

Study on the Psychological Impact of Interactive Video Immersion Experience on Viewers

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Abstract: With the advent of the information age, the form of information dissemination has gradually changed from text graphics to video, which can trigger two sensory experiences at the same time, and use visual and auditory systems to convey more information. For a time, this kind of video transmission has become an important channel for obtaining and exchanging information. Then, with the development of audio and video technology, interactive video began to appear in the public eye. The immersion of interactive video comes from the fusion of narrative and interaction. It is the basic feature of a good interactive video to use the language lens in the narrative and arouse the audience's thinking in the interaction.

Keywords: Interactive Video; Immersion; Pleasure.

1. Research on Interactive Video Immersion Experiences

1.1. Narrative Elements of Interactive Videos

The essence of interactive video is video, so the main theme of its creation still revolves around the principle of "content resonance". Therefore, narrative is an important aspect of interactive video. It is the backbone of the story structure of interactive video, and the narrative elements of interactive video are mainly reflected in the following two aspects, namely, there are multiple endings to choose from, and the transformation of narrative perspective.

1.1.1. Multiple Endings can be Selected:

The difference between the interactive video area and traditional film and television is that there will be different options for the audience to choose from when the plot develops, allowing the audience to actively create their own personalized ending. This interactive form allows the audience to participate in the film as a participant, which is different from the use of narrative techniques to involve the audience in the narrative activities, which uses text options to display the key information in the film and television, so that the audience can choose to decide the direction of the plot. The audience is not only the viewer of the movie, but also the director who determines the direction of the plot. This kind of integration of interaction and narrative is no longer for the director to manipulate the action direction of the protagonist of the film and television, but to allow the audience to exert their subjective initiative to a large extent, providing the audience with space for thinking, mobilizing the audience's expectations and imagination, and subverting the narrative structure of traditional film and television.

1.1.2. Shift in Narrative Perspective:

Different from the traditional film and television narrative techniques, a large number of montage cuts are used, and flashbacks and interludes are used in the narrative to promote the development of the plot. Interactive videos often change perspectives at critical moments in the development of the story, allowing the audience to choose the plot according to the prompts through the subjective lens of a character in the play, rather than showing the whole story from a third-person

perspective. This method can often break the "fourth wall" in film and television. Let the audience substitute the plot from a first-person perspective, and interact with the characters in the play through this perspective, so that they can better substitute the identities of the characters in the play and produce an immersive experience.

1.2. Elements of Interactive Video Immersion Experience

The experience of immersion can be divided into three levels, namely information immersion, sensory immersion, and brain immersion. The fusion of narrative and interaction is an element of an immersive experience in interactive video. The narrative paves the way for the whole environment, creates an atmosphere, and engages the audience in the plot through some narrative techniques, such as creating suspense, and integrating the audience's subjective perception into the structure of the film. This is the first layer of immersion, information immersion. The interaction of sight, hearing, and touch creates a novel sensory experience for immersion, so as to reach the second level of immersion, sensory immersion. Finally, through these behavioral feedbacks, the audience can be replaced from the real environment to the virtual film and television environment, and through sensory feedback, experience the emotions and thoughts of the characters in the play, so that the audience can have a spiritual interaction with the characters in the play, and realize brain immersion or spiritual immersion.

1.2.1. The Narrative Resonates with the Heart:

Interactive video is innovative in form, but its essence is narrative image. A good narrative image should not only resonate with the audience in the content of the script, but also pay attention to the language of the lens during production, so that the lens can better express and convey emotions. For example, different contextual experiences can be created through different scenes. The panoramic lens can explain the environment and time of the event, and the close-up medium shot can focus on the emotions and actions of the characters, and can also show the relationship between the characters and the surrounding environment. Close-ups can better highlight the subtle changes in the details of the person's face or body, so that the audience can feel more delicate emotional changes.

At the same time, the close-up can also be a symbolic realization of something, highlighting its metaphorical meaning to sublimate the film. When the audience is in the "peeping" perspective, the audience can gradually enter or fade out of the scene as the camera moves closer and farther. The camera allows the viewer to carefully observe the changes in the picture during the movement.

1.2.2. Integrate into the Invisible Interactive Interface:

Interactive interface is an important part of interactive video, and to achieve an immersive experience, we need to pay attention to sensory design on the interactive interface. Visually, when the interaction appears, the text options can be gradually revealed to match the way the lens is shot. Or use the style of subtitles to avoid the appearance of text to break the immersive situational experience. The icons of the interaction should also be thematic and systematic, and should not deviate from the overall tone of the video. From the auditory point of view, you can also incorporate some sound effects or lines into it to create a corresponding atmosphere with the film and television plot, so that it is more suitable for the overall environment of the play, so that the audience can make choices more efficiently.

2. The Psychological Impact of Interactive Video on the Audience

Interactive video relies on audio-visual experiences to mobilize viewers' emotions, and sensory psychology is closely related to interactive video. Its principle is to feed back to the brain through interactive behaviors, and further association is processed by the brain, and certain memories in the mind are awakened through synesthesia, and then the emotions in the memory are reproduced, so as to improve attention and participation. Therefore, through the in-depth understanding of human interaction behavior and perception, it can bring a more immersive interactive video experience to the audience.

2.1. The Psychological Experience of the Audience

Watching interactive videos is an aesthetic activity, and in aesthetic activity, it has become a consensus to recognize the participation of all senses in appreciation. [1] By strengthening the stimulation of the visual, auditory, and tactile senses on the body, the interactive video makes the audience ignore the space of the body itself and enter the cyberspace and artistic conception created by the interactive video, which can make the body's sense of existence in a secondary position, thereby highlighting the psychological sense of existence. Only by mobilizing the inner activities of the audience can the emotions of the audience be aroused, so as to mobilize behavior and emotions. This kind of psychological implicit interaction is the interactive experience that immersive interactive video should have, it is a kind of spiritual pleasure from the feedback of physiological senses, from a psychological point of view, people through the synthesis of visual and auditory experience, the formation of a "foresight" mechanism, this mechanism is called narrative. The so-called narrative pleasure is that the brain symbolizes and narrates visual or auditory signals to form a judgment about the audio-visual object in its favor, thus triggering the response of the brain's pleasure center. [2] Narrative pleasure is often imperceptible, for example, the meadow is an object of pleasure for people, but this positive

feeling is not caused by sight, but is symbolically processed in the brain and judged by associating positive experiences. If the color makes people feel pleasant, then it can be considered that the pleasure is narrative pleasure. In general, narrative pleasure can be divided into two levels of experience, namely visual and auditory.

2.1.1. Visual Pleasure:

Visual pleasure refers to the pleasure that people feel about what they see, and the reason why people can get pleasure when watching images is fundamentally due to the instinctive desire of human beings to peep. This is the "gaze theory" proposed by Laura Mulvey in "Visual Pleasure and Narrative Cinema". She borrowed the concept of voyeurism from the famous psychologist Sigmund Freud. Freud emphasized that peeping is an instinctive human need. And when the desire to peep tends to others, it becomes a desire for satisfaction. When the voyeurism tends to you, it becomes a manipulative desire. As a result, people can instinctively feel satisfaction while watching interactive videos.

2.1.2. Auditory Pleasure:

Auditory pleasure is that people feel pleasant about the sound they hear, different from visual pleasure, hearing is abstract, and it will subjectively process cognition and emotion, so that people can feel delicate emotions. This processing mobilizes the human imagination, activates the cerebral cortex, and involuntarily extracts musical information. For example, in horror films, the water organ is often used as an instrument to create sound effects. It can produce a low, unusual sound that creates an oppressively tense atmosphere for horror films.

3. Summary

In the 5G information age, advanced audio and video technology will bring traditional video to the forefront and present it in the form of interactive video. As an emerging product of the times, interactive video has broad development prospects. When designing interactive videos, we should not only pay attention to the explicit sensory interaction experience, but also pay attention to the implicit psychological experience. Only when these two experiences are triggered at the same time can the audience get the perfect sense of immersion. From a psychological point of view, these two kinds of experience can be intertwined with each other, and the interactive behavior generated by the audio-visual experience provides the brain with new cognition, fully mobilizes the audience's emotions, and then the brain makes associations through experience. This stimulation of imagination can be called synesthesia, or synaesthesia. From an aesthetic point of view, synaesthesia design is an effective way to improve the user's sense of participation. It can be seen that objective behavioral experience and subjective psychological cognition complement each other. This is the principle of psychological theory that enhances the immersion of interactive videos. For the interactive video itself, its narrative mode and emotional cognition are very important, and it requires a strong sense of audience participation to get the best feeling of the film. [3] Whether it is from the content or the form of intervention, so that the audience can get a sense of participation from the beginning. While creating a virtual imagination space for the audience, the original text structure is broken. The original text is decomposed into a variety of different fragments, and at the critical juncture of each textual plot, the initiative is handed

over to the audience through the emergence of interactive interfaces, so as to "force" the audience to participate in it, so as to obtain an immersive experience. To sum up, as an emerging form of video expression, interactive video should pay attention to the readability of the script in terms of content, narrative techniques in shooting, and more invisible and fit the theme of the story when interacting, so as to comprehensively create an immersive interactive video.

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