Does Choice Matter? Investigating Perceived Agency and Actual Control in Interactive Game Narratives

Haoran Zhang

The School of Creativity and Innovation, Xiamen University, Xiamen, China
angjackzh@gmail.com

Abstract. In narrative-driven games, player choice is often marketed as a core mechanic that grants players agency over the story. However, recent studies suggest that the perception of agency—the player's sense that their decisions matter—may carry more weight than actual narrative control. This paper explores the tension between perceived and actual agency in interactive storytelling, focusing on how narrative design techniques shape player experience without relying on extensive branching. Using close analysis of several representative games, this study examines how feedback design, emotional framing, and structural opacity influence the player's experience of meaningful choice. Drawing on narrative theory, game studies and cognitive psychology, the paper argues that agency in games is not strictly a mechanical function but a designed player feeling, often constructed through illusion and implication. By synthesizing theory with case analysis, this work highlights how narrative designers can craft compelling experiences of control, even within constrained systems.

Keywords: interactive storytelling, perceived agency, narrative games, player choice, game design

1. Introduction

Interactive storytelling has become a defining dimension of contemporary game design, promising players the power to influence how narratives unfold. Popular titles such as Detroit: Become Human and Life is Strange market themselves around the idea of “meaningful choice,” where decisions appear to shape the destiny of characters and worlds. Yet a persistent question remains: to what extent do these choices truly matter?

Prior research has identified a crucial distinction between perceived agency—the player’s subjective sense of control—and actual agency, the objective degree to which narrative outcomes diverge [1]. Players often report satisfaction and immersion even when branching structures converge or outcomes are predetermined. This paradox raises a broader design challenge: meaningful choice may depend less on structural variety and more on the experiential framing of decisions.

Foundational theories of digital media [2] foreground agency and immersion as pivotal qualities, yet recent scholarship indicates that emotional feedback, narrative opacity, and real-time responsiveness can preserve a compelling sense of control even within tightly authored systems.

However, little research has systematically compared how these design strategies construct the illusion versus the reality of choice in contemporary interactive games.

This paper addresses that gap by examining the relationship between perceived and actual agency in interactive narrative design. Drawing on theoretical frameworks and case studies of Detroit: Become Human, Life is Strange, Undertale, and Disco Elysium, it argues that perceived agency often outweighs actual branching in determining immersion and player satisfaction. By disentangling these dimensions, the study contributes to ongoing debates about meaningful choice and offers insights for the design of future narrative-driven games.

2. Theoretical framework – understanding player agency in interactive narratives

2.1. Player agency and narrative authority: Murray and Ryan

The concept of agency is central to discussions of interactive narratives. Janet H. Murray famously defines agency as "the satisfying power to take meaningful action and see the results of our decisions" [3]. In her view, digital environments are compelling not simply because they present a story, but because they allow participants to do something within that story. However, Murray also stresses that this freedom is always bounded by the author's design—the narrative system provides a space of possible actions, but players cannot act outside its coded limits.

Marie-Laure Ryan expands this framework by categorizing different modes of interactivity. She distinguishes between external versus internal perspectives and exploratory versus ontological modes [4]. For example, an "internal–exploratory" mode places players inside the story world as characters who can move, investigate, and interact with objects. Agency, in this sense, is not only about how many choices exist but also about the perspective from which choices are experienced and the role players occupy in the narrative. Together, Murray and Ryan highlight a tension: agency is both a promise of freedom and a negotiation between player action and narrative authority.

2.2. Perceived agency vs. actual agency

While Murray and Ryan stress the importance of agency, later research has pointed out that what players feel often matters much more than what the system actually affords. Researchers distinguish between perceived agency—the subjective sense of control—and actual agency, the objective degree of influence over outcomes [5,6].

This distinction explains a common paradox in narrative games. Players often report strong immersion and satisfaction even when story branches converge or outcomes are predetermined. For instance, many narrative-driven titles use "fake choices" that eventually lead back to the same narrative node. As long as players perceive their decisions as meaningful, the experience remains engaging. Conversely, if players discover that their actions have no effect, immersion can collapse, even in systems with multiple branches.

Recent studies emphasize that perceived agency can be carefully designed through narrative framing, emotional stakes, and feedback systems [7]. In practice, this means that designers do not always need to multiply storylines to create engagement; instead, they can focus on how the presentation of choice constructs a convincing sense of control.

2.3. Constructing perceived agency

The key to the construction of perceived agency lies in players' recognition of the existence of choices or their empathy for the existence of choices. In some previous studies, it was proposed that

perceived agency in game narratives is highly related with "meaningful choice" [3]. However, some more compelling primary studies have pointed out that the agency perceived by players is not equivalent to the perception of valuable choices [5]. It may be related to the player's expectations, investment and other aspects simultaneously. Meanwhile, some theoretical models of social psychology [8] have also pointed out the generation methods of perceptual agency. After sorting and summarizing, this paper will analyze the construction of perceptual agency in game narrative from the following aspects.

• Visible Options and Structure: When players can clearly see alternatives and the narrative's local structure, they more readily infer causal influence over the story.

• Discernible Feedback: Players need to observe the consequences of a choice. Feedback may be immediate (NPC reactions, UI prompts) or delayed (later callbacks that reference earlier actions). Signaling future impact helps players understand why a decision matters, stabilizing the sense of control [9].

• Unity of Player and Avatar: Perceived agency increases when choices align with the player's current goals, moral stance, or strong attachment to characters [10]. The detailed interactions in the game and the interaction methods of task affordance affect the way players interpret the avatar; when player intent coheres with the avatar's narrative role, agency is felt more strongly [7].

• Player Expectations and Background: From the subjective perspective of players, their cognition of their own initiative is highly correlated with their gaming background and expectations [5]. Perceptions of agency are filtered through genre conventions, prior experience, and marketing promises. Experienced gamers often find it difficult to perceive a high degree of narrative initiative in the familiar gaming field because they have a clear understanding of the way the game plot develops.

Taken together, these conditions show that perceived agency is not reducible to branching complexity. Instead, it is constructed through design strategies that combine clarity, consequence, and emotional impact.

3. Core factor analysis

To examine and demonstrate how perceived agency is constructed in practice, this part will analyze game mechanics and narrative design. Each case illustrates different design strategies that balance authored story structure and player control. Specifically, this study explores how limited branching – or even the absence of branching – can still result in a highly engaging sense of agency.

3.1. Detroit: Become Human – highly structured "branch-transparent" narrative and visible options

Detroit: Become Human is an interactive drama in which player choices are frequently made explicit. At the end of each chapter, the game presents a flowchart showing the selected options and alternate branches (see Figure 1). This highly transparent narrative structure visually encodes each decision, increasing perceived agency by making players aware of their influence. Each branch on the flowchart seems to tell the player, "if I had chosen differently, things might have been different." This clear visibility of options can heighten early engagement as players feel their path is unique (Figure 1).

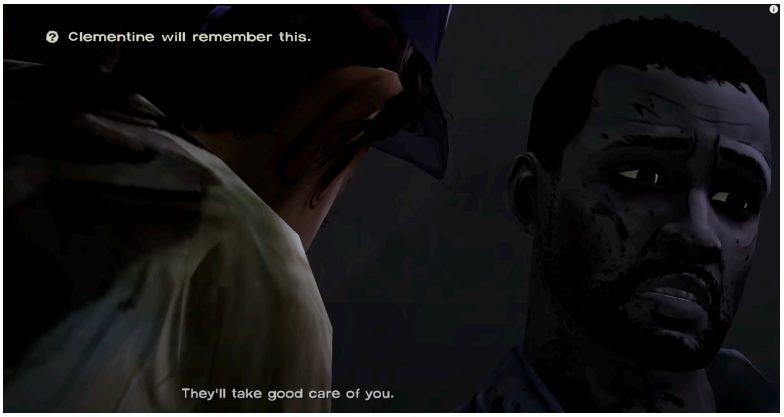

Figure 1. The walking dead

However, this transparency comes with a trade-off. Despite many branches, Detroit: Become Human ultimately reconverges most paths to key story beats, leading to a limited set of endings. For example, no matter how soon Kara escapes danger, her main journey (protecting Alice and seeking freedom) follows a similar trajectory. The developers acknowledge that fully divergent storylines are resource-intensive, so most chapters funnel into major endpoints for narrative cohesion. The flowchart system makes these convergences visible: players can clearly see how different choices later rejoin the same storyline.

This design has a double effect. On one hand, the flowchart validates the player's impact on a micro level (showing which scenes were triggered or missed) and reinforces the satisfaction of a "unique" path. On the other hand, this transparency can undermine the illusion of agency during replays, as players notice many decisions are only superficial or temporary. In summary, Detroit's highly transparent mechanics do not elevate perceived agency above actual agency; instead, they simply make the limitations of agency explicit. The more one plays, the easier it is to discover these limits, which can weaken the feeling that choices truly matter.

3.2. Discernible Feedback

Discernible Feedback is the backbone of perceived consequence. Discernible Feedback can be observed in multiple ways, the feedback might on the storyline or also can be seen in visual or audio feed back.

Some narrative-driven games have ingenious design for constructing perceived agency; for example, in the Walking Dead series, at some crucial points, the UI will prompt the player, for example, "Clementine will remember" (Figure 2). This sentence very directly informs the player: Your choice is of great significance and will change the subsequent development of the game's plot. Although at certain moments, no matter which option you choose, it won't make any difference; for instance, when Lee left his last words to Clementine on his deathbed, no matter how the player chooses, the outcome remains the same. In other words, the theoretical initiative is actually very low. But such UI prompts will make the subsequent plot of Clementine's growth more reasonable, as if all of this are the last words left by the player that shape the character's personality. Although The Walking Dead is a video narrative game, this combination of plot and UI feedback makes all plot developments seem closely related to the player's choices, greatly enhancing the player's perceived agency.

This way of constructing perceived agency is called "Agency Informing Techniques" [11], which refers to the way or technique by which game designers deliberately convey a sense of agency to

players. This approach makes players feel that their choices are meaningful and influential by influencing their psychology. This concept can also be seen in the other reasons that affect perceptual agency as expounded in this article.

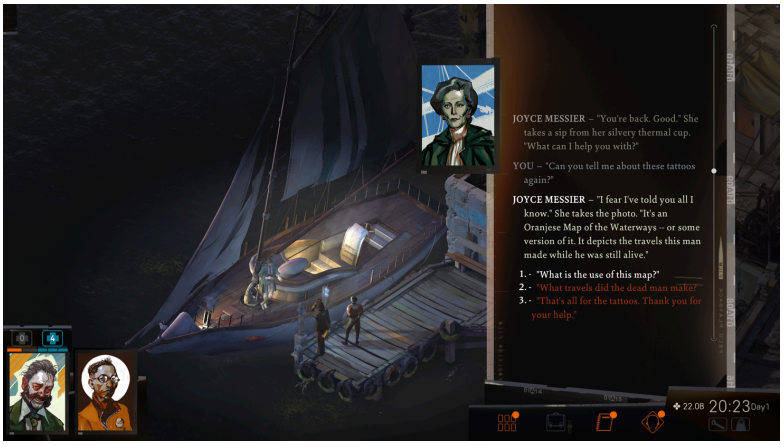

Figure 2. Disco Elysium

3.3. Unity of player will and avatar role

When players are immersed in the game world, they seldom regard the characters on the screen as purely external images. Players will unconsciously project their emotions, values and personality traits onto the characters they control. At the same time, the characters controlled by players also have settings in terms of story, mechanism and world view. From this perspective, when observing the relationship between the game and the player, the character, which is the incarnation of the player, becomes a hybrid entity. It is neither the player nor the protagonist of the game, but rather a conspiracy between the game design and the player.

Disco Elysium is a role-playing game that achieves a strong sense of agency without any major branching plot. Instead of multiple endings or divergent story paths, it offers a deep character development system and a richly reactive narrative voice. Players control a detective whose identity —including voice, thoughts, and skills—unfolds based on the player's dialogue choices and stat allocations. In this way, the player's will and the avatar's personality become tightly aligned.

The protagonist's inner thoughts (the "Thought Cabinet") and his personality traits are voiced as dialogue options. As the player chooses lines of dialogue or actions, those choices are refracted through the character's psyche and narrative role, rather than being blocked. For example, if the player tries to be kindly or cynical, the detective's thoughts will quip back in humorous or critical tones. The game cleverly integrates the player's intent into a system of skills and personal traits. This means that when a player tries to persuade or empathize, the internal skills (like empathy or logic) interact to determine success. In effect, the player feels that their intended approach is being executed by the character, which greatly strengthens perceived agency even though the story outcome is not branching widely.

This design—aligning the player's will with the character's internal narrative—significantly reinforces the sense of control. During dialogues, the game acknowledges the player's choices by immediately affecting the protagonist's internal state. Even though the overall story is mostly fixed (there is essentially one ending), players feel deeply invested because they see their character being shaped. Disco Elysium's recognition of the player's input was rewarded by critical acclaim; it won Best Narrative at The Game Awards 2019, a testament to how strongly players felt involved. In this

case, the richness of character and responsiveness of dialogue created a more compelling sense of agency than any branching structure could.

Perceived agency also rises when choices bind directly to the player's immediate goals, moral stance, or cared-for relationships—because the player experiences action as meaningful commitment rather than mere option selection. As Tanenbaum and Tanenbaum argue, "agency is not freedom to choose; it is a commitment to meaning" [12]. For example, in Metal Gear Solid 4, the protagonist Snake has to climb through a life-killing microwave corridor to save the world. The player has almost no outcome control yet must repeatedly press a single button to force Snake through lethal radiation. There is minimal actual branching, but the moment enlists embodied commitment and responds with escalating audiovisual acknowledgment (labored movement, teammates' voices), producing a powerful sense of perceived agency.

From another perspective, the realization of agency is also a match between the player's desires and actions [13]. Players have a desire to act. The game has an underlying computational model, which supports players to take certain actions. When a player's "desires" and the game's "abilities" are perfectly matched, perceptual agency emerges. If the authored arc compels actions that conflict with a player's established attachments or intentions, the avatar can cease to feel like a co-authored self. In The Last of Us Part II, Joel, who was popular and loved by players was brutally killed without any warning. That can create a sharp desire–system mismatch for players who cannot align with Abby's motivation, yielding a felt loss of agency as the plot "pulls" them through beats they do not endorse.

In sum, perceived agency is maximized when design (1) lets players author a stance that the avatar can credibly embody, and (2) acknowledges that stance moment-to-moment through diegetic feedback and consequences. Alignment—not sheer branch width—is the decisive variable [13].

3.4. Seemingly trivial interactions

Even those seemingly trivial interactions still matter [14]. In-game narration: not every choice must be meaningful or change the plot. Sometimes inspecting an irrelevant object or playing a guitar won't change the overarching of the story. However, in fact, they contribute to players' personal narrative experience. By allowing players to express themselves or explore the world in subtle ways, the game acknowledges players' free will, thereby maintaining a sense of immersion.

For instance, in the Dark Souls series, many of the worldviews are buried within the item description texts and game environments. Players who are interested in the plot and the world view will actively explore these clues. Many details buried in these tiny interactions will assist players in understanding the main storyline of the game. These small interactions change the personal narratives of players, and each player will have a different personal narrative about the game's plot and worldview when they play for the first time. They keep players actively engaged, make the game world feel responsive, and prevent the experience from degenerating into passive cutscenes. This design concept guarantees players that their way of playing—no matter how tiny the details are —is very important in shaping their journey [15].

3.5. Expectations and background

Players accept different levels of agency depending on what they expect.

For example, players of cinematic interactive dramas (Detroit, narrative adventure games) anticipate some limitations, and often report high engagement despite limited control, whereas players of open-world sandboxes (like Grand Theft Auto) expect and demand high freedom.

Similarly, marketing and hype affect expectations. Widely hyped titles that implicitly promise vast reactivity but ship with narrower affordances (e.g., early reception of Cyberpunk 2077) encounter sharper agency dissonance when expectations are violated. The variable is not just the design but the story players believe they are entering.

4. Conclusion

This paper has examined whether and how player choice matters in narrative games, focusing on the gap between perceived and actual agency. Drawing on theoretical insights and close case studies, we have shown that perceived agency often outweighs actual narrative control in shaping player experience. Games like Detroit: Become Human, Life is Strange, and Disco Elysium demonstrate that designers can craft the feeling of agency through transparency, feedback, character alignment, and narrative framing instead of simply adding more choices.

The case discussions show how different techniques converge on the same outcome: a convincing feeling of control. Detroit: Become Human demonstrates how visible options and structure can validate player impact early, while also revealing convergence on replay. Life is Strange illustrates how emotional framing and delayed callbacks keep decisions meaningful even when outcomes narrow—an instance of agency-informing techniques that signal significance at the moment of choice and corroborate it later [11]. Undertale combines moral consequence with meta-acknowledgment to make the system's memory palpable, turning even small acts into identity-defining moments. Disco Elysium shows that extensive branching is not required: by aligning player intent with avatar voice and surfacing reactive inner dialogue, it sustains a powerful sense of authorship through moment-to-moment responsiveness.

For designers, the implication is clear: agency is a designed experience, not a by-product of branching alone. Practical priorities include (a) discernible feedback—immediate reactions and later echoes that "close the loop"; (b) player–avatar alignment—choices that express the player's values through a credible character; (c) narrative opacity with honesty—conceal structural convergence while avoiding misleading promises; (d) meaningful local consequences—relationship shifts, tone changes, and state updates that players can perceive; and (e) expectation management—onboarding and marketing that set the right "contract" for freedom and constraint.

Ultimately, agency in games is a felt quality: a blend of mechanical possibility and psychological presentation. By understanding and leveraging the factors that build perceived agency, developers can ensure that players experience a genuine sense of control over the story, even within relatively constrained systems.

References

[1] David Thue, Vadim Bulitko, Marcia Spetch & Trevon Romanuik. (2010) Player Agency and the Relevance of Decisions. In: Lecture Notes in Computer Science. Berlin, Heidelberg: Springer Berlin Heidelberg, pp. 210–5.

[2] Juul J. (2011) Half-Real: Video Games between Real Rules and Fictional Worlds. 2005th ed. MIT press.

[3] Murray JH. (1997) Hamlet on the holodeck : the future of narrative in cyberspace [Internet]. Cambridge, Mass.: MIT Press; pp.342.

[4] Marie-Laure Ryan. (2001) Beyond Myth and Metaphor: The Case of Narrative in Digital Media. Game Stud [Internet]. Jan; 01(01). Available from: https: //www.gamestudies.org/0101/ryan/

[5] Carstensdottir E., Kleinman E., Williams R., Seif El-Nasr M.S. (2021) "Naked and on Fire": Examining Player Agency Experiences in Narrative-Focused Gameplay. In: Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems. Yokohama Japan: ACM; pp. 1–13.

[6] Thue D., Bulitko V., Spetch M., et al. (2011) A Computational Model of Perceived Agency in Video Games. Proceedings of the AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment 7, (1): 91-96.

[7] Yin M., Xiao R. (2022) How Should I Respond to “Good Morning?”: Understanding Choice in Narrative-Rich Games. In: Designing Interactive Systems Conference. Virtual Event Australia: ACM; pp. 726–44.
[8] Thompson S.C., Armstrong W., Thomas C. (1998) Illusions of Control, Underestimations, and Accuracy: A Control Heuristic Explanation. Psychol Bull, Mar; 123(2): 143-61.
[9] Day T., Zhu J. (2017) Agency informing techniques: communicating player agency in interactive narratives. In: Proceedings of the 12th International Conference on the Foundations of Digital Games. New York, NY, USA: Association for Computing Machinery; pp. 1-4.
[10] Engelbrecht H., van der Laan L.N., van Enschot R., Krahmer E. (2022) The Role of Agency and Threat Immediacy in Interactive Digital Narrative Fear Appeals for the Prevention of Excessive Alcohol Use: Randomized Controlled Trial. JMIR Serious Games. June 13; 10(2): e32218.
[11] Day T., Zhu J. (2017) Agency informing techniques: communicating player agency in interactive narratives. In: Proceedings of the 12th International Conference on the Foundations of Digital Games [Internet]. Hyannis Massachusetts: ACM. pp. 1-4.
[12] Tanenbaum K., Tanenbaum J. (2009) Commitment to Meaning: A Reframing of Agency in Games. UC Irvine: Digital Arts and Culture.
[13] Wardrip-Fruin N., Mateas M., Dow S., Sali S. (2009) Agency Reconsidered. In: Proceedings of DiGRA 2009 Conference: Breaking New Ground: Innovation in Games, Play, Practice and Theory. Available from: https: //dl.digra.org/index.php/dl/article/view/369
[14] Zeidan Mellqvist S., Kappler E. (2022) Meaningful Choices : A closer look at the choice design of Detroit: Become Human. Available from: https: //urn.kb.se/resolve?urn=urn: nbn: se: uu: diva-479991
[15] Stang S. (2019) “This Action Will Have Consequences”: Interactivity and Player Agency. Game Stud. May; 19(1). Available from: https: //gamestudies.org/1901/articles/stang