

Decisions in the Loop: An Empirical Study of Narrative Time and Player Agency in *Hades* and *Twelve Minutes*

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EXTENDED ABSTRACT

This paper presents findings from an empirical study investigating the impact of loop structures on the experience of narrative time (Genette 1980; Juul 2004; Wei et al. 2010; Zagal & Mateas 2010) and player agency (Domsch 2013; Vuorre & Metcalfe 2016; Bódi 2023) in two recent video games: *Hades* (2020) and *Twelve Minutes* (2021). While belonging to different genres – *Hades* being a roguelike and *Twelve Minutes* a time loop mystery – both games adhere to a similar looping structure that intertwines gameplay and narrative. In *Hades*, the player’s goal of escaping the Underworld is reflected by its central mechanic of repeatedly dying and starting over, advancing through cycles of failure and progress. Here, dying shapes narrative development through looped structures, returning players to familiar areas to repeat prior actions and explore new choices (Caracciolo 2023, 676). These resets allow players to refine their approach across loops, while influencing how the game’s story unfolds. In contrast, *Twelve Minutes* revolves around solving a central mystery within a strict twelve-minute time frame before the loop resets (see Anyó 2015). In this way, *Twelve Minutes* asks the player to unravel this mystery through solving ‘narrative puzzles’ (Fernández-Vara 2014; Wei & Durango 2019). More concretely, the player has twelve minutes to interact with characters and objects, making choices that lead to different narrative outcomes in an attempt to break free from the time loop.

The live, die, and repeat structure of both games functions not only as a gameplay mechanic but also as a narrative device (see Schneidermann 2023). Both games are narrative-driven and present the player with choices that impact the progression of the story, granting a strong sense of player agency. However, the games differ in their treatment of time. While *Hades* offers unlimited time within each loop, allowing players to make decisions at their own pace, *Twelve Minutes* imposes a strict twelve-minute limit, which introduces an element of time pressure that directly affects narrative outcomes and player agency. Due to their similar looping structures and contrasting approaches to narrative time, *Hades* and *Twelve Minutes* serve as

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compelling case studies for comparing the effects of player agency on narrative time, and for empirically testing these effects with participants.

Previous studies on agency in video games have predominantly focused on theoretical frameworks, with limited empirical attention to player practices. Carstendottir et al. (2021) emphasize this underrepresentation of studies centered on actual player perceptions of agency within choice-driven narrative-focused games. Carstendottir et al.'s own empirical study focused on broad player sentiments on agency, where having a meaningful impact over the unfolding narrative was only one of many focal points. This study builds on their work by specifically examining how narrative time – whether constrained, pressured, or unrestricted – affects agency and decision-making within video game storyworlds (Thon 2016).

Through comparative and empirical analysis, this paper explores how narrative time shapes player agency and experience in each game. For the experiment, ten participants, aged 18-30, played either *Hades* or *Twelve Minutes*. Participants, who were regular gamers with no prior experience of the selected games, each played for ninety minutes before engaging in semi-structured interviews about their experiences. A balanced gender distribution was achieved, and the interviews allowed for in-depth exploration of player experiences, with flexibility for follow-up questions beyond the initial questionnaire.

The findings of this qualitative study suggest that narrative time significantly influences how players make decisions and engage with the unfolding story. While *Twelve Minutes* players felt they could meaningfully influence the game's story and exercise agency, *Hades* players reported the opposite. The study also revealed that players' perceptions of actual playtimes were unaffected by the presence or absence of a time loop mechanic. Additionally, I investigated the correlation between players' emotional investment and time pressure, but surprisingly, over half of the participants reported a lack of emotional connection to either of the case studies. Finally, the study revealed that the imposed time loop in *Twelve Minutes* led to more rushed decision-making compared to *Hades*. These findings may not only reflect differences in narrative time but also broader distinctions between the two case studies themselves, suggesting the need for further exploration across a wider range of games and contexts.

This research extends existing studies on time loops by examining their dual role as gameplay mechanics and narrative devices. This dual role influences unique narrative outcomes through player agency. On a theoretical level, this paper contributes to our understanding of time loops and similar looping mechanics in video games, and how they influence player agency. On an empirical level, this paper builds on existing theory by integrating player data from the participant interviews to provide a grounded perspective on the intersection of narrative time and agency. In terms of game text analysis, this presentation highlights how interactive storytelling in video games can take on different forms and be influenced by factors such as narrative time. This qualitative exploration emphasizes the need for more empirical research into player experiences of narrative time and agency to deepen our understanding of player engagement and storytelling in interactive media. Ultimately, this paper argues that *Hades* and *Twelve Minutes* demonstrate the potential of loop structures to shape not only gameplay but also to deepen the player's narrative experience.

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