

language processing, which had enhanced the analysis, preservation, and access to cultural and literary legacy. The study brought into focus the fact that AI-powered technologies had helped in analyzing big chunks of texts, digitizing archive records, and extracting knowledge from them, thus making interpretation of literature easier and more accessible. Nonetheless, the authors pointed out that the ethical issues should be resolved in order to adopt AI responsibly.

Viola (2023) investigated the development of the humanities in the digital age and made the case that Digital Humanities had advanced past the point of using the traditional critical perspective to adopting an interdisciplinary approach that incorporates technology into their work. This investigation analyzed the interplay of digital technologies and humanities research and revealed that computational techniques have supplemented, but not supplanted, the traditional literary critique. The writer pointed out that new possibilities for literary analysis, cultural knowledge preservation, and academic collaborations have emerged from digital media, artificial intelligence, and data research.

Dobson (2026) explored the digitalization of the humanities in terms of the latest developments and the future possibilities of digital transformation in humanities research. According to the research findings, Artificial Intelligence, big data analytics, and digital technologies have greatly contributed to literary studies by means of advanced text processing, analysis in various languages, and creation of intelligent digital archives. Additionally, the study found that the new AI technologies allowed researchers to perform a full literary analysis and gain access to historical and cultural materials. However, the issues of ethical governance and balancing between computational analysis and human understanding have to be taken into account in the future development of Digital Humanities.

3. Research Methodology

The current study is guided by qualitative review-based research methodology, which aims at critically examining the impact of AI and Digital Humanities on literary interpretation. In particular, the current research has utilized exclusively the secondary data that has been collected from the peer-reviewed journals, books, proceedings of conferences and scholarly databases, such as Scopus, Web of Science, Google Scholar, JSTOR, Springer, Elsevier, and Taylor & Francis. Relevant sources of information that have been published within the period from 2015 to 2026 were selected due to their relevancy to AI, Digital Humanities, and literary studies. Thematic analysis has been used as an approach to organizing and critically reviewing relevant literature according to specific topics, such as technologies of AI, applications for literature, challenges and problems, ethical aspects, and future perspectives.

4. Artificial Intelligence and Digital Humanities: Transforming Literary Interpretation

The advent of Artificial Intelligence (AI) has had a remarkable impact on Digital Humanities, especially in the area of literary analysis. In conventional literary study, there was a method known as close reading in which the literary text was critically analyzed by literary scholars in order to find the underlying themes, symbolism, structure, and style of the text. This is an integral part of literary analysis, but the advancement of technology has helped scholars to perform literary analysis at a much larger scale. The use of AI in computational literary analysis has opened new avenues of research for literary scholars through which they can discover linguistic patterns, thematic trends, and intertextuality within the texts. Consequently, AI has become a valuable complement to traditional literary criticism, supporting scholars in generating new insights while preserving the importance of human interpretation.

The Digital Humanities involves the application of computational technology in order to improve the understanding, preservation, and dissemination of literature and culture studies. With the inclusion of AI in the Digital Humanities, there have been many advancements in terms of digitization of manuscripts, automatic processing of text, multilingual translation, metadata creation, and semantics analysis. With all these technological advancements, scholars are able to analyze literature from different perspectives historically, culturally, and through comparison. Instead of eliminating the traditional literary analysis, AI adds to the process of analysis.

4.1 AI Technologies in Literary Studies

The Artificial Intelligence (AI) field is characterized by numerous technologies that have revolutionized literary research and criticism. Such technologies as Natural Language Processing (NLP), Machine Learning (ML), Deep Learning (DL), and Large Language Models (LLMs) are among the most important technologies that have been used in literary research. Through NLP, computers gain the ability to analyze human language and recognize grammar, semantic connections, keywords, and recurring motifs in literary works. Machine learning allows researchers to classify literary genres and discover the stylistic parallels between different writers or predict authorship using linguistic features. Deep Learning models further enhance these capabilities by recognizing complex contextual relationships within texts, making them particularly useful for narrative and discourse analysis.



Figure 2: Artificial Intelligence in Literary Text Analysis

The advent of Large Language Models has enabled sophisticated methods of summarizing literary works, analyzing the meaning behind literary texts, providing interpretations, and comparing literary texts. These AI-based tools can help researchers automate some routine analysis tasks so that they may be able to conduct a much more thorough study of their large literary corpus.

4.2 Computational Text Analysis

The application of computational text analysis is one of the areas where the influence of AI technology in Digital Humanities is being felt strongly. As compared to literary criticism, which usually looks at only individual texts, computational approaches allow for an analysis of thousands of literary texts at once. With the use of computer models, various characteristics such as word frequency, style, and narratives are analyzed.

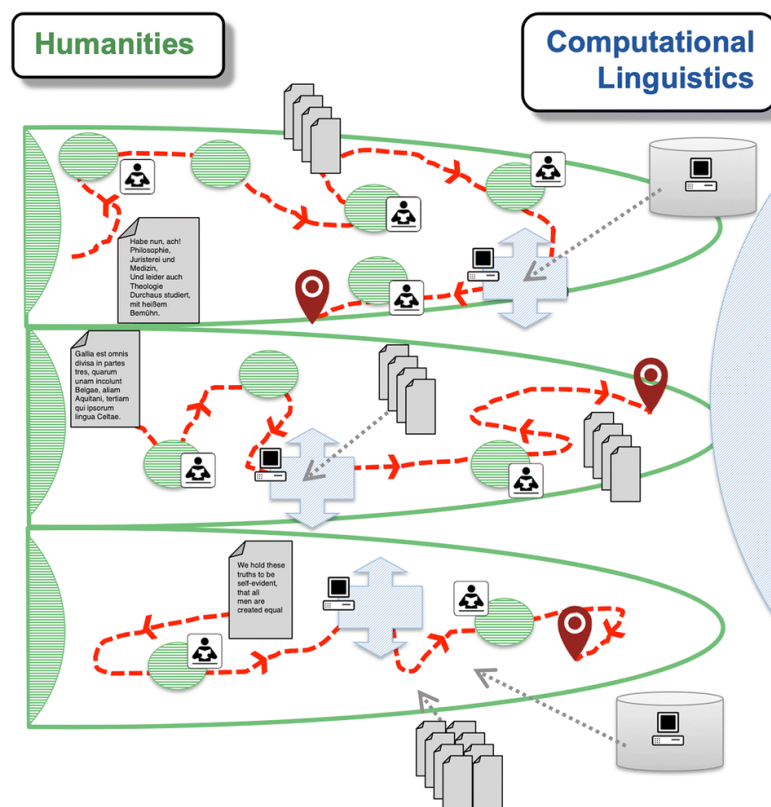


Figure 3: Computational text analysis within the Humanities

Methods like text mining, topic modeling, sentiment analysis, keyword extraction, and stylometric analysis make it possible to conduct objective study of literary works by pointing out regularities that could otherwise be overlooked through normal reading. Topic modeling could help identify major themes running through novels of different eras, and sentiment analysis could be used to observe emotional changes that occur throughout the story. Stylometric methods would aid in identifying the author based on their writing style and syntax patterns. These computational approaches provide empirical evidence that complements traditional literary interpretation, thereby fostering more rigorous and data-driven literary scholarship.

4.3 Digital Archives and Literary Databases

Digital archives and literary databases have brought about an entirely new paradigm to access literary sources. Hundreds of historical texts, rare books, personal correspondence, newspapers, and literary works have been digitized and are now available on various online archives. The role of artificial intelligence technology in this process is that it makes document organization easier, creates metadata, corrects mistakes made using Optical Character Recognition, and translates multilingual texts.

Digital archives help foster an interdisciplinary approach through enabling researchers from various geographic locations to have access to the literary source documents without any physical restrictions. The use of Artificial Intelligence in indexing and searching helps researchers find material easily and make connections among various texts, writers, historical events, and culture. Such technologies play an important role in the preservation of the literary heritage and the advancement of research in the field of Digital Humanities.

4.4 AI-Assisted Interpretation

AI-assisted interpretation may be defined as a collaborative process where the intelligence of computers enhances, rather than substitutes, human literary critique. The computers can spot recurrent motifs, narrative techniques, stylistic devices, characters' relationships and themes that serve as useful points for literary critique. In addition, the computers can analyze large volumes of texts quickly, thus allowing researchers to generate new hypotheses and explore literary trends across different genres, languages, and historical periods.

Even though there are these benefits, AI does not have the cultural understanding, the emotional sense, the historical knowledge and the philosophical mind of human interpretation. Often, literature has its meaning constructed in relation to the socio-cultural setting, symbols and intentions of the author and the personal experience of the reader – all this still poses difficulty to the comprehension of AI. That is why it is more appropriate to consider AI as the helper of analysis but not as an independent literary critic. The most effective approach combines computational efficiency with human critical judgment, allowing scholars to benefit from both technological innovation and interpretive expertise.

On the whole, the incorporation of Artificial Intelligence in Digital Humanities has completely changed the way of interpreting literature through its capabilities to enhance analytical tools, provide better accessibility to literary sources, and foster interdisciplinary studies. In spite of the fact that AI presents endless possibilities for analyzing data computationally and discovering knowledge, the future of literary criticism will always depend on successful cooperation between people and intelligent systems, ensuring that computational precision is balanced with human creativity, cultural understanding, and critical insight.

5. Applications of AI in Literary Studies

The emergence of Artificial Intelligence (AI) as a powerful tool in literary analysis can be attributed to the fact that it has brought new methods of computer analysis that help in the process of analyzing, interpreting and preserving literary works. As opposed to literary criticism whose main source is close reading and human interpretation, AI helps the researcher to analyze vast amounts of literary texts with increased efficiency and accuracy. With the help of technologies such as Natural Language Processing (NLP), Machine Learning (ML), and Deep Learning (DL), AI helps in discovering literary patterns, themes, style and language connections that may not be easily discernable using traditional methods. These applications do not replace human interpretation but rather complement it by providing empirical evidence that enriches literary scholarship and expands research possibilities.

5.1 Text Mining and Topic Modeling

One of the most popular applications of AI in literary studies is known as text mining. Text mining is a technique that allows the extraction of useful information from big amounts of textual data by using computer algorithms. Text mining allows studying thousands of literary works at once, which helps detect commonly used words, ideas, phrases, and semantical connections between various texts and eras. This method saves a lot of time on literary studies and improves the objectivity of results.

Topic modeling also improves literary criticism because it helps identify underlying themes through automatic analysis of a body of literature. With the help of probability-based algorithms, AI clusters words that occur frequently together and finds major themes that need not be classified manually. Topic modeling may be used by researchers to study changes in themes between different authors, literary movements, or eras to understand the evolution of themes, culture, and ideology in literature.

5.2 Sentiment Analysis

Sentiment Analysis is yet another important area where AI is applied in literary studies. This form of analysis is performed on the basis of the mood conveyed in literary works through classification of language into positive, negative or neutral sentiments. The advanced forms of AI are able to detect more complicated moods like fear, anger, sadness, happiness, anticipation and surprise, enabling researchers to explore emotional patterns throughout narratives.

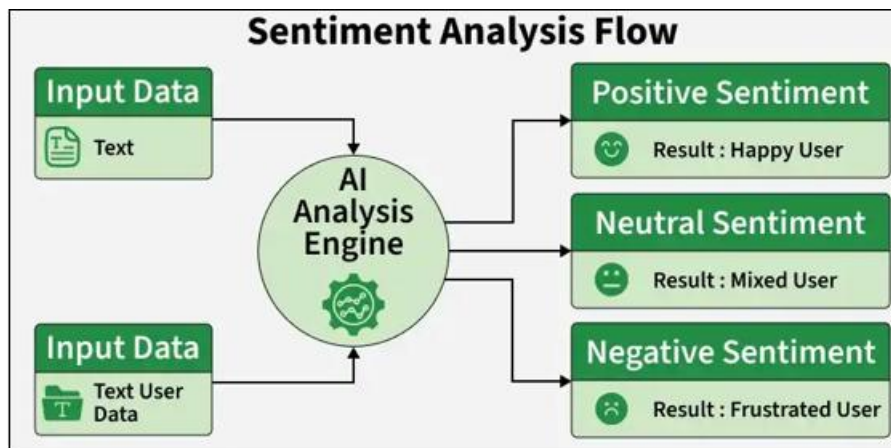


Figure 4: Sentiment Analysis

In literary criticism, sentiment analysis can help critics understand character development, emotional development, and the dynamics of story-telling. By noting changes in the way emotions are expressed in different sections of a book, critics can be able to understand the psychological development of characters and emotions in a literary piece. Moreover, with comparative sentiment analysis in different books, critics can study variations in the depiction of emotions across different writers, literary styles, and cultures. While the emotional interpretation may be affected by cultural considerations, AI offers an objective perspective.

5.3 Authorship Attribution

Authorship Attribution has proven to be among the most fruitful endeavors of AI when used in the study of literature. AI uses stylometry and machine learning techniques to determine the likely writer of anonymous, disputed, or collective literary pieces through the unique traits of language use. Such unique language traits may include vocabulary choice, sentence length, grammar use, punctuation use, and syntax use.

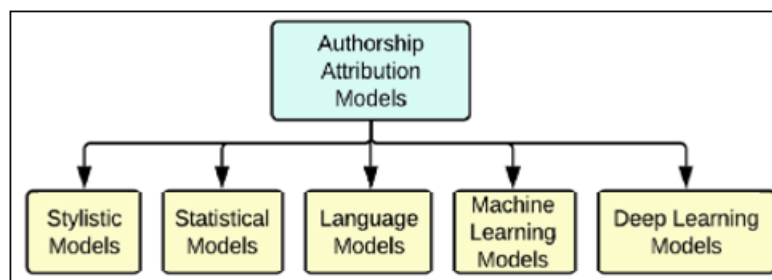


Figure 5: Authorship Attribution Method

The power of artificial intelligence to assess multiple textual characteristics at one time has tremendously helped increase the precision of authorship attribution. Scholars of literature have used computational methods to successfully settle some of the age-old controversies about the authorship of disputed works and collaborative writings. Besides authorship attribution, the methods help understand an author's stylistic development over time and the link between the literary influence on the writer. Consequently, AI has become an essential tool in textual criticism, historical literary research, and forensic linguistics.

5.4 Narrative and Stylistic Analysis

Artificial Intelligence has made significant contributions to the study of narrative construction and literary style through the systematic analysis of text components which would take a considerable amount of time to analyze manually. The use of Artificial Intelligence allows for the identification of plot development, interaction between characters, patterns of dialogue, point of view, symbolism, and text structure within literature. This technology is useful in making comparisons between different texts to see how narratives are constructed differently.

Stylistic analysis is another area where the use of AI can be observed. In this context, AI is used to analyze aspects like lexical richness, syntactic complexity, figures of speech, rhetorical devices, and sentence structure. Such studies enable researchers to discern the specific style of particular writers and literary periods. Additionally, the use of visualization software enabled by AI helps to visualize narratives, themes, and stylistics in the form of graphs and interactive models. Even though computational analysis offers empirical information, the interpretation of literary texts is still dependent on human judgment.

5.5 Translation and Multilingual Literary Studies

AI has played an important role in revolutionizing literary translation and research involving multiple languages. The application of NMT systems based on deep learning algorithms has helped in increasing the accuracy of translation between different languages. Such translation is done considering the context of the relationship, instead of individual words, which results in a more natural translation process while retaining the original meaning.

AI also facilitates multilingual literary analysis through comparative analysis between different literary traditions and genres across cultures. Researchers can analyze translations of literary works with original works for cultural and linguistic differences in interpretation. Moreover, AI also helps with digitization and translation of rare manuscripts to help preserve endangered languages and ensure world-wide accessibility to literary heritage.

6. Challenges, Ethical Issues, and Future Directions

Artificial Intelligence has revolutionized literary research by providing advanced tools for the analysis and interpretation of literature. At the same time, the growing use of AI raises a number of ethical and other problems. These problems must be solved in order to implement AI in the field of Digital Humanities properly.

- **Algorithmic Bias:** AI models learn from previously existing datasets that might include cultural, linguistic, or historical bias. This could lead to AI-generated interpretations missing out on the views of minorities or even upholding pre-existing stereotypes. Thus, researchers need to critically assess AI outputs using diverse datasets.
- **Copyrights and Intellectual Property:** There have been debates surrounding the copyright of literary texts used by researchers for training AI. Researchers should abide by copyright laws and make sure their use of AI-generated literary interpretations is legal.
- **Man's Creativity VS AI:** While the efficiency of AI in interpreting literary texts and finding patterns in them cannot be questioned, it fails to comprehend emotions, culture, symbolism, or human creativity behind them. Hence, human scholars still play an integral part in critical interpretation and literary analysis.
- **Ethical Considerations:** Transparency, accountability, and academic integrity need to be maintained in the use of AI for literary research purposes. Researchers must validate AI interpretations to ensure their accuracy, while at the same time, AI dependency needs to be reduced to ensure the authenticity of research and scholarly analysis.
- **Emerging Trends and Future Prospects:** Future advancements in the field of AI such as language modeling, explainable AI, multilingual analysis, and digital archives would prove beneficial in enhancing literary research. The future of literary interpretation is in the form of collaboration between AI-based computations and human insights into culture and literature.

7. Discussion

According to the results obtained from this review, Artificial Intelligence (AI) has brought revolutionary changes to the field of Digital Humanities through providing novel computational approaches to the literary studies. Technologies such as NLP, ML, DL, and LLMs have improved literary criticism by applying approaches like text mining, topic modeling, sentiment analysis, authorship attribution, narrative analysis, and multilingual translations. In this way, researchers can analyze huge collections of literature more efficiently, uncover patterns in texts, and gain novel insights based on data instead of traditional approaches

of close reading. Hence, AI has become an important research tool in literary studies, which facilitates interdisciplinary collaboration between computer science and humanities.

Even so, the review also reveals that there is no possibility of replacing the interpretive skills of the human scholars through the advances of AI. The problems like algorithmic bias, issues about copyright, ethical considerations, and the inability of the AI to comprehend the cultural connotations, symbols, and the emotions of humans are significant challenges that prevent AI from performing independently in literature analysis. Thus, it can be seen that the future of literature studies should involve collaboration whereby the AI provides computational assistance, whereas human researchers provide critical analysis, contextual knowledge, and interpretation. Such a balanced integration of technology and human expertise will strengthen Digital Humanities research and ensure more comprehensive, ethical, and meaningful literary scholarship.

8. Conclusion

The research findings indicate that Artificial Intelligence (AI) has become a transformational technology for the discipline of Digital Humanities as it greatly enhances literary criticism using innovative computational technologies like Natural Language Processing (NLP), Machine Learning (ML), Deep Learning (DL), and Large Language Models (LLMs). The review shows that AI expands the boundaries of literary interpretation by enabling the use of applications like text mining, sentiment analysis, authorship detection, narrative analysis, digital preservation, and multi-lingual translation. However, the research highlights crucial problems associated with algorithmic bias, copyright issues, ethics, and the inability of AI to comprehend human creativity, emotions, and culture. It means that AI is just an additional tool which helps people with literary criticism and cannot substitute human critical thinking. As a result, the research findings show that the proper use of AI in Digital Humanities will lead to innovative, multidisciplinary, and ethical literary research while preserving human insight and critical thinking.

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