

**Text, Textuality and Digital Media**  
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**Lecture 1:**

**Introduction to the Course**

Welcome, to the first lecture of this course, text, textuality and digital media. In this course we will look at various ways in which, various methods through which human beings have engaged in communication. The aim, the principle objective of this course is to understand how human beings actually operate. What are the changes that are being brought about within the human life, in human society, through this shift from the traditional media to what is called the digital media.

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Now the traditional media, I am here primarily looking at, for your understanding, the print media. Though one would say that even electronic forms like television or radio could also undergo a significant change with the emergence of digital media because before digital media every other form of recording human ideas was done through mechanical means.

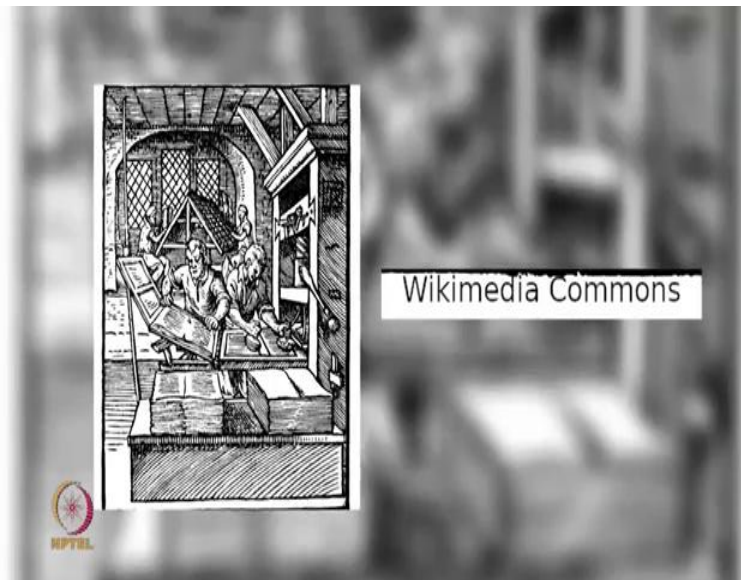
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There would be some mechanical means through which these thoughts are recorded, whether in the form of a newspaper or a book, or in the form of radio or television. The cameras used to be mechanical cameras, whereas now you have the digital cameras. So for television, for radio the devices that were used for recording voice would have been mechanical devices. But now more and more digital voice recorders are used.

And this is not a very simple technological change, what I am going to argue through this course and hopefully be able to communicate to you is this. That this change is extremely significant and can bring very far reaching changes- in human relationships, society , politics , international politics- which is something that we are going to explore in this course.

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So just for a pointer, I would like to tell you that there have been historically several eras in which these kind of shifts have taken place in the past. The most recent shift that of this significance that had taken place, took place in Europe about 5 to 600 years ago in the form of the discovery of the printing machine. Before that, the only method of reproduction of texts were manual.

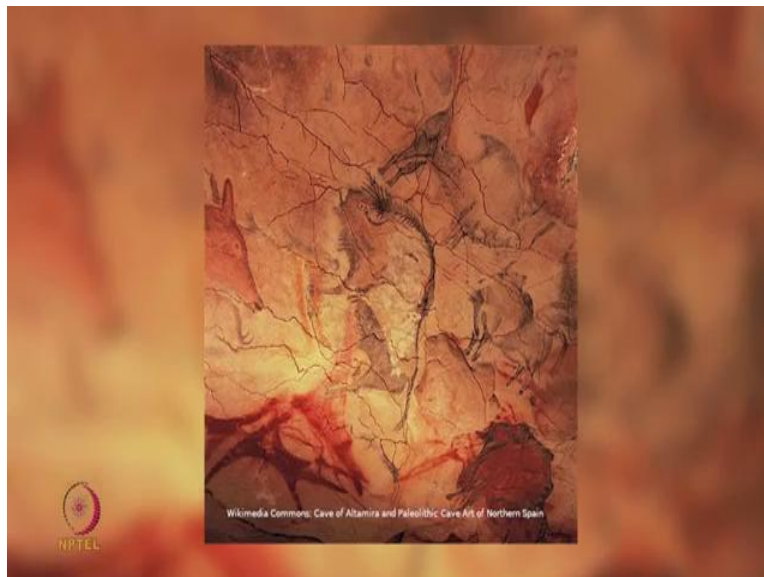
So we had a shift from the manual to the mechanical. The current era is a shift from mechanical to the digital. So what we are going to try to understand as part of this course is the ways in which the shift from manual to mechanical brought about a tremendous amount of change, in the way human beings functioned, the way human societies were governed, human relationships, economics.

There was a very great far reaching change, set of changes that took place and they will help us that history will help us understand our present day world but hopefully that is somewhere we will go through the course. For now let us understand the various kinds of technologies of communication, that could be there that we have seen in human history.

So before human beings could read or write, (they could) language was invented and if you look at the history of human kind, language is a very, if you look at the entire spectrum of the time range of human existence on the earth, the discovery of language and oral communication is something that is a very very minor small fraction of that larger development.

So it's a very recent phenomenon so to say. But before the discovery of written writing, human beings communicated only through oral mechanisms and something that I need to tell you that after the discovery of writing, how that writing is recorded also underwent a series of changes through history.

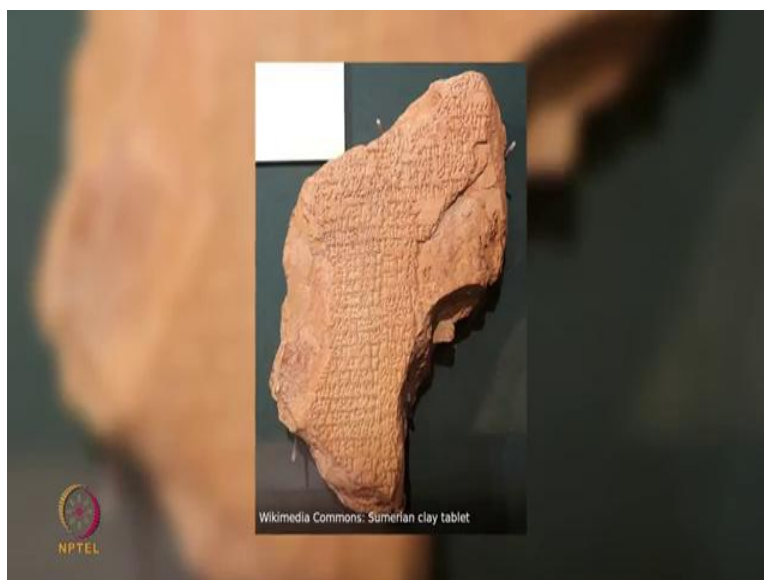
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You would have heard of cave paintings and cave inscriptions by Stone Age humans and you would also have heard or seen the Ashokan pillar at Sarnath for example, where inscriptions are still available on stone. You would have heard of the Rosetta stone, the famous Rosetta stone which is kept in the British museum- an example of how human beings would have communicated, using other material other than paper. Now the inscriptions in stone are not very portable. As human life became more complex, as human society became more complex, you had the need the great need, human beings had a great need to actually communicate in a portable form. Where portability becomes important. Stone tablets can be very heavy to carry.

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They usually are marked on buildings or put up in special monuments and such situations. But when trade and commerce becomes important, at that point of time it becomes important to be able to communicate using portable means and therefore we have the use of Clay tablets, on which all the tablets are wet, people will make an inscription then they will either be sun dried or fired. So good thing about clay tablets is that, they could be passed on from one place to another and could be used as methods of recording economic activity. What is the quantity that is being purchased or how much money has been gathered? So to make a record of taxes, various kinds of things.

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Then you have other forms, like scrolls. So first way in which scroto paper was developed. The first kind of parchments were sort of developed. Papyrus was a very important source of that. You have the scrolls, what you need to understand is the difference between a scroll and a codex. So for example what I have in my hand is the example of a codex.

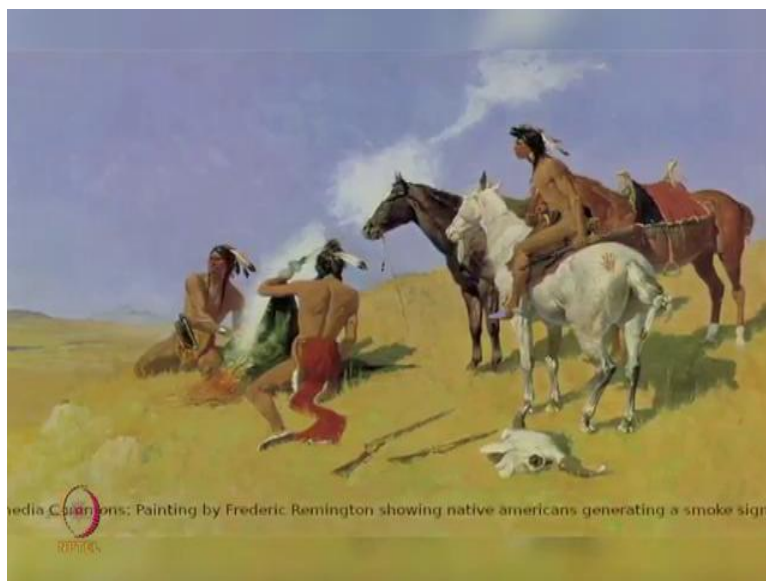
A codex is any sort of written material where things are tied at the spine and you read it by turning one page to another. Some cultures would turn the pages from right to left, some cultures would turn it from left to right. Some cultures would also turn the page from the top depending on what kind of practices there would be, but historically there have been many other ways of recording human ideas.

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For example, within the Aztec civilization, there are ways in which people make recordings by tiny knots on strings. There would be, also you would have heard of cases where communication across distances would be carried out through fire or smoke messages. So, really, various cultures had various ways of solving this problem of portability in communication. But it is not the same thing to record an idea across these various media.

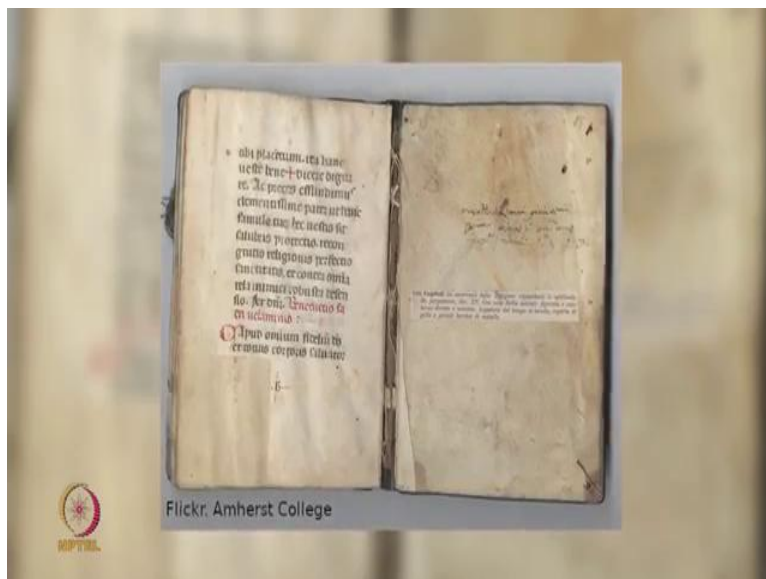
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The media actually matters in the way things are communicated. Just to give you an example- I mean, in a scroll, you understand, the scroll if you had to get to a certain point within the text, you had to roll up the two sides of the scroll up to that point and only then read. So it made it very cumbersome. Whereas for codex, you can open the page at any place and continue reading.

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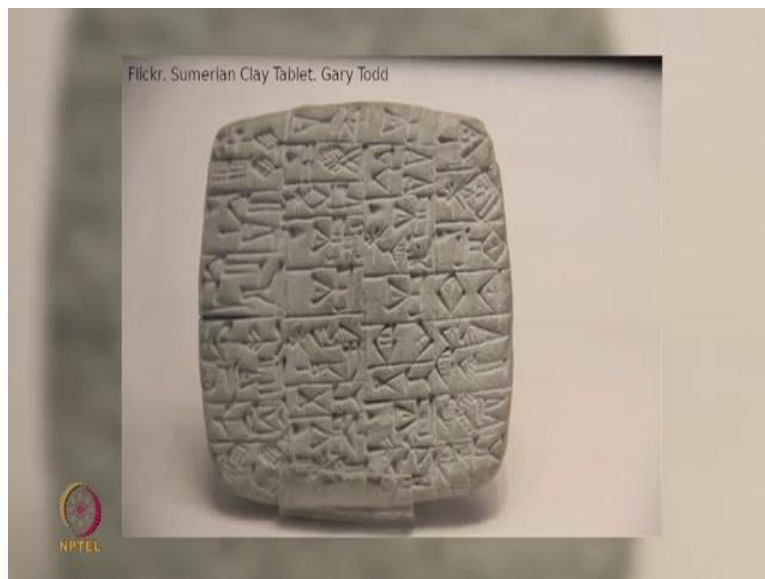


So and you can actually turn back in page. Sometimes the books can be really huge, very large in size, turning the pages would not be so easy but that conceptually, that would be possible and because they were conceptually possible, people would be writing these texts, would keep it in mind and write accordingly.



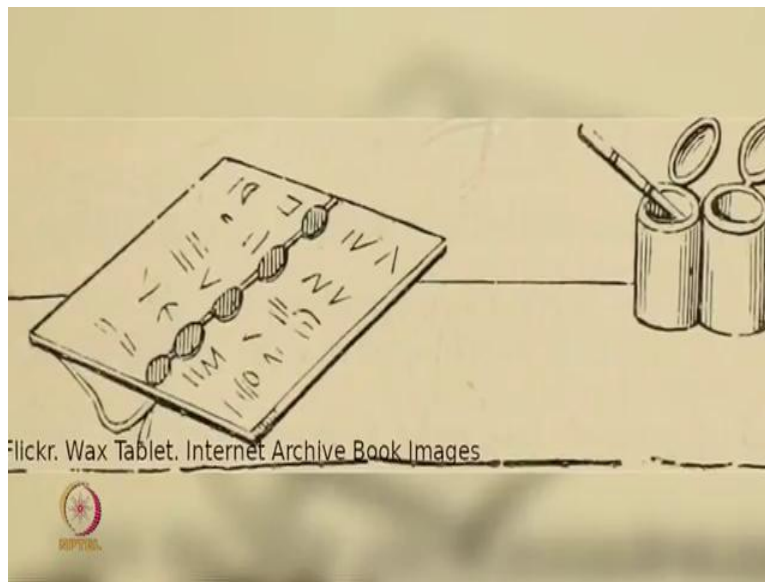
So part of what we are going to do in this course is to explore what the form does to the content. The relationship between form and content. The material that is being used to write on or write with. We also look in this course, look at the use of writing implements and their effect on what is being written and that is something that hopefully I will be able to explore along with you, but staying with the codex is, I would like to tell you that, codex could, before the invention of paper codex pre dates the invention of paper.

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So in the codex you have, you could have in the form of very thin clay tablets or stone tables which are tied together by the spine, with a leather strip, for example. But you also had later on the need for reusability. Stones inscriptions could be very limited in terms of reusability you can not reuse this. Although there are examples in history where the stone will also be reused by chipping off one layer.

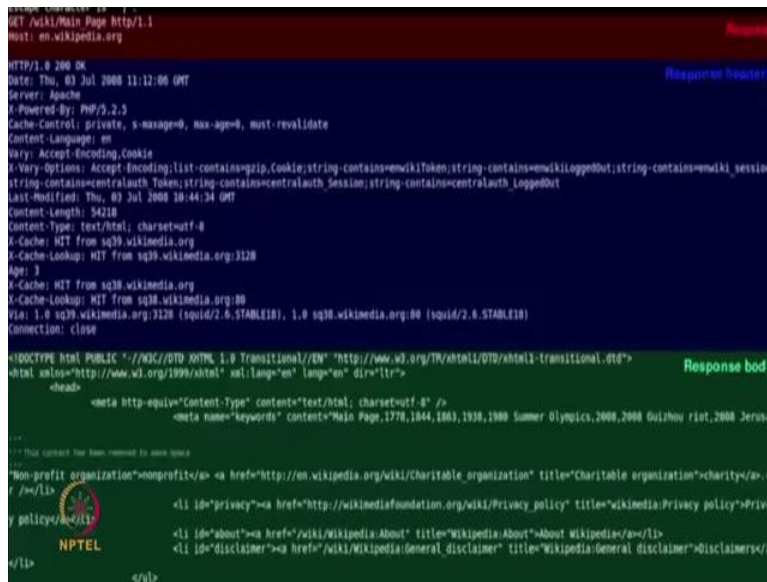
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But what was invented were wax tablets, the wax writing systems, where the sheet of wood would be taken and there would be a layer of wax on it and someone would take a sharp implement - maybe made of wood or metal- and inscribe it. Once the use is over they could either scrape off that layer of wax or put more wax on it and continue to use the same tablet. So it was, it became reusable. Now if you take several of these wax tablets and put them together and tie them up at the edge, then they would become, took the form of a codex.

So that is, so the codex really gets more and more advanced after the coming of printing, of various kinds of bindings, various kinds of paper cuttings, various kinds of printing machines. Till such time that you come to the digital format and we are going to study in detail in this course the distinction between codex and what we call in the digital format, hypertext.

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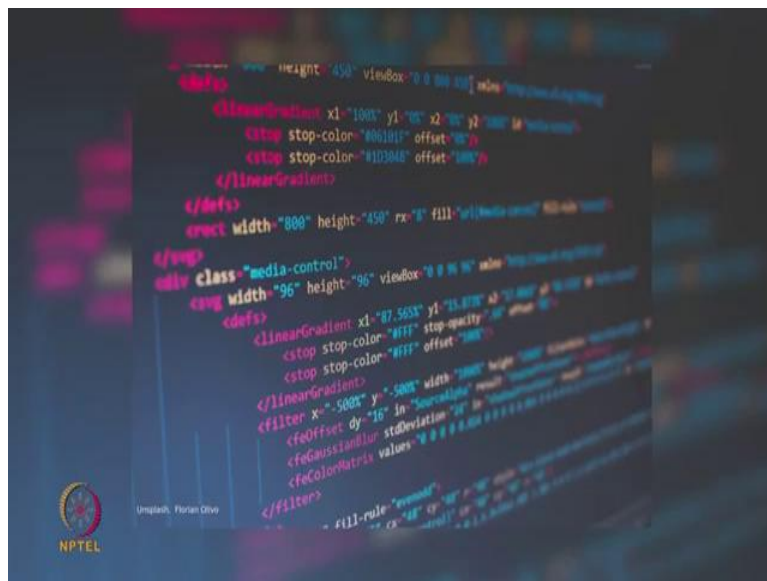
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Request
GET /wiki/Main_Page HTTP/1.1
Host: en.wikipedia.org

Response Headers
HTTP/1.0 200 OK
Date: Thu, 03 Jul 2008 11:12:06 GMT
Server: Apache
X-Powered-By: PHP/5.2.5
Cache-Control: private, s-maxage=0, max-age=0, must-revalidate
Content-Language: en
Vary: Accept-Encoding, Cookie
X-Vary-Options: Accept-Encoding,list-contains=szip,Cookie,string-contains=wikiToken,string-contains=wikiLoggedIn,string-contains=wiki_session;string-contains=centralauth_Token;string-contains=centralauth_Session;string-contains=centralauth_LoggedIn
Last-Modified: Thu, 03 Jul 2008 10:44:34 GMT
Content-Length: 34218
Content-Type: text/html; charset=utf-8
X-Cache: HIT from sq39.wikimedia.org
X-Cache-Lookup: HIT from sq39.wikimedia.org:3128
Age: 3
X-Cache: HIT from sq38.wikimedia.org
X-Cache-Lookup: HIT from sq38.wikimedia.org:80
Via: 1.0 sq39.wikimedia.org:3128 (squid/2.6.STABLE10), 1.0 sq38.wikimedia.org:80 (squid/2.6.STABLE10)
Connection: close

Response body
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en" dir="ltr">
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
    <meta name="keywords" content="Main Page,17th,1844,1861,1938,1980 Summer Olympics,2008,2008 Guizhou riot,2008 Jerusalem" />
    <!-- This content has been removed to save space -->
    <!-- Non-profit organization=nonprofit/s> <a href="http://en.wikipedia.org/wiki/Charitable_organization" title="Charitable organization">Charity</a> </li>
    <li id="privacy"><a href="http://wikimediafoundation.org/wiki/Privacy_policy" title="Wikimedia:Privacy policy">Privacy policy</li>
    <li id="about"><a href="/wiki/Wikipedia:About" title="Wikipedia:About">About Wikipedia</a></li>
    <li id="disclaimer"><a href="/wiki/Wikipedia:General_disclaimer" title="Wikipedia:General disclaimer">Disclaimers</a>
  </li>
</li>
</li>
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Now hypertext is very interesting because in hypertext, you can actually link various parts of the text together or various texts together. The other important point about the hypertext is that what you usually use is an output device- a display device like the screen of a computer or the phone or the tablet to view the text- but what you are seeing on the text is rarely what the computer, is usually not what the computer is storing.

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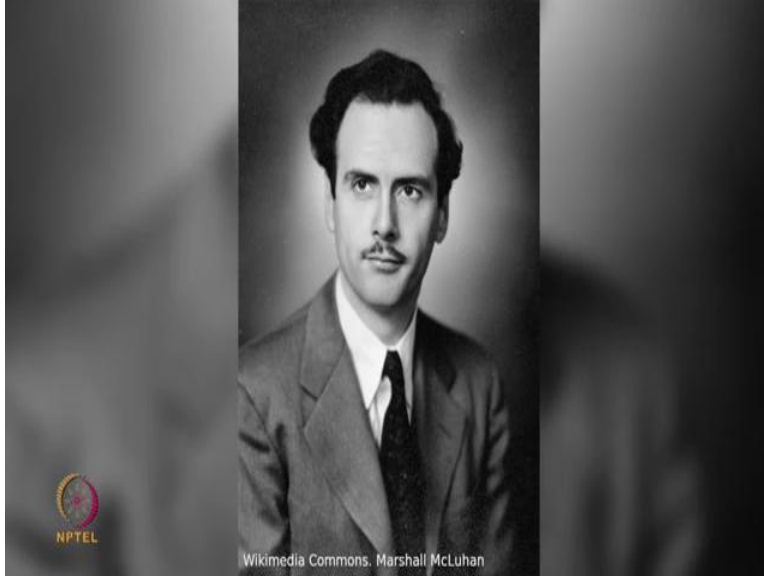
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    <stop stop-color="#001010" offset="0%" />
    <stop stop-color="#103040" offset="100%" />
  </linearGradient>
</defs>
rect width="800" height="450" rx="8" fill="url(#background)"/>
</svg>
<div class="media-control">
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        <feGaussianBlur stdDeviation="4" in="offsetOut" result="blur"></feGaussianBlur>
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  </svg>
</div>
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So what the computer is storing is a mark-up language. We call it ML, so you have XML, or HTML - Hyper Text Mark-up Language - HTML. So there is a higher test between the mark up language and what the user interfaces. You have certain soft wares, for example, the usual word processor or an email, is what is described as 'What You See Is What You Get'. WYSIWYG it is called as an acronym.

So we tend to think that what we are writing into the word processor is what the computer is recording but it is actually not. The computer is recording a much complex set of codes which we call mark up language and because of this mark up language what hypertext documents can do, is actually bring together various kinds of media together. So imagine in a book, if you imagine if you could open a book and you could watch a video in it or you could have heard a piece of audio recording in it.

That would be unthinkable right? But, on your phone you could be scrolling through certain new story and a video starts playing or you could be scrolling through a social media site and then an advertisement starts playing. So it is possible with the mark up language to actually mix these various media together and produce a record. And this is a revolutionary change in the way human beings have approached texts and they are bringing about far reaching, they have far reaching implications both in terms of social and economic implications but also in terms of what it is doing to ourselves, to humanity as such, to our brains to our minds and the way we interact with each other.

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So this is, where we are going to, what we are trying to explore through this particular course. So I am, in this story we are going to begin from the oral world, move to the, understand the manuscript world and then move to the print world before we come to the digital world and understand its implications. But to begin with, we are going to begin with 2 essays by Marshall McLuhan, the commentator who had foreseen many of these changes coming. These changes which we are now going through in 21<sup>st</sup> century but he had pointed out certain fundamental issues which are very pertinent to us in the mid 20<sup>th</sup> century and we are going to study, begin our study, by looking at two couple of essays by Marshall McLuhan. Thank you.