

The Embodiment of Interactive Imagery and the Narrative Practice Perspective of Drama Terracotta Show

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ABSTRACT

As a traditional art containing characters and narrative genes, the “performativity” of the drama terracotta has been sealed for a long time due to physical solidification and viewing barriers. This paper takes the drama terracotta as the research object, integrates art and media theory, and uses interdisciplinary case analysis to analyze the practice of interactive images and drama terracotta. It constructs a narrative framework with “embodied interaction” as the core, activates the contemporary narrative potential of the drama terracotta, and reveals the integration mechanism of interactivity, body perception and narrative construction. Its theoretical significance lies in broadening the boundary between narratology and performance research. In practice, it provides a specific path for the innovative development of new media art creation and traditional cultural performance.

Keywords: *Drama terracotta, Interactive imaging, Digitization, Performativity.*

1. INTRODUCTION

Classical narratology is a theoretical framework for studying the way stories are told. It focuses on how stories are constructed, organized and presented. The body narratology, which emerged at the end of the 20th century, further incorporates the body dimension to explore how the body affects the narrative and how the human being as a body narrates the body. This theoretical perspective provides a key framework for understanding the relationship between interactive images and drama terracotta.

The traditional opera art contains profound aesthetic value. The physical solidification and spatialization of its performance are the figurines. Its narrative relies on the hint of static modeling and the completion of the viewer's imagination, which constitutes the core dilemma of its contemporary transformation. It also points out its core potential-to release the “performativity” that has been sealed. Interactive image is the digital flow and time development of performance, which directly constructs the narrative process through dynamic image and user operation. The two are one

static and one dynamic, one real and one virtual, forming a comparison between traditional material carriers and contemporary digital media. The combination of the two is not a simple digital replication, but a remodeling of the narrative mechanism. The interactive image takes the drama terracotta as the cultural prototype and narrative gene, and constructs an accessible, influential and experiential “narrative field” through interactive design. This makes the viewing of the drama terracotta change from passive and static appreciation to active and embodied narrative practice.

2. INTERACTIVE IMAGING AND DRAMA TERRACOTTA FROM THE PERSPECTIVE OF BODY NARRATOLOGY

Body narratology points out that the body is the core power and symbolic carrier of narrative development. Combined with Merleau-Ponty's “situational body” theory, it is further clarified as “situational body”, thus providing internal motivation for the development of the plot. As a

solidified body posture, the drama terracotta seals the potential of traditional narrative; the interactive image is transformed into a dynamic and participatory narrative process through embodied interaction. The dialogue between the two in the dimension of "body as a narrative medium" enables digital technology to activate the body narrative contained in the drama terracotta, promote the narrative practice of viewing from passive interpretation to physical presence, and reconstruct the integrated relationship between performance and narration.

2.1 Embodied Characteristics in Interactive Imaging Technology

The embodied characteristics of interactive images are establishing the central position of the body in cognition and meaning generation from the philosophical level. As a "descriptive essence of pure experience" (Husserl)¹, phenomenology has laid a solid philosophical foundation for the study of experience design. Under this theoretical framework, embodiment defines the fundamental principle that interactive images should take the user's body as the core medium of narrative generation; "Coexistence, empathy and commonality" together constitute a three-in-one technology-experience framework to achieve this principle.

The characteristic of "coexistence" is the spatial basis of embodiment, which constructs the field of "situational body". The space in which the figurines of current era are located is no longer a container that simply carries functions such as collection, display, and research, but a content structure that can be revealed through the user's physical experience. As the core structural element of narrative, the body situation is also the cognitive channel for readers to enter and decode the story world. Introducing this view into the study of drama terracotta means that the role of users will change from passive viewers to active experiencers and participants in narrative generation. The first interactive VR Peking Opera "Qingyuan Fantasy" in China has constructed a real-time "action-feedback" closed loop: the audience "becomes" "Xiaoqing", whose gestures, postures and other actions are captured instantly and directly trigger the plot branch and visual feedback, eliminating the interaction delay in traditional media, making the

physical behavior and narrative evolution closely coupled in the virtual space-time, and realizing the embodied presence fusion.

The characteristic of "empathy" is the internal driving force to promote the narrative drive of embodiment. In the 1980s, scholars Francisco Varela and Evan Thompson put forward the concept of "vivid cognition", emphasizing the direct interaction between perceptual behavior and the surrounding environment, expounding the concreteness and dynamics of cognition, further enriching the theoretical connotation of embodied cognition and making it closer to life experience. Subsequently, Don Ihde applied embodiment to the field of philosophy of technology and proposed a post-phenomenological theory with technical embodiment as the core. He believes that technology not only changes our perceptual structure, but also constitutes an intermediary between people and the world, and promotes the transformation of embodiment from perceptual embodiment to perceptual embodiment mediated by technology.² VR Peking Opera "Qingyuan Huanxing" achieves state synchronization through physical interaction. Interactive imaging technology makes the empathy mechanism no longer rely on psychological association, but resort to mandatory physical simulation. For example, the audience needs to make "Jianjue" and other program gestures to unlock the plot, so that the body is brought into the role state, and the emotions and motivations of the role are unconsciously synchronized in the action imitation, so as to realize the deep immersion and emotional substitution from physical action to psychological experience. ("Figure 1")

The "commonality" feature is an embodied meaning mechanism that enhances the symbolic narrative process of the body. The final work is sublimated to the realm of "commonality", that is, the time and space of audio-visual language and emotional resonance. It does not simply splice traditional symbols and digital scenes, but creates a participatory and co-constitutable cultural narrative space-time. The interactive VR Beijing Opera "Qingyuan Huanxing" high-fidelity Beijing Opera singing and freehand performance program are integrated with the digital West Lake landscape, and the audience experience it with an unprecedented "internal perspective". The individual's interactive choice and the collectively

1. Ni Liangkang, An Exposition of Husserl's Phenomenological Concepts (Revised Edition), 2nd Edition [M]. Beijing: SDX Joint Publishing, 2007, p.142.

2. (U.S.) Don Ihde. Making Things "Speak": Post-Phenomenology and Technological Science [M]. Translated by Han Lianqing. Beijing: Peking University Press, 2008: 12.

shared cultural memory converge here, jointly generating an experience that is both personally unique and deeply rooted in cultural roots, and realizing the resonance and coexistence of the traditional aesthetic spirit and contemporary individual emotions in a new dimension.



Figure 1 Qingyuan Huanxing - AI Co-creation interactive VR peking opera cultural appreciation immersive narrative work.

a Image Source: School of Journalism and Communication, Beijing Normal University

2.2 Performance Characteristics of Drama Terracotta

The drama terracotta is a funerary object buried with the deceased in ancient Chinese tombs, simulating performing arts such as music and dance, acrobatics, and storytelling. Its performative nature is rooted in the "stylized" aesthetics of traditional Chinese opera. Drawing on J.L. Austin's "speech act theory" and subsequent discussions on performance research, the "performative nature" of the drama terracotta does not refer to a completed action, but rather to a dynamic potential jointly carried by its form, posture, and the ritual or dramatic context in which it is placed. It implies that the drama terracotta is not only a static record of past performances, but also an action framework and communication medium that contains "re-stimulability," always preserving a potential dimension for dialogue and reawakening with the present.

The performativity of the drama terracotta is embodied in the concise, stylized moments. Merleau-Ponty's "body schema" theory points out that the body is not an object isolated from the world, but rather a subject of perception and action. Through highly refined body postures, gestures, expressions, and costumes, the most representative dynamic moments in opera performances are captured and frozen. When the audience gazing at the drama terracotta, they are not merely observing a static object, but rather, through their own bodily

perception and movement experience, they "move with the terracotta" in their consciousness, reconstructing the movement sequence and emotional tension implied by its posture. Thus, in the dialectic of stillness and movement, object and body, the viewer experiences the temporal extension of the performance.

The performativity of the drama terracotta is reflected in their open narrative structure. Through their poses, combinations, and spatial settings, they stimulate the viewer's active imagination and narrative completion of the dramatic plot, character relationships, and situations. Under the influence of the Han Dynasty's funeral concept of "treating the dead as if they were alive", the drama terracotta are not only material settings for creating entertainment life in the netherworld for the tomb owner, but also important carriers of social culture, aesthetic taste, and ethical concepts at that time. The combination of different drama terracotta, such as music and dance drama terracotta, speak and sing drama terracotta, and acrobatics drama terracotta, together constitute a symbolic ritual scene, which stimulates the audience's association with the performance form, social customs and even spiritual beliefs at that time and the active completion of the narrative plot.

However, the performativity of the drama terracotta faces its fundamental dilemma, that is, the multi-dimensional loss caused by the solidification of physics: the flow of time, the presence of sound, and the immediate viewing interaction are all suspended. It is this "unfinished" state that constitutes the third feature of its performance — the interactive potential to be activated. The drama terracotta carries all the elements of the performance at the symbolic level, but they cannot complete the performance independently; it relies on the audience's cultural decoding ability, physical empathy and imaginary participation to achieve the transmission of meaning. This internal open interface provides a logical starting point for the intervention of contemporary digital media.

2.3 Construction of the Theory of Inter-media Bodily Presence

In the traditional exhibition mode, this "body-performance" circuit is broken. Interactive images are designed to repair and enhance this loop, so that the audience from the "bystanders" into the "co-performer". The two together constitute the theoretical basis of the dynamic dialogue between

cultural relics and audiences, so that the dramatic moments in history can be continued in the contemporary experience.

In the interactive situation, the body's movement, posture and spatial position become the most primitive "questions". When the audience's body makes a tentative action, it is not manipulating an external object, but "calling" to the solidified form of the drama terracotta with its unique movement logic and perception. This intentional movement of the body is the first driving force to break the static seal of the figurines and touch their internal "performative" potential. The "performativity" of the drama terracotta needs to be completed and confirmed by a "present" and embodied audience. This is no longer a one-way viewing, but in the process of simulating, echoing and even triggering the action of the drama terracotta, emotional resonance and physical and mental immersion are generated, forming a cross-temporal and embodied "co-performance relationship". "Presence" is the ultimate experience state generated by the above interaction. It is not a simple physical proximity, but a perceptual field formed by the deep mutual infiltration of the body and the activated performativity. In this field, the physical experience of the audience (such as the smoothness of the dance, the solemnity of the ceremony) and the historical performance potential carried by the drama terracotta (such as the charm of the classical dance, the emotion of the drama role) are intertwined and filled with each other. The subject-object boundary is blurred here, and the audience enters an immersive state of "I am in the performance, and the performance is also in me". This "presence" is both spatial and meaningful. ("Figure 2")

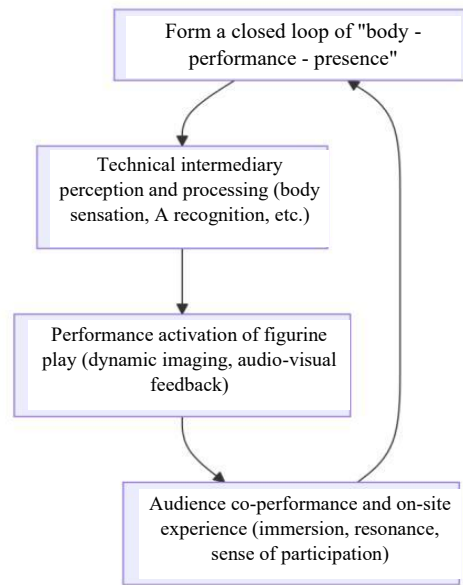


Figure 2 Interaction flowchart.

3. TECHNICAL IMPLEMENTATION AND EXPERIENCE GENERATION OF INTERACTIVE IMAGING SYSTEM

The interactive image system for the drama terracotta (such as the Han Dynasty speak and sing drama terracotta, dance drama terracotta, acrobatic drama terracotta and other pottery drama terracotta that perform ancient performing arts scenes) transforms the audience into co-actors by constructing an interactive closed loop of "body movements - real-time feedback". This not only technically breaks the limitation of time and space, but also makes the figurines dynamically "awake". Moreover, at the experience level, through personalized narrative and multi-sensory immersion, the audience can obtain a sense of physical cultural participation. Its core value lies in the fact that technology, as an intermediary, promotes the paradigm shift of cultural heritage interpretation from "static preservation" to "living generation".

3.1 Technical Implementation of Interactive Imaging System

The interactive image system transforms the audience's body dynamics into system input in real time through motion capture and somatosensory sensing, so that the museum narrative changes from a one-way display to a dynamic field where the audience and the scene continue to talk and jointly

generate meaning. Its core is the real-time cycle of “body action-system response”. The system recognizes postures and awakens the virtual dynamics of the figurines to achieve body dialogue across time and space. The movement and choice of the audience drives the evolution of elements such as virtual stage, light and shadow, and roles, making the body the key to reconstructing the cultural field. Parameters such as movement rhythm and strength regulate music and sound effects in real time, and promote the co-creation of individual rhythm and historical performance rhythm.

The interactive layer integrates somatosensory sensing (Kinect, depth camera), touch screen and physical prop sensing (such as imitation instrument controller). When the preset command is triggered, the image and narrative feedback is instant. On the image presentation, augmented reality allows the audience to aim at the showcase drama terracotta through a tablet, AR glasses or mobile phone. The screen is superimposed on the dance dynamics, and the virtual and the real are on the same stage; Immersive projection uses multiple projectors to seamlessly project the dance and banquet scenes of the drama terracotta to the wall or the ground to create a sense of encirclement; the holographic phantom cabinet presents a three-dimensional dynamic illusion next to the cultural relics or in an independent display cabinet. The three extend the

interactive interface between the body and the cultural relics on different scales.

Taking the VR experience system of the acrobatics terracotta in the Mausoleum of the First Qin Emperor as a typical example: High-precision 3D scanning and virtual restoration are used to construct realistic digital models. The artificial potential field algorithm optimizes users' free movement in virtual space, and collision detection technology enables precise interaction between the controller and cultural relics. The three-layer narrative progression of guidance, exploration, and interaction gradually guides the audience from passive viewing to active exploration. This system integrates the aforementioned interaction logic, sensing technology, and imaging methods into a coherent whole - the mapping of body sensation and controller interaction to the instantaneous response of the drama terracotta, allowing the rhythm of the Qin Dynasty acrobatics to be re-enacted through the audience's bodies. As a result, interactive imaging is no longer just a technological overlay, but becomes an engine for generating cultural significance. The audience's bodies serve as both input devices and narrative subjects, jointly writing a flowing museum text through every gaze, step, and touch with the acrobatic figurines.(“Figure 3”)

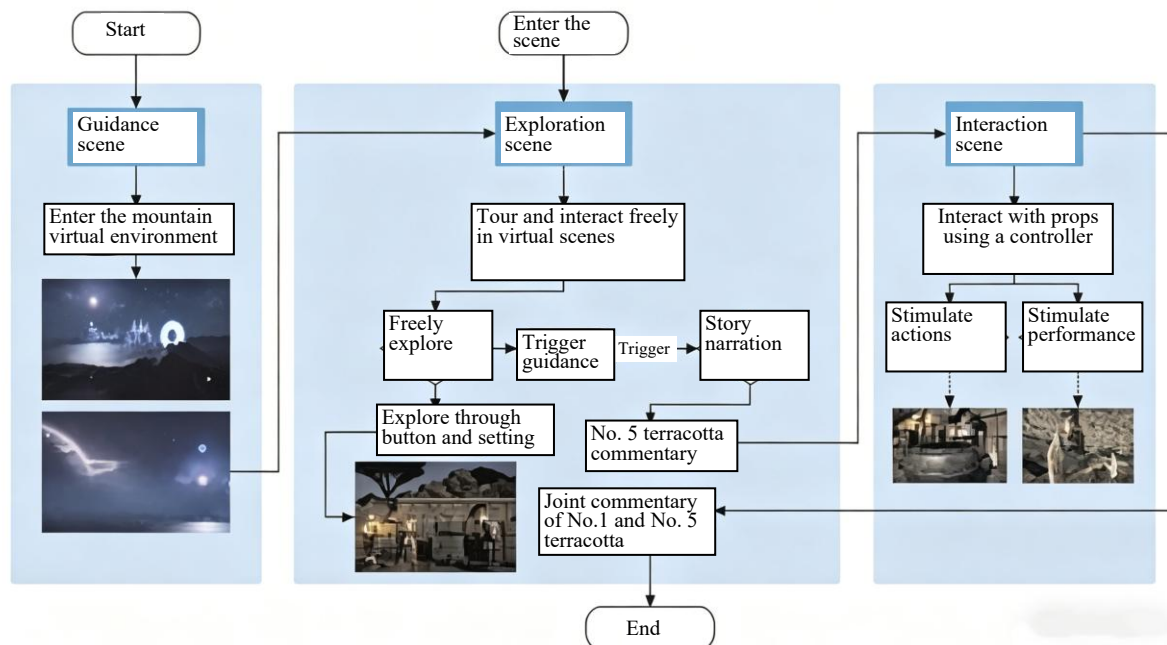


Figure 3 VR experience flowchart of drama terracotta.

3.2 Experience Generation of Interactive Imaging System

The ultimate goal of technological implementation is to generate a multi-layered and meaningful visiting experience, transforming drama terracotta from "viewable cultural relics" into "dialogue-able actors". In contemporary museum curation and spatial design, emphasizing the "physical presence" of the audience has become an important trend. The curators no longer only regard the exhibition as a one-way transmission of information, but actively stimulate the physical perception and cognitive input of visitors through multiple sensory media such as immersive dynamic line planning, interactive visual graphics, sound and light environment, and tactile devices. In this comprehensive experience construction, color is especially dynamic — it is not only a decoration or logo, but also an atmosphere language and interactive clue that infiltrates the space. It is deeply involved in shaping the audience's presence experience and guiding their body and space for continuous and in-depth perceptual dialogue. This relationship transcends simple visual design and constructs a complete set of cultural narrative fields. Under the blessing of different colors, space becomes the carrier to guide users to interpret historical semantics.

The navigation scene of VR experience system for the acrobatics terracotta of the Qin Shihuang Mausoleum is based on the virtual environment of Lishan Mountain. With the help of a calm atmosphere and narration, the experiencer is guided to turn the perspective and follow the lens to roam. In the immersion, the historical background of Qin Mausoleum and K9901 funerary pit is preliminarily recognized, and the concentration and sense of substitution are improved. About the exploration scene fusion free roaming and story triggering: the user is close to the acrobatics terracotta, which automatically activates the narrative explanation. The system reduces the interference by limiting the interactive position and promotes the independent exploration and cognition of the acrobatics knowledge. The interactive scene relies on the VR handle to transform the drama performance art into a physical experience. The user can lift the bronze ding ornamental pattern, simulate the "carrying ding" throwing action, or alternately climb through the handle to find the road, and experience the thrilling and skills of the performance. The three-layer scene is from shallow to deep, from historical tour, knowledge exploration to skill interaction, and completes the cognitive transition from "viewing" to "experiencing".

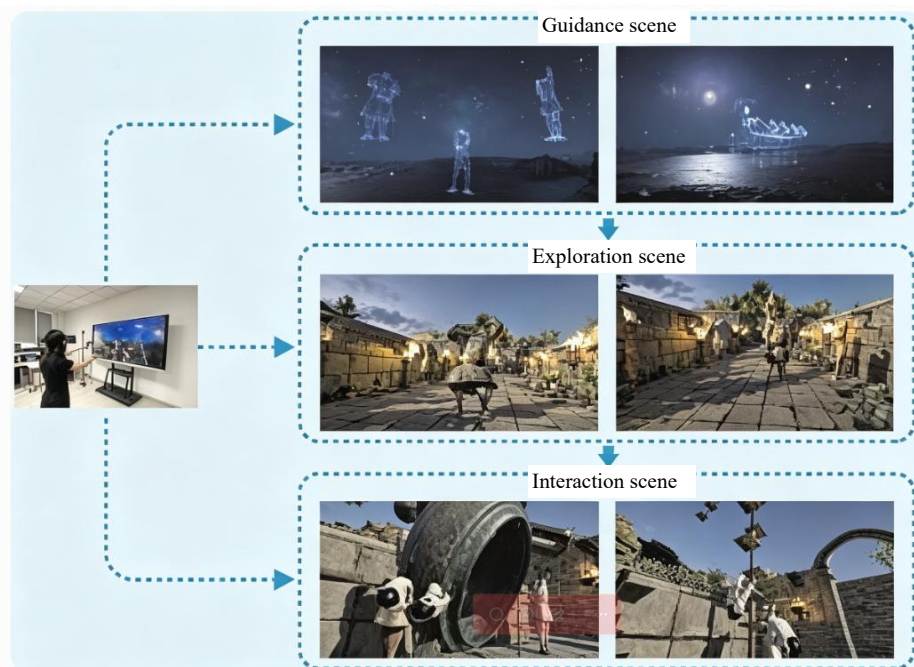


Figure 4 Three experience scenes in the VR system of acrobatics terracotta.

3.3 Interactive Imaging Under Artificial Intelligence

The development of artificial intelligence has brought new possibilities for interactive images and played an important role in reconstructing personalized and customized embodied image content. With the development of modern technologies such as virtual reality and artificial intelligence, the connection between technology and body is getting closer and closer, and even the boundary is blurred to some extent. There is a trend of "technologization of the body" and "bodification of technology", which makes the original subject-object binary opposition based on the dichotomy of body and mind seriously challenged. Artificial intelligence can accurately understand the unique needs of each audience by analyzing the behavior data and preferences of the audience.³ The AI immersive interactive experience of "Xiyun Yongsheng" produced by the Stage Art Department of China Academy of Traditional Opera breaks through the shackles of the static display paradigm of cultural relics, takes "digital activation of cultural relics and intelligent remodeling experience" as the core concept, and constructs a new paradigm of opera digital experience with interactivity, immersion and communicability. With the help of artificial intelligence generated content (AIGC) technology, the project empowers the narrative reconstruction of cultural relics, so that the audience can intuitively recognize the performance form and evolution pedigree of ancient Chinese operas in embodied interaction and immersive perception. Through the cognitive transition from "watching" to "experiencing", it promotes the transformation of special cultural relics into cultural media of embodied perception, interactive participation and ubiquitous communication, and opens up an intelligent paradigm transformation path for the living inheritance of opera cultural heritage. ("Figure 5")



Figure 5 "Xiyun Yongsheng" AI immersive interactive experience.

a Image Source: National Academy of Chinese Theatre Arts

4. PARADIGM EVOLUTION FROM "ACTIVATING DRAMA TERRACOTTA" TO "INTELLIGENT ENVIRONMENT OF HUMAN TERRACOTTA"

The digital interactive technology promotes the transformation of drama terracotta culture from "cultural relic storage" to "living inheritance". High-precision restoration, AIGC-driven and gesture interaction activate performativity, so that the audience can "wake up" and perform together with embodied interaction, build an immersive "phenomenon field", and realize embodied and decentralized experience. Interactive images activate performing historical memories, expand the value of cultural relics, and open up innovative paths for cultural inheritance. However, technology also brings experience dilemmas such as lack of authenticity and strong interaction presupposition, and ethical challenges such as digital avatar weakening ontological attention and interpretation right transfer, which need to be reflected and adjusted in integration.

4.1 Core Cultural Values - from "Preservation of Cultural Relics" to "Living Inheritance"

Under the paradigm of traditional museology and cultural relics protection, the cultural existence of the drama terracotta (such as the acrobats terracotta figures of the Qin tombs, the opera terracotta figures of the Jin Dynasty, etc.) can usually be summarized as "cultural relics preservation". The core of this model lies in static guarding and object gaze: cultural relics are placed in a constant temperature and humidity display cabinet, and their historical information is

3. Zhou Liyun, Pang Xiyuan, Body and Technology from the Perspective of Technology Phenomenology [J]. Journal of University of Shanghai for Science and Technology(Social Sciences Edition), 2015,37(04): 354-358.

explained through one-dimensional texts such as labels and catalogues. There is an insurmountable physical and cognitive distance between the audience and the cultural relics. The vivid performance originally carried by the drama terracotta — the dramatic moment solidified by its posture, the etiquette regulation contained in the costumes, the emotional tension conveyed by the expressions, and the millennium cultural memory experienced by the “body” are in a state of silence and dormancy. However, with the development of digital technology and contemporary interpretation concepts, a “living inheritance” paradigm with interactive images as the key intermediary is emerging. It is no longer satisfied with the preservation of cultural relics as “specimens”, but is committed to activating its inherent “life” state, realizing the fundamental value shift from the preservation of “things” to the interpretation of “things”, from “static history” to “experienceable tradition”.

The technology can carry out high-precision digital restoration and creative extension based on the remaining physical traces of the drama terracotta (such as painted patterns and unique postures). Through projection mapping, augmented reality (AR) and other technologies, interactive images can put the drama terracotta back to their original cultural context. The static exhibition space can be instantly transformed into a noisy Han Dynasty theater, and the multi-sensory dimension understands the occasion, function and atmosphere of the performance of the drama terracotta. The profound cultural significance of this turn is that it enables the “performing physical experience” of the figurines to be reproduced and inherited in the contemporary era. The acrobatic play “A Thousand Years with a Finger”, a collaboration between the Emperor Qinshihuang's Mausoleum Site Museum and the Shaanxi Acrobatic Art Troupe, starts with the fingerprint on the belly of the “supine figurine”. Dynamic projection technology uses visual means to show the whole process of cultural relics restoration and rebirth. From the broken pottery pieces to the complete figurine body, the shocking picture formed by fragment aggregation makes the figurines full of vitality, and also makes the ancient pottery making process show vitality again. With the joint action of lighting and mechanical devices, the two scenes of time and space can be superimposed and displayed: when the moonlight enters the restoration hall and illuminates the fingerprint traces of the drama terracotta, the boundary of time and space is broken, and the

restorer and the ancient potter realize the separation of space and time. This kind of cross-view across the millennium has transformed the archaeological discoveries that originally existed only in museum showcases and academic literature into vivid narratives that the audience can perceive and resonate with. Through this intermediary, the audience feels no longer the cold clay, but the temperature of the fingertips, the breath of labor, and the common ingenuity in the inheritance of skills. The “body” of the drama terracotta has thus become a bridge connecting the spiritual world of ancient and modern laborers. The content of its inheritance has also been sublimated from specific cultural relics knowledge to the continuation of cultural genes and national emotions. (“Figure 6”)



Figure 6 Acrobatic play "A Thousand Years with One Finger".

a Photo source: Shaanxi Acrobatic Art Troupe Co., Ltd.

4.2 Activation and Exploration of Performative Qualities of Drama Terracotta Under Artificial Intelligence

The work “Jin Shi Sheng · Xi Zhong Ling” innovatively integrates AIGC and digital shadow media to create an immersive experience for the vast audience of cultural and digital art enthusiasts, enabling a deep dialogue with traditional opera artifacts. Through high-precision 3D modeling for digital restoration, it focuses on representative sculptures and figurines of miscellaneous dramas from the three major stages of opera's “conception,” “formation,” and “prosperity.” Its core interaction relies on Leap Motion real-time interaction technology and the TouchDesigner visual programming platform. A pathway for the development of traditional opera artifacts, led primarily by gesture interaction, has been constructed. Firstly, artificial intelligence technology is employed to conduct high-precision 3D digital restoration of representative figurines and carved bricks from the three historical stages of opera's “conception”, “formation”, and “prosperity”,

establishing an accurate virtual model library. The system's interaction logic revolves around a closed loop of "gesture mapping - real-time driving - dynamic feedback". The Leap Motion sensor precisely captures the posture, position, and motion trajectory of the audience's hands and fingers in the air, converting them into a high-dimensional skeletal data stream. The TouchDesigner platform serves as a combination of a "digital director" and a "virtual stage": it analyzes the input gesture data in real time and, through preset yet flexible algorithms

(such as recognizing specific hand postures as "invitation", "guidance", "clapping", and other commands), drives the corresponding opera figurine models to activate their pre-set or programmatically generated animation sequences. This rigid, static digital twin of cultural artifacts "wakes up" on the screen, either dancing gracefully or performing segments, achieving an instantaneous transformation from a static form to dynamic performance.(“Table 1”)

Table 1. AI restoration

					
Before processing	Processed	Before processing	Processed	Before processing	Processed
Pottery drama terracotta		Brick carvings of Song Dynasty drama from Lingshi Temple Pagoda in Huangyan City, Zhejiang Province.		The tomb drama terracotta of Hong Zicheng from the Southern Song Dynasty in Yinjiacun Village, Poyang City, Jiangxi Province.	

a Image Source: Self-made by the Author

The experience generated by this technological interaction profoundly embodies the symbiotic generation of "body-performance-presence" described earlier. Firstly, gestures become a kind of embodied "summoning" ritual that transcends language. Instead of using buttons or menus, the audience directly employs the ancient expression of their own bodies - gestures - to invite a dialogue with historical artifacts. When the audience imitates opera routines or makes exploratory movements, their bodily intentions directly intervene in the historical narrative. Secondly, feedback constructs a "co-performance" relationship across time and space. The dynamic response of the drama terracotta is not a mechanical repetition, but rather an interactive dialogue loop of "audience initiation-figurine interpretation-audience response" formed by combining the core historical movement paradigm with visual changes generated by the intensity and rhythm of real-time gestures. In the process of attempting to "awaken" different figurines and trigger continuous scenes through combination, the audience physically experiences and understands the morphological evolution of opera from song and dance to narrative drama. Ultimately, a deep sense of "historical presence" is condensed. In the dim experiential space, the audience gazes at the screen and sees their virtual hand shadows dancing and interacting with the revived thousand-year-old drama terracotta in the

same light and shadow field, temporarily suspending the material barrier and linearity of time. The boundaries between subject and object, present and past, real and virtual blur in embodied interaction, jointly "generating" a performative event rather than simply restoring historical scenes. In this event, the performative potential of the drama terracotta is reactivated and reinterpreted through the bodily experience of contemporary audiences, completing the transformation from "staring at cultural relics" to "spiritual existence that can be dialogued and co-performed", providing an embodied innovative path for the "living inheritance" of cultural heritage.

4.3 Outlooks

The digital presentation of cultural heritage is gradually evolving towards a new paradigm of "hyper-dimensional fusion". Its core lies in the shift from merely relying on "technical restoration" to a narrative ecosystem characterized by "intelligent co-creation among people, figurines, and environments". In terms of technology, artificial intelligence (AI), extended reality (XR), and humanoid robots have achieved deep collaboration: AI can analyze the morphological structure of figurines, understand and generate performance-like movements and emotional expressions, XR technology creates a seamless immersive space

where virtual and real elements blend, and robot technology endows the drama terracotta with physical agency, allowing them to step out of the display case and participate in interactions, achieving a human-machine dance scene like that in the work "Soul of Qin Terracotta Warriors".

In terms of experience, this paradigm has been promoted from passive "viewing interaction" to active "guiding co-creation": the audience can rely on gestures, body movements and even physiological signals to participate in, and carry out improvisational interaction and collaborative creation with AI-driven drama terracotta, becoming an organic part of narrative construction. Technology will gradually hide in the background, and the focus of experience will return to the humanistic connotation-cultural memory is reactivated and inherited in deep individual participation.

5. CONCLUSION

The author of this paper believes that the relationship between the two is essentially complementary and generative: the drama terracotta raises a question about how the traditional performance culture is contemporary; interactive images provide a set of specific solutions and theoretical perspectives with their media characteristics, thus activating the cultural genes of the drama terracotta and generating new narrative life in the modern context.

In the evolution of interactive image technology, embodied theory provides a key theoretical framework for it, and promotes the transformation of image narrative from one-way communication to multi-dimensional meaning construction with body as the intermediary. Technology has realized the "embodied turn" from philosophical origin to artistic practice. Through the virtual avatar, multi-channel perception interface and metaphorical interaction mechanism, it has reshaped the spatial presence, behavioral agency and emotional substitution depth of the audience in the narrative. In the future, with the continuous iteration of sensing technology, artificial intelligence to generate content and natural interaction system, interactive images will further enhance the personalization and transparency of embodied narrative, and finally build a new image language and aesthetic paradigm with physical experience as the core.

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