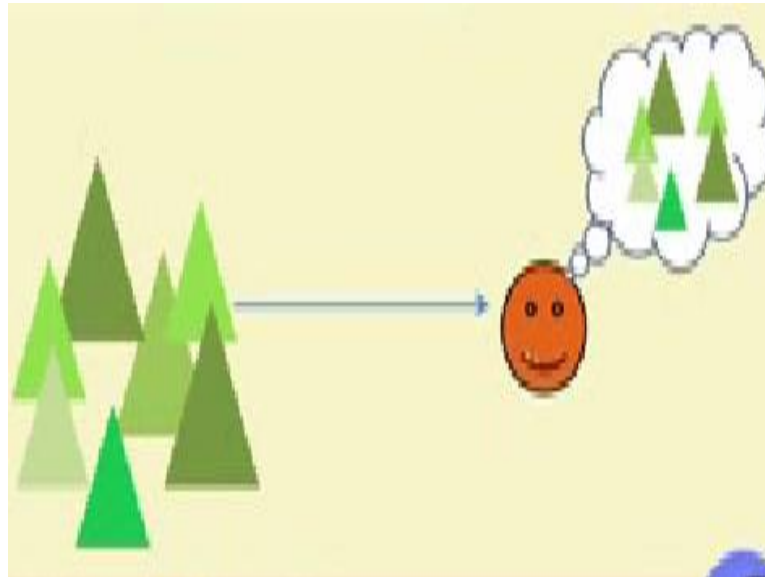
So this is how visual perception is happening with us all the time, so in other words graphically I have tried to represent this particular phenomena where you are looking at an object and this is where you are looking at an object by a direct process where it is forming a particular notion of perception but many a times two things might happen;

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One is where you are looking at this object in context to other objects which is also a bottom-up process but it is in context to the objects as such, where your intentions are still not coming into picture. So you will you do not look at an object individually but you look at an object rather you see the object as a part of many things, as a part of a context, as a part of an ecology, that helps you making a perception more clear.

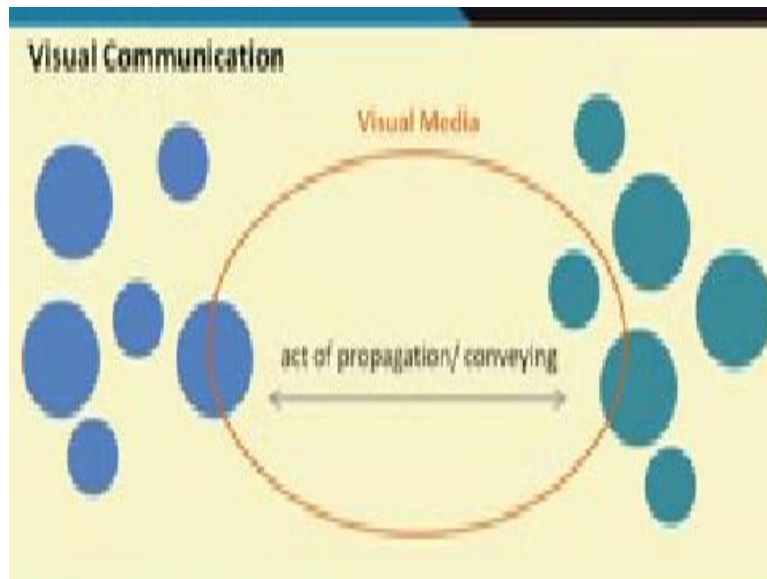
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What happens in another case is where you have a preconceived notion of what you are trying to look at your own intention memory data and knowledge come in to picture and hence you look at this particular object and the top down approach works in this particular case, so if you see this part if you see this part the left part that is the bottom-up process and the domain of bottom-up process and if you look at the right part that is the top down process, where the individuals intentions or memories also come into picture.

The past experiences play a major role in visual perception, so these three distinct modalities help us in perception a quick understanding of perception and to make meaningful information based out a based on our brain image very efficiently. So this these three ways are working simultaneously when whenever we are looking at any of the object or any whenever we are seeing the environment around us.

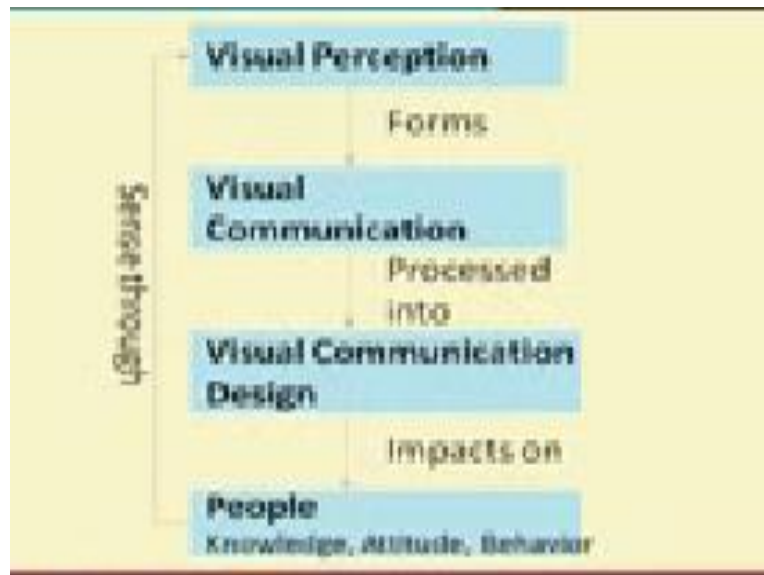
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So if we now go back to our diagram for communication, what is visual communication predominantly is where this act of propagation or conveyance is happening in a predominantly visual media, that means there are two different entities the communicator and the receiver and there is a propagation happening through certain kind of media, there is signals being transferred, there are references being laid out, there are expressions being formed.

All these things are happening in a particular media and when that particular media is predominantly visual in nature, we talked with we define that as visual communication.

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So in other words if we look at this particular diagram visual perception is something, we already discussed and we started with so visual perception forms the visual communication. So until and unless the communicator and receiver are in a common paradigm they visually perceive where they visually perceive different objects around the environment or a particular environment or a particular entity.

They are observing that and that forms visual communication without the notion of perception visual communication in a particular media is impossible to occur is not it so if the communicator is sending out a signal which is predominantly visual in nature. It has to be perceived, it has to be perceived by the communicator the signal comes out and then the signal is perceived by the receiver recipient and then you are you are again reconstructing that information within your brain.

So that forms visual communication and then when visual communication is processed in some fashion it leads to visual communication design. In other words visual communication is a particular media domain, where the communication is taking place but whenever we are

structuring it, architecting it, giving a shape to these visual communication in particular designed forms it becomes visual communication design.

So it is processed it is not in a rock route format, it is not the signals which are coming out in a rough format but these are processed and thus visual communication is formed visual communication design is formed and that reaches to the user many ways.

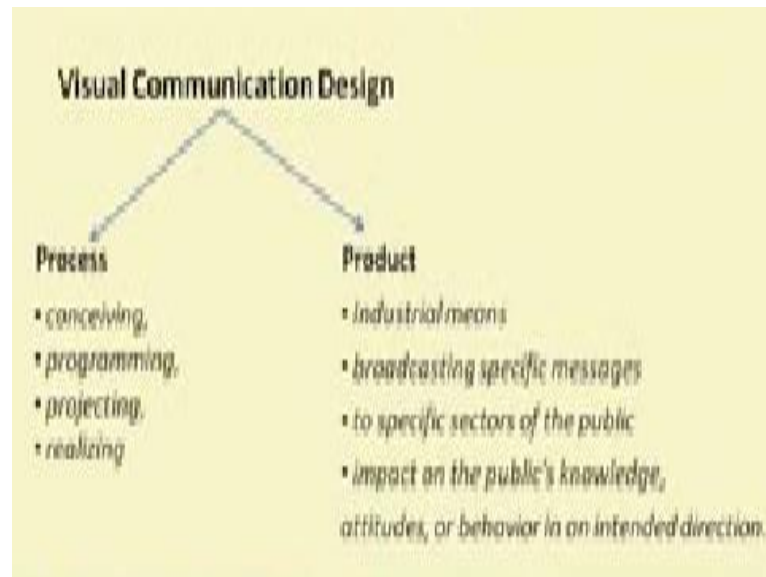
Visual communication design does not occur or is not respected enough and that leads to disasters that leads to miscommunication as you see all around many times, we see on the streets I talked about that advertisement example, so that might happen when visual communication is not processed and designed. Now visual communication design has an impact on people and the impact on people is in terms of knowledge, attitude and behavior.

So I repeat the visual communication design has an impact on people and the impact is on knowledge, attitude and behavior. Now as I told you earlier as well that communication happens on the basis of a culture right, we talked about we talked about culture as the as the predecessor as the breeding ground for context, experiences and assumptions.

This is so very true in case of visual communication as well you need a particular visual culture in place for people to set up the context for having experiences which relate to that particular visual culture and having assumptions, which relate to the visualized until and unless this visual culture is existent we really cannot rely on people communicating and people getting affected by visual communication that are designed in a particular intended fashion.

So if you look at this people are getting affected or they have an impact and then again people sense the environment, since the objects around them through visual communication. So this is a loop this is a process which is happening all the time, when we talk about visual perception and visual communication. So this also sets up the sets of the connection between visual communication and visual communication design and visual perception how they together are acting when it comes to affecting people at large looking at visual communication design.

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So visual communication design just like any other form of design is referred to as both process and the product, so visual communication design is referred to as a process, when it comes to conceiving, programming, projecting and realizing a particular method of design. So basically whenever we are looking at visual communication design as a process we are programming certain things around it, we are processing that program we are implementing that.

So there is a step-by-step logical procedure which takes place when it comes to visual communication design as a process and as an outcome of that process, what we have is visual communication design as a product. Where many a times visual communication, the characteristics of that product is that, it is developed by industrial means in many cases say.

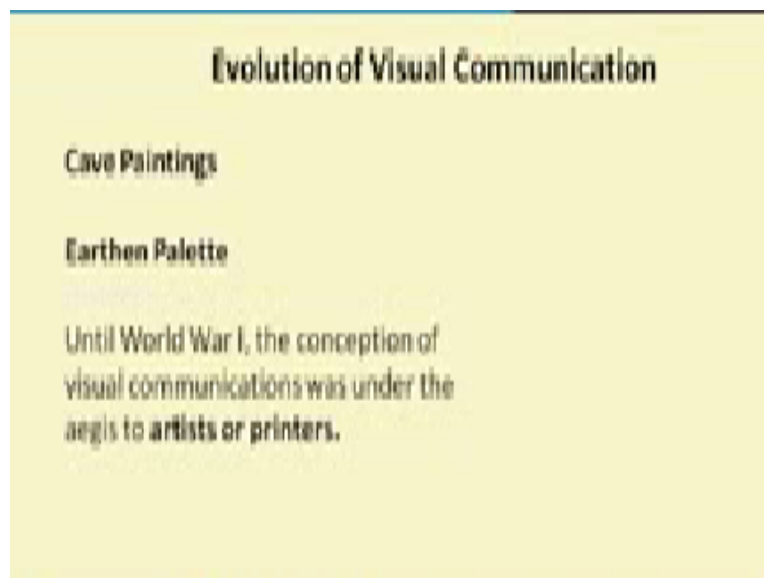
For example a newspaper media or a print advertisement or a film or a particular graphic which has been developed many a times they are produced by industrial means that is the character of that product, it broadcasts a specific message that product broadcasts a specific message and that specific message is meant for specific sector of the public, so all of these are characteristics of a particular product.

So a product is designed to broadcast some specific message and then it is meant for specific sectors of the public and why we are doing all of this, why we are coming up with this product? We are coming up with this product for having an impact on public knowledge, attitude and behavior. In an intended, in an intended manner to take an intended action, so we are doing all of this we have followed a process of visual communication design.

They have programmed lot of lot of activities happen at an industrial level for creating a visual communication design and then as a product it is an industrial product it broadcasts a particular message it is meant for a particular target audience and it goes out it rolls out to people and why we are doing all of this in first place?

We are doing this in order to have an impact on that particular set of audience and not just having an impact in any any any particular way but having an impact in a particular order which was intended by the designer or it was intended by the creator of that particular visual communication. So hope this is clear when it comes in terms of visual communication design as a process as a product and the very intention of creating the process and the product.

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Now if you look at the next part of visual communication. We would look at the evolution of visual communication, which in itself is a very very interesting facet. Visual communication has been part of human civilization and dawn of human civilization thousands of years back. When the human beings we are starting to develop the sense very different from other animals we made a mark by creating visual communication at that particular point of time.

There was intent for communication, there was intent to reference, there was intent to express certain things. So that started with the cave paintings, there was different kind of intentions. So if you now take an example of cave painting and fit it into the model for human cooperative communication, you would see that each of the intent are falling into place. There would be a social intent, there would be a communicational intent, there would be a referential intent, there would be expressions, there would be signals or manifestations and there would be referential point.

So there would be references which are being drawn which at the receivers end would be received or the references would be acknowledged in a particular manner, then it would be justified in from a co-operation and point or from a shared intention stand point. It would be comprehended the expressions would be completed in a particular manner and some kind of action could have been taken.

The action could have been in cognizance with that of the creator is intention and so on so the cave paintings is wherefrom where we started and then we moved on to developing clay palettes making different kinds of signs and symbols clay palettes were developed, in order to keep record of certain aspects of information and thereafter we see that we have come a long way until the World War I before.

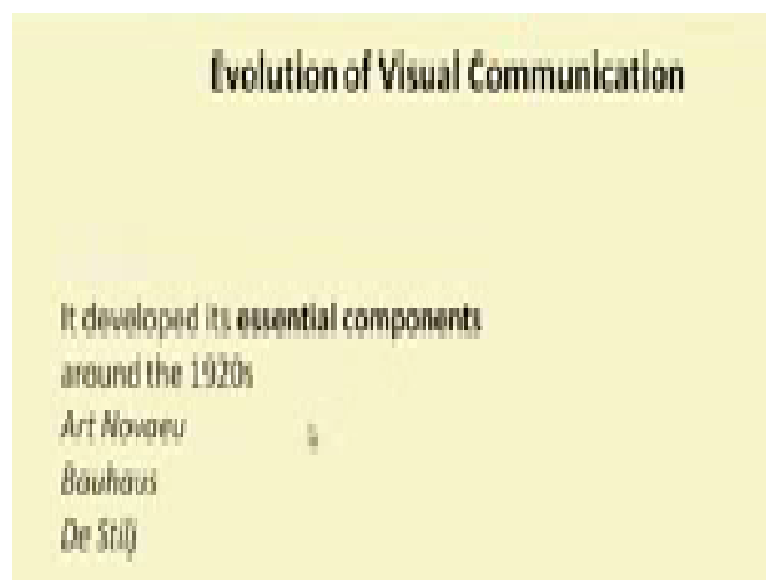
Until World War one the whole intent of visual communication was revolving with the group of artists and painters and with ornamentation and decoration. so if you look at the three stages primitive stages of visual communication, the cave paintings and then we have the other than pilots and until the world war one where the artists and printers where of prevalence.

We see that the cave paintings were more of setting of a context and was presentation of that the Arden ballots were more of X to do with experiences. They were developed in order to keep record of how many say for example you are storing your food grains and how much belongs to me and how much belongs to you or to keep a record of how much food grain is available or not available.

So for all that this have been recorded on an ordinate and this has evolved through experiences there have been experiences, where it was noticed that there was a confusion in understanding the number, so there was a confusion in understanding between you and me? What belongs to you and what belongs to me and that led to some kind of communication all device whereas at the latter part if we see that was more or less reliant on the assumptions, assumptions on trying to beautify elements assumptions based on you know making it aesthetically pleasing.

The assumption was that the ornamentation or the decorations by the artists and painters the usage of crafts and skill sets in terms of ornamentation in a particular communication device would actually add on to the pleasing factor add on to the intent of sharing or loving it or caring for it to a greater extent and which lies in the domain of assumption for that matter.

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So if we move on to the next stage of development, this development was essentially took place after the world war one where we see lot of changes happening in terms of art and craft, architecture in the domain of fine arts architecture and this kind of areas lot of changes took place lot of revolutions took place, art movements took place during this time post World War II in around 1920s and that is the time when modern visual communication started developing its essential components.

So in that three art movements are of special importance the art nouveau, Bauhaus and de stilly, so with them came up three aspects where there were questions coming up in between classical and modern versions, there were questions being raised, there were experiments being done, there were experiments being done in terms of minimalism yet not forsaking the technology.

The arts and crafts the connection the humanist approach which Bauhaus took, yet it was leaping on to a very minimalist modern approach to design and then distill where abstraction took a major role and abstraction and looking into real world into a different paradigm all started taking shape. So if you can if you look at these three aspects these form the very basis of modern visual communication they were setting up if the paradigm at this particular stage. They were developing various elements which are essential for visual communication.

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It changed from artistic creation to effective communication in the 1950s with new developments in :
psychology,
sociology,
linguistics, and
marketing.

Then if we look at the next stage of visual communication a major change took place, when the change from artistic creation to an effective communication was taking place post World War II. So during World War II there were lot of advancements which happened in the areas of psychology, sociology, linguistics, marketing in terms of technological development also there were lot of need for innovation and very quick changes took place.

During that time and that led to a changeover to a to a paradigm shift when we moved on from the artistic notion of visual communication the pure you know pristine artistic notion of visual communication based on the assumptions around it based on the values around it which already started changing in the indeed.

After the world war one took a major jump from there to a very very you know rational and need based approach with the developments of all these areas, which took place during this time. so essentially there were different types of communication which were emerging with the change of sociology and the psychology of the disciplines emerging into that.

so we talked about various types of communication which exists, so this different types we are emerging. During this stage groups organizations communication within organizations communities, cross-community, communication and things like that that we are shaping up and the disciplines were also looking at the nitty gritty of these linguistics which was framing the media which was which was coming up as a major media for communication in a different way.

So linguistics was also part of a media revolution which was taking shape in this particular time and then marketing or understanding the real world the needs of the people, the commercial aspects which the world was going through and shaping up that was setting the context for communication. So basically this was the time when different types of communication started emerging and taking a very crucial very distinct shape.

The emergence of media was taking place and also a different context was being set which was basically depending on a new consumerist, globalized, consumerist approach which was taking up and that was shaping up the next developments in terms of visual communication design and today we are in a phase where we are witnessing the next step where the developments are primarily in terms of technology lot of technological developments are taking place and the importance is now on the interaction between the public and the information.

So if we again go back to this particular slide now so the in now the emphasis is on media and its interaction.

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So the next slide will give a little bit better clarity on this so we have already talked about this particular slide where communication media and mass media is dependent on technology, now technology is bifurcating. At this point of time into two different aspects one into a cross cultural aspect where the technology has to cater to different cultures and communities having varied needs.

At the same time it has to cut across into a common paradigm of information and communication that we are all going through at this particular moment of time in the course of human civilization and on the other hand we have a cross-media approach where technology also has to cut across different media for communication.

Today we have multiplicity media and working across in different ways different manner, so it has to cut across but the interesting aspect to look at this is how do we they are bipolar in nature they are there they are polar in nature right. So you have on one side you have culture and people and there is multiplicity of culture which are there on the other hand there is multiplicity of media and methods of communication.

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So what binds them together is the concept of user centricity or usability or the focus on the users are coming into picture which is the need of the day, where these two are being looked at in unison they cannot be looked at separately that ok I am talking about a particular culture and cross culture and I will not look into the media you cannot work in that particular kind of a scenario any longer.

You have to look at culture and different cultures you have to look at media and different media and how you bind them together is based on how the user behaves with the media, how the user behaves being in that society or being in that particular culture and that leads to too so that leads to two different aspects which is the perception and interaction of that particular interface.

So whenever we are talking about a cross-cultural and cross media technology based communication rather visual communication. It is very much dependent on perception on one hand where we where you are observing that the perception is being formed and meaningful information is being generated on the other hand you are interacting with the post particular media in a particular fashion to perceive that.

So two important aspects are surfacing out one is the perception of the media or perception of the visual communication design and the interaction with that particular visual communication design and both are prevalent around us and very important. So that brings us to the end of this particular lecture. Thank you very much for joining.