The Creative Characteristics Of New Media Art In China: A Case Study Of Guangzhou International Light Festival

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Abstract

This article aimed to study:

(1) The creative characteristics of new media art in China, with a focus on the Guangzhou International Light Festival (GZILF) .

(2) The impact of these characteristics on the exhibition influence of new media art, using various research methods .

(3) The distinctive features of award-winning new media artworks from Guangzhou and Lyon in terms of form, style, interactive experiences, and innovative topics .

The sample was six acclaimed artworks from 2014 to 2022. They were selected by the award recipients of the Trophy Of Light in Lyon and the Light Arts Award in Guangzhou. The instrument for collecting data was an expansive online survey. Data was analyzed using Descriptive statistics and Content Analysis.

The research results were found as follows:

1.The 'Form and Style' of new media art plays a crucial role in shaping its aesthetics and guiding the viewer's experience.

2.Technical Interaction' bridges the gap between art and the viewer, creating a multi-directional, interactive process.

3.Innovation in Topics' allows new media art to reflect ongoing cultural and societal shifts, and explore the impact of technology on daily life, relationships, and culture.

Keywords: New Media Art, Form and Style, Technical Interaction, Innovation in Topics.

Introduction

In our technologically advanced society, the art world has continuously evolved, adapting to changing techniques and styles throughout history. In the digital age, rapid technological advancements have given

rise to a new artistic language, as theorized by media theorist Lev Manovich. New media art, with its focus on coding and computation, offers a tangible and interactive experience, redefining our perceptions and experiences of art. This artistic movement has gained significant popularity within the contemporary Chinese art scene, manifesting in creative works, exhibitions, critiques, and education.

Since the 1960s, new media art has attracted international interest, evolving through various stages such as media labs, art centers, and digital culture research institutions. In China, the government has actively promoted the integration of technology and art, incorporating new media art into the development of cultural and creative industries. Numerous new media art exhibitions, including the Guangzhou International Light Festival(hereinafter “GZILF”), have been held across China, attracting large crowds and garnering international attention for Chinese artists' experimental expressions. Additionally, educational programs dedicated to new media art have been established in universities and art institutions, nurturing artists who are proficient in both technology and art, enabling them to create innovative works and understand the dynamic relationship between art, technology, and society.

This paper aims to explore the creative characteristics of new media art in China, focusing on a case study of the Guangzhou International Light Festival. Specifically, it aims to investigate the characteristics of new media art, examine the situation of new media art exhibitions in China, explore the opinions and evaluations of professionals and the general public regarding new media art, and investigate the influence of the creative characteristics of new media art on its exhibition impact.

Literature Review

1. Image Characteristics New Media Art

In today's spectacle society (Guy Debord, 1967), images have overtaken text, dictating our perception and understanding of the world. New media art is shaped by this visual-centric society, integrating new visual codes from static to dynamic visual encoding (Chen Xiaoqing, 2011).

1) Moving Images and Films

The understanding of images changed with French philosopher Henri Bergson in the 19th century. His interpretation of the image as a manifestation of a specific moment shaped our perception of images. This new concept of moving images and the advent of digital technology have reshaped art forms such as video, experimental film,

digital audiovisual, animation, and more (He Chongyi, 2013; Yungao Din, 2012). Video art specifically has evolved in terms of viewing modes and creative materials (Wang Yonglin, 2012).

2) Dynamic Image and Animation

Computer animation's roots are traced back to the avant-garde film ideas of the 1920s (Lin Peichun& Chen Weilun, 2005; Ye Yilan, 2003). Gilles Deleuze connected animation and dynamic image, describing the former as a continuously changing motion picture (Lin Peichun& Chen Qiyao, 2003). Experimental animation, influenced by dynamic image art, exhibits four key characteristics: digital tool transformation, heterogeneity aesthetics, possibilities of interactive forms, and the expression of artificial life (Lin Peichun& Chen Weilun, 2005).

3) Image Composition

The perceptual construction of images involves multiple sensory levels, and can be explored through generative aesthetics and information visualization (Bense, 1971). Image composition in the digital age relies heavily on computer programming languages and logical control calculations.

4) The Migration of Images into Space

In the digital era, images have transitioned from physical media to fluid interfaces, such as large buildings or installations and mobile phones (Chen Xiaoqing,2011). This migration influences how we perceive and interact with images, giving rise to phenomena like mobile films (Max Schleser,2011) and introducing haptic aesthetics that interweave tactile and visual senses (Laura Marks, 2002).

Overall, the evolution and migration of images into space, moving images, dynamic images, and image composition reflect the rich and diverse range of literature on image characteristics in new media art.

2. Narrative Characteristics in Artworks

Hermine Freed outlined the distinct time elements in film and video, emphasizing video's representation of real space and time and film's reliance on pre-recorded material (Liu Yawen, 2012). However, with the transition to virtual realities, contemporary video has diverged from this emphasis (Butler, 2010). Animation's flexibility in time representation further expands this (Yumei Chen, 2003).

Media theorist Lev Manovich defined four concepts of dynamic images, highlighting the transformation of narrative in new media art (Manovich, 2003). He focused on the transition from sampling to full recording and the opening of new aesthetic possibilities with digital

technology (Manovich, 2003).

Hyper-narrative methods have been exemplified through internet hypertext and "database aesthetics." Internet hypertext characterizes net-based communication activities, including multimedia, synchronicity, interactivity, and hypertextuality, while also allowing user autonomy and participation, though sometimes at the cost of discerning content quality (Rafaeli & Newhagen, 1996).

Christiane Paul's "database aesthetics" forms another dimension to hyper-narrative, referring to the aesthetic principles used in data/information visualization, thereby differentiating new media art from traditional linear narratives (Paul, 2007).

3. Interactive Characteristics of New Media Art

New media art relies on viewer interaction for an immersive experience, integrating the elements of interface, device, and space (Lin Peichunand Wang Zhengyang, 2009).

1) Control and Feedback. Interactions are influenced by cybernetics, introduced by Norbert Wiener in 1948, describing the interrelationships within a system, such as goals, actions, feedback, and responses (Yungao Din, 2011).

2) Openness of Interaction. Cybernetics has influenced computer design, fostering unpredictability and randomness in digital media interaction, often referred to as "future time" (Xing Hong, 2013). This openness also evokes viewer's unique experiences, resonating with Jacques Derrida's "la coupure" and Roy Ascott's view on artwork's openness (Chen Haoyi, 2011).

3) Co-creation and Community in Interaction. As digitality deepens virtuality, views diverge on virtual experiences' relationship with reality, with idealism celebrating liberation and naïve realism expressing concern. Virtual realism, as a compromise, recognizes both material and cultural realities (Chen Xiaoqing, 2011). These notions impact community interactions in the post-internet era, where technology pervades every aspect of life. Network art often highlights these themes, fostering community co-creation and information exchange (Chen Haoyi, 2012).

4) Audience Involvement. Engagement in new media art requires audience immersion, often leading to the dematerialization of physical elements (Chen Peicen, 2007). The body becomes the origin of experiences, emphasizing human subjectivity in the creation and appreciation process (Chen Xiaoqing, 2011).

4. Technical Characteristics of the Newmedia Artwork

Heidegger's "essence theory" of technology underscores the intrinsic link between technology, humans, and the world, while Ihde positions technology as non-neutral and dependent on societal and

cultural contexts (Chen Xiaoqing, 2011). Trogemann explores the transformation of computers from mere tools to vital components of knowledge and communication systems (Georg Trogemann, Jochen Viehoff, 2004). The advent of electronic media technology led to the creation of interfaces, becoming integral in digital media, as noted by Manovich (Lev Manovich, 2012). Trogemann emphasizes the role of interfaces as a link between machine logic and user perception, facilitating the integration of computers into various life domains (Georg Trogemann, Jochen Viehoff, 2004).

Software structures, contrary to common belief, are not merely products of recent technological advancement but have historical roots in human thought, business, politics, and cultural-social codes (Georg Trogemann, Jochen Viehoff, 2004). The rise of digital data and media software shifted the role of media from carrying intended messages to representing signals, with media attributes hinging on specific software (Lev Manovich, 2012).

The new media art vocabulary encompasses concepts like dematerialized images, five-dimensional space composition, non-linear narratives, and interactive art. The content now includes aspects of technology and software, shedding light on the relationship between technology, humans, the world, and how the modern technological world manifests itself. The transformation of software has led to media now representing and controlling signals, with its attributes varying based on specific software.

Conceptual Framework

The conceptual framework of this study (Figure 1.) illustrates the interconnections between the key concepts of new media art in the Chinese context.

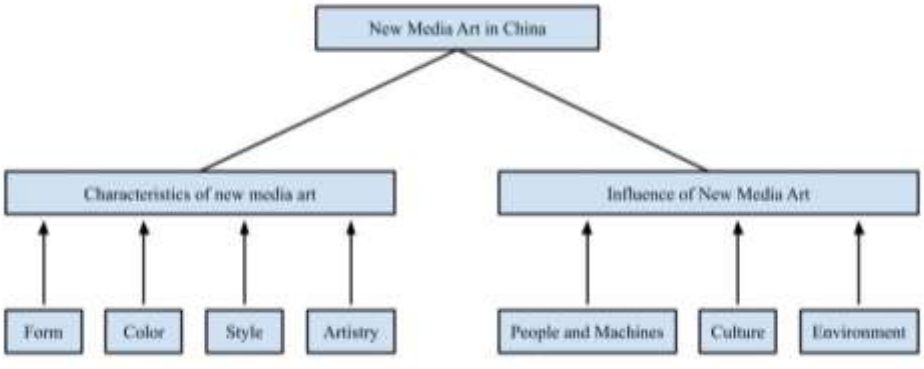

Figure 1. Conceptual Framework of this study

Research Methodology

This study employs a case study method, with the GZILF as the subject of analysis. The research methods used include document analysis, in-

depth interviews, and questionnaire surveys. These methods allow for a comprehensive exploration of the impact of new media art characteristics on its exhibition influence, gathering insights and perspectives from both experts and the general public.

The research follows a systematic approach, starting with the determination of the research topic, purpose, and research questions. A thorough review of relevant literature is conducted, focusing on the identified research questions and establishing a preliminary theoretical framework. The analysis encompasses a range of sources such as books, journals, magazines, and online literature. The case study of the GZILF is conducted through literature analysis, covering the period from 2011 to 2022.

In-depth interviews and questionnaire surveys are conducted to gather detailed data from professionals and the general public. The collected data is analyzed, reviewed, and revised as necessary. The research process culminates in the presentation of conclusions and recommendations based on the findings. The research methodology is illustrated in Figure 2.

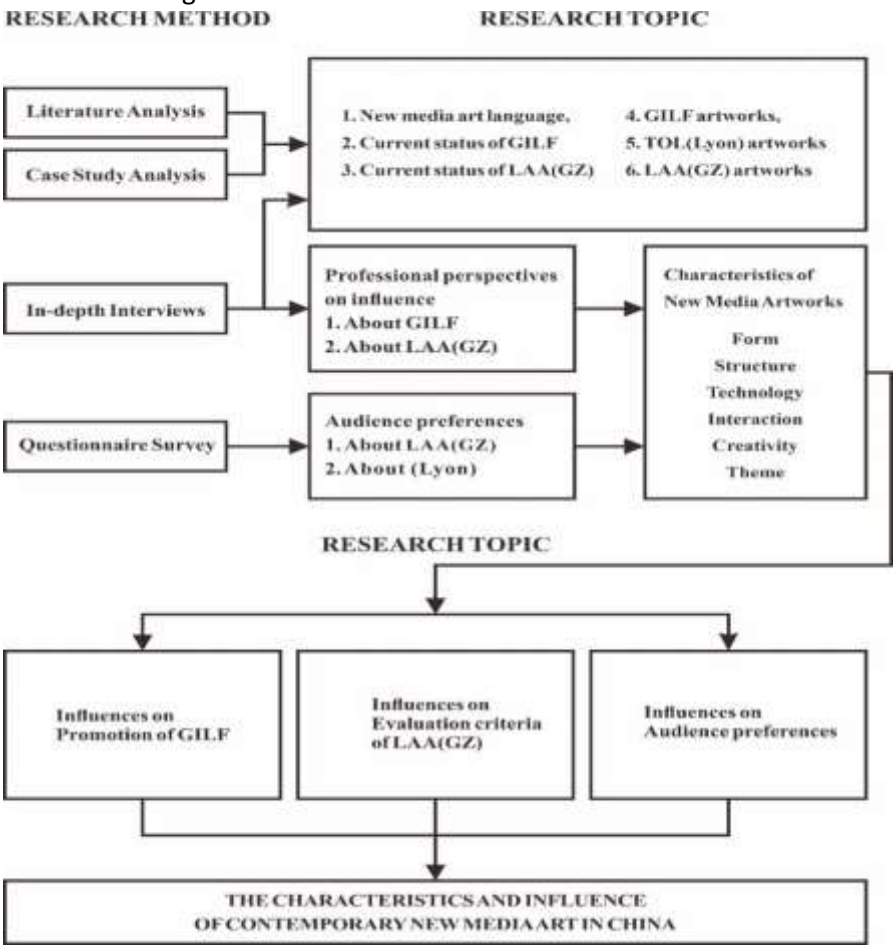

Figure 2. Introduction of research method

Research Results

This study focusses on six acclaimed artworks spanning from 2014 to 2022, exhibited in the culturally distinct contexts of Lyon and Guangzhou. Featured masterpieces include the award recipients of the Trophy Of Light in Lyon (hereinafter “TOL(Lyon)”): "URBAN FLIPPER" (2014), "Ephemeral Meadow" (2019), and "Grand Mix" (2022). In parallel, it draws attention to the Light Arts Award in Guangzhou (GuangZhou) (hereinafter “LAA(GZ)”): "Canton Energy" (2014), "Legend of YUE" (2016), and "YU DA BA JIAO" (2018). An expansive online survey was conducted to collect audience interpretations and sentiments regarding these art pieces, further enriching the discourse.

1. Form and Style Analysis:

As shown in Figure 3.,This study undertakes a deep dive into the forms and styles presented in the artworks. It reveals that "Ephemeral Prairie" has garnered notable acclaim for its unique color texture and light and shadow dynamics, while "Grand Mix" captivated the audience with its spatial sense and compelling narrative expression. On the other hand, the audience interprets the artwork's components, light and shadow textures, spatial arrangements, sound, and rhythm from their unique perspectives. They scrutinize the artwork to understand the story it narrates and the connections between different sections and elements.

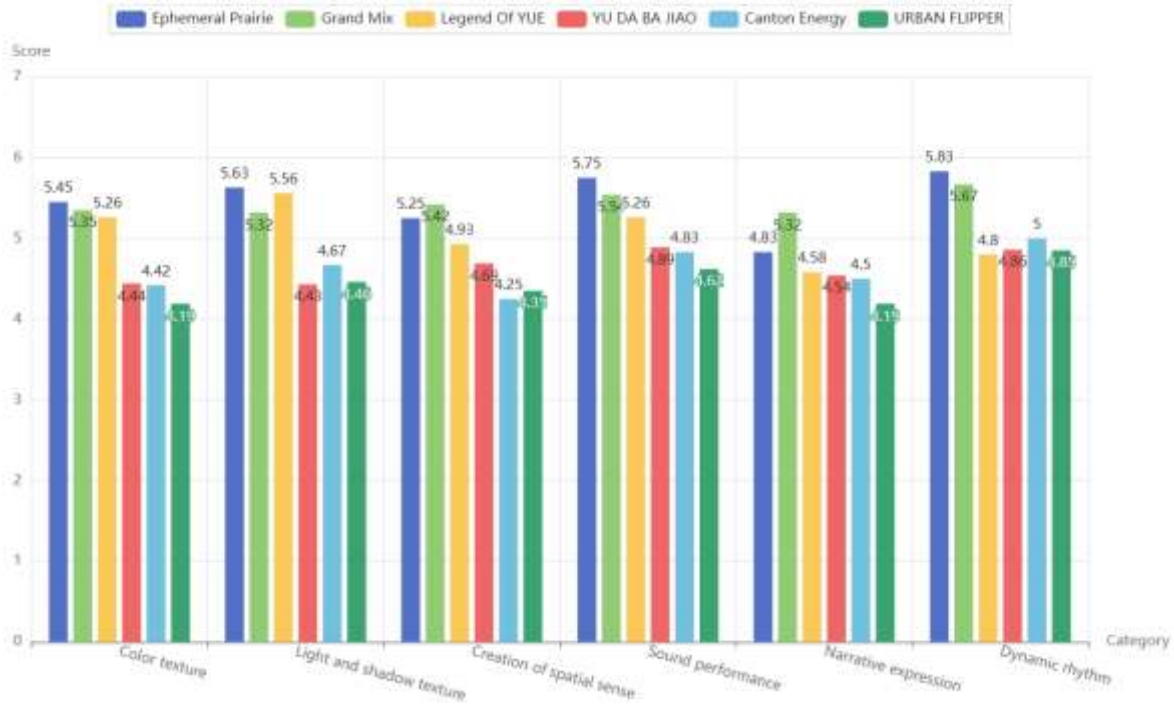

Figure 3. Audience's evaluation of the form and style of the six works

2. Technical Interaction Analysis:

As shown in Figure 4.,The analysis of technical interaction reveals that

"Ephemeral Prairie" leads the cohort in terms of technical effect innovation, immersive experience, and interactive feedback. In this regard, artworks honored by TOL (Lyon) outperformed those by LAA (GZ). As the audience is becoming increasingly familiar with digital technology, they compare the technology used in the artwork with their own digital tools. They gauge the technical difficulty and accessibility. However, professionals are more interested in the embodiment of the digital spirit through technology or innovative methods.

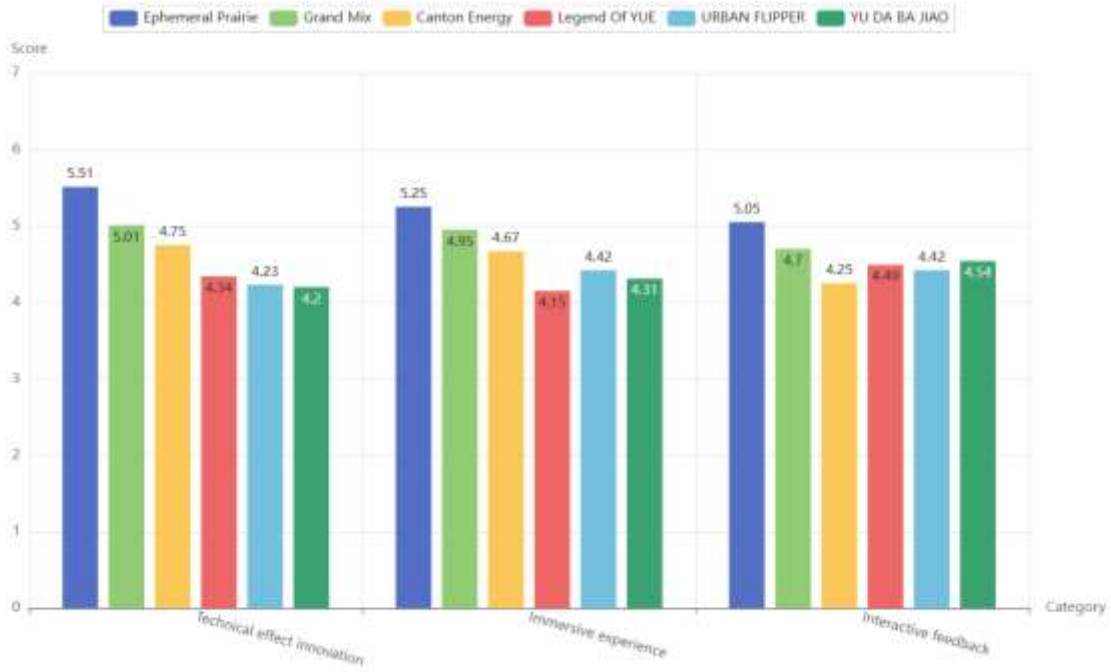

Figure 4. Audience's evaluation of the technical interaction of the six works

3. Innovation in Topics Analysis:

As shown in Figure 5.,In the realm of innovative topics, "Ephemeral Prairie" emerged as a forerunner, followed by "Grand Mix," "Canton Energy," "YU DA BA JIAO," "Legend of YUE," and "URBAN FLIPPER". Experimental themes were the most favored category among the audience. They find these works intriguing, novel, and creatively unprecedented. Simultaneously, professionals focus on whether the artworks signal new developments in form, technology, and aesthetics. For instance, "Ephemeral Prairie" probes into human perception through constantly morphing abstract forms. On the other hand, works like "Canton Energy" leverage a mobile network app to explore the theme of human vocal communication.

In conclusion, the award-winning new media artworks from both Guangzhou and Lyon demonstrate distinctive features in terms of form and style, interactive experiences, and innovative topics. They successfully engage both professionals and the general audience by pushing the boundaries of artistic and technological innovation,

exploring new narratives and interactive possibilities, and addressing contemporary issues in a creative way.

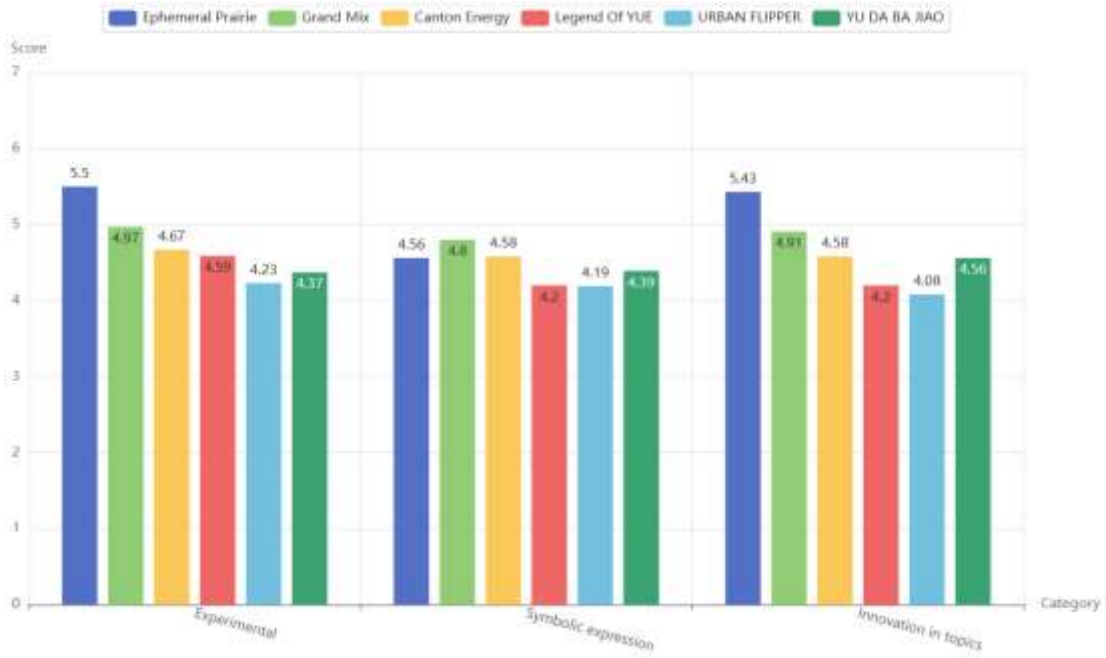

Figure 5. Audience's evaluations of the innovation in topics for the six works

Discussions

Our research underscores the burgeoning creative environment of new media art in China. Despite being in its developmental stage, the quality of the works is already remarkable, as evidenced by the recognition of Chinese artists on international platforms such as TOL (Lyon). We have identified three primary characteristics that underpin new media art: Form and Style, Technical Interaction, and Innovation in Topics.

In 'Form and Style', which includes Light Art Characteristics, Color Art Characteristics, Formative Artistic Characteristics, and Spatial Experience Characteristics, we observe a significant overlap with the award-winning works at GZILF. These elements serve as the fundamental building blocks of new media art, shaping its aesthetics and guiding the viewer's experience. Technological innovation forms an integral part of these characteristics, manifesting in the creation of changeable and reversible outcomes that provide a new lens for viewing and experiencing art.

'Technical Interaction', encompassing Environment Interaction Characteristics and Audience Interaction Characteristics, further bridges the gap between art and the viewer. The works showcased at GZILF reveal that new media art transcends static viewing, transforming into a dynamic process where viewers influence and are influenced by the artwork. The synergy between technology and art not only innovates how we perceive art but also how we engage with

it, evolving into a multi-directional, interactive process.

The third characteristic, 'Innovation in Topics', characterized by Symbolic Expression Characteristics, Cultural Reflection Characteristics, and Experimental Characteristics, examines new media art's relevance and influence. These characteristics reflect new media art's intrinsic link to the digital age, investigating the impact of technology on daily life, relationships, and culture. By bridging the virtual and real worlds, new media art can experiment with and reflect the ongoing cultural and societal shifts in ways that traditional art forms cannot. In doing so, new media art becomes a mirror to our society, reflecting our interaction with technology and the digital landscape.

Moreover, it's worth noting that these characteristics are not isolated but are interconnected. The 'Form and Style' is often influenced by the 'Technical Interaction' capabilities of the medium, and both are used to explore and express the 'Innovation in Topics'. This interplay creates a rich, layered experience that is unique to new media art. As we move further into the digital age, we anticipate that these characteristics will continue to evolve and shape the future of new media art in China.

Conclusion

This research has examined the creative environment of new media art in China through case studies of the GZILF. The findings highlight three core characteristics that define new media art in the Chinese context: Form and Style, Technical Interaction, and Innovation in Topics. Each characteristic deeply entwines with digital technology, underlining its integral role in the new media art process, from creation to exhibition to audience experience.

Though new media art in China is still in its developmental stage, its considerable progress is evident in the quality of works and international recognition of Chinese artists. As we move further into the digital age, new media art in China will undoubtedly continue to evolve, reflecting societal changes and the deepening interaction between humans and technology.

Suggestions

The case studies of GZILF present unique insights into the development and characteristics of new media art. However, as an evolving field, new media art in China warrants further research. Future studies could consider a more comprehensive range of new media art forms, beyond light festivals, and also extend the comparison to more international festivals to further understand different regional influences on new media art.

Furthermore, while the current research identified the three core characteristics of new media art, a more in-depth exploration of each, particularly in relation to the role of digital technology, could provide richer

insights. Specifically, the impact of emerging technologies, such as virtual reality, artificial intelligence, and machine learning, on new media art creation and audience interaction could be a fruitful area of exploration.

Lastly, additional emphasis could be placed on the viewer's experience and reception of new media art. Audience perception, interaction, and their interpretative frameworks are crucial aspects that can shape the understanding and evolution of new media art. Therefore, in-depth audience studies could further enrich the discourse around new media art.

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