

Artificial Intelligence and Its Influences on Human Cultural Distortion

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Article Info

Article history:

Received 28 October 2025

Revised 2 November 2025

Accepted 7 November 2025

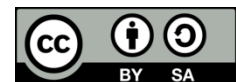
Keywords:

Artificial Intelligence,
Cultural Distortion

ABSTRACT

This research examines how artificial intelligence (AI) can influence and distort human culture. AI is viewed as a technology that enables machines or computer systems to mimic human intellectual abilities. The method used is a qualitative method with a descriptive analytical approach. The data sources are obtained from observations of phenomena and literature reviews. The results of the study indicate that the presence of AI, which has greatly facilitated human life, has an impact on aspects of human culture. This problem occurs when the identity, values, and traditions of a society are changed or weakened by strong external influences. Forms of cultural distortion caused by AI can be observed in phenomena such as information distortion and cultural changes in social media, dependence on AI in cultural thinking, the potential risk of cultural misinterpretation, and the influence of AI on the phenomenon of cultural inequality. However, cultural distortion can be prevented with several important steps such as instilling cultural values from an early age, introducing the history and philosophy of the nation's culture, and increasing cultural literacy.

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1. Introduction

Culture plays a vital role in human life, as it serves as the foundation that connects individuals to their identity, values, and historical heritage. Through culture, each person can understand who they are, where they come from, and how to interact with their environment. (Syahrie, 2008) Culture is not simply a collection of traditions or old customs that are followed, but a living system of values that continues to develop and adapt to changing times. In everyday life, culture functions as a social binding factor that unites various groups in society, strengthens a sense of solidarity, and facilitates communication between generations. Culture forms a bridge that transmits the wisdom and values of ancestors to the younger generation, so that a shared identity is maintained and not lost in the currents of globalization (Koentjaraningrat, 1993).

Furthermore, culture plays a significant role in character formation and education. Through culture, norms, ethics, and morals can be applied as guidelines for life, enabling humans to live together in harmony and ethics (Koentjaraningrat, 2000). Culture also influences human ability to adapt and innovate, as each culture allows room for creative change while maintaining its original values. Entering the current era known as Society 5.0, culture is forced to face the massive flow of progress. Humanity's desire to create a more efficient and faster life has resulted in the development of cutting-edge technology. Amazingly, humans have created technological advancements that are beginning to replace human tasks in various aspects of life (Aprianti et al., 2022). This technology is known as Artificial Intelligence (AI).

The advent of AI is bringing about major changes in the cultural landscape of humanity. While its emergence offers many conveniences and opportunities, it also raises concerns about disrupting human culture, values, and identity. AI has now transformed into a solution to various contemporary human problems. AI is a technology that enables machines or computer systems to mimic human intellectual abilities (Masrichah, 2023). AI works by using algorithms and data to simulate human thinking to automatically complete complex tasks. In simple terms, AI is the ability of machines to think, learn, and act like humans (Pakpahan, 2021). With this technology, computers can perform tasks such as speech recognition, natural language processing, data analysis, and predictions based on the information obtained.

AI can also improve itself by correcting errors through a continuous learning process. AI was created to assist and even replace tasks that typically require human intelligence, such as learning from experience, recognizing patterns, making decisions, understanding language, and solving problems (Fukuyama, 2018). In today's digital age, AI offers advanced solutions that support various human activities efficiently and effectively. For example, when we search for information on the internet through search engines like Google, AI is used to provide the best search results based on our needs. AI is also present in social media, where it tailors the content we see based on our preferences and interactions, making our social media experience more personalized and relevant.

One thing we need to realize is that AI is starting to pose a serious threat to culture. This technology is beginning to influence and distort several sectors of human culture. Its influence can be seen in how AI is revolutionizing the way we learn, work, communicate, and organize our daily lives by offering convenience, speed, and personalization unattainable with conventional technology. One negative impact of this phenomenon is that AI is enabling the spread of false information, hoaxes, and propaganda through deepfakes and social media controlled by AI algorithms, making it difficult to distinguish between fact and fiction. This can negatively alter cultural perceptions and social values.

Based on the aforementioned issues, this study examines the influence and impact of AI on the sustainability of human culture. This study is intriguing due to the massive influence of AI, which has gradually distorted culture. Furthermore, this study aims to provide arguments

and insights on how we should act to ensure the preservation of culture in an era of AI's significant influence.

2. Research Methods

This study uses a qualitative research method with a descriptive approach in analysis. Moleong defines qualitative research methods as research that aims to understand phenomena experienced by research subjects, such as actors, perceptions, motivations, actions, and other aspects comprehensively and descriptively in the form of written words (Moleong, 2005). In qualitative research, Mulyana defines qualitative research as research that uses scientific methods to uncover a phenomenon by describing data and facts using words comprehensively regarding the research object (Mulyana, 2010). The data collection technique is through literature studies by searching for relevant sources, in the form of books, journals, archives, and news in online media and newspapers so that theoretical data can be obtained (Miles, MB, 2009). After all the data has been collected, the next process is to carry out the data analysis stages using data reduction, data presentation, and drawing conclusions (Manan, 2021). The final step in this method is writing with provisions so that it can produce a scientific paper on Artificial Intelligence (AI) and its influence on the distortion of human culture.

3. Result and Discussion

History of the Development of AI

Artificial intelligence (AI) began with the dream and idea of creating machines that could think and act like humans. In the 1940s and 1950s, the foundations of AI began to take shape with the discovery of the basic concept of artificial neural networks by Warren McCulloch and Walter Pitts in 1943, which mimicked the workings of the human brain (Rifki, 2024). Then, in 1950, Alan Turing introduced the concept of machines that could be considered intelligent in his famous work "Computing Machinery and Intelligence", and introduced the Turing Test as a measure of machine intelligence.

A significant turning point occurred in 1956 when John McCarthy and several other scientists held a conference at Dartmouth College and formally introduced the term "Artificial Intelligence." This marked the beginning of AI as a distinct field of study. AI initially focused on problems that could be solved using formal logic and mathematics. Later, a new approach called machine learning emerged, using data to train computers to make predictions and decisions.

From 1950 to 1970, AI research focused on the development of symbolic logic and knowledge representation, with programming languages such as LISP as the primary tools. This period also saw the emergence of the first programs demonstrating AI's ability to communicate with humans, such as the Chatbot ELIZA in 1966 and the mobile robot SHAKEY in 1972. By the late 1970s, AI progress was severely hampered by technological limitations and funding shortages, a period known as the "AI Winter."

In the 1980s and 1990s, AI experienced a new resurgence with the emergence of expert systems programs that used knowledge bases to support decision-making in a variety of fields. Neural networks also experienced rapid development with new learning algorithms, such as the back propagation method. A significant milestone was reached in 1997, when IBM's Deep Blue computer defeated world chess champion Garry Kasparov, demonstrating AI's ability to solve complex strategic problems.

In the 21st century, the development of artificial intelligence (AI) has accelerated rapidly thanks to the advancement of the internet, the availability of big data, and the dramatic increase in computing power. Machine learning and deep learning techniques, which utilize layered artificial neural networks, give AI enormous potential for recognizing images, understanding human language, and controlling autonomous vehicles. AI has now become an integral part of everyday life and industries, from digital services, healthcare, and finance to the automotive sector.

The development of AI in responding to the complexity of human needs has made AI a complex phenomenon (Coal, 2024). Therefore, it is quite difficult to define and describe AI precisely. However, considering how it works and its function in society, Artificial Intelligence (AI) can be defined as a computing system designed with qualities that can rival and replace human intelligence (Bey, 2023). Computers are designed to be intelligent so that they can perform tasks like and as well as humans, by imitating some functions of the human brain, such as language comprehension, knowledge, thinking, logic, problem solving, and even decision making.

AI has now reached a near-perfect level. In some applications, AI is capable of communicating imaginatively and emotionally (Riza et al., 2023). The advent of virtual assistant technologies like Siri, Google Assistant, and Alexa has made everyday tasks easier, from scheduling appointments and sending messages to quickly answering questions, all using voice commands. AI is also beginning to be applied in the transportation sector, with autonomous vehicles capable of driving independently, providing comfort and safety during travel.

In the world of business and online shopping, artificial intelligence (AI) analyzes consumer behavior to provide product recommendations tailored to their interests and needs, enhancing shopping experience. Even in healthcare, AI helps monitor physical conditions through wearable devices like smart watches and supports doctors in making diagnoses with greater accuracy.

Cultural Homogenization Due to the Influence of AI

Artificial Intelligence (AI) has become one of the most revolutionary technological innovations of the modern era. Its emergence has brought profound changes to various aspects of human life, including how we interact, learn, and understand the world around us (Anah, 2024). However, despite its significant benefits, AI also poses serious challenges related to cultural homogenization. AI, with its ability to process large-scale data and automatically generate content, plays a role in the rapid creation and dissemination of

information. This can lead to cultural homogenization, where unique local cultures are gradually replaced by a uniform global culture.

According to Saidi, the homogenization process began at the beginning of Indonesia's liberalization era under President Suharto. Since liberalization, foreign cultures have entered Indonesia, along with other influences. Wilhelm, on the other hand, argues that cultural destruction began with the development of information technology such as satellites and the internet. Since then, information consumption has become almost limitless (Safril, 2015). All social groups in Indonesia have unlimited access to any information and tend to absorb it without considering its positive and negative impacts on their cultural identity.

Cultural homogenization is the process by which local cultural differences gradually disappear and cultures across regions become increasingly uniform or homogeneous. This phenomenon generally occurs as a result of the influence of globalization, where the widespread exchange of information, ideas, products, and values causes the dominant culture to spread and change local cultures (Aprinta, 2023). Cultural homogenization is often associated with the loss of cultural diversity, where unique cultural norms, values, and practices are standardized in the global space. This process can be seen as a result of the penetration of dominant foreign cultures, such as Western or capitalist cultures, which replace or absorb local cultures.

The phenomenon of cultural homogenization is also considered a form of cultural colonialism, where Western or capitalist culture dominates and displaces local cultures. However, not all societies passively accept this process, as they retain the freedom to choose and maintain their own culture. Some communities are even able to combine global products with local culture to maintain their identity. However, the impact of this cultural homogenization remains a challenge for preserving cultural diversity worldwide.

In today's increasingly digitalized world, cultural homogenization is a real phenomenon experienced by many societies worldwide. Information and communication technology, particularly social media like TikTok, Instagram, and YouTube, facilitates the rapid and widespread spread of global culture, often displacing local cultures and losing their presence. A concrete example of cultural homogenization in this modern era is the influence of Western and Korean popular culture, which dominates lifestyles, music, and even culinary trends in many countries. In Indonesia, for example, Western pop music and K-Pop, which go viral on social media, are very popular among the younger generation, while regional songs and traditional music are increasingly marginalized. The same applies to traditional cuisine, whose popularity is increasingly being replaced by Western fast food or Japanese and Korean dishes such as Sushi, Kimchi, Ramen, and so on (Larasati, 2018).

The Significant Impact of AI on Cultural Distortion

The presence of AI also impacts aspects of cultural distortion, a problem that occurs when a society's identity, values, and traditions are altered or weakened by strong external influences. The term "distortion" originally came from the electronics world, describing forms of interference such as unclear radio sound or a pixelated television picture. Today, the term "distortion" is commonly used in various fields, including culture (Hadi, 2013).

In a cultural context, distortion refers to changes in cultural form due to unwanted external influences, the distortion of original cultural facts, and the blurring of cultural values and rules that can damage the cultural value system. Cultural distortion can occur due to improper intercultural interactions, planned efforts to slow down cultural development, or even the extinction of certain cultures (Marsha, 2023).

This distortion leads to the loss of values and traditions held by a society, the loss of cultural identity, and the failure of the cultural system to maintain its viability. This phenomenon can also lead to the emergence of the concept of "instant culture," where cultural elements are quickly adopted without in-depth understanding. This can lead to cultural appropriation, the appropriation of a group's cultural elements without proper respect or understanding. Furthermore, cultural distortion is often exacerbated by the dominance of a more economically and politically powerful global culture, which pushes local cultures to the margins.

Cultural distortion can be viewed as a threat; this phenomenon can be observed by examining the following issues. In principle, culture continues to develop and improve thanks to the communities that support it. This aligns with the essence and meaning of the word "culture" itself. This development can be very slow or very rapid, but no culture is stagnant (Rosana, 2017). Culture is always moving forward, and its rate of development depends on the extent to which it interacts with other diverse and widespread cultures. Distortion occurs when cultural interactions do not proceed as intended, when attempts are made to slow down the pace of cultural development, or when deliberate attempts are made to suppress or negate other cultures.

Culture is not something ready-made and simply acquired. It is a process of improving the social life of the society that supports it. Because culture is acquired through education and is not something that can be acquired instantly, its development requires a clear direction. If cultural education is interrupted or not prioritized in the development of national character, it will result in distortion. (Hadi, 2013).

Increasing cultural development; efforts to bring one nation's culture closer to and harmonize it with the culture of another nation are also necessary in the dynamics of cultural development. The meeting and fusion of cultures can provide material for concrete research that requires careful examination and observation, relying on the local wisdom of each ethnic group or tribe (Hadi, 2013). Distortion in this case is clearly visible in attempts to create exclusive cultural spaces or, conversely, allow accepted values to be exposed to various external influences that can disrupt the cultural system. Simplifying the meaning of culture into mere artistic terms is one form of distortion that requires careful examination.

Cultural distortion can also result from the process of exploitation and commercialization, which are serious phenomena that threaten the sustainability and integrity of the cultural values of indigenous communities. Cultural exploitation occurs when elements of traditional culture, such as art, rituals, traditional clothing, and religious symbols, are used without permission and without respect for the original cultural owners, often solely for economic gain. Cultural commercialization exploits the noble values of culture as a commodity to be

sold widely, but this process often views culture as a product to be sold, ignoring its social context, history, and spiritual meaning (Susanti, 2019).

In many cases, sacred or secret forms of traditional cultural expression are revealed to the public without the consent of the community, and the profits from this commercialization of culture are not distributed fairly among the communities that possess those cultures. For example, woven or batik motifs, which are the cultural heritage of certain ethnic groups, are transformed into mass fashion products without any recognition or compensation to the communities that originally created them (YA Sari & Virgy, 2024). Moreover, in the era of social media, indigenous cultures have also become objects of commercialization, often displaying pieces of content that deviate from their original meaning, which causes distortion of cultural information that is detrimental to society.

Cultural distortion caused by exploitation and commercialization not only undermines cultural meaning and value, but can also lead to social and economic inequality. Therefore, it is crucial to protect traditional forms of cultural expression through strict regulations, respect for intellectual property rights in the cultural sector, and empowerment of cultural communities so they can obtain equitable economic benefits (Andreas, 2023). In this way, culture can be protected from harmful distortion and remain sustainable as a meaningful identity for future generations.

Based on observations of current phenomena and a review of several media sources, several significant impacts of AI on cultural distortion have been identified. This paper will focus on the issue of cultural distortion in Indonesia, as it presents its own complexities.

a. Information Distortion and Cultural Change in Social Media

In today's digital age, social media has become a primary platform for people to communicate and obtain information. However, this development has also brought negative impacts in the form of significant information distortion. AI plays a crucial role in the rapid and mass processing and dissemination of information. However, it also leads to information distortion, which impacts social and ethical behavior. Information generated or disseminated using AI is sometimes inaccurate or manipulative, influencing communication patterns, changing communication and social culture, and potentially exacerbating political and cultural tensions (Sarkawi, 2016). This distortion can also alter common cultural values through the spread of fake news, hoaxes, or manipulated content, such as fake lip-syncing, which distorts social perception and the veracity of communication.

Cultural change is also inevitable due to this information distortion. Communication patterns in society have shifted, becoming more emotional, instantaneous, and sometimes aggressive. Blaming, hateful comments, and polarization have become commonplace in the digital space. Cultural values of communication that emphasize tolerance and dialogue are beginning to crumble (Subiyantoro, 2024). Social media has given rise to a new culture where the priority is the speed of dissemination of opinions without verification of facts, which can undermine critical thinking and healthy communication channels.

Social media, as an interactive digital space, has revolutionized the way people communicate and express themselves, including in a cultural context. However, the ease of access and freedom of expression on platforms like TikTok, Instagram, and WhatsApp also carry a significant risk of cultural distortion. This distortion occurs when authentic cultural elements, such as traditional clothing, dances, music, and symbols, are carelessly altered without considering their original context or meaning. As a result, cultural values, inherently rich in meaning and history, are reduced to simple trends or instant lifestyles that lose their authenticity.

One clear example of this phenomenon can be seen in the trend of modifying traditional kebaya clothing on TikTok, combining it with international styles like Korean crop tops. While this transformation has certainly caught the attention of the younger generation, it has also obscured the kebaya's essence as a symbol of cultural identity and local wisdom (Siregar et al., 2024). In addition, cultural distortion on social media often results in priority being given to content that contains vulgar elements or is inconsistent with local cultural norms, which can erode respect for traditions and social norms in the community (Tasya et al., 2023). Furthermore, cultural information distortion is also evident in the dissemination of news, stories, or rumors spread without adequate verification, particularly on instant messaging apps like WhatsApp. Exaggerated or abbreviated information can lead to cultural misunderstandings and exacerbate conflict between different cultural groups.

The impact of this distortion of cultural information is profound, including a decline in the younger generation's awareness and understanding of their indigenous cultural heritage and a weakening of national identity. Cultural homogenization caused by the dominance of more attractive global trends also contributes to the erosion of traditional values. Therefore, a collective effort is needed from the government, cultural communities, and social media users to improve digital literacy and cultural awareness. With the right approach, social media can be an effective tool for preserving and promoting local culture in the era of globalization.

b. Reliance on AI in Thinking Culture

Reliance on AI isn't just about the technology itself, but also how it is gradually changing the way humans think, learn, and make decisions. The culture of thinking that developed through reflection, critical analysis, and traditional problem-solving is now being replaced by the ease of predictions and automated recommendations provided by AI. When information is accessible with a single click and AI messages are readily accessible, critical thinking skills and the ability to analyze information deeply are at risk of erosion.

Numerous studies have shown that technology, including AI, can influence individual thought patterns and behavior. For example, excessive technology use has been linked to decreased concentration, critical thinking, and creativity (Johnson & G, 2019). Furthermore, this dependence creates the risk of intellectual passivity. People who rely too heavily on AI for decision-making may lose the ability to analyze context, understand the nuances of problems, and construct arguments independently. Those accustomed to instant answers may

be less resilient to the complexities and uncertainties inherent in real-world situations outside the digital realm (Lukman & Agustina, 2023).

A healthy culture of thinking should encourage dialogue, diverse perspectives, and the courage to question simple answers. However, AI operating on historical data can sometimes reinforce biases and create an "echo chamber" effect, a condition in which a person is only exposed to information or ideas that align with his or her own beliefs and opinions, while opposing views are filtered out or ignored. The effect The information received becomes increasingly limited and homogenous. This can hinder critical thinking and innovation, which are essential to intellectual culture.

In today's education system, more and more educational institutions and students are using artificial intelligence applications to complete various tasks, including writing essays, translating texts, and solving problems from each subject (Faisal, 2024). For example, thanks to AI applications that can instantly generate text or answer questions, students may lose the opportunity to practice critical thinking, formulate ideas, and logically argue their conclusions.

A real-life example is when many people rely heavily on search engines like Google or artificial intelligence-based virtual assistants (like Siri, GPT chat, Gemini, Alexa, or Google Assistant) to quickly find answers to their everyday questions (Oktafia et al., 2025). For example, when someone faces a complex problem or question, such as choosing a university major, making an investment decision, or even completing an academic assignment, they often immediately seek a "quick answer" with the help of artificial intelligence. AI capable of replacing creative functions such as graphic design, content writing, and even music production presents a dilemma for professional thinking. For example, a graphic designer who relies too heavily on AI to create work, without striving to develop creative ideas independently and experiment, may face stagnation in his or her creative abilities.

However, reliance on AI does not mean that human thought culture must disappear. On the contrary, AI can be a tool that enriches the thought process if used wisely. The task is to develop digital literacy and critical thinking so that humans remain active thinkers, using AI as a helpful partner, broaden their horizons, rather than simply replacing the process of thinking and synthesizing ideas. This aligns with Holmes' research, which shows that AI can serve as a tool to facilitate collaborative learning, provide constructive feedback, and support the development of interpersonal communication skills. In this context, AI serves not only as a learning tool but also as a platform for developing social and teamwork skills, which are essential in the professional world (Holmes et al., 2023).

c. AI and the Risk of Cultural Misinterpretation

The impact of AI on the risk of cultural misunderstanding is a crucial issue in the evolving digital age. AI, thanks to its ability to process data and make decisions automatically, can transform understandings and perceptions of cultures that are highly complex and rich in nuanced contexts. However, AI's limitations in understanding cultural nuances often lead to distortions and misinterpretations, which can impact the preservation and respect of indigenous cultures (Rasyad et al., 2025).

The risk of misinterpreting cultural information is a key issue in the use of intelligent technology in the modern digital era. Despite its sophistication, AI has limitations in understanding the social, cultural, and emotional contexts that are crucial for accurate cultural interpretation. This can lead to misinterpretations, potentially obscuring cultural meanings, leading to misunderstandings, or even triggering social conflict.

One major cause is AI's inability to understand complex cultural values contextually. For example, a symbol or gesture considered positive in one society may be interpreted differently by AI because it has a contrasting meaning in another culture. AI using natural language processing (NLP) algorithms often struggles to understand double intenders, sarcasm, or local cultural idiosyncrasies. For example, a phrase or word in one culture may have a different or even contradictory meaning in another culture (Rochim, 2024). As a result, AI can produce results or answers that are inappropriate or even offensive to certain cultural groups without realizing it.

Another problem arises when AI, using data and algorithms, often fails to deeply understand cultural context. For example, in traditional art, AI can create new works by imitating traditional patterns and styles, but it lacks the philosophical, symbolic, and moral values inherent in them. The decline of Acehnese language culture also indicates cultural distortion, with the use of Acehnese declining, particularly among young people, due to the influence of Indonesian and the perception that Acehnese plays a lesser role in formal settings. This impacts the sustainability of Acehnese culture, which is reflected in everyday language.

Additionally, AI can introduce cultural bias if the data used is limited to a particular perspective or dominated by the majority culture. For example, AI algorithms trained on data from Western countries may struggle to account for local cultural diversity, including minority cultures. This can lead to misunderstandings that reinforce stereotypes or ignore the uniqueness of certain cultures. AI natural language processing technologies often struggle to understand cultural idioms, metaphors, and linguistic nuances, which can lead to misinterpretations in cultural communication and education (Nendissa, 2025).

Cultural misinterpretations by AI not only impact everyday interactions but can also have serious consequences. For example, in international diplomacy, mistranslations or misunderstandings can lead to tensions in relations between countries. Another risk to consider is the lack of transparency in AI decision-making processes. Many AI models, especially those based on deep learning, operate like "black boxes" without explaining the reasoning behind their results or decisions. This opacity makes it difficult for people to assess the accuracy or potential misinterpretation of AI culture, leading to mistrust and unpredictable negative consequences.

Therefore, it's important to understand that AI is not a neutral entity free from bias. To prevent this technology from becoming a harmful tool, cultural experts, anthropologists, and linguists need to be involved in its development. Furthermore, human oversight is still necessary to ensure AI interpretations are culturally appropriate. Thus, AI can be a bridge between cultures, not a source of misunderstanding.

d. The Impact of AI on Cultural Transformation and Inequality

The emergence of AI has become a significant catalyst for global cultural transformation. On the one hand, AI accelerates the process of cultural dissemination and exchange through digital platforms. The traditions, arts, and languages of various communities can be documented, shared, and even studied across national borders without the need for direct interaction. This has encouraged the emergence of new cultural forms that are more flexible, dynamic, and adaptable to technological developments. For example, music, fine art, and literature can now be created with the help of AI, opening up previously unimaginable creative opportunities.

However, this transformation also leads to cultural inequality. Cultural inequality is a situation where there is an imbalance or disharmony in the growth and development of cultural elements within a society. This occurs because some cultural elements experience change or develop at a different rate than other cultural elements, which causes a gap between cultural elements, both between material and immaterial culture, and between local culture and foreign cultural influences (Farkhan & Maryani, 2023). Cultural inequality can lead to social distance within a society and potentially lead to conflict or a cultural identity crisis. This term, often known as "Cultural Lag," was first introduced by William F. Ogburn to describe the imbalance in cultural adaptation to changing times and technology.

AI typically favors dominant cultures that are well-documented in global databases, while local or minority cultures are often overlooked. Algorithms that operate on popularity and data volume cause small traditions or local wisdom to become increasingly marginalized (Cahya, 2024). As a result, cultural representations emerging in the digital space are distorted: rich on the one hand, but lacking in diversity on the other. Furthermore, access to AI is unequal. Countries and communities with high levels of technological resources have more opportunities to develop and disseminate their cultural narratives. Conversely, groups lacking access to technology will find it increasingly difficult to compete and maintain their cultural presence in the digital space. This inequality can strengthen the dominance of some cultures and weaken the position of others, thus widening the gap between the center and the periphery on the global cultural map.

e. Navigating Culture in the Age of AI Development

Navigation is the process of determining position and directing movement from one place to another safely and efficiently. Generally, navigation involves determining one's current position and determining the direction and route to reach a destination. Navigating culture in the era of AI technology development means managing cultural values, traditions, and identities and adapting them to AI technological developments to remain relevant and sustainable. In this era, the use of AI has become an important tool in cultural preservation, for example, to digitally document traditional arts, music, dance, and languages to make them more accessible and more resilient in the face of modernization and globalization (UB, 2024).

As AI continues to permeate various aspects of life, it is therefore crucial to direct the impact of cultural change towards a future that embraces diversity, inclusivity, and ethical

responsibility (RP Sari, 2025). This requires collaborative efforts from technologists, policymakers, cultural practitioners, and the wider public to navigate the complexities and ensure AI serves as a tool for positive social transformation.

In the future, we will often see AI systems fostering more inclusive and culturally dynamic societies, where creativity thrives, diverse perspectives are celebrated, and ethical principles guide technological innovation. By harnessing the transformative power of AI with foresight and intentionality, we can shape a future where technology and culture converge to elevate humanity and enrich the collective experience of people.

Distortion Prevention Efforts and Cultural Preservation Strategies in the AI Era

Cultural distortion can be prevented through several important steps, namely: instilling cultural values from an early age, introducing the nation's history and cultural philosophy, and improving cultural literacy. Furthermore, it is necessary to select and adapt foreign cultures entering the country to prevent damage to the nation's unique cultural identity. The sustainable development and preservation of local culture are also crucial to maintaining cultural stability from negative external influences. Continuous cultural education and prioritizing national character building are crucial for preventing the loss of cultural values passed down from generation to generation. Involvement of all levels of society, increased social security, and the revival of local culture are also important steps in addressing cultural distortion.

The presence of AI doesn't necessarily have a negative impact on the sustainability of cultural heritage. On the other hand, AI also brings new directions in preserving and presenting culture in a more engaging way. AI plays a role in cultural preservation efforts by delivering digital innovations that make the preservation and management of cultural heritage more efficient and sustainable. AI enables the digitization of various forms of cultural heritage, both tangible, such as paintings, artifacts, and ancient manuscripts, and intangible, such as traditions, performing arts, and regional languages. Thanks to image processing and machine learning technologies, AI can analyze, recognize patterns, and reconstruct cultural data with a high level of detail, supporting more accurate research, documentation, and preservation.

AI also supports digital restoration, for example, of historical manuscripts and buildings, as well as the development of simulations and virtual experiences that can raise public awareness about the importance of cultural heritage preservation. AI can detect damage in a timely manner and offer preventative solutions in the field of cultural heritage preservation, helping cultural institutions develop more effective long-term preservation plans. When used ethically, AI can be a powerful tool for preserving local identity and fostering creative innovation without compromising the authenticity of cultural values.

Addressing the issue of cultural distortion requires collaboration between IT experts, AI experts, and cultural experts to create a digital-based cultural ecosystem that aligns with the essence and norms prevailing in each society's culture. Furthermore, it is important to consider the importance of ethics and cultural intelligence in AI development. This is a key prerequisite for ensuring responsible development of this technology and achieving tangible

benefits without harming society. Ethics in AI development requires adherence to the principles of fairness, transparency, accountability, and respect for privacy and human rights. By adhering to ethical norms, AI developers can prevent bias, discrimination, and abuses against specific groups, which often occur due to unrepresentative data or unfair algorithms.

Beyond ethical aspects, cultural intelligence is also crucial because AI must be able to understand and appreciate the cultural diversity that exists within society. Integrating cultural intelligence into AI helps ensure that this technology does not undermine traditional values, but instead supports the preservation and development of local cultures. Cultural intelligence in AI can also increase the technology's relevance and sensitivity to various social and cultural contexts, allowing it to interact with society in a more humane and contextual manner. By combining ethics and cultural intelligence, AI development can be directed toward creating inclusive, equitable, and responsible systems, while supporting the preservation of cultural heritage and human values. This is crucial so that technological advances not only have positive technical impacts but also have broad social and cultural influences, by maintaining harmony and balance between innovation and cultural identity.

4. Conclusion

Artificial intelligence (AI), as an advanced technology, has brought significant changes to various aspects of human life, including culture. However, the emergence of AI also poses serious challenges to the sustainability of indigenous cultures due to cultural distortion. AI accelerates the spread of information without adequate filters, often leading to distortions in cultural information and communication, which can undermine traditional cultural values and existing social norms. Furthermore, AI can blur the boundaries between humans and machines in terms of social awareness and interaction, thereby weakening certain human values and social relationships. The transformation of societal behavior along with the increasingly widespread use of AI can also accelerate cultural disintegration, social inequality, and the loss of solidarity within communities.

The presence of AI in social media, politics, and digital communication is changing the way people understand and view culture, sometimes leading to the distortion of cultural concepts and narratives for the benefit of certain groups or individuals. Therefore, it is important to raise awareness about communication ethics, implement cultural value filtering, and maintain balance in the use of AI so that this technology can be a tool for strengthening culture, not a cause for the loss of national cultural identity. In conclusion, AI opens up opportunities for progress, but also carries the risk of cultural distortion, thus requiring wise management, prioritizing respect for cultural and humanitarian values, so that technological developments do not damage cultural heritage and social identity.

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