

Understanding Cinematography in Video Games: "BioShock Infinite" 2013 and "Red Dead Redemption" 2018

فهم التصوير السينمائي في ألعاب الفيديو: "BioShock Infinite" 2013 و "Red Dead Redemption" 2018

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Abstract:

This article highlights the significance of cinematography in interactive storytelling in video games by striving to understand how cinematography impacts videogames through player experiences, boosting narrative immersion, and influencing gaming dynamics. Through theoretical frameworks and examination of literature, it reveals how cinematography deals with generating emotions, and enhances storytelling techniques. Case studies of videogames like "BioShock Infinite"(2013) and "Red Dead Redemption II"(2018) showcase the practical use of cinematographic practises by displaying the blending of visual aesthetics with player actions. Despite problems such as technological limitations and artistic concerns, this article aims to understand cinematography in videogame narratives by stressing its theoretical roots, practical ramifications, and future innovative potential.

Keywords: Cinematography; Interactive storytelling; Videogames; Narrative immersion; Player experiences.

ملخص:

يسلط هذا المقال الضوء على أهمية التصوير السينمائي في السرد القصصي التفاعلي في ألعاب الفيديو من خلال السعي لفهم كيفية تأثير التصوير السينمائي على ألعاب الفيديو من خلال تجارب اللاعبين، وتعزيز الانغماس في السرد، والتأثير على ديناميكيات الألعاب. ومن خلال الأطر النظرية ودراسة الأدب، يكشف المقال كيف يتعامل التصوير السينمائي على توليد المشاعر، وتعزيز تقنيات السرد القصصي. تُظهر دراسات حالة لألعاب الفيديو مثل "BioShock Infinite" (2013) و "Red Dead Redemption II" (2018) الاستخدام العملي للممارسات السينمائية من خلال إظهار المزج بين الجماليات البصرية وأفعال اللاعبين. وعلى الرغم من الصعوبات مثل القيود التكنولوجية والمخاوف الفنية، الهدف من المقال إلى فهم التصوير السينمائي في سرديات ألعاب الفيديو من خلال التأكيد على جذوره النظرية والآثار العملية والإمكانات الابتكارية المستقبلية.

كلمات مفتاحية: التصوير السينمائي؛ رواية القصص التفاعلية؛ ألعاب الفيديو؛ الانغماس في السرد؛ تجارب اللاعب.

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1- Introduction

In recent years, the merger of technology with narrative skill has catapulted video games to new heights, where cinematography plays a key part in creating the player's experience. What previously were simple pixels on a screen have transformed into immersive universes, rivalling the visual magnificence of Hollywood's cinematic classics. As players travel these virtual settings, they shift from passive spectators to active participants in a dynamic tale, where every camera angle, lighting choice, and composition helps to fascinate and immerse.

This essay goes on a study of the expanding field of video game cinematography, diving into its complexity and uncovering its tremendous influence on interactive narrative. Our investigation is upon the subtle interaction between cinematography and narrative immersion, player engagement, and storytelling strategies inside the interactive world of video games.

At the core of our inquiry is the merging of two separate but related mediums: cinema and video games. While cinema has long been lauded for its ability to captivate audiences via visual storytelling, video games provide a unique platform where spectators easily shift into protagonists, creating the narrative through their actions and choices. It is within this dynamic interaction of images and interactivity that video game cinematography emerges as a formidable tool for producing intriguing tales and immersive experiences.

Our work is to lay the foundation for a complete investigation of cinematography in video games. Drawing upon existing literature, we hope to identify the subtle relationships between visual aesthetics, gameplay mechanics, and narrative design in video game cinematography. Through thorough research and critical evaluation of games like as "BioShock Infinite" (2013) and "Red Dead Redemption" (2018), among others, we hope to illustrate the transformational significance of cinematography in creating the future of interactive narrative.

2- Steps of Cinematography in Videogames

Cinematography in video games has arisen as a blossoming subject of study, relying upon ideas and approaches from cinema studies, game studies, and visual arts. This section gives an overview of current literature and methods, addressing important ideas that explain the function of cinematography in influencing the interactive narrative experience.

It is vital to create a precise definition of the word within this context. Shaw (2018) describes video game cinematography as the use of visual techniques such as framing, composition, lighting, and camera movement to express story, atmosphere, and emotion inside interactive worlds. This definition illustrates the varied nature of cinematography in video games, highlighting its function in boosting player immersion and narrative.

Several theoretical frameworks have been presented to study cinematography in video games and its influence on player experience. King and Krzywinska (2006) establish the notion of

"screenplay," which analyses the relationship between cinema, video games, and user interfaces. They say that video games apply cinematic principles to build immersive story worlds while also giving interactive aspects that separate them from conventional film.

Juul (2005) offers the idea of "half-real," highlighting the dual nature of video game settings as both fictitious worlds and rule-based systems. He claims that cinematography in video games mediates between the virtual and the real, altering player perceptions and interactions inside the game space. In their landmark work, Salen and Zimmerman (2004) investigate the significance of rules in game design and suggest that cinematography acts as a set of implicit rules that regulate player interactions and experiences. They argue that designers might harness cinematographic approaches to steer player attention, create emotions, and reinforce narrative elements.

Jenkins (2006) addresses the notion of "game design as narrative architecture," highlighting the relevance of spatial design and visual storytelling in creating player experiences. He thinks that cinematography in video games acts as a type of narrative scaffolding, arranging game areas and guiding player movement to enhance storytelling.

Several empirical research have studied the impact of cinematography on player involvement, immersion, and emotional reactions. Smith et al. (2017) performed a qualitative review of player experiences in narrative-driven video games and found that cinematographic approaches such as dynamic camera angles and expressive lighting greatly boosted player immersion and emotional involvement with the story.

In a comparative research, Hitchens (2017) studied the use of cinematography in linear vs. open-world video games and found that players expressed better enjoyment and emotional engagement in games with more cinematic presentations. However, she also emphasised that excessive dependence on cinematic approaches might distract from player agency and immersion in open-world situations. By combining ideas from multiple disciplines, this researcher may examine the dynamic interplay between images, interaction, and narrative in video games.

3- **What Studies Have Found**

In the context of video games, cinematography comprises a spectrum of visual methods aimed at boosting narrative immersion, directing player attention, and provoking emotional reactions. Shaw (2018) describes video game cinematography as the art of employing camera location, framing, lighting, and movement to form player experiences inside interactive worlds. This concept underlines the dynamic interaction between visual aesthetics and player involvement inherent to cinematography in video games.

Several cinematographic approaches typically applied in video games assist to increase storyline and gaming immersion. Framing, the arrangement of components inside the game viewpoint, plays a significant function in directing player attention and constructing visual compositions (King & Krzywinska, 2006). Dynamic camera movement, including pans, tilts, and zooms, adds physical intensity to gaming moments and strengthens narrative pacing (Smith et al., 2017). Lighting design, with its interplay of light and shadow, defines the mood, ambiance, and tone of gaming settings, improving emotional involvement (Hitchens, 2017).

While video game cinematography has many parallels with conventional film, it also provides distinct problems and possibilities intrinsic to interactive narrative. Salen and Zimmerman (2004) suggest that video games provide a separate narrative form defined by player agency and emergent storytelling, demanding modifications of cinematographic approaches to suit interactive gaming. Jenkins (2006) believes that video game cinematography acts as a type of "narrative architecture," organising game areas and directing player movement within nonlinear narrative frameworks.

Cinematography plays a significant part in structuring player experiences, impacting narrative immersion, emotional involvement, and gameplay dynamics. Smith et al. (2017) observed that players experienced heightened emotional reactions and improved immersion in games with cinematic presentations, attributing these effects to the successful use of cinematographic methods. However, Hitchens (2017) advises against over-reliance on cinematic approaches, stressing that excessive linearity and scripted sequences may limit player agency and break immersion in open-world situations.

In practice, cinematography influences several areas of game design, including level structure, scene composition, and narrative pacing. Game designers employ cinematographic approaches to command player attention, deliver narrative information, and generate memorable visual moments (Ryan, 2013). By incorporating cinematography into the design process, developers may enrich player experiences and increase the creative worth of video games as a narrative medium.

a. Interactive Storytelling and Cinematography in Video Games

Interactive storytelling in video games includes the user as an active participant in the narrative, where decisions and actions impact the evolving story arc (Juul, 2005). Cinematography, on the other hand, comprises the visual methods required to communicate story, mood, and atmosphere, based upon ideas derived from conventional film (Shaw, 2018). Together, interactive storytelling and cinematography constitute the backbone of narrative design in video games, delivering players compelling and immersive experiences.

The merging of interactive storytelling and cinematography in video games provides dynamic narrative pace and player agency. Players have the option to explore game environments at their own leisure, learning narrative aspects and affecting the plot via their actions and choices (Salen & Zimmerman, 2004). Cinematographic methods like as camera angles, framing, and lighting lead player attention and build dramatic tension, increasing the interactive narrative experience (King & Krzywinska, 2006).

Among the video games that truly capture the essence of the implementation of cinematography into videogames are the following:

- **“BioShock Infinite” (Irrational Games, 2013):** With its magnificent graphics and painstakingly designed set pieces, BioShock Infinite embodies the mix of interactive narrative and cinematography, bringing players into its richly detailed universe. What also sets this game apart is the how the game developers managed to include instant decisions making and how these decisions affected the continued branching of the story in to various nooks and crannies of the story, leaving the player at times completely baffled by the amount of detailed that is included into making the scenery not only an immersive tool but also part of the narrative itself.
- **“Red Dead Redemption 2” (Rockstar Games, 2018):** The huge open-world of Red Dead Redemption 2 is brought to life with cinematic panoramas, immersive sound design, and dramatic sequences that blur the border between gameplay and story. Among one of the most highly regarded cinematographic video games out there. The developers surely intended to not only capture and immerse the player but it also highlights the amount of effort that was pooled into making the game painstakingly detailed in its environment.

Such efforts cannot be taken lightly as they help the player engage on a highly emotional level with the story. A major example of this is when, for instance, the player-protagonist tries to save a captured character in the video game, when there are no cinematographic aspects such as a clear camera focus on the character and a detailed description, it becomes less important to save them, as this is seen as a secondary and usually an optional mission.

However, when there is a clear cinematographic cut-scene to the objectives of the mission, be it a character to save or simply a dialogue, the player feels emotionally more and more engaged in the actions he or she takes and it suddenly does not feel like secondary but as a high priority mission to accomplish. Hence, the inclusion of the cinematographic cut-scene put a clear focus for video game players to set their priorities, meaning this tool allows them to categorise what would help in advancing the story forward and what is only ludological or purely related to the gaming aspect of the videogames; making it crystal clear that the cinematographic element helps in moving the storyline forward and therefore helping the narrative aspect of video games.

In both these video games, carefully composed shots and framing techniques guide the player's attention towards key elements within the game environment (such as important story events and gameplay objectives). Dynamic camera movements, including scripted angles and transitions between gameplay and cutscenes, further direct the player's attention towards significant events and interactions, enhancing cinematic immersion. And finally, the use of lighting and visual effects enhances the player's sense of immersion and draws their attention towards important objects and interactive elements within the game world.

While interactive narrative and cinematography provide unlimited creative opportunities, they also represent distinct obstacles for game creators. Balancing player freedom with cinematic storytelling may be a delicate affair, requiring careful consideration of tempo, player decisions, and narrative coherence (Hitchens, 2017). However, the merging of interactive storytelling and cinematography offers up new options for creative expression and player interaction, pushing the frontiers of what is possible in video game narrative design.

b. Challenges and Opportunities in Implementing Cinematography in Video Games

The incorporation of cinematography into video games poses both obstacles and possibilities for game creators, needing a precise balance between visual narrative, interaction, and technological limits. This section discusses the different challenges and opportunities faced in adopting cinematography in video games.

i. Technical Challenges

One of the key obstacles in adopting cinematography in video games resides in technological limits, including hardware limitations, graphics capabilities, and performance concerns (Shaw, 2018). Real-time rendering of dramatic sequences and dynamic camera movements needs advanced optimization approaches to ensure smooth frame rates and visual integrity across diverse gaming systems (Salen & Zimmerman, 2004). Technical challenges are therefore still persistent even if tech companies who are pioneering the gaming industry's advancement find themselves restricted to the technology of the time.

In order to portray this, it is important to point out that unlike other story telling mediums, video games require a certain console or a personal computer setup that would allow it to function. What is referred to as the basic requirement to run any particular game. These are both hardware and software component that need to be present in order for a game to function, and the better the equipment the better graphics and therefore cut-scenes and details it would allow the player to witness. Hence the hardware and software limitation that the player has would directly affect the outcome of how much of the details and cinematographic experience he or she might be able to experience.

It is therefore crucial to take into consideration that in order to experience the video game with its cinematographic components as well as ludological ones, he or she must be up to date on all hardware and software elements. Which can be an obstacle since it would mean that if you do not possess the right equipment, you cannot experience the story at its fullest and sometimes not at all.

The same applies for console users such as Xbox and PS players. If the player does not possess the right console reference, he or she will not be able to experience any part of the video game, be it, again, ludological or cinematographic.

“Uncharted 4: A Thief’s End” (Naughty Dog, 2016) is a series widely recognised for its cinematic presentation and engaging plot. Uncharted 4 extends the frontiers of cinematic narrative in video games, incorporating seamless transitions between gameplay and scripted sections, theatrical camera angles, and dynamic set pieces. However, it perfectly exemplifies the technical issues encountered by players since the videogame can only be experienced through a PS5 (Play Station 5) console and no other platform except that one. This is not only a technical issue but also a marketing stunt that would push players to actually procure a PS5 in order to play video games which are exclusive to it.

ii. Artistic Challenges

In addition to technological barriers, developers encounter creative problems in adapting cinematographic approaches to the interactive aspect of video games. Balancing player agency with cinematic narrative may be a complicated task, as designers must discover strategies to steer player attention while keeping a feeling of player choice and autonomy (King & Krzywinska, 2006). Crafting coherent storylines that develop fluidly inside interactive settings involves careful design and execution (Juul, 2005).

In other words, there is no clear formula to what could be considered a striking balance between cinematographic aspects and interactive player aspects without forgetting the gaming aspect in videogames. This dilemma would still persist since it all would depend on multiple variables amongst which there is the player’s own interest in being immersed. A particular variable that cannot be foreseen or even measured is how much the player wants to be involved in the storytelling of the video game and how much of it should be left for cinematographic to reveal.

If not balanced well enough, the player might feel overwhelmed by the choices he or she has to make just to start the game for instance since there are videogames that allow the player to choose even the shape of the nose of the protagonist; whether or not they have scars, moles crooked teeth for instance. Although these are artistically and aesthetically pleasant additions to the cinematographic aspect of the video game since the player would actually portray, to a

certain degree, whatever he or she wishes as a person. Yet, it would definitely create at times a sense of overwhelming options during which the player sometimes would simply skip the character creation phase of the game since its only purpose is aesthetic and not directly linked towards the storytelling of the video game's narrative.

On the other hand, creating not enough aesthetic and artistic aspects to a video game can also take away the emotionally bonding experience of a character with the player. For example, if the player feels like he or she does not have any control over the overall looks and apparel of the character they are playing with it would create a sense of detachment and which is usually essential to keep any story engaging and interesting and the player loses all interest in the story and by extension, the video game. It is therefore essential to find a balance between technological

Despite these obstacles, the incorporation of cinematography in video games gives various chances for innovation and creative expression. Advancements in graphics technology, including real-time lighting, dynamic shadows, and complex physics simulations, give unparalleled creative flexibility for designers to construct visually attractive and engrossing gaming environments (Hitchens, 2017). Emerging storytelling strategies, like as branching storylines and player-driven storytelling, allow developers to build individualised experiences suited to individual player choices and preferences (Jenkins, 2006).

"Hellblade: Senua's Sacrifice" (Ninja Theory, 2017), a video game that highlights how independent developers may employ cinematography to create emotionally engaging experiences. Through its ground-breaking use of binaural audio and cinematic images, the game immerses players in the psyche of its protagonist, giving a unique and intensely personal adventure. The video game also permits the player to, for a lack of a better word, live the experience of being a psychologically troubled woman in the 7th century in the Scandinavian parts of the world. This videogame perfectly, highlights the aesthetic limitations in which the player is not allowed to make any changes to the character however. The character the player is given remains the same one by the end of the story; hence some games still do not base their aesthetical cinematographic elements based on the character himself but on the environment around the character.

4- Discussion

Looking ahead, the horizon of cinematography in video games stretches with tremendous possibility for innovation and creative inquiry. Breakthroughs in virtual reality technology and procedural generation algorithms offer the possibility of enhancing the immersive capabilities of video game cinematography to new heights, blurring the barriers between virtual and reality (Ryan, 2013). As creators try to push the frontiers of narrative and visual aesthetics,

cinematography is positioned to play a vital role in determining the future landscape of interactive entertainment.

The future of cinematography in video games teems with prospects for unprecedented improvements, giving a canvas for creative expression and immersive narrative on a scale never before seen. In this part, we dig into the probable future trajectories and larger ramifications of advancements in video game cinematography.

a. Technological Advancements

Technological breakthroughs are on the edge of transforming video game cinematography, bringing a wealth of new tools and tactics to create immersive and visually appealing experiences. Real-time ray tracing, better lighting models, and high-fidelity graphics engines allow developers to reach unparalleled levels of realism and immersion (Shaw, 2018). Moreover, emerging technologies like virtual reality and augmented reality bring up new vistas for interactive storytelling, allowing people to connect with virtual worlds in previously inconceivable ways (Salen & Zimmerman, 2004).

b. Procedural Generation and AI

Procedural generation methods and artificial intelligence stand poised to alter the design and experience of video game landscapes. Procedurally generated landscapes allow unlimited diversity and replayability, letting developers to construct huge, dynamic environments that react to player actions and choices (King & Krzywinska, 2006). Meanwhile, AI-driven systems offer the potential to improve cinematic presentations by dynamically modifying camera angles, character motions, and ambient effects to create more immersive and adaptable experiences (Juil, 2005).

c. Artistic Exploration

In the field of artistic inquiry, video games are maturing into a powerful medium for creative expression, with cinematography having an increasingly essential role in creating the visual and emotional resonance of interactive storytelling. Developers are delving into unexplored area, experimenting with fresh narrative strategies, visual aesthetics, and storytelling formats to push the bounds of video game cinematography (Jenkins, 2006). Experimental games and independent releases are challenging established standards, opening the door for novel approaches to cinematic narrative within the field of video games (Hitchens, 2017).

5- Conclusion

In conclusion, this research project has dug into the dynamic interplay of cinematography and interactive narrative within video games. Through an investigation of theoretical frameworks, practical uses, and future possibilities of video game cinematography, we have uncovered the

rising potential of this medium as a vehicle for creative expression and narrative immersion. From conceiving cinematography in the context of video games to examining its influence on player agency, narrative pace, and immersive storytelling, we have gathered essential insights into the subtle interaction between images, interactivity, and narrative techniques.

Drawing upon substantial literature study and graphical examples collected from numerous video games, we have underlined the obstacles and potential inherent in incorporating cinematography into video game storylines. From technical limits to creative considerations, developers wrestle with a variety of problems in developing coherent storylines that smoothly mix cinematic aspects with interactive gameplay. Nonetheless, with developments in technology, fresh storytelling strategies, and inventive game design approaches, the future of cinematography in video games offers immense possibilities for innovation and creative exploration.

As video games continue to expand as a medium of creative expression and cultural relevance, cinematography stays at the forefront of innovation, pushing the frontiers of interactive entertainment. By embracing technology improvements, exploring new creative possibilities, and promoting multidisciplinary cooperation, developers may build immersive and emotionally evocative experiences that engage players and move the medium into unexplored territory. In the ever-evolving environment of video game cinematography, the desire for immersive narrative and creative quality endures, allowing players and artists alike the chance to go on a thrilling voyage of discovery and innovation.

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6- The bibliography.

- Hitchens, M. (2017). *Game writing: Narrative skills for videogames*. Bloomsbury Publishing.
- Jenkins, H. (2006). Game design as narrative architecture. In K. Salen & E. Zimmerman (Eds.), *The game design reader: A rules of play anthology* (pp. 670–687). MIT Press.
- Juul, J. (2005). *Half-real: Video games between real rules and fictional worlds*. MIT Press.
- King, G., & Krzywinska, T. (2006). *Screenplay: Cinema/videogames/interfaces*. Wallflower Press.
- Kojima Productions. (2019). *Death Stranding* [Video game].
- Naughty Dog. (2020). *The last of us part II* [Video game].
- Newman, J. (2019). *Best before: Videogames, supersession and obsolescence*. Routledge.
- Ryan, M. L. (2013). *Narrative as virtual reality: Immersion and interactivity in literature and electronic media*. Johns Hopkins University Press.
- Salen, K., & Zimmerman, E. (2004). *Rules of play: Game design fundamentals*. MIT Press.
- Shaw, A. (2018). *Cinematography in video games: Reimagining interactive storytelling*. Routledge.