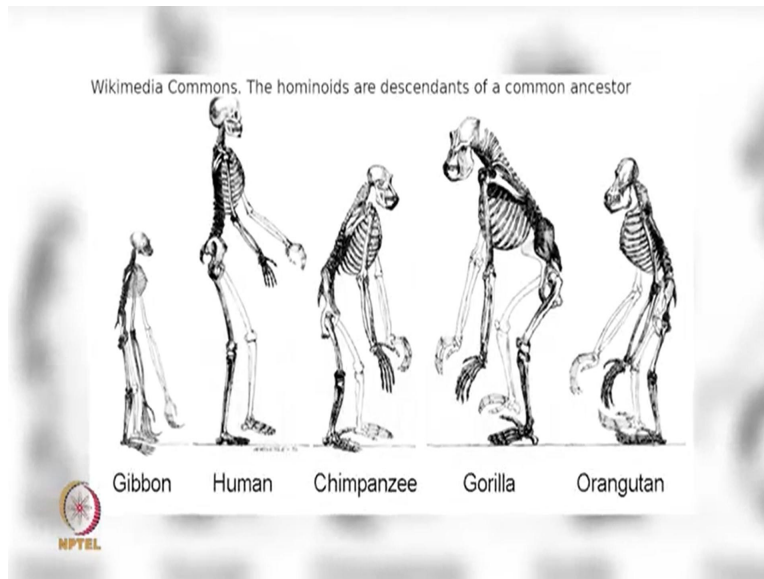


**Text, Textuality and Digital Media**  
**Professor Arjun Ghosh**  
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**Indian Institute of Technology Delhi**  
**Lecture 2**  
**Marshall McLuhan: The Medium is the Message**

Welcome, today we are going to look at an essay by Marshall McLuhan: The Medium is the Message. Now before I go to the essay, I want to tell you a little bit about how human beings are a tool making animal. Human beings are also animals and therefore what is it that distinguishes human beings from other animals.

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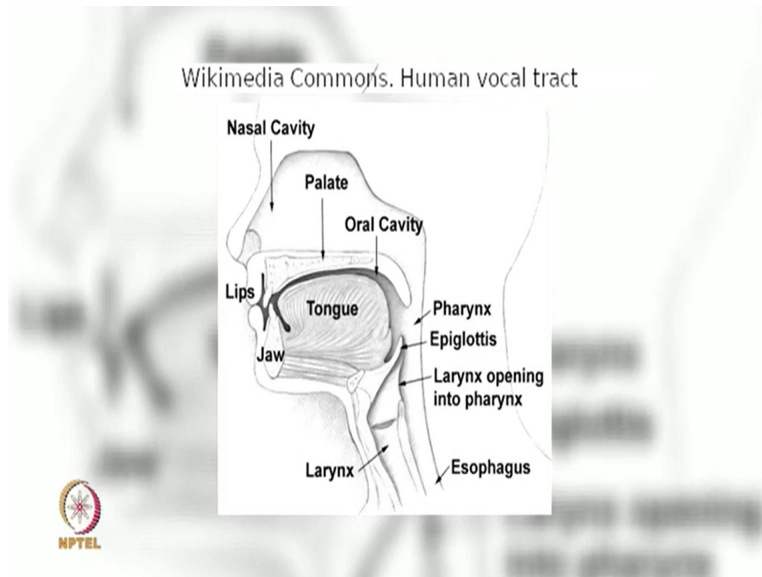


One of the things that distinguishes human beings from animals is that life on earth has undergone an evolutionary process through which one life form from another through a process of natural selection has evolved into higher life forms.

So to understand how human beings actually communicate and how human beings actually function it's important to understand some important biological changes that human beings had over (previous) other life forms who were earlier in the evolutionary ladder.

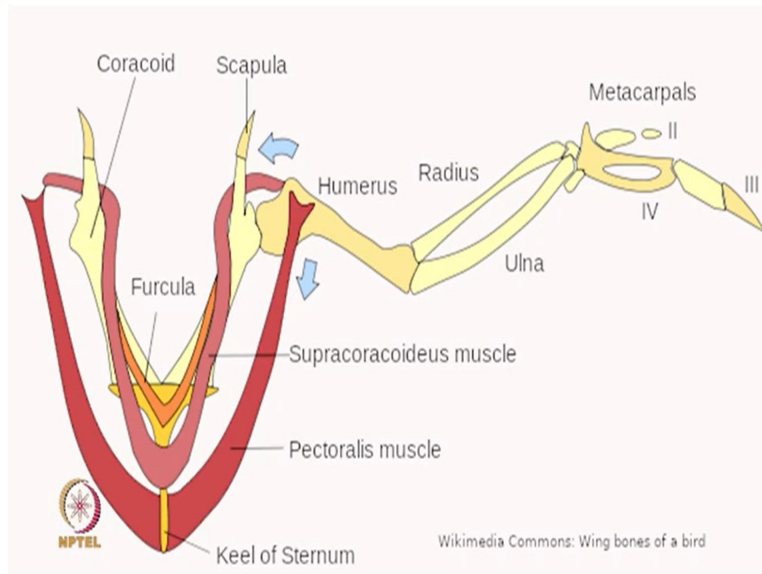
So, when we communicate what are the things that we use? We use our voice and we use our hands whether we are typing out something on the computer or we are writing a letter. We are using our hands, and we also use our eyes to be able to receive communication. But in order to create, we use our voice and our hands. So one important thing about human beings that you need to understand is unlike other animals -some of the primates and precursors of human beings and the ape- we are the first set of life forms on the earth who do not use our mouth as an implement. For example, if I am going to eat something I am going to pick it up with my hand and put it in my mouth, right? Whereas some other animals will -like birds or dogs or cows- pick up their food with their mouth itself.

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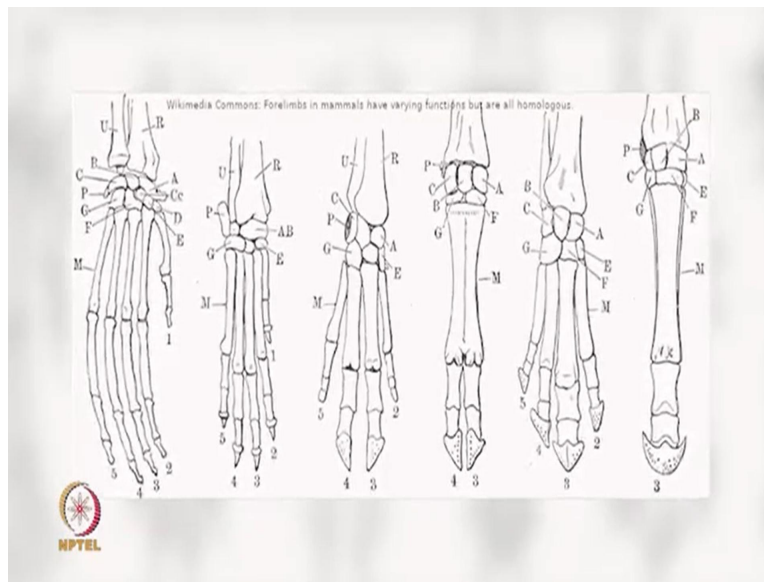
This makes a big difference because it freezes up the mouth to do other things and the mouth then takes various kinds of shapes. To be able to create the range of sounds that human voice produces you need a different shape of the mouth. Which will no longer be very useful for picking up food if we were to eat directly off the plate or off the ground with our mouth then, one the mouth will have to be at a location where we can reach the that lower level much easily. The other important thing is about the hands. The human beings are bipedal- they walk on two feet- whereas many other, most other animals, use four feet.

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Or even birds use their four limbs to fly. Or, fish use their four limbs and hind limbs in a very different sort of way. Whereas we have our hands free to do other kinds of activity so we can use our hands to do other things. If you stand up straight and your locomotion is not dependent on our four limbs, then we are able to use our hands for other kinds of activity that's a very major change. The second important change regarding the hand is the placement of the thumb and the fingers. Now even so, so the important point is the grip.

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For example if I take this pen, I can grip it and this is something most animals can't do, so what is important is the thumb and the four fingers. And even within the primates if you look at chimpanzees for example they would have much longer fingers. So they will be able to carry something like this. Whereas human beings can- because the relation between our fingers and thumb are much closer- bring it together and make a round like this which allows the grip, and all the fingers sort of fold in and around almost an axis which allows a kind of grip. It is this grip that makes human beings the tool making animal.

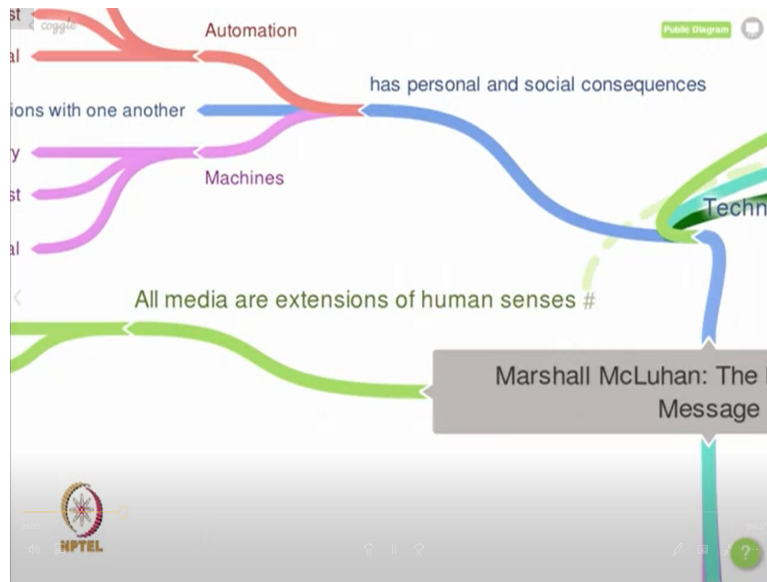
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And the first tool that people use would be for hunting and gathering and fighting. So within the evolutionary ladder those homo sapiens who would be able to learn to pick up stones or crudely made weapons and throw, would gain because they would be able to hunt better food. Number two, they would also be able to gain by being able to fight, in case of fight between clans, they would have an advantage. So, there is a process where those who are better tool makers survive a lot more in the harsh conditions than the others. So therefore, this makes a very important change in which human beings become tool making.

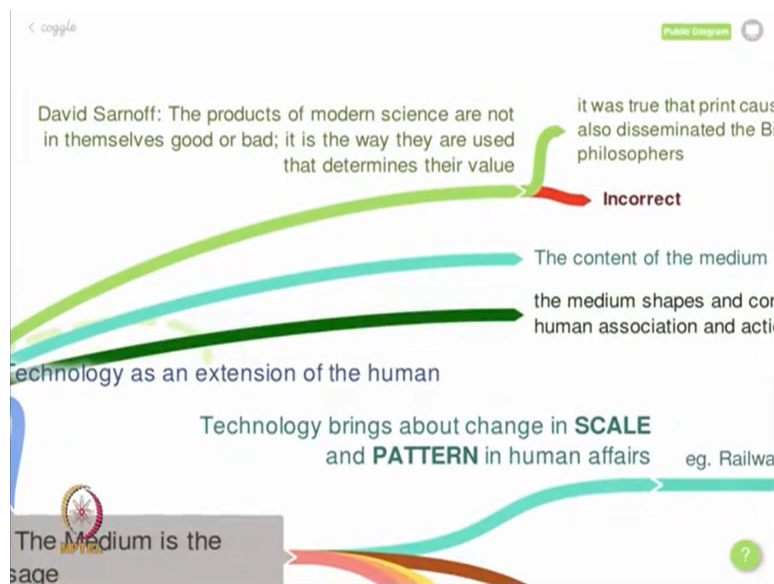
So this, coupled with the change in the mouth where we can use our voice to be able to articulate different sounds and those sounds then take on meanings and our ability to take tool. So that allows us to be able to also write because to be able to write we need a grip, that is how that is very fundamental to be able to do that. So, Marshall McLuhan says that it is important for us to understand that human beings are tool making animals.

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We can move to the mind map. This is an important point you need to understand- all media are extension of human senses. So, the television is the extension of the eye. In fact, various kinds of machine so let's say the car, is an extension of the feet.

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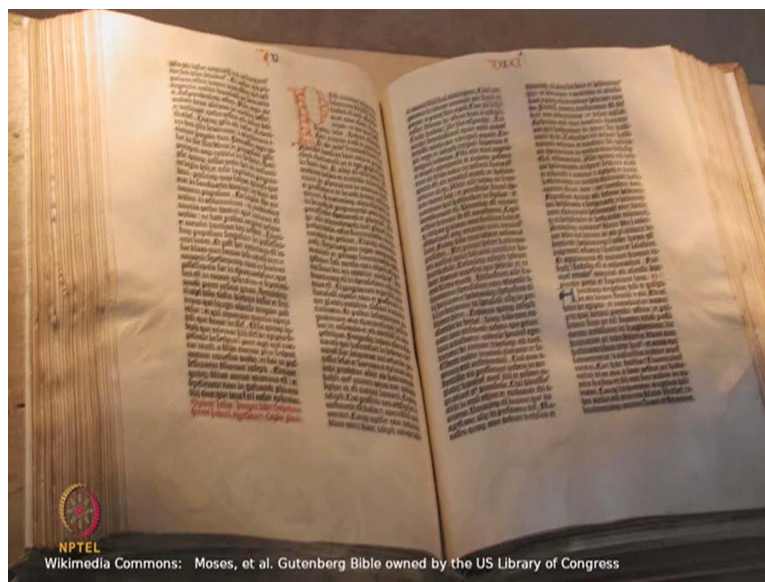
So, in a similar way, all media are extensions of human senses. He says that this idea of the creation of technology as an extension of the human has, tremendous, personal and social consequences. He actually argues against another philosopher- David Sarnoff- who had argued in a particular essay “The Medium is the Message”. Marshall McLuhan argues against Sarnoff’s

contention that the products of modern science are not themselves good or bad, that technology itself is not good or bad. It is how we use it, how human beings use it, in the hands of a good person it is used in a positive way, if it is in the hands of someone who doesn't use it properly, it can have very negative consequences.

Sarnoff gave the example of print. There was a lot of contention that once print came into being, a lot of trash would begin to circulate. This is an argument that we hear for every single time there is a new media innovation. When television came into being, people thought this is going to turn people into couch potatoes and people are not going to get up and read any longer, it will destroy people's reading habits and all kinds of things. Now when the digital media has come about, people are worried about a lot of fake news and other kind of things (that digital media brings). Everybody is writing on digital media. We do not know what is correct and what is wrong. People are misguided.

Therefore, these kind of arguments are being made. But this is not a very new argument- this argument was made for print as well. In later lectures, we are going to look at this issue closely but for now, let us understand that Sarnoff says that, it's a widely held view that print has caused much trash to circulate, lot of things that do not make sense or are not of very good quality get circulated. However, print was also used to disseminate the Bible because when Gutenberg started to print, the first book he chose was Bible as a prototype.

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So the earliest things that got printed were Bibles. The circulation of the Bible became a lot more and so people could start owning copies of the Bible. Before that, the copies of the Bible would be few and far between because they would be manuscript copies which would be kept in ecclesiastical libraries. Access would be there only to a very few people.

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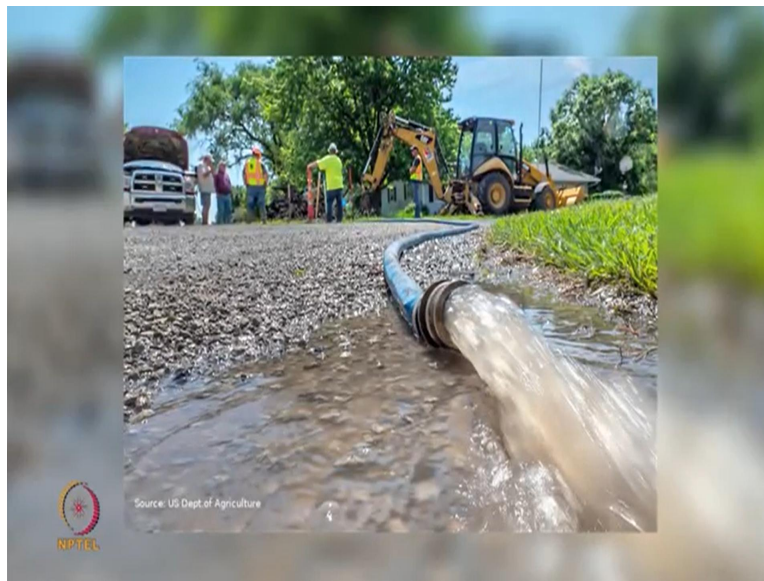


But now people could own copies of the Bible. Therefore much weighted print brings in much weighted dissemination of religious thoughts of seers and philosophers. But, Marshall McLuhan argues that this is an incorrect way of looking at technology. He goes into a complex system of arguments. I am going to take you through these arguments to disprove what Sarnoff says.

He says, that usually when we are accessing some content, we are accessing it using a medium. For example, a news story- we can read it on a newspaper or watch it on television or hear it on the radio and in present day, we may read it on a news website on our phone or on the computer. He says that the content of the medium almost blinds us to the medium. We do not pay much attention to the medium itself. But, he argues that the medium shapes and controls the scale and form of human association and action.

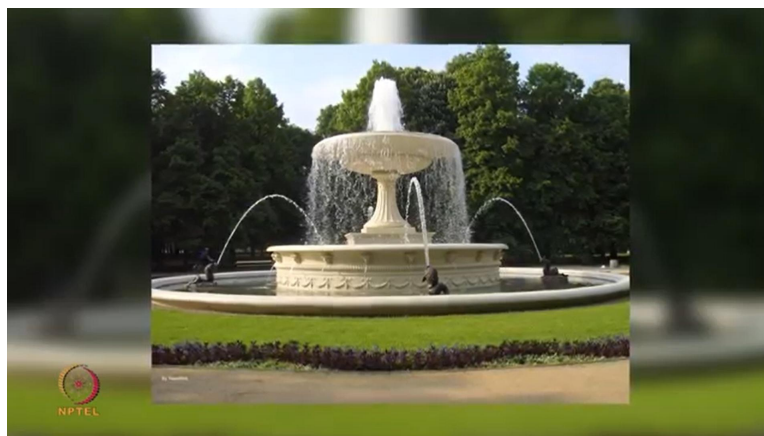


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The way we respond to a particular content is dependent on the way the medium shapes that content. It is very much like, you know, you have so many gallons of water and if you push it through a very wide pipe it will come at a certain speed. Whereas if you put it through a very narrow pipe, it will create a greater pressure and the water will travel much further.

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So the form which is used to record and communicate the content actually shapes the way human beings respond to it and in fact, very often, one would say that human beings who are creators of these content are mindful of the form. For example, when I am teaching this course, if I am

teaching it in the classroom, I would frame it very differently but this is a different kind of mechanism. I am principally here speaking to a camera.

I cannot see any students right now. They are there in the back of my mind- all of you are there in the back of my mind- and I understand that I am explaining it to students. So I am trying to replicate some of my classroom behavior before the camera in order to explain the things to you but actually it is not so. I am trying to frame this lecture very differently. I know that there will be some degree of editing that will go into the creation of this lecture.

At the end, in a classroom there is no space for editing at all. Whereas here, there is no direct interactivity at the point of time when I am speaking. This is not a live recording. So, you have to understand that that is something that goes into the creation- what form we are going to use goes into the creation of the kind of content that is there.

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So, he actually disproves Sarnoff. He takes us through a series of examples and all the examples are not related to communication but other forms of technology. He says technology brings about change in scale and pattern in human affairs. He gives an example of the railways.

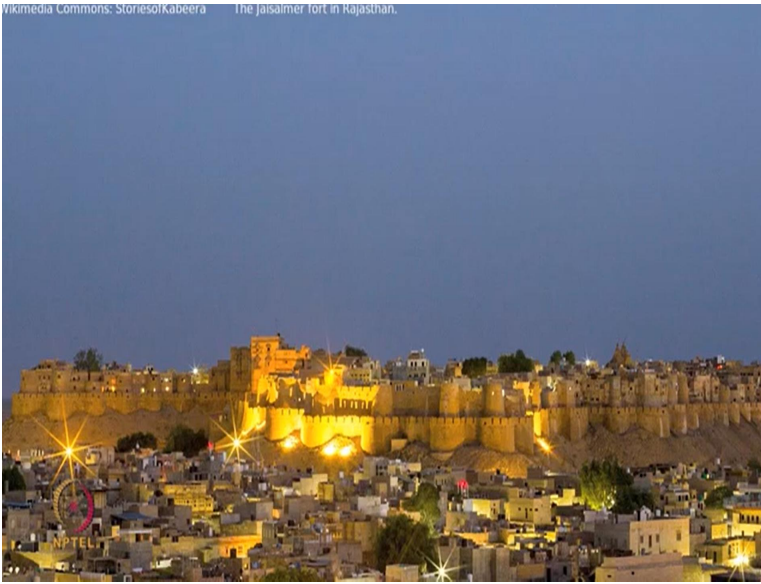
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Now when the railways were first created, new kinds of cities were created historically. If you look at the history of human kind, you find that cities were usually created around channels of communication- principally on the banks of rivers- because that will allow for a channel for communication. Or, cities will be created around fortresses-places of strategic importance- and there will be a fortress and around that fortress, the city will be built from the strategic security point of view. It is a Geo sensitive location.

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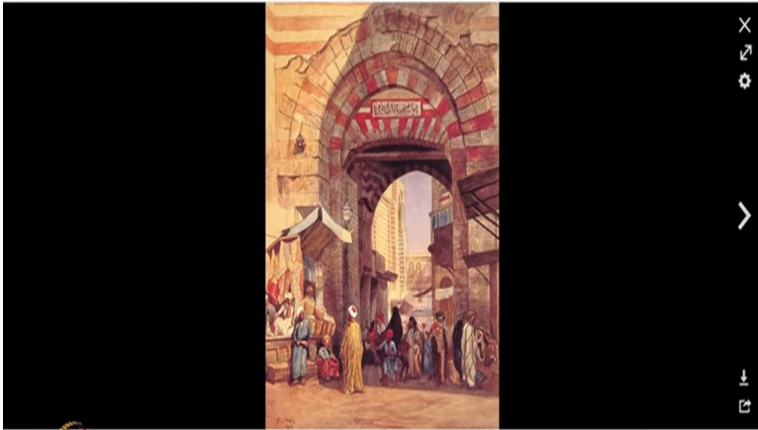
Wikimedia Commons: Stories/Kabeera The Jaisalmer Fort in Rajasthan.



The Jaisalmer Fort in Rajasthan, India, is illuminated at night, showing the city lights below.

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The Moorish Bazaar by Edwin Lord Weeks, 1873

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And these were two kinds of cities which were the earliest cities that were created. Towns or cities, places of habitation were created in ancient times. You also had cities which were created around trade routes. There were important points of trade routes. For example, the Silk Route or important trade routes between continents, especially between Asia and Europe. Along the trade route, there will be transit points where cities will develop, where merchants from various parts would come exchange their goods and create the Bazaar and so historically, these were the places where cities were created.

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But when railways came into being, we had new kinds of cities. Because now, the railways are coupled with other kinds of development that have taken place throughout human history. First of all, you had industrialization. Industrialization brings important changes.

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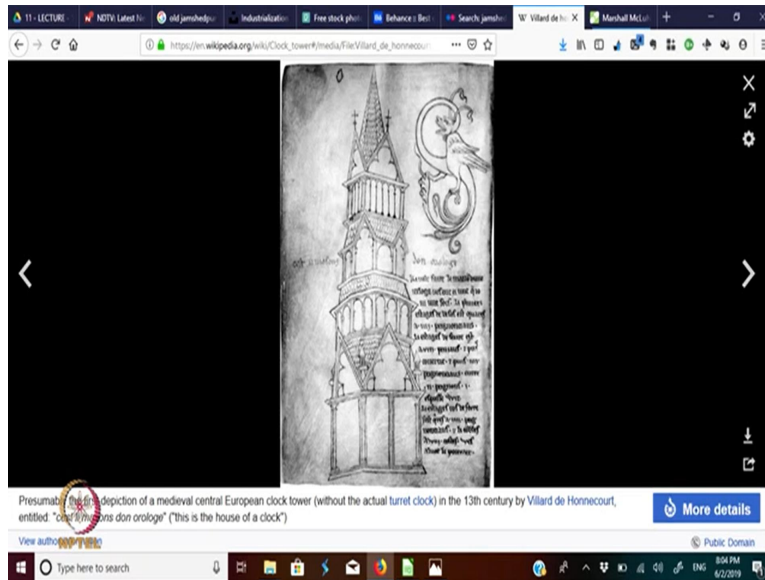
Industry works on raw material. So you get raw material from a factory, then the skilled laborers work on the raw material and then produce certain goods. So, it helps for the industry to be located near the places of raw material. Transportation then becomes one reason. Then the finished product is transported because you don't always need the product. This is something that we are paying the price for today in the form of pollution. Those parts of the raw material which are considered a waste need not be carried to the market.

We only carry the final produce. So, if you get a very large tree trunk and you cut it and make a wooden table out of it, you don't need to carry the leaves, and the branches and other kinds of things all the way down to the factory. You carry only the finished product down to the factory. This becomes much easier, much cheaper. Therefore, typically these industrial townships are located near spaces of raw material. Now, whether or not a city is located nearby, depends on the railway line. Before the introduction of the railways, it was not feasible. So the railway line makes these new kind of cities possible.

What the railway line also makes possible is the establishment of these cities. Because of the new kinds of work and leisure that come into play. Before this, human kind beings would not

have a sense of clock time. Somehow it makes for an important exercise to imagine ourselves in a different historical time period.

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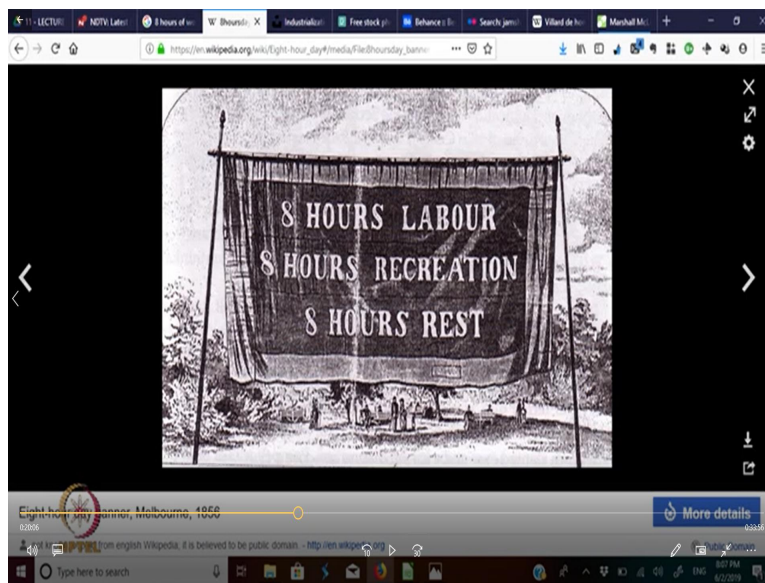
As I speak, there is a clock ticking away and I am aware that so much time is passing by. But this may not have been the case with people six, seven, eight hundred years ago- this kind of awareness of the clock time. The clock time is something that develops after the Industrial Era, when production becomes linked to a certain target, and the raw material has to be brought in. There's a certain investment that has been made and the returns to investment will have to be calculated on the basis of when the goods are sold in the market (19:07).

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Therefore time becomes very, very important. Whereas before, time was more seasonal or diurnal- it was perceived on the basis of when the sun rises and when the sun sets. There was a sense of timing of when a certain crop was to be planted or harvested, and when the rains would come. For example, in case of fishing, one would know the time when the fish would come to the shore or fresh water and that is when the fishermen would go and catch the fish.

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So, there was a very different sense of time but with the coming of Industrial Age, you have a new kind of division of work and leisure. People would work for sometime and there would be a



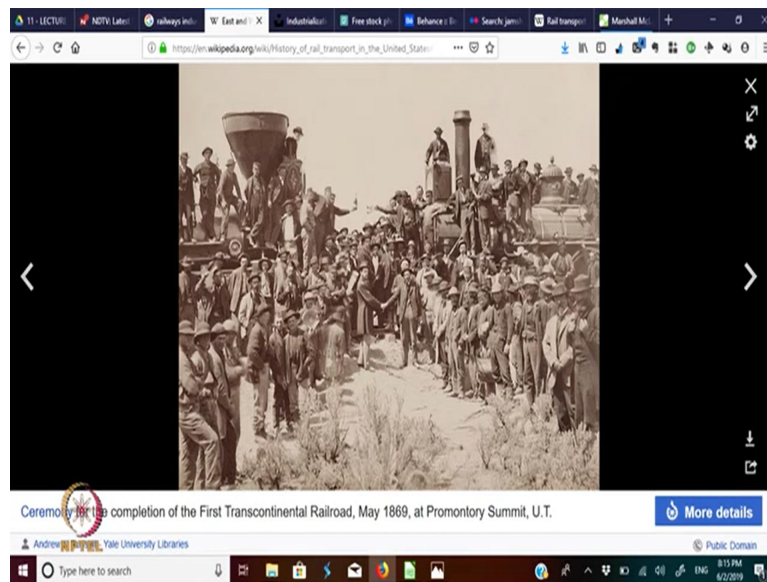
certain degree of leisure time also. That distinction between work and leisure was very well determined by clock time rather than seasonal or diurnal time.

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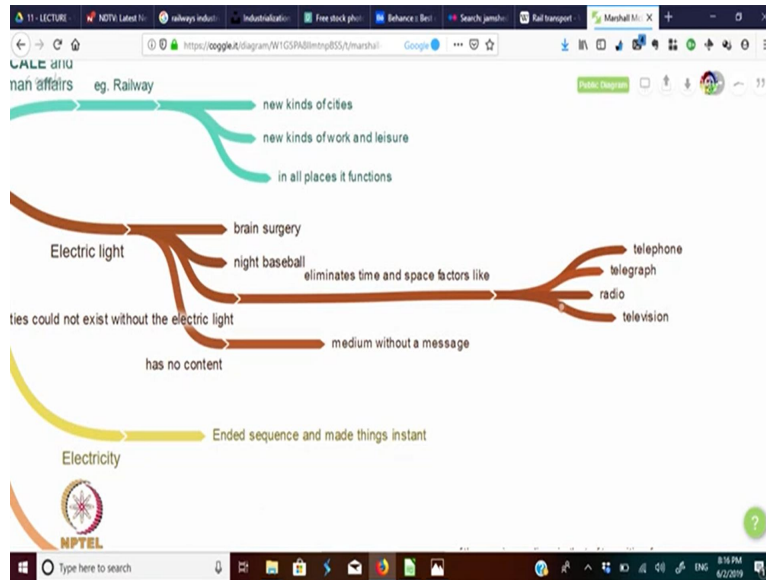
People in the early Industrial Era were made to work for very, very long hours- thirteen, fourteen, fifteen, sixteen hours perhaps and even more than that. If you read Charles Dickens' novels, you will find some of the characters work for a very, very long duration during the day. But still there was this distinction between work time and leisure time.

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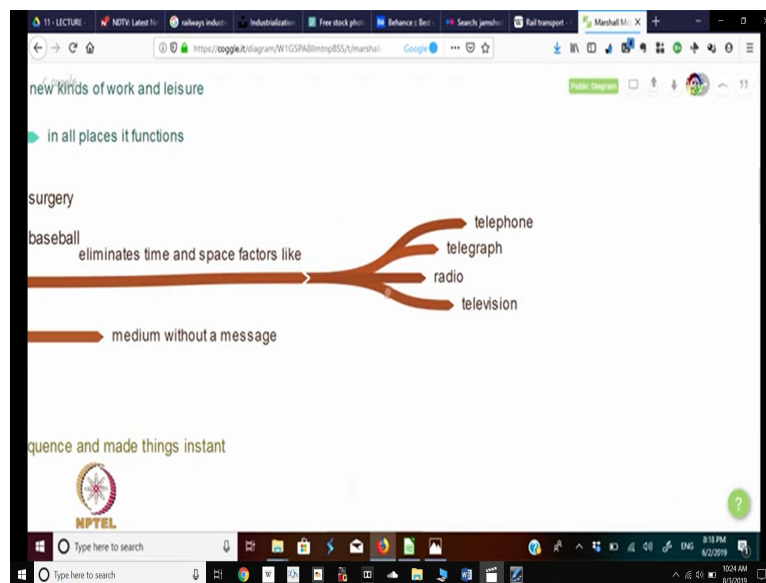
And it is linked to the way the railways function because this kind of distinction then means that people have to move from their place of birth to this township. And the railways make those channels of labour also possible. The labourer has to report to work and then go back, when there is a break when the production stops. It makes labour available to these townships, and without the railways it is very difficult to imagine this kind of industrialization. So, what the railways do once they come into being is the way the railway functions. The railways replicates this kind of pattern in other places too. For example, if there are railways which go to administrative centres or tourist centres, time becomes very important because the train has to leave at a certain time because large number of people are travelling on the railway on the same train. So what he is saying is that the invention of the technology of railways brings about certain changes in the way human beings conduct their affairs.

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Then he moves to examples of other technology. With the availability of electric light certain kind of activities could be made possible- a brain surgery or people playing sport at night. So, it eliminates space and time factors. Many other things that are brought about by electricity: telephone, telegraph, radio, television, various of each of these are examples of what is brought about by electricity and what these technologies made possible is communication.

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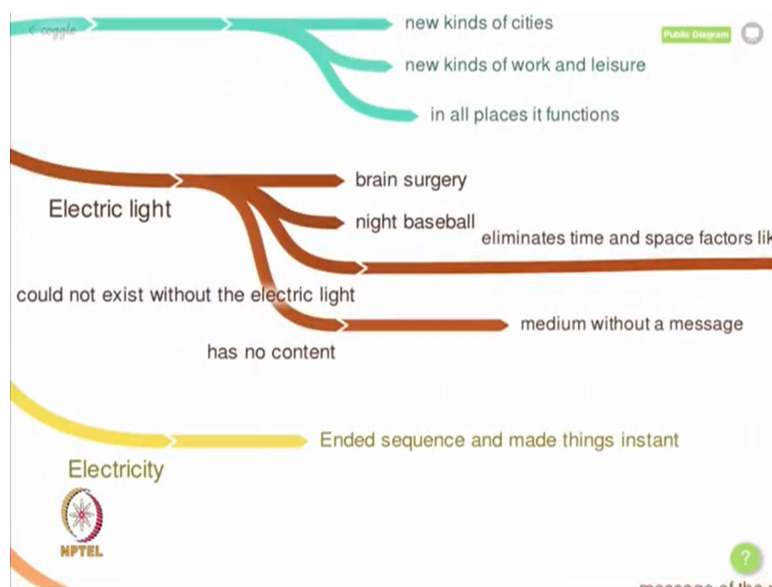


Each of them have their own specific requirement, like for example radio or television, are centrally organized. There is a television studio where the recording happens and then it gets up-

linked and goes to somebody's home and the person can watch it on the T.V set and there is an appointed hour, unlike for example this particular recording which you can watch at your own leisure.

Whenever you have time, you can watch this lecture. You can start a video or scroll to that particular time stamp and watch it from there. Suppose this video is an hour long video and you have already watched it for 33 minutes, you can now start watching it from the thirty fourth minute onwards now. So, there are various kinds of changes that each technology makes possible.

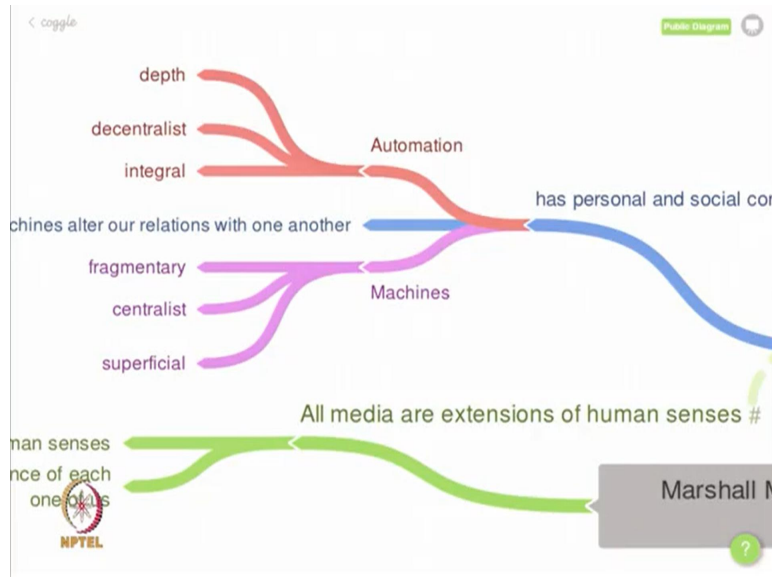
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But everything is put together in form through the emergence of electricity. These kind of relationships between the creators of the texts and the recipients of the texts, or creators of the message and the recipients of the message, would not have been possible without electricity. And he says, that though electricity itself does not have any content of its own, it is probably a medium without a message. What he is trying to suggest is that the medium may be without the message but it is framing the message.

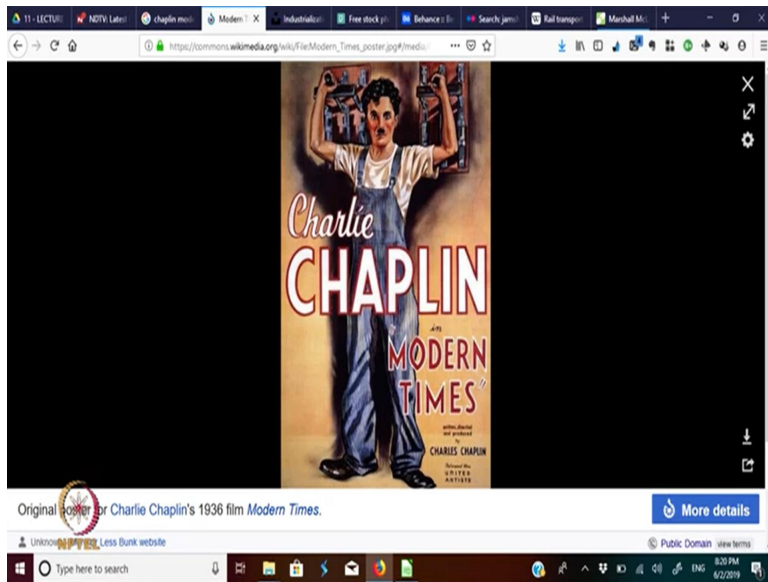
The medium in a certain way is making us behave in a certain sort of way and that almost becomes pervasive. The impact of a certain small technological change can be far reaching in human affairs. So, one of the things that he says is that electricity ended sequence and made things instant.

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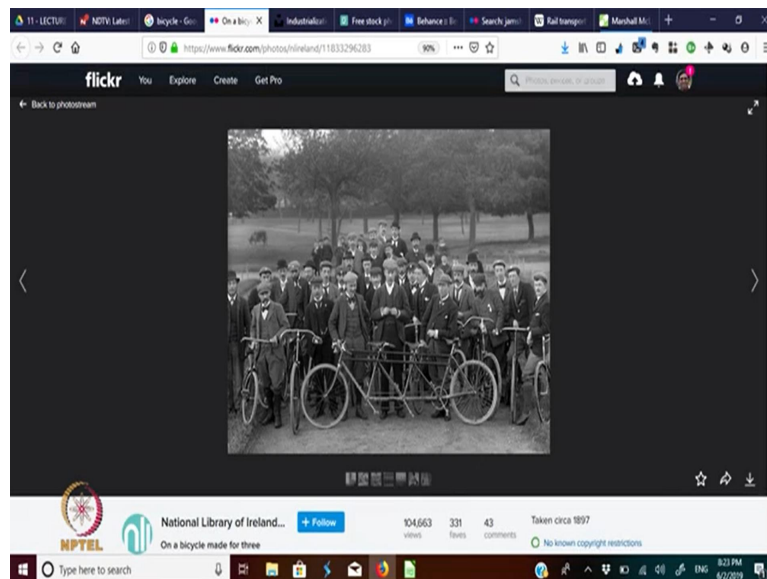
So, for example he says that there is a distinction between machine and automation. According to him, machines alter our relationship with one another.

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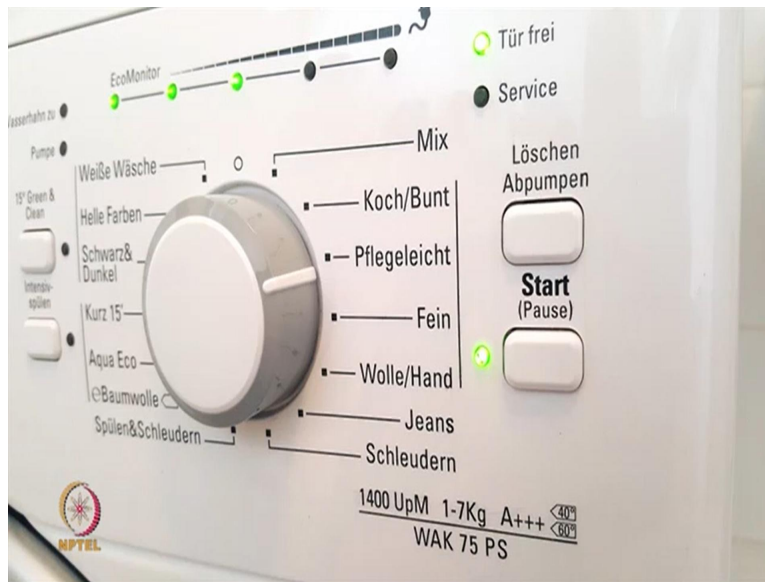
Some of you may have watched this film by Charlie Chaplin called Modern Times where he looks at how machines are and their effect on people and working lives. It's a very satirical presentation of the impact of machines on modern life. I strongly recommend that you watch that movie. So, he says, if you look at non-automated machines which are mechanical. Let us consider the example of a bicycle.

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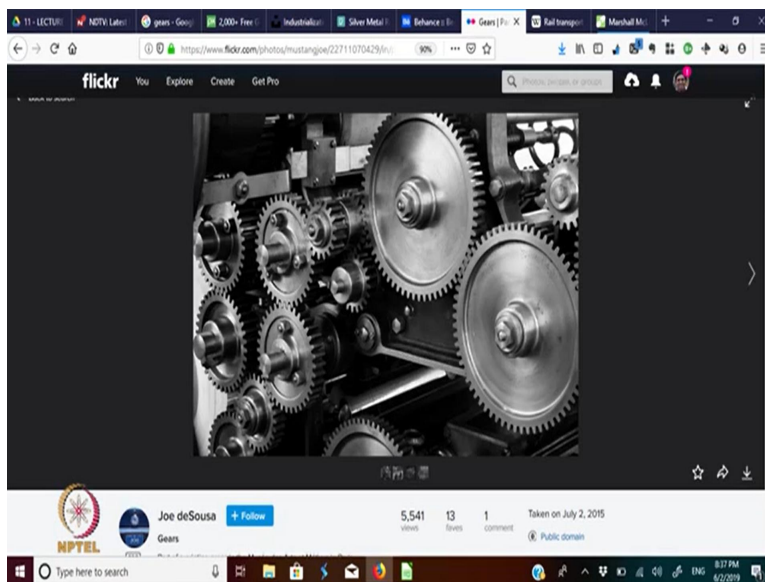
In a bicycle, you press the pedal and the wheels move and there is a direct relationship between you pressing the pedal and the cycle moving.

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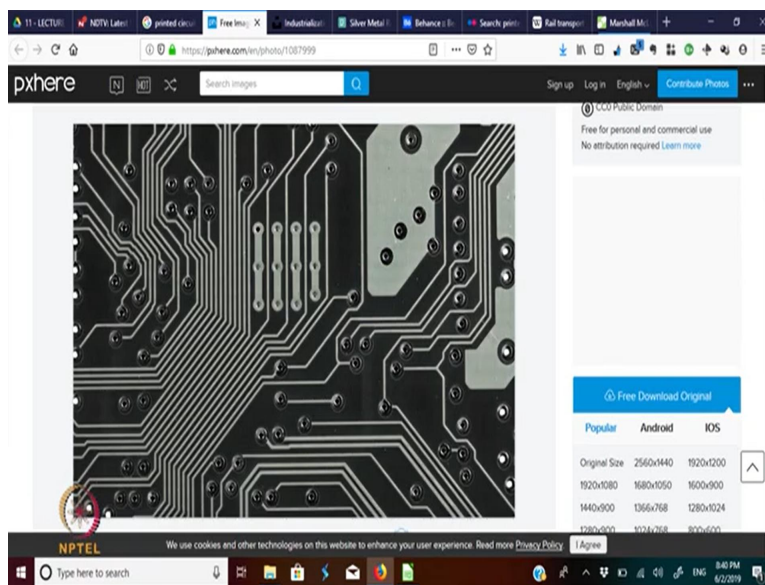
Compare it with a drone or for example a modern washing machine. It doesn't require you to turn a lever in order to let the motor go. You switch something on and all the changes that are happening are regulated through a wired circuit. When electricity enters into the field and electrical circuits enter into field, you have automation.

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So, the controlling of the speed in a car or a bicycle is made through a gear box. It's all mechanical. So if you put it in a certain gear, then you press on the accelerator, the gas will increase the speed of the car in a certain sort of way. Whereas, if you have to change the setting of the programme on a washing machine or a microwave oven these days, your action of pressing the button is not mechanically linked to how the motor moves. It is linked through a circuit.

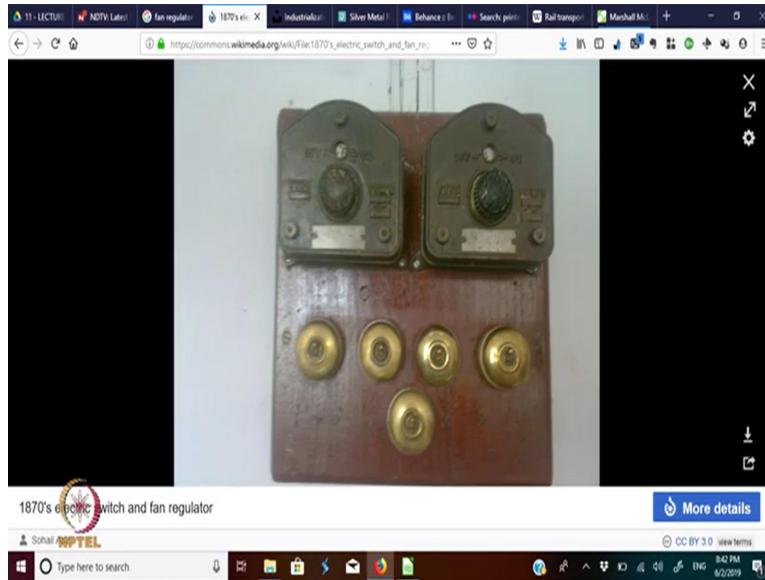
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The circuit takes over. Now the circuit is giving a certain instruction which is regulating it according to the amount of electricity that goes in or not.

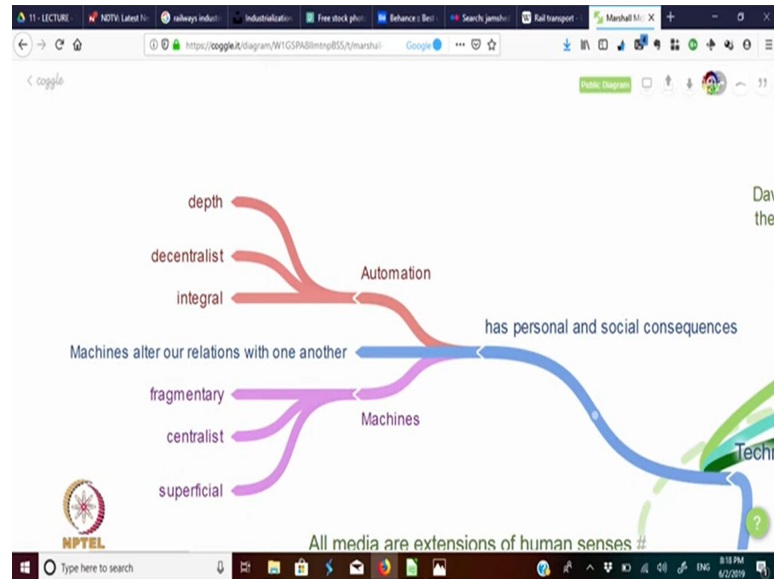
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For example if you look at the mechanical regulators of fans. If you turn the fan to five it will move the wire to a certain point where certain electrical frequency will go in. Sorry I am not very versed with all the technologies, but I can just communicate the idea to you. When you turn the regulator of a mechanical regulator, you control the energy that goes into the fan and make it move at a fast or slow pace.

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Whereas, the digital regulator would merely instruct the circuit to send that much electricity into the fan. That's the distinction between earlier machines and automation. Now, he says, this makes a tremendous degree of difference because machines were fragmentary. You had to have people at different parts of the assembly line in order to work on a specific problem but because they were fragmentary it needed a lot more centralized control.

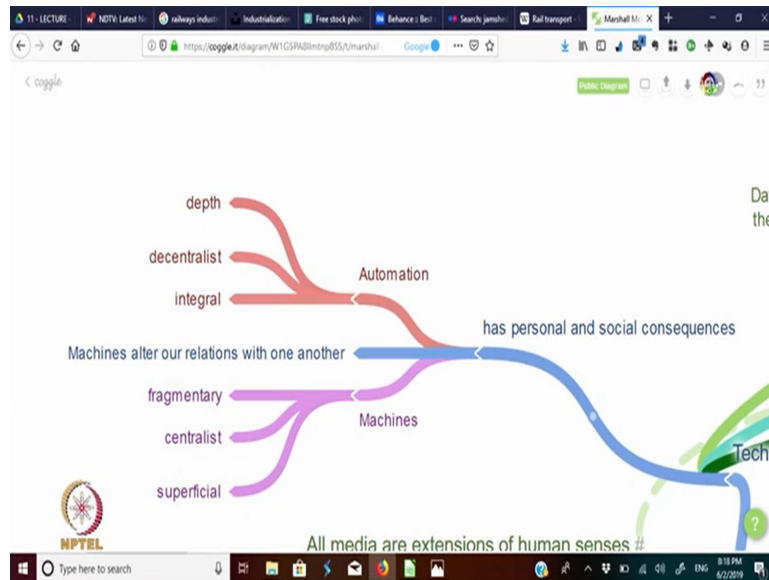
There is a kind of negative relationship, inverse relationship between the two. The more fragmentary production processes, the more centralized it needs to be. Whereas with automation, what happens- because there is weighed depth and it is integrated through the production process,-is that you can regulate what exactly happens at that particular spot at a local level and that change can also show up on a dashboard in the control room.

So the control room is now able to give a lot greater autonomy for that final point of delivery. So though decision making within automated universe is much more decentralized, it is actually a lot more integrated. For example if I am producing a pen cap which has a different diameter than the fellow making the cap, the person who is making the cap will also have to increase the size of it.

They can't change that decision themselves. Whereas in an automated system, if there is a change in the diameter here, that will automatically show up on somebody else's screen and they

will know and they will be able to make that small change without referring to that central authority.

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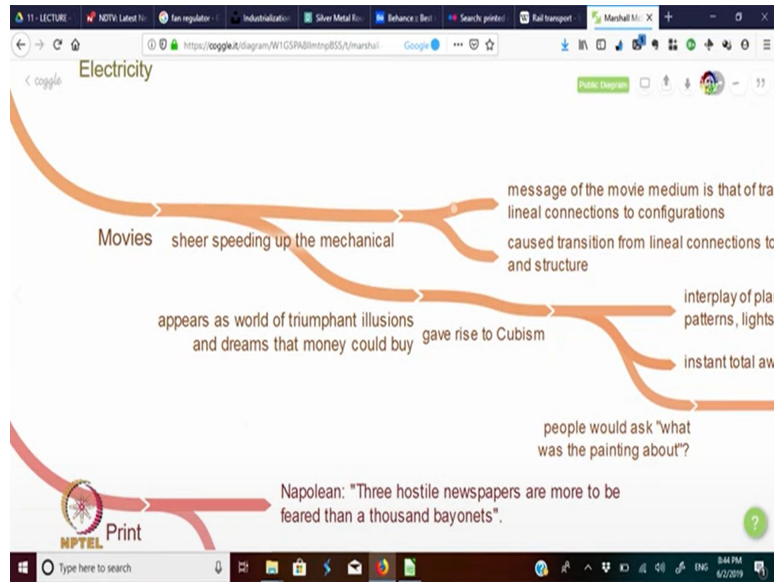
Therefore the mechanical world needed a lot more central authority but the automated world doesn't require central authority that much. That will tell you that you can now custom-make a lot many more goods. You get a lot more customization. Many of these companies when they are producing and selling things, let us say in India, have machines which are things which have been designed elsewhere. When they are producing it for India, they are customizing it for the Indian market or maybe even for various markets within India. That kind of decentralization is possible with automation whereas in the mechanical world, centralization would be required.

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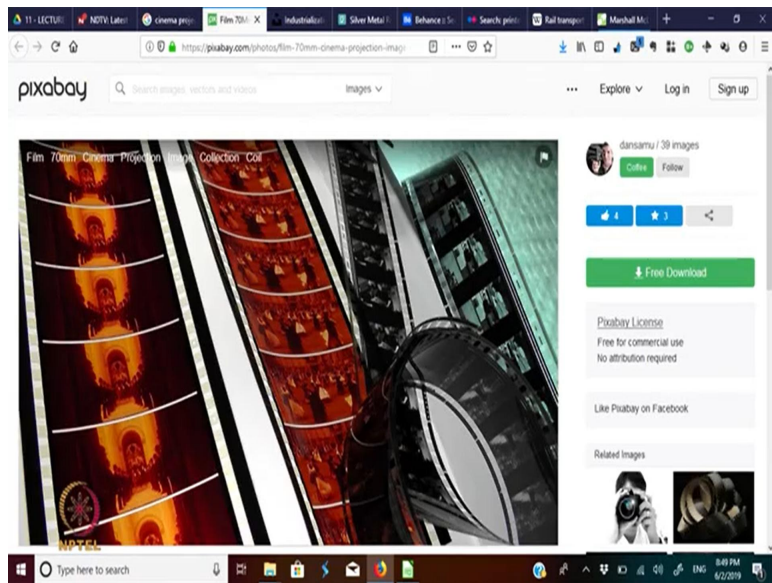
So that is purely a technological chain. So the electricity actually ended this sequence. It made things instant so you could make small changes during the process. He also talks about movies. Movies- not digital but mechanical movie cameras- were taking series of photographs because our eyes are not able to see pictures below and above a certain frame rate. When those series of photographs are projected onto the screen at a certain speed, we see a moving image.

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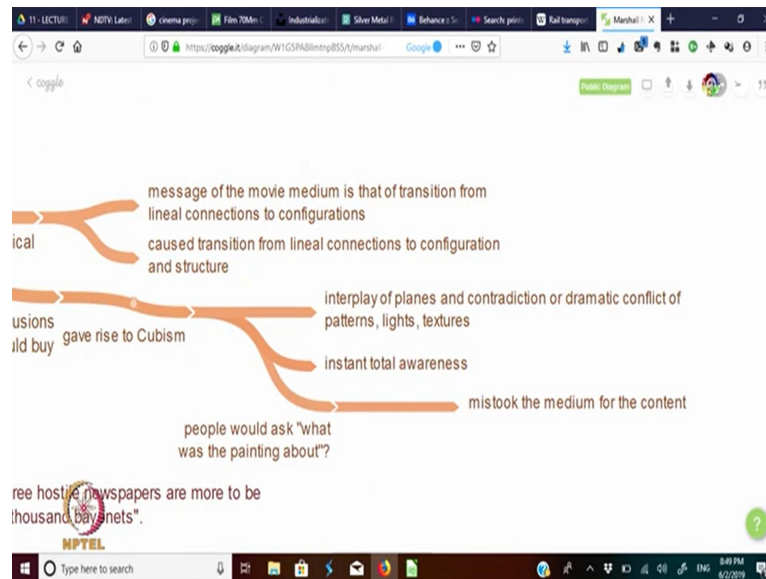
So movies were sheer speeding up of the mechanical movie shots. So, the moving image is actually moving from, a transition from a lineal sort of connection to that of a different kind of a structure. And now, you could play with illusion.

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Movies could superimpose one image on another now. With a mechanical camera, one could record separate photographs and one photo would be super imposed on another. For a split second, the film moves on through the camera. So now make it possible to impose two images together or play two kind of sequences together and create a montage, create a kind of illusion.

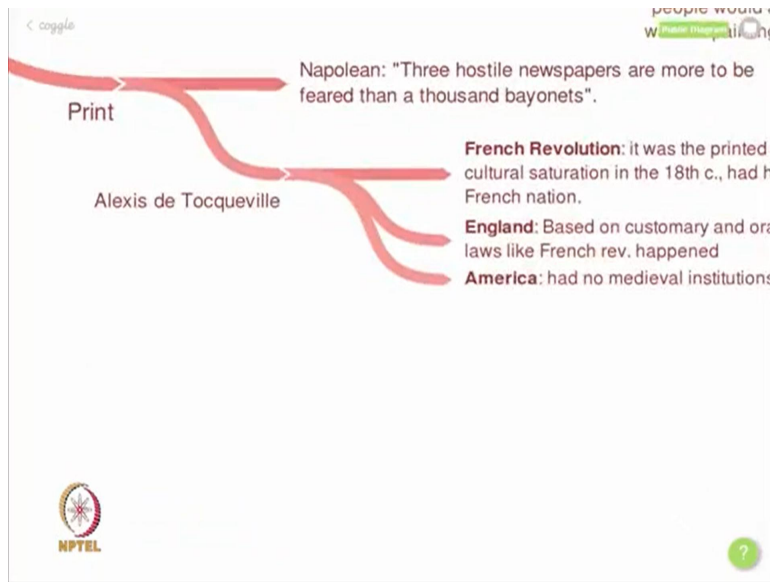
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This gave rise to new kinds of art forms like Cubism, which played on the interplay of planes and created this dramatic conflict. So, imagine, it could show the face of a monster and the fear on the face of the people who are running away from it. On the same plane, that would be short separately, but they have been superimposed together and they are being played out. That is something that can be possible with the coming of this kind of technology.

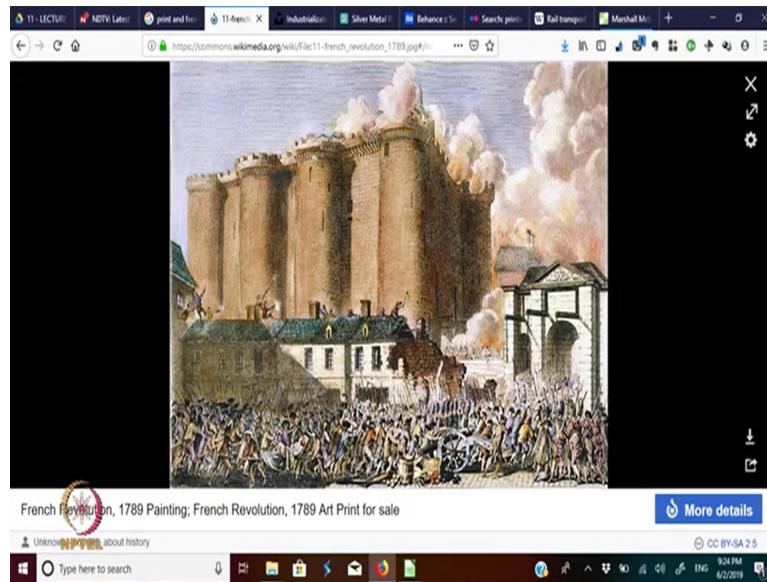
This would not have been possible in other form of media. When Cubism comes into being, people would ask -what is this painting about? But the answer is the painting is not so much about something but about the medium itself. The way human beings are now interacting with images and ideas- is what cubism as a movement actually tried to encapsulate, bring forward, and critique.

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Now he moves to the other important communication technology and that is print. We are going to discuss this later on in the course at a much greater detail. Print has a very far reaching impact on human life specially during the Renaissance- from the time the print was discovered and the first printing machine was created. In fact, scholars have argued that print played a very important role in in creating revolutions across Europe.

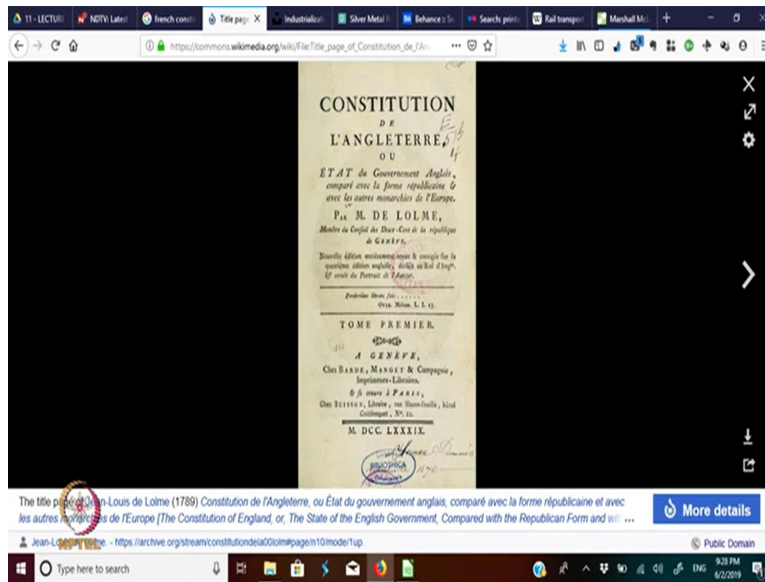
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And so for example the French revolution and other similar democratic revolutions that took place in Europe around the sixteenth, seventeenth and eighteenth centuries. Print had a very important role to play as a tool for communication. We are going to look at all that in later lectures but for now one of the points that he is speaking of is that after the French revolution there was a sea change in the way in which France was governed (or conceptually I mean). The important point to be noted here is that the movement from monarchy to democratic parliamentary sort of politics is something that was brought about by a change in the Constitution.



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The change that happened within France: the king of France was guillotined and the argument was for liberty, equality, fraternity is- actually brought about changes in Constitution. So this was an important moment in history where you had a change of constitution because of a certain medium. Just to explain the point, he takes two other nations, one is England.

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England even today has a constitution which is primarily based on customary oral laws. There are sets of customary laws. There are sets of statutes, legal judgments and the sense of the law is

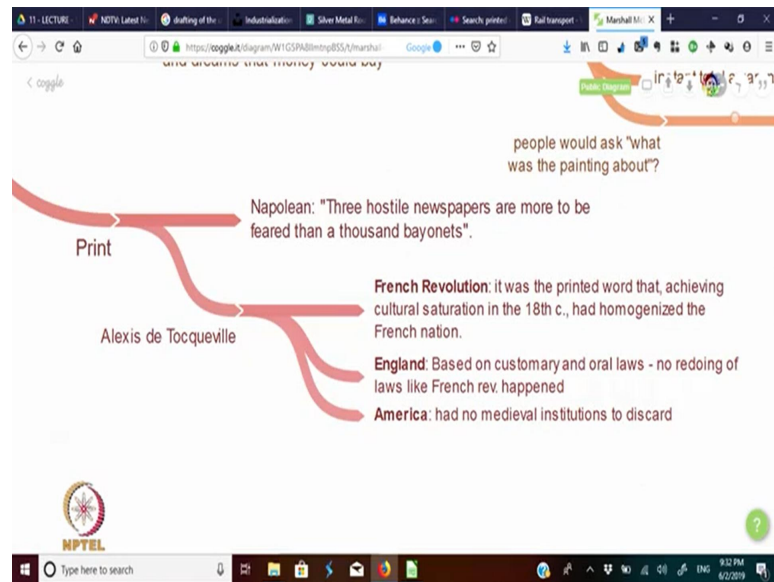
derived from that. So, what he says is that unlike in France, in England, this shift from the oral world to the print world never really happened.

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Whereas in America, you know the American constitution is a very, very landmark text in the history of human politics. And in fact, the England constitution takes a lot of leaves out of the American constitution. Because America was imagined as a New World, that is, a colonial vision where they did not recognize the rights of of the native Americans at that point of time.

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So they were beginning without any examples of any medieval institutions. They were writing from scratch. In the French Revolution, they had derived parts of previous medieval institutions and then changed it to modern institutions and that was something that was brought about through the changes in the constitution. So, each of these three nations, in their constitution bear a very different relationship between the shift from the oral to the printed world.

And this importance of print was something that was extremely well fathomed by the rulers of that time. You know we do talk about the French Revolution as this bringing about this democratic change in France, but what happened really was that it gave rise to a new monarch so to say, in the form of Napoleon for the next years following the French revolution. That is for a history lesson to figure out.

But Napoleon was very much aware of the power of print. He says that three hostile newspapers are more to be feared than a thousand bayonets. So the power of the print is something that Napoleon realizes at the level of ideas. The battle has now shifted to the level of ideas rather than merely in the battle field. So, it's not only important to have good guns. It is also important to be able to control the print.

Because the newspapers can articulate a certain view among the people and that can be very dangerous for the rulers. And so the rulers take cognizance of it and decide how they are going to govern or administer the media to be able to govern the country in a certain sort of way

according to their administrative vision. In the concluding part of the essay, McLuhan looks at this novel by E.M Forster "Passage to India" to describe a certain conflict between the East and West.

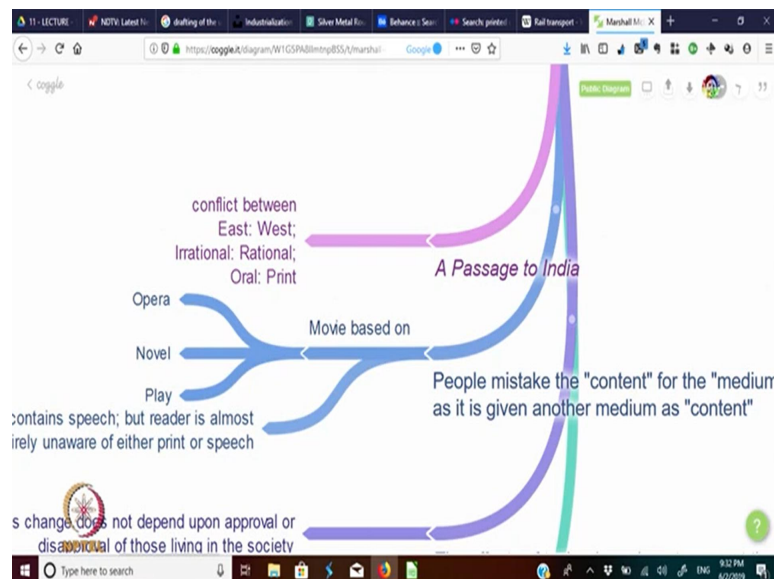
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And also to thereby explicate his idea of how the change of technology frames the message. He refers to a particular central incident in Passage to India where a young British girl called Adela Quested visits India and there , she meets an acquaintance who is called Dr Aziz.

And there is a particular incident where the two of them visit a cave. They've gone out for an outing along with their friends and family and they wander off during a conversation into a cave and when they come out of that cave then the world falls a part. There is an accusation that Dr Aziz has tried to molest Adela Quested. Now, it not clear as to who is saying the truth because what McLuhan importantly tries to suggest is that there cannot be any final word on what the truth really is. He says because there is a long legal battle after the incident and Adela Quested is not able to testify very clearly what happened within the cave (there could have been other people or there could have been animals within the cave as well).

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But McLuhan looks at it very differently. McLuhan looks upon it as a conflict between the East and the West in a way in the way the legal system actually operates. The West is largely in this case Adela Quested and all the British friends and acquaintances. They belong to a universe which is more attuned to the printed form. Whereas, Dr Aziz belongs to a world in India which is more attuned to the oral form.

So, oral testimonies and testimonies in a legal printed universe work very differently. And the two do not come together. They don't understand each other. The West tries to frame the East as irrational but the world of the oral has a different sense of reason than the world of the print. This is something that we are going to look at later on in the course as well. But print operates in a

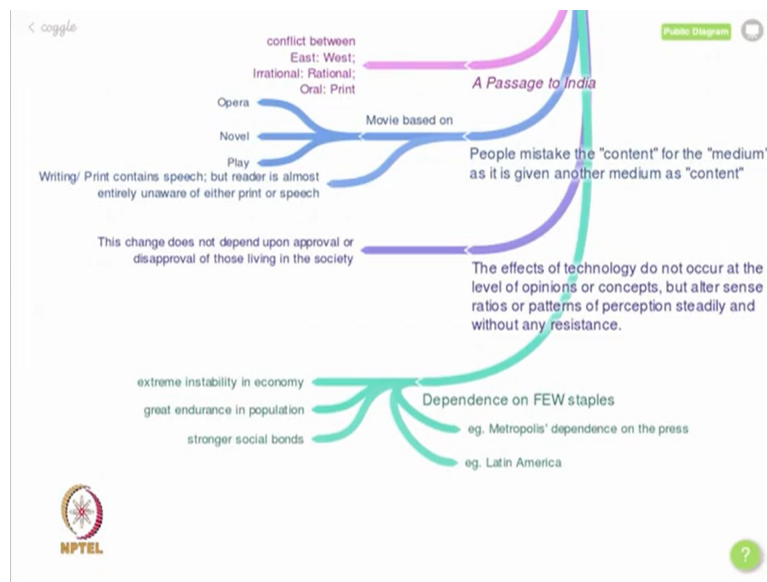
certain sequence the way you a book is organized. In the case of writing, we move from point A to B through point C, that's how it's organized, the page numbers are organized- page one, page two, page three, page four- that sort of brings in a certain kind of sequence.

But in case of orality it is not sequential. Its much like the mind map that we are reading right now.

I can move the mind map from point A to any particular point I want to cross refer to. I can easily do that. I can add some other points very easily down there together. So the oral world works very differently from the print universe and the way people think within the printed universe is very different from the way people think or operate mentally in an oral universe. So that distinction is the bone of contention. That is what leads to this confusion in understanding what happens in that cave in Passage to India.

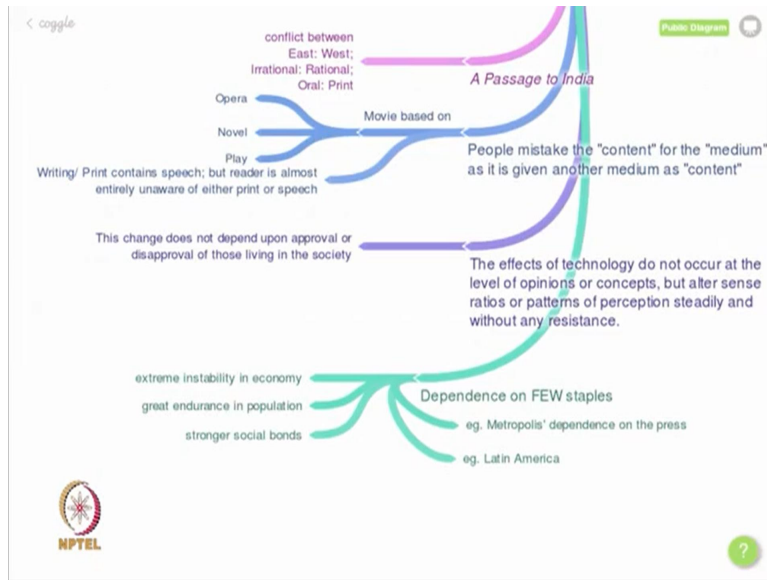
So, McLuhan is saying that the medium that is used to communicate actually frames our way of understanding content. That is something that usually human beings are not very aware of.

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And he is he is actually trying to make people aware of that. So McLuhan's entire effort in this essay is to underscore the importance of studying the medium and looking at what is it that the medium brings in.

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For example he looks at situations where the movie can be based on other texts. Movies can be based on an opera or a novel or a play. But when the movie comes into being, many a times we have seen movies and films which have been based on a novel, for example, or a play that we have read or seen. But while watching the movie people think that this is the play but it is not the play, it has been re-framed. It is a separate script that has to be written for the film itself.

So, this is right. Both writing, print as well as movies- all of them contain speech but it is not the same speech. The speech in a novel is not the same as the speech in a movie. If there is a serialized version, then that would also be framed very differently from that of the movie.

So each form has its own implications on the way a certain content is delivered and McLuhan says the reader is almost entirely unaware of either print or speech. But the reader usually doesn't pay any attention to what medium is being used but the medium is important- that is what he is trying to say.

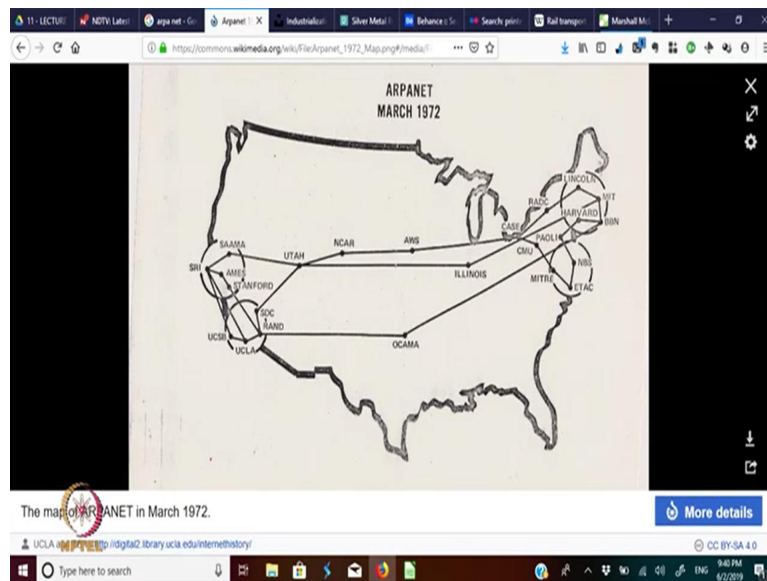
And he says that the effects of technology do not occur at the level of opinions or concepts, but alter the sense of ratios or patterns or perceptions steadily without any resistance. So, the point is that these changes that are brought about in specific technologies, these technological changes are not completely dependent on people's opinions.

Technological changes happen, so when we say that the Bible is being used, print is being used to talk about the Bible or to translate the Bible among people or audiences, it doesn't mean that

is the reason why print has been put into place. The way the print is shaped; after that what happens to the technology can almost be beyond the control of everybody involved.

While creating technology we are always not aware of its larger implications. It says this change does not depend on that approval or disapproval of those living in society. What kind of changes that change of technology would bring about often cannot be controlled by those who created that technology. For example if you look at the internet, the internet was created through a program, a government program to preclude to prepare for the consequences of nuclear Armageddon.

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So that if there was a nuclear war, and there was an important data centre where data would be stored so that if it got destroyed, that would lead to a serious difficulty in administrative functioning and also if it is a military data centre, that would lead to serious difficulty in functioning during war.

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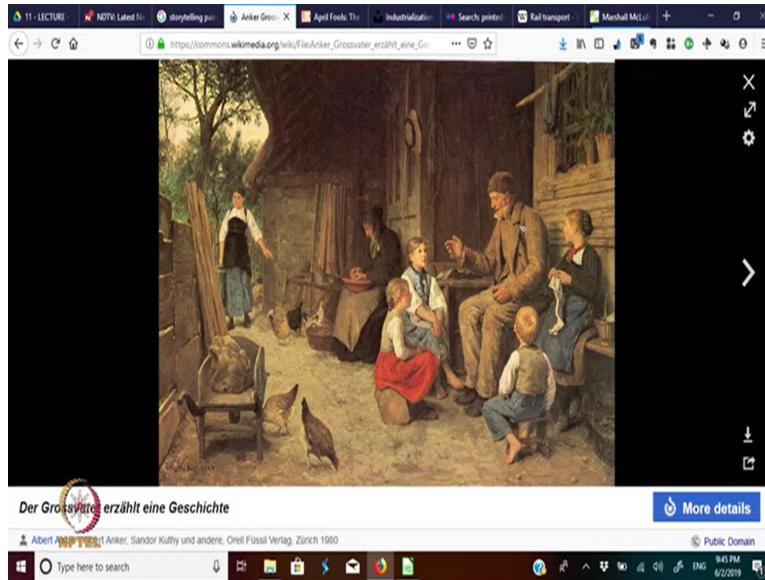
So they tried to figure out if the data can be decent-red and yet be interlinked. So that if one part of the network is wiped out, the data can be restored from other parts of the network. This is very similar to the kind of torrent technologies and other kind of technologies that we hear of today.

Where data transfer is communicated between various systems in packets and not as a whole. So the packets of data could be distributed across the network and therefore if one particular data centre storage stops functioning either due to some technical fault or due to war, and acts of war, then all the data and all the functioning is not lost.

Now this was what the internet had created. This was primarily a military project but look at where we are today. Today, that decent-ring has resulted in greater possibilities of civilian use. It is no longer merely a military development, it is now a technological development of gigantic portions which has brought about a sea change in the way human lives are operating.

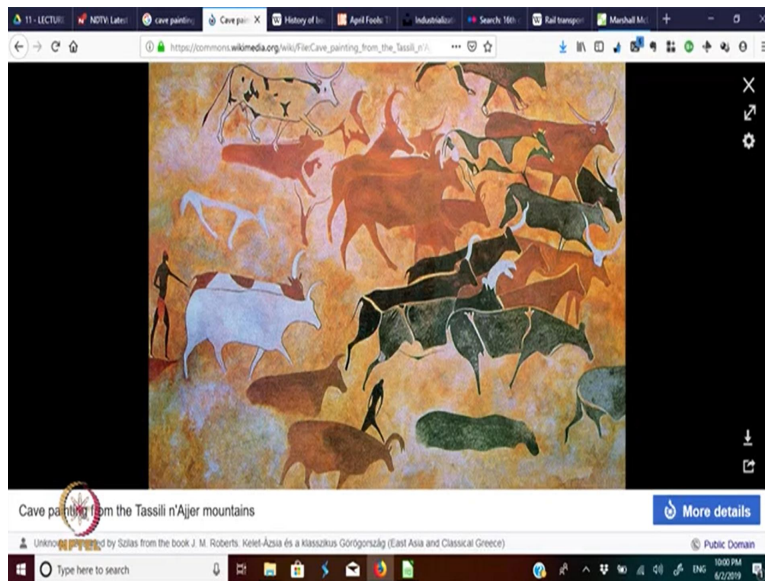
So therefore, the creators of the technology do not always have the key to what would be the social or political or economic cultural implications of that technology. But these implications are there because the medium does frame the message and therefore our principle task here is to understand how the medium is framing the message.

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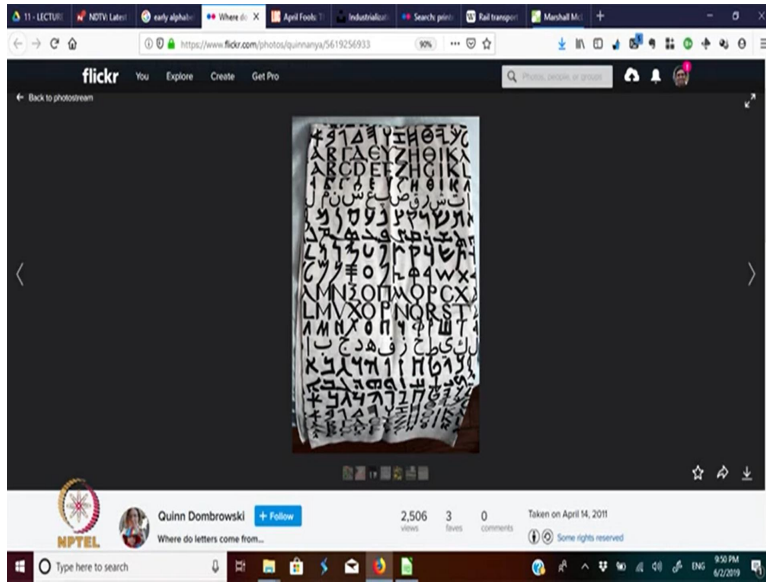
So, when in this course we go and look at the, the transmission of human ideas through various technologies, firstly we use our voice in the form of oral, then there is the form of oral records or oral communication- stories, poem, poetry, ideas, songs.

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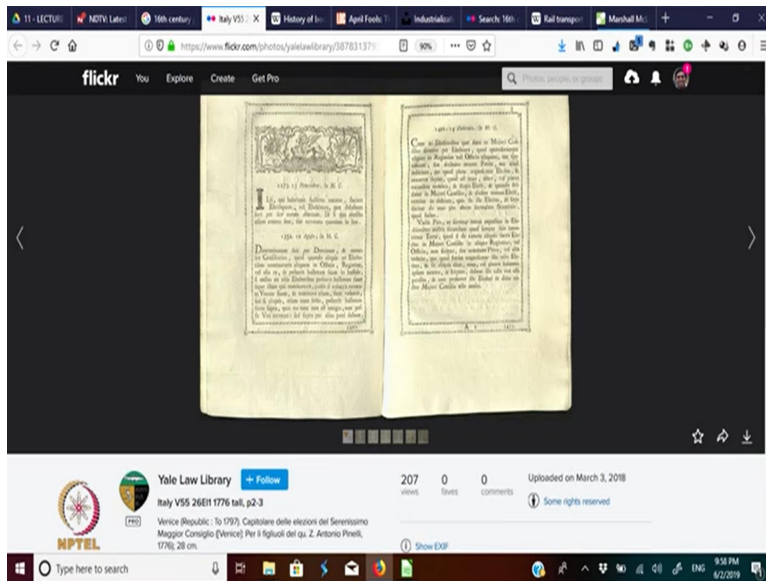
Then you have inscriptions on stone walls or caves, pictographs- pictures being drawn.

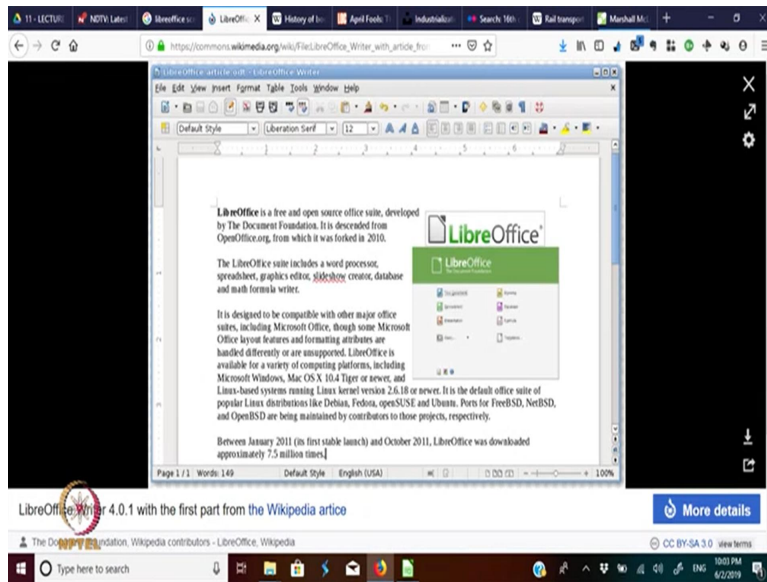
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Then the invention of writing the alphabet, the vowel is born, then the words are born, then the various kinds of forms, which are transformed there.

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To the coming of print, and finally the digital world. We are going to look through these phases of history to see how in each of these cases, the medium is framing the message and therefore medium is becoming the message. In the next lecture, we will look at another essay by Marshall McLuhan. Thank you.