

The Role of Digital Humanities in Modern Educational Scenario

Dr. Ruby Roy

Assistant Professor, Department of English, Satyawati College Evening, University of Delhi, India.

Abstract—This Paper analyses the role of Digital Humanities (DH) against relevant intellectual issues discussing its place within the humanities subject. It shows that while DH includes digital technologies, mainly AI technologies, it stays rooted to humanities through its emphasis on comprehending and evaluating the creation of literature, Political Science, History, philosophy, and culture. While taking into account intellectual critiques of DH's knowledge features, its complimentary roles in research studies, and the success of its tools, this article states an anti-Realist viewpoint. This approach proposes that DH's different methods add to knowledge creation rather than dilute the humanities area. This Paper shows by applying the idea of anti-realism, one can understand the concept of humanities, the article studies the broader, more inclusive understanding of the humanities, emphasizing the DH's important role in this evolving field.

Index Terms—Digital Humanities, AI, Knowledge creation

I. INTRODUCTION

This Paper shows how Digital Humanities (DH) can add to Modern Education Infrastructure and how it can fight any kind of epistemological challenges which questions its methods within the humanities subject. It shows how that DH inserts digital technologies, notably AI tools, it remains on the basic level connected to the humanities through its emphasis on understanding and appreciating the origin of arts subjects such as literature, philosophy, and culture keeping its value against intellectual critiques of DH's knowledge features, its complimentary roles in research, and the efficiency associated with it, this article proposes an anti-essentialist Point of view. This theory advocates that DH's different methods increase the knowledge bank rather than dilute the humanities subjects. By applying the idea of anti-realism, to

understand the subject of humanities, this article states for a intellectual, more inclusive comprehension of the humanities subjects, which highlights DH's suitable role in this changing field. Digital Humanities (DH) is often defined as an interdisciplinary field that combines conventional art subjects like literature, history, and philosophy with computer technologies, particularly artificial intelligence [AI]. It uses Print mining, text visualization, cyber mapping, and AI technologies for evaluating large data sets and finding solutions for humanities/arts-related questions. AI based technologies have an important role in DH for pattern/set recognition in texts, predictive evaluation, and understanding historical data. This Paper shows how DH integrates quantitative and qualitative methodology, including 21ST C techniques like cyber reality and AI technologies such as ChatGPT and Grok etc. Despite these new technologies, DH faces relevant challenges in its authenticity and how it combines with traditional humanities subjects. Critics have shown that the knowledge created by DH is seen to have different features compared to that built by traditional humanities subjects. This difference largely comes from the tools used by DH typically which depends on quantitative methods, which are generally linked with objectivity, whereas traditional humanities often utilize qualitative methodology, linked with subjectivity. this difference in point of view leads to a diversity in the nature of the Learning generated.

This article 's goal is to address these challenges and defend the status of DH within the arts subject. It suggests that an anti-realism take on the humanities, in which the stress is about the relation-ships between different subjects rather than the presence of a shared basis and it allows for the addition of DH as a part of this evolving field. DH 's evolution is from the divergences in methods, data, or subject as compared to conventional humanities methodology, data, or

content. It posits that the use of digital tools is frequently seen as too scientific to be located within the purview of the humanities subject.

II. LITERATURE REVIEW

The subject of DH emerged in the early 2000s, which shows the fusion of cyber technology with humanities subject. Initially coined as Humanities Computing, this subject has developed into a multifaceted field. Making sense of the useful terms like ‘work’, ‘job’, and ‘tools’ is crucial for grasping the application of DH, as they describe how digital technologies are used in humanities/arts research. Within DH area, ‘work’ generally refers to scholarly/intellectual projects combining digital technology into arts research, including works like Digital archiving and Data analytics. ‘Jobs’ is defined in DH as projects integrating technical skills with comprehension of humanities, which produces jobs such as Digital archivists or Data curators. Then the term ‘notion’ defines as it carries core topics like subject collaboration and social digitization. Methods and ‘tools’ in DH are technical software used in arts research, including text mining techniques etc. The term ‘Digital Humanities’ signifies the combination of computer technology with humanities /arts disciplines. developing from its earlier avatar as ‘humanities computing,’ it has led to inclusion of different range of interdisciplinary methodology. This expansion is particularly seen with the coming of AI technologies. In recent years, AI tools have become an important pillar in DH, leading to innovations in conventional research methods through refined data analysis, and pattern awareness, making it possible the new approaches to New Historicist studies. AI’s capacity to process and evaluate huge data sets has significantly given new definitions and added to humanities/arts research. Illustrations of AI applications in DH is inclusive of the utility of text analysis and natural language Processing to test large text anthologies, visual image and Pattern Recognition methods for evaluating art works in historical research, and social network evaluation methods for examining personal documents in social and historical contexts. These cases highlight AI’s important impact on DH, making innovations in research/subject methodologies and results by integrating 21ST C technological capacities with humanistic/Philosophical inquiry., DH

is not just about the merging of technology into humanities; it is also an emerging field that critically studies its Place and scope. This adds exploring DH’s Far-reaching impact and use beyond Western contexts.

III. THEORETICAL FRAMEWORK

This paper takes some points from Essentialist theories and social criticism showing how, understanding the digital humanities in terms of historical ‘eras’ or ‘waves’ may lead to better understanding the scope of Digital Humanities. Many critics have discussed the digital humanities as having three different ‘waves’: the ‘FirstWave’, the ‘second Wave’, and the ‘third Wave’. By redefining the digital humanities in this way, it becomes easier to understand different approaches to the humanities subject with separate emphasis on each set/ group. It is different in this way as it does not state that these waves are linear and do not repeat or overlap. It is possible for there to be examples of ‘First Wave’ digital humanities, ‘second Wave’ digital humanities, and ‘third Wave’ digital humanities happening simultaneously, or for the same conventional humanities to try to attempt to answer humanities query utilizing tools from both the ‘First Wave’ and the ‘second Wave’.

IV. METHODOLOGY

DH uses both quantitative and qualitative methods, such as advanced techniques/tools like Virtual reality and AI technologies like GANS and GPT. Despite these new arrivals, DH faces important challenges in its authenticity and how it combines with conventional humanities subjects /discipline. The first wave of digital humanities was known because of the use of technology to make it easier cross-disciplinary studies and the creation of quantitative data. This made room for the thorough critical analysis of books and the capacity to step back and see information on a larger-than-life scale. The second wave of digital humanities stresses the addition of technology into traditional humanities subjects, leading to the rise of new questions and the learning of digital content and analytics that create qualitative information. This also gave birth to a culture whose origin is digital, resulting from the integration of the humanities and Digital/Cyber world. The critics refer to this time

period as one of Quanti-tative Information and Cross-Disciplinary opportunities, underlining the utility of tools having software to evaluate huge amounts of data and build up learning images. It is noted that the use of digital technology led to the manipulation of information and the development of a new way to read and write. However, some critics have pointed out that combination of methods and studies, having both qualitative and quantitative, ways have long been used in subjects such as social science and the Humanities. This shows that even within the 'First Wave' of digital humanities, a total quantitative approach is not necessarily needed. In fact, combined methodology is often used. They go on to argue that we can learn to make use of quantitative methods in the humanities, citing cultural analysis as an illustration of a unique way of utilizing data processing technology in the subject that has affinities with the features of the First Wave. The second wave of digital humanities led to new questions arising from the integration of technology with traditional humanities stream. Rather than being dependent on digital tools that create Quantitative data, this time period focused on the evaluation of digital content and Qualitative analytics.

V. ANALYSIS/DISCUSSION

Third wave of digital humanities

The third wave of digital humanities is known by a critical study of the field itself and how it collaborates with the conventional studies leading to creation and addition of knowledge. There is emphasis particularly about the role of software and code creation in moulding the tools used for doing research in the humanities and they do test the very nature of the humanities. This wave shows a turning point in the field, as it not only based upon the quantitative research of the first wave and the qualitative evaluation of digital matter in the second wave, but also questions and critiques these viewpoints, seeking to find novel ways of comprehending the intersection of digital technology and the humanities. It offers an illustration of the 'third Wave' of digital humanities, in which technology is not simply seen as a tool, but rather as a basic feature of what makes people human. This perspective supports study of the nature of digital tools, including a structuralist study of software or code that tries to understand its hidden components rather than simply trying to repair issues that may

arise. It also shows what could be clarified as the 'third Wave' of digital humanities, as they propose a critical evaluation of digital tools to fully make sense of their potential and disadvantages, and to consider how they may mould the work of the humanities. They argue that this approach, referred to as critical technical practice, includes both using digital tools to their fullest limit and constantly asking about their utility in order to increase efficiency. There are Epistemological Problems in digital humanities the epistemological challenge pertains to difficulties or obstacles that emerge in the context of the nature of knowledge and its creation. These issues are the reliability of different sources of Knowledge, the Narrow scope of human mind and the viability of certainty in a constantly changing world.

Knowledge Creation

This Paper will examine the intellectual challenges in DH. DH has been the discipline of a number of epistemological challenges, which can be seen in Difference in Knowledge characteristics: the knowledge created by DH is seen to have varied characteristics than that created by the humanities more generally, with a dependence on Qualitative research methods and a leaning towards objectivity. For instance, critics show that DH 's evolution is from the divergences in methods, data, or subject as compared to conventional humanities methodology, data, or content. It posits that the use of digital tools is frequently seen as too scientific to be located within the purview of the humanities subject.

Limitations of digital humanities

Some critics points out disadvantages of DH methods like Digital book mining, which many times are not able to bring out new themes or styles. They point out about the ambiguity and authenticity of digital methods, coming up with need for satisfaction with established conventional humanities practices. Further, Problems of algorithmic bias in AI-based infrastructure have Problems regarding original and comprehensive humanities Research. Some theorists argue that DH is prone to advocating existing power status quo, often controlled by Western, Patriarchal Point of views. This leads to concerns about the DH's ability to address differences and adaptability. Moreover, the change towards a technology-based approach in humanities subject or in Education and

Research could overlook logical discussions of different cultural and social perspectives. In the context of DH's scope within the broader humanities area, It is emphasized for the need to impose DH with greater humanistic principles/methods, seeing its tendency to be a tool rather than an equal collaborator in the humanities. Some Perceive that Persons in DH often have a more auxiliary role in mainstream university research, highlighting the demand for more recognition and assistance within the student/teacher/academic community. The paramount relevance of keeping a human-centric approach in DH is stressed in all the discussions regarding importance of DH. They visualise a future where the integration of data and digital tools increases the scope of humanities studies, adding to existing knowledge rather than replacing, traditional literary studies, making sure of that humanistic issues stay at the forefront of the discipline. This balanced approach tries to leverage the advantages of both digital and traditional methods, encouraging a more democratic, Comprehensive, and effective area of study. When it comes to tools and method effectiveness: the success of DH tools, particularly AI based ones, is a burning topic of controversy. A Primary Problem is the effectiveness of these digital tools in creating novel and meaningful information. The Critics points out the disadvantages in DH efforts, such as Digital Book Mining and Distant Reading. these tools, goals regarding assisting computers in interpreting texts, as not able to to recognize themes or styles not already visible. This comes to a mere reinforcement of existing learning rather than the finding out new standards. Moreover, the outcomes from these digital approaches can be doubtful, raising queries about their advantages in significant knowledge advancement in the arts subject. Another DH carries critical Problems of algorithmic bias AI-based systems, especially in pattern recognition and data analysis, which leads to biases coming from their training data or inherent design flaws.

VI. CONCLUSION

In Conclusion one can say that DH is dominated by Western, Patriarchal viewpoints. This dominance leads to concerns about the field's ability to tackle issues of diversity and inclusion adequately. Scholars think that there should be a shift in humanities

education and research priorities, away from traditional scholarship to a latest technology-focused, market-driven Point of view. Critics are of the opinion that these challenges question the nature and status of DH as a subject area. In contrast, challenges do not necessarily suggest that DH should not be considered humanities subjects, but rather raises the major problem of whether the tools and methods of DH employed in this conventional knowledge field are effective or they should be improved.

REFERENCES

- [1] R. Barthes, *Image–Music–Text*. London, U.K.: Fontana Press, 1977.
- [2] D. Berry, "Introduction: Understanding the Digital Humanities," in *Understanding Digital Humanities*, D. Berry, Ed. London, U.K.: Palgrave Macmillan, 2012, pp. 1–20.
- [3] T. Clement, "Where Is Methodology in Digital Humanities?," in *Debates in the Digital Humanities 2016*, M. Gold and L. Klein, Eds. Minneapolis, MN, USA: University of Minnesota Press, 2016, pp. 153–175.
- [4] L. Evans, S. Rees, and D. David, "An Interpretation of Digital Humanities," in *Understanding Digital Humanities*, D. Berry, Ed. London, U.K.: Palgrave Macmillan, 2012, pp. 21–41.
- [5] R. Felski, *The Limits of Critique*. Chicago, IL, USA: University of Chicago Press, 2015.