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Original Article

Preserving Traditional Culture in the Age of Artificial Intelligence Through AI

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Abstract *- The traditional cultural practices in the contemporary period have gone through certain drastic changes and are rapidly dying a slow and gradual death, as a result of the majoritarian influence and also as a result of the direct impact of globalization, policies of states, or the shifting of lifestyles of the traditional population towards majoritarian culture, which has resulted in this slow and gradual extinction of cultures from the earth. In connection with this, the need of the hour is to preserve our cultural heritage with available resources at hand, and one such tool is Artificial Intelligence (AI). This research examines the contradictory relationship between artificial intelligence and traditional culture: how a modern technology can be employed to maintain ageless customs, practices, and knowledge systems. Technically speaking, AI is generally seen as a disruptive force, and that is where it often begins to appear, but in this case, it actually constitutes a unique chance to keep the cultural heritage safe for the generations to come. This paper explores how AI can be used in many ways for this goal, recognising that any attempt at doing this should never be without ethical consideration.*

The first application that we would like to mention is their digitization and archiving, where a limited application is required. Recordings of oral histories, songs, and traditional ceremonies can be powered by AI on tools that transcribe audio and, therefore, preserve the original recording in an accessible format. (Nanetti, 2021)

Predictive modelling, powered by AI, can anticipate the impact of cultural or environmental changes on traditional practices, enabling proactive strategies for cultural preservation. These insights can inform policy decisions, community-based initiatives, and educational programs aimed at strengthening cultural identity and resilience.

A human-centered approach is essential. AI-based cultural preservation projects will depend on community engagement, and empowering the community with AI-based knowledge will help in the process. Such projects should be developed and implemented with regard to local communities and values; therefore, the involvement of local communities in developing and implementing such projects is necessary. The capacity building programs may train the community members on AI tools usage and enable them to claim the domain of cultural preservation efforts, increasing the participation level. We can foster collaboration and knowledge sharing to make sure that AI is not a tool of homogenization or eradication for culture, but a powerful enabler of cultural enrichment and transmission.

Keywords *- Tradition, Culture, AI, Preservation of Traditional Culture, Machine Learning.*

1. Introduction

1.1. Traditional Culture: A Brief Overview

Traditional culture consists of the shared values, beliefs, customs, traditions, practices, and social behaviours of a particular group of people, often passed down through generations. It represents a community's historical and ancestral heritage, shaping its identity and worldview. One of the earliest academic works was provided by Sir E.B. Taylor in his work, Primitive Culture, in 1871. He defined culture as "that complex whole which includes knowledge, belief, art, law, and habits acquired by man as a member of society" (Brown et al., 2020). This introductory definition established traditional culture as a shared social experience rather than a genetic inheritance.

Key aspects of traditional culture include:

- Customs and Traditions: Customs and traditions are all that which is passed down through generations to create social morals and behaviour. They take up a great multitude of things from mundane conviviality to important stage affairs and indicate a society of values, history, and social organisation. These are established patterns of behaviour within a community, ranging from daily rituals like greetings and mealtimes to significant life events like births, marriages, and funerals. They provide structure and meaning to social life.
- Values and Beliefs: Values and beliefs are fundamental aspects of what makes us human, guiding our decisions

and shaping our perceptions of the world. These are the core principles and ideals that guide a community's worldview and moral compass. They influence how people interact with each other and the world around them (Hood et al., 2023).

- Language: Language is a common medium by which we communicate with and amongst ourselves. It is through language that we transmit information, or we do share our traditional cultural practices orally, which is one of the main tools in the hands of humankind for the preservation of our culture. Language is fundamental to culture, serving as a vehicle for communication, storytelling, and the transmission of knowledge and traditions (Akinsola, 2013).
- Art: Art is one of the most powerful expressions at the disposal of human beings, which brings out the rich cultural traditions of a community to the outer world. It is of different form or kind like tangible and intangible art form. Traditional art forms, including music, dance, visual arts, and crafts, express a community's aesthetic sensibilities and cultural narratives (Schein, 1991).
- Social Structures: Each and every society/community do a certain social structure that governs that society/community. These social structures are sometimes strongly rigid or closed group social structures based on a hierarchical social system in most of the traditional societies, which are breaking down slowly and gradually in the contemporary period. Social structures are the ways in which a community organizes itself, including family structures, kinship systems, and social hierarchies.
- Religion and Spirituality: Religion and spirituality are both related to one another, and they are related to human beings in their search for meaning and purpose of life, and the latter is related to the existence of some supernatural force that is governing us, carved out of some complex psychosis like respect and fear. Religious beliefs and practices often play a central role in traditional cultures, providing a framework for understanding the world and one's place in it (Schein, 1991).
- Material Culture: Material culture is that which is visible and that has a certain physical structure and can be felt. These types of cultural aspects are very much reflected in the customary dress, housing module/pattern, musical instruments, food habits, pattern of community agriculture, etc. This includes the physical objects and artefacts created and used by a community, reflecting its technological advancements, artistic skills, and daily life (Rangel, 2022).

Tradition here does not mean static or unchangeable aspects, but in modern times it reflects a dynamic and evolving character. It is important to note that "traditional" does not necessarily equate to "static" or "unchanging." Cultures are dynamic and evolve over time, adapting to new circumstances and influences while retaining core elements of their heritage (Hood et al., 2023). Furthermore, individuals within a culture do not uniformly adhere to every aspect of tradition (Giger et al., 2007). There is often diversity and individual expression within a shared cultural framework.

1.2. AI: A Brief Overview

Artificial Intelligence refers to the development of computer systems and algorithms capable of performing tasks that typically require human intelligence, such as learning, problem-solving, decision-making, and pattern recognition.

Artificial intelligence involves creating machines capable of performing tasks that typically require human intelligence. The learning, reasoning, problem-solving, and perception and language understanding tasks form these tasks. Although the idea of thinking machines has cropped up constantly in the imaginations across the centuries, the idea of an AI field of study is relatively recent, dating back to the middle of the 20th century.

1.3. Different Views on AI

- Machine Learning: Machine Learning (ML) algorithms allow the computer to learn data without the help of a program (De la Mora Velasco et al., 2021). It allows the discovery of patterns, prediction, and improvement of performance as time goes by.
- Deep Learning: Deep Learning (DL) is a subset of Machine Learning (ML) that builds upon artificial neural networks with multiple layers, which makes it possible to process complex data to the extent that it can achieve breakthroughs in such areas as image recognition and natural language processing (Dhanesha & Locke, 2024).
- Natural Language Processing (NLP): Put otherwise, NLP is the ability of computers to understand, interpret, and create human languages, powering applications like chatbots and machine translation.
- Computer Vision: This field enables the computer to 'see' the image and video and do object recognition and facial recognition (Shapiro, 2025).
- Robotics: They use AI and Physical Robots to do tasks in the physical world, combining robotics with AI (Zhu et al., 2023).

While AI offers immense possibilities, ethical contemplations are extremely paramount. Safe, trustworthy, transparent, and beneficial to humanity is of utmost importance to develop and regulate AI systems. Leveraging the power of AI means addressing problems such as bias, job displacement, and privacy.

1.4. Different Types of AI and Their Uses

AI is categorized into various types based on capabilities and functionalities. Here is a brief overview:

1.4.1. Narrow or Weak AI

- Definition: This type of AI is designed for a specific task and excels at it, often outperforming humans (Choi, 2023). It operates within a limited context and cannot perform outside its designated function.

- Examples: Spam filters, recommendation systems, image recognition software, virtual assistants, and self-driving car navigation systems (Betz, 2025).
- Uses: Automating repetitive tasks, providing personalized experiences, and improving efficiency in specific areas.

1.4.2. General or Strong AI

- Definition: This hypothetical AI would possess human-level intelligence and cognitive abilities across a wide range of tasks, including learning, reasoning, and problem-solving in various domains (Szecsei, 2025). It does not yet exist.
- Examples: The fictional HAL 9000 from *2001: A Space Odyssey*.
- Uses: Could potentially perform any intellectual task a human can, leading to breakthroughs in science, medicine, and other fields.

1.4.3. Super AI

- Definition: This hypothetical AI would surpass human intelligence in all aspects. It is purely theoretical at this point (Szecsei, 2025).
- Examples: No real-world examples exist.
- Uses: Its capabilities are unknown and could range from solving complex global problems to posing existential risks.

1.4.4. Reactive Machines

- Definition: These AI systems react to immediate inputs without memory or past experiences to inform their decisions.
- Examples: IBM's Deep Blue chess-playing computer.
- Uses: Limited to specific tasks with clearly defined rules and predictable environments.

1.4.5. Limited Memory AI

- Definition: These AI systems can use past experiences to inform future decisions, utilizing stored data to improve performance.
- Examples: Self-driving cars, chatbots.
- Uses: Enables more complex behaviour and adaptation to changing environments.

It is to be noted that these categories are not always mutually exclusive or of the same features, and some AI systems may demonstrate different characteristics of multiple types (Ikram et al., 2024). With the field of AI development and change ever-present, new types, ever more sophisticated multidimensional applications are always emerging.

2. Review of the Literature

Modern Artificial Intelligence (AI) problems for Cultural legacy preservation study how AI helps in the protection of cultural backgrounds beyond just machine learning, predictive analytics, and digital restoration technologies. Study highlights that AI's ability to digitize and archive valuable endangered artefacts in cloud-based digital libraries improves the monitoring of cultural heritage. It argues that AI establishes a link between ancestral memory and the modern digital society. Though the article also highlights the concerns about authenticity, incompleteness of data, and moral ownership of the digitalized culture. The research directly aims to observe the importance and integration of AI technologies in the context of safeguarding the traditional cultural heritage in today's society. (Colace et al., 2025).

The study investigates how AI technologies support the process of preserving Saudi cultural heritage amongst university students. The authors conducted a survey-based study, discovering that AI tools like augmented reality, virtual museums, and digital storytelling promote engagement amongst the younger generation with traditional practices and historical information. The study ultimately finds that AI can not only help to rejuvenate the awareness of the younger generations in the culture but also modernize the means of preservation. The educational and social aspects of AI-assisted cultural preservation are highlighted in the article, making it a significant piece of information. (Bakr et al., 2026).

Zhou's research article, published in Science Direct, discusses the role of information systems with AI to protect intangible cultural heritages, particularly traditional handicrafts. The study proposes a knowledge graph, a multimodal database, and a recommendation system to document and promote traditional craft practices. Results show strong gains in the public engagement and digital reach of at-risk practices. This research is especially pertinent to the proposed topic as it illustrates the potential of AI in safeguarding indigenous craftsmanship and traditional artistic expressions in the digital era. (Zhou, 2025).

Digital Preservation and Development of Architectural Heritage is a systematic study on virtual technologies and AI applications in the field of architectural heritage preservation. The study conducted an analysis of more than 300 articles from Web of Science and Scopus to gain insights into the current trends in AI-assisted conservation. Results reveal that 3D scanning, digital twin, and AI-assisted reconstruction technology greatly boost the preservation accuracy and accessibility. The article is relevant because ancestral heritage is an integral component of traditional culture, and AI offers innovative solutions for the conservation of endangered historical structures. (Ma et al., 2025).

This study by MDPI explores how AI can help in the conservation of intangible Cultural Heritage (ICH), including traditional music, dance, rituals, and endangered languages. The authors explore the role of voice recognition systems, semantic analysis, and generative AI in recording and revitalizing cultural practices. Public engagement and cultural awareness are proven to be positively affected by AI-powered VR experiences. The study strongly suggests that AI has the potential to save and spread the traditional culture all over the world and promotes the intra-generational transmission of culture. (Sánchez-Martín et al., 2025).

The applications of AI in Cultural Documentation, Artifact Restoration, Predictive Conservation, and Digital Heritage Management are the main areas of interest for this study. The authors highlight the importance of machine learning, 3D scanning, and intelligent archival systems for the protection of tangible and intangible cultural heritage. The article also addresses the ethical issues related to AI-generated cultural representations. Research adds much value to the topic by making the case for AI as a transformation tool to support the continuity of traditional culture in a rapidly evolving technological landscape. (Abdelkarim & Mourad, 2025).

A case study is used to explore the role of AI technologies such as natural language processing, machine learning, and digital twins in cultural heritage preservation. The study highlights the importance of AI in the process of digitizing manuscripts, oral history, and folk tradition. It claims that AI is not only an intermediate link between traditional culture systems and technological society but also a tool to connect these two. The study has a significant relevance as it brings a direct connection between innovation in AI and cultural identity and continuity of culture. (Ghaith, 2025).

Mishra et al. discuss AI-based visual inspection techniques that aid in the preservation of cultural heritage buildings and monuments. The study concentrates on deep learning techniques for crack and erosion detection in historic buildings and the identification of damage in building structures. The authors conclude that the use of image processing with AI has a tremendous effect on the accuracy and speed of heritage conservation. The article aims to add to the debates on the safeguarding of traditional culture by demonstrating how AI can be used to protect physical manifestations of historical identity and collective memory. (Mishra & Lourenço, 2024).

In this paper, the authors explore the possibility of using AI-generated cultural products to help achieve the sustainability of intangible cultural legacy. The research through the lens of the AISAS model explores how the AI-generated artworks stimulate cultural awareness, cultural identity, and cultural participation. The results indicate that the use of AI-generated cultural products has a positive influence on public engagement and enhances cultural identity. The importance of this study is that it links AI innovation with the sustainability of the traditional culture in modern digital societies. (Zhang et al., 2023).
This article explores and critically analyzes biases that can be present in AI systems within cultural heritage preservation. Foka contends that AI could be perpetuating historical disparities if training data is incomplete or biased. Authentically preserving cultural narratives is emphasized as a critical aspect of ethical AI governance. The article adds to the knowledge about the responsible use of AI as a means for the safeguarding of traditional culture without distorting marginalised histories (Foka et al., 2025). Oruc talks about ethical and legal concerns in the application of cultural heritage collections to AI training sets. The article focuses on the problems of ownership and consent of sensitive heritage materials. The study suggests that, while AI can enhance accessibility and preservation, heritage institutions need to have ethical guidelines in place to prevent the exploitation of cultural resources. This work is relevant in that it relates technological advancement to culture, rights, and heritage protection. (Oruc, 2025).

This study combines AI, Augmented Reality (AR), and Extended Reality (XR) to preserve the Chinese Keju cultural heritage. The researchers use deep learning, OCR, and GPT technologies to develop an immersive heritage experience. The results show that AI-driven digitization is beneficial for cultural education and public interaction. The study is significant because it demonstrates the potential of AI systems to inspire and enhance traditional cultural activities with the younger generations. (Jin et al., 2025).

An AI-based platform (ART-RISK 3.0) is introduced, which integrates fuzzy logic and GIS technologies to evaluate the risk of heritage buildings. The authors describe the role of AI in detecting environmental risks and prioritising conservation strategies. The study explains the significance of Intelligent systems in the field of heritage preservation and sustainable cultural management. (Moreno et al., 2022).

Present AI-based visualization systems to analyse and present cultural relics, such as the Terracotta Warriors of China. Machine learning is employed to discern patterns and relations between the artefacts. The authors propose that AI visualization can be used to generate a more comprehensive understanding of the traditional heritage, making it more accessible to the public and more open to scholarly Interpretation. The research is important as it combines digital humanities and cultural preservation. (Li et al., 2025).

This article focuses on the preservation of intangible cultural heritage through digital technologies like AI, Python programming, VR, and 3D animation. The authors highlight the contribution of AI in cultural database management, virtual museums, and the enhancement of public engagement in cultural heritage preservation. The study concludes that digital transformation is needed to protect the traditional cultural practices in this technological era. (Cui, 2025).

3. Research Gap

The application of Artificial Intelligence (AI) in the protection of cultural heritage shows an accelerating trend. However, there exists a significant research gap in the field. Prior studies have largely focused on the protection of a tangible cultural heritage like monuments, artefacts, and historical sites; however, preservation of the intangible traditional culture, including folk traditions, storytelling, indigenous language, oral history, and music, remains underexplored. Aspects like 'technology and capabilities' of AI tools in machine learning, and digital archiving dominated the prior studies; however, ethical and cultural

research on the use of AI in preserving traditional values and identities remains limited. In-depth research on data privacy, cultural authenticity, ownership issues, and potential misuse of AI to distort the content through AI-generated content or commercialisation also remained insufficient. Moreover, the existing interdisciplinary research is limited. The integration of AI with cultural studies and heritage management may serve as a bridge towards a holistic understanding of AI-driven cultural preservation. However, accessing AI technologies by rural and underrepresented indigenous communities remains a major challenge, as illustrated in many studies. The literature on AI offers case studies and applications of technologies, but fails to suggest a participatory platform for community participation for long-term preservation. Questions related to representation with reliability and preservation with accuracy of traditional culture through the AI system also remain a major challenge. This paper attempts to explore the role of AI in preserving traditional culture by critically discussing secondary research in the relevant field.

4. Research Methodology

This study applies a 'qualitative research' methodology based on secondary sources. It explores existing data, case studies, relevant published literature, policy documents, archives, and digital resources on Artificial Intelligence (AI) related to the preservation of traditional culture.

To understand the applications of AI in cultural preservation, their opportunities, challenges, and effectiveness, the study has adopted both an exploratory and analytical approach.

4.1. AI and Socio-Cultural Tradition

At this moment, the rise of artificial intelligence has profound implications for the preservation of traditional cultures in the world in contemporary times. As the term implies, Artificial Intelligence is present everywhere in our lives, literally, from the cultural to the day-to-day. Since the advent of AI technologies, the way AI and cultural preservation are linked together is a topic of huge interest.

In the rapidly evolving 21st century, artificial intelligence has permeated the corners of man's life, choosing to enhance every aspect of human culture (Nanetti, 2021). It has been from ancient days that societies have relied on their heritage to propagate their resilience, and the need to articulate and preserve cultural identities (Nanetti, 2021). Future experts will be able to decode knowledge, encode data, aggregate information, and simulate the effect of preserving or neglecting human experiences with AI technologies (Nanetti, 2021).

AI and traditional culture converge to serve both an unprecedented opportunity and challenging situations that need to be studied carefully (Nanetti, 2021). In today's globalized environment, to be successful, it is imperative that one has a multilingual and transcultural mindset (Nanetti, 2021). As always, AI brings new possibilities and inspiration, but to be put into practice, it brings the requirements of human expertise and the knowledge of the full principles and traditions of the respective cultural context (Sukkar et al., 2024). But yet, it should not be overlooked that it also involves human element, craftsmanship, and cultural sensitivity. However, as more technologies are powered by AI, there have been a series of debates also on insecurities and fears that technology would take over jobs, escalating autonomous weapons, and that AI even poses a threat to humanity's ability to control technological progress (Stein et al., 2024). The exposure of highly advanced AI models that can create text and images has sparked fear that the integrity of artistic and academic work is being trampled on, and, deeper, what holds the value of creative human hearts(Stein et al., 2024).

4.2. Strategies for Preserving Traditional Culture through AI-Driven Technology

Due to the ever-increasing integration of AI into different aspects of society, developing strategies that prioritize the safeguard of a culture that is traditional culture is essential.

The successful adoption of AI requires integrating it from a human-centric perspective by working with the cultural context in which AI will be implemented (Shabbir & Anwer, 2018) (Vinuesa et al., 2020). It includes participating actively with communities, the cultural experts, and the artists to ensure that the AI tools are created and used respecting and preserving the peculiarities and traditions of various cultures (Shabbir & Anwer, 2018).

It is also important to emphasise cultural diversity. Encouraging the development of AI systems that are in line with, or at least reflect, a variety of cultural points of view can prevent the homogenization of cultural expression. It, of course, includes making AI tools in multiple languages and versatility within culturally dependent contexts.

The power in the hands of AI for cultural preservation also needs to be used with due planning and performance. Here are several key strategies:

4.3. Digitization and Archiving

- AI-powered Scanning and Transcription: Digitalization of cultural artefacts, documents, and audio-visual recordings using AI tools (Duguleană et al., 2020). In addition to preserving fragile materials, this also makes the materials available for use in research and education. It also affords powered Optical Character Recognition (OCR) to translate handwritten or printed documents into searchable digital text and speech-to-text to transcribe oral histories, songs, and stories.
- Metadata Tagging and Categorization: This can be used to automate the tagging and categorization of digitized materials, which will lower the barrier to searching, analysing, and retrieving specific information (2020) with AI. This is particularly important with a large set of cultural heritage data.

- 3D Modelling and Virtualization: Culture's cultural artefacts, buildings, and topographic landscapes can be modelled by AI (Nanetti, 2021). This is based on creating virtual experiences so that users are able to experience and engage in cultural heritage.

4.4. Language Preservation

- AI-powered Language Learning Tools: The Rise of AI in language learning apps and platforms that employ gamification, each individual's personal learning path, and speech recognition for a gaming yet effective language acquisition. (2020).
- AI-assisted Translation and Interpretation: Usage of AI native translation and interpretation technologies to support cross-cultural comprehension and dialogue, to permit the saving and spreading of endangered languages and cultural data.
- Machine Translation: By using AI-designed translation and Interpretation to transfer the understanding of culture and language, it fills the gap of language and culture, thus helping language reinvigoration and revive imposed and extinct languages (Anderson, 2021). This also lends itself to archiving and analysis of previously existing text files.
- Speech Synthesis: AI models that can synthesize endangered languages' speech so that learners can hear the speech in the language they are learning, and improve pronunciation skills (2020).

4.5. Cultural Analysis and Understanding

- Pattern Recognition and Analysis: Found applications of AI to analyse huge datasets of cultural information, such as texts, pictures, and audio recordings, and recognize patterns, themes, and relationships within cultural practices, beliefs, and historical trends (Duguleană et al., 2020).
- Social Network Analysis: Using AI to analyze cultural communities' social networks to learn how traditions spread, how cultural knowledge is brought to other social dynamics, and how it promotes cultural change.
- Predictive Modelling: Use of AI for the development of predictive models, such as those to predict the consequences of cultural or environmental changes on existing traditions, for the purposes of proactive cultural preservation strategies.
- Sentiment Analysis: Use AI to digest textual data (example: social media posts, online forums) to understand how the public perceives and feeds into cultural heritages for the preservation process.

4.6. Community Engagement and Empowerment

- Co-creation and Collaboration: Inclusion of the local community involved in the development and carrying out of AI-powered cultural traditions preservation projects (Sieck & Zaman, 2017). to ensure that the technology is in line with its values and needs.
- Capacity Building: Equip community members with the necessary skills to use AI tools and also grant them the ability to engage in the effort of cultural preservation. In doing this, it brings a feeling of agency and sustainability. This means, for example, equip members with AI-powered tools to archive songs, stories, and their local intangible cultural heritage.
- Knowledge Sharing Platforms: To create an online platform with communities to share and exchange their cultural knowledge, experiences, and traditions (Gondola, 2024). It keeps the cultural identity and also, in a certain sense, encourages intergenerational learning.

4.7. Ethical Considerations

- Cultural Sensitivity: Develop AI systems that are not biased, do not perpetuate stereotypes, or misrepresent cultural practices so that the system is culturally sensitive in execution (Chung, 2021).
- Intellectual Property Rights: Specify a concrete necessity to create clear guidelines and protocols for the protection of the Intellectual Property (IP) rights of their indigenous communities, and cultural creators (Nanetti, 2021). The following is especially relevant to the use of AI in generating new cultural outputs.
- Data Privacy and Security: Install robust data privacy and security procedures to shield the personal cultural information from accidental exposures or illegal use.

Thus, if we can strategically use the AI-enabled approaches, cultural handicrafts that are the embodiment of the cultural heritage should be preserved and passed to the next generation, and improve our capability by a lot. However, we should always remember that technology indeed is a tool, and it can be beneficial to us only when we use it humanely and correctly to take us to where we need to be.

5. The Impact of Artificial Intelligence on Traditional Culture.

There are both positive and negative implications of the relationship between AI and traditional culture. With the development of AI technologies and their integration into multiple cultural domains, they have the capability of being strong vehicles for the preservation, analysis, and diffusion of cultural heritage.

AI-powered algorithms help to digitize the cultural artefacts and catalogue them so as to make the process of managing and retrieving them more efficient. In addition, AI can be used to simulate the impacts of cultural preservation and neglect, so that decision makers can make wiser decisions on tradition preservation (Trach, 2021).

However, AI brings its own set of challenges to how the traditional culture functions. However, as more and more of what we do is driven, controlled, and attempted to be "pushed" by AI-based technologies, the fear of the cultural expression being homogenized, as people fear standardization of AI-based content, both with and without remainder, will take the place of local traditions that have their own uniqueness and details. Moreover, the dissemination of cultural information through the use of AI-driven platforms presents questions regarding the authenticity of such information, which is being

disseminated, and the contextual integrity of such information (Stein et al., 2024).

By artificial intelligence, the creative arts - art and design - have the potential for revolutionizing. There are tools that can utilize AI power, utilizing the artists and designers' ability to play around with new formats of expression, rely on feedback while they work on their works in progress, or even generate outputs in new formats anew. However, the appearance of AI-generated art has reignited the controversy over what the value of human creativity is, the ethics of attribution for artistic works, as well as its implications on the face of artistic practice (Newton & Dhole, 2023).

The relations between Artificial Intelligence and old culture are many-sided/faceted and also positive and negative. Integrating AI into the cultural domain has a broader impact on what it means for preservation, experience, and dissemination of cultural heritage.

5.1. Positive Impacts

- Preservation and Archiving: AI can sharply contribute to the field of preservation and archiving of the cultural heritage. This might include already available AI-powered tools, making the process of digitization and classification of artefacts, documents, and other cultural material easier. (2024). This allows researchers and the public at large to access the data, making it more accessible. It is particularly important in this case where the items are fragile or in a remote location.
- Restoration and Reconstruction: Damaged artefacts of almost any substance can be analyzed by AI algorithms and helped in the process of restoration. More extreme are applications in which AI can even be employed to reconstruct lost or incomplete cultural objects to show insights into past civilizations.
- Language Preservation: This can help preserve and revitalize endangered languages by creating language learning tools, translating texts, generating speech in the language, and a range of other activities. Such help can protect the linguistic heritage and prevent the cultural loss of communities.
- Cultural Analysis and Understanding: Through combing a large data store of cultural information, AI can find and bring forth hidden patterns and relationships over which a human researcher might pass unnoticed. This makes it possible to get new discoveries and a deeper understanding of cultural practices, beliefs, and historical trends.
- Accessibility and Education: AI platforms can support this cultural information to be available to more people. (2024). Interactive exhibits and personal learning experiences are available with respect to different cultures, and these can improve interest and understanding.

5.2. Negative Impacts

- Homogenization of Culture: However, there is a worry that mass-producing AI-generated content is too standardized to serve at risk of homogenization of cultural expression (Newton & Dhole, 2023). Outputs of such generic AI may hide or even overshadow local traditions.
- Authenticity and Contextual Integrity: Using AI-driven platforms for cultural information relies on the authenticity of the cultural information provided, the accuracy of that information, and the cultural context of that information (Vinuesa et al., 2020). An even greater limitation of AI is the possibility that it may not interpret and present cultural knowledge as well, even as collectively someone could be shallow or sensitive as a person.
- Loss of Traditional Skills and Craftsmanship: By automating traditional practices with AI, we are often missing the work of most of the traditional skills, and most of all, the craftsmanship itself. (2024). Such information, which is passed through generations by human artisans, may be lost when it is replaced by machines.
- Commercialization and Commodification: AI can enhance the commercialization and commodification of culture within the cultural context (Stein et al., 2024). Such a practice might be profitable at the expense of traditional practices and symbols.
- Ethical Considerations: Nevertheless, with the increasing use of AI in cultural life, many ethical challenges start to arise (Ge et al., 2024). One of the questions surrounding ownership, intellectual property rights, and how AI should be used in the cultural context.
- Human-Centered Approach: Cultural implementation and development of AI should rely on a human-centered approach (Sun, 2025). This includes making AI tools a responsibility and honour of use by involving communities, cultural experts, and artists in the development and implementation process.
- Emphasis on Cultural Diversity: It is imperative that we emphasize the perspective that it is important to enhance cultural diversity and develop AI systems that are culturally diverse and respectful of a variety of cultural perspectives. Ethically, it counts as engaging in the creation of AI tools in many languages and adapting them to different cultures.
- Balancing Technological Advancement and Cultural Preservation: The key problem is to strike the appropriate balance between promoting technology and protecting the culture. (2024). To develop AI, the potential impacts of AI on traditional cultures must be carefully considered, and ways for mitigating the negative impact must be devised.
- Education and Awareness: The public also needs to be educated about the possible benefits and risks of AI in cultural contexts. This can foster digital literacy and critical thinking in promoting a digital environment that can help people navigate the AI-changing cultural environment.

There is a need for dialogue, a need for a critical analysis of the relationship between AI and the traditional culture that is evolving. We can overcome these challenges

if we can steal any advantage from these opportunities and ensure AI is a vehicle of cultural preservation, learning, and enrichment, not a tool for homogenisation or erosion.

6. Conclusion

Amidst the intertwining of Artificial Intelligence and the preservation of cultural heritage as a transformative opportunity, artificial intelligence as a phenomenon to protect and maintain human history and traditions presents new intricate ethical and practical problems that warrant careful treatment and discussions. By combining AI with digitization and analysis, distribution and distribution of cultural knowledge, it is empowered to assist in preserving cultural knowledge better, to have wider access to the resources of the culture, and to deepen the insights into the practices and thoughts of the culture (Nanetti, 2021). While unpresented cultural knowledge and wisdom can be decoded through AI algorithms, it does not currently include international content in the census and the ability to aggregate real-time information in the user's key interests to develop intelligence further (Nanetti, 2021). While in use for cultural heritage conservation, AI does actually have its troubles, as well, from artificial restoration to perpetuation of bias and destruction of cultural sensitivities (Ghaith, 2024). Thus, we should proceed with this integration with a sensitive approach where we should not only leverage the capabilities of AI but also look for potential perils. The application of AI to cultural heritage needs to be subject to the highest level of ethical considerations (Ghaith, 2024). Therefore, the need for building the auspicious interplay of technology and heritage preservation's intricate interplay necessitates the establishment of the disciplinary governance frameworks and ethical guidelines for the same (Ghaith, 2024). Solving these problems and embracing a human-centered design will unlock the power of AI to save and cherish the representation of the world's culture for future generations (Ghaith, 2024). Additionally, AI system development should focus on cultural sensitivity, without propagating biases, stereotypes, misconstruing the subject of the cultural ties, and establishing clear rules and protocols for protecting the intellectual property rights of the indigenous community and cultural creation.

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