Discussion on the Art of Embryonic Form of Computer Animation-the Peepshow

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Discussion on the Art of Embryonic Form of computer Animation -- The Peepshow

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Abstract: Peepshow is the result of the accumulation of multiple cultures. It is the product of the development of the art form to a certain degree due to the urgency of the aesthetic needs of the public art and the urgency of demand of the upper class society on novel art. As a form of media art, it had played a very active role in cultural communication in a certain social period. With the progress of the times, it has gradually evolved into a folk art culture. The protection and inheritance of the peepshow as an intangible culture is our present task. The peepshow art, the originator of modern computer animation, has a unique artistic charm in traditional art. Below it is planned to study the comparison between the peepshow art and modern computer animation.

Keywords: peepshow, media and advertisement, art protection, computer animation
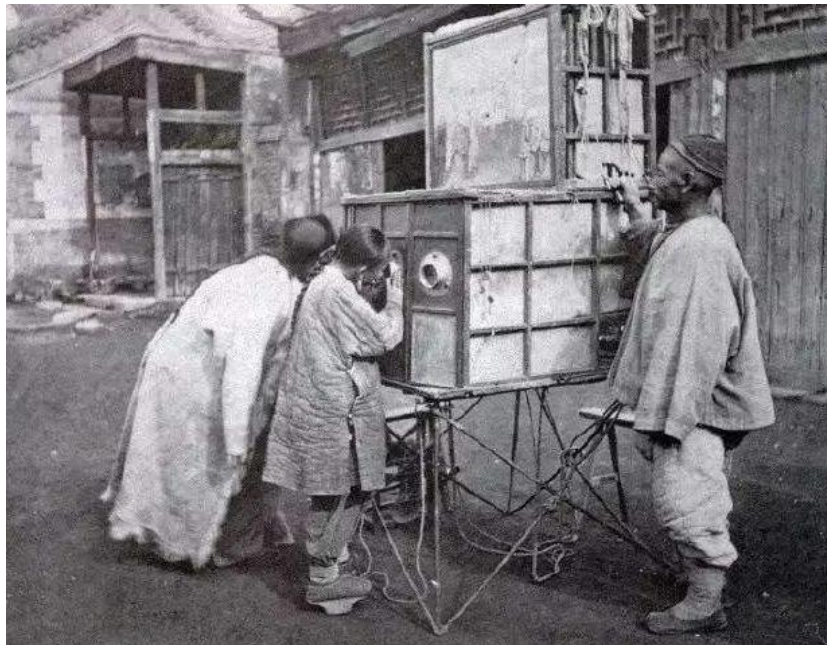
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Fig. 1. John Thomson, west view of Beijing street, 1869, London: Wilcom

Fig. 2. Modern People Watching Peep Show

"Look inside and see a mass of bobbing heads, it's heavy snow and yet it's a cold day; Yang Bailao has sold out tofu and is returning home, holding one kilogram of noodles in his arms; He was preparing to celebrate the New Year, but he didn't expect that the henchman came to collect the debt before his door; Huang Shiren hounded Yang Bailao to death and snatched Xi'er as his servant girl. "I remember when I was strolling around the Shanghai City God Temple a few years ago, an old entertainer grasped my arm and did not let me go. The passing pedestrians were shocked instantly by this situation. What happened? It was seen there is a big red wooden box with five big eyes painted on it, there were three or five people sitting in front of the big eyes and looked inside intently. There were a lot of audience surrounding the box, and the visitors immediately surrounded the shouting old entertainer's venue in the busy street tightly. It was seen that the old entertainer was pulling the rope mechanism through the wooden box device while singing, and the sound of gongs and drums behind the wooden box were also heard. It can be said that there are talks and singing, gongs and drums, performances and pictures, plots and stories. There is only one person in the whole performance process, this is the folk art — peepshow（see Fig. 1）.

The peepshow, also known as "Zoetrope" or "Diorama", was more popular in Beijing, Tianjin, Shanghai, Xi'an and other places, and later became popular in Hunan, Hubei, Shanxi, Henan, etc. The main performance contents are landscapes, historical legends, novels, folk stories, and also recorded history. It is a comprehensive form of folk art. Because there are story plots, sounds, and sense of shot, the main picture inside the box moves by pulling, so it has the prototype of animation and is known as the old animation. The peepshow is a distinctive art form in traditional Chinese folk art. It is a comprehensive art that combines painting, rapping, performance and screenwriting art（see Fig. 2）. Whenever Spring Festival and other important festivals come, it becomes a shining folk event. It is a materialized carrier of traditional Chinese folk art with rich cultural connotation and aesthetic interest, and is of great artistic value.

1 Retrospect of regional cultural exchanges under specific historical conditions

1.1 The origin of peepshow

When and where did the art of the peepshow originate? It was said that the peepshow originates in the Tang Dynasty and its inventors are Li Chunfeng and Yuan Tiangang. In the Tang Dynasty, the Western Region sent a beautiful woman to the emperor as a tribute, she is good at singing and dancing, and is regarded as a treasure by the emperor, but the beauty often frowns, and rarely laughs. Even the emperor has no way to change this, so the emperor calls in Li Chunfeng and Yuan Tiangang, who know the Book of Changes and the Eight Diagrams and can foresee the future, they said that the imperial concubine was not sick, but homesick, so they worked out a plan for the emperor, then the emperor led the concubine to the imperial study room and then they drink wine, he let her talk about the customs and beautiful landscape of her hometown. While the concubine was talking about her hometown, her eyes fluttered, but her spirit was inspired, and smiled vividly every now and then. Li Chunfeng and Yuan Tiangang who hid in the next room

wrote down one by one and then portrayed them on a total of eight pages. They were known as the eight scenes of the Western Region, they were packed in wooden boxes, the wooden box was equipped with magnifying glass and gongs and drums, etc., and was equipped with an entertainer for performance. When this concubine was invited to watch the scenes again, the beauty was so surprised that she seemed to return to her hometown, she laughed out loud and her beauty was drop-dead gorgeous. This is the origin of the peepshow. The author did not find any specific historical records for this legendary, so can only take it as a story. But what is certain is that the peepshow is the product of cultural exchange between the East and the West, and it is also an advanced form of art whose art form develops to a certain level.

1.2   The peepshow is the predecessor of computer animation media

The peepshow is also called diorama. As the name "diorama", it has become a specific cultural term. For example, the movie "The Peep Show", directed by Hu An, starred by Xia Yu, Xing Yufei, Liu Peiqi and Lu Liping tells a story about first entry of Western film to the old Beijing and birth of first Chinese film in the early 20th century; For example, the documentary "The Peep Show" filmed by CCTV tells the story of East-West communication. The invention of photography and the opening of China to the outside occurred almost simultaneously. In 1839, the French Louis Jacques Mandé Daguerre took the first photo in the world. One year later, the Opium War broke out between the Qing Dynasty and the United Kingdom. Photography, this new thing soon entered China following the Western war photographers, businessmen, journalists, pastors and soldiers. For the first time, the West saw the real China through photos. There are many more similar works. During the long-term development of Chinese culture, a specific two-part allegorical saying is also formed, such as: "A silly woman watches a peep show — spend money for nothing", and so on. These are true portrayal of diorama as a cultural term.

This cultural term was formed in the process of gradual cognition, deepening, understanding, re-deepening, re-cognition and then re-understanding in people's original conscious cognition of the explicit diorama (the peep show) art. After countless times of repetition, it eventually became a custom-made exclusive term, which has different meanings.

2   The peep show is an art form of media and advertisement

2.1   Concept and types of media

The Chinese word "Mei"(matchmaker), in "The Analytical Dictionary of Characters" written by Xu Shen in Eastern Han Dynasty, interprets it as "Mei, a planner, who makes a match between two family names." In vernacular words, it is: "Mei means planning, planning to make a match between a man and a woman of two different family names to form a new family." It can be extended to: "Pass one party's information to another." The mass media is the media that spreads various kinds of information. Since the birth of oracle, human civilization has been transmitting information through oracle as a medium, making the media to have its initial shape.

The first type of media is the most primitive type. This type of media is the simplest, mainly based on short-distance transmission. The transmission method and speed and the transmission area are relatively limited. It is not vivid and difficult to retain; The second type of media is more vivid than the first type of media. It is often the on-site interactive transmission, but its retention capacity is weak and it privacy is also weak; The third type of media uses paper as the main carrier and can transmit information over long distance. It uses words and patterns as the expression form of transmission and can be retained for a long time; The fourth type of media mainly uses the audio and video and time concept as the main expression forms. The content of the expression is more accurate and can be stored for a long time. It has a fast spread speed and a wide spread range, but it lacks synchronization. The fifth type of media has the fastest communication speed, wider communication range, stronger interactivity, longer retention, smaller carrier size, and strong synchronization, so it the most vivid. "Media integration is not only a change in the media structure, but also a result of the rapid development of emerging media represented by the Internet, which also greatly affects the landscape of cultural production and communication." [1]

2.2   The peep show is the predecessor of animation film media

Both the peep show or kamishibai to be mentioned later, are the predecessor of contemporary movies. They both have many similarities: there is a script before the performance; And they all have pictures, and tell

stories through the pictures; They are all accompanied by background music art; And they both have elements of performance in it; Through this art form, fees can be charged to obtain profits; Both of them are a form of media art; Both of them have a function of disseminating and recording cultural thoughts, traditional stories, political opinions and historical events of that time. As one of the forms of media, a variety of arts have converged to become an emerging art. The root of the birth is the re-combination of business formats, scene reproduction, breakdown of the normal situation after development of various arts and technologies to high-end forms, and it finally become a new art form. Throughout the history of human civilization, the development of culture is a process from simple to complex, from single to multiple, and from low level to advanced level. The peep show is a carrier of diverse arts. It combines painting art, drama art, folk art and juggling, music art and other arts in one. At the beginning of its birth, it was full of vitality and vigor, and attracted the attention of many audiences. In terms of function, the peep show has the functions of rapping entertainment, spreading cultural stories, inspiring thoughts, and recording history. These functions are also similar to movies. The marketing method also has the attribute of buying tickets for watching, and no tickets no watching. In terms of basic principle, the peep show use the principle of telling the story by pulling multiple story pictures by the performer. The movie also tells the story by the continuous flow of countless pictures to create new pictures. In general, both the production process and the marketing methods are functionally similar, and they both are the art that is presented to the audience through creations in advance through mechanisms, so they are known as "old-style movies". But with the progress of society and the advancement of science and technology, it has eventually become a folk event in society. With the advent of the technological revolution in the world, the discovery of photography, videography, performance art, contemporary music art, theater art and the principle of persistence of vision as well as the appearance of sound movies, finally animated movies appeared. The peep show art has already possessed the prototype of animation film art. "The development of digital technology continues to promote the innovation of artistic thinking and the transformation of video presentation." [2] The peep show has laid the foundation for the birth of animation film art. Animation film art is the continuation and inheritance of the peep show art. "In the field of digital art, technology and art need to be deeply integrated. But it is needed to make clear that technology serves art, and art content is the fundamental." [3] Modern computer animation has opened the era of digital media and realized the transition from traditional art to modern technology, that is, the combination of art and science. Compared with the art of the peep show, computer animation is more advantageous.

It is mainly reflected in the following aspects: 1. Paperless production of computer animation; 2. The spread range of computer animation has been extended to the extreme; 3. Computer animation spreads faster; 4. Computer animation can be saved and played in the form of Internet multimedia, and its way of transmission has changed; 5. The expression forms of computer animation are more diverse, has great virtual infinity, unlimited creation of visual effects and other advantages; 6. The profitability of computer animation has been greatly improved. Just the film "Nezha: Birth of the Demon Child" in last year reached a box office value of 5 billion Yuan, which cannot be achieved by the traditional peepshow art. Although the peepshow is the beginning of animation art, the peepshow art was restricted by the historical limitations at that time; 7. Computer animation has formed a unique animation industry, affecting the economic structure of the entire society and the trend of today's regional economy.

2.3   The Toyo-flavored peep show "kamishibai"

The Japanese kamishibai is mostly installed in a box on the back frame of a bicycle. The shape of the box is similar to a small house. It has two small doors. The doors are closed before the performance. With the accompaniment of the knocking board and the narration of the performer, the plot is gradually unfolded, and the two small doors opened slowly. Inside the small doors there are the prepared plot pictures. The audience sits around the box. The audience can be more or less. These audiences are mainly children. The number of audiences is not limited, but for this kind of performance, it is not easy to charge performance fees. In China, for the peep shows, magnifying glasses are often installed around the box for viewing, and the performer does not sell tickets, the performer will not let the audience sit in front of the viewing glasses, so the audience will not see the story pictures inside. The Japanese kamishibai has a relatively small box at the back, and is often performed in a mobile way on a bicycle. It usually takes a few minutes for a story, but it also takes a little longer. For Chinese peep show, the box is generally large in size, and there are musical instruments such as gongs and drums mounted on the back of the box, so it is often not easy to move. It is mainly suitable for performance in crowded places such as temple fair, big fair or important celebrations. This kind of performance is not convenient in movement and the audience can only watch through the

viewing holes equipped with a magnifying glass, so it actually hinders the spread and development of the art of the peep show. Kamishibai often interacts and communicates with children through theatrical form of performance, which not only narrows the distance between each other, but also brings theater-like enjoyment and entertainment to children, and improves children's attention, understanding and expression skills, and inspire children's potential in language, music, vision, performance, etc. Through the changes in language, expression, limbs and sound of the kamishibai performer, as well as the interaction and communication with the audience, the performer lets the story go out of the stage into the audience and into the imaginary world of the children, making the performance and imagination merge naturally and resonance between the performer and the audience, this is the magical charm of kamishibai. The Japanese kamishibai has played an active role in promoting and spreading the development of Japanese anime.

As far as the peep show is concerned, the peep shows are not totally "foreign". It has been merged into the soul of traditional Chinese art in is long development, and has gradually used traditional Chinese art as its main expression form. Whether "the peep shows" or "American ginseng", and "Western Clock", "Westerners", "Western Matches", "Western Painting", "Western Gun", "Western Artillery", "Western Musical Instrument", etc., they are all the terms of material and cultural exchanges between different regions. The word "foreign" represents a distinctive western (alien) color, it is a word that distinguishes Chinese culture and foreign cultures. "The underlying logic of fusion development is first the fusion of technology, from the traditional technology of the mechanical age, to the classic technology of the industrial age, and then to the high-tech of the digital age. Every technological advancement will bring the integration and innovation of traditional and emerging technologies." [4] As a form of media, it had once prospered for a time and played a positive role in cultural thoughts, legends and history records at that time. As a form of entertainment, it had also once won people's love. With the progress of the times and with the rising of the emerging media such as digital media and movies and televisions, the peep shows have been evolved into an art form of folk activities and become a form of folk art that urgently needs social protection.

3   Contribution and innovation

I have been committed to the research of computer animation industry and communication for a long time. According to the laws of the computer animation industry, various different types of animation development models have been explored, and the generation mechanism of such three cycles as computer animation industry, market, and economic society has been studied in depth. I have written a number of related papers and books. The textbook "Flash Animation Short Film Production" which I recently wrote has been published by Hebei Fine Arts Publishing House. The book which I recently wrote on the research of computer animation industry, "Animation Art Industry and Communication Research" will be printed soon. Welcome animation enthusiasts to read it and provide valuable opinions. The papers "A Preliminary Study on the Operation Mode of Animation Market" and "Research on China's Early Animation Market Development" were published in publications such as "Art Market".

"The development of art is a transformation of art paradigm in a certain sense. In every historical period, there is a dominant art paradigm, which determines the mainstream direction of art development and forms a certain artistic trend of thought. However, we have also seen that this paradigm is gradually changing, which is related to humanities, social sciences, and philosophy. However, science and technology also play an important role and influence this process." [5] Take the peepshow studied in this paper as an example, through the birth, spread, prosperity, and even decline of the peepshow, we should draw nourishment from it, and should innovate design. " 'Original design' must extend the scope of design activities from 'model design' forward to 'principle research' and 'prototype experimental research'; extend backward to 'product implementation', 'commercialization' and even the possibility research practice of recycling and reuse. Its working process can be expressed as a complete, full-program original design 'chain': principle research → application experiment → detailed design → production transformation → achievement promotion."[6] Realize the digital game design of the peepshow art and carry out the digital improvement of the peepshows through modern computer technology, that is, use computer animation virtual reality technology to realize the digital presentation of the peepshows, combine traditional art with contemporary computer technology.   While rescuing those national arts that are on the verge of extinction, it is easier to enrich people's entertainment interests and forms of entertainment after creation by combining the new and old ideas. "The creation history of Chinese animated films has actually gone through the creation process of borrowing, interruption, imitation and pursuing a unique national style, has experienced different development stages such as imitating foreign industrial operation modes, improving processing technology,

and changing market concepts to exploring new creations with national characteristics." [7] Because the lyrics and tunes of the peepshows have a clear nature of national folk art, we can record the sounds and pictures of contemporary peepshow artists in their live performances, and perform non-linear editing of these performances subsequently, and finally, synthesize them into new digital music tracks for music lovers to listen to in combination with the advanced modern digital music synthesis equipment. According to the structure of the peepshow wooden box equipment, design a digital peepshow APP or device. The digital peepshow device should be simple and easy to use, easy to carry, easy to move, easy to use by peepshow artists, which can alleviate the extinction of peepshow art to a certain extent. This measure is the uphold of peepshow art and also an innovation of a new art form. "Interactive film, as a narrative carrier, guides the characters in the film to make "choices", and is a bridge that promotes narrative and performs the two-way communication between the experiencer and the work." [8] We can also create corresponding computer animate films based on the combined artistic style of rap, performance and painting of the peepshows to enrich the art form of digital animated films. Peepshows are a traditional visual art with relatively strong interaction. It has the unique charm of modern animated films. We should enhance the interactivity of peepshow art and strengthen the development and research of interactive film animation. The ultimate goal of innovation is to maximize the inheritance, dissemination and perfection of peepshow art, promote the combination of traditional art and computer animation, and explore new computer animation industrial marketing methods.

The animation art industry is affected by the laws of development model to a certain extent and has a pattern of overall bucket effect. Only after the overall understanding, overall planning, overall creation of the animation industry and in-depth understanding of the animation market, can animation creation have sufficient economic support and can form the industrialization of the animation market when it has reached a certain extent. Both the early Chinese animations and the peepshow that have taken shape in the animation industry have the basic principle characteristics of animation. They are both the drawn dynamic pictures and both have the characteristics such as script creation, character portrayal, coexistence of sound and picture and selling tickets for seats. However, due to different stages, their specific contents and forms are also different, and eventually they formed their own different industrial models.

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