# Storygameness: Understanding Repeat Experience and the Desire for Closure in Storygames

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## ABSTRACT
Repeat play is often seen as key to the experience of interactive stories such as storygames. This is arguably quite different from repeat experience of non-interactive stories. While work has been done to investigate motivations for repeat experiences of storygames, the impact of the relationship between the narrative and the playable system on repeat experience is underexplored. In this paper we examine this question through close readings of two storygames that encourage repeat play: *Bandersnatch* and *Cultist Simulator*. Observations suggest that as players experience a storygame, they shift focus between the narrative and the playable system. This shift impacts both the type of closure experienced and the desire to replay, and suggests the degree to which the player treats a work as a storygame, or its *storygameness*, is not an inherent property of the work, but instead is an experiential property that can change over the course of a traversal.

## Keywords
rereading, replay, storygames, closure, close readings

## INTRODUCTION
Repeat experience is often seen as essential to the experience of interactive stories. Murray (2018) sees these works as "kaleidoscopic", requiring repeat encounters to reach the "point at which we exhaust all the variations and as a result find a revelation of a new, more progressive and inclusive paradigm". Despite this central role, little work has been done to explore the details of the player's experience when repeatedly playing a storygame, how this relates to the player's need to pay attention to the narrative and the playable system, and the desire to continue to replay.

In this paper we focus on repeat experiences of storygames, which Reed defines as "a playable system, with units of narrative, where the understanding of both, and the relationship between them, is required for a satisfying traversal" (2017, 18), where a satisfying traversal is "the situation where both the player and author are in general agreement that the work was encountered as intended, and need not necessarily be replayed" (2017, 17). We consider the playable system to be a combination of the game mechanics the player accesses by means of controls, and the rules and state those mechanics impact. The playable system is represented to the player through an interface (Nealen, Saltsman, and Boxerman 2011). The narrative consists of the "mental representation of causally connected states and events which captures a segment in the history of a world and of its members" (Ryan 2003). We distinguish between narrative closure, "the phenomenological feeling of finality that is generated when all the questions saliently posed by the narrative are answered" (Carroll 2007), and system closure, the feeling of understanding how the system works, similar to Murray's

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electronic closure, which "occurs when a work's structure, though not its plot, is understood" (1998, 174).

Through close readings of two storygames, *Bandersnatch* (Netflix 2018) and *Cultist Simulator* (The Weather Factory 2018), we explore whether players focus on the playable system and/or the narrative during repeat playthroughs of a storygame, and how this impacts both the ongoing experience and motivations for repeat experience. Our close readings suggest that the player's focus on the playable system and/or narrative does not remain constant, and that this shifting focus affects both the type of closure the player experiences when completing a traversal, and the desire to replay the storygame. This also suggests that whether or not the player treats the work as a storygame, what we call its *storygameness*, is not a property of the work, but an experiential property that can change over the course of a traversal.

## RELATED WORK

Early work on repeat experience of interactive stories debated whether readers go back for variation or to reach narrative closure (Ciccoricco 2007; Bernstein 1998, 2009; Bernstein, Joyce, and Levine 1992; Douglas 2001; Harpold 1994). Moving beyond this, Murray (1998, 2011, 2015) argues that readers initially replay for variation, but eventually work towards an understanding of the larger systems underlying the variations, a process Mitchell (2012) characterizes as second-order closure. Building on Murray and drawing on Calinescu's (1993) model of rereading in non-interactive stories, Mitchell and McGee (Mitchell and McGee 2012; Mitchell 2012) suggest that readers of interactive stories initially reread for closure, and have goals that inform this partial rereading. Only after achieving these closure-oriented goals do readers consider what they are doing to be "rereading", at which point they potentially switch to something similar to Calinescu's simple or reflective rereading. Simple rereading involves recapturing the original experience, and reflective rereading involves looking for some deeper meaning in the work or trying to understand something about the underlying systems. However, they do not explain in detail what simple or reflective rereading might involve in an interactive story as opposed to a non-interactive story.

Mitchell (2013) later problematizes simple rereading in interactive stories, suggesting that rereading to recapture the experience is either no longer interactive (if the reader makes exactly the same choices in a second reading) or is more like replaying (if the reader focuses on recapturing the feeling of making choices, rather than on the story). What it means to repeat the experience of an interactive story has also been questioned, as works often make use of micro-rereadings (Mitchell 2013) or rewinding (Kleinman, Fox, and Zhu 2016; Kleinman, Carstensdottir, and El-Nasr 2018), which involve going back to a point earlier in the same reading and repeating a sequence rather than beginning a new playthrough. Regarding reflective rereading, Mitchell (2015) suggests a connection between storygames exhibiting Wardrip-Fruin's (2009) SimCity Effect and those that afford reflective rereading to understand the underlying system. They argue for a need to encourage the reader to focus on both system and story simultaneously, and that it is not yet clear how to encourage or sustain this dual focus.

## RESEARCH QUESTION

Although previous work has explored the nature of repeat experience in interactive stories, questions related to repeat experience beyond closure and the notion of reflective rereading are still unanswered. Mitchell (2015) argues that for reflective rereading to take place, "the work must encourage the player to reread to simultaneously examine both the underlying system and its relationship to the player's experience of the story." Interestingly, this closely matches Reed's definition of storygames. However, it is not clear whether a work being a storygame is a sufficient or necessary condition to encourage reflective rereading.

In this paper, we explore this issue by examining in detail the role of the relationship between the narrative and the playable system in the player's motivations to replay and the process of reaching, and possibly reading beyond, closure. In particular, we are exploring:

1. To what extent does the player focus on the narrative units and on the playable system in a storygame during play, and during replay?
2. How does this focus affect the player's motivations to replay, desire for closure, and the potential for repeat experience beyond closure, such as reflective rereading?

## METHOD

We address these questions through close readings (Bizzocchi and Tanenbaum 2011; Tanenbaum 2015) of two storygames: *Bandersnatch* and *Cultist Simulator*. *Bandersnatch* is a storygame that provides dialogue and action choices to players, which have a range of consequences from minor feedback responses to major scene changes. Playing the work often involves encountering "dead ends" and rewinding to earlier points in the narrative, with many repeat readings required for all branches in the story to be visited. In *Cultist Simulator*, gameplay largely consists of resource management: the player begins the game with basic resources, which can then be used with various actions available to the player. The game is also puzzle-like: the player learns how to combine resources and actions in order to progress through the game, unlocking both new interactions and new narrative fragments. The inclusion of "permadeath" (Copcic, McKenzie, and Hobbs 2013) means the player must replay the game many times to progress. These games were chosen as they require repeat experience to progress in both the narrative and the playable system, suggesting a relationship between these two layers.

Close reading is an approach adapted from the humanities that explores the relationship between the "text" (in this case, the storygame) and the reader or player. A close reading involves multiple playthroughs of a game, which deepens the researcher's understanding of the game and allows for a rich, nuanced analysis of the gameplay experience. For our study, all three authors played all three games.[1] This enabled us to discuss our experiences and extract the various insights described in the paper. However, to facilitate a clear description of the play experience, and to acknowledge the fact that we are not claiming to have covered a representative range of players, we chose to focus on the second author's experience of *Bandersnatch* and the third author's experience of *Cultist Simulator* to frame our findings. To make this apparent to the reader, descriptions of gameplay are presented in the first person.

The close reading approach involves the use of a set of "analytical lenses" to help the researcher attend to specific issues within the work. In our close readings, we focused on whether and when we were paying attention to the playable system and/or the narrative, and whether we were aware of and understood the relationship between the two. We also tried to determine if, and when, we felt we reached either narrative and/or system closure, and paid attention to whether we had achieved a satisfying traversal.

## BANDERSNATCH

Initially, the playable system and its relationship to the narrative in *Bandersnatch* seemed clear and understandable. However, the increasingly complicated narrative obscured the player's understanding of the system. By the end of the first full playthrough, the player reached narrative closure but no longer felt they understood the playable system. On repeat play, the player focused on exploring narrative variation, and gradually came to feel that the system was not as complex as they first thought. Once the system seemed understandable, and the outcome of their choices felt predictable, they no longer felt motivated to replay.

## Understanding the storygame as a choice-based, branching story

From the start, *Bandersnatch* presents itself as a choice-based, branching storygame, with the tutorial stating: "This is an interactive film where you make choices which alter the story." This initial impression of the work as a choice-based branching story is reinforced by the first few choices the player encounters. At the start of the game, players encounter a choice regarding what Stefan, the main character, would like to have for breakfast, and what kind of music he should listen to on the bus (see Figure 1). While these choices only have limited, local consequences, it soon becomes clear that other choices do have an impact on the direction of the story.

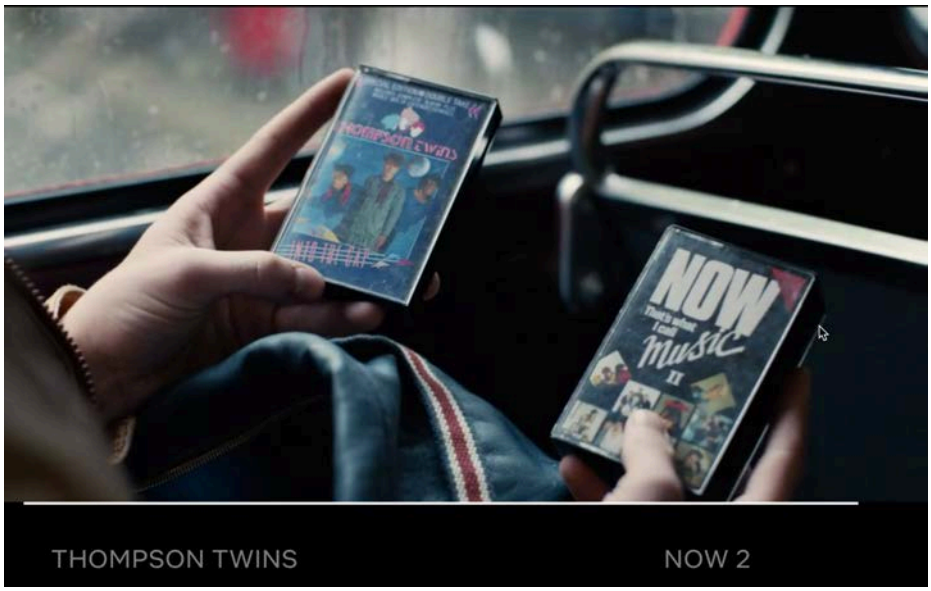


**Figure 1.** Making choices in *Bandersnatch*.

The third choice point involves Stefan meeting Colin, a genius game developer, and Mohan Thukar, founder of the game publishing company, Tuckersoft, where Stefan is hoping to publish his game, titled "Bandersnatch". At this point, the player must choose whether to "accept" or "refuse" Thukar's offer to work for him in the office. I chose to accept, which led to the story jumping to five months later, when Stefan's game has been released and receives a "zero out of five stars" review. Here, Stefan says "I should try again", and the game appears to restart from the beginning. This time, the game makes use of dramatic compression (Murray 2011), skipping past the first two choice points and showing Stefan listening to the same cassette I had selected the first time through. It then progressed to the previous choice point, where the player has to decide whether Stefan should accept Thukar's offer.

Here, the storygame seems to be suggesting that the overall game objective, and the way to move the narrative forward, is to try to obtain the best possible game review. After the rewind described above, I chose the "refuse" option, partly out of curiosity, and partly because I was developing an initial mental model of the playable system that certain choices would impact the direction of the narrative, possibly leading to a "better" ending. This was reinforced by the outcome of the "refuse" path, which actually meant Stefan refused to work in the office, instead working on the game at home. After a number of additional choices, including a choice to either enter Stefan's therapist's office or follow Colin, who just happened to be passing by, and a later choice as to whether Stefan takes his medication, I reached an "ending" where Stefan took his medication and finished developing his game for a "two and a half stars" rating, which is shown on television in the form of a review by a video game critic.

By reinforcing the "get a better rating" narrative/game goal and the sense that my choices would impact the outcome, what I had experienced so far also seemed to be revealing a structure to the playable system. The storygame repeatedly gave me two choices which would either progress the narrative or reach a dead-end, after which I would rewind, and then try a different path. I was focusing on developing an understanding of both the structure of the playable system (make a choice, reach a dead-end, then rewind and choose again) and the narrative (the story of Stefan's attempts to make his game), and their relationship (make choices that enable Stefan to make a better version of the game), so as to progress in the storygame. The branching structure seemed fairly clear, and the choices I was making also seemed to have a clear correspondence to how I was making progress in the narrative.

## Doubting my understanding of the narrative/system relationship

Towards the middle of my first playthrough of *Bandersnatch*, my understanding of the narrative/system relationship began to be clouded by the development of a complicated narrative layered on top of the playable system. Simultaneously, changes in the options that were available at choice points I re-encountered on rewinding suggested that perhaps the playable system was not as simple as I had first thought.


**Figure 2.** The player is given choices as to where to rewind to.

After I achieved the "two and a half stars" ending, I was taken back to a choice to either follow Colin, or "go back" to the choice as to whether Stefan takes his medication (see Figure 2). I chose to "go back" to the medication choice, but this time I chose *not* to have Stefan take his medication, thinking this might improve the game review and push the narrative forward. This path introduced several new plot elements, including a dream sequence where Stefan steps through his mirror and revisits the night before his mother's death, which he feels responsible for; a scene where Stefan watches a TV documentary about the original "Bandersnatch" book's author, Jerome F. Davies, descending into madness; and a suggestion that Stefan thinks he is being controlled by someone. This culminates in Stefan asking "I know there's someone there. Who are you?" I then had a choice between "Netflix" and the glyph that Davies had become obsessed with. I chose the former, after which Stefan's father brings him to see his therapist. The therapist tries to help rationalize what is happening, but the scene quickly turns into an improbable action sequence where Stefan and the therapist fight. The camera then pulls back to reveal that Stefan is an actor filming the scene. The storygame ends with the director calling for help and the actor claiming that he really is Stefan.

At this point I was shown an option to "exit to credits" (something that had not happened in previous "endings") or to return to the scene where Stefan is standing with his father outside the therapist's office (see Figure 3). Unlike my previous encounter with that scene, this time only the option to follow Colin was shown. The "go back" choice that I had previously encountered was no longer available.


**Figure 3:** Only one rewind option is available, plus the option to "exit to credits".

Two things were happening as I played through this sequence. On the narrative level, a number of additional plot elements were being introduced, suggesting the narrative was more complicated than I had initially assumed. I was no longer certain that the focus of the story was to get a better rating. On the system level, I was also no longer confident in my initial mental model. I began to wonder whether there was a more detailed tracking of system state at work in the storygame, with a need to "unlock" paths or influence the direction of the narrative by making use of the system, rather than simply choosing branches. In addition, the appearance of the "exit to credits" option made me wonder if there was something privileged about this ending that had "unlocked" the ability to end the traversal. This sequence complicated my understanding of both the narrative and the playable system. Despite this, I was still paying attention to both, and trying to understand the narrative/system relationship.

## Reaching narrative closure, but not system closure

As I replayed, looking for some sense of a satisfying traversal, I continued to encounter game reviews when I reached the dead ends, frequently receiving either "zero stars" or "two and a half stars" reviews. Although I was no longer focused on getting a better rating, this was the only visible indicator of "progress" that the game provided, which contributed to my understanding of the narrative and the system. After several rewinds I reached a scene where Stefan had killed his father with an ashtray. Given two choices, "bury the body" or "chop it up", I chose the former. Stefan buries his father's body in the backyard and completes his game. This time, no review is given. Instead, the video game critic mentions Stefan's arrest for his father's murder, suggesting the game was not released. I was then given a choice to "exit to credits" or "go back" to the bury-or-chop choice.

At this point I was unsatisfied with the ending that was shown, as it seemed that every path where I avoided killing Stefan's father led to a poor rating, whereas choosing to kill his father resulted in the game not even being released. Furthermore, the option to "go back" suggested that there was more to discover, and perhaps a way to either progress the narrative or reach a "better" ending. Despite my discomfort at the

implications of the other choice, I went back and selected the "chop it up" option. Following this, Stefan successfully released his game and it received a five-star review. Automatically the end credits began to roll, interspersed with a post-credits scene where a news presenter says the "Bandersnatch" creator was found to be behind the murder of his father, and that there are plans to release "Bandersnatch" as an interactive film on Netflix. Interestingly, after the credits finished, I was given an option to "get Rabbit from Dad", or to "exit to credits". At this point I felt that I could have exited the game, as I had reached the "best" ending, having achieved the highest possible rating for Stefan's game. However, the other option suggested there was still more to explore, particularly in terms of the unresolved thread related to Stefan's mother's death. I chose the "get Rabbit from Dad" option and was taken to a sequence where Stefan found his childhood Rabbit toy from a safe in his father's office. This led to a flashback where I could choose whether or not Stefan would follow his mother on the train ride that led to her death. Having Stefan accompany his mother led to Stefan, as a child, passing away with his mother in a train crash, and also dying in the present day as his father and his therapist look on. At that point, the credits automatically rolled, and the playthrough ended with no options given to "go back".

Here, I felt I had achieved narrative closure and I was also satisfied with my traversal of the game. The fact that the game automatically exited suggested there was nothing much left of the narrative to uncover. While I had initially accepted the ending where Stefan's game got a five-star review, the additional scene where he was "reunited" with his mother was more narratively satisfying, because Stefan seemed to have reached some resolution with his past. As I still had doubts as to *how* I had reached the five-star review, I felt that I did not completely understand the system or its relationship to the narrative. However, my satisfaction with Stefan's resolution outweighed questions I had about the system. This suggests I had reached narrative but not system closure.

### Reaching a clearer understanding of the system on replay

On my second full playthrough of *Bandersnatch* I felt that I was exploring for new content and to see if any paths would lead to new choices. While I had achieved narrative closure in the first playthrough, some scenes made me wonder what would happen if I chose another option. I was no longer reading for narrative closure, but instead to explore narrative variations.

This time, I adopted a more systematic approach. Since I knew from my previous playthrough that there were several dead-ends, I made sure to select choices that avoided those paths, attempting to reach the various endings as quickly as possible. My second playthrough involved a more critical view of the story-system, as I was trying to clarify my previous uncertainties. I noticed foreshadowing of later events and the use of film techniques to highlight certain aspects of the narrative. I was now paying attention to how the narrative was told, but I no longer cared about the characters or what was happening in the storyworld. I was basically skimming through the story in an attempt to work out the playable system.

This playthrough revealed two things: certain choice points were clearly conditions for unlocking certain endings, and some choices that had seemed significant to me in the first playthrough were actually what Mawhorter (2014) calls false choices, not having any actual impact on the direction or outcome of the story. While I was not completely confident that I could reach specific endings in my second playthrough, I now had a better sense of how the system, which had seemed so complex at the end of my first playthrough, actually related to progression through the narrative. My mental model of the playable system was much clearer than after the first playthrough. At that point I no longer felt a need to replay, having reached what I considered to be system closure.

## CULTIST SIMULATOR

In *Cultist Simulator*, initially both the playable system and narrative were hard to understand, but seemed to be working together, and both needed to be understood to progress. However, once the player began to feel they had mostly figured out the system and no longer needed the narrative to help make sense of the mechanics, they no longer felt motivated to replay to uncover the narrative, but instead focused on replaying to complete their understanding of the system. On reaching system closure they stopped replaying, feeling they could predict the story outcome and didn't need to actually experience the ending.

### Story and playable system initially supporting each other

In *Cultist Simulator* there is no tutorial. The splash screen sets expectations by telling the player they "won't always know what to do next" and should "keep experimenting" (see Figure 4). In addition, the game makes use of "permadeath", meaning that there is no way for the player to restore the game to a saved state. Once the player "dies" (which happens very frequently for the inexperienced player), the player must restart the game. This places the focus on repeat playthroughs and incremental development of an understanding of the playable system. My first few playthroughs involved gaining an understanding of both the mechanics and narrative. My aim at this point was to survive for as long as I could while uncovering new elements of the game, rather than actively working towards victory or an end to the story.

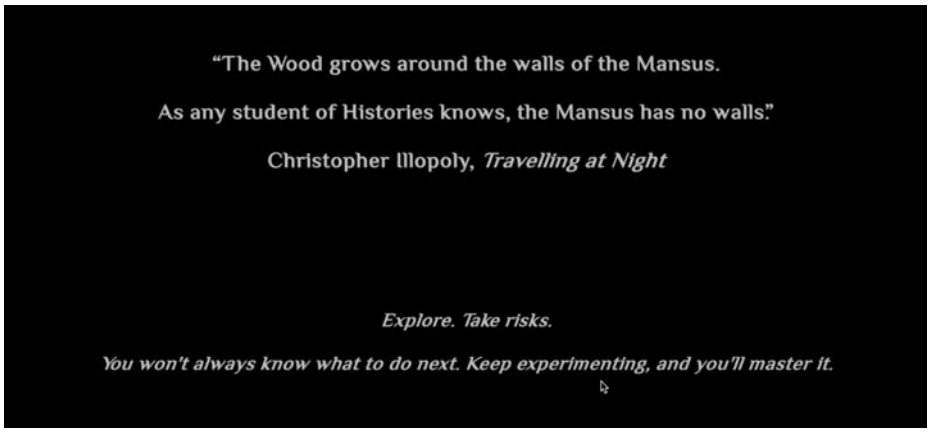


**Figure 4:** Splash screen placed before the game's main menu sets up player expectations.

During these initial playthroughs, *Cultist Simulator* felt confusing. There were so many elements to explore, yet I was unsure what role each of them played in terms of progress. Possibilities, both at the narrative and system level, were gradually revealed. For example, I discovered that with the Work action, I could choose to stay at my job, or to find some other source of income as a painter or with clerical work. Experimenting with the Dream action revealed the existence of the Mansus, a mysterious part of the game's world I could explore. I could purchase and use the Study action on different books to acquire more Lore Fragments regarding the different Principles, upgrading them to higher-level fragments. I struggled to figure out what role these various actions played in the bigger picture and whether I was moving in the right direction to progress both in the game and the narrative. Early in my playthroughs, I often "died" without properly understanding how certain game mechanics work, or where certain narrative threads were leading. Dying ended the current playthrough, requiring me to restart with zero progress but allowing me to build on my knowledge of both system and narrative.

At this stage I was relying on the narrative to make sense of the game's mechanics and objectives. The narrative fragments hint at how certain resources can interact to unlock new parts of the game. For example, when I had to find sources of Contentment, I knew

I could easily access that resource by spending money at the Ecdysis Club, a cabaret; this system mechanic made perfect narrative sense. At this point I was clearly paying attention to both the narrative units and the playable system and using my gradually developing understanding of the relationship between these layers to move forward.

## Replaying to understand both story and system

Much of the narrative and playable system is withheld from the player in early playthroughs, needing to be uncovered gradually. This means the player's understanding of both narrative and system are left incomplete at the end of each playthrough. There are multiple desires for closure here. The ambiguity of the narrative piques the player's interest in the game's background and lore, as well as the possible endings. I wanted to find out what the larger picture was in terms of Cults and Lore, past the dreary Work loop that I had already learned. Additionally, the ambiguity of the game mechanics and game objective created a need for closure regarding the victory condition. Not only did I not know how to win, I barely knew how to play the game. I felt that I had only scratched the surface of its game mechanics. "Permadeath" and the gradual uncovering of the game mechanics and objectives made it impossible to experience what Aarseth (2011) calls the "real game object". This lack of closure therefore created motivation to replay. There was something new to learn during each replay, both in terms of narrative and game mechanics.

## Shift in motivations to replay

As I attempted different interactions and uncovered more content both within and across playthroughs, I began to form a clearer mental model of the game and how progress could be attained. I learned how to avoid an early death: I needed to Work to maintain a stable flow of income, treat any Afflictions before I permanently lost Health, and maintain a balance of Fascination, Dread, and Contentment. I also learnt what resources were required to unlock new interactions: I needed specific Lore Fragments to explore deeper into the Mansus, and a number of Cult Followers to succeed in Expeditions to attain resources. With each new playthrough, I built on knowledge from previous playthroughs, progressing at a much faster rate.

However, after a few playthroughs, much of the replaying involved redoing what I had already figured out before I could reach the point where new narrative content or new mechanics could be uncovered. This involved many hours of play consisting of nothing new or interesting, in a process that is often referred to as "grinding". I found myself automatically executing certain action loops, such as repeating Work every few minutes, Dreaming of the Mansus, or using all my followers for Expeditions. In replay sessions where much of the narrative had been seen in previous playthroughs, there was a distinct shift in my replay motivations towards playing the mechanics and figuring out the system in order to progress towards a victory, with little or no attention given to the narrative units.

Here, much of my attention was on figuring out how different resources can be combined to produce new results, and how to use the new game elements to further my progress in new ways. My actions were generally the same: I repeatedly engaged in the various game loops required for survival and progression, and spent less time reading. I barely paid attention to the narrative. Even new pieces of text not previously encountered now felt like "flavour text", since they no longer contributed to my understanding of how to progress in terms of the system. At this point the system's behaviour itself, combined with my well-developed mental model of the playable system, provided enough information to help me progress in the storygame.

### Reaching system closure and loss of motivation to replay

While the procedural aspects of "roguelike" games like *Cultist Simulator* technically allow for unlimited replayability (Short and Adams 2017; Smith 2014), I found that my motivation waned after a certain point. This became clear in my final playthrough, where after a 7-hour playthrough I felt that I had figured out the steps necessary to reach a win condition. However, due to mistakes I had made earlier in the playthrough, I realized there was no way for me to reach the victory condition. Although I did not actually "win", I felt I had completed the game to a sufficient extent, and that if I wanted to, I could complete a satisfying traversal.

At this point, since I had figured out the underlying system, my replay motivation vanished. This was possibly related to my prior shift in motivation from a balance between narrative and mechanics to solely a system focus. Once I reached system closure, and I didn't care as much for narrative closure, I stopped replaying. I felt I could guess the ending of the narrative, so there was a sense of partial narrative closure without a need to actually experience narrative closure. Furthermore, I could save myself the effort of actually playing the game again by instead searching through external sources (e.g. wikis, forums, and gameplay videos) to see the ending from a narrative perspective. I also didn't feel the need to actually reach the victory screen to achieve system closure. Rather, I felt that I had achieved system closure once I believed I had attained mastery over the system.

## DISCUSSION

From our close readings of two storygames, *Bandersnatch* and *Cultist Simulator*, we can see that the player's focus on the narrative units and the playable system did not remain constant during play and replay, shifting based on the changing importance of the two layers and whether the player had reached narrative or system closure. In both storygames, the player reached either narrative or system closure first, continued to replay, and did not feel a need to replay once they reached both forms of closure. We now discuss the possible implications of these findings in terms of how a player's focus shifts between the narrative and the playable system, and how this relates to motivations to replay and desire for closure.

### Shifting Focus: Storygameness Rather Than Storygames

One implication of this shifting focus is the notion that whether or not a work is a storygame is not a property of the artefact itself, but rather a perception by the player that can change during play and replay. We refer to this perception as *storygameness*: the degree to which the player is motivated to maintain a focus on both the playable system and the narrative to develop an understanding of both and the relationship between them, and to use this understanding to move towards completing a successful traversal. When the player begins to focus almost exclusively on either the narrative or the playable system, or no longer needs to pay attention to the relationship between the two, we consider the player to have lost their sense of the storygameness of the work.

*Bandersnatch* was initially foregrounded as a storygame. However, the narrative became increasingly complicated due to the introduction of multiple, potentially inconsistent narrative threads. Concurrently, the way the availability and range of options sometimes changed on replay suggested that the system was perhaps more complicated than the player first thought. The system state, in the form of the game reviews, is only shown when the player reaches certain endings, and the player did not know which choices led to those endings. This made it hard for them to see a relationship between the narrative and the playable system, and for this particular player, at this point *Bandersnatch* no longer felt like it had any storygameness.[2]

In early playthroughs of *Cultist Simulator*, the work was clearly a storygame, as understanding both the playable system and units of narrative, as well as the relationship between them, was essential for the gameplay experience. However, the player's motivation eventually shifted towards the system, as the narrative no longer seems to be needed to support a deeper understanding of the system. Once the initial scaffolding work of the narrative was complete, the system itself was able to support further development of the player's mental model, with no need for support from the narrative.[3] This is similar to Mitchell's (2015) experience of Prom Week (McCoy et al. 2012) where their "focus was very much on solving puzzles within the social simulation, with little attention given to the story, particularly when rereading" (Mitchell 2015). From the player's perspective, the narrative and mechanical aspects of the work decoupled, and the player focused only on the playable system rather than the narrative. Here, the work had a greatly reduced sense of storygameness.

## Rereading Storygames

Our findings also suggest a relationship between the storygameness of a work, whether the player had reached closure, and the player's motivation to replay.

In the first playthrough of *Bandersnatch*, the player initially felt that there was a clear relationship between system and narrative and was motivated to engage in rewinds to reach narrative closure. At first, they felt this closure would involve achieving a better rating for Stefan's game. However, as the narrative became more complicated, and they lost confidence in their understanding of the system, they were no longer certain how to move towards narrative closure. By the end of the first playthrough, they did manage to achieve narrative closure, but was not sure how they got there.

When replaying, they were now replaying for narrative variation rather than closure, and although they had not reached system closure, they were no longer interested in understanding the system. Interestingly, however, they were actually making use of their previous experience of the system, following paths they had not explored in the previous playthrough and trying to reach new narrative content as quickly as possible. In doing so, it became clear that the system was not, in fact, as complex as it appeared during the first playthrough. This exhibits what Wardrip-Fruin (2009) calls the "Eliza Effect", when a system can initially seem to be complex, but loses this illusion as players realize how the system actually functions. At this point, the player reached system closure, and no longer felt any need to replay. This suggests that the loss of storygameness, and the premature reaching of narrative closure, shifted the player's motivation to replay simply to exploring variations. Once system closure was reached, in this case in the form of experiencing the Eliza Effect, there was no longer any reason to replay.[4]

In *Cultist Simulator*, because there is a relatively small gap between the game's surface mechanics and its underlying system, with much of the system state directly visible to the player, the player's mental model was likely not far from the game's actual system. Although the finer details may not be clear, it was sufficient for progression through the game. In fact, as a prerequisite for progression, *Cultist Simulator* requires the player to form an effective mental model. For example, the player learned that successful Expeditions require Followers with certain Aspects to overcome obstacles. Through repeat interactions, the player learned that higher levels of Aspects seem to increase the player's chances at succeeding in Expeditions. Though the player didn't know the chance of success at each level, only by forming this understanding was the player able to effectively progress through the game loop. This suggests that the SimCity Effect (Wardrip-Fruin 2009; Mitchell 2015), where the experience of the surface of the work supports developing an understanding of the underlying system, is present here. However, what is interesting is that once the player developed confidence with their

understanding of the system, they no longer needed to use their understanding of the narrative to deepen their system understanding, and the storygameness of their experience was greatly reduced. The player stopped replaying once they reached system closure. At that point, they felt they "got it" enough that they could theoretically replay to a satisfying traversal. They also felt they did not need to actually experience narrative closure: it was enough to know they could reach it, and to experience narrative closure by reading others' accounts of the ending.

Interestingly, in *Cultist Simulator* the use of narrative abstractions (Murray 2015) to support the player's development of system understanding seemed to help maintain a sense of storygameness until the player reached a certain level of system understanding. The narrative's focus on the playable character's desire to understand the occult nature of the storyworld directly mirrors the need for the player to gradually uncover the underlying workings of the playable system. This seems to be in line with Mitchell's (2015) argument that, in addition to the presence of the SimCity Effect, appropriate narrative abstractions are required to maintain a balanced focus on both narrative and system, and therefore to encourage rereading beyond closure. Despite this, after a certain point the player's focus shifted from narrative to system, and the player lost the motivation to replay. Why this was the case is worth exploring further.

## CONCLUSION

Through our close readings of *Bandersnatch* and *Cultist Simulator*, we have explored the relationship between the player's experience of the narrative and the playable system in storygames, how this relationship changes during play and replay, and how this experience relates to closure and the player's motivations for replay. We proposed that storygameness is a moment-by-moment perception by the player that can change as the player's focus shifts between the narrative and the playable system. This relates to, and impacts, the player's current motivation to replay, which can shift between and encompass working towards both narrative closure and system closure. This shift in motivation seems to relate to premature achievement of closure at either the story or system level. This suggests that motivation to replay beyond closure perhaps relies on the maintenance of storygameness up to and beyond both narrative and system closure and requires the player to simultaneously reach both narrative and system closure.

It is important to note that the type of knowledge acquired from a close reading is more about the detailed, specific experience of encountering a work, rather than any attempt to generalise that experience. To be clear, we do not claim that the second author's experience of *Bandersnatch* or the third author's experience of *Cultist Simulator* will be every player's experience of those games. We are also not making direct comparisons between the two games or claiming that these games are representative in any way of all games. Instead, we are looking at the rich description of each player's individual experience as a way to gain insights into how the structural elements of that work contribute to that experience, and what these insights suggest in terms of possible further investigation. With this in mind, we have tried to present our findings and discussion not as generalisable results, but rather as preliminary insights that suggest (rather than prove) that the player's focus on the story or the playable system can potentially shift during play. This shifting focus also situates "storygameness" not just as a feature of the artefact, but also of the encounter of the player with the artefact. We have briefly mentioned the other authors' experiences of the games, experiences that do not invalidate our argument. Future work will include empirical studies of player response to storygames that encourage replay, and design-based research into maintaining storygameness and encouraging replay beyond closure.

There are still some unanswered questions raised by our close readings. What is the nature of replay beyond both narrative and system closure? How does this relate to

Mitchell's (2012) notion of reflective rereading? Is storygameness perhaps a requirement for reflective rereading? Finally, what can a game designer do to maintain the balance required for continuing storygameness? It may be that this requires not only narrative abstractions that appropriately reveal the playable system and its relationship to the narrative units, but also game mechanics that encourage, and enable, the player to reach both narrative and system closure simultaneously. Our current study is a first step towards investigating the "storygameness" of games that involve both narrative and a playable system, and the relationship between storygameness and motivations for repeat experience in interactive stories.

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## ENDNOTES

[1]All three authors are highly experienced game players. The first and second author tend to play story-focused games with strong characters, whereas the third author plays system-focused games. The close reading of *Bandersnatch* by the second author took 3 hours, involved 2 complete playthroughs (to the point where the credits roll automatically) and 11 dead ends and rewinds, and reached a total of 13 endings. The *Cultist Simulator* close reading by the third author took 13 1/2 hours for 7 playthroughs.

[2] It is worth noting that although the first author had a very similar experience, for the third author, who encountered the "train" ending first and the "five-star review" ending on replay, the playable system was seen as a simple branching narrative from the start. System closure was reached almost immediately, after which the work no longer had any feeling of storygameness.

[3] The other two authors did not manage to develop enough of an understanding of the playable system to reach this point. For them, *Cultist Simulator* continued to be a storygame, but neither of them managed to reach either narrative or system closure.

[4] For the third author this process was very much accelerated, and motivation for replay was largely for variation.

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