## Narrative Mode and Fiction Prof. Sarbani Banerjee Department of Humanities and Social Sciences Indian Institute of Technology-Roorkee

## Lecture - 59 Future of Fictional Writing - III

Good morning and welcome back to the lecture series on narrative mode and fiction. We are discussing our module 12, which is future of fictional writing. So today we want to start with a new topic digital humanities. (refer time: 00:44)

We need to understand that as a relatively new field, digital humanities is constantly growing and changing. Digital humanities is an area of scholarly activity, which lies at the intersection of computing or digital technologies, and the disciplines of the humanities, the different disciplines that are part of the humanities. It includes the systematic use of digital resources in the humanities, as well as the analysis of their application.

Through producing and using new applications and techniques digital humanities has been making new kinds of teaching and research possible, while at the same time studying and critiquing how these impact cultural heritage and digital culture. (refer time: 01:36)

Now digital humanities can be defined as new ways of doing scholarship that involve collaborative transdisciplinary and computationally engaged research, teaching and publishing. It brings digital tools and methods to the study of the humanities, with the recognition that the printed word is no longer the only or the main medium for knowledge production and distribution.

A distinctive feature of digital humanities is its relationship between the humanities and the digital media. The field employs technology in the pursuit of humanities research, and at the same time, it subjects technology to humanistic questioning and interrogation. (refer time: 02:31)

The definition of the digital humanities is being continually reformulated by scholars and practitioners alike. Since the field is constantly growing and changing, specific definitions can quickly become outdated or redundant or unnecessarily they could limit the future potential of this field. Historically, the digital humanities developed out of humanities computing, and has become associated with other fields such as humanistic computing, social computing and media studies.

In concrete terms, the digital humanities embraces a wide variety of topics, from curating online collections of primary sources, which are primarily textual to the data mining of large cultural datasets to topic modeling. (refer time: 03:34)

So digital humanities incorporates both digitized remediated and bond digital materials, and combines the methodologies from traditional humanities disciplines, which would include rhetoric, history, philosophy, linguistics, literature, art, archaeology, music, cultural studies, and social sciences, with the tools provided by computing, which could include hypertext, hypermedia, data visualization, information retrieval, data mining, statistics, text mining, digital mapping, and digital publishing.

Related subfields of digital humanities have emerged, which include software studies, platform studies and critical code studies. Fields that parallel the digital humanities include new media studies and information science, as well as media theory of composition, game studies, particularly in areas that are related to digital humanities project design and production, as well as cultural analytics. (refer time: 05:00)

Now one of the primary concerns of digital humanities is the processing of data. For processing textual data digital humanities builds on a long and extensive history of digital edition, computational linguistics and natural language processing, and it develops an independent and highly specialized technology stack that is largely cumulating in the specifications of the text encoding initiative.

This part of the field is sometimes set apart from digital humanities in general, and defined as digital philology, or computational philology. For the analysis and digital edition of objects or artifacts, different technologies are required. (refer time: 05:53)

So digital humanities descends from the field of humanities computing, whose origins reach back to the 1940s and 1950s, in the pioneering work of Jesuit scholar called Roberto Busa, which had begun in 1946. Busa's work primarily we see, you know prominent works happening in and around 1946, and also the contributions by English Professor Josephine Miles beginning in the early 1950s.

In collaboration with IBM, Busa and his team created a computer generated concordance to Thomas Aquinas' writings, which is known as the Index Thomisticus. Other scholars began using mainframe computers in order to automate tasks such as word searching, sorting, and counting. And all these processes or functions became much faster than processing information from texts with handwritten or typed index cards.

In the subsequent decades, we see that archeologists, classicists, historians, literary scholars, and a broad array of humanities researchers in other disciplines applied emerging computational methods in order to transform humanities scholarship. (refer time: 07:29)

As Tara McPherson points out the digital humanities also inherit practices and perspectives that are developed through artistic and theoretical engagements with electronic screen culture, beginning in the late 1960s and 1970s. These range from research developed by organizations such as SIGGRAPH to creations by artists such as Charles and Ray Eames and the members of E.A.T., in full form experiments in art and technology.

The Eames and E.A.T. explored nascent computer culture, and intermediality in

creative works, which dovetailed or fused together technological innovation with art.

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The first specialized journal in the digital humanities is called Computers and the

Humanities, which debuted in 1966. The computer applications and quantitative

methods in archaeology, in short CAA Association was founded in 1973. The

Association for Literary and Linguistic Computing, in short ALLC and the Association

for Computers and the Humanities in short, ACH were then founded in 1977 and 1978

respectively. (refer time: 09:00)

With the advent of personal computers and the internet, the focus of Digital Humanities

shifted from the text and gravitated towards design. The multimedia nature of the

internet has allowed digital humanities work to incorporate audio, video and other

components in addition to text. Digital humanities emerged from its former niche status

and gained popularity at the 2009 MLA convention in Philadelphia.

MLA meaning Modern Language Association. And here digital humanities made some

significant contributions and these were celebrated as the future of the field of

humanities.

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The terminological change from humanities computing to digital humanities has been

attributed to John Unsworth, Susan Schreibman and Ray Siemens according to the

editors of the anthology called A Companion to Digital Humanities that came out in

2004. Unsworth, Schreibman and Siemens tried to prevent the field from being viewed

as mere digitization.

Consequently, the hybrid term has created an overlap between fields such as rhetoric

and composition, which use the methodology of digital technologies in studying

traditional humanities subjects. The use of computational systems and the study of

computational media, within the humanities, arts and social sciences has more generally

been termed as the computational turn. (refer time: 10:56)

Digital tools, techniques and media have expanded traditional concepts of knowledge

in the arts, humanities and social sciences. However, digital humanities is not solely

about the digital in the sense of limiting its scope to the study of the digital culture. We

have to understand that it is also not only about the humanities as traditionally

understood, since digital humanities also argues for a remapping of the traditional

practices.

So what we get here is not only digital or only humanities, rather digital humanities is

defined by the opportunities and challenges that arise, that emerge from the conjunction

of the term digital with the term humanities in order to form a new collective singular.

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So building on the first generation of computational humanities work, more recent

digital humanities activities seeks to revitalize liberal arts traditions in the electronically

inflected language of the 21st century, a language in which text is uprooted from its

long standing paper support, and text is increasingly wedded to both still and moving

images as well as to sound.

In such a language supports have become increasingly mobile, open and extensible.

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Digital humanities projects typically involve multiple circles of researchers, from

faculty and staff to students and community partners. A project's complexity and scale

generally implies the involvement of multiple strata of workers from within and across

institutions of learning.

Projects can involve partner institutions, such as museums, libraries, and archives, as

well as members of the community, alumni and members of interested virtual networks,

such as collectors, amateur historians, and so forth. So partnerships with corporations in particular media and technology companies are also possible. However, we need to remember the limitation that corporate and academic cultures may not be quite the same.

This is a this is clearly a limitation that this process entails. The cultures of academia and the corporate are vastly different and so are their goals and values. (refer time: 13:48)

Here we are looking at Ted Underwood's latest work called distant horizons, digital evidence and literary change. It came out in 2019 from University of Chicago Press. It unfolds a wider new perspective on literary history through digital means of research. Starting from broad questions and historical arguments this book, Digital Horizons focuses on the analysis of specific case studies and it leaves academic discussion of debatable issues in the background although such issues are not altogether overlooked. (refer time: 14:34)

So the guiding premise behind writing a work such as Distant Horizons includes using the scope of data that is newly available to us through digital libraries in order to handle previously elusive questions about literature how do we use the aid of you know digital to treat literature anew.

Ted Underwood shows how digital archives and statistical tools can deepen our understanding of issues that have always been central to humanistic inquiry rather than just reducing words to numbers as we often understand it to be.

Without denying the usefulness of time-honored approaches, such as close reading, narratology, or genre studies, Underwood argues that we also need to read the larger arcs of literary change that have remained hidden, remained obscure from us as a result of their sheer scale.

Using both close and distant readings in order to trace the differentiation of genres, transformation of gender roles and persistence of aesthetic judgment Underwood shows how digital methods can focus on the larger landscape of literary history and also add to the beauty and complexity that are traditionally associated with literature. (refer time: 16:24)

One language does not serve the purpose of global communication. This is because there are a variety of political, social and religious constraints coming on its way. This understanding has given rise to translation. The importance of translation therefore increases. We cannot deal with one language worldwide.

So translation becomes one of the essential practices that is intimately manifested in and along with the concept of globalization. Technology fosters the concept of globalization, which is conceived as an excellent product of technology advancement, whereas translations studies or the act of translation unifies the international community linguistically, politically, as well as socially. (refer time: 17:19)

Technology has made possible machine translation, computer-aided translation and translation management system to facilitate the necessity of unifying linguistic and cultural diversity. Ever since the new inventions the tendency of using technology in translation studies has brought in too many questions that revolve around accountability, reliability, fidelity and truthfulness of the translated texts.

The most known types of technology, we are thinking of here are machine translation or MT, computer assisted translation or CAT, and translation management system. (refer time: 18:08)

So machine translation is defined as the use of computer system to convey meaning from source language to the target language. And this is happening without the intervention of human translator at any stage of the translation process be it the pretranslation translation or the post-translation stages.

Machine Translation, sometimes referred to by the abbreviation MT is a sub-field of computational linguistics that investigates the use of software in order to translate text or speech from one language to another. It is not to be confused with computer aided translation however or machine aided human translation, MAHT or even interactive translation. It is different from all three of these. And so we all know that one of the most popular types of machine translation is available to us as Google Translate. (refer time: 19:21)

Next we have computer-assisted translation, which is defined according to Wikipedia as I quote, a form of language translation, in which a human translator uses computer hardware to support and facilitate the translation process unquote. The definition is in huge contrast with the definition of machine translation. The latter that is the machine translation is the automated translation of a text written or spoken with absolutely no intervention of human translator.

On the other hand, CAT tools are recognized as types of software that assist translators in editing and revising a translated text more efficiently and with a wide range of tools, which include dictionaries, terminology databases and translation memory. (refer time: 20:20)

Finally, we have translation management system or TMS, which is an online platform where the translation process is done through projects. TMS accelerates the workflow of projects among translators, editors and reviewers. So TMS is the finest and the latest product of technology enhanced translation, which has been implemented in massive translation projects around the globe, where many translators are involved and they participate in the process of translation.

I would like to stop our lecture here today, and meet you again with another round of discussions. Thank you.