

Digital Humanities and the Transformation of Reading Practices in English Literature

Dr. Tarit Agrawal

Assistant Professor - English
Mahamaya Government Degree College
Kaushambi

Abstract

Digital Humanities (DH) has completely revolutionized the processes of creating literature, reading literature, studying literature, interpreting literature, and teaching literature. For example, English Literature, which is generally known for its emphasis on close reading of printed texts, has embraced new digital technologies including text-mining software, electronic archives, hypertext, corpus analysis, data visualization, machine-assisted reading, and digitized manuscripts. These developments have opened up new avenues for literary scholarship, but also pose new challenges to assumptions about reading a literary text. In this research paper, I shall explore the role that Digital Humanities has played in changing the way that people read in English Literature, and in the shift from close reading to distant, computational and distributed reading. It claims that digital reading isn't always an alternative to traditional literary reading but that it can be read on a larger scale, faster, and in a different way. The paper addresses the topics of digital archives, electronic literature, distant reading, algorithmic criticism, visualization and digital pedagogy. It also reflects some of the constraints of computational methods, such as issues of interpretation, data selection, accessibility, algorithmic bias and the loss of particularity of the text. The paper draws on the scholarship of Franco Moretti, N. Katherine Hayles, Matthew Kirschenbaum, Matthew L. Jockers, Stephen Ramsay, Alan Liu, Jerome McGann, and others to suggest that the future of literary reading is neither the choice between print and digital reading nor the choice between close and distant reading, but rather a productive dialogue between these modalities.

Keywords: Digital Humanities, English Literature, Close Reading, Distant Reading, Machine Reading, Digital Archives, Electronic Literature, Computational Criticism.

1. Introduction: Digital Humanities and English Literature

Reading has always played a vital role in the study of English Literature. The notion of reading, in most of the history of literary studies, has been read as a close reading of a relatively stable printed text. A traditional approach to the study of a novel, poem, play or essay is to look at the language, imagery, symbolism, narrative structure, characterization, historical context, and rhetorical devices. This approach, also known as close reading, has emerged as a hallmark of contemporary literary criticism. But with the advent of digital technology, there are new ways of producing texts and new ways of studying literature.

Digital Humanities is one of the most significant of these changes. Digital Humanities is an interdisciplinary area of study that brings together humanities research and computational tools and methods. These approaches are used in literary studies, such as the popular algorithms for literary analysis, the electronic editing of literary texts, network analysis, data visualization, stylometry, corpus analysis, and digitization. Digital Humanities transforms the experience of reading literature and the ways in which readers investigate and interpret it.

Thousands, sometimes millions, of literary texts are now available via the internet and are searchable and suitable for computational analysis. Digital archives have changed the reader/literary material dynamic by making manuscripts, historical editions, newspapers, letters, and rare books available to scholars from places far removed from traditional libraries. Meanwhile, computational techniques enable analysis of patterns in literary corpora that would be hard or even impossible to discover by reading them for an individual.

In this context, it is relevant to consider Franco Moretti's definition of distant reading. Rather than focus on particular texts or a handful of texts, distant reading analyzes vast quantities of literature, looking for larger-scale patterns, genres, historical shifts and common literary forms (Moretti, 2013). A second perspective on large scale computational analysis is provided by Matthew L. Jockers, who refers to it as “a way to study literary history at a scale that works across large collections of texts” (Jockers, 2013).

But this does not imply the absence of traditional reading with the advent of digital reading. There are those scholars who have suggested that the various modes of reading, ranging from close, hyper, and machine reading, can coexist (Hayles 2010). With that, Digital Humanities poses a more multifaceted question: not just about the effect that the computer is having on human readers, but on the ways in which the technology is redefining reading as a way of being.

The aim of this paper is to explore how reading practices are changing in English Literature with Digital Humanities. It focuses on the shift from print to digital environments, from close to distant reading, and from individual to distributed and machine-assisted reading. It also assesses opportunities and constraints of such developments.

2. From print culture to digital reading

The first big shift in reading habits is the shift from printed page to digital screen. Writing is usually presented in a linear sequence in printed books. Readers can skip pages, make notes in the margins and jump from chapter to chapter, but the book's physical form creates a fairly consistent reading context.

Digital texts are more flexible. Users can look up any word in the text, follow hyperlinks, open several texts at once, highlight and copy text, add notes electronically, adjust display options, and use dictionaries and other sources of information right away.

Thus, the digital environment brings about more interactive and non-linear reading experiences. Landow (2006) says that hypertext is a new approach to the organisation of written text that forms a network of textual units. In hypertextual environments, readers can go through different paths through a work, not necessarily beginning to end.

The shift has significant implications for English Literature, as literature is increasingly being produced in digital formats. Modern electronic literature can contain hyperlinks, animated graphics, sound, video, programming and interactive features. In these kinds of texts, the reader's task is to not only interpret meaning but also navigate through and interact with the reading.

Digital reading thus demands that readers are to become new kinds of literate. The reader must not only grasp language but may also need to interpret interfaces and hyperlinks, as well as understand multimedia content and metadata and digital structure.

Digital Archives and the Democratization of Literary Access

Digital archives have been one of the most important and impactful developments of Digital Humanities for the study of literature.

Special programs for digitizing rare and historically significant materials have increased the availability of such materials for researchers. Archival materials such as manuscripts, first editions, newspapers, correspondence, photographs, and other archival materials can be digitized and placed on the web.

It alters the reader/ literary archive dynamic. It used to be that one would have to visit a specific library or archive to study a rare manuscript. These geographic limitations can be overcome by digital collections.

Comparative research is also more convenient with digital archives. For instance, a scholar studying Shakespeare can compare various editions and historical records without having to get all the books in person. Likewise, a research scholar can look for specific words or patterns within huge chunks of novels or periodicals.

However, digitization should not be confused with complete preservation. Digital versions are representations of original materials. A manuscript may have content that is not possible to represent in plain text, such as the way the manuscript looks, the paper texture, binding, marginalia, handwriting, and physical condition of the manuscript.

McGann (2001) focusses on the materiality of texts and believes that digital textual scholarship should not abstract literature from its linguistic content. Digital Humanities thus increases the accessibility, yet also poses questions of what might be lost in the digitization process.

3. Close Reading, Distant Reading, Machine Reading

Close Reading and its Traditional Importance

The methodology of close reading has been one of the main methodologies in the field of English Literary Studies. It involves sustained attention to the details of a particular text. A close reader can read a single sentence, metaphor, image, rhyme, narrative technique or stylistic pattern to gain an interpretation.

Close Reading's strength is its sensitivity to text complexity! Often these ambiguities, contradictions, ironies, symbolisms, and nuanced changes in meaning can be found in the literature. Such features might be hard to document with quantitative analysis alone.

As literary studies have developed, close reading has become a defining practice, and there have been other ways of reading, as described by Hayles (2010). Close reading can help readers to stay focused on the textual details that computers might not capture.

For instance, a computer could count how much the word "dark" is used in a novel, but it could not always tell that the word "dark" means "physical darkness," or "emotional suffering," or "moral ambiguity," or "social conditions. It is still necessary to rely on human interpretation to decode context and meaning.

Digital Humanities should not be seen as just the replacement of close reading. Instead, it offers other scales for the examination of literary texts.

The Emergence of Distant Reading

The most influential criticism of the traditional approach to literary reading has certainly come from Franco Moretti's idea of distant reading.

Literary scholars do not have time to read every text they study throughout literary history, according to Moretti (2013). Rather, scholars can examine literature in terms of broader aspects of literary patterns.

Distant reading is a movement that reorients the focus away from works toward systems, genres, periods and corpora. A researcher could study 100s or 1,000s of novels to explore how narrative form varies through time. Instead of inquiring into the meaning of one novel, the researcher can ask questions about the evolution of a literary feature over a large historical corpus.

This has implications for English Literature that are important. Literary history has a tendency to focus on canonical authors and texts. Through large-scale computational research, patterns can emerge involving lesser-known, popular, marginalized, and relatively little-critically-attended texts.

For instance, Jockers (2013) shows how computational techniques can be employed to analyze a large set of novels. Likewise, Moretti's graphs, maps, and trees offer visual resources to study literary history at a granularity that goes beyond the capacity of conventional close reading.

Distant reading thus transforms the unit of literary analysis. The unit may be a passage or novel, but it can also be a corpus, a genre, a period, a network or a dataset.

Machine Reading and Algorithmic Criticism

A second shift takes place when computers are used directly in the analysis of literary texts.

Machine reading is not synonymous with the understanding of literature by a computer in the same way that it is by a person. Rather, computational systems detect patterns based on programmed procedures, or statistical models.

Ramsay (2011) defines algorithmic criticism to be the means by which algorithmic procedures can be incorporated into literary criticism. Computational tools may help the researcher discover patterns of words, stylistic characteristics, networks of characters, themes, or formal patterns.

A researcher looking at a set of Victorian novels, for instance, may use computational means to detect the prevalence of specific class-, gender-, industrialisation- or domesticity-related words. This could then produce questions for later human interpretation of the results.

This results in a two-step operation:

It is necessary to perform computational analysis, identify patterns and interpret them by human users.

Patterns that can be uncovered by the computer will then need to be interpreted by scholars based on literary, historical, cultural, and ideological frameworks.

This correlation explains that machine reading does not replace human reading. Rather, it can shift human focus to patterns that may not be apparent otherwise.

4. Online archives, hypertext, and new modes of literary engagement. Online archives, hypertext, and new modes of literary engagement.

How readers are accessing literary materials has been altered by the digital archives. Many manuscripts, historical editions, letters, newspapers and archival materials are already digitized and can be researched on digital platforms, so it is not always necessary to physically be in a certain archive.

Hypertext is also a significant influence on the reading process. Printed literature tends to promote sequential reading. Hypertext provides links, which enable readers to navigate from one text node to another.

Landow (2006) suggests that hypertext blurs the lines among author, text and reader. The reader is involved in building a reading path in the hypertextual environment. Readers may find different order of textual units.

Electronic literature goes one step further. Some digital literary works need readers to click, choose, manipulate or interact with a work in order to be able to experience it. Reading is thus enacted to some extent.

The reader is no longer merely receiving a set of words but enters an interactive environment of the text.

Digital environments have also reshaped reading from an individual practice to a more distributed one. In a conventional reading scenario, a person reader can sit with a book, read it and interpret it on their own. DREs frequently link the reader to other readers, texts, databases, reviews, annotations, social media, and scholarly resources.

Liu (2012) calls for a more culturally aware Digital Humanities which involves social and critical aspects of digital technologies. Reading in digital settings is then able to be shared and networked.

Students can enjoy reading a Shakespeare play and accessing digital versions, historical notes, video lectures, scholarly articles, dictionaries, and online discussions. This provides a reading context where interpretation is fragmented between various sources.

Digital reading is thus defined by the trans-platformness of reading.

5. The use of digital tools and the transformation of literary scholarship.

Digital Humanities (DH) has brought a plethora of tools that have revolutionized literary studies.

Data Visualization and Literary Interpretation

Digital Humanities has brought about visualization as a valuable tool for literary analysis.

Literary information can be depicted in a variety of ways, such as using graphs, maps, timelines, networks, etc., that are not typically found in prose literature.

In 2005, Moretti explored literary history through the use of graphs, maps and trees. These types of depictions can be useful in allowing patterns to emerge that might not be apparent when information is provided solely through written description.

For example, a map might depict a novel's plot of characters moving around in space. Relationships between characters might be represented graphically within a network graph. A timeline may illustrate the evolution of specific genres over a number of decades.

As such, visualization helps to make reading an analytical process that requires not only a textual interpretation but also spatial and statistical reasoning.

But visualizations are not value-free. The researcher determines what data to record, which variables to measure, and how to represent information. So, a graph can draw attention to some elements of a literary corpus, while obscuring others.

Visualization should therefore not be seen as a literary criticism, but rather as a device to help interpret the text.

Text Mining and Corpus Analysis

Text mining enables researchers to analyse large sets of text to detect words, phrases, themes, stylistic features and more.

A scholar of Victorian literature might construct a corpus of novels and analyze trends in word usage, names of characters, plot structures, or the depiction of specific groups of people.

Jockers (2013) shows how computational techniques can be used for large corpora of texts. This is possible because these approaches enable the study of questions that are not limited to a single text.

Network Analysis

Network analysis can be applied to the analysis of relationships between characters, authors, texts, publications, etc.

For instance, characters could be nodes and their interactions nodes to node. These may offer a different view of narrative structure:

Network analysis thus turns the focus of analysis away from the individual textual elements and towards relations and structures.

Digital Pedagogy and Classroom Practices

Digital Humanities has made a great impact on literary education.

Printed materials, lectures, discussion, and essays are also the staples of traditional literature class. These methods can be complemented by digital pedagogy, which can include online archives, collaborative annotation, corpus tools, visualization, digital exhibitions, interactive editions, and so on.

Students will analyze a text from multiple levels using digital tools. They may read a novel carefully, then study word frequency, patterns of ideas, character relationships and make comparisons with other books.

These activities invite students to recognize that there is more than one way to use their skills of literary interpretation – one qualitative and one quantitative.

Digital pedagogy can also better engage students as active agents of research. Students don't just get answers from their books or teachers, they can build data sets, ask questions about the data, interpret it, and share their observations with a digital audience.

This aligns with an investigative approach to literary learning.

6. Digital Reading Challenges and Limitations.

Though Digital Humanities offers a range of possibilities, there are some limits.

Loss of Context and Materiality

The analysis of literature sometimes involves converting large pieces of literature into searchable data. This may lead to the loss of historical, cultural, material and linguistic context

Not all digitized texts are able to capture the full physical experience of manuscripts and books. Literary scholarship can be influenced by typography, paper, binding, any marginalia, any handwriting, and any physical arrangement.

McGann (2001) highlights the significance of the materiality of texts in print and states that digital textual scholarship should not be limited to formal objects of language.

The problems of the corpus and data selection were addressed. Corpus and Data-Selection Problems were solved.

The researcher's choice of a corpus has an impact on the computational results. A corpus that excludes some authors or genres could mean that its results may not reflect the literary culture at large.

Digital does not come with a magic wand to replace inequalities. Various texts are digitized in greater detail. What works can be studied computationally depends on copyright, institutional priorities, language, and technology.

The digital canon expansion should then be a sensitive one in the politics of archives and datasets.

Algorithmic Bias

Algorithms work with rules and sets of data. Results can also be affected by biases in the digitization of materials, in the metadata, in the OCR process, in corpus construction, or in the computational models used.

Thus, the results presented in calculations cannot be taken for granted as objective and neutral. Researchers are needed to investigate the methods by which data sets are compiled, and the effects of computational processes on the results.

Digital Inequality and Accessibility

There is inequity between institutions and individuals on access to quality digital tools, databases, computing resources, and technical training.

While access to literature may be enhanced through the use of digital technologies, it can also lead to new inequalities of access when certain resources are dependent on specialized software, expensive databases, or advanced technical knowledge.

Human Interpretation vs. Computational Analysis

Numbers are not necessarily literary. Even if there is a statistical pattern, it still needs to be interpreted.

A computer can detect that a specific word occurs more often in a corpus than another, but does not have the power to independently determine the complete historical, cultural, symbolic or emotional significance of the pattern.

The most fruitful way to solve this problem is thus to avoid considering computational analysis and human interpretation as rival systems. Instead, computational tools can recognize patterns, human readers can offer contextual and interpretive analysis.

7. The Future of Reading in English Literature

Outcome of the discussion: The Future of Reading in English Literature"

In English Literature, reading has been completely revolutionized by Digital Humanities. The shift from print to digital environments has altered the ways in which literary texts are

accessed, searched, compared, annotated, visualized, and interpreted. Primary materials, particularly, have been made more available in digital archives, and hypertext and electronic literature have challenged the linear models of reading.

The computational methods have more significantly also brought new levels of literary analysis. The distant reading of Moretti, the macroanalysis of Jockers, the algorithmic criticism of Ramsay, and others, are examples of how computational methods can uncover patterns in literary corpora that would be hard to detect on a case-by-case basis with reading.

Digital Humanities is not a substitute for close reading, however. Language, ambiguity, context, history, materiality are all aspects of literary interpretation that need attention. The most useful value of the computational methods is when they pose questions and patterns that can be understood through humanistic thinking.

The shift from printed book to computer, and from human reading to machine reading, are not the only ways to interpret the transformation of reading. It has come to be known as an extension of reading practices. This enables contemporary literary scholars to read closely, read distantly, read digitally, read computationally, and to switch back and forth among these modes as their research questions dictate.

Methodological plurality is, in other words, the future of English Literature. Digital Humanities provides new tools, new archives, new scales, and new ways to collaborate for literary studies. Perhaps most importantly, it prompts scholars to re-question a familiar query: What is reading?

Reading in the digital realm is no longer a one-to-one relationship between a book and one reader. This can include databases, algorithms, visualizations, hyperlinks, networks and collaborative platforms. But at its core is interpretation, the human quest for understanding in language, culture, history and meaning. Digital Humanities is not an end to this humanistic act but rather new contexts and opportunities for it.

References

1. Best, S., & Marcus, S. (2009). Surface reading: An introduction. *Representations*, 108(1), 1–21. <https://doi.org/10.1525/rep.2009.108.1.1>
2. Hayles, N. K. (2007). Hyper and deep attention: The generational divide in cognitive modes. *Profession*, 2007(1), 187–199. <https://doi.org/10.1632/prof.2007.2007.1.187>
3. Hayles, N. K. (2010). How we read: Close, hyper, machine. *ADE Bulletin*, 150, 62–79.
4. Hayles, N. K., & Pressman, J. (Eds.). (2013). *Comparative textual media: Transforming the humanities in the postprint era*. University of Minnesota Press.
5. Howell, S., Kelleher, M., Teehan, A., & Keating, J. (2014). A digital humanities approach to narrative voice in *The Secret Scripture*: Proposing a new research method. *Digital Humanities Quarterly*, 8(2).
6. Jockers, M. L. (2013). *Macroanalysis: Digital methods and literary history*. University of Illinois Press.
7. Kirschenbaum, M. G. (2012). What is digital humanities and what's it doing in English departments? In M. K. Gold (Ed.), *Debates in the digital humanities* (pp. 3–11). University of Minnesota Press.
8. Landow, G. P. (2006). *Hypertext 3.0: Critical theory and new media in an era of globalization*. Johns Hopkins University Press.
9. Liu, A. (2012). Where is cultural criticism in the digital humanities? In M. K. Gold (Ed.), *Debates in the digital humanities* (pp. 490–509). University of Minnesota Press.
10. Liu, A. (2013). From reading to social computing. In K. M. Price & R. Siemens (Eds.), *Literary studies in the digital age: An evolving anthology*. Modern Language Association.
11. McGann, J. (2001). *Radiant textuality: Literature after the World Wide Web*. Palgrave.
12. Moretti, F. (2005). *Graphs, maps, trees: Abstract models for literary history*. Verso.
13. Moretti, F. (2013). *Distant reading*. Verso.
14. Piper, A. (2018). *Enumerations: Data and literary study*. University of Chicago Press.
15. Pressman, J. (2014). *Digital modernism: Making it new in new media*. Oxford University Press.

16. Ramsay, S. (2011). *Reading machines: Toward an algorithmic criticism*. University of Illinois Press.
17. Samuels, L., & McGann, J. (1999). Deformance and interpretation. *New Literary History*, 30(1), 25–56. <https://doi.org/10.1353/nlh.1999.0010>
18. Underwood, T. (2019). *Distant horizons: Digital evidence and literary change*. University of Chicago Press.