

On Interactive Films in the Context of Film-Game Integration

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Abstract: Under the background of the film-game integration, the cross-media interaction between film and digital games has promoted the burgeoning of interactive films. In light of this situation, this paper attempts to explore interactive film in the digital media era, identifying its ontology and critical features. Firstly, interactive film with image language and montage techniques at its core is inherently associated with games. Secondly, such digital media technologies as AR, VR, and MR and more flexible and available interactive interfaces have made the user's interventional participation possible, bringing them a more interactive and immersive viewing experience and transforming them as one of the co-authoring branching narrators. On the premise of maintaining the whole story context constructed by the director, the audience conveys more alternative plot events through the diverse path nodes and clue selections, exerting the coupled function of multiple narrative subjects. Finally, the user's active involvement not only enriches the artistic forms of film but also generates a community for meaning co-creating and sharing and brings the user personalized aesthetic experience.

Keywords: Interactive Films, Film-Game Integration, Ontology Features, Interventional Participation, Individual Aesthetic Experience

1. Ontology of Interactive Films

1.1 Definitions of Interactive Films

Before proceeding, it's reasonable and rational to identify the definition of interactive films. The specific conceptualizations of interactive films vary between studies (Stenzler & Eckert. 1996^[1]; Guerrini et al. 2017^[2]; Verdugo et al. 2011^[3]; Perron et al. 2008^[4]; Nascimento et al. 2019^[5]), while one of the most common consensus is that the user's choice affects the natural flow of interactive events. For example, Stenzler & Ecker (1996) pointed out that a person that acts upon a video can provide commands of what is to be viewed next by "play" and "pause". They believed that the user serves as the branching narrators out of two narrative agents and influences the flow of film plots, which is consistent with Perron (2008)'s definition of interactive films: "interactive film allows user's responses to complete the whole story and they can promote the film plots conforming to individual preferences". In this study, since there exists no formal definition of interactive films, the author follows Stenzler & Ecker (1996) and Perron (2008), who attached great importance to the active play of users. In interactive films, the user undertakes the responsible of co-authoring on the premise of conforming to the core plot constructed by directors. In addition, interactive films essentially present interactive gamification features, allowing users' immersive experience particularly in the context of film-game integration.

1.2 Ontology Features of Interactive Films

Interactive film as one of the cinematic genres encompasses characteristics of both movies and digital games under the background of film and game integration. On the basis of maintaining the movie art with image language and montage techniques in nature, interactive films are also endowed with the features of game interaction, giving the audience autonomy and mobility to explore multiple story endings according to corresponding plot selection nodes. As another form of film, interactive movie essentially gives much priority to acoustic-optic and diverse lens language generated. In this process, the individual choice of the audience is perceived as the special film narration, just as Zhong SH (2022) depicted that the essence of interaction remarks an alternative montage, like additional plot editing and sequence construction^[6]. On the other hand, interactive movie has something in common

with digital games, manifesting the preference of interactive experience environment. Under the background of film and game integration, interactive games and dynamic images are constantly and deeply integrated. The best available evidence is that SHI C (2020) has pointed out that interactive movies emphasize the spatial roaming and environmental interaction of the game. What's more, the protagonist makes different choices and achieves corresponding outcomes through the control of the player^[7]. Compared with the closed story context generated by traditional films, on the basis of ensuring narrative coherence, interactive films encompass digital game-like interactive environment, allowing players to make choices at different plot nodes. Generally speaking, with the assistance of gamification, the interactive film whose essential feature lies in cinematography belongs to the new form of film art. Distinguished from the closed narrative of traditional film, interactive film attaches major significance to the communication and interaction between the audience and film works, enabling them to make choices and extend multiple story endings on the basis of ensuring the narrative coherence.

1.3 Evidence of Interactive Films

The blossoming of interactive film endures a long history, which is beset with obstacles and impediments. *Kinoautomat: Clovek a jeho dum* created in 1967 represents the first interactive film recognized in history. The audience is able to determine the plot thread by means of the red and green buttons installed on the seat. Nevertheless, this innovation hasn't received due attention. Since then, the progress of interactive movies has reached an impasse until the *Heavy Rain* released in 2010. As the crystallization of interactive movie, *Heavy Rain* embodies the real-time rendering effect of the recreational machines, and the players in the movie can talk to the characters in the scenes, allowing them to experience the whole story through a variety of narrative perspectives. Hereafter, such interactive movies as *Life is strange* (2015), *Black Mirror: Bandersnatch* (2018) and *The Invisible Guardian* (2019) enjoy more ingenious creative designs and sophisticated film style, vigorously promoting its progress. In light of this situation, especially in the context of film-game integration, there is an overwhelming agreement that interactive films have indeed enriched the expression form and aesthetic characteristics of the film art. The best available evidence is that interactive film has become the research hotspot in the field of film and quite a large number of scholars believe that video games have re-driven the development of interactive films. They have paid more attention to the relationship between VR games and interactive films and believe that the cross-media interaction and integration between interactive films and VR games have changed the previous narrative subject, narrative method and audience's aesthetic experience effect (e.g., Qiu ZH. 2021^[8]; YU S. 2012^[9]; XIE B et al. 2020^[10]). For example, Qiu ZH (2021) demonstrated that in interactive films, the choice of the audience becomes the crucial part of the film, realizing the turning from one-way output of film reading to two-way interaction. YU S (2012) believed that interactive film is expressed as the non-linear narrative mode. XIE B et al. (2020) depicted that interactive films bring the audience an empathic immersive experience at the boundary between virtual and physical spaces.

2. Interactive Storytelling

2.1 Digital Technology Empowering: Basic Effects of Media Technology

On the basis of digital technology and interactive interface, interactive films make the human-computer interaction possible. In other words, the digital technology empowers the audience to exchange with interactive films by digital medias and more sophisticated interactive interfaces, providing them with participatory and immersive perception. McLuhan (2000) once pointed out that film as the high-definition medium possesses the features of long viewing time and closed viewing environment, which will reduce the synergistic effect of audience viewing imitation, touch and kinesthetic sensations^[11]. Films traditionally employ montage and photography technology to output the story to the audience in the form of natural and smooth image narrative, in lack of the direct experience effects. In a contrast, interactive film with the dual medium of film and game challenges the traditional narrative model. Virtual reality (VR) and augmented reality (AR) with the characteristics of immersion and real-time interaction have changed the expression form of movies, bringing the audience the unique interactive movie-viewing experience. In particular, with the continuous development of extended reality (XR) technology, brain-computer interface (BCI) and other IOT devices, the digital world merging virtual and physical spaces will give audiences the possibility of embodied participation, and a variety of human perception will interact with the computer system to realize the

interaction and communication between sensory channels and interactive films. In addition, with the refinement of media technology, the interactive interface has also undergone the transformation from the button voting to the keyboard shortcut then to the branching selection interactive interface^[12]. The presentation and style design of the interactive interface are more varied, and the textual narrative path is more diverse. What's more, compared with the traditional theaters, the utilization of PCs and such mobile terminals as cellphones make interactive films more flexible and interactive in the construction of images and storytelling, achieving the transformation from one-to-many to one-to-one in the transmission of film images and bringing the users' interactive and immersive experience.

2.2 Interventional Participation

Digital technology and artificial intelligence provide strong support for the user's interactive experience and create a good environment for their interventional participation, realizing the shift from passive viewing to participatory interaction. In interactive films, the user has more of a chance to intervene in the interactive storytelling in a variety of ways. WANG XC (2022) has expounded that the user is able to influence the time and space of the movie, and no longer follows the traditional narrative way, breaking the closure and continuity of the traditional movietelling^[13]. The user's interventional participation has reshaped the original narrative network, which is embodied in the transition from linear narrative or nonlinear narrative to interactive branching narrative. Generally speaking, movies with a fixed plot conventionally flows the linear narrative mode, manifesting the strong logical cause-and-effect relationship between plot events. In this mode, under the guidance of the director, the characters in the play make the rational decisions in face of dramatic conflicts. The core of the film narrative remains the director's personal creative intention, carrying out one-way communication to the audience. Nevertheless, the interactive film leverages the coupled function of director and the user to the fullest which is characterized that the film director and the audience become the dual creators of the interactive film storytelling. As the co-authoring branching narratives, the user has made different choices according to the multiple clues at the key nodes, conveying multiple directions and alternative plots. In interactive films, each plot encompasses the logical context, allowing the user to participate in the creation of the film storytelling by manipulating different story branches and choice nodes. On the premise of maintaining the independence and integrity of the film, interactive films have more narrative branches, the user has turned into both viewers and narratives of films whose choices have become part of the interactive film storytelling, and the narrative network will continue to parallel and interweave with their choices. As a result, the interactive storytelling will be multi-directional with more diversified narrative perspectives. For instance, *The Invisible Guardian* involves four major endings and quite a number of branching endings, and there are corresponding ends through the choices made by the user at different nodes. Each choice of the user will exert great influence on the patriot Xiao Tu's fate in the play, progressively promoting the progress of the interactive storytelling.

3. The User's Independent Aesthetic Perception

3.1 The Independent Aesthetic Experience of Meaning Co-creating and Sharing

Apart from the interventional participation in interactive storytelling, the user enjoys more narrative rights given the openness and sharing of the Internet platform, realizing the transformation from the object of the right to the subject of the right and achieving the independent aesthetic experience. The streaming platform provides the user with such viewing functions as playback, time-shifting and pausing, and also offers more possibilities for them to participate in the exchange and discussion of interactive movies. While viewing the interactive films in diverse media channels, the users mould themselves through self-expression and self-disclosure^[14]. In addition, their active involvement in the interactive storytelling through streaming platforms has contributed collective wisdom, completing the co-creation and sharing of meaning. The Internet technology has made the shift from the silent viewing space to the social field on streaming media platforms possible. The used shared viewing environment has transformed into the vibe characterized by self-contained and elusive viewing^[15]. Unlike the quiet atmosphere in the cinema, the personal viewing space with exclusivity as the core allows the user to express own attitudes and opinions. Discussions about the film are no longer limited to the end of film screening, but can be shared with the assistance of such multiple ways as bullet screen and film review at any time. In addition, the burgeoning of social media platforms has also built a new social field for the user after interactive movie viewing, which not only gives them the opportunity to communicate and interactive with others, but also participate in the discussion and exchange of movie plots through

various new fields. In this community-like communication fields, the user as the subjects of creation has raised a strong sense of intervention, empathy and identity.

3.2 Individual audiovisual Experience

In the meantime, the innovation of media technology has changed the user's audiovisual perception and viewing requirements, bringing the user's personalized aesthetic experience and providing the endogenous power for the development of digital interactive films. On the one hand, digital interactive films provide the user with the right in movietelling and break the barrier between audiences and the film works, achieving the dissolution of aesthetic distance. On the other hand, the different movie plots and story endings based on audience choices also serve as the catalyst of personalized aesthetic experiences. The aesthetic effect in traditional films is embodied as the user's passive involvement, while the interactive film integrating the audience's preferences into the film, reducing the personal preferences of the film director and creating the personalized narrative network accord with the audience's individual aesthetic experience. Wang G (2021) has demonstrated that the most major characteristic of interactive art is to construct a dialogue between the work and the participants, offering them opportunities to intervene with the art works^[16]. Interactive films with the digital game genes in nature make the interactivity between the user and film works possible, particularly in the context of film-game integration. The film narrative network and plots unfolded depend critically on the audience's personalized requirements, which not only conform to their aesthetic perception in modern society, but make the audience obtain heterogeneous and individual aesthetic experience. In addition, perceiving the user as the co-authoring narratives in the interactive film can stimulate the user's sense of creation and participation, so as to allow them to truly feel the protagonist's mental process and trigger the emotional immersion experience. Generally speaking, the audience traditionally has a strong sense of absence while viewing movies. The empathy generated by the audience is merely imposed by the director, failing to arouse their sympathy with protagonists in the film. Nevertheless, interactive films allow the audience to intervene movietelling in making various choices just as the film protagonist does, which not merely eliminate the isolation between the audience and the creator, but result in the immersive audiovisual experience. Wang W (2021) proposed that by endowing the audience the right to make choices, interactive film creators try to make the audience take for granted that all the choices are made by themselves and the ending of the film is also the result of self-selection^[17]. In light of this situation, film viewers are more likely to have a strong attachment to the context set by the directors and enjoy a deeper emotional connection with protagonists in interactive films. While yielding the personalized audiovisual experience, the audience is able to have such a feeling that they are a community with shared future with characters in the interactive movies.

4. Conclusion

In the context of film and game integration, interactive film develops rapidly and innovates the artistic and aesthetic boundary of film. The distinction between interactive films and other films lies in that the former with the film language as the core encompasses a game-like experience environment, allowing users to interventionally participate in the film narration. As one of the co-authoring branching narrators, their choices have become part of the alternative plot events. What's more, the narrative network is reshaped subsequently, realizing the shift from linear narrative or non-linear narrative to interactive storytelling. In addition, the empowerment of media technology has exerted multi-modal interactive experience on the users, who are able to obtain the independent aesthetic experience and contribute their collective wisdom to the meaning co-creation and sharing through the participation in the promotion of plot events and the empathy with protagonists in film works. As a result, the previously unilateral communication channel will be broke up and the community aesthetics will be yield.

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