Journal of Literature and Art Studies, October 2024, Vol. 14, No. 10, 921-931

doi: 10.17265/2159-5836/2024.10.016



# **AIGC Related Context:**

# A New Communication Culture For Human

# HU Zi-yang

School of Foreign Studies, Zhongnan University of Economics and Law, Wuhan, Hubei 430073, China

The emergence and rapid development of Artificial Intelligence Generated Content (AIGC) technology is revolutionizing human communication and cultural landscapes. This paper explores the impact of AIGC on society, identifying three distinct cultural paradigms: AIGC Blended Culture, AIGC Based Culture, and AIGC Polluted Culture. AIGC Blended Culture represents a synergistic collaboration between AI and human creativity, enhancing content creation efficiency, promoting cross-cultural communication, and enriching human experiences. AIGC Based Culture signifies a shift where AI becomes the core driver of cultural production and dissemination. This leads to innovative cultural industry models, expanded development fields, and improved cultural product quality and diversity. However, AIGC Polluted Culture arises from the misuse of AIGC to produce or disseminate harmful content. The paper proposes countermeasures and recommendations to maximize the benefits of AIGC while mitigating potential risks. This involves fostering collaboration between AI and humans, focusing on talent cultivation, establishing and improving laws and regulations, and developing solutions to detect and mitigate harmful content. Additionally, promoting responsible innovation and ethical AI development is crucial. In conclusion, AIGC represents a transformative force reshaping human communication and culture. While offering immense opportunities for innovation and efficiency, it also presents challenges that require careful consideration and proactive measures to ensure its positive and sustainable impact on society.

Keywords: AIGC, communication culture, human-machine collaboration, cultural evolution

# Introduction

# Concept and Background of AIGC

Artificial Intelligence Generated Content (AIGC), which pertains to content crafted using generative AI algorithms, represents the application of complex algorithmic structures to either augment or assume the human role in the rapid and cost-effective creation of nuanced, customized, and high-quality content that aligns with user inputs or predefined specifications. AIGC encompasses a broad spectrum of synthetic outputs, including textual compositions (e.g., poems), visual art (e.g., artworks), auditory creations (e.g., music), cinematic narratives (e.g., cartoons), augmented training datasets, and interactive three-dimensional experiences (e.g., virtual avatars, digital assets, and immersive environments) (Wang, Pan, Yan, Su, & Luan, 2023). This

HU Zi-yang, postgraduate, studying at the School of Foreign Studies, Zhongnan University of Economics and Law, focusing on foreign linguistics and applied linguistics, as well as language policy and language planning.

paradigm is underpinned by machine learning algorithms, particularly advanced deep learning, which are employed to analyze existing datasets and generate novel content.

With the advancement of technological innovation, AIGC is increasingly being integrated into domains such as journalism, literary composition, artistic design, and gaming development. These technologies not only enhance user satisfaction but also exemplify the progression of artificial intelligence, where machines are seamlessly integrated into the fabric of our existence, achieving a profound understanding of our essence.

Through the tailoring of recommendations, the provision of bespoke support, and the delivery of personalized search results, AI systems hold the promise of creating an authentically immersive and uniquely individualized user experience. This significant advancement in the capabilities of general AI is poised to revolutionize the approach to personalization. It is expected to transform the interactional paradigm between humans and personalization systems (Chen et al., 2024).

In recent years, the emergence of large language models such as ChatGPT, Kimi AI, Cohere, LLaMA, and others has catalyzed the rapid advancement of Artificial Intelligence Generated Content (AIGC) technology. This progress has been marked by increasing market adoption and widespread user engagement. Notably, the introduction of ChatGPT has attracted significant public interest, prompting discussions regarding the capabilities and limitations of artificial intelligence (AI) (Chen et al., 2024). The evolution of AIGC has overcome earlier obstacles in generating content at scale and volume, thereby enabling the creation of automated and intelligent content (Zhou, Liang, Fang, & Zhou, 2024). As a cutting-edge content generation technique, AIGC is progressively reshaping the landscape of digital content production, providing users with a more diverse and immersive virtual experience.

# Impact of AIGC on the Way Human Society Communicates

The emergence and evolution of AIGC have had a profound impact on the communicative landscape of human society. In terms of information acquisition and dissemination, AIGC technology is capable of rapidly generating vast amounts of information content, including news articles and social media posts, thereby significantly enhancing the manner in which information is accessed. This facilitates the swift acquisition of necessary information by individuals; however, it may also lead to issues of information overload and screening challenges. Moreover, within the domain of language exchange and communication, AIGC technolog's ability to comprehend and produce natural language has rendered interactions between machines and humans more naturalistic and fluid.

For instance, intelligent assistants and chatbots can enhance communication experiences by leveraging AIGC technology, thereby offering a more humanized interaction. Within the realms of culture and entertainment, AIGC technology facilitates the creation of music, movies, games, and other content, enriching the diversity of entertainment options available to the public. In the educational and training sectors, AIGC can generate customized educational resources and training materials, catering to the varied needs of learners and thereby enhancing the efficiency and effectiveness of educational and training processes.

Personalization, the craft of tailoring experiences to individual tastes, serves as a critical and dynamic bridge that narrows the gap between humans and machines. In the contemporary, technology-driven world, personalization is pivotal in augmenting user interactions and engagement across a multitude of digital

platforms and services. By aligning with individual preferences, personalization systems enable machines to address the unique requirements of each user, resulting in more efficient and enjoyable interactions (Chen et al., 2024). Furthermore, AIGC technology has the potential to transform social interactions, including those mediated by virtual assistants or social robots.

In conclusion, the emergence and evolution of AIGC technology have not only transformed the paradigms of information acquisition and interpersonal communication but have also catalyzed innovation and transformation across a multitude of societal domains. As AIGC technology continues to progress and find its applications, human society is poised to encounter a spectrum of novel opportunities and significant challenges.

In view of these developments, this paper posits that the AIGC-related context constitutes an emergent communicative culture that is broadly applicable to human conditions both in the present and in the future. Combined with artificial intelligence, this culture exerts a profound influence on the modus operandi of human communication and the dissemination of culture through the autonomous or assisted generation of content. It can be characterized by three distinct cultural paradigms: AIGC blended culture, AIGC based culture, and AIGC polluted culture. In the subsequent section, the author will explore these three cultural modalities, examining their specific manifestations and impacts on societal development. Furthermore, the paper will discuss the appropriate responses and guidance for shaping the trajectory of this nascent culture.

#### **AIGC Related Context**

#### **AIGC-Related Context**

In the dynamic realm of human social and cultural interactions, the emergence of AIGC technologies is poised to become a ubiquitous tool, significantly influencing and shaping a wide array of contexts. As a result, a communicative environment that is inextricably intertwined with AIGC is on the rise. Within this context, AIGC acts as the conduit for the creation, dissemination, and engagement with a diverse range of content types, encompassing textual, visual, auditory, and video formats. Consequently, the interaction between humans and artificial intelligence is poised to become the norm.

# **Characteristics of AIGC-Related Context**

The distinctive feature of AIGC-related context differentiating it from other contexts is its technology-driven nature. The evolution and application of AIGC are inextricably linked to the advancement of AI technologies, including but not limited to deep learning, natural language processing, and computer vision. To illustrate, ChatGPT, a remarkable system with robust functionalities, exemplifies the convergence of diverse technologies such as deep learning, unsupervised learning, instructional fine-tuning, multi-task learning, in-context learning, and reinforcement learning (Wu et al., 2023). These sophisticated technologies enable AIGC to adeptly process and comprehend complex data, thereby generating content of exceptional quality.

The integration of multi-modal has emerged as a critical component within the domain of AIGC. This field focuses on understanding and emulating the relationships and interactions across multi-modal, generally encompassing tasks such as vision language generation, text audio generation, text graph generation, text Code Generation (Chen et al., 2024). The application of advanced technologies has facilitated the expansion of AIGC's scope to encompass a diverse and multi-modal context. This implies that AIGC is capable of handling a spectrum of formats, including but not limited to text, image, audio, and video. Furthermore, it enables the interconversion

and amalgamation of these diverse modalities, catering to the varied communicative requirements of users across different environments.

The multi-modal nature of AIGC has precipitated a transformation in user engagement within the domain of AIGC-related context, moving away from the conventional framework. AIGC requires interaction with users to discern their intentions and generate content that aligns with their needs. This interaction can be achieved through direct means, such as user-input commands, or indirectly, by analyzing user behavior data to refine content generation. Within this diverse and multifaceted communicative landscape, the context surrounding AIGC holds significant social and cultural implications that warrant attention.

Furthermore, the application of AIGC extends beyond merely altering the process of content generation; it also reshapes the methods through which individuals access information and interact. It even profoundly impacts the paradigms of cultural production and consumption. For example, AIGC has the potential to craft news narratives, educational materials, advertisements, and more, which may alter public attitudes and receptiveness towards such content.

#### **AIGC Blended Culture**

#### **AIGC Blended Culture**

The integration of AIGC with cultures has reached a state of profound synergy, delineating a unique cultural paradigm. This paradigm amalgamates the cutting-edge capabilities of AI with the rich cultural traditions and imaginative ingenuity of humanity. Within this cultural milieu, AIGC not only facilitates the enhancement and amplification of human cultural endeavors and expressions but also plays a pivotal role in the creation and dissemination of culture. A collaborative effort between humans and machines in the production and propagation of culture has given rise to a novel cultural symbiosis. This emerging cultural trend not only highlights technological advancements but also signifies the evolution and progress of human cultural endeavors.

# **Characteristics of AIGC Blended Culture**

#### Improving the efficiency of content creation

AIGC has the potential to streamline the creation, modification, and optimization of various content formats, such as textual, visual, auditory, and cinematic. This notably improves the efficiency of content creation and shortens the creation cycle. Consequently, content creators can more effectively respond to the dynamic market demands and user preferences.

# **Promoting cross-cultural communication**

AIGC technology holds the potential to dismantle linguistic and cultural barriers, thereby promoting dialogue and integration among diverse cultural entities. For instance, the utilization of AI-assisted translation tools, such as Google Translate, enables individuals to overcome linguistic challenges effortlessly, enhancing cross-cultural communication and understanding.

# Enriching human life experience

AIGC is transforming the landscape of human experience, providing an abundance of diversity and depth. For instance, in the realms of Virtual Reality (VR) and Augmented Reality (AR), AI is instrumental in creating immersive environments. Within these settings, individuals can explore artificial universes, encountering a rich tapestry of cultures and historical periods. Furthermore, AI's role in crafting literary works, whether poetry or

novels, offers audiences a spectrum of original creative expressions and imaginative capabilities that differ from those of human authors.

#### **Human Communication in AIGC Blended Culture**

#### AI-Assisted translation tools

Just as Google Translate does, it leverages AI, specifically machine-based translation, to facilitate rapid and accurate translation of content across diverse languages. This advancement simplifies cross-lingual communication and promotes dialogue and collaboration among different cultures.

# Application of AIGC in literary works

Over the past few years, AI has begun to contribute to the creation of poetry, novels, and other literary forms. For instance, AI-generated poems can demonstrate unique creative approaches and imaginative capabilities that differ from those of human writers, opening new avenues for literary innovation. AI-generated novels can be refined based on reader feedback and preferences, providing a personalized reading experience.

# Application of AIGC in the game industry

In the game industry, companies are increasingly utilizing AIGC technology, particularly in the field of text-to-image generation, to eliminate the need for outsourcing original artwork and translations. This application of technology has significantly increased productivity and reduced costs, highlighting the extensive impact of generative AI within the gaming sector.

# Application of AIGC in education and learning resources

The integration of AIGC into educational sectors is progressively transforming the conventional educational paradigm. Educators may excessively leverage the capabilities of generative AI, precipitating revolutionary shifts in education, such as increased productivity and the promotion of individualized learning (as observed by Zhang, Yan, & Yuan, 2024). Online educational platforms are poised to harness AIGC to create customized educational resources and curricula from existing databases, thereby providing a personalized educational experience for learners and concurrently facilitating the future evolution of the educational sector.

In essence, the fusion of AIGC and culture represents a dynamic and creative cultural phenomenon, merging artificial intelligence with human culture to deliver a more effective, diverse, and profound cultural encounter for humanity. As AI technology continues to advance and find practical applications, AIGC blended culture is anticipated to undergo further development and transformation, propelling the innovation and progression of human culture. This will lead to the next phase of human social communicative culture, characterized by AICG based Culture.

# **AIGC Based Culture**

#### **AIGC Based Culture**

AICG based culture signifies a novel cultural development that takes AI technology as the core to promote the development of cultural industry. This encompasses the application of AI across various domains, including game design, cinematic and television production, literary composition, artistic creation, and more, infusing fresh energy into the cultural landscape. Within this cultural framework, AIGC not only serves as a support for human creativity but also evolves into a primary conduit and driving force for cultural production and dissemination.

However, this cultural milieu could potentially undermine human creativity, as AIGC might supplant certain roles that require human imaginative and emotional engagement.

It is worth clarifying that AIGC blended culture refers to the use of AI technologies to facilitate cross-cultural communication and understanding. "Blended" implies the fusion of elements of different cultures, with AIGC playing a role in facilitating this fusion. AIGC blended culture emphasizes the role of AI technology in promoting cultural integration and communication. While AICG based culture relies heavily on AI algorithms and big data analysis to generate and distribute content, aiming to improve the quality and diversity of cultural products, and at the same time, innovate the development model of the cultural industry. AICG based culture emphasizes the central role of AI technology in cultural production and innovation.

#### **Characteristics of AIGC Based Culture**

# Innovating cultural industry model

AIGC based culture signifies a paradigm shift in the conventional modes of cultural production. It revolves around the application of artificial intelligence technology as the core element, integrating it into the fabric of cultural creation, production, and dissemination. This integration heralds an era characterized by intelligence, personalization, and bespoke customization within the cultural sector. For instance, the application of AI in game development has the capability to autonomously generate intricate game narratives, characters, and environments, catering to the individual preferences and requirements of players, thereby delivering unparalleled gaming experiences.

# Broadening the field of cultural industry development

AIGC based culture transcends the boundaries of traditional cultural industries and extends its influence into emerging domains such as virtual reality, augmented reality, and AI assistants. The proliferation of these fields has injected an unprecedented level of innovation and developmental prospects into the cultural landscape.

# Improving the quality and diversity of cultural products

The utilization of artificial intelligence in the realm of cultural creation enriches and diversifies the cultural product offerings, enhancing their quality to new heights. For example, the application of AI in film and television production leverages big data analytics to discern audience preferences, thereby enabling the creation of content that aligns more closely with market demands.

# **Human Communication in AIGC Based Culture**

# AI-based game development: Detroit: Become Human

In the game "Detroit: Become Human", AI is employed to power the narrative, character personas, and visual elements. The engagement with these personas within the game's narrative serves as a mechanism for players to advance the storyline. The AI within the game transcends the actions and responses of the characters, incorporating dynamic interaction systems with non-player entities. This feature provides players with a more diverse array of choices and experiences within the gaming environment.

# AI-based film and television creation: Chinese Myth

This year, a new, short-form drama titled *Chinese Myth* was officially launched on the Yangshipin AI channel, garnering public attention. Significantly, this drama is recognized as the first "AI full-process short drama" in China. Utilizing AI technology, *Chinese Myth* offers a reinterpretation of the classic myths and legends

of ancient China, representing a pioneering effort in the integration of state-of-the-art AI image generation technology with China's esteemed traditional cultural heritage.

# AI-based music creation: Amper Music

Amper Music, a software powered by artificial intelligence, utilizes deep learning techniques to synthesize melodies, harmonies, rhythms, and other musical elements. With minimal input from users, the software can generate a complete musical composition, thereby enriching the musical experience for enthusiasts.

AIGC based culture, as a novel cultural phenomenon is driving the transformation and advancement of the cultural sector, due to its unique strengths and innovative modes.

#### **AIGC Polluted Culture**

#### **AIGC Polluted Culture**

In the context of the rapid progression of artificial intelligence, AIGC will gradually become a nascent or even a predominant force within the cultural sector. AIGC exhibits distinctive characteristics, including robust universality, rapid content generation, minimal user proficiency requirements, and affordability. These characteristics have facilitated the swift adoption of AI tools across diverse domains (Wang, Li, Chen, & Li, 2024). Nevertheless, the contamination of culture by AIGC is a matter that necessitates attention.

AICG polluted culture refers to the use of AIGC to produce or disseminate content that is detrimental or misleading. This encompasses scenarios such as the proliferation of fake news, misinformation, biased content, and other forms of content that adversely affect societal well-being. In such cases, AIGC may be misused as a conduit for disseminating false information and harmful content, potentially leading to a cascade of issues and adverse effects.

#### Potential Problems and Harms of AIGC Polluted Culture

# Weakening human creativity

AIGC has unexpectedly precipitated a stir within the traditionally revered domains of creativity and design, prompting many artists and designers to experience apprehension (Lou, 2023). An overreliance on AI for cultural production may potentially erode human creativity over time. As individuals become accustomed to AI's role in creative endeavors, they may lose the capacity for independent thought and original creation, which would represent a significant setback for cultural innovation and advancement.

# Leading to cultural homogenization

AI-based content creation typically relies on extensive data and algorithmic processes, which may lead to cultural outputs that become increasingly homogenous and lacking in diversity and originality. As cultural products conform to uniform patterns and regulations, the threat to cultural diversity becomes more pronounced.

# **Exacerbating social inequality**

The application of AI technology requires substantial data and resources, which may enable individuals or entities with abundant resources to dominate cultural production and consumption, while those with limited resources struggle to participate. This could further exacerbate social disparities and curtail cultural diversity and innovation.

# **Improper Application of AIGC Polluted Culture**

#### Dissemination of false news and misinformation

Large language models are constructed by processing extensive historical human-generated data. Consequently, AIGC may inadvertently perpetuate and even amplify biases present within the training datasets (Fang et al., 2024). AIGC technology possesses the capacity to fabricate news articles that appear authentic, which could lead to the dissemination of false news and misinformation. For instance, certain entities or individuals may exploit AIGC to fabricate reports on political matters, social events, or other critical issues, thereby misleading the public and undermining social confidence.

# Hate speech and discriminatory content in online communities

The application of AIGC may extend to the creation and propagation of hate speech, prejudicial content, and erroneous information within online communities and discussion platforms. Such content is often crafted to attract user attention, generate financial gains, or sway public opinion (Boididou et al., 2018). These actions can exacerbate societal fragmentation, intensify feelings of animosity and discrimination, and adversely impact the reputations and mental well-being of individuals and groups.

# Misuse of deep fake videos and audios

Deepfake videos produced with the assistance of AIGC are utilized to mislead the public, tarnish reputations, or perpetrate cybercrimes. These videos may incorporate falsified images, audio, or video segments and are employed to spread rumors, damage an individual's reputation, or execute cyberattacks. Furthermore, forged audio and video content are disseminated more frequently and reach a wider audience, complicating the prevention of AI-generated fraud and posing a greater threat to public property security (Wang et al., 2024).

#### Creator copyright infringement

In AIGC, models may inadvertently utilize data, including textual, musical, visual, and other forms, that have not been legally authorized by the copyright holders during their training phase. This utilization may result in violations of the original creators' intellectual property rights, particularly when it occurs without proper authorization or under the pretense of fair use. Furthermore, compositions generated by AIGC often involve the amalgamation and adaptation of data sourced from various origins, which can lead to ambiguous attribution of copyright. In such cases, the determination of copyright ownership and the subsequent distribution of royalties become a complex task.

Within this AI-centric digital landscape, there has been a significant increase in the generation of discriminatory and deceptive content by AI, which has caused considerable disruptions both within the digital sphere and across society at large (Li, Zhang, Zhang, Gao, & Fang, 2024). It is imperative for individuals to be aware of the potential harmful effects arising from the misuse of AIGC technology and to proactively implement measures to mitigate such risks. Only through such vigilant actions can the advancement of AIGC technology within the cultural domain be ensured to be constructive and beneficial to societal welfare.

#### **Countermeasures and Recommendations**

Generative AI is now recognized as a pioneering and transformative tool, its influence permeating sectors previously deemed beyond its grasp, such as art, literary composition, and professional journalism (Carlson, 2017). Nevertheless, this automated production strategy presents novel challenges (Liu, Wang, & Yu, 2023).

With the increasing integration of AIGC technology into daily life, it is imperative for individuals to adopt a variety of counterstrategies to maximize its benefits while mitigating its potential drawbacks. Initially, fostering a harmonious integration of AIGC and human culture, and enhancing the synergy between AI and human collaboration, is crucial for harnessing the strengths of both. Furthermore, the development of talent and the enhancement of human innovation and competitiveness within the AIGC domain are pivotal for fostering cultural innovation and ensuring sustainable development. Lastly, the formulation of robust laws and regulations, along with the standardization of the AIGC market, are essential steps in addressing the issue of cultural pollution generated by AIGC. By implementing these comprehensive strategies, society can advance the use of AIGC technology in the cultural sector while safeguarding intellectual property rights and upholding the integrity of the cultural marketplace.

# Optimization Strategies for AIGC Blended and Based Culture

# Strengthen the collaboration between AI and human beings to realize complementary advantages

Machines may indeed simulate the appearance of thought; however, the authentic expression of emotion, profound spiritual insights, and the discernment of finer human virtues remain beyond the reach of contemporary machines. Moreover, there are higher realms of truth, benevolence, aesthetics, morality, and ethical conduct. The indispensable role of humanity is paramount in nurturing these sophisticated dimensions of the human experience (Lou, 2023). It is our duty to foster and promote the symbiosis between human innovators and artificial intelligence, to cultivate and propagate platforms and instruments for human-machine synergy. The computational power and analytical capabilities of AI must be harnessed, synergistically integrating with human ingenuity and emotional intelligence, to co-author culturally rich and profound content. This endeavor will facilitate a more seamless interaction between human creators and AI technology, enabling the maximization of AI's auxiliary functionalities and thereby enhancing the quality of their creative output.

# Focus on talent cultivation to improve human creativity, ethical awareness and competitiveness in the field of AIGC

It is imperative to strengthen educational and training programs designed to improve individuals' expertise and comprehension in the field of AIGC. This encompasses the development of competencies in data management, algorithmic understanding, and the cultivation of creativity. Moreover, it is essential to reinforce the ethics of science and technology, as well as professional ethics, among developers of artificial intelligence. Establishing a framework for technological ethics and fostering network security awareness among AI professionals is also crucial (Wang et al., 2024). Furthermore, the promotion of interdisciplinary education and research is encouraged to cultivate holistic talents with a blend of technical, artistic, and business acumen, thereby addressing the diverse needs of AIGC cultural advancement.

# Establish and improve laws and regulations to regulate the AIGC market order

It is crucial to revise and enhance existing intellectual property legislation in consonance with the evolution and application of AIGC, while clearly defining the principles of copyright ownership and authorization for AIGC creations. Furthermore, the establishment of relevant industry standards and ethical guidelines is essential for governing the use of AIGC technology and content generation, thereby preventing misuse and malpractice. Subsequently, robust supervisory and enforcement mechanisms must be strengthened to combat copyright

infringement and other illegal activities, thereby upholding fair competition and fostering a healthy cultural market environment.

Regarding this matter, numerous experiences can be cited. In 2021, Chinese academicians proposed a framework aimed at mitigating the potential risks associated with AI, with the ultimate goal of enhancing the government's effectiveness in governance (Li & Li, 2021). By 2024, building upon previous theoretical frameworks, a novel concept of AIGC governance was introduced, which involved the application of a Global Digital Compact (Li et al., 2024). This initiative seeks to establish a secure, trustworthy, and equitable cyber domain (Wylde, 2023). With the continuous advancement of AIGC, it is of paramount importance to adopt a comprehensive strategy for intellectual property protection and regulation that incorporates novel and innovative approaches (Wang et al., 2023).

# Countermeasures and Suggestions for AIGC Polluted Culture

From a juridical perspective, it is the responsibility of relevant authorities to strengthen the ethical and legal governance of AIGC technology to ensure its applicationis in harmony with societal values and the principles of laws and regulations. It is crucial to enhance public awareness and understanding of AIGC technology, while simultaneously fostering vigilance against the spread of misinformation and copyright infringement. Technically, the development of solutions such as content auditing and identification mechanisms is essential to facilitate the detection and mitigation of harmful content originating from AIGC. Ethically, there is an urgent need to promote and support responsible innovation that drives the healthy and sustainable development of AIGC. This can be realized by enhancing AIGC models with self-regulatory capabilities and avoiding the generation of harmful content.

# Conclusion

The advent of AIGC has precipitated a transformative shift in human interaction. It has significantly enhanced the efficiency and ease of content creation and dissemination by automating the production of textual, visual, auditory, and other content types. This paradigm shift not only accelerates the dissemination of knowledge but also diversifies both the means and substance of communication. However, it is imperative to be cognizant of the potential adverse effects of AIGC technology, such as information saturation and the proliferation of misinformation. Consequently, individuals must revel in the benefits of AIGC while remaining vigilant about the potential hazards it poses and implementing strategies to mitigate such risks.

In the developing of AIGC, it is equally crucial to be vigilant about the variety and sound progression of cultural manifestations. As AIGC propels the advancement of cultural sectors, there is a risk of fostering cultural uniformity and diminishing the capacity for innovation. Therefore, there is an imperative to prioritize the safeguarding and fostering of cultural diversity and creativity alongside the evolution of AIGC technology. This entails nurturing and supporting the expansion of age-old crafts, melodies, literary works, and other cultural expressions. Moreover, it involves enhancing the public's aesthetic and cultural awareness through educational and training initiatives.

In the era ahead, the confluence of artificial intelligence with the cultural sector represents a significant area of scholarly inquiry. As AIGC technology progresses, it is anticipated that novel applications will emerge, including immersive virtual reality experiences and tailored educational experiences derived from AIGC. It is

equally crucial to focus on harnessing the full potential of AIGC while ensuring the protection of human welfare. This entails the development of AIGC frameworks capable of self-regulation to prevent the creation of harmful content, as well as the establishment of relevant legal frameworks, regulations, and ethical guidelines to govern the application of AIGC technologies.

#### References

- Boididou, C., Papadopoulos, S., Zampoglou, M., Apostolidis, L., Papadopoulou, O., & Kompatsiaris, Y. (2018). Detection and visualization of misleading content on Twitter. *International Journal of Multimedia Information Retrieval*, 7(1), 71-86.
- Carlson, M. (2017). Automating judgment? Algorithmic judgment, news knowledge, and journalistic professionalism. *New Media & Society*, 20, 1755-1772. doi: 10.1177/1461444817706684
- Chen, J., Liu, Z., & Huang, X. et al. (2024). When large language models meet personalization: perspectives of challenges and opportunities. *World Wide Web*, 27, (42).
- Fang, X., Che, S., & Mao, M., et al. (2024). Bias of AI-generated content: An examination of news produced by large language models. *Scientific Reports*, 14(1), 5224.
- Li, L. C., & Li, Y. Q. (2021). Risks in AI-embedded government and its avoidance. *Journal of South China University of Technology*, 23(5), 1-13.
- Li, Z., Zhang, W., Zhang, H., Gao, R., & Fang, X. (2024). Global digital compact: A mechanism for the governance of online discriminatory and misleading content generation. *International Journal of Human-Computer Interaction*, 1-16.
- Liu, Y., Wang, S., & Yu, G. (2023). The nudging effect of AIGC labeling on users' perceptions of automated news: Evidence from EEG. *Frontiers in Psychology*, 14.
- Lou, Y. Q. (2023). Human creativity in the AIGC era. She Ji: The Journal of Design, Economics, and Innovation, 9(4), 541-552.
- Wang, T. Y., Li, L., Chen, X., & Li, K. Z. (2024). A study on the risks and countermeasures of false information caused by AIGC. *Journal of Electrical Systems*, 20(3), 420-426.
- Wang, Y. T., Pan, Y. H., Yan, M., Su, Z., & Luan, T. H (2023). A survey on ChatGPT: AI-Generated contents, challenges, and solutions. *IEEE Open Journal of the Computer Society*, *4*, 280-302.
- Wu, T. Y., He, S. Z., Liu, J. P., Sun, S. Q., Liu, K., Han, Q. L., & Tang, Y. (2023). A brief overview of ChatGPT: The history, status quo and potential future development. *IEEE/CAA Journal of Automatica Sinica*, 10(5), 1122-1136.
- Wylde, A. (2023, June). The UN Global Digital Compact (GDC), achieving a trusted, free, open, and secure internet: Trust-building. *European Conference on Cyber Warfare and Security*, 22(1), 544-551. https://doi.org/10.34190/eccws.22.1.1448
- Zhang, W., Yan, R., & Yuan, L. (2024). How generative AI was mentioned in social media and academic field? A text mining based on internet text data. *IEEE Access*, 12, 43940-43947.
- Zhou, J., Liang, Z., Fang, Y., & Zhou, Z. (2024). Exploring public response to ChatGPT with sentiment analysis and knowledge mapping. *IEEE Access*, 12, 50504-50516.