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

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ABSTRACT
As a traditional art form embodying roles and narrative genes, the "performative" aspect of drama terracotta has been sealed for a long time due to physical solidification and viewing barriers. This paper takes drama terracotta as the research object, integrates art studies and media theory, and adopts an interdisciplinary case analysis method to analyze interactive imaging and figurine drama performance practices. It constructs a narrative framework centered on "embodied interaction", activates the contemporary narrative potential of drama terracotta, and reveals the integrated mechanism of interactivity, bodily perception, and narrative construction. Its theoretical significance lies in broadening the boundaries of narratology and performance studies, while in practice, it provides a specific path for the innovative development of new media art creation and traditional cultural performances.

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

1. INTRODUCTION

Classical narratology is a theoretical framework for studying the way stories are told, focusing on how stories are constructed, organized, and presented. The rise of body narratology in the late 20th century further incorporated the dimension of the body, exploring how the body influences narration and how humans, as bodily beings, narrate their own bodies. This theoretical perspective provides a key framework for understanding the relationship between interactive imagery and figurines.

Traditional opera art embodies profound aesthetic value. Its physical solidification and spatial presentation in performance are embodied by drama terracotta, and its narrative relies on the hints of static modeling and the viewer's imagination to complete. This constitutes the core dilemma of its contemporary transformation and also points out its core potential—releasing the sealed "performativity". Interactive imaging, on the other hand, represents the digital flow and temporal unfolding of performance, directly constructing narrative progression through dynamic imagery and user interaction. The combination of the two, one static and one dynamic, one tangible and one virtual, forms a contrast between traditional material carriers and contemporary digital media. The integration of the two is not a simple digital replication but a reshaping of narrative mechanisms. Interactive imaging takes drama terracottas as cultural prototypes and narrative genes, constructing an "narrative field" through interactive design that is accessible, influential, and experiential. This transforms the viewing of drama terracotta from passive, contemplative appreciation to active, embodied narrative practice.

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

Body narratology posits that the body serves as the core driving force and symbolic carrier for narrative unfolding. Incorporating Merleau-Ponty's "situated body" theory, it is further clarified as "situated flesh," thereby providing an intrinsic motivation for plot development. As a frozen body

posture, the drama terracotta encapsulates the potential of traditional narrative; interactive imaging, through embodied interaction, transforms it into a dynamic, participatory narrative process. The two engage in a dialogue on the dimension of "the body as a narrative medium", enabling digital technology to activate the inherent body narrative of the drama terracotta and shift viewing from passive interpretation to bodily present narrative practice, thus reconstructing the integrated relationship between performance and narration.

2.1 Embodied Characteristics in Interactive Imaging Technology

The embodied characteristics of interactive imagery are establishing the centrality of the body in cognition and meaning generation from a philosophical perspective. Phenomenology, as "the descriptive essentialism of pure experience" (Husserl)[1], lays a solid philosophical foundation for the study of experience design. Within this theoretical framework, embodiment defines the fundamental principle that interactive imagery should use the user's body as the core medium for narrative generation; while "coexistence, empathy, and commonality" together constitute a trinity of technology-experience framework to realize this principle.

The "coexistence" characteristic serves as the spatial foundation of embodiment, constructing the field of the "situated flesh". The space in which today's drama terracottas are situated is no longer merely a container for collection, display, and research; rather, it is a content structure that can be manifested through the bodily experiences of users. As a core structural element of narrative, bodily context also serves as a cognitive pathway for readers to enter and decode the story world. Introducing this perspective into the study of drama terracotta signifies a shift in the role of users, from passive observers to active experiencers and participants in narrative generation. "Qingyuan Huanxing", the first interactive VR Peking Opera in China, establishes a real-time "action-feedback" loop: the audience is incarnated as "Xiaoqing", and their gestures, postures, and other movements are instantly captured and directly trigger plot branches and visual feedback, eliminating the interaction delay found in traditional media. This allows bodily actions and narrative evolution to closely couple in virtual space, achieving an embodiment-based fusion of presence.

The "empathy" characteristic serves as the intrinsic driving force behind the narrative drive of embodied cognition. The "empathy" characteristic serves as the intrinsic driving force behind the narrative drive of embodied cognition. In the 1980s, scholars Francisco Varela and Evan Thompson introduced the concept of "vivid cognition", emphasizing the direct interaction between perceptual behavior and the surrounding environment. They elaborated on the embodiment and dynamism of cognition, further enriching the theoretical connotation of embodied cognition and bringing it closer to life experience. Subsequently, Don Ihde applied embodied cognition to the field of technological philosophy, proposing a post-phenomenological theory centered on technological embodiment. He believed that technology not only alters our perceptual structure but also constitutes a medium for human interaction with the world, driving the shift of embodiment from perceptual embodiment to perceptual embodiment mediated by technology. [2] The VR Peking Opera "Qingyuan Huanxing" achieves state synchronization through physical interaction, and interactive imaging technology enables the empathy mechanism to rely less on psychological association and instead resort to compulsory physical simulation. For example, the audience needs to personally make programmed gestures such as the "sword technique" to unlock the plot, thereby bringing the body into the role state and unconsciously synchronizing the character's emotions and motivations through action imitation, thus achieving deep immersion and emotional engagement from physical action to psychological experience.(“Fiugure 1”)

The "commonality" feature represents an embodied meaning mechanism that enhances the process of symbolizing the body through narrative. Ultimately, the work sublimates to the realm of "commonality", which is the simultaneous presence of audiovisual language and emotional resonance in time and space. It is not simply a concatenation of traditional symbols and digital scenes, but rather creates a participatory and co-constructive cultural narrative space-time. The interactive VR Peking Opera "Qingyuan Huanxing" integrates high-fidelity Peking Opera vocals, freehand performance styles, and digitized West Lake misty rain scenery,

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.

allowing the audience to experience it from an unprecedented "internal perspective". Individual interactive choices and collectively shared cultural memories converge here, jointly generating an experience that is both uniquely personal and deeply rooted in culture, achieving resonance and simultaneous presence of 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 figurines, rapping figurines, and acrobatic figurines, together constitute a symbolic ritual scene, stimulating the viewer's association with the performance forms, social customs, and even spiritual beliefs of that time, as well as the viewer's active narrative completion of the plot.

However, the performative aspect of drama terracotta faces its fundamental dilemma, namely the multidimensional absence caused by physical solidification: the flow of time, the presence of sound, and the instantaneous interaction between the performer and the audience are all suspended. It is this "unfinished" state that constitutes the third characteristic of its performativity - the interactive potential that remains to be activated. The drama terracotta carries all the elements of performance at the symbolic level, but it cannot complete the performance autonomously; it relies on the cultural decoding ability, bodily empathy, and imaginative participation of the audience to convey meaning. This inherent 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 model, this "body-performance" loop is fractured. Interactive imaging aims to repair and enhance this loop, transforming the audience from "spectators" to "co-performers".

Together, they constitute the theoretical foundation for a dynamic dialogue between cultural relics and the audience, enabling the dramatic moments of history to be re-enacted in contemporary experiences.

In an interactive context, bodily movements, gestures, and spatial positions become the most primal "questions." When the audience's body makes a tentative movement, it is not manipulating an external object; rather, it is "issuing a call" to the frozen form of the figurine, utilizing its unique movement logic and perception. This intentional movement of the body serves as the primary impetus to break the figurine's static seal and tap into its internal "performative" potential. The "performative" qualities of the drama terracotta require the completion and confirmation of a "present" and embodied observer. This is no longer a one-way viewing experience; rather, it involves emotional resonance and physical and mental immersion during the process of simulating, echoing, or even triggering the movements of the figurine, forming a cross-temporal and embodied "co-performance relationship". "Presence" represents the ultimate state of experience generated by this interaction. It is not simply physical proximity; rather, it is a perceptual field formed by the deep interpenetration between the body and the activated performative qualities. Within this field, the audience's bodily experiences (such as the exhilaration of dancing and the solemnity of ritual) and the historical performative potential embodied by the drama terracotta (such as the charm of classical dance poses and the emotions of dramatic characters) intertwine and enrich each other. The boundaries between subject and object blur here, and the audience enters an immersive state where "I am in the performance, and the performance is within me". This "presence" is both spatial and meaningful.(“Figure 2”)

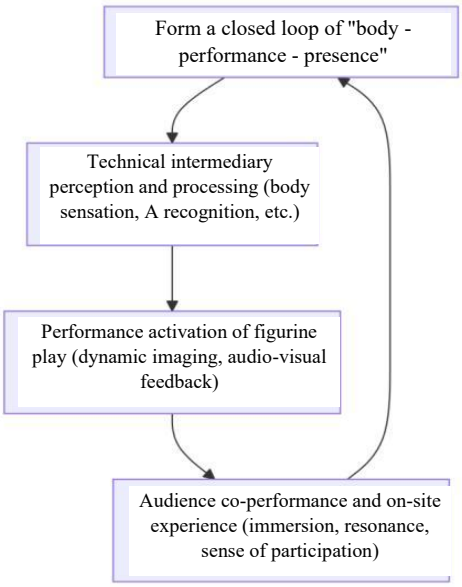

Figure 2 Interaction flowchart.

3. TECHNICAL IMPLEMENTATION AND EXPERIENCE GENERATION OF INTERACTIVE IMAGING SYSTEM

The interactive imaging system for drama terracotta (such as Han Dynasty figurines representing ancient performing arts scenes like rapping figurines, dancing figurines, and acrobatic figurines) transforms the audience into co-performers by establishing an interactive closed loop of "body movement-real-time feedback". This not only technically breaks the constraints of time and space, allowing the drama terracotta to dynamically "come alive", but also provides the audience with a physical sense of cultural participation through personalized narratives and multi-sensory immersion at the experiential level. Its core value lies in the fact that technology, as a medium, drives the paradigm shift in the interpretation of cultural heritage from "static preservation" to "dynamic generation".

3.1 Technical Implementation of Interactive Imaging System

The interactive imaging system, through motion capture and somatosensory sensing, converts the audience's body movements into system inputs in real time, transforming museum narratives from one-way displays into dynamic fields where the audience and the scene engage in continuous

dialogue and co-create meaning. Its core lies in the real-time cycle of "body movement - system response", where the system recognizes gestures and awakens virtual dynamics of the figurines, enabling physical dialogue across time and space. The audience's movements and choices drive the evolution of virtual stages, lighting, characters, and other elements, making the body the key to reconstructing cultural fields. Parameters such as movement rhythm and strength regulate music and sound effects in real time, facilitating the co-creation of individual rhythms and historical performance rhythms.

The interactive layer integrates motion sensing (Kinect, depth camera), touch screen, and physical prop sensing (such as imitation musical instrument controllers). When preset commands are triggered, images and narratives provide instant feedback. In terms of image presentation, augmented reality allows viewers to align their tablets, AR glasses, or mobile phones with the drama terracotta in the display case, and the screen overlays with dynamic dance and music, creating a seamless integration of virtual and real worlds.

Immersive projection seamlessly projects the dance and banquet scenes of the figurines onto walls or floors using multiple projectors, creating a sense of enclosure. The holographic phantom cabinet presents three-dimensional dynamic illusions next to cultural relics or in independent display cabinets, extending the interactive interface between the body and 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”)

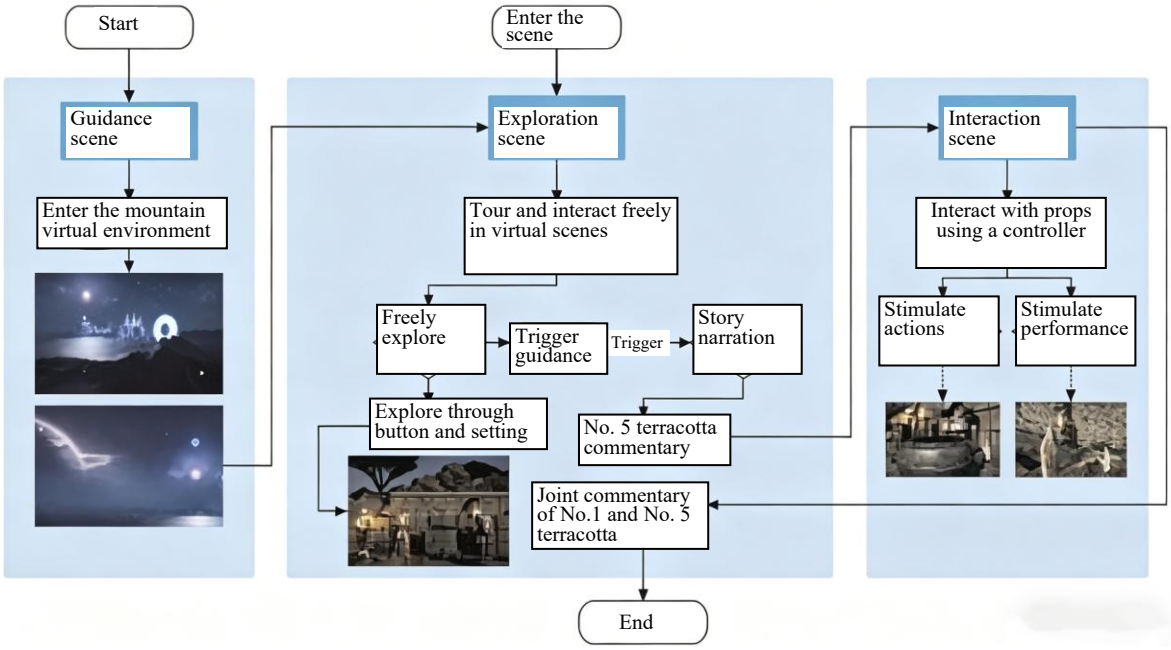

Figure 3 VR experience flowchart of drama terracotta.

a Image Source: Journal of Northwest University (Natural Science Edition), 2025, Vol. 55, No. 1, Feb., 2025

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. Curators no longer view exhibitions merely as a one-way transmission of information, but actively stimulate visitors' physical perception and cognitive engagement through immersive circulation planning, interactive visual graphics and texts, sound and light environments, tactile devices, and other multi-sensory media. In this comprehensive experience construction, color is particularly dynamic - it is not only decoration or identification, but also serves as an atmosphere language and interactive cue that permeates the space, deeply participating in shaping the audience's presence experience and guiding their body to engage in continuous and in-depth perceptual dialogue with the space. This relationship transcends simple visual design and constructs a complete cultural narrative field. With the enhancement of different colors, the space becomes a carrier that guides users to interpret historical semantics.

The guide scene of the VR experience system for the acrobatics terracotta of the Mausoleum of the First Qin Emperor is set in a virtual environment of Lishan Mountain. With the help of a calm atmosphere and narration, it guides the experience to rotate their perspective and roam with the camera, immersing them in the initial understanding of the historical background of the Qin Mausoleum and the K9901 burial pit, enhancing their focus and immersion. The exploration scene integrates free roaming and story triggering: when the user approaches the acrobatics terracotta, the narrative explanation is automatically activated. The system reduces interference by limiting interaction positions, promoting independent exploration and understanding of the Terracotta Army knowledge. The interactive scene relies on VR controllers to transform the acrobatics performance art into a physical experience. Users can lift the bronze tripod to admire the decorative patterns and shapes, simulate the action of "lifting and throwing the tripod", or use the controller to climb and search for props alternately, experiencing the thrills and skills of the search performance. The three-tier scene progresses from the superficial to the deep, from historical guidance and knowledge exploration to skill interaction, completing the cognitive leap from "watching" to "experiencing".

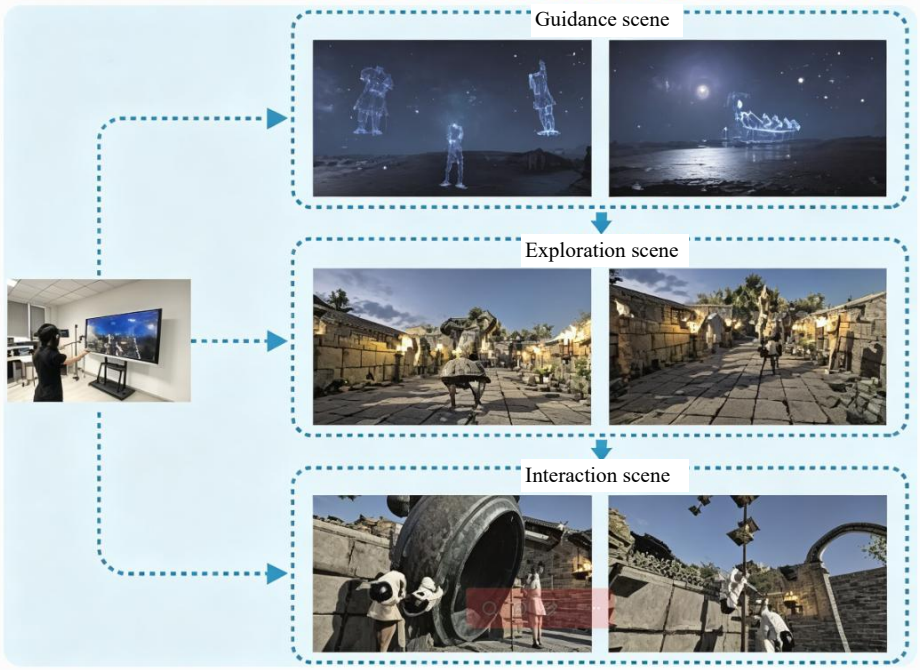

Figure 4 Three experience scenes in the VR system of acrobatics terracotta.

3.3 Interactive Imaging Under Artificial Intelligence

The development of artificial intelligence (AI) has brought new possibilities to interactive imaging, playing a significant role in reconstructing personalized and customized embodied imaging content. With the advancement of modern technologies such as virtual reality and AI, the connection between technology and the body has become increasingly close, to the point where boundaries are blurring. This has led to the emergence of trends such as "technologization of the body" and "bodification of technology," posing serious challenges to the traditional dualistic thinking based on the dichotomy of mind and body. Through analyzing audience behavior data and preferences, AI can accurately understand the unique needs of each individual viewer. [3] The "Xiyun Yongsheng" AI immersive interactive experience, from the Stage Art Department of the China Academy of Traditional Opera, breaks through the constraints of the static display paradigm of cultural relics. With the core concept of "digitizing cultural relics and intelligently reshaping experiences", it constructs a new paradigm of interactive, immersive, and communicable digital opera experiences. The project utilizes AI-generated content (AIGC) technology to empower the narrative reconstruction of cultural relics, allowing audiences to intuitively perceive the performance forms and their evolutionary lineage of ancient Chinese opera through embodied interaction and immersive perception. By undergoing a cognitive leap from "watching" to "experiencing," it promotes the transformation of specific cultural relics into cultural media featuring embodied perception, interactive participation, and ubiquitous dissemination, opening 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"

Digital interactive technology has propelled the transformation of figurine culture from being "sealed as cultural relics" to "living inheritance". High-precision restoration, driven by AIGC and gesture interaction, activates performativity, allowing audiences to "awaken" and co-perform through embodied interaction, thereby constructing an immersive "phenomenal field" and achieving an embodied and decentralized experience. Interactive imagery activates performative historical memories, expands the value of cultural relics, and opens up innovative paths for cultural inheritance. However, technology also brings about experiential dilemmas such as the loss of authenticity and strong interactive presuppositions, as well as ethical challenges like the diminution of ontological attention and the shift of interpretative power to digital avatars. Reflection and adaptation are needed in the integration process.

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

Under the traditional museology and cultural relic protection paradigm, the cultural existence of drama terracotta (such as the Qin Dynasty tomb figurines of acrobats, the Jin Dynasty opera figurines, etc.) can usually be summarized as "cultural relics in storage". The core of this model lies in static preservation and object gazing: cultural relics are placed in climate-controlled display cases, and their historical information is explained

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.

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 performative nature originally embodied by the drama terracotta - the dramatic moments frozen in their poses, the etiquette norms contained in their costumes, the emotional tension conveyed by their expressions, and the millennia-old cultural memories experienced by their "bodies" - 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 imagery as a key medium, is emerging. It is no longer satisfied with preserving cultural relics as "specimens", but is committed to activating their inherent "life" state, achieving a fundamental value shift from the preservation of "things" to the interpretation of "events", and from "static history" to "experiencable tradition".

Technology enables high-precision digital restoration and creative extension of the remaining physical traces of the drama terracotta (such as painted patterns and unique poses). Through projection mapping, augmented reality (AR), and other technologies, interactive imagery can place the figurines back into their original cultural context. A static exhibition space can instantly transform into a lively Han Dynasty acrobatic theater, providing a multi-sensory understanding of the occasion, function, and atmosphere of the drama terracotta performances. The profound cultural significance of this shift lies in its ability to reproduce and inherit the "performative bodily experiences" of the drama terracotta 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 employs visual means to showcase the entire process of cultural relic restoration and rebirth, from fragmented pottery pieces to the complete figurine. The stunning images formed by the aggregation of fragments bring the acrobatic terracotta to life and revitalize ancient pottery craftsmanship. With the combined effects of lighting and mechanical devices, two temporal scenes are displayed in an overlapping manner: when moonlight shines into the restoration hall, illuminating the fingerprint traces of the supine figurine, the boundaries of time and space are broken, and the restorer and ancient potters achieve a distant gaze. This gaze across thousands of years transforms archaeological discoveries, which originally only exist in museum display cases and academic literature, into vivid narratives that viewers can perceive and resonate with. Through this medium, viewers no longer feel the cold pottery clay, but rather the warmth of fingertips, the breath of labor, and the shared craftsmanship in the inheritance of skills. The "body" of the drama terracotta thus becomes a bridge connecting the spiritual worlds of laborers from ancient and modern times, and its inheritance content has also been elevated from specific cultural relic knowledge to enduring 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 evolved from passive "viewing interaction" to active "guided co-creation": viewers can participate by relying on gestures, body movements, and even physiological signals to engage in improvisational interaction and collaborative creation with AI-driven drama terracotta, becoming an integral part of the narrative construction. Technology gradually fades into the background, and the focus of the experience returns to humanistic connotations - cultural memory is reactivated and passed down through deep individual participation.

5. CONCLUSION

The author believes that the relationship between the two is essentially complementary and generative: the theatrical figurine raises a question about how traditional performing culture can be modernized; interactive imaging, with its media characteristics, provides a specific set of solutions and theoretical perspectives, thereby activating the cultural genes of the drama terracotta and generating new narrative life in the modern context.

In the evolution of interactive imaging technology, embodied theory provides a key theoretical framework, driving the shift of image narration from one-way communication to multidimensional meaning construction mediated by the body. Technology has achieved an "embodied turn" from philosophical tracing to artistic practice, reshaping the audience's spatial presence, behavioral agency, and emotional involvement depth in narration through virtual avatars, multi-channel perception interfaces, and metaphorical interaction mechanisms. In the future, with the continuous iteration of sensing technology, AI-generated content, and natural interaction systems, interactive imaging will further enhance the personalization and transparency of embodied narration, ultimately constructing a new image language and aesthetic paradigm centered on bodily experience.

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