Virtual Reality Expression of Body Art in the Game Industry

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Abstract. Body art is difficult to be commercialized because of its time limited characteristics. However, the core connotation of the expression of its art form not only satirizes and criticizes the real society, but also exerts a subtle influence on human life. The current virtual reality game upgrades people's experience from a single plane to an immersive mode, reaching a new height in the sense. In a sense, it makes the body and mind touch a broader direction, which provides an excellent medium for the dissemination of body art in the virtual reality game experience.

Keywords: Body Art; Virtual Reality; Design of Online Games.

1. Introduction

1.1 The Origin and Development of Body Art

Body is a symbol with multiple meanings, hidden in history, politics, society and other fields. Since the second half of the 20th century, body art has occupied an important position in contemporary art. Body problems have become an important part of contemporary art creation, theory and criticism, mainly manifested in performing art, behavioral art, art and conceptual art. The expression methods of these arts intersect with each other and intertwined with gender, race, class and other issues, It reflects people's more in-depth thinking about themselves, and questions and challenges the dualistic opposition of body / mind in Western rationalist philosophy since dickar in the 17th century.

Since the Second World War, the aesthetic significance of Western art has been questioned, and the fierce art practice has constantly impacted the boundary of modernism. Body art related to behavioral performance rose in the 1960s. Because the display scope of body art is no longer restricted by time and space, region, culture and expression methods like traditional art materials and media, the spiritual connotation of artists' body expression is also more free. Body art originated from the impromptu performance of Dadaism poetry in the late 1910s. Body related performance has been reflected in various art schools since the 1950s. For example, the action painting of abstract expressionism Jackson Pollock, the silent music performance of wave movement artist John Cage and the accidental art of Allan Kaprow all express the movement of the body.

1.2 Expression Form and Spiritual Connotation of Body Art

In 1964, Yoko Ono's most famous storm school work "slice" was born in Carnegie Hall. Her body began to be displayed in a pure and direct form in front of the world for the first time, allowing us to see an oriental woman's cry for female art. Dressed in black, she sat in the center of the stage with a grim face, asked everyone to cut off her clothes and finally exposed to the stage. This bold attempt has attracted great controversy, which not only meets the desire of men to peep and stare at women's bodies in a patriarchal society, but also ridicules and despises men's eyes with their bodies. We don't know what kind of psychological desire every man who cuts off his clothes has. We may have respect, obscenity, malice, admiration, and even shame at staring at himself. But we can be sure that Yoko is the same as those female artists who doubt the art history of male perspective and strive for gender identity, They are awakening. Yoko, who was cut off a little until she was naked, sat up with a firm and tenacious expression that seemed to have a trace of anger, just as she described it: "when I made slice for the first time, my heart was full of anger and anxiety." "This ambivalent mood seems to be the same as Susanna in the picture of janeneski. Women have survived for too long under the gaze of the patriarchal perspective, and their awakening consciousness must have traces of history, leaving the shy warmth of peeping and the anger of women's resistance. Three years later, Yoko Ono

conducted her slice in Paris In the second performance, Yoko calmly sat on the stage, smiled and said to the audience: "come on, cut off my clothes, anywhere; everyone's cut area should not be larger than a postcard, and please give this fragment to anyone you love." this time, she met the love of her life, Lennon. If you say slice The birth of is Yoko's first clarion call for her own female identity, so the meeting with Lennon in the second slice officially opened the road of her feminist art. Although Yoko does not admit that she is a feminist artist, her later works are also full of feminine color. Yoko Ono's first two slices The birth of, just like the budding development of feminist art, opens a window in the mysterious female world, seeks some relatively fair role status with women's own voice, gets rid of the passivity of staring, and rejects pornography and violence with the most naked female body.

At the end of the 1970s, the "presence" and "metaphysics" of the French philosopher Jacques Derrida were the key to explain the theory of body art. Derrida was deeply influenced by Heidegger. Along the track of Heidegger's theory, he developed deconstruction theory in exploring the possibility of the collapse of sound, body, writing and even the whole "civilization". He brought the screams in Heidegger's cruel theater back to the body to question the initial roots of language and art and their concrete realization, and proposed that "Heidegger's promised speech exists in the body, the body is the theater, and the theater is the text. This text is no longer subject to the ancient writing, but a text or speech that is not in line with the previous norms." (Jacques Derrida, *writing and difference*, trans. Alan Bass, University of Chicago Press, Chicago, 1978) under the influence of Derrida's theory, body centered performance art can easily be regarded as the metaphysics of presence, representing the "presence" of the body It can surpass the desire of all symbols, symbols and moral meanings and directly enter the essence of things. However, the artistic practice of replacing text with body may slide into new essentialism.

Since the late 1980s, the theory and practice of western contemporary art have turned to anti aesthetic body art again. Neurotic, broken, damaged, ugly and non idealized bodies are filled with contemporary art, showing the instinct of human nature and the fragility of body and life.

Whether it is real existence or virtual image, body art emphasizes the most basic and real feeling of human beings. It is the deepening resistance to the binary opposition of "body" and "spirit", sensibility and rationality in Western art rationalist philosophy. Artists use real flesh to oppose the constraints on human freedom and personality from various systems such as religion, commerce, society and politics. Since the 1990s, it is no accident that contemporary art practice and theory have turned to the body again. This turn means that the real feeling from the flesh has finally broken the simulation image shielding reality in the post-modernism period, and let people touch a real and humanized world again.

2. A Brief Analysis of the Concept of Virtual Reality in Games

2.1 History of Virtual Reality Games

Virtual reality game, if you turn on the computer and put on the virtual reality helmet, you can enter an interactive virtual scene, not only the current scene, but also the past and future. After understanding virtual reality, the concept of virtual reality game is not difficult to understand. Wearing a virtual reality helmet, you see the world of the game. No matter how you turn your eyes, you are in the game.

Its principle is to use computer simulation to generate a three-dimensional virtual world, provide users with visual, auditory, tactile and other sensory simulation, let users feel the experience of experiencing their environment, and be able to interact freely with things in the space.

Although virtual reality technology appeared only in recent years, it has been applied in many fields, including medical simulation surgery, military aerospace simulation training, industrial simulation, emergency deduction, electronic games and so on. Among them, there is a more important relationship between video games and virtual reality technology. Different from the simple simulation in other industries, video games often need to build a complete macro world and have higher

requirements for technology. Therefore, as an application platform, games also play a huge demand leading role in the development of virtual reality technology.

The concept of virtual reality existed as early as the 1960s, but it was not applied to game technology. Until modern hardware equipment was sufficient to support it, shenx first proposed the first practical model, and then completed it by oculus developers, shenx, the famous Pac Man developer Iwatani and others [1] (you can't imagine! The earliest VR game was pac man. Sina), and finally ushered in the explosive development of VR games in 2016. [2] (2015 VR game development report. Tencent games).

2.2 Virtual Game Instance

Half life: alyx jumps out of the design logic of existing games, and its interaction is the interaction that really makes VR meaningful. For example, when shooting, the limitations of the handle basically restrict the interaction of the shooting game to the system of "It aiming, rt design and X-Key bullet changing". However, half life: alyx is completely different. VR game requires you to hold the controller in the correct way of holding the gun, your eye sight, take out the magazine from your backpack for replacement, and even pull the bolt and load it yourself. You may be in a hurry, but this is the real virtual reality interaction. In addition to the complete design system highly conforming to VR, the whole game design is also aimed at VR, including rhythm, mirror movement and level design. Half life: alyx shows VR games that the future must be bright.

If we characterize half life: alyx, it is the first 3A masterpiece in VR games. It has cross era significance and proves to all onlookers that VR can have heavy games. Why is half life: alyx a cross era work? To sum up, the main reasons are as follows:

1. It is the most abundant VR game at present. It has a complete plot of 8-10 hours. Previous VR games were sketch games that can pass customs in 2-4 hours.

2. It has a complete battle and plot system, and has interactive playing methods specially built for VR games, such as climbing a ladder by hand, changing a magazine manually (really pulling a bolt by yourself), and a large number of interactive scenes to give players a real interactive experience.

This has never been done in previous games. For example, for the bullet design in FPS games, most game designs are to kill the enemy and drop bullets, or a fixed supply point. You go near the bullet cursor and press a to pick up bullets. The design of half life: alyx is that the bullets are on the shelf, and there are a lot of garbage on the outer layer of the shelf. You need to "push away" the sundries with your arm, find the bullets, and then load the bullets manually. This sense of immersion and experience is unmatched by other games. In fact, before half life: alyx, many small studios tried to make VR shooting games, but because there was not enough money, many designs were simplified, the interactivity was not so strong, the players' sense of immersion and realism was naturally very poor, and the evaluation of VR Games was naturally not high. Therefore, the existence of half life: alyx proves to players that VR can make good games.

3. The content of the game is rich enough, the scene is complex enough, the modeling is exquisite enough, and the player's participation, interaction and immersion are strong enough. As mentioned before, when playing VR games, players' sense of experience is linked to the interactivity in the game. The more interactive things in the scene, the stronger players' sense of immersion and the more realistic virtual reality. High interactivity requires a strong ability of heap resources, development, code and art. These factors are well balanced in half life: alyx.

4. Before half life: alyx, most manufacturers did not dare to specially produce games for VR platform due to the small sales of VR equipment, and small manufacturers did not have enough money and time, so they did not dare to bet on VR games.

As a result, the VR platform can not find a game that can really be played every day, and there is no real masterpiece, which leads to a vicious circle. Without games, players do not buy equipment, players do not buy equipment, the installed capacity cannot go up, and manufacturers dare not invest in making it. However, V society has taken the first step to break the cycle, including development cost, development time (4 years), sufficient technical reserves and hardware adaptation capacity. V

society has proved to everyone with practical actions that there can be 3A masterpieces on VR, and VR games can have an experience that can not be imitated by any host. V club has the ability to make games that others can't imitate.

If the emergence of half life: alyx really drives the sales of VR devices and makes VR players feel that this is a real VR game. Then half life: alyx has undoubtedly opened a new era, allowing more large manufacturers to focus on the VR platform and make more attempts. Of course, in this process, it is v club itself that gains the most. On the one hand, it proves to everyone the excellent game production ability of V club, on the other hand, it can promote his ambition to build a VR game platform.

3. Research on the Game Perspective of Body Art Elements

3.1 Discussion on Body Elements in Virtual Games

In the western philosophical tradition, the body problem has always been placed in the dual discussion framework opposite to consciousness, and has been belittled because of its materiality. Rene Descartes believes that there is no chance to get close to truth and knowledge through sensory and physical experience. He doubts the physical experience itself and places his pure self on the "I think" without body by completely eliminating the uncertainty of body. It was not until modern times that the importance of the body really appeared. Friedrich Nietzsche reversed the fundamental starting point of empirical philosophy or rationalist philosophy and took the body as the starting point. In Merleau Ponty's phenomenology, the body is regarded as a contradiction intertwined with "externality" and invisible "internality", that is, the body itself has both passive factuality and active transcendence.

In Merleau Ponty's view, the body is the connection between the experience world and the external objective world. The experience world perceived by human beings is processed through the information received by the innate sensory organs as the natural interactive interface. From the "sensory substitution" effect that can be realized by virtual reality technology, if the technical conditions can completely replace the synchronous relationship between vision, hearing and body posture, this also means that, For the first time in the history of human media technology, virtual reality has completed the complete replication and integration of in vitro sensory information, and can completely replace the natural human sensory channel through full coverage.

For the immersion characteristics of virtual reality, some scholars describe it with "being there". Early virtual reality technology had to make a difficult choice between image fidelity and computer response speed due to the limitation of computer computing ability and graphics ability of graphics card. Today's virtual reality technology has been able to solve such problems on home level equipment, so as to realize the millisecond real-time response of participants' physical posture and virtual environment in head mounted display. In conclusion, the digitization in the sense of being mentioned by Merleau Ponty as early as digital survival has been realized in today's virtual reality, and brings complete alternative body experience to participants, and affects participants' identity experience through the replacement of physical experience.

Chris solarski starts with shape psychology and game dynamic picture composition to explore how to shape the emotional experience of the game in the game. It also points out the important relationship between game interaction means, such as somatosensory control and game aesthetic experience.

3.2 Enlightenment and Future Development Suggestions

From the experience of participants in the immersive communication environment of virtual reality, the spatial practice experience of the body has the following characteristics:

- 1). Virtual reality space provides a unique spatial narrative and immersive body interaction experience due to its technical affordance. The natural openness of the space text itself enables the immersed to form a variety of interactive relationships through body posture, perspective and focus,

endow them with broad degrees of freedom and form their own meaning to the space. Specifically, users can freely choose the relative position of body and space within the technical limit in the virtual space. Therefore, the physical experience of different participants in the same virtual space may be very different. Therefore, the spatial text of virtual space itself must include the dimensions of body experience and body space dynamic relationship, which is one of the significant differences between immersive communication and general media use.

2). The nature of virtual reality space is also defined by the immersion's body participation experience. In mark Ogier's classification, standardized and homogeneous meaningless places such as theme parks and amusement parks belong to "placelessness", because such places lack unique cultural landscape, local culture and people rooted in them. Due to the open text relationship between body and space, it not only provides the immersion with the opportunity to practice the body locally, but also provides the opportunity to interpret the independent meaning of the spatial text. In the future multi person online shared virtual reality space, because the space has a sustainable existence independent of the immersion, it is possible to generate "places" with shared significance and even unique "Humanistic" and "historical" landscapes in the virtual space.

3). Some participants also realized that the virtual "spatiality" may be "deceptive" to the immersion's physical experience. Immersors wear sensory devices, such as head mounted displays, data gloves and even "hamster cages" that can provide space walking ability. These sensory devices partially or completely cover human body sensory channels. Therefore, physical space is completely isolated from immersors' senses after meeting basic technical and physical space requirements. The physical entity space annihilates all the symbolic meaning of the physical space, resulting in the degeneration of the physical space into "non place". Similar landscape descriptions have long appeared in dystopian literary texts such as matrix and number one player.

4. Summary

The interactive participation of games makes video games a medium that can carry more possibilities. However, in the eyes of "many people", they still think that video games are superficial and will provoke negative effects. This is mainly because the current research and development of video games mainly focuses on satisfying adrenaline, and there is little sublimation from entertainment to aesthetics. This is why many people deny that games are a major source of art. To alleviate this bias, responsible game designers should pay more attention to the exploration of game cultural connotation, social function and artistic attribute in the development of modern electronic games, so that players can go deep into the core of the problem layer by layer through interaction in the game, and bring players more aesthetic experience and thinking in addition to the satisfaction of sense of achievement and sense of strength. For example, the interaction with games leads to profound thinking on life attitude, thoughts, feelings and values, which is also the particularity of video game art.

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