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Thinking of Aesthetic Empathy in Immersive Exhibitions

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ABSTRACT

Based on the phenomenon of immersive exhibitions becoming a boom in art experiences, the authors investigate the reasons for this phenomenon from the intersection of the two fields of cognition and art - "aesthetic empathy", and consider the audience's "aesthetic empathy" as one of the key factors contributing to the phenomenon. In addition, the authors believe that the communication effect of immersive exhibitions is ultimately completed by the joint construction of technical equipment and the personal characteristics of the audience. Then, the authors propose some conditions and methods for building a positive art experience in immersive exhibitions. The overall point refers to that the advantages of immersive technologies include sensory stimulation and visual image construction, which will benefit the audience in immersing themselves in the symbolic system constructed by the work, which is the driving factor in the early stage of empathy. Then, this will make the audience think and feel the meaning speculation and emotional understanding brought by this symbol system, and complete the empathy experience.

Keywords: Aesthetic empathy, Immersive exhibition, Composition of immersion

INTRODUCTION

In Shanghai's EPSON teamLab Boundless Museum, there are several immersive experience galleries. A series of technologies, by linking audience behavior or time, put the audience in a space where light and shadow intertwine, or blur the boundaries of space, or interact virtually. Accompanied by beautiful music, the audience will appreciate the ever-growing and changing exotic flowers or abstract forms around them, influencing their entire process from birth to disappearance. The viewer wanders through this world, through the ever-changing virtual space, who is immersed in the space created by virtual technology. Moreover, the audience is made to construct associations and reflections about man and nature with contemplative and profound effect.

While these statements may not represent the true feelings of every viewer, a series of immersive art exhibitions created by teamLab have actually been exhibited in art and business spaces in several countries by creating virtual scenario, clearly indicating that this is the current trend in art experience.

In terms of this trend, we believe that one of the indispensable reasons is that with the cooperation of a series of immersive technologies, the spontaneous aesthetic empathy ability of the audience has been exerted to a

higher degree in the "unilateral" communication between people and things (Gompertz 1960:533), forming a process of good aesthetic experience and appreciation. That is the reason why immersive exhibitions attract a wider audience.

In order to discuss the topic of "immersive exhibitions" and "immersive technologies" more deeply and precisely in the following, we account for them here. The term "immersive exhibition" in this study refers to offline physical exhibitions that use digital technology as a way to present content or visuals. The term "immersive technology" typically refers to Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR) as well as a range of simulation technologies.

In this article, we first review empathy, which is particularly important in the experience and study of art (Barasch & Barasch 1990:82), also exploring immersion, which is at the heart of immersive exhibitions. In order to reflect the need to think about connecting empathy in aesthetics with immersive exhibitions, we then combine technical and human factors to propose some conditions and methods for constructing a benign art experience in immersive exhibitions. Finally, we reiterate the essence of immersive exhibitions from another aspect.

AESTHETIC EMPATHY: AN IMPORTANT ABILITY TO EXPERIENCE ART

The meaning of empathy and its relationship to the communication process, with a broad field of academic research (Gompertz 1960) such as psychology, sociology and philosophy. Retracing its origins, Friedrich Theodor Vischer and Robert Vischer first proposed the role of empathy (Jorland and Thirioux 2008). Friedrich Theodor Vischer viewed the empathetic role as "Object Personification" and called it the "Symbolic Role of Aesthetics" (Jorland and Thirioux 2008). This also made him a pioneer of empathy in aesthetic theory. Based on the "aesthetic symbolism", Robert Vischer proposed the "Einfühlungsästhetik". In addition, he focused on the significance to the way we experience the world of the specific form of the body as well as the corporeality of perception (Curtis & Elliott 2014:366). Afterwards, the American psychologist E.B. Titchener translated the term Einfühlung (feeling-in) as "empathy" (Barasch & Barasch 1990). Empathy is of particular importance in the experience and study of art, which is described as the process by which viewers recover in their own minds the emotions conveyed by the artist's work (Barasch & Barasch 1990).

This complete empathy process from awareness to association to empathy is vividly illustrated by combining a quote from Vischer. "When something in the landscape appeals to our senses, our emotions, or our feelings, it must come from the fact that its form, its color and its light excite a reactive movement in our inner man, and thus our physical body resonates. The habit of expressing states mind in real life, such as the agitation of the soul." (Jorland & Thirioux 2008) That is to say, stimuli from the external world first attract the attention of the senses, change our emotions, and then get further emotional feelings.

Therefore, the complete process of aesthetic empathy can be regarded as.

Step 1: Reach awareness through sensation (opportunity for empathy).

Step 2: Evoke association through active thought (the beginning of empathy).

Step 3: Complete emotional empathy (in empathy).

However, if full empathy is to be reached, there are two points worth noting.

(1) Our feelings for an object are awakened through the association with the memory of what we have experienced (Jorland & Thirioux 2008). It indicates that without this experience, there will be no change in our feelings. In the discussion on the sharing hypothesis, Japanese professor Nishida also noticed this, saying that although people have innate empathy, empathy communication may still be blocked by personal experience (Nishida 2013).

(2) The feelings we experience are not created through the thing itself, but through the thoughts it evokes (Jorland & Thirioux 2008). It suggests that during the process of empathy, the emotions associated by the imagination may differ due to the different levels of feeling ability between individuals.

The above views on aesthetic empathy provide important implications for the ensuing exploration of experience in immersive exhibitions.

IMMERSION: THE ENABLER OF AESTHETIC EMPATHY

The core of an immersive exhibition is the creation of "immersion", which aims to make the audience ignore the real world and focus their awareness entirely on the experience and content of the exhibition, thus building a state of high integration of spirit and art (ideally). A series of immersive technologies exert a role in attracting the audience's attention and stimulating their senses in the exhibition. Achieving a sensory experience, and completing the first step in the process of aesthetic empathy - reaching awareness through sensation. It provides an opportunity for arising aesthetic empathy.

Frank Biocca and Ben Delane argued that immersion happened on both sensory (perceptual) and conscious (mental) levels by revealing contact perception with sensory and related physical aspects (eds. Biocca & Levy 1995). As a result, the visual image construction brought about by immersive technologies is not a complete "immersion", but also requires the completion of the psychological experience to achieve "consciousness immersion", which is the second step during the process of aesthetic empathy for the audience - evoke association through active thought.

We recognize the implications of consciousness immersion from Jim Blascovich's exploration of the social implications in immersive virtual environments. Jim Blascovich emphasized that virtual environments could exist through any sensory form on the basis of organized information (Blascovich 2002). The term "IVE" is used to refer to a mental state created by the organization of multi-sensory information. Besides, he also said that

The Truman Show was a logically perfect demonstration of "IVE" (Blascovich 2002). This means that "immersion" is not only based on the realism brought by technology, but also on the construction of a set of virtual symbols (information on images, language, etc.) that can be decoded by the audience, allowing them to make associations and thereby achieve a state of consciousness immersion - complete emotional empathy.

Therefore, the creation of immersion consists of two aspects including sensory immersion + consciousness immersion. The way is sensory attraction + artificial construction of virtual symbols.

Obviously, immersion is also a dynamic experience, moving from sensory attraction to conscious immersion. Here presets where the intersection of empathy plays a role in the immersive exhibition experience - the creation of immersion facilitates the occurrence of empathy, and the occurrence of empathy deepens the experience of immersion.

There exist obvious advantages of the use of immersive technologies in creating a sense of immersion. In the immersive exhibition about Van Gogh, the exhibition allows visitors to take a first-perspective tour of the environment of Van Gogh's life in order to deepen the audience's understanding of Van Gogh. However, it is also possible that personal experiences and cognitive differences may not generate empathetic immersion in the process. For example, Cogburn made it clear that no one else could possibly try to know in a few minutes in VR about the racist experiences she has been burdened with since birth (Omokha 2021). This fits with the rising obstacles to empathy. To sum up, the communication effect of immersive exhibitions is constructed by both technical equipment and personal characteristics of the audience.

CONDITIONS AND METHODS: EXPLORING THE PATH TO AESTHETIC EMPATHY BY COMBINING IMMERSION

Technical Factors: Conditions That Promote the Occurrence of Pre-empathy

1. Simulacra

As mentioned earlier, through constructing virtual symbols, the viewer can dissolve the objectively real world and create consciousness immersion. The teamLab' s exhibition includes light and shadow, flowers and plants, and abstract forms that are virtual symbols with symbolic meaning of nature.

This was the "Three Orders of Simulacra" that Baudrillard proposed in his reflections on the impact of electronic media on the world order. In the third stage of simulation, the focus is on the viewer's association with symbols. It can create a virtual reality world that does not exist in the real world but is extremely real and perfect. In addition, it enables the audience's imagination to be fully utilized. However, the excessive use of simulacra to create immersion will be harmful to the realization of human values as well as the balanced development of spiritual ecology.

2. Multiple interactions

Various interactive behaviors play a basic role in people's daily life, including interactions between people, interactions between people and nature

and interactions between people and media. It is through the interaction of various environments that people get to know themselves and further to sense the world, understand the world and transform the world, indicating that if we want the audience to have more sense in immersion, it is essential to use multiple ways to connect and interact with the audience.

As a condition for promoting empathy, the above is the current status of most excellent immersive exhibitions. However, we still summarize this to reiterate the significance of catching the performance and viability of technology during the process of empathy occurrence. They play a role in the early stages, for instance, they attract sensory attention and make us make associations. "It is a mistake to suppose that any medium's connection to reality could purely be based on the properties of that medium." (Engberg & Bolter 2020) Technology is not the same as art, and it alone cannot resonate emotionally. The following is a look at what methods can be used to complete empathy in an immersive exhibition, in terms of human factors.

Human Factors: Methods to Facilitate Empathy Completion

1. Artistic techniques

The artistic techniques in this context do not emphasize external beauty of form, just as art does not refer only to external beauty. Instead, it emphasizes that the designer distills the essence of things to arrive at the core concept, and then selects the materials and media to be used in line with the concept.

As a result, the job for designers who want to make immersive exhibitions that can accomplish emotional resonance is to provide artworks (not necessarily objects) that are open and can touch deep psychological rather than figurative levels. In addition, it allows the viewer to project their own emotions onto the artwork based on their own experiences, which is the original definition of empathy, the "Symbolic Role of Aesthetics". The audience can understand the artwork from the effect of senses and associations differently, bringing about changes in the audience's emotional or ideological realm.

2. Slow down

The purpose of art is to impart the sense of things being perceived. Technology makes it difficult for viewers to understand art forms and will accordingly increase the difficulty and length of their perception. Therefore, the time of sensation should be increased (Shklovsky 1917). Moreover, this approach is not only reflected in the process of art appreciation. In the framework of Merlijn's research on design empathy, the idea that association requires a time commitment is mentioned (Kouprie & Visser 2009).

This will allow the audience to better penetrate and understand another person or object or event, then internalizing it. This is one of the keys to effective and beneficial empathy communication.

ON THE OTHER SIDE OF THE DISCUSSION

"The curator of contemporary art is fundamentally concerned with the new, and with that concern comes the pressure to create exhibitions and events

to showcase that novelty." (eds. Noordegraaf et al. 2013) In the present day, immersive technologies are becoming part of this pressure as the new thing to do. However, if we leave aside the immersive technologies that appear so great now, in the long run, it seems that art or exhibitions have always been highest praised for their capability of provoking thought in the audience.

American contemporary artist James Turrell used space and light as the material for his work, manipulating its color, intensity, shape, and duration to reveal the artist's concept. The viewer is allowed to feel the migration of emotions and changes of consciousness in the works of different colors. In Jiang's past research on color, the idea that color could produce changes in human emotions was also verified by analyzing data on physiological signals in different color environments (Jiang 2020; Jiang 2022). The light environment affects subjects' subjective perceptions mainly by influencing their mental functioning (Yu 2021). Color has visual psychological sensations such as cold, warm, light, and heavy feelings. For example, a high color temperature environment gives a bright and relaxing feeling, while a low illumination environment is depressing (Lu 2021; Jiang 2021). In addition, the artist's work is also built on this empathy process of sensory stimulation - evoking associations - emotional resonance, allowing the viewer to immerse themselves in an abstract, sensory world.

Artist and writer Maya Kramer accurately commented on James Turrell's work in this way: "Through his work, one is ushered into a state of hyper awareness, of the pieces themselves and more to the point of one's own consciousness." (Kramer, M. 2018) Isn't this state the goal of the current immersive art exhibition?

CONCLUSION

In this article, we try to explore the complete process from sensory-association-empathy, and explore two types of "immersion", the core of an immersive exhibition. We investigate a mixture of concepts from these two fields in order to give some views on the conditions and methods for achieving aesthetic empathy. Finally, the work of the famous artist James Turrell is mentioned with the purpose of further arguing our point. We believe that immersive technologies have the gift of engaging the masses and stimulating the senses to accelerate imaginative happenings. However, they do not directly evoke empathy yet merely stimulates the primitive emotions or instincts inherent in the human mind through the existing physical conditions. Besides, the human factor still needs to play an indispensable role in order to form a complete process of empathy and to make the audience gain something from the art. Actively analyzing them from different perspectives and exploring the essence and differences are certain ways to construct an ideal experience. Therefore, this article is a preliminary attempt. However, this is not intended as a complete overview, and there are many other propositions concerning immersive experiences in exhibitions that can be explored beyond those mentioned in this study, such as meditation in Eastern aesthetics, Gestalt completion psychology, mind-flow theory, etc.

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