# Research on the Experience of Interactive Art From the Perspective of Reception Aesthetics

## Baihui Chen[1,*]

[1]School of Animation and Digital Arts, Communication University of China, Beijing, China
*Corresponding author. Email: 704691939@qq.com*

## ABSTRACT

**Since the 1960s, the rapid development of science and technology has gradually reduced the power distance between people. Individual visitor has also transformed from passive appreciation to active acceptance. The theory represented by receptive aesthetics also provides theoretical support for the development of modern art. At the same time, interactive art characterized by "interactivity", "mixed senses" and "cross-media" came into being. In the era when the individual is activated, the creator adopts the "people-oriented" creative concept, uses scientific and technological methods to create a multidimensional space art which contains both virtual world and reality, and establishes an artistic expression of equal dialogue between creators, works and audiences from the perspective of reception aesthetics. With the upgrading of the consumer era, the iterative development of the audience's aesthetic level and emotional experience research has undoubtedly become the core content of contemporary art development and exploration.**

*Keywords: reception aesthetics, aesthetic experience, audience emotion*

## I. INTRODUCTION

The 20th century is the bit era, and the vigorous development of modern science and technology has accelerated the process of urbanization and also provided audiences with power of voice. Although scientific and technological rationality lubricates the industrial chain of society, but what follows is the fragmentation of the individual itself, and the artist's keen intuition captures the problems brought about by the rapid development of individuals and society under rapid industrialization. With Arthur Danto's final conclusion on art, traditional art steps down the altar, individual discourse power is activated from the perspective of daily life aesthetics, and it also gives visitors more initiative and enthusiasm from the perspective of reception aesthetics at the same time. The creators hold the "people-oriented" creative concept and constantly explore how to establish a cold connection with scientific and technological rationality in the digital era. "Interactivity" has become a breakthrough in the society; with the development of interactive art, artistic creation has changed from one-way to two-way interaction; appreciators and artists together create the complete artwork, and gradually develop into a new interactive art form from the bottom up.

## II. THE RISE OF INTERACTIVE ART AND INDIVIDUAL ACCEPTANCE

New media interactive art originated from modern installation art, but it not only stays here, but also varies. As a representative form of artistic expression in modern art, it deconstructs the boundaries of traditional art, and the most important feature is that the audience becomes an indispensable part of the works of art, making "everyone an artist". The concept of "interaction" came into being with the "reception aesthetics" put forward by Jauss in 1976, and the American interactive art began to flourish in the 1960s. As an artistic trend of thought, reception aesthetics undoubtedly lays a theoretical foundation for contemporary artistic creation. The creators of receiving aesthetics who face to the reader also focus on the audience. In the 1960s the modern artist Nam June Paik proposed that "public participation" would be the central feature of all future media installations.

In 1999, an Israeli new media artist Daniel Rozin created "Wooden Mirror" using 83 small wooden blocks equipped with a steering gear and a camera combined with programming. The camera captures real-time dynamic images of people combined with the angle of the wooden block; in the wooden block the silhouettes of different figures are drawn in real time above to mobilize the interest of the audience ,thus the audience and the creator jointly complete the artwork. The audience becomes a part of the artwork created by

themselves at the end. Therefore, new media interaction, as the most representative form of artistic expression of contemporary fashion, breaks away the mystery of traditional art, dispels the concept of creation-based, and makes the creator, the work and the audience in an equal dialogue position to complete the creation of the work together. Art works have also moved from the "individual enjoyment" of the artist's personal emotions to emphasizing the audience's active experience of "interpersonal enjoyment".

New media interactive art is a new art language that integrates the bit era and traditional art. It uses human-computer interaction media technology as a medium and highlights the audience's perception experience as one of its salient features, creating a multi-dimensional and dynamic aesthetic experience. With the development of modern technology, from touch-based interactive forms to interface-based interactive experiences, and then to multi-modal immersive interactive devices, the development of technology has completely changed the experience form of traditional art from unidirectional propagation to human-computer interaction. Interface interaction is the earliest and relatively mature new media interaction art form. It mainly uses physical actions such as clicking, touching, motion capture, and wearing a remote control to generate instant feedback through "direct contact." This substituting interactive mode allows the audience to experience the aesthetics of the work as a "player" by clicking on the screen. The famous American new media pioneer artist Chris Milk's work "The Treachery of Sanctuary" is an interactive installation art composed of three screens and one side reflected by water as a mirror. While the audience standing in front of the pool, the shadows projected by the audience and the silhouettes of birds will be presented on the white giant screen through Kinect motion capture. When the audience touches the birds with their shadows, their shadows will turn into small birds and disappear with the birds. The audience brings in the work through the "tactile" gameplay, and the accompanying visual impact also allows the audience to get more intuitive perceptual feedback. From the beginning of interface interaction, the audience's contribution to digital technology will further establish their position in the integrity of the artwork. The development of media technology also provides the audience with creative possibilities.

## III. AESTHETIC ACCEPTANCE AND EXPERIENCE IN INTERACTIVE ART

With the existence of digitalization, the Internet has brought about the possibility of equality for all. With the rapid development of modern technology, participants are no longer satisfied with a single-sensory, two-dimensional, and single-medium button-based and click-based experience. As a result, the new media interactive art of "mixed senses", "multi-dimensional" and "cross-media" came into being, and the synaesthetic experience of interactive art works between the audience and the new media is also a direct collision between the creator and the audience, allowing the cold modern technology to inject emotional exchanges. The "interactivity" of media interactive art follows the rule from low to high, from shallow to deep, from basic sensory transformation experience, to an imaginative world of images, and finally completes the aesthetic re-creation to generate emotional resonance, making the audience no longer "outsiders".

McLuhan put forward in "Understanding Media": "The media is an extension of the human senses." In today's era when attention is infinitely diluted, the separation of the pure visual senses and other senses undermines the integrity of humans, although the media and human relations are relatively independent, the media has a non-negligible influence on people's potential cognition. Traditional media affects vision or hearing alone, making people's perception into a linear structure. The Internet under modern technology mobilizes people's sense of touch and makes people's perception into a three-dimensional structure on this basis. Therefore, the "mixed senses" of interactive art strives to mobilize the immersive synesthetic experience of the audience's five senses. Just like the interactive installation based on poetry "The Wind Blows the Grass and Sees the Cows and Sheep" uses the shadow puppet light and shadow principle to project and image cotton, milk, wool, and brushes, through the rotation of the blowing sensor, the projection changes in the distance and the displacement, as if they can feel the "wind and grass" and successfully mobilize the audience. Basic senses, such as hearing and vision, create a comprehensive three-dimensional basic synesthetic experience.

After mobilizing the basic sensory experience, the audience enters a space of imagination. In the theory of reception aesthetics, there are a lot of gaps and uncertainties in literary texts, which are called "calling structures", which call readers to actively improve and fill up. Therefore, limited texts create infinite meanings, just like the Chinese poet Lu Ji in "Wen Fu" said:" Simple shape Paul Vientiane, a pen can also contain everything". New media interactive art creates a multi-dimensional synesthetic experience of "mixed senses" for the audience, and create a harmonious coexistence space between the real world and the virtual world, so that everyone can enter and become an artist. William James once said: "The less things presented in the movie, the more things the audience will receive." The same is true in the new media interactive art. Japanese new media installation team Teamlab continues to break new ground on the boundaries of artwork. Once

entering the exhibit hall, the visitors can enjoy physical and mental freedom of movement in a limited setting. Just like its work "Forest of Flowers and People: Lost, Immersed and Reborn", it is the repetition of the process from birth to death of countless flowers, which will wither and die if the audience touches or steps on them, and this result will also affect other works. For example, a butterfly is supposed to be in a place where spring flowers bloom, and the fading of the flowers results in the butterfly drifting away. And The work is not played mechanically, but is a computer program that draws "fleeting" moments and unique pieces in real time. Under the immersive experience of this situation, it is hard not to let people imagine the ever-changing nature of reality and enter the imagination space of the individual's mind. The team uses a group of works to eliminate the boundaries between reality and virtual world, creators and audiences, and works through interaction and metaphor, leading the audience to fill in the "blanks" and "uncertainties" of the works, and from a sensory-based experience into a borderless space where "virtual is real".

The remarkable feature of new media interactive art is also the advanced level of synaesthesia from surface to deep. It is the brand of the audience's "aesthetic re-creation" in interactive art and imprinted with individual emotions, it's the creator who resonates emotionally with the audience through a wave progression. From the beginning of the 20th century. Philosophers and aestheticians have emphasized the individual's spiritual pleasure and freedom through the appreciation of art in the age of mechanical reproduction. Cognitive psychology also proves that high-quality interactive art makes it easier for viewers to find their own existence after interaction, obtain basic senses and behaviors, and awaken the emotional resonance in people's hearts. Just like the above "Forest of Flowers and People: Lost, Immersed and Reborn", the interactive scene of the audience's completed work is influenced by the audience and continues to reflect that each audience sees different scenes. As the flowers wither, the visual perception brings a stronger emotional impact to the audience, guiding the audience from the real world to the virtual world to complete the reflection on man and nature. Successful interactive art works should not only pay attention to linking and interaction, but also pay attention to the emotional communication with the audience, mobilize the enthusiasm of the audience to participate, so that the audience can find their own existence and better interpret the thoughts and emotions conveyed in the works.

## IV. EXPLORATION OF INTERACTIVE ART UNDER AESTHETIC EXPERIENCE

Interactive new media art as a pioneer in the art of fashion's leading contemporary art. From the perspective of reception aesthetics, it is important to take into account the audience's horizon of expectations, making artworks "unexpected, but also reasonable." From the era of mouse and keyboard clicks, to the era of "small screen" interconnected touch, to the era of artificial intelligence, multi-modal interaction and multidimensional space, what will be the new round of exploration? The next step should be to focus on the "receiving subject" and to use the development of modern technology to achieve a richer cultural integration without being confined to a single medium, constantly diluting the boundaries of art. Just as Duse, one of the most influential newcomers in the field of digital art in Italy, its most famous interactive video dance "Dökk" Image capture through interactive projection technology and hardware such as sensors, accurately capturing performers' movements and emotions through data analysis. And through sentiment algorithms, we collect information from viewers around the world who share on social networks, finally complete the interactive effect with the screen image, making each performance different. Dökk is derived from the Icelandic word for darkness, which perfectly fits the work conveys the tenacious struggle in the dark, so that the audience can also get emotional sublimation on the other side of the Internet. Therefore, new media interactive art works that combine "multimedia", "cross-domain" and "emphasis on emotion" are undoubtedly the vane of interactive art creation in the future.

New media interactions continue to break through boundaries between media and forms, while time and space are constantly exploring to stimulate the audience's artistic emotions, and even play a role in artistic healing. Seeeklab is a new media art team from China dedicated to seeking the emotional meaning of installations to people. This team organized a new media art tour called "Heavy Rain, Sound and Light". The inspiration for this exhibition comes from a group of children with autism, such children are called "children of the stars" or "rain people". In order to encourage children to bravely step out of the "closed" world, they hope to create a "dream world" for this group of "star children". The top of the exhibition hall is covered with raindrops wrapped in drape material, and the lower distance from the ground gives people a sense of oppression. The room also switches to blue-violet light, which seems to be the inner world of autistic children. By touching the raindrops, the music sounds and the light spreads, as if telling us that "contact" is so easy and beautiful. The work creates an interactive art experience space. Through lighting, music, and touch, the audience not only puts the

audience in a three-dimensional space, but also establishes multi-dimensional emotions from experience and perception, and "touches" the inner world of "children of the stars" through reality. Seeeklab also hopes to use this interactive device to encourage children to bravely step out of the closed inner world, build relationships with others, and experience the beauty between people.

New media interactive art expands the temporal experience of art while the public participates in the art environment and enjoys the art resources. By mobilizing the audience's "mixed senses," the collision between people and art becomes a temporal process that no longer focuses on visual form, but rather on subjective emotional experience through environment, atmosphere, and "field," which exists in a progression of time. The art of new media interaction also distinguishes itself from other forms of art. This is what sets new media interactive art apart from other art forms. For example, Teamlab's work "Flowers-Layered Ultrasubject Space". This piece is a myriad of flowers of varying forms made from 3-D imagery. A flower is born, grows, blooms, and dies in a repetitive cycle from birth to death, from death to life. In the process of life, when the audience walks into the work environment where the silhouettes and images overlap as if they are in a sea of flowers, the flowers will also be affected in real time with the audience's actions, and change without repetition. The audience experience infinite time in relative time, and the flowers in front of them will not be seen again. This endless cycle of flower blossoms breaks the static visual experience of the picture, and uses dynamic and continuous picture changes to continuously convey information to the audience, and at the same time the audience obtains a gradual emotional sublimation from the shallower to the deeper. Not only the audience's diachronic experience with the passage of time, but the art works also acquire temporal existence through the audience's experience and reception. It is the continuous exploration of the multidimensionality of space and the infiniteness of time in the future of new media interactive art.

New media interactive art, as an artistic expression method under the digital vision, explores the connection between art and people in technical media, creative forms, and time and space exploration, and carries the aesthetic art of perception, experience, and unlimited imagination. Constantly create infinite, transcending, and extremely impactful multi-dimensional shocks in the limited time and space, so that everyone can enter, so as to get emotional vent and sublimation. It also indicates that with the development of digital technology, new media interactive art will show more dimensional artistic expression and unlimited possibilities for exploration.

## V. CONCLUSION

In today's digital survival and development, "watching" is no longer just a simple act, the "audience" is no longer an "outsider" to the work of art. The connectivity and interactivity of new media art liberate passive audience, mobilize the visitors' senses and participate in the creation of works of art. Through the sublimation of emotions from surface to deep, it fills the "blank" of the work, and the recipient also get aesthetic experience from scientific and technological rationality.

## *References*

[1] Snow bamboo. The technological beauty and ecological civilization of interactive art [J]. Modern Communication (Journal of Communication University of China), 2007.

[2] Wang Yuzhu. Research on the Application of "Interaction" in Video Installation Art [D]. Lu Xun Academy of Fine Arts, 2019.

[3] Tao Ying, Sun Ningna, Zhang Kai. Analysis of image communication in synesthesia design [J]. Design Design, 2019.

[4] Zhong Ming, He Renke, Zhao Danhua, Wang Wei. Research on interactive device experience design based on synaesthetic transformation theory [J]. Packaging Engineering, 2020.

[5] Zhang Kai, Lin Hong. The application of synaesthesia in product design [J]. Packaging Engineering, 2018, 39(6): 20-23.

[6] Xin Xiangyang. From user experience to experience design [J]. Packaging Engineering, 2019, 40 (8): 60-67.

[7] Lan Yuqi, Liu Pai. Research on the emotionalization of interactive products based on user experience [J]. Packaging Engineering, 2019, 40(12): 23-28.