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Chapter

The Integration Narrative of Media and Space in Museum

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Abstract

With the increasing popularity of digital presentation and narrative means in museum display design, the role of media art in museum space design has become increasingly prominent. The integration narrative of media and space will deconstruct our design and understanding of exhibition space, thus bringing a new design paradigm. This chapter will discuss the ways and methods of innovative design of museum space in combination with the design case study of new museum space; It tells about the new design concept of the integration of media and space, discusses the integration way of media and exhibits, media and space, and how to use the characteristics of media art with great appeal and guidance to realize the digital innovation of museum exhibition.

Keywords: museum, space, media, integration narrative, display design

1. Introduction

With the rapid development of digital media technology, the application of media art in the public cultural space such as museums and relics has become increasingly widespread and popular. It is pointed out by the International Council of Museums in the interpretation of the theme for International Museum Day 2022 that museums “have the power of innovating on digitalisation and accessibility, museums have become innovative playing-grounds where new technologies can be developed and applied to everyday life. Digital innovation can make museums more accessible and engaging, helping audiences understand complex and nuanced concepts” [1]. It can be seen that the integration and display of new technologies in new media in the museum space has not only become a new technical means attached to the museum space, but become an active builder in the museum space as well. In this way, more exhibits have been displayed, which are diverse, vivid and attractive. The traditional space narratives and construction methods of the museums have been reshaped. The learning mechanism and behavior mode of the audience in the museum space have been changed. New possibilities and opportunities have been brought to contemporary museum space and display design. New technologies are undoubtedly of great value and significance.

However, as new technologies and new media have been continuously applied to the traditional exhibition space of museums, disharmony arises between traditional space and modern media as a result of their rapid development. Exhibition designs of

museum space are confronted with new challenges. To address this issue, this paper adopts the research methods of case study and documentary analysis and studies the design idea of the integration of exhibition space in museums, aiming to provide today's frontier exploration and thinking for the design path of contemporary exhibition space.

2. Literature review

It is a great trend and focus in the current work of exhibit display in museums across the world to plan, discuss, interpret and study the exhibit display with the relevant theories of narratology. It is an effective method widely recognized by the relevant industry and academia in the world as well.

Before narrative theories were formally introduced as the organization forms or means of the exhibit display, museum exhibitions, particularly thematic exhibitions with the timeline sequence, implied "narrative budding" [2]. For example, Steven Lubar pointed out in the article *Timelines in Exhibitions* that timeline is a natural and intuitive way to present and understand the past, and is highly capable of staging the historical narratives [3]. Edward Bedno, an American scholar, also stated in his article *Museum Exhibitions: Past Imperfect, Future Tense*: "Many thematic exhibitions have basic narrative clues. A story can connect all exhibits or all perceptible exhibition elements, which is more powerful than creating a simple theme including all exhibits" [4]. In 1998, an academic concept of "systematic exhibition" in the exhibition design of world museums was put forward by the academic circle of Japanese museums, that is, the design methods of exhibition scripts with information structures are established on the basis of a good understanding of exhibits' information [5]. The "information structure" here has nearly the same meaning as the structure research of traditional texts in the narrative theories.

Spatial narrative theories have been used for the relevant academic analysis of museum exhibitions, growing like mushrooms. However, the early academic analysis paid more attention to studying the relationship between museum exhibitions and narratives as well as their significance while the later placed more emphasis on studying with museum exhibitions as the structures and methods of narrative texts. For example, Mick Barr used narrative theories such as narrative voices, narrative focus and narrative time to analyze the exhibition of the American Museum of Natural History for the first time in the first chapter *Telling, Showing, Showing off of Double Exposures* [6]. Mieke Bal believes that the narrative perspective provides a significance that cannot be obtained by other methods. Such analysis can be utilized to read the museum and its exhibits rather than the objects on display alone [7]. Liu Jiaying and Song Xiangguang explored the relationship advantages and feasibility of museums and narratives through the analysis of the advantages of museums' "sense of existence," "cultural" and "entertainment" in their article *Media Advantages of Museums—A Trial Analysis of Museum Exhibitions from the Perspective of Structuralist Narratology* and combining the research perspective and theoretical framework of structuralist narratology [8]. However, the real in-depth analysis of the relationship between exhibitions and narratives should pay attention to *Museum Making: Narratives, Architectures, Exhibitions* [9], a work co-authored by Suzanne Macleod and others, and *Narrative Turn of Contemporary Museum Exhibitions* authored by Zhang Wanzhen [10]. Since then on, with the collision of narrative theories and design disciplines, narrative theories have also started to combine with

exhibition design space, forming a research trend in the narratives of museum exhibition space. At this stage, it is believed by some researchers that the theme and spatial form conveyed by the exhibition bear similarity to the expression or logic of the narrative, therefore, it is feasible to take the museum as the narrative text and conduct the research of spatial narratives around it [11]. For example, Li Nvxian analyzed the relationship between the sequence of museum display space and the narrative of exhibition theme and explored the design methods of museum display space with narrative characteristics [12] through the spatial narrative theories.

Over the past decade, with the vigorous development of information technology, digital technology and intelligent technology, we see an increased use of digital media products in all aspects of human society. The expression and interactive narrative of media art have gradually become one of the means of cultural and artistic communication that enjoy the most popularity. So are the museum exhibitions. At present, the narrative means and digital form of museum exhibition media have become important ways to achieve “getting cultural relics alive” and “getting cultural relics fashionable,” and have become the consensus of the academic circle and industry in this field [13]. Overall, it is more often to see application cases of digital media narrative expression in museums; however, the writings on relevant academic and theoretical researches are rarely seen. The former includes WeChat widgets such as Digital Palace Museum and Traveling in Dunhuang, Decorative Patterns Carry the Great Truth- The Palace Museum Tencent Digital Experience Exhibition, and Beijing 2022 Olympic Winter Games Digital Museum, of which the author participated in the planning and design, as well as the National First Robot Stage Drama that integrates technology, culture and art, etc. [14]. The latter, for example, Zhao Ling, conducts a study [15] of the applications of media in the museums from the narrative perspective with the narrative expression of digital media in the museums as the object of study in the article Digital Representation to the Integration of Feelings and Setting—A Study of Museum Digital Media Exhibition in the Context of Narration. In 2022, the National Cultural Heritage Administration of China issued the new version of the official document Evaluation Criteria for Museum Operations, formally proposing that “the situation of using auxiliary exhibits and modern information technology to improve the level of cultural communication in the representative temporary exhibitions will be regarded as an indicator for the assessment of museums” [16]. The guiding value and incentive effect brought by this policy will produce a profound effect on the follow-up development of museum exhibitions.

At present, a tidal wave of digital technology is showing a rapid spread in global museum exhibitions, but not a few museum exhibitions do not have enough time to think about the relevance between digital technologies and their exhibitions under such an explosive development. Without corresponding theoretical discussions and a summary of methods, they are involved in the flood of digital technology in an instant. As a result, a number of problems arise from practical operations, such as the incompatibility of the content and form of media and space, the hybrid sequencing of space organization and structure, as well as the follow-up maintenance and operation of media equipment [17]. To overcome these problems, some researchers have also paid attention to the necessity and importance of the study of integrating media into the design of space. For example, Lin Shaoxiong stated in his article Physical Narration and Space Integration in Museum Phase 4.0: The current and future museum phase 4.0 museums are based on the creation of integration experience space in the future tense, which place more emphasis on the organic integration of real space and virtual space, physical space and psychological space, aiming to the

construction of the self-growing integration fields [18]. Here, the virtual and psychological space refers to the media space of the museum exhibition, while the real and physical space refers to the real physical space of the museum. Some researchers have done something further, namely, taking the visitor guiding display system in museum exhibitions as an example. They explored the problems and applications of the complementary functions and the shortcomings of the traditional guiding system and modern digital media and came to a clear conclusion that the visitor guiding display system innovates, improves and upgrades the original visitor guiding system, which is really a cutting-edge idea [19]. Therefore, the relevant studies of the integration narrative design of media and space in museum is not just a cutting-edge academic issue that needs to be further explored. The relevant studies and explorations are urgently needed due to their values to a certain extent.

To sum up, the studies of digital applications have started with a bang in the museum exhibitions across the world. The space narrative and media narrative methods of the exhibition have also respectively demonstrated their important values and roles. However, media narrative in the museums are developing too explosively; moreover, media narrative and space narrative are limited by their respective knowledge characteristics and scopes. Due to this fact, lots of disharmony problems arise inevitably from the hybrid application of media narrative and space narrative in the museum exhibitions, thus requiring the study of the interrelated whole for the purpose of integration. Therefore, this paper attempts to take the lead in exploring the challenges faced by the narrative and design methods of museum exhibitions and their new design ideas after the integration of media and the space which traditionally focuses on objects. It is hoped that the study in this paper can be the first to fill this nearly blank field, realize the integration and innovation in the museum exhibitions, and thus produce a new design paradigm, which are our research objectives and values as well.

3. The proposal of the narrative design methods that integrate space and media

The integration narrative space refers to a new spatial form brought by the integration of multiple media means and physical space. The narrative of traditional museum display space is connected by cultural relics and space. The presentation of objects and the construction of architectural space jointly determine the narrative logic of museum display. However, digital media plays an increasingly important role in museum narrative, which will greatly affect the changes in the structure of traditional display space, thus bringing a new integration narrative space.

3.1 Several elements of integration narrative space

3.1.1 Space

Space is the most basic and the most important material basis of museums, and a key elements that distinguishes physical exhibitions from the experience of the online cultural heritage communication. The existence of space is an important prerequisite for the attraction of visitors. Personal experience of space is one of the most effective ways to collect information. Compared with ordinary “objects,” it is omni-directional and multi-channel to exchange information with space and obtain perception from space.

It is natural for people to emotionally depend and become interested in space. As Norberg-Schulz Christian, a well-known architectural theorist, said in *Existence, Space and Architecture*, “the root of people’s interest in space is existence” [20]. The relevant evidence is found from the research results of cognitive psychology and linguistics. Experts have identified a great relationship between space and human cognition and emotional formation. People interact with the external space through their own bodies from childhood. An image schema based on spatial perception of the external world is the basic structure for understanding and recognizing more complex categories and concepts [21]. The cognition of one’s own body and the surrounding space is the most basic cognitive activity of human beings, so image schema mostly reflects a spatial relationship between human beings and the external world. This abstract understanding of spatial relationship forms the empirical basis for people’s understanding and reasoning of anything. Therefore, space is not only the basis for the formation of cognition, but also the basis for human behavior and emotion. It is also an important prerequisite for the development of the indispensable attachment to a place and a sense of belonging in their minds.

In addition, the significance of space to museums and people is also reflected in the aspects such as space and narrative logic, space and environmental cognition, and the cultural spirit of space. The museum space is constructed to meet the needs of functional logic, structural logic, behavioral logic, and spiritual logic. Once the spaces are constructed, they conversely construct the audience’s behavior in the museum and guide their emotional clues and changes during the visit. It is an important elements of museum experience to create environmental experience in the museum space. Human senses are very keen. Beyond the traditional five senses such as vision and hearing, we also develop perceptions of ourselves, space environment, changes of light, air flow, changes of temperature, vibration, etc., and every cell of our body is even communicating with the surroundings. As Margravial Opera House Bayreuth described in Michael Haim’s *From Interface to Cyberspace: The Metaphysics of Virtual Reality*, the creation of space and atmosphere “mobilizes all human senses: visual, auditory, tactile, plot, and even the smell of incense and candles [22]. The audience of Bayreuth is the pilgrim of exploration, immersed in an artificial reality, that is, a holistic experience.” The layout and creation of the space also reflect a certain cultural and spiritual connotation, such as gardens in the south of China and courtyards in the north of China. They contain the traditional Chinese values and ideas that are reserved and aggregated, and reflect a number of dialog relationships between humans and the external environment such as heaven, earth, nature, cities and towns, as well as between the family members.

As a result of the essential status and multiple attributes of space, the audience develop an overall perception of the image and cultural spirit created by the space environment through the conscious creation of the space so that the space becomes a “field” to guide their emotions and display their spiritual power. Under the guidance of the narrative logic planned by the space, the audience’s learning and experience behaviors are constructed as well.

3.1.2 Objects

The significance of “objects” is self-evident in the display activities of cultural heritage. Sima Qian described the Confucius temple he saw in Qufu and Confucius’ remains such as “clothes, hats, zithers, carriages and books” in the *Historical Records*

of Confucius Aristocratic Family [23]; the “carriages, clothes and ritual vessels” enabled Sima Qian to imagine Confucius’ conducts. He was so attracted that he forgot to return. This is probably one of the earliest descriptions of the significance of “objects” on museum exhibitions. The presentation of “objects” directly proves the real existence in history. Additionally, but the uniqueness of heritage is often an important elements to arouse the audience’s strong interest and exploration spirit. The so-called “prove history by material evidence” has always been one of the important concepts of museum construction.

Digital technology has brought a new way of display; however, it cannot completely replace the position of “objects” in people’s minds. Although we can easily get access to the high-definition pictures of the Mysterious Smile of the Mona Lisa online, millions of people still go to the Louvre Museum to see the Mona Lisa every year. People can roam freely in the real space of the ancient city, and appreciate the cultural relics and treasures in close proximity, marveling at the wise ancestors’ craftsmanship. This sense of reality produced by the existence of reality as well as the emotional and spiritual guidance and infection given by the size and turns are still irreplaceable by digital means. Digital technology will not eliminate people’s desire for “reality”; conversely, it may act as a bridge between people’s minds and the real objects, stimulating their desire to explore the real objects.

Objects are the realistic basis of human cognitive system. A variety of states of “objects,” natural laws, and interactions and exchanges between objects and people are also the foundation for us to understand this world. Objects are also an important link between human emotions and the cultural world, as well as the important carriers and symbols of human cultural system. The remembrance and worship of “objects” universally exist in human civilization, which are the direct presentation of cultural symbols, and the external expression of profound and abstract cultural connotation and spiritual world. Culture is a collective memory. This converging behaviors and mode of thinking are usually maintained and symbolized by “objects” in a certain forms.

It is one of human instincts to pursue materiality. From the perspective of physiology, the operation and play of objects stimulates the secretion of adrenal hormone and brings excitement and pleasure to the cerebral cortex nerves, keeps people unceasingly relying on objects and chasing objects and communicating and interacting with the objects. Animals are curious about objects and eager to play with objects, which is actually an instinctive expression to exercise their predatory skills and survival ability. Likewise, human’s desire to understand, control, conquer and collect objects also comes from the born instinct.

Therefore, “objects” are not only physically visible and touchable. They exist in our spiritual and cultural world as well. The display of “objects” in museums is of irreplaceable significance.

3.1.3 Media

Interactive digital media is known for its characteristics such as sensible, interactive, narrative and interrelated, which can bring extremely strong experience and extremely strong communication and produce fundamental changes to culture communication, education and other areas.

Through sight, hearing and touch, digital media can generate super-infective power which is immersive, full-view, and media-rich. Particularly, when media is applicable to everything today, digital media brings so great infection that it has

broken people's imagination time and time again. Interaction is another aspect of the extremely strong experience. It is one of the most basic ways for humans' development of cognition to interact. The interactive media endows everything with spirituality through the cognition of various sensors of language, movement, orientation, eyes, EEG, touch, etc., interactive media, so that the object can talk with us. Interaction brings pleasure, experience, emotion and recognition to people.

Interactive media is also known for its narrative. It is a form of art about time and narrative. As Roger C. Schank, an American cognitive scientist, pointed out that Humans are not ideally set up to understand logic; they are ideally set up to understand stories [24]. Mark Turner also wrote in his book *The Literary Mind*: "Storytelling is a basic way of thinking, and most of our experiences, knowledge and thoughts are organized in the form of stories" [25]. Digital media is naturally born with narrative characteristics, which makes it have an edge in the area of communication. At the same time, the Internet, the Internet of Things, artificial intelligence, big data, cross-media, O2O and other technical means have not only brought about subversive and explosive growth in communication capacity, but brought about the transformation of communication paradigm and discourse system as well, leaving endless space for possibilities and imagination.

Boosting with unique advantages in the area of communication, interactive digital media has gradually integrated into the new museum space. It is no longer an optional auxiliary means ranging from small interactions to big experience. Instead, it will be an important part of the new integration narrative space and an important link in the museum narrative. In the construction of the new museum space, the space narrative that integrates media will generate more inspiration and creativity for architects and space designers and become the leader of an important trend of museum construction in the future.

3.1.4 People

People are the complex existence and ultimate goal in this system, but they are also the elements that can be most easily overlooked. Museum exhibitions communicate information to people, and the needs of people are multi-level and multi-dimensional.

On the one hand, the characteristics of the audience as the object of communication should be considered. The characteristics and ability of the audience in receiving information largely determine the effectiveness of communication. The knowledge system is asymmetric at both ends of the communication. The sender is better at the expert knowledge system, while the receiver often does not have the knowledge reserve in this respect. Therefore, there is a key part of transforming from knowledge text to exhibition script in the link of exhibition planning and text design.

On the other hand, in addition to specific information transmission, it is important to consider the visiting process and behaviors of individual visitors, and the possible visiting mode of group visitors. The designer should handle the key issues to realize stronger spiritual appeal and information transmission, namely, how to mobilize the audience's emotions and expectations by the entire space field that integrates information and atmosphere, guide their behaviors, shape the emotional curves with the specific space plot, construct their behaviors with rich interactions and dialogs, and guide them to the preset situations. Media and interaction have

particularly outstanding advantages in guiding the audience's emotions as a result of more active dialog ability. Meanwhile, as an open public cultural service facility, people also have diversified activities and needs in the museum space. The integration and satisfaction of more needs and participation in activities such as visiting exhibition, reading, learning, taking a rest and social interactions will also complement and change the construction and understanding of the future integration narrative space.

3.2 Narrative design methods that integrate space and media

The narrative design method that integrates space and media attempts to organically integrate "objects," "media," "space" and "people" to form a new type of display space that is very attractive, communication-oriented, narrative-centered, carried by space, media breakthrough, and the combination of the real and the virtual. Here, communication and education remain the goal orientation of integration narrative space in the museums as well as the major part of museum space open to the public. Narrative is the core means and basic process of the museum's display space, as well as an important basis for organization of exhibits and media and space design in the museum. It tells stories through cultural relics, commemorates great people and past events, reveals the cultural phenomenon behind the people and events, shows the laws and characteristics of human survival and development, and expresses the spirit and significance. Space is the basic carrier. The museum, as a physical space, distinguishes itself significantly from the complete online virtual space, which is also an important factor for the audience to acquire rich and real experience. Media has become an organic part of the space, performing the important functions of time narration and theme narration.

Therefore, in the narrative design method integrating space and media, we should, from the very beginning of the conceptual design, consider with emphasis the possibility of new media artistic expression forms, the possibility of space and media combination, as well as the possibility of media guiding emotional changes of the audience during the visiting process. Key exhibition items that are condensed in response to the narrative needs and suitable for media expression, in combination with important and large exhibits that are mainly shown in traditional museums, become key elements that need to be considered first in the "point" and "line" relationship of the museum space organization. What's more, through the logic and clues organized by spatial and emotional narratives, these points are used as key points and memory points to form a complete exhibition route for visits and experiences, thereby forming the basic paradigm of museums' innovative design.

4. Design case of integration narrative

In recent years, under the guidance of the above design ideas, the author's team have made an effort to apply such ideas and concepts to the design of new museum exhibitions. They have achieved positive results and won wide recognition by the cultural and museum circles and the public. The exhibition designs of the Confucius Museum and the China National Pavilion of the 2019 Beijing World Horticultural Exposition are taken as examples in this paper to introduce the application and thinking of relevant methods in practice.

4.1 Confucius Museum

4.1.1 Theme and planning

The theme of the exhibition in the Confucius Museum is “The Great Sage: Confucius.” As a representative of the Axis era, Confucius and his thoughts have had a profound impact on Chinese civilization and even world civilization. The exhibition design of the Confucius Museum demonstrates great cultural significance and contemporary values, but it also creates a tough problem and a big challenge for the designer. According to the conventional narrative logic to honor celebrities, text narratives are divided into five parts, namely, Confucius’ Era, Confucius’ Life, Confucius’ Wisdom, Confucius and Chinese Civilization, Confucius and World Civilization. But how to better attract the audience in a journey of space? How to produce stronger pertinence and guidance for audience’s emotions and expectations? The author team have organized a new integration narrative logic for the museum based on the spatial conditions, content logic and emotional clues.

What kind of person Confucius should be told? Liang Shuming said, “The Chinese culture before the era of Confucius was almost in the hands of Confucius, and that after the era of Confucius almost originated from Confucius” [26]. Just as the ancients used to describe Confucius as “His lofty conduct is like a high mountain, which is regarded as the code of conduct by people.” We believe the audience’s admiration to be the most important goal in the museum of such a sage. The corresponding content is called “preface.”

Secondly, it is cognition. Admiration is emotional while cognition is rational. It is necessary for the audience to develop a complete understanding of the background and the whole life of Confucius. The corresponding contents are Confucius’ Era and Confucius Life, the first and second parts of the exhibition. We attach great importance to Confucius not only due to his position as a great man in history but also due to the valuable enlightenment and instructions given by his thoughts thousands of years later. Then, how can we effectively draw nutrition from his thoughts? We come up with another word, “dialog.” We should help the audience to learn and think through dialogs. The Lunyu (Analects), the most important carrier of Confucius’ thoughts, was compiled by the succeeding generations of Confucius’s disciples in the form of dialogs. A dialog situation is created and dialog behaviors are constructed to make the interactive “dialogs” become a way for the audience to experience and learn in the visit. It is our third goal. The corresponding content is the sacred map in the special experience hall and Confucius Wisdom, the third part of the exhibition.

We expect the audience to gain something valuable and be touched and inspired finally after admiring Confucius and creating dialogs with him, understanding his life and important thoughts, as well as his broad and profound impact on Chinese civilization and world civilization. Therefore, the fourth goal is “baptism.” In particular, we expect to infect the audience through the exemplary power of the deeds of the people with lofty ideals who have been infiltrated by Confucianism that demonstrates self-cultivation, family-regulation, state-ordering and land governance in the history since then as well as to deduct Confucius’ understanding and interpretation of “a gentleman” in the Phantom Theater. It corresponds to Confucius and Chinese Civilization, the fourth part of the exhibition, and the Gentleman’s Hall of the special experience hall.

In Confucius and World Civilization, the fifth part of the exhibition, large art installations are used to present the international influence of Confucius' thoughts. We achieve the fifth goal, namely, "paying respects to" knowledge and to Confucius by building the last hall, the Permanent Confucius, into a professional Confucius library.

The basic thread of the Confucius Museum exhibition narrative and the overall keynote of the exhibition design are formed by developing from admiration, cognition, dialog, baptism to respect and integrating the communication intention and the audience experience.

4.1.2 Space and media

The Confucius Museum is a very special, as very few cultural relics are directly related to Confucius. It is the most important to display Confucius thoughts, wisdom and contemporary values in the Confucius Museum, but all of them are abstract concepts. How to interpret abstract concepts and show the power of spirit in the museum? It requires us to transform these abstract contents into perceptible elements and atmosphere through creativity, and to tell the truth and explore the spirit through stories, and to express his ambitions by means of things and metaphors the combination of space, media and various artistic techniques. Because of the powerful infective characteristics, new media has also become a prominent means for the Confucius Museum to reflect the interpretation and experience of the key contents of the five goals as above, and has generated apparent rhythm changes in space. The most important highlight is the mapping projection of "The Great Sage: Confucius" in the prolog hall, the interactive long scroll of the sacred map, and the Youlan Cao of the Gentleman's Hall of Phantom Theatre.

The prolog hall is the space to achieve the goal of "admiration." In the tall and broad theme space, light is used to shape the great figure of Confucius in the arms of the mountains, presenting the meaning of "softy conduct as high mountains." By projecting the shocking video and audio effects of "The Great Sage: Confucius" through the 80-second ring immersive mapping, the designer generalizes the contribution and influence of Confucius, and finally shapes the prolog hall into a solemn, pure, and soul-shaking ultimate space (**Figure 1**).

The Confucius Museum has a total of 36 pieces of authentic relics of the holy signs drawn by the Ming people. Through the combination of art and technology, the stories of the sacred map have been redrawn into a dynamic digital scroll, which are projected on the wall and also on the long table below the scroll in an interactive way. When the audience clicks on the characters in the image, it will trigger a story, as if

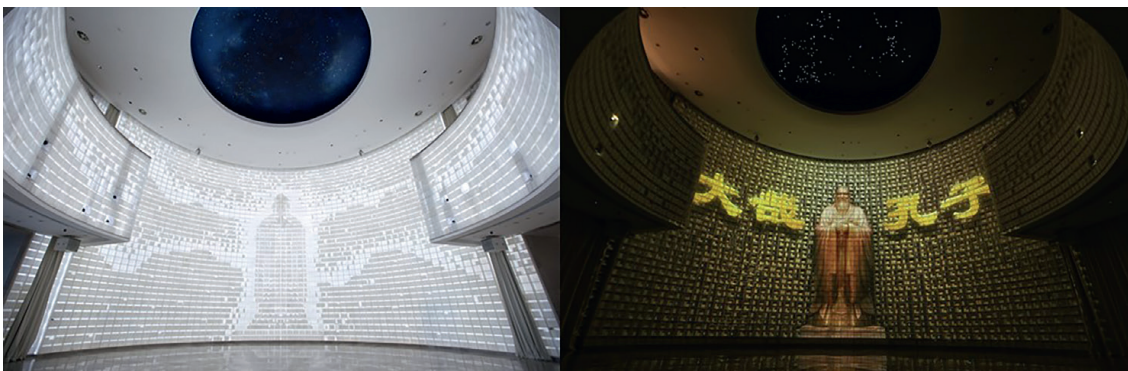


Figure 1.
"Great Confucius" light sculpture and media narrative fusion scene in the lobby of the Confucius Museum.

talking with Confucius, shortening the distance between Confucius and the audience, thus forming the integration of the virtual and the real and an integrated space of “a dialog” between the ancient and the modern (**Figure 2**).

The Gentleman’s Hall is a deductive space using multi-screen phantom stage technology. Centering on the theme of “The Way of the Scholar,” it allows the audience to understand and think about how to cultivate themselves through the continuously updated repertoire, so as to achieve the purpose of education and “baptism.” “Youlan Cao” is our first show. It is said that the zither music of “Youlan Cao” was composed by Confucius. Confucius used orchids as a metaphor to express his praise of the character of a gentleman, as well as his confidence and generosity in facing difficulties. With this as the creative theme, dance design attempts to reconstruct and interpret the charm of traditional Chinese culture by using modern digital means such as sound, light and electricity. The addition of bamboo flute playing robots adds a different style to the Phantom stage. Combining the traditional elements with the cutting-edge technology, harmonizing the piano and flute, dialog between ancient and modern, and leaving a deep memory for the audience through surreal and novel experience (**Figure 3**).

Finally, the key media means of the Confucius Museum became an organic part of the space narrative logic and integrated harmoniously with the whole building.



Figure 2.
Interactive digital fusion scene of the “Drawings of Confucius Saint Deeds” in the Confucius Museum.

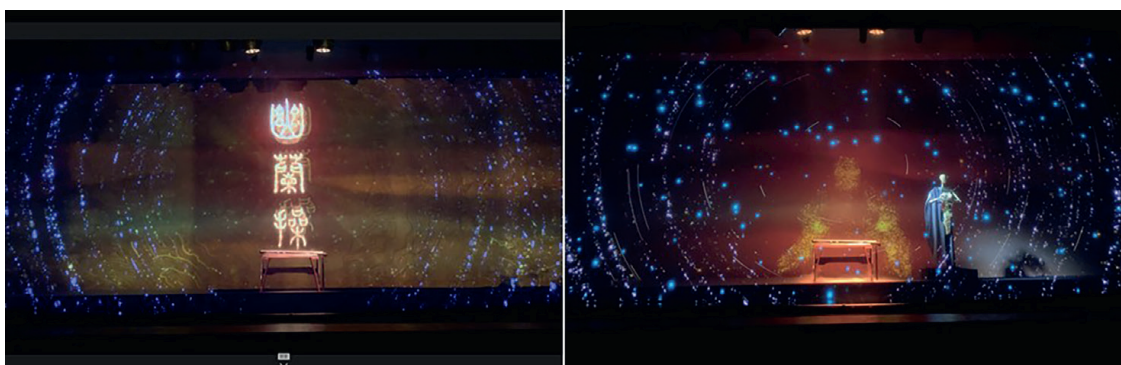


Figure 3.
Orchid parade robot phantom technology theater in the Scholar’s Academy of the Confucius Museum.

4.2 The China National Pavilion of the 2019 Beijing World Horticultural Exposition (the China National Pavilion in short)

4.2.1 Theme and planning

The theme exhibition of the World Horticultural Exposition is “Living forever - China Ecological Culture Exhibition.” According to the characteristics of the theme, we put forward an overall idea, emphasizing the combination of dynamic interpretation and static display, the combination of virtual artistic conception and physical flowers, the integration of contemporary science and technology and traditional art, the expression of the Chinese ecological culture spirit of harmonious coexistence between human and nature in poetic Chinese language, the display of green water and green mountains and gardening masterpieces, and the demonstration of the achievements of contemporary ecological civilization construction. In this way, cultural confidence and national image are demonstrated. Combined with the space conditions, we explore a narrative clue that is mainly based on logical relations and supplemented by temporal relations. From the origin of ecological concept to macro development, system composition to mesoscopic phenomenon, and from traditional concept to current innovation and development. The “six harmonies” narrative clues of “harmony between heaven, earth and man,” “harmony between four seasons,” “harmony between mountains and rivers,” “harmony between spring and river winds,” “peaceful and comfortable living,” and “harmony and symbiosis” were put forward, respectively representing the traditional ecological concept of harmony and simplicity, the green development concept of beautiful rivers and mountains, the ecological overall concept of harmonious symbiosis of mountains, forests, fields, lakes and grass, the concept of people’s livelihood and universal benefits of sharing ecological achievements, and the win-win global view of conspiring to build ecological systems. From philosophy to scenery, landscape and human settlements, and then to the global perspective, layout in order and step by step.

4.2.2 Space and media

The theme exhibition is located on the basement of the China National Pavilion. The architectural layout has been more restrictive. The entrance and exit are located in a fan-shaped hall, connecting a circular patio and a relatively small fan-shaped space through two corridors. On the one hand, we need to consider the space streamline, on the other hand, we need to consider the relationship between the space and the expression of the exhibition content under the limited conditions.

The prolog hall is quiet space compared with other halls. Through the combination of ramming earth, astrology and plant seeds, the poetic landscape painting skillfully composed of the three elements tamps the earth wall, reflecting the theme of the exhibition “endless life,” reflecting the philosophical thinking of Chinese ancestors on the harmony and unity of heaven, earth and man. “Harmony between Heaven, Earth and Man,” reflects the hazy cognition and simple emotion of Chinese ancestors on natural plants and reflects the simple natural view of harmonious coexistence between man and nature through the words related to plants in Chinese oracle bone inscriptions and the chapters eulogizing plants in the Book of Songs. Through AR technology to expand the knowledge of plants in the Book of Songs, the media began to participate in our exhibition. “Four Seasonal Scenes and Harmony,” is located on one of the corridors. We take the long scroll of the famous blue-green landscape “A

Thousand Miles of Rivers and Mountains” as the theme, use the immortal moss as the painting material to reproduce the classic scroll, and use the projection technology to perform dynamic light and shadow interpretation on it, depicting the combination of mountains and rivers, living between vegetation, and the benign interaction between human and nature, highlighting the cultural origin of the green development concept of “green water and green mountains are golden mountains and silver mountains.” “Landscape Harmony,” is located on the central axis of the building. In combination with the architectural space characteristics of the circular submerged courtyard, the audience moves from the quiet corridor to the bright open space, and the mood is mobilized to reach a small climax of the exhibition. The Shuiyuan Mountain Hall respectively displays 24 landmark and rare and characteristic plants in the history of Chinese horticulture. On the central axis of the building, the dialog between ancient and modern times, the harmony of mountains and rivers, and the formation of interesting landscape space, show the ecological holistic view of the symbiosis of mountains, forests, fields, lakes and grass. “Spring River Wind and Harmony,” echoes the exhibition hall of “Four Seasons Scenery and Harmony,” and is located on another corridor. With the title of *The Dwelling in Fuchun Mountains*, it vividly represents the ink and water artistic conception of *The Dwelling in Fuchun Mountains* by combining the plant art installation with the transparent light and shadow technology of electrified glass, and reveals the Chinese people’s pursuit of an ideal living environment full of poetic charm and the unity of nature and man. “Xianghe Yiju” is an innovative space progressive panoramic image space, with multi-layer gauze and image light and shadow strengthening the level and depth of space. With the representative themes of *The Painting of the Eighteen Scholars* and *The Painting of the Forty Scenes of the Summer Palace*, the audience is immersed and traversed in depth, making the audience feel like stepping into the painting, from the rhythm of the twigs and leaves and the breathing of flowers and birds, from the ecological interest of the literati residence to the royal garden, from the four seasons of spring, summer, autumn and winter, to feel the close combination of gardening and life, highlighting that a good ecological environment is the most inclusive well-being of the people’s livelihood. “harmony and symbiosis” reflects the innovative development of contemporary ecological civilization. The space is transformed from a symmetrical progressive traditional Chinese space to a modern landscape image space that emphasizes block changes. The audience is like walking on a huge blueprint, overlooking green mountains and waters, and full of vitality. Scenarios of major achievements in the protection and construction of contemporary ecological civilization in China are immediately visible, affirming China’s sense of ecological responsibility of “harmonious coexistence” and the win-win global view of “embracing all rivers.” The whole exhibition also reached a climax.

As shown in, the opening and closing changes of the whole spatial pattern and the involvement of the media are integrated with the space, and the media changes from point to line and then to immersion in the space, leading the audience to change their emotions from exploration to immersion, from pursuit to sudden openness, thus forming a novel and overall narrative experience (**Figure 4**).

5. Discussion

To summarize, this paper summarizes the four core elements of “space,” “matter,” “media” and “people” by combing and analyzing the evolution trend of academic



Figure 4.
Space and media narration of the Ecological Culture Exhibition in China Pavilion of the International Horticultural Expo.

development related to integration narrative design, and demonstrates the landing of the proposed integration narrative design ideas and methods through detailed discussion and exploration, as well as the exploration of theories and methods oriented to media and space integration narrative. It is practical, scientific and of great forward-looking value. For example, the exhibition design of the Confucius Museum and the China National Pavilion of the World Horticultural Exposition has won more than 10 important design awards at home and abroad, and has become one of the important topics for media reports and discussion in the cultural and museum circles. Among them, the total number of visitors to the design series of the China Pavilion of the World Horticultural Exposition by China Xinhua has exceeded 2 million, and the number of on-site visitors has also exceeded 5 million during the half-year session, which has become an important phenomenal work in China's cultural and museum industry in recent years. In addition, the following five points of thinking and inspiration have also been formed in the process of the rich practical experience of the front line.

5.1 The importance of curators' "media literacy": Increasingly prominent

In the exhibitions of the museum, communication is the purpose, and planning is the overall planning process to achieve the purpose. The success of the planning largely determines the attraction and success of the exhibition. Planning is a logical thinking that precedes text compilation and artistic design. It is a blueprint planning after comprehensive consideration of the theme, content, communication purpose, spatial structure and media means. In the current new exhibition planning activities, the understanding and understanding of the media has become an important quality of the curators, an important factor determining whether the exhibition planning is attractive and progressiveness, and an important reference and measurement factor for the later official and public evaluation criteria.

5.2 Integration narrative design method has become a key link in contemporary exhibition design

Text narration has a relatively mature mode. The first step of thinking and work of exhibition planning often starts from text narration. For example, for celebrity introductions, it is often explained from the character's life background, life experience,

intellectual contribution, influence of later generations and other aspects, which is natural and logical. But in museums, we need stronger emotional guidance and more focused interpretation paradigm. This kind of narration starts from the understanding of the main characteristics and characteristics of the exhibition theme and content, and comprehensively considers the purpose of exhibition communication, the conditions of architectural space, the possibility of exhibition streamline, the natural tendency of audience behavior, the guidance of audience emotion, the use of large space media and other elements, and echoes the logical narration and emotional clues, and integrates the space narration and media experience, so as to achieve the effective reconstruction of the integrated narration.

5.3 Design trend of museum exhibition under integration narrative: theater and theme

With the help of media means, the museum space tends to be a “mobile drama stage.” The audience walks through scenes one by one, feels different spatial expressions, accepts the information conveyed by different media, perceives the turning changes of the narrative plot, and participates in various activities to guide the audience’s cognitive and emotional experience. In the integration narrative, the “theatrical” and “thematic” approach has become an effective means used in the industry. It also uses the concept of “screen” in the stage language to connect the structure and logic of the narrative and guide the audience’s behavior (activities, emotions) actively and unconsciously.

5.4 Cross-disciplinary cooperation is an important way to stimulate new ideas

The design and research of integration narrative space involves many disciplines, such as history, archaeology, museum, communication, architecture, art design, new media, and so on. It requires interdisciplinary and cooperative research and personnel training with complex knowledge structure to realize the integrated, systematic and event-based comprehensive narrative mode and new knowledge dissemination system. In the interdisciplinary team, designers’ space awareness, visual thinking and media literacy play a key role in the creative transformation from text narration to integrated narration, but at the same time, attention and experience accumulation from the perspective of content creation, narrative logic and communication audience cannot be ignored. These organic integration with space, media and vision can help the design team to promote more targeted, innovative and diversified creative transformation and generation.

5.5 Training of new creative talents oriented to integrated narrative: Imminent

The process of transformation from knowledge text to exhibition script is an important stage of creative transformation, and many breakthrough and important ideas are often generated at this stage. Traditionally, the transformation of this stage is often completed by experts who provide knowledge, but this often leads to the little difference between the exhibition script and the knowledge text, which is still limited to the text narrative thinking, and has not effectively completed the transformation to the integrated space exhibition language, and it is difficult to effectively stimulate the large design creativity. In the future, the chief director of integrating narrative space needs content and story creators with space and esthetic experience, or space

designers with macro logic consciousness and narrative ability, content creativity and exhibition thinking. Only by breaking through the inherent professional category and thinking paradigm and integrating multidisciplinary knowledge and experience can we play a leading role in the integration of narrative space and bring creative breakthroughs and systematic innovation. Therefore, the guidance and training of cross-creative talents and the discussion, setting and teaching of relevant courses or discipline systems are the initial core and focus of the current work in this field, and are also in urgent need.

6. Conclusion

In conclusion, the idea and method of integrating space and media narrative proposed in this paper is a relatively new solution and design understanding put forward by the author's team in view of the cutting-edge changes in the development of the industry in the face of new technological challenges in museums over the years. Although it has the meaning of preliminary exploration, it has also obtained good feedback and verification. Therefore, the participation of digital media and other elements is not only a useful supplement to the new museum space, but also an active builder of the new museum space. Its involvement will reconstruct our understanding of the narrative system of museum space, and bring new ideas and creativity in narrative mode, space construction and even museum architectural design. Looking forward to the future, with the media narrative occupying an increasingly important position and role in the museum space narrative, the designers' understanding of the museum's social education value and attention to the audience's behavior are becoming clearer and clearer. In combination with the systematic training of interdisciplinary disciplines and the designers' cross-learning, we believe that the future will be more systematic and systematic integration of narrative design ideas, concepts, strategies, methods and even systems and paradigms, It will take shape gradually. On the other hand, we also hope to have close communication and partnership with more relevant research teams abroad, so as to make greater research contributions.

Acknowledgements

The paper is supported by the National Social Science Foundation project Research on the Application of Interactive Design in the Field of Cultural Heritage Display and Communication (20BG127), the liberal arts special project of Tsinghua University's independent scientific research program Research on Knowledge Organization and Service for Cultural Heritage (w02), and the key scientific research project of the National Museum of China in 2021 Research on Intelligent Interactive Design of Museum Exhibition Based on Audience Experience (GBKX2021Z10).

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