

Links between Video Games and other Media: Ludonarrative Dissonance and Transmedia Storytelling

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Abstract: In this study, we explore the unique role of video games within the realm of transmedia storytelling, a concept initially defined by Henry Jenkins in 2006. Using "Cyberpunk 2077" and its anime counterpart "Cyberpunk: Edgerunners" as case studies, we investigate how video games contribute to the narrative universe in a way distinct from traditional media. Specifically, the concept of "narrative dissonance" in games is introduced and analyzed. We find that such dissonance is mitigated and complemented by other forms of media, in this case, anime, enhancing the overall storytelling experience. This offers new perspectives on game design and its integration into broader transmedia narratives, which have both academic and economic implications.

Keywords: Video Game design, transmedia storytelling, ludonarrative dissonance, cyberpunk 2077

1 Introduction

In his seminal 2006 work, "Convergence Culture," Henry Jenkins first articulated the concept of transmedia storytelling, a field that has since seen considerable development in both theoretical frameworks and practical applications. Jenkins employed the term to elucidate how "The Matrix" franchise transcends multiple media platforms. He posited that the film trilogy and its subsequent video game adaptations epitomize a form of entertainment in the age of media convergence, constructing a narrative universe not confined to any single medium. Ideally, each medium should make a unique contribution to the unfolding of the story.

Initially, the integration of video games into the broader landscape of transmedia storytelling was met with some skepticism. In 2010, when the American Producers Association approved the new title of "Transmedia Producer," they did not explicitly specify that "video games" were part of the definition of transmedia storytelling (Kinke, 2010)[1].

Jenkins' conceptualization implies that video games occupy a distinct role in transmedia narratives. Unlike traditional narrative media—such as novels, comics, and films—which extend the story, video games serve to immerse players within the narrative universe. This unique positioning of video games within transmedia storytelling has been both acknowledged and critiqued. For instance, Kinder coined the term "commercial transmedia super-system" in 1991 (Kinder, 1991)[2], recognizing the burgeoning narrative and commercial potential of video

games among younger audiences.

As video games have evolved, their scale and graphical capabilities have somewhat surpassed those of traditional art forms. Veugen's 2016 (Veugen, 2016)[3] study on the "Assassin's Creed" franchise revealed that video games could serve as pivotal media texts within transmedia storytelling frameworks. It was found that media texts undergo transmedia storytelling across multiple game versions.

Despite the commercial and academic significance of transmedia storytelling, there remains a gap in scholarly literature concerning the unique design features of video games within this broader context. This article aims to fill this lacuna by introducing the concept of "narrative dissonance in games." Utilizing "Cyberpunk 2077" and its anime adaptation "Cyberpunk: Edgerunners" as case studies, this paper conducts a close reading to explore how the anime compensates for the narrative dissonance present in the video game, thereby enriching the overall transmedia experience. Through this analysis, the study seeks to offer valuable insights for future game design and transmedia storytelling practices.

2 Video Games in Transmedia Storytelling: A New Narrative Frontier

Transmedia storytelling, as initially conceptualized by Henry Jenkins in his 2006 work "Convergence Culture," has evolved significantly, both theoretically and practically. This concept exists alongside other terminologies, such as "Cross-media," [4](Petersen, 2006) "Transfiction,"[5,6] (Dena, 2009; Ryan, 2008) "Multiplatform," (Jeffery-Poulter, 2003) [7]and "Deep Media,"[8] (Rose, 2012) among others. These terms often draw from semiotic theories of intertextuality and multimodality. Notably, transmedia storytelling exhibits hypertextual characteristics, allowing audiences to navigate freely between dramatic and episodic narratives. However, the literature has yet to fully explore the intersection of these hypertextual elements within transmedia storytelling.

Media companies have begun to embrace convergence by sharing content across platforms. However, they often overlook the narrative potential of such convergence. As Jenkins noted, the current licensing system often results in redundant, diluted, or contradictory narratives, undermining the quality of franchises and sequels. This is particularly evident in the realm of video games, which were initially sidelined in discussions of transmedia storytelling but have since gained recognition for their unique role in narrative assemblages.

Intertextuality [2](Kinder, 1991)and hypertextuality serve as crucial frameworks for understanding how media texts interact. For instance, filmic intertextuality relies on the viewer's ability to decode references based on prior viewing experiences. This is exemplified in various end-credit scenes and Easter eggs that pay homage to other works, thereby enriching the narrative tapestry.

By the late 20th century, some companies had advanced the concept of "cocreation," as described by both Dena and Jenkins. In this model, companies collaborate from inception to create content that synergizes across multiple media platforms. This approach allows for a more proactive, top-down form of transmedia storytelling, where even film directors may actively participate in the expansion of their narratives into other media forms.

In conclusion, transmedia storytelling is undergoing a period of stabilization, with video games transitioning from a contentious position to one of greater centrality. This paper will introduce the concept of "narrative dissonance in games" as a pivotal element in transmedia storytelling. This concept not only enriches our understanding of intertextuality but also provides new avenues for future game design and marketing strategies.

3 Beyond Dissonance: The Role of Ludonarrative Dissonance

The concept of "ludonarrative" is an amalgamation of two influential fields of game studies: "ludology" and "narratology." Ludology is primarily concerned with the examination of games through the lens of their mechanics, rules, and interactivity [9](Frasca, 2003). This field seeks to understand the intrinsic elements that constitute the gameplay experience. Narratology, in contrast, approaches video games as narrative media, focusing on their storytelling aspects[10](Wardrip-Fruin & Harrigan, 2004). This approach has origins in literary theory and human communication studies. Although initial discourse suggested that ludology and narratology were mutually exclusive, they were originally conceived as complementary frameworks for analyzing games[9](Frasca, 2003).

In 2007, Clint Hocking pioneered the concept of "ludonarrative dissonance," a term that encapsulates the tension between a game's narrative and its mechanics [11](Hocking, 2007). Hocking utilized the game BioShock as a case study to illuminate this tension. In BioShock, the player encounters two conflicting paradigms: the "narrative structure" and the "game structure." According to Hocking, the game structure implicitly endorses the Randian objectivist philosophy espoused by the character Andrew Ryan. This philosophy, rooted in Ayn Rand's literary and philosophical works, champions individualism, free markets, and a disdain for collectivism. Ryan, an emblematic libertarian capitalist, establishes the underwater city of Rapture as a testament to these ideals.

Conversely, the game's narrative structure compels the player to undermine these principles by aiding Atlas, a character ideologically opposed to Ryan. This narrative direction serves as a critique of Randian objectivism. However, Hocking argues that this critique is not harmoniously integrated with game mechanics. Specifically, the game offers a dichotomous choice of either "harvesting" or "saving" the Little Sisters, child-like entities in the game. While both options lead to the player gaining power, the "saving" option yields more power over time. This disjunction between game mechanics and narrative constructs a form of ludonarrative dissonance, as gameplay mechanics necessitate altruistic actions that are incongruous with the game's overarching narrative, which emphasizes self-preservation [12](Despain & Ash, 2016).

Makedonski [13](Makedonski, 2012) delineates the core of narrative dissonance in games as the tension arising when the discursive elements of a game's narrative and environment are at odds with the underlying mechanics of gameplay. This tension can result in player disengagement, disrupting the immersive experience. This invites the question: Does game narrative dissonance function as a form of counter-immersion, instigated by the symbolic incongruity between gameplay and narrative? Drawing upon Hocking's seminal example, one might hypothesize that the degree of player disengagement is proportionate to the extent of the dissonance. Recent critiques[14](Abraham, 2013) suggest that identifying dissonance requires a nuanced perspective, underlining the multiplicity of viewpoints on what constitutes dissonance.

This complexity is evident in games such like "Watch Dogs," where user interface prompts incongruously encourage actions that contradict the emotional tone of the narrative.

Contrary to the negative connotations associated with "dissonance," scholars have questioned the assumptions underpinning its reception, such as "incarnation bias" [15](SERAPHINE, 2014). This bias posits that controllable game characters are always perceived as extensions of the player. However, considering the multimodal or ergodic nature of games [16](Dunne, 2014) and borrowing from music theory [17,18](Parncutt & Hair, 2011; Saldivar, 2022), dissonance can be viewed as a temporary state that can be resolved or even exploited for broader emotional and cognitive engagement. In summary, the term "game narrative dissonance" has been employed to examine the intricate interplay between game mechanics and narrative, as well as its impact on player experience. Although often perceived negatively, the concept has potential applicability in transmedia storytelling research. For instance, dissonant elements in a game such as BioShock could be expanded upon or resolved in other narrative mediums, such as comics or anime, to enhance the overall narrative experience.

The methodology of this paper employs two humanities research methods: close reading and case analysis. Close reading involves a detailed examination of the text, supplemented by repeated viewings and note-taking to enable higher-level analysis [19](Bizzocchi & Tanenbaum, 2012). This method is distinguished from textual analytic approaches, which entail a broader collection of texts and objectives. In accordance with the analytical model proposed by Gambarato[20](Gambarato, 2012), this paper adopts both close reading and textual analysis, each serving different levels of analysis. This study focuses primarily on themes closely aligned with the close reading method, such as narrative structure, characterization, and aesthetic considerations, within the framework of Transmedia storytelling.

4 Research methodology and analytical framework

This paper undertakes a focused analysis of the narrative dissonance present in CD Projekt Red's video game, *Cyberpunk 2077* (2020), and examines how this dissonance is addressed through Transmedia storytelling in Trigger Productions' anime series, *Cyberpunk Edgerunners* (2022). Both works are adaptations of Mike Pondsmith's tabletop role-playing game, *Cyberpunk 2013* (1988). Despite its initial acclaim and significant media attention since its first trailer in 2012, *Cyberpunk 2077* was released amid controversies over gameplay bugs, optimization issues, and deceptive marketing practices. These shortcomings, indicative of internal management lapses at the Polish game company, were widely criticized[21](Schreier, 2021). However, this paper narrows its focus to the game's narrative inconsistencies, whether inherent in the game design or resulting from optimization issues.

Transmedia storytelling emerges as a compelling framework for addressing these narrative gaps. Yet, it is important to note that the deployment of Transmedia storytelling should not serve as a justification for neglecting the inherent quality of the video game medium. The game's narrative is influenced by seminal works such as William Gibson's *Neuromancer* and Philip K. Dick's *Do Androids Dream of Electric Sheep?*, which also inspired the film *Blade Runner*. The choice of this particular case study is informed by the unique narrative depth that video games offer as the core text in Transmedia storytelling projects. The interactive nature of video games allows for a richer understanding of the cultural and poetic dimensions of the text. Both the game and the

anime exist in a coherent narrative universe, fulfilling the criteria for Transmedia storytelling. Additionally, the commercial success of the anime has rejuvenated interest in the video game, spurring sales and catalyzing community discussions.

The ensuing game narrative analysis is based on 117 hours of gameplay conducted between January 2021 and May 2023, utilizing a Win10 operating system and a SteamDeck handheld console. The gameplay was undertaken subsequent to substantial patch updates that addressed numerous bugs across platforms. This analysis will also incorporate insights from official written sources and officially released comics, though the primary focus remains on the video game and the anime.

5 Cyberpunk 2077 and Cyberpunk Edgerunners Case Study

5.1 Exploring the Premise and Purpose in 'Cyberpunk 2077' and 'Edgerunners': A Transmedia Analysis

Bernardo [22](Bernardo, 2011) contends that the success of a transmedia storytelling project hinges on a well-defined premise and explicitly stated objectives. These elements are instrumental in shaping the project's positioning, direction, and target audience, and ultimately, the goals it aims to fulfill. The absence of a clear premise and purpose could impair audience engagement, underscoring the need for meticulous articulation.

In the context of "Cyberpunk Edgerunners," the project serves as a promotional vehicle for the video game "Cyberpunk 2077," which itself is an adaptation of Mike Pondsmith's tabletop game, "Cyberpunk 2020." Although primarily conceived for entertainment, both the anime and the game are integral components of a broader strategic framework. Kłosiński [23](Kłosiński, 2022) argues that the video game serves as a meta-medium for the cyberpunk genre. Regrettably, despite eight years in development and significant investment in marketing, "Cyberpunk 2077" suffered from multiple technical issues upon release, undermining the gaming experience and the product's integrity.

Taking a cue from Japan's "media mix" strategy, CD Projekt Red expanded the Cyberpunk universe through the sequential release of comics both pre- and post-launch. The inclusion of anime appears to be a premeditated component of their marketing portfolio. Despite the game's problematic release, its intricate world-building and compelling narratives have cultivated a devoted fan base. Data indicates that the anime series has effectively served as a gateway into the Cyberpunk universe for new audiences. Trigger Studios, responsible for the anime, ensured high quality and accessibility, enabling even those unfamiliar with the game to engage with its narrative.

This multi-platform approach bears resemblance to Campfire's strategy for "Game of Thrones," which evolved from mere storytelling to comprehensive world-building, even incorporating multisensory experiences such as HBO's aroma sets that replicate the scents of key locations in Westeros. Similarly, CD Projekt Red has disseminated a range of digital assets, such as e-comics, trailers, and soundtracks, to enrich the narrative landscape. For instance, the comic "Cyberpunk: Trauma Team" offers valuable backstory and internal perspectives on a pivotal faction within the game, thus augmenting the depth of the Cyberpunk universe.

5.2 Time, Narrative, and Dissonance: A Comparative Study of 'Cyberpunk 2077' and 'Edgerunners'

Narrative serves to "construct a world and populate it with figures and objects," as posited by Ryan [24](Ryan et al., 2004). Though narrative analysis can employ a gamut of methodologies—existential, cognitive, aesthetic, sociological, sociolinguistic, and technological—this study narrows its focus to the structural formation of story worlds within transmedia contexts. Davidson[25](Davidson, 2010) delineates five key strategies for structuring transmedia narratives: a) participant roles and processes; b) states, events, and actions; c) temporal sequencing; d) spatial schematics; and e) deictic references.

The fictional setting, Night City, represents an expansive urban landscape located in the Free State of Northern California. Governed by giant corporations like Arasaka, Militech, and Kang Tao, the city operates in a milieu of technological advancement and moral stagnation. "Cyberpunk 2077" unfolds across five narrative segments, each of which contributes to one of seven potential outcomes. While initial player choices offer brief narrative context, they minimally affect narrative progression, resulting in a form of narrative dissonance.

Upon entering Act I, the narrative's temporality becomes fixed, and player agency diminishes. This leads to another manifestation of narrative dissonance as players divert from the main storyline to engage in side activities. Such behavior reveals incongruities between gameplay mechanics and overarching narrative themes. The anime "Edge Runners" mitigates some of these dissonances by highlighting societal imbalances, thereby enriching the game's critique of corporate capitalism. Subsequent acts of the game further exacerbate the narrative dissonance. While the game introduces a "countdown mechanism" to instill urgency, it fails to enforce this in gameplay. This discrepancy manifests in inconsistent character interactions and narrative focus, as noted by Kaniewska[26](Kaniewska, 2022).

The anime "Edgerunners" employs a more traditional three-act structure, focusing on character development and interpersonal dynamics. Unlike the game, the anime provides a passive narrative experience, but it successfully enriches the overall story, characters, and setting. Various visual and narrative cues interlink the game and the anime, contributing to a unified narrative universe. Owing to space constraints, this study concentrates on the narrative structure over characterization and world-building, thus indicating avenues for future research. Both the game and the anime exist as independent but interconnected entities within a broader transmedia narrative, each offering unique perspectives and entry points into the Cyberpunk universe.

5.3 From Game to Anime: How Endings Shape the 'Cyberpunk 2077' Transmedia Universe

Cyberpunk narratives often manifest a triad of thematic outcomes. Initially, they address attempts to deconstruct corporate hegemony, illuminating the pervasive corruption and authoritarian oversight imposed by monolithic entities such as corporations, governments, or institutions. For instance, in "Cyberpunk 2077," the character Johnny Silverhand aspires to dismantle Arasaka Corporation's iconic Arasaka Tower using a miniaturized nuclear device. Notwithstanding the mission's success or failure, the corporation retains its oppressive dominion. The game also affords players alternate routes, such as the option to single-handedly infiltrate Arasaka Tower in a quest for subversion, colloquially referred to as the "Sun" ending.

Secondly, these narratives explore personal redemption, wherein protagonists confront their internal ethical quandaries. Such narratives often culminate in an introspective metamorphosis, releasing the individual from the fetters of systemic oppression. As evidenced in the "Star" ending of "Cyberpunk 2077," V's decision to align with Panam and the Nomads not only subverts Arasaka's schemes but also represents a personal departure from an oppressive preordained path. Thirdly, cyberpunk narratives occasionally depict apocalyptic resolutions, underscoring societal decline and the irrevocable consequences of unchecked technological progress. In the game's "Devil" ending, V becomes ensnared in Arasaka's duplicitous promises, leading to cognitive decline and eventual commodification of human consciousness.

The anime "Edgerunner" amalgamates these thematic threads. The protagonist, David, initially aims to subvert the dominion of Arasaka and other corporations through cybernetic enhancements. However, he soon finds himself a mere pawn in their grander schemes. Torn between the expectations of his deceased mother and his own rebellious inclinations, David undergoes a transformative journey that culminates in his emergence as a figure of urban legend. Although he fails to extricate himself fully from systemic machinations, his actions yield a measure of personal redemption. Yet, his ultimate fate, along with those of his companions, reinforces the narrative's dystopian undertones.

In summary, cyberpunk narratives serve as both critique and cautionary tale vis-à-vis contemporary societal quandaries, projecting visions of dystopian futures. These stories foreground themes of individual defiance and existential self-inquiry, thereby prompting audiences to critically engage with the ramifications of technological evolution and entrenched power dynamics.

5.4 The Role of Negative Capabilities and Transmedia Signposts in the 'Cyberpunk 2077' Universe

The concept of Cyberpsychosis merits particular attention in the study of the Cyberpunk 2077 universe and its anime counterpart, Edgerunner. As delineated in the rulebook of the original tabletop game, Cyberpunk 2020, Cyberpsychosis is a mental affliction instigated by excessive cybernetic modification. It induces a loss of physical sensation and an escalating detachment from human interaction, ultimately culminating in bouts of uncontrolled aggression. The video game explores this phenomenon through an extended side quest, where players—assuming the role of V—investigate and confront individuals suffering from Cyberpsychosis. Unlike its tabletop precursor, the game nuances the portrayal of Cyberpsychosis, contextualizing it within broader social, economic, and power dynamics[23](Kłosiński, 2022).

Conversely, Edgerunner adopts a more introspective approach by visualizing the internal struggles of characters afflicted by Cyberpsychosis. This visualization serves as an effective migratory cue for the audience, filling narrative gaps left by the game and facilitating a deeper comprehension of this complex psychological condition. In Edgerunner, the protagonist, David, grapples with his own form of identity crisis, exacerbated when faced with a cybernetic disease.

The integration of anime into a game's transmedia strategy also carries implications for production costs. Animation remains a relatively cost-effective medium, offering an attractive avenue for developers grappling with escalating development expenditures. Edgerunner, despite being a transmedia extension of the controversial Cyberpunk 2077, demonstrates commercial viability and adds narrative depth, thus validating its role in the broader media mix strategy. For

instance, in the episode "Fringe Walker," the character Adam Heavy Hammer, who appears as the final adversary in both the anime and the game, eliminates key characters. This narrative arc catalyzed viewer migration from the anime to the game, as many sought to enact revenge on Adam Heavy Hammer within the game's interactive environment.

In summary, as rising development costs make large-scale games less financially autonomous, developers may increasingly resort to transmedia strategies that incorporate cost-effective mediums like anime. These media not only enrich the narrative experience but also serve as crucial engagement and migration points for the audience. In conclusion, given the rising costs of game development, future game portfolios may be more inclined to follow this path as game development becomes less and less financially independent and game openers cannot afford the cost and ability to guarantee a narrative experience for every VUP in a large-scale game [27](Kent, 2010). Transmedia storytelling is a media mixing strategy whereby relatively stable, passive viewing media such as movies, anime, and manga will occupy an increasingly important place in the game media mix.

6 Conclusions

Within the domain of transmedia storytelling research, video games have often been marginalized as supplementary narrative extensions rather than as self-contained artistic mediums. However, in the contemporary landscape of multimodal communication, video games have not only eclipsed other traditional forms on the market scale but also function as central texts within transmedia narratives. Hocking's notion of "ludonarrative dissonance" offers a valuable theoretical framework for investigating the relationship between video games and other narrative forms. This lens allows for an exploration of the dynamics between gameplay mechanics and narrative structures, as well as the identification of congruencies and incongruities across different mediums.

To operationalize this framework, the present study employs 'Cyberpunk 2077' and its transmedia extension, 'Cyberpunk: Edgerunners,' as case studies. Despite the turbulent reception of 'Cyberpunk 2077,' which impacted both critical evaluations and the developer's financial standing, the subsequent release of 'Cyberpunk: Edgerunners' reinvigorated audience engagement and stood alone as a compelling narrative work. This study posits that ludonarrative dissonance manifests variably, dependent upon a game's intrinsic mechanics and genre. Such dissonance can be indicative of either developmental limitations or inherent constraints within the medium of video gaming. Nevertheless, strategic transmedia storytelling can mitigate these discordant elements, thereby delivering a more seamless narrative experience to the audience.

Drawing on Bjarnason's 2021 analysis of 'Final Fantasy XV,' this study [28](Bjarnason, 2021) also raises concerns about the potential dilution of commitment to video game narratives as development costs soar. This issue is evident in problematic practices like misleading marketing and suboptimal optimization, as exemplified by 'Cyberpunk 2077.'

The concepts of intertextuality and ludonarrative dissonance can be analogized to components of a jigsaw puzzle. Intertextuality enables audiences to discern the unified narrative universe to which these pieces belong, while ludonarrative dissonance shapes the contours of individual puzzle pieces. This dynamic can further be likened to traditional Chinese Mortise and Tenon

woodworking techniques, in which the “mortise” of video games can be precisely aligned with the “tenon” of alternative media forms, creating a more complex narrative composition. Future research avenues should explore methods to optimize these “mortises” within video games and investigate their strategic implementation in transmedia narratives.

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