

**ARTS AND HUMANITIES IN THE AGE OF AI AND DIGITAL
TRANSFORMATION**

Digital Humanities, Cultural Studies, Creativity And Technology

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ABSTRACT

Artificial intelligence (AI) and digital transformation are reshaping contemporary society, including the arts and humanities. Traditionally, humanities disciplines such as literature, history, philosophy, languages, cultural studies, and heritage have focused on interpreting human experience, culture, values, identity, and meaning. The rapid development of digital technologies and generative AI is creating new possibilities for research, education, creativity, cultural preservation, and communication while simultaneously challenging established concepts of authorship, originality, intellectual property, cultural representation, employment, and human creativity.

This paper examines the changing relationship between arts, humanities, AI, and digital technologies, focusing particularly on digital humanities, cultural studies, creativity, cultural heritage, and ethical issues. It argues that digital transformation should not be understood as a process of replacing human creativity with machines. Rather, digital technologies can extend human intellectual and artistic capabilities when they are used responsibly.

Digital humanities enable researchers to analyze large collections of texts, images, historical records, maps, and cultural materials using computational methods. AI can support translation, transcription, classification, digital preservation, artistic experimentation, and large-scale cultural analysis. However, these benefits must be balanced against algorithmic bias, copyright concerns, misinformation, privacy risks, cultural homogenization, digital inequality, employment disruption, and data colonialism.

The paper proposes a human-centred digital humanities model based on the relationship between **human values, humanities knowledge, digital literacy, AI and digital tools, critical evaluation, creative production, and ethical innovation**. Particular attention is given to Africa and Rwanda, where digital technologies can contribute to preserving local languages, oral traditions, music, historical resources, and cultural heritage.

The paper concludes that the future of arts and humanities should not be framed as a competition between humans and machines. Instead, it should focus on responsible collaboration in which technology expands human capabilities while human beings retain responsibility for interpretation, creativity, cultural meaning, and ethical decision-making.

Keywords: Artificial Intelligence, Digital Humanities, Digital Transformation, Arts, Humanities, Cultural Studies, Creativity, Technology, Cultural Heritage, Generative AI.

1. INTRODUCTION

The twenty-first century has experienced rapid development in digital technologies that has transformed communication, education, research, cultural production, business, and social interaction. Artificial intelligence has become one of the most significant developments in this transformation. Contemporary generative AI systems can produce text, images, music, videos, translations, and other forms of content that were previously associated primarily with human

creative activity. This development raises an important question for the arts and humanities: what does human creativity, identity, authorship, and cultural expression mean when machines can increasingly produce cultural and artistic content?

The question is not merely technological. It has philosophical, cultural, educational, economic, and ethical dimensions. Humanities disciplines have traditionally examined fundamental questions concerning identity, morality, language, history, culture, knowledge, and human existence. The arts similarly provide important means through which individuals and communities express emotions, values, experiences, and identities. Digital transformation therefore affects fields that are central to understanding human society.

Digital humanities represent an important response to these developments. It combines humanistic scholarship with digital technologies and computational methods. Researchers can use digital archives, databases, GIS, artificial intelligence, text analysis, visualization, and other technologies to investigate cultural and historical questions on a scale that was previously difficult to achieve. At the same time, humanities scholars critically examine technology itself. They ask questions about algorithmic bias, privacy, inequality, cultural representation, power, authorship, and the social consequences of technological systems. Thus, digital transformation does not make the humanities less relevant. It makes humanistic questions about technology increasingly important. This paper therefore examines the transformation of arts and humanities in the age of AI and digital technologies, with particular emphasis on digital humanities, cultural studies, creativity, cultural heritage, education, and ethical responsibility.

2. BACKGROUND TO THE STUDY

Arts and humanities have historically played a fundamental role in preserving civilization and interpreting human experience. Literature records imagination and social experience; history preserves collective memory; philosophy explores knowledge and morality; languages facilitate communication and cultural continuity; and music, theatre, dance, painting, film, and sculpture provide forms of emotional and symbolic expression.

Digital technologies have changed the ways these activities are produced, preserved, studied, and distributed. Libraries increasingly maintain digital repositories, museums provide virtual exhibitions, historical documents are digitized, and researchers can analyze large collections using computational technologies. Artificial intelligence represents a further stage of digital transformation. AI systems can process large datasets, recognize patterns, translate languages, classify documents, generate content, and assist with cultural preservation. The relationship between AI and culture is particularly important because AI systems depend heavily on human-generated data. Literary works, artworks, photographs, music, historical documents, and online cultural materials can contribute to the datasets used to develop AI systems. This creates an important relationship between **human creativity and machine-generated production**. While technology can increase creative possibilities, it can also challenge existing concepts of authorship, ownership, cultural representation, and originality. For this reason, UNESCO emphasizes principles such as human dignity, fairness, transparency, cultural diversity, human oversight, and AI literacy in responsible AI development.

3. STATEMENT OF THE PROBLEM

The rapid development of AI and digital technologies presents significant opportunities for arts and humanities but also creates serious challenges.

First, many traditional humanities programmes have not fully integrated digital skills. Students may graduate with strong knowledge of literature, history, philosophy, or culture but limited competence in data analysis, digital archives, AI, digital publishing, and computational research.

Second, AI challenges conventional understandings of authorship and originality. When a machine produces a poem, image, story, or musical composition, determining the appropriate role of the human creator, AI system, and technology provider becomes increasingly complex. Third, AI can reproduce cultural and social biases contained in training data. Underrepresented languages and cultures may receive inaccurate or stereotypical treatment.

Fourth, AI-generated content may affect the economic position of artists, writers, translators, designers, musicians, and other cultural workers. Automated production can reduce costs and increase efficiency but may also create competition for human professionals.

Fifth, global digital platforms may increase the visibility of dominant languages and cultures while reducing the visibility of local traditions and minority languages.

Sixth, digital inequality may prevent developing countries and poorly resourced institutions from participating fully in digital humanities. Limited infrastructure, funding, skills, and access to advanced technologies can create unequal opportunities for knowledge production.

There is therefore a need for a human-centred approach that enables arts and humanities to benefit from AI and digital transformation without undermining creativity, cultural identity, human dignity, intellectual property, and critical thinking.

4. OBJECTIVES OF THE PAPER

4.1 General Objective

The general objective is to examine how artificial intelligence and digital technologies are transforming the arts and humanities, with particular emphasis on digital humanities, cultural studies, creativity, and technology.

4.2 Specific Objectives

The paper aims to:

1. Examine the development and importance of digital humanities.
2. Assess the influence of AI and digital transformation on cultural studies.
3. Examine the relationship between technology and human creativity.
4. Identify opportunities created by AI and digital technologies.
5. Examine ethical, cultural, educational, and economic challenges.
6. Propose approaches for strengthening arts and humanities education and research in the digital era.

5. RESEARCH QUESTIONS

The paper is guided by the following questions: How are digital technologies transforming arts and humanities? How does digital humanities contribute to contemporary research? How is AI influencing cultural studies and cultural production? How can technology enhance human creativity? What ethical and cultural challenges are associated with AI-generated content? How can universities prepare humanities students for a digital future?

6. CONCEPTUAL UNDERSTANDING OF ARTS, HUMANITIES AND DIGITAL HUMANITIES

Arts and humanities are broad fields concerned with human experience, knowledge, culture, interpretation, and expression. The **arts** include painting, music, theatre, dance, literature, film, sculpture, photography, and related creative activities. The **humanities** include history, philosophy, literature, languages, cultural studies, archaeology, religious studies, and related disciplines. Their purpose extends beyond the production of information. They seek to understand the cultural, social, historical, ethical, and philosophical significance of human experience. Technology does not eliminate these functions. Instead, it creates new questions for humanistic inquiry. For example, while computer scientists may develop facial-recognition systems, humanities scholars can investigate their cultural assumptions, ethical implications, effects on privacy, and potential for discrimination.

6.1 Digital Humanities

Digital humanities are an interdisciplinary field that combines humanities scholarship with digital technologies and computational approaches. It has two complementary dimensions:

Humanities Technology:

Humanities scholars use digital tools to investigate cultural, historical, linguistic, literary, and social questions.

Technology Humanities:

Humanities scholars critically examine the cultural, ethical, social, and political consequences of technology. Digital humanities therefore include digital archives, digital history, computational literary studies, digital art history, digital cultural heritage, computational linguistics, digital storytelling, GIS, data visualization, and digital museums.

7. DIGITAL HUMANITIES AND THE TRANSFORMATION OF RESEARCH

Traditional humanities research often depended on relatively small collections of books, manuscripts, documents, and physical archives. Digital technologies have expanded the scale and accessibility of research. Researchers can now analyze thousands of texts, compare historical documents, visualize geographical information, study large cultural datasets, and examine patterns that may not be visible through conventional research methods. For example, computational text analysis can examine thousands of political speeches, newspapers, novels, or social-media posts. GIS can help historians study migration, conflict, settlement, and geographical change. However, computational methods should complement rather than replace traditional humanistic interpretation. A computer can identify a pattern, but the researcher must determine **what the pattern means and why it matters**.

Therefore, digital humanities combine computational capacity with human interpretation.

8. AI, CULTURAL STUDIES AND CULTURAL REPRESENTATION

Cultural studies examine how culture is produced, distributed, consumed, and interpreted. It considers identity, language, media, power, representation, globalization, social relationships, and cultural practices. AI increasingly participates in cultural production and distribution. Recommendation algorithms influence the music people hear, films they watch, and information they encounter. Generative AI produces text, images, music, and videos, while automated translation affects communication between linguistic communities. This means AI

is no longer simply a technological tool; it is increasingly becoming part of the cultural environment.

A major question is therefore: **Who determines which cultural expressions become visible in digital environments?**

Algorithmic systems may favour certain languages, cultural products, genres, or communities. This can influence cultural visibility and popularity. AI systems can also reproduce stereotypes found within their training data. Cultural groups with limited representation in digital datasets may receive less accurate or less diverse representations.

Responsible AI therefore requires attention to:

cultural diversity; fairness; representation; non-discrimination; transparency; human oversight; and community participation. AI literacy should consequently include **cultural literacy**, enabling users to recognize that AI outputs are not necessarily culturally neutral.

9. CREATIVITY AND TECHNOLOGY IN THE AGE OF AI

Creativity has traditionally been associated with imagination, originality, experimentation, and human expression. Generative AI challenges this understanding because machines can now produce poems, stories, images, music, videos, designs, advertisements, and other outputs.

Three broad perspectives can be identified.

First, some argue that AI cannot possess creativity in the same way as humans because it lacks human experience, emotions, consciousness, and cultural embodiment.

Second, creativity may be understood functionally as the production of something novel and valuable. From this perspective, AI can participate in creative processes.

Third, AI can be viewed as a creative partner or instrument through which human beings expand their creative abilities. The third perspective is particularly useful because it recognizes both technological capability and human agency.

AI can assist with idea generation, experimentation, editing, translation, design, accessibility, and cultural preservation. Artists can explore multiple alternatives quickly, while researchers can use AI to organize and analyze large quantities of information. Nevertheless, human beings remain responsible for creative intention, evaluation, cultural interpretation, and ethical decisions. Thus, the future of creativity should not simply ask whether humans or machines are more creative. It should examine how human imagination can work with intelligent technologies without losing human authorship and cultural meaning.

10. DIGITAL TRANSFORMATION OF LITERATURE, HISTORY AND CULTURAL HERITAGE

10.1 Literature

Digital technologies have transformed literary production, publication, distribution, and consumption. E-books, online publishing, digital libraries, social media, and AI-generated writing have created new forms of literary participation. AI can produce essays, poems, stories, and scripts rapidly. However, human literature often reflects lived experiences, cultural memory, emotional complexity, intentional ambiguity, and individual perspectives. Literary education should therefore emphasize critical reading, originality, source evaluation, ethical AI use, intellectual property, and development of a distinct human voice.

10.2 History

Digital archives enable researchers to access historical materials from distant locations. Digitized newspapers, maps, photographs, manuscripts, and oral histories have expanded historical research. AI can assist with: optical character recognition; handwriting recognition; transcription; translation; document classification; metadata generation; and pattern identification. However, a digital archive represents only the materials that have been preserved and digitized. **A digitized archive should not be mistaken for the entirety of the past.**

10.3 Cultural Heritage

Cultural heritage includes both tangible and intangible resources. **Tangible heritage** includes monuments, buildings, manuscripts, archaeological materials, artworks, and historical objects. **Intangible heritage** includes oral traditions, languages, music, dance, rituals, traditional knowledge, and storytelling. AI can support digitization, cataloguing, restoration, documentation, translation, and public access. However, communities should participate in determining how cultural knowledge is collected, digitized, interpreted, and used. This is particularly important for Indigenous and local knowledge.

11. AI AND MUSEUMS, MUSIC AND PERFORMING ARTS

Museums increasingly use digital catalogues, virtual exhibitions, 3D models, interactive displays, virtual tours, and AI-supported search systems. These technologies can improve accessibility and enable audiences to explore collections remotely. However, technological systems should not replace professional and community interpretation. Algorithms may classify objects, but historians, curators, artists, and communities provide their deeper cultural meanings. Music and performing arts are also being transformed by AI. Technologies can support automated composition, sound generation, voice synthesis, digital choreography, virtual performers, augmented reality, and immersive theatre. These developments create new artistic possibilities but also raise concerns about unauthorized reproduction of artists' voices, images, performances, and styles. Consequently, **consent, attribution, ownership, and fair compensation** are increasingly important.

12. ETHICAL AND SOCIAL CHALLENGES OF AI

The transformation of arts and humanities through AI creates several major challenges.

12.1 Algorithmic Bias

AI may reproduce historical stereotypes and inequalities contained in training data. Underrepresented cultures and languages may receive inadequate or inaccurate representation.

12.2 Copyright and Intellectual Property

AI systems may be trained using human-created texts, images, music, and other materials. This raises questions about permission, licensing, attribution, ownership, and compensation.

12.3 Employment Disruption

Automation may affect translation, transcription, editing, design, content production, and other cultural occupations. However, it may also create new roles involving AI supervision, evaluation, curation, and ethical governance.

12.4 Digital Inequality

Unequal access to internet infrastructure, computers, software, AI systems, digital archives, and technical training can widen inequalities between institutions and countries.

12.5 Cultural Homogenization

Global digital platforms may give greater visibility to dominant cultures and languages while marginalizing local traditions, minority languages, and community knowledge.

12.6 Misinformation and Historical Distortion

Generative AI can produce convincing but inaccurate historical texts, images, audio, and videos. Researchers must therefore distinguish AI-generated information from verified historical evidence.

12.7 Privacy and Cultural Data

Digital archives may contain personal information, photographs, recordings, oral histories, and sensitive cultural knowledge. Consent, confidentiality, ownership, and community expectations must be respected.

12.8 Overdependence on AI

Excessive reliance on AI may weaken independent reasoning, writing, close reading, interpretation, and critical thinking. AI should therefore support rather than replace scholarly judgment.

12.9 Commercial Concentration

Advanced AI systems require significant financial and technological resources. Concentration of AI infrastructure among powerful organizations can create concerns regarding control over knowledge and cultural data.

12.10 Data Colonialism

Cultural and linguistic data may be extracted from communities and incorporated into systems controlled elsewhere. This creates questions concerning data ownership, community participation, economic benefit, and cultural sovereignty

13. OPPORTUNITIES CREATED BY DIGITAL TRANSFORMATION

Digital transformation provides significant opportunities for arts and humanities.

Digital Opportunity Contribution to Arts and Humanities

Digital archives	Preservation and wider access to cultural materials
AI translation	Communication across languages and cultures
Computational analysis	Examination of large cultural datasets
Virtual reality	Immersive heritage and cultural experiences
AI-assisted creativity	Artistic experimentation and innovation
Online publishing	Wider distribution of creative and scholarly works
Digital museums	Increased public access to collections
GIS	Spatial analysis of historical and cultural information
Social media	Cultural participation and public engagement
Digital storytelling	New narrative and communication formats
3D scanning	Documentation and preservation of heritage
Digital libraries	Expanded access to knowledge
Machine learning	Identification of patterns in cultural datasets

These opportunities can strengthen research, education, preservation, creativity, cultural communication, and public engagement.

14. DIGITAL HUMANITIES IN AFRICA AND RWANDA

Digital humanities offer considerable potential for African scholarship because the continent possesses extensive cultural resources, including oral traditions, Indigenous languages, traditional music, historical records, archaeological sites, community knowledge, literature, and visual arts. Digitization can preserve these resources and make them available to researchers, students, communities, and international audiences. However, African digital humanities should not simply reproduce priorities established outside Africa. African researchers and institutions should determine research priorities based on local cultural, historical, linguistic, and development needs.

14.1 Relevance to Rwanda

Rwanda possesses valuable cultural resources, including oral traditions, traditional music and dance, historical sites, Indigenous knowledge, languages, literature, visual arts, and cultural institutions.

Digital technologies can support: cultural heritage preservation; education; tourism; research; digital archives; cultural entrepreneurship; language documentation; and public access to cultural resources.

Historical sites could be documented through photography, GIS, 3D technologies, and virtual reality. Oral histories and traditional songs could be preserved through digital archives. Rwandan universities could establish **digital humanities laboratories** that combine humanities scholarship with AI, GIS, digital archives, data analysis, digital preservation, and multimedia technologies. Such initiatives could create new opportunities in research, education, heritage management, tourism, and cultural entrepreneurship.

15. CHALLENGES FOR DEVELOPING COUNTRIES

Developing countries may face particular barriers to digital transformation in arts and humanities.

Major challenges include: **Limited infrastructure** – inadequate internet, computing facilities, and digital storage. **Skills shortages** – limited availability of professionals combining humanities and technology expertise. **Financial constraints** – high costs of AI systems and digital preservation infrastructure. **Limited digitization** – significant cultural resources remain undocumented digitally. **Language inequality** – AI often performs better in languages with large digital datasets. **Weak intellectual-property systems** – uncertainty concerning ownership and use of digital cultural resources. **Cybersecurity risks** – digital collections can face unauthorized access, data loss, and cyberattacks.

Successful digital transformation therefore requires investment in infrastructure, skills, governance, policy, cultural institutions, and local technological capacity.

16. STRATEGIES FOR RESPONSIBLE DIGITAL TRANSFORMATION

16.1 Strengthen Digital Humanities Programmes

Universities should establish programmes combining traditional humanities with digital research, AI, GIS, data analysis, digital archives, and digital preservation.

16.2 Promote AI Literacy

Students and researchers should understand how AI works, how data influence outputs, algorithmic bias, copyright, privacy, verification, and ethical use.

16.3 Protect Cultural Heritage

Institutions should digitize manuscripts, oral traditions, music, languages, historical photographs, archaeological materials, and community histories while ensuring community participation.

16.4 Strengthen Copyright Protection

Governments, universities, technology companies, and cultural institutions should develop clear mechanisms for licensing, attribution, consent, ownership, and fair compensation

16.5 Promote Cultural Diversity

Digital systems should include diverse languages, cultures, communities, and historical perspectives rather than privileging only dominant cultural groups.

16.6 Maintain Human Oversight

AI outputs should be reviewed by qualified researchers, historians, archivists, curators, educators, and artists, especially where cultural or historical interpretation is involved.

16.7 Encourage Interdisciplinary Collaboration

Effective digital humanities require collaboration among humanities scholars, computer scientists, data scientists, artists, librarians, archivists, museum professionals, policymakers, and communities.

16.8 Develop Institutional AI Policies

Universities and cultural institutions should establish policies addressing academic integrity, copyright, privacy, transparency, attribution, verification, data governance, and cultural sensitivity.

17. PROPOSED HUMAN-CENTRED DIGITAL HUMANITIES MODEL

This paper proposes the following model:

Human Values → Humanities Knowledge → Digital Literacy → AI/Digital Tools → Critical Evaluation → Creative Production → Ethical and Culturally Responsible Innovation

17.1 Human Values

The process begins with dignity, justice, cultural diversity, inclusion, creativity, responsibility, and respect for human rights.

17.2 Humanities Knowledge

Historical, philosophical, cultural, literary, and ethical knowledge provides the foundation for interpreting digital technologies and their outputs.

17.3 Digital Literacy

Students and researchers require sufficient digital competence to understand and use modern technological tools.

17.4 AI and Digital Tools

AI, machine learning, GIS, digital archives, virtual reality, computational analysis, and related technologies support research, education, preservation, and creativity.

17.5 Critical Evaluation

Users must evaluate AI-generated outputs by asking: Is the information accurate? What evidence supports it? What assumptions are embedded in the system? Whose perspectives are represented? Whose perspectives are missing? Could the output contain cultural bias?

17.6 Creative Production

Technology can support digital storytelling, interactive exhibitions, computational literature, virtual heritage, digital music, and multimedia scholarship.

17.7 Ethical Innovation

The final goal is innovation that respects human dignity, cultural diversity, intellectual property, academic integrity, community rights, and social responsibility.

Core principle:

Technology should expand human capacity without removing human responsibility.

18. FUTURE OF DIGITAL HUMANITIES

The future of digital humanities is likely to involve increasingly sophisticated collaboration between human scholars and intelligent computational systems.

Important areas include:

AI-assisted historical analysis

AI will help researchers process large historical collections, compare sources, identify relationships, and locate patterns.

Large-scale literary analysis

Computational systems will enable scholars to examine thousands of literary works for language, themes, styles, and representation.

Language documentation

AI can support transcription, translation, speech recognition, and preservation of endangered and under-resourced languages.

Virtual heritage

3D technologies and virtual reality can reconstruct historical environments and make heritage accessible to remote audiences.

Immersive digital museums

Museums may increasingly combine physical collections with virtual reality, augmented reality, interactive archives, AI, and 3D models.

AI-assisted archaeology

AI can support identification and classification of archaeological objects and analysis of satellite imagery.

Digital ethnography

Researchers can study identities, communities, social relationships, and cultural practices emerging in digital environments.

Multimodal humanities

Future research will increasingly combine text, images, audio, video, maps, and three-dimensional objects.

These developments demonstrate that digital humanities will increasingly connect technological innovation with humanistic interpretation.

19. DISCUSSION

The transformation of arts and humanities demonstrates that AI does not make humanistic scholarship obsolete. Rather, it increases the importance of questions concerning meaning, culture, identity, ethics, power, and human experience.

AI can process information at a scale and speed that would be difficult for individual researchers. It can identify patterns, classify materials, translate texts, organize collections, and support creative experimentation.

However, **information is not the same as meaning.**

A machine can identify a recurring theme in thousands of literary works, but understanding the historical, cultural, emotional, and philosophical significance of that theme requires human interpretation. Similarly, AI may generate a convincing historical explanation, but researchers must verify its evidence and assess its accuracy. AI also changes the role of the creator. In some contexts, artists and researchers may increasingly become designers, curators, editors, evaluators, and interpreters of AI-assisted outputs. This does not necessarily reduce creativity. Rather, it changes the environment in which creativity occurs.

The key challenge is therefore not whether AI should be accepted or rejected, but how AI can be integrated while preserving human judgment, cultural diversity, creativity, intellectual freedom, and ethical responsibility.

20. CONCLUSION

Artificial intelligence and digital transformation are fundamentally changing the environment in which arts and humanities research, education, cultural preservation, and creative production occur.

Digital humanities have developed into an interdisciplinary field incorporating digital archives, computational analysis, GIS, artificial intelligence, machine learning, virtual environments, cultural analytics, and generative technologies.

These technologies provide significant opportunities. They can improve access to cultural materials, preserve heritage, support research, enhance education, assist creative professionals, and create new forms of cultural expression.

However, these opportunities are accompanied by serious challenges, including algorithmic bias, copyright disputes, employment disruption, digital inequality, cultural homogenization, misinformation, privacy concerns, technological dependence, commercial concentration, and data colonialism.

The central issue is therefore not whether AI should be used in the arts and humanities. The more important question is how AI can be integrated without undermining human judgment, cultural identity, creativity, intellectual freedom, and ethical responsibility.

A human-centred approach provides an appropriate framework. AI should expand human capabilities while remaining subject to human evaluation and ethical oversight.

The future of arts and humanities is therefore unlikely to be a simple competition between humans and machines. It will increasingly depend on responsible collaboration between human knowledge and computational intelligence.

The future of digital humanities should not be measured by how much human work technology can replace, but by how effectively technology can help humanity understand, preserve, question, and create culture.

21. RECOMMENDATIONS

21.1 Universities

Universities should: Introduce digital humanities courses and programmes. Integrate AI literacy into humanities curricula. Provide students with access to digital research technologies.

Promote interdisciplinary research involving humanities and computing. Develop institutional AI-use policies. Train academic staff in digital research methods. Establish digital archives and repositories. Encourage critical and ethical approaches to AI.

21.2 Governments

Governments should: Invest in digital infrastructure. Promote affordable internet access. Support digital cultural preservation. Strengthen copyright and intellectual-property frameworks. Support local-language digital resources. Promote responsible AI governance. Reduce digital inequalities.

21.3 Museums, Libraries and Cultural Institutions

These institutions should: digitize important collections; protect sensitive cultural materials; involve communities in digitization; preserve metadata and contextual information; use AI under professional supervision; and develop virtual and interactive exhibitions.

21.4 Artists and Creative Professionals

Artists should explore AI as a creative instrument while protecting: originality; copyright; attribution; consent; authorship; cultural identity; and the value of human creative labour.

21.5 Students

Students should develop both traditional humanities competencies and digital skills. They should learn to evaluate AI outputs, verify information, understand algorithmic bias, protect intellectual property, acknowledge appropriate AI assistance, and maintain independent thinking.

22. ORIGINAL CONTRIBUTION OF THE PAPER

The principal contribution of this paper is the proposal of a **human-centred approach to digital humanities and AI**.

Four principles guide this approach.

Principle 1: Technology Should Extend Rather Than Erase Human Creativity

AI should enhance human imagination and creative activity rather than make human creators invisible. **Principle 2: Digital Humanities Should Remain Critical**

Digital humanities should not merely celebrate technological innovation. It should critically examine the assumptions, biases, inequalities, exclusions, and power structures embedded in digital systems. **Principle 3: Cultural Diversity Must Remain Central**

Digital transformation should protect local languages, cultural traditions, Indigenous knowledge, and diverse cultural perspectives. **Principle 4: Human Judgment Remains Fundamental.** Human beings remain responsible for evaluating evidence, interpreting meaning, determining cultural significance, and making ethical decisions.

The proposed framework can therefore be summarized as: **Human Values → Humanities Knowledge → Digital Literacy → AI/Digital Tools → Critical Evaluation → Creative Production → Ethical and Culturally Responsible Innovation**. This model provides a basis for integrating technological innovation with humanistic values.

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