"How Do I Restart This Thing?" Repeat Experience and Resistance to Closure in Rewind Storygames

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Abstract. Interactive stories are a kaleidoscopic form that both encourages and rewards repeat experience, allowing players to try out different variations of a story or see the story from different perspectives. This may be one reason for the increasing use of rewind game mechanics, where players are required to repeatedly play a storygame before eventually reaching some form of conclusion. While this seems to be playing to the strengths of the medium, what is not clear is how rewind structures can be explained by current models of repeat experience in interactive stories. Through a close reading of the storygame *Elsinore*, we explore the impact of rewind game mechanics on repeat play, in terms of the player's ability both to determine when the end has been reached, and to subsequently replay beyond closure. Our observations suggest that rewind mechanics may frustrate, rather than support, closure and repeat experience of storygames, and may require a revision of current theories of rereading and repeat experience.

Keywords: Replay · Rewind mechanics · Rereading · Replay · Storygames

1 Introduction

One of the defining characteristics of interactive stories is the ability for players to go back and try out different variations of the story. The ability to make choices and see the outcome of those choices both encourages and rewards repeat play, allowing players to either see the way that those choices changed the course of the story, or see the same story from a different perspective. Murray refers to this as kaleidoscopic form [1, 2].

There have been an increasing number of story-based games released in recent years that focus specifically on the need for players to repeat events multiple times to progress through the game and reach some form of an ending. Games such as *Save the Date* [3], *The Stanley Parable* [4], *Doki Doki Literature Club* [5], *Bandersnatch* [6] and *Nier: Automata* [7] are structured such that the player needs to repeatedly go back to move forward, utilizing what Kleinman et al. [8–10] refer to as a "rewind" game mechanic. This is not a new phenomenon, with interactive fictions such as *Spider and Web* [11] and classic video games such as *The Legend of Zelda: Majora's Mask* [12] incorporating time loops and the need to repeatedly replay the same or similar sequences, often with the

eventual objective of "breaking out" of the loop. Even classic interactive stories without an explicit time loop narrative, such as *afternoon, a story* [13], tend to encourage repeat experience, either to make sense of what is happening in the story, or to come to some other sense of closure or completion [14].

This pattern of requiring the player to engage in repeated play with the goal of eventually reaching some conclusion raises interesting questions about the nature of repeat experience and endings. If a storygame is explicitly designed to encourage or even *require* replay, how then does a player know when they have really reached the ending? If an ending is eventually reached, why would the player go back and replay the storygame beyond the ending? And what would the player be doing if they did go back and replay at that point? If replaying is an inherent feature of interactive stories, the answers to these questions can help us to better understand both "rewind" storygames, and interactive stories in general.

To explore these questions, we conducted a close reading of *Elsinore* [15], an adaptation of Shakespeare's *Hamlet* [16] in which you play as Ophelia caught in a time loop as she repeatedly attempts to avert the tragic events of the original play. As the player goes through multiple repetitions of the timeline, a number of additional goals become evident, eventually focusing on the need for Ophelia to break out of the time loop and reach some form of ending. However, as we will discuss, the focus on a rewind mechanic makes it unclear both when the game actually comes to an end, and what it would mean to replay the game beyond this ending.

The works we are considering are what Reed refers to as *storygames*, "a playable system, with units of narrative, where the understanding of both, and the relationship between them, is required for a satisfying traversal" [17]. We use the term *player* to indicate the entity engaging with the storygame, and *play* for the activity the player is engaging in. At times we may refer to *reading* and *rereading*, after Mitchell [18, 19], to indicate the player is focused more on the narrative units than the playable system.

2   Why Do People Reexperience Stories?

The question of why people go back and reexperience stories has been explored in detail [20–26]. In the context of non-interactive stories, Calinescu [27] identified three types of rereading: partial rereading, simple rereading and reflective rereading. Focusing on interactive stories, there have long been debates as to whether people reread for variation or for closure [28–33]. Moving beyond this, Murray [2] argues that while people reread for variation, they are ultimately looking for some form of closure. Mitchell [18, 19] expands on this position, adapting Calinescu's categories to interactive stories. According to Mitchell, people initially reread interactive stories from a goal-directed perspective, similar to Calinescu's partial rereading. After reaching this goal, they shift to the equivalent of simple or reflective rereading. This requires a change in what the player is doing as they experience the storygame. What is not clear is what it means to engage in simple [34] or reflective rereading [35, 36] in an interactive story.

Kleinman [9, 10] has explored the notion of "rewind mechanics", the idea that the player needs to go back, either to a specific (restricted rewind) or any (unrestricted rewind) earlier moment in the same traversal, or to go back to the beginning of a narrative

after a traversal (external rewind). This framework was later expanded to define rewind more broadly as "a narrative progression mechanic that allows the player to return to a previous point in either narrative and/or game-play." This mechanic "requires [the player] to rewind in order to progress the game narrative" [8]. There has also been work to explore how storygames that incorporate rewind mechanics potentially undermine the notion of rereading by breaking player expectations that a play session will be self-contained [37, 38], as can be seen in a game such as *Save the Date.*

3   Research Problem

Much work has been done to understand what it means to reexperience a storygame, and how this is different from rereading non-interactive stories. This work tends to focus on storygames where there is some form of "ending" beyond which the work can mechanically no longer progress. Whatever the player may feel in terms of reaching closure, the work is at an end. At this point, the reader can choose whether or not to go back and replay, either to complete their understanding (partial rereading), or to engage in simple or reflective rereading. The reader can also choose to stop playing.

What is not clear is how players respond to works that explicitly require replay [39], something that Mitchell [37] argues undermines expectations for rereading. Although Mitchell claims this forced replay, and the related cross-sessional play, is defamiliarizing [40], Kleinman et al. [8–10] suggest it is, in fact, an increasingly common approach. Regardless, this type of work foregrounds the problematic nature of "endings" in interactive stories. For these works, the "end" often triggers a rewind, with the actual end coming after a longer traversal resulting from one or more rewinds. In addition, as the player has already been repeatedly encountering the game as part of the rewind, it isn't clear what it would mean to "reread" this type of storygame.

This leads to the questions that we are exploring in this paper. If the ending of the work is indeterminate, what then would it mean to reexperience such a work, not in the sense of the enforced "rewinds" required by the work's mechanics, but in the sense that Mitchell [19] considers? When do these games end? How would a player replay these games? And how does this relate to Mitchell's model of rereading in interactive stories?

4   Method

To begin to explore these questions, we conducted a close reading of the storygame *Elsinore* [15], an adaptation of Shakespeare's *Hamlet* [16]. Structured as a point-and-click adventure game, the gameplay in *Elsinore* focuses on having the player character, Ophelia, talk to non-player characters (NPCs) as a means of collecting and using information referred to as "Hearsay", which is tracked in Ophelia's "Journal". Using information opens up "Leads", which represent narrative threads that can be pursued to completion, at which point they are "sealed" (marked with a wax seal in the Journal). Talking to NPCs can also change what the NPC and/or Ophelia believe and what goals NPCs are currently pursuing, and can reveal potential future events, which are displayed in a "Timeline". An underlying temporal predicate logic system determines which events will take place in the current timeline [41]. Repeat play in the form of a "rewind" is required to progress in

the game, with total playing time in the range of 15–20 h, involving 20 or more rewinds, needed before some form of ending is reached.

Close reading is an approach adapted to the study of games by Bizzocchi and Tanenbaum [42] in which the researcher takes on a specific "naive player" perspective, and repeatedly plays a game so as to gain a deeper understanding of the structural features of the work. To aid the process, they recommend that the researcher adopt a particular set of "analytical lenses" to allow for a focus on specific features related to the investigation. For our close readings, we focused on the following questions: Have I reached the end? If so, how do I restart? And what am I doing when playing, both before and after restarting? Both authors played the game, discussed the play experience, and extracted the insights described in this paper. To facilitate a coherent description of play and acknowledge that our findings do not necessarily reflect those of all players, we frame our findings in terms of the first author's experience. To help make this apparent to the reader, all descriptions of gameplay are presented in the first person.

In the discussion of our close reading below, we consider a *traversal* to be an encounter that a player has with a storygame from a beginning to an end, as defined by Montfort [43]. A *beginning* is a point at which there is no stored state differentiating the storygame from its original state when first installed, and an *end* is a point at which there is no further action that the player can take without somehow, either implicitly or explicitly, resetting the storygame to its original state. These are deliberately mechanical definitions that do not refer to the player's perception of the beginning or ending.

Regarding the player's perception of an ending, which we refer to as *closure*, we distinguish between *narrative closure* and *system closure*. We consider narrative closure to be "the phenomenological feeling of finality that is generated when all the questions saliently posed by the narrative are answered" [44]. Following Mitchell et al. [36] we consider system closure to be equivalent to Murray's electronic closure, which "occurs when a work's structure, though not its plot, is understood" [2]. As discussed in [36], it is possible for a player to reach either narrative closure, system closure, or both, without necessarily having reached the end of a work. Conversely, a player may reach the end of a work without having reached one or both forms of closure.

A *replay* involves completing a traversal then playing from the beginning, whereas a *rewind* (following [10]) involves either going back to an earlier point within the narrative or gameplay, or going back to a "false beginning" where some stored state remains that represents non-zero progress. Note that simply returning to an earlier point within the same traversal, for example by loading a save point, is not a rewind. For this to be a "rewind mechanic" in Kleinman's [8] sense, the game must maintain some state to track the fact that the rewind occurred, otherwise there is no way that the player can be prevented from moving forward without having succeeded at the rewind mechanic.

5   Forced Rewinds and Cross-Sessional Puzzle Solving

The traditional idea of an "ending" is almost immediately overturned in *Elsinore*, with the use of the rewind mechanic and the need to repeatedly revisit the main timeline introduced early in the game. The game requires rewinding to progress, shifting the focus from a single traversal to an extended traversal stretching over repeated rewinds.

Following a brief "prologue" which introduces the player to the core game mechanics, setting and characters, the first evening arrives, and Ophelia sleeps. During the night she has a nightmare, presented as a series of images, in which the events of the original Shakespeare play are shown. When Ophelia wakes on Thursday morning, she realizes the events of the dream have not yet happened. This introduces the initial goal of the game: prevent the original events of the play from occurring. However, it quickly became evident that there were other goals that I needed to work towards.

As the events of the play unfold, a cloaked figure approaches Ophelia on Saturday, and abruptly kills her. I was shown a black screen containing an illustration of a river, the text "I feel my body growing cold", and a button labelled "Try again". Pressing this button takes Ophelia back to her bed, where she wakes on Thursday morning. Here I quickly realized I was repeating the same events, with Ophelia inevitably and repeatedly killed by the mysterious assailant. Using Kleinman et al.'s terminology [8], this is a designer-controlled rewind, as the player cannot initiate it on their own. In fact, the player's goal is to *prevent* the rewind, as it hinders progress. There is also zero scope for the player to determine where to rewind to, as the rewind always resets to Thursday.

What is happening here is very much like games such as *Save the Date*: the player is presented with an obstacle that requires repeated rewinds to overcome. Stopping the mysterious assailant involves a shift to cross-sessional puzzle solving [37]. Once the player determines that Brit, lady-in-waiting to Queen Gertrude, may be the assailant, Ophelia must convince the captain of the guards to arrest Brit. This involves befriending Brit, after which she confesses and kills Ophelia. When the timeline restarts, it is possible to use the information gained from the confession to have Brit captured before she kills Ophelia again. Once Brit is captured, the playwright Peter Quince appears and declares that this "thread" of the story has been "snipped", and that Ophelia will no longer be in danger from Brit. However, it emerges that Ophelia needs to stop Fortinbras invading Denmark, which also requires puzzle-solving across sessions.

The game provides a number of tools to help with this repeated rewinding. After the first rewind, a "fast forward" mechanism is unlocked, letting you accelerate time in a form of dramatic compression [45]. Following the second rewind, a "restart" mechanism is added, allowing you to abandon the current timeline and jump back to Thursday morning, while retaining any information Ophelia has acquired. This additional means of rewind introduces player-controlled initiation, but the scope is still not in the player's control. It is also important to note that there is no manual "save game" mechanism, so the player is also unable to checkpoint specific game state.

Both the Brit and Fortinbras cross-sessional puzzles require information, in the form of Hearsay, from one timeline to be carried over to the next and focus on removing obstacles that terminate the timeline prematurely. In working to solve these puzzles, it became clear to me that there is a reason Ophelia needs to survive to Sunday morning, and my focus shifted from the intermediate goal of prolonging Ophelia's life, to the larger goal of trying to find a book, called the "Hand of Dionysus" or the "Book of Fate", which is causing the time loop. Through Quince, I discovered that the book is in the hands of Lady Simona, who will be at the Inn in the town outside Elsinore Castle on Sunday morning. Now, the motivation for solving the cross-sessional puzzles becomes to get this book and break out of the time loop.

At this point, my notion of the "end" of the storygame, and some sense of closure, was linked both to my understanding of the playable system – how to manipulate the various characters through the use of "hearsay" – and my understanding of the narrative – that Ophelia had been trapped in a time loop as the result of the Book of Fates. Once I had the book, I assumed that I would be able to break out of the loop and bring the game to an end, simultaneously reaching both narrative and system closure.

This was reinforced by what happens when Ophelia receives the book from Simona. She tells Ophelia that the book once belonged to Quince, and he has been using it to torment her. She also explains that once you use the Book of Fates "the clock on Elsinore advances forever", suggesting that there would be no turning back. At the same time, she cautioned that "a perfect world is a notion held only by fools and children". I wasn't sure what she meant, but I was looking for closure, and saw this as the most logical route to ending the game and resolving the story threads. However, after receiving the Book, Ophelia wakes on Thursday, with the Book on her table. Ophelia's reaction mirrored mine: "I thought that might have been the end of all this. But it wasn't."

6   Repeated Resistance to Closure

Although it seemed that solving the cross-sessional puzzles would bring the game to an end, *Elsinore* repeatedly resists attempts at both reaching an ending and achieving either narrative or system closure. It was not just the narrative twist related to Quince's role in the time loop that provided resistance to closure. The rewind mechanic, by allowing for several different ways the player could try to end the game, was also encouraging the player to defer closure and continue to engage with the time loop.

I had assumed that once I received the book, the loop would be broken, time would move inexorably forward as Simona had warned, and the game would come to an end. Instead, it turned out that Ophelia needs to decide *which* timeline will be the "permanent" future for the people living in Elsinore Castle. The Book lists 11 different "Fates", each represented by a page in the Book. When you select a page, you are presented with a choice to "abandon current timeline and revisit the event that cemented this fate". For Fates that you have not yet experienced to completion, there is no such option. Rather than taking me out of the time loop, acquiring the Book had instead given me the choice to end the loop, but also the temptation to stay until I find the "best" ending.

Soon after acquiring the Book, Ophelia has an encounter with the Ghost that heightens the tension between ending the game or continuing. The Ghost repeats Simona's warning that there is "no perfect world to be found" and suggests the way to overcome Quince is to use my power to choose which Fate to finalize. Here an additional option arose, as Ophelia suggested she could burn the Book. The Ghost cautioned against this, as although this would remove Quince's powers it would also trap everyone in the loop together with Quince. It did, however, open up a new option: rather than choose one of the less-than-perfect endings, I could instead end the game by remaining in the loop.

This suggests that the player, rather than reaching closure, is encouraged to continue to engage in something equivalent to Mitchell's [18, 19] partial rereading, exploring variations until the player decides either they have found the least bad Fate and will finalize it, or they will abandon any hope of ever leaving the loop and burn the Book.

Interestingly, partial rereading usually involves repeat play in search of closure *after* reaching the ending of the work, whereas here it is happening *before* the player has reached an ending, but while the player is repeatedly reexperiencing the timeline.

Given the Ghost's insistence that there was no best ending, and not seeing any obvious way to burn the Book, I chose the ending that most closely resembled the original Shakespeare play, which was actually the outcome I had been working so hard to avoid through the many time loops. This felt like a defeat, but at the same time it brought the promise of closure. However, the game makes you doubt even this decision, once again resisting closure. After selecting a Fate, each character tells Ophelia how they feel about the ending and why it is not the best ending. After all have spoken, the Ghost reminds Ophelia that if this is her choice, then she should stick with it. You are then given 2 options: "Choose This Fate" and "Restart Time". This is your first chance to turn back. If you select "Restart Time", Ophelia wakes on Thursday morning, back in the loop. If, however, you select "Choose This Fate", you are shown a second warning: "This will be inscribed as the true fate of Elsinore Castle, ending you from your endless loop. There will be no turning back." The two options are "Choose This Ending" or "Not Yet". The game was repeatedly resisting my attempts to end the game, but I chose to go on. After a short animation showing Ophelia drowning in the river the credits roll, followed by a still image from the animation and the words "FIN". The game then exits.

7   The End Is not the End: Resisting Both Ending and Closure

Here I assumed that I had finally reached the end. Reopening the game, the main screen had changed: whereas previously it had shown a scene in a graveyard with Elsinore Castle in the distance, now it showed the final scene from the Fate I had chosen. Where the first menu option has previously been "Continue Game", now it showed "Return to Elsinore". While my choice of a Fate had clearly had an impact, it seemed I was being given the chance to return to the game, presumably to continue from where I had left off. There was no "Restart" option on the main screen, and looking at the "Options" screen showed that while there was an option to "Erase all data", again there was no "Restart" option, nor was there any option such as "New game plus" as can be found in other games. At this point I was uncertain whether I had actually completed the game, or how I could go about replaying the game, other than choosing to "Erase all data".

This, combined with my memory of both Simona's warning that the fate I chose would be permanent and the Ghost's admonition to choose carefully, made me curious as to what would happen if I chose to "Return to Elsinore". Going back into the game after selecting a Fate leads to a conversation with the Ghost where he tries to convince Ophelia not to return. In addition, the Ghost warns Ophelia that if she does choose to return, any Fate that has previously been chosen will be removed from the Book.

Whereas previously I felt I had completed the game, now I felt that closure had been suspended, perhaps indefinitely. I didn't want to go back, as I thought I had understood both the story and the playable system, but now that sense of closure was confounded as it seemed I hadn't really finished the game. There was a tension between my feeling that the game was complete and the fact that mechanically nothing was stopping me from resuming, as opposed to restarting, the game. In fact, there was no clear way to

restart the game. At the narrative level, there was a similar tension between Simona's statement that time would inevitably move forward and the assertion by the Ghost that Ophelia should not return on the one hand, and the possibility that Ophelia could return but at the cost of sacrificing her earlier choice of Fate on the other. In terms of both the playable system and the narrative units, I was no longer certain I had reached closure, or even the mechanical end of the game. The game seemed to be asking *me* to decide when to stop playing. In terms of Mitchell's [18, 19] model of rereading, I was unclear whether, if I went back into the game, I would be engaged in some form of rereading, or still engaged in my "first" reading, despite having reached (and lost) closure.

8   Playing for Closure Versus Playing for *Completion*

It is worth reflecting on how the game ended up like this. At the time I had gained access to the Book of Fates, I was playing version 1.4 of *Elsinore*. In earlier versions, the final choice when you select a Fate included additional text, in bold, stating: "Your save progress will be deleted". On launching the game after the end credits, rather than "Return to Elsinore", you would see the original "Start Prologue" option. Entering the game, you had to replay from the Prologue, with none of the Hearsay or Leads you had accumulated in your previous traversal, and without the Fast Forward or Restart tools.

Fans reacted strongly to this. Many reviews and comments in the Steam forum were similar to the following: "As it stands, the thought of starting anew without being able to go to a specific save game means I may not replay Elsinore, or if I do it won't be for a while due to time constraints" [46]. Players had been expecting there would be some way to reenter the game and work towards completing all the Fates, without having to replay the cross-sessional puzzles and accumulate the Hearsay that would enable the various Leads to be completed and the Fates unlocked.

The developers responded by releasing version 1.4, which implemented the ending system described above. The release announcement posted in Steam stated: "we knew that we wanted to capture the feeling that no matter what fate Ophelia chose for Elsinore, it was the final choice she would make. We believed most players would want to put down the game at that point and move on… It's clear that our original structure wasn't hitting our thematic goals for a large number of players" [47]. The developers had felt players would be wanting closure, whereas players were aiming for completion.

Interestingly, even in the original design you could in fact play through all the "endings" to the point where they appear in the Book of Fates, as long as you didn't select the final "Choose this ending" option. In addition, the game clearly warns players before the save file is deleted. Despite this, some players were unhappy with the finality of the original design. Instead, they wanted to be able to play all of the endings through to the credits, without putting in the effort of replaying from the start. This is what the updated version allows, if you ignore the Ghost's warning and return to Elsinore.

It is also important to note that in the updated version, there are in fact 2 mutually exclusive "final" endings: "burn the Book" and "Exeunt All". Choosing to burn the Book, by clicking on the candle that appears beside the Book after Ophelia mentions this option, renders all the Fates inaccessible, but does not actually end the game. After this point, all the player can do is repeatedly cycle through the time loop, having trapped

Ophelia and Quince in the loop forever. The only way to end the game is to quit. The other ending requires the player to finalize all the Fates in the Book, then wait for Quince to talk to Ophelia and offer her the ability to remove everyone from the "stage".

These various ways of ending the game all build upon the initial use of the rewind mechanic, which emphasizes repeat play and exploration of variations. Choosing any of the Fates requires the player to decide to stop playing, even though mechanically they could continue. This is putting the choice in the hands of the player, asking the player to consciously decide to "put down the game… and move on", as the developers initially envisioned, rather than enforcing this by deleting the save data. The "burn the Book" ending similarly requires the player to decide to stop playing, but provides some sense of narrative closure in terms of Ophelia's defeat of Quince and the explicit removal of all other endings. Finally, the "Exeunt all" ending is perhaps an implicit critique of the players who demanded the ability to complete all endings – in the final animation before the credits role, Ophelia joins Quince in his role as playwright and tormentor, treating the world as a stage and all the people within as mere puppets.

9   Replaying as Both Supporting and Resisting Rereading

Having explored the ways *Elsinore* first requires repeated rewinds, then resists closure, and finally pushes the responsibility for ending the game to the player, we will now look at what it means to replay *Elsinore* from the start. Before version 1.4, this was forced on the player after choosing a particular Fate, as the save data was erased. For players of version 1.4 or later, the only way to replay from the beginning is to go into the "Options" screen and choose "Erase all data" – there is no explicit "Restart" option.

The first thing that became obvious when playing through the "Prologue" for a second time was how much I relied on the "fast forward" mechanism. Without it, I was forced to slow down and pay attention to the dialogue. This encouraged me to take time to renew my knowledge of the characters and appreciate the writing. In terms of Mitchell's [18, 19] model, this could be seen as a form of simple rereading: reading again to recapture the feeling of the first experience. Interestingly, I was also paying attention to characters I knew had ulterior motives, such as Quince. I was looking closely for hints that he was more than he seemed and trying to figure out how I had missed this on my first traversal. This bears similarities to reflective rereading.

However, once the "fast-forward" and "restart" functions were unlocked, I shifted to a more goal-oriented form of play, often focusing on a specific Lead that I wanted to explore and then complete. I found I had an uneven recollection of specific events that sometimes made this difficult, as I had forgotten which Hearsay could be used to trigger which events. I could recall major plot points, such as Hamlet killing King Claudius, Brit being a spy for Denmark, and Irma attempting to poison Hamlet, but not the details of how I had discovered and then triggered these events during my first traversal. This suggests that to some extent I was now engaged in partial rereading.

At the same time, I realized that knowledge from my previous playthrough was actually hindering my replay experience. First-time players of *Elsinore* can be assumed to have no prior knowledge of the storygame. Even if they have read or watched *Hamlet* in other media, which may give them some insight into the characters and overall plot,

they would not know how the playable system works, or which Hearsay Ophelia needs to collect and make use of to progress. As such, the player and Ophelia learn new information about both the narrative units and the playable system at the same time. However, in a replay of *Elsinore,* the player has knowledge that Ophelia does not possess. This disconnect came to interfere with my attempts to progress in the game.

For example, in the cross-sessional puzzle involving the mysterious assailant, Ophelia must figure out who is repeatedly killing her and prevent this from happening. As I already knew the identity of the spy, I tried to optimize my play such that I would only encounter the spy once and then complete the Lead in as few time loops as possible. However, this became an obstacle as Ophelia did not yet have the knowledge of who the spy was. By taking actions based on that knowledge I was actually preventing Ophelia from gaining the Hearsay she needed. No matter how hard I tried to avoid the spy, the rewind mechanic and the design of the cross-sessional puzzle ensured that Ophelia must die repeatedly before the puzzle can been solved. Even when I became aware of this problem, my prior knowledge continued to disrupt my replay. Once I realized that I needed to obtain the missing Hearsay, I was mechanically working through the puzzles and trying to gather the Hearsay as quickly as possible. I was no longer paying attention to the story, instead focusing almost exclusively on the playable system.

At this point, I forced myself to let go of any expectations I had from my first traversal, including narrative and system knowledge. By allowing myself to repeat the core mechanic of sharing information with characters, letting the narrative run its course, and having Ophelia die again and again as if I didn't know anything, I was able to develop a fresh, albeit not new, understanding of the story and the playable system. This was accompanied, at times, by enjoyment at encountering Leads that I had not previously seen or finished. For example, I discovered a new Lead involving Guildenstern and Rosencrantz, whom I had ignored on my first traversal.

Eventually I felt that I had reached a similar state as when I was playing *Elsinore* the first time around. I had completed the cross-sessional puzzles, accumulated a sizeable amount of Hearsay, and reacquainted myself with the relationship between the Hearsay and the ways they could be used to influence the story. This enabled me to engage in more exploratory play, trying out different possibilities and working to unlock different Fates. At this point, when I was no longer forced to rewind but had not yet finalized any Fates, I was engaged in what could be called *kaleidoscopic* play. By breaking free of the cross-sessional puzzles but deliberately avoiding triggering an ending, I was able to make use of the rewind mechanic to play with both the narrative units and the playable system, exploring variations and the ways my choices impacted the direction and shape of the story until I decided I had played enough, and I simply stopped playing.

10   Discussion: Rethinking Rereading in Rewind Storygames

The experience described above suggests that the structure of Elsinore's rewind mechanics, which explicitly represents information in the form of Hearsay and uses conversation as a means to gather Hearsay and overcome barriers to progress, supports a specific pattern of play. When the player and Ophelia have the same level of understanding of the story and playable system the player is able to focus on both, but once the player

has completed the storygame and tries to replay, the mismatch between the player's and Ophelia's knowledge interferes with the rewind mechanic, making rereading, in the sense that Mitchell [18, 19] discusses, somewhat problematic. It is only when the replay is treated as if it is a first playthrough that play can progress smoothly. This form of replay as if playing for the first time is not accounted for in Mitchell's model.

To understand what is happening, we can examine Mitchell's model in more detail. Mitchell proposes that only after reaching closure will a reader consider what they are doing to be "rereading", equivalent to Calinescu's [27] simple or reflective rereading. At that point, what the reader is doing *changes* while their understanding of the storygame remains *invariant*. To support this type of rereading, Mitchell suggests storygames need to provide mechanics that can adapt to what the reader is doing when rereading beyond closure. In *Elsinore*, the core mechanic of gathering and using Hearsay to overcome obstacles by altering NPC goals and triggering events in the timeline strongly encourages goal-oriented play during an initial traversal, both before and after the cross-sessional puzzles are solved.

Initially the player is working to understand the playable system and the narrative units, and the core mechanic directly supports this. Once the player has overcome the cross-sessional puzzles and acquired the Book of Fates, they can shift to a more exploratory type of play, similar to Calinescu's reflective rereading. This is possible because the gameplay loop can adjust to this new type of play. The initial barrier of Brit killing Ophelia is literally gone, as Quince has "snipped" that narrative thread. Although the Fortinbras threat is still present, since Ophelia has the information about his hiding place, the player can quickly forestall the invasion in each loop and explore the various possible Fates. While the core mechanic is unchanged, the larger gameplay loop shifted from a forced rewind to overcome the cross-sessional puzzles, to a more exploratory use of the rewind mechanic and Hearsay to develop Leads and unlock new Fates, allowing the player to gain a deeper understanding of the storygame. We refer to this type of reflective rereading without replaying as *kaleidoscopic* play, after Murray's [2] notion of interactive stories as a kaleidoscopic medium.

Interestingly, this variation on reflective rereading is happening *after* the player has (at least temporarily) reached both narrative and system closure, but *before* the player has ended the game and started a true replay from the beginning. There is a difference here between engaging in reflective rereading while holding off on mechanically ending the game, and attempting to replay from the actual beginning. As we have seen, the structure of the core mechanic and the accompanying rewind mechanic becomes problematic on a true replay, as at this point the player has reached closure, and is trying to shift to either simple or reflective rereading. However, without a set of Hearsay that matches the player's knowledge of the story, the player eventually has to switch back to the original, goal-oriented form of play. The resetting of the game state has locked the larger gameplay loop back to its original form, making it difficult for the player to play beyond closure. This mismatch between how the player is trying to play the game, and what the mechanics actually support, frustrates the attempt at simple or reflective rereading. It is also not clear whether this is equivalent to partial rereading, as the player may already have both narrative and system closure – what they are lacking is the Hearsay required by the game mechanics to allow them to act on that closure.

This suggests that a rewind storygame such as *Elsinore,* which is explicitly designed to *require* repeat play, actually *frustrates* any attempt to replay the game from the start, as it forces replay to be the same as the original approach to playing. Storygames that aim to support replay beyond closure perhaps need to be designed to acknowledge what Mitchell suggests, which is that rereading is not, in fact, reading *again*, but reading in a *new way*. It also suggests that Mitchell's model of rereading needs to be extended to incorporate other forms of repeat experience, such as replaying as if playing for the first time and the kaleidoscopic play that arises from repeated resistance to closure.

11   Conclusion

In this paper we have explored how *Elsinore*, a storygame that makes use of a rewind mechanic that requires repeat play to progress, actively resists closure both by encouraging the player to engage in kaleidoscopic play, and by refusing to bring the game to an end, pushing the responsibility for ending the game from the system to the player. In addition, the very mechanics that require repeat play in the first traversal, in fact tend to frustrate and problematize attempts to reset the game and then replay from the start, requiring the player to replay as if they were playing for the first time until they reach the point where they can once again engage in kaleidoscopic play. These types of repeat experience are not fully explained by existing models of rereading in interactive stories.

These observations raise a number of questions regarding repeat experience of storygames. One immediate issue is whether designing for replay of the type encouraged by rewind mechanics actually hinders the type of rereading beyond closure as described by Mitchell [18, 19]. Beyond this, the type of kaleidoscopic play that *Elsinore* encourages once the cross-sessional puzzles are resolved suggests a need to extend Mitchell's model of rereading so as to better accommodate "the different kinds of closure a kaleidoscopic medium can offer" [2]. These are all areas for future exploration.

It is also important to note that our observations are based on close readings, and therefore reflect the experience of specific players with a specific storygame. Future work should make use of empirical studies of players to better understand to what extent these observations can be generalized, both to other players, and to other storygames.

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