Video Game Sadness from *Planetfall* to *Passage*

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Many video game players and designers consider making players cry the ultimate proof of a game's emotional effectiveness. Of the handful of video games known for making players cry, none is more frequently mentioned than the text-adventure game *Planetfall* (Infocom, 1983). In *Planetfall*, the player explores a planet that seems to have only one remaining inhabitant: an endearing robot, Floyd. Floyd accompanies the player through most of the game, eventually sacrificing himself to help the player-character escape the planet. Based on the emotional connection the game establishes between the player and Floyd, many players have cried when Floyd dies in their (virtual) arms (Meretzky, 2008).

Twenty-five years later, Clint Hocking, creative director at Ubisoft, discussed another video game at the 2008 Game Developer's Conference. Although it was radically different from *Planetfall*, it had a similar effect on Hocking:

> Why can't we make a game that … means something? A game that matters? You know? We wonder all the time if games are art, if computers can make you cry, and all that. Stop wondering. The answer is yes to both. Here's a game that made me cry. It did. It really did [Fagone, 2008].

The game was Jason Rohrer's *Passage*. Rohrer created this art game for an indie games showcase in 2007, but it looks like it could have been released 30 years earlier. The entire game display is just 100 pixels wide and 16 pixels high. The player-character, a young blond man, is only 8 pixels from head to toe (figure 1). He walks on a bland playfield, navigating around obstacles, and finding chests that give him points. There are no instructions and there is no dialogue. After five minutes of gameplay, regardless of player actions or score, the blond man dies and the game ends.
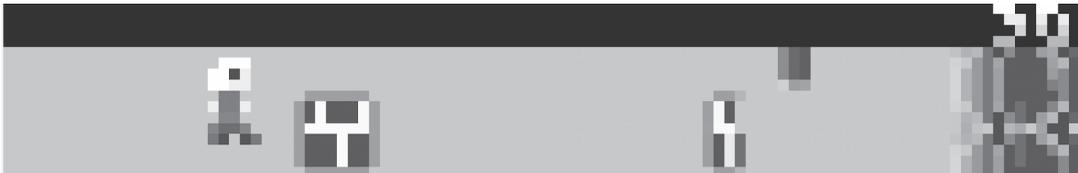

Figure 1: *Passage*'s minimalist graphics match its simple gameplay. Note the game score in the upper-right corner.

Planetfall and *Passage* are wildly different from each other. *Planetfall* has rich characterization and narrative; *Passage* has almost none of either. *Planetfall* takes many hours to complete; *Passage* lasts exactly five minutes. *Planetfall* establishes clear victory conditions; *Passage* establishes no victory conditions. Yet they are similar in that both succeed in causing players to feel sad or even to cry.

In this essay, I aim to explain why players rarely cry at video games. By examining the psychological factors required for crying and sadness, we will see how aspects of the video game medium and historical conventions of game design have made it challenging to create games that make players cry. This discussion also shows how video games can overcome these obstacles and how *Planetfall* and *Passage*, specifically, manage to make players cry through very different means.

The tremendous variety of video games presents a challenge in any attempt to theorize players' emotional experiences. To narrow the scope, I explore the large group of video games that meet the following criteria: they present narratives that represent fictional worlds, they can be "won" by enacting the narrative from beginning to end, they intentionally create specific emotional responses in players, and the emotional responses they elicit are widespread and strong enough to make some players cry. These requirements exclude many games, such as puzzle games and casual games without well-developed narratives. They also exclude games that cause players to cry based on idiosyncratic causes such as social interaction with other players, individual emotional memories reawakened by the game, or particular game outcomes (such as frustration at dying during gameplay). These types of emotional responses are difficult to predict and thus cannot be the type of widespread, intended responses that game designers can aim to generate.

This essay is structured in four parts. First, we examine the emotional response of crying and its dependence on perceived helplessness. Second, we look at the emotion of sadness, which is related to but distinct from crying, and explore how a video game might evoke such a feeling. Third, we discuss three factors that contribute to the intensity of sadness and analyze why video games are ill-suited to generating this specific emotion. Finally, we see how a little-discussed aspect of emotion, attention, serves a crucial function in determining a video game player's emotional response. Along the way, we compare the conventions of video game design with specific examples, especially *Planetfall* and *Passage*, to see how video games can overcome obstacles to generating emotions such as sadness.

Crying and Helplessness

One reason it is difficult to analyze crying is because this emotional response varies in so many ways. For example, crying accompanies a wide variety of emotions. There are tears of joy, of anger, of sadness, and of pain. Crying also appears in many different social contexts. People cry alone, in small groups, and in public. Crying's effects vary between individual people and situations; sometimes crying makes you feel better, other times worse. Further, crying is governed by culturally-created display rules, which cause us to embrace our urge to cry in some situations but suppress it in others.

Despite these differences, situations that cause crying invariably have two characteristics. First, crying requires intense emotional arousal (Gross, Frederickson, and

Levenson, 1994). Second, crying occurs in situations where criers perceive themselves to be helpless (Borquist, 1906; Miceli and Castelfranchi, 2003). Although we don't commonly think of crying as associated with helplessness, examples make the connection clear. When we are faced with an undesirable situation, our first instinct is to cope by taking action to change the situation. If we perceive ourselves as unable to affect the situation, we won't take these coping actions. It is only when we abandon coping actions and surrender to our situation that we may begin to cry (Frijda, 1986: 53). Consider a situation in which you want to show someone a beloved letter sent to you by your dying grandmother. When you go to get it, it's missing. You immediately take coping action by searching for it. Your searching demonstrates that you do not feel helpless—you are taking action precisely because you think you might be able to find the letter. It is only after an exhaustive search that you accept that you have lost it, give up the search, and begin to cry.

Crying's dependence on perceived helplessness is one reason that video games have difficulty making players cry. Video games, by convention, provide players with numerous (even unlimited) chances to grapple with game obstacles, which encourages players to continue attempting to overcome these obstacles rather than giving up and succumbing to them. And even if players do abandon a particular game session in frustration, they have the opportunity to return and try again later. Video games must make players feel that success is possible because if players truly felt helpless to make progress, they would stop playing. Contrast this situation with films that make us cry. Ed S. Tan argues that films place viewers in the position of "invisible witnesses" who frequently see narrative events that "would by all means justify altruistic responses … on the part of the viewer," and that the viewer's emotion always includes "a component of helplessness" (1995: 17–18). Viewers' inability to affect the situations portrayed in films is a key factor in films' ability to elicit tears (Frome, 2014). Part of the reason we cry when we see a film character dying of a terminal illness is that we cannot do anything to save them.

Perceived helplessness is strongly related to whether an outcome is irrevocable. A situation perceived as not only undesirable, but also impossible to reverse, is much more likely to induce tears. It is no surprise that death of a loved one, the pinnacle of irrevocable loss, is a prototypical situation that causes crying. Video games rarely provide these types of losses; when your character is killed during a video game, you just try again and again until you succeed or abandon the game. A handful of video games do have permanent death (aka *permadeath*) for the player-character, such as *Batman: Arkham Origins* (Warner Bros. Games, 2013). This game has an optional, extra-difficult mode that ends the game if your character dies even once. However, even this type of permadeath is not truly permanent in the way real-life situations can be, because the player can play the whole video game over from the beginning and try again. The video game *Chain World* (2011), also created by Rohrer, proposes a more consequential, but voluntary, permadeath framework. Rohrer has released only one copy of the game, which he brought to the 2011 Game Design Challenge on a USB drive. He stated that he had played the game only once and intended each player to play only once before giving the USB drive to a new player. Rohrer's description of his single playthrough confirmed that permanent loss is felt more intently: "I had one of the most heartbreaking and poignant deaths, way too soon, that I've ever experienced in a videogame…. And my child, who was sitting there, was in tears" (Fagone, 2011). A video game currently under development, *Upsilon Circuit* (Robot Loves Kitty, unreleased) may provide the first publically-available video game

with true permadeath (sometimes called perma-permadeath). The game, hosted on a single server, will be playable only by players individually selected by the development team, and each player will have only one opportunity to play (Grayson, 2015). The player whose character is killed in a game of *Upsilon Circuit* will truly be helpless to reverse the loss.

Planetfall demonstrates a simpler way video games have used helplessness to elicit crying: making significant narrative losses both unavoidable and irrevocable. In *Planetfall*, Floyd's death occurs while getting a magnetic card essential for repairing a computer. There is nothing players can do to avoid Floyd's death if they hope to complete the game. Interestingly, the very fact that this event is authored by the game's creator and cannot be altered by the player has led to criticism that *Planetfall* is emotionally effective only by "cheating," as Raph Koster argues:

> We often speak of wanting to make a game that makes players cry. The classic example is the text adventure game *Planetfall*, where Floyd the robot sacrifices himself for you. But it happens outside of player control, so it isn't a challenge to overcome. It's grafted on, not part of the game. What does it say about games that the peak emotional moment usually cited actually involves cheating? [2004: 88].

Passage avoids this criticism by making the player feel helpless using interactive techniques. When the player directs the player-character (whom I'll refer to as the blond man) to walk around the playfield, this motion is represented by having the character remain in the same place on the screen as the playfield scrolls under him. However, the blond man and playfield also move, together, one pixel to the right every three to four seconds, regardless of player actions. Simultaneously, over time, the blond man ages; he gradually slumps over and his hair turns grey (figure 2). Thus, the blond man begins the game as a young man on the left side of the screen, but ends the game as an old man on the right side of the screen. When the blond man is just a few pixels from the right edge of the screen, he dies and is replaced with a gravestone. A few seconds later, the game ends (figure 3). Each play session lasts exactly five minutes, regardless of player actions.

   Passage initially appears to be like most video games in that the player can take actions to cope with and overcome obstacles—in this case, the blocks that impede his
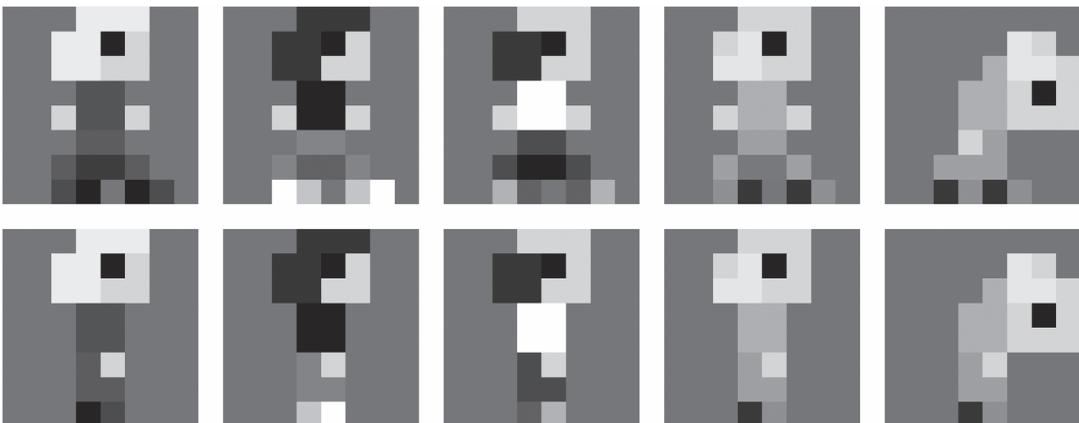

Figure 2: The simple graphics show the blond man walking by alternating between the top and bottom images. As he ages, his hair turns from blond, to brown, to brown/balding, to grey/balding, and finally he slumps over.

Figure 3: At top, the blond man early in the game; at center, the old man late in the game; at bottom, the gravestone shown at game end.

movement. The game creatively disguises players' helplessness by allowing them to control prototypically important aspects of the game, such as navigating the playfield, acquiring points, and opening chests. But in *Passage*, these goals are not important to most players. The blond man's most emotionally significant journey—from left to right, and from young to old—is not affected by gameplay. Since the motion from left to right is relatively slow, players only gradually realize that this movement is unstoppable. Players can choose how and where the blond man moves, or even leave him standing still, but nothing players do can prevent him from aging and eventually dying. Players' helplessness is made more salient by their reasonable expectation that they will be able to overcome the game's main threat, which, in this case, they cannot. The creator of *Passage*, Jason Rohrer, has written an artist's statement, "What I Was Trying to Do with *Passage*," that confirms the centrality of this gameplay mechanic: "*Passage* is a game in which you die only once, at the very end, and you are powerless to stave off this inevitable loss" (2007).

Sadness and Loss

We think of crying as occurring in many types of situations, both positive and negative, but there are reasons to associate it most strongly with sadness. Although we sometimes speak of "tears of joy," psychologists generally attribute such tears not to joy, but to negative emotions felt during otherwise happy events. There are several theories regarding why we might feel sad during happy events. One theory states that happy con-

texts are simultaneously sad because we are aware of the fleetingness of happiness, as well as the losses inherent in seemingly happy situations (Feldman, 1956). At your child's graduation, for example, you may suddenly think about the dreams you had at your graduation that you never fulfilled. An observation that supports this theory is that children, who do not think of happiness as inherently fleeting, rarely cry in happy situations. Another theory about tears of joy holds that crying comes from a sudden feeling of helplessness in the face of a new and overwhelming (but in other ways, positive) situation (Frijda, 1986: 54). This theory would explain the burst of tears we see when beauty pageant winners are announced. But it is extremely rare for players to describe themselves as crying while playing due to overwhelming happiness, so we need not discuss tears of joy further.

Among negative emotions, crying is associated most strongly with sadness. Sadness is an emotional response to the loss of something we value, such as a relationship, an object, or an opportunity. Why do we cry more often due to sadness than to other negative emotions, such as anger or fear? It is because sadness causes a reduction in coping actions, and crying marks the abandonment of coping action. While anger is often a response to loss, an angry person frequently takes action to reverse the loss. Fear is a response to danger, not loss, and strongly motivates coping behaviors. A sad person is sad because they accept their loss and have no plan to reverse it (Stein and Levine, 1990). In other words, sadness, like crying, is based on perceived helplessness (Lazarus, 1991: 247). These distinctions are not always clear because we often feel emotions in combination rather than individually.

Understanding how sadness relates to video games requires us to look at two aspects of sadness: the factors that determine its intensity, and the conceptual nature of its core requirement, loss. We will look first at loss. It is not enough to say that video games cause sadness based on player loss, because there are many senses in which the concept of loss might apply to a video game. When playing a video game, we rarely cry because we lose. As noted earlier, we can just try again. To understand how a video game can make players feel the type of loss that might lead to crying, we should first distinguish between two types of emotions players can feel: what I will call *personal* and *sympathetic* emotions. By personal emotions, I just mean typical emotions, which are based on our appraisal of how a situation relates to our goals (Lazarus, 1991). Sympathetic emotions, in contrast, are emotions we feel for others, based on our perception of their emotions and/or on our appraisal of a situation's implications for their goals (see Bernard Perron's essay in this book). For reasons we will see shortly, in the case of sadness, personal emotions are less likely to be widespread among players than sympathetic emotions.

The sadness caused by narrative artworks is most often sympathetic. We assume, in the absence of contradictory information, that fictional characters' emotional responses are similar to those of real people (Ryan, 1980). In other words, we are sympathetically sad for characters when they suffer the types of losses that make real people sad. For example, we are sympathetically sad for Lauren Winter, a character in *Heavy Rain* (Quantum Dream, 2010), when we see her cry as she describes her murdered son, Johnny. Understanding the basis of real-life sadness thus helps us understand both personal and sympathetic sadness in video games.

Although we sympathize with Lauren while playing *Heavy Rain*, we suffer nothing like the type of loss she (fictionally) suffers in the video game world, namely, losing one's child. On what loss, then, might personal player sadness be based? Players sometimes

feel personal sadness based on loss of enjoyable engagement with the video game itself, much as viewers might feel sad upon the end of a favorite TV series. One player who enjoyed the video game *ICO* (Team Ico, 2001), for instance, eagerly awaited the developer's next video game, the immensely acclaimed *Shadow of the Colossus* (Team Ico, 2005). After purchasing it, he writes, "I'm pretty sure I just sat down and played the entire thing through front to back." He then describes the sadness he experienced at the end of *Shadow of the Colossus* saying, "By the end, I was picking my jaw off the floor thinking they'd done it again, but it was mixed with this really intense sadness that after all this waiting and anticipation it was over" (Owens, 2013). Similarly, we might feel sad based on a video game character dying, such as Floyd dying in *Planetfall,* since we lose our enjoyable interaction with a virtual character. Of course, it is unusual for players to enjoy a video game so much that they feel a sense of intense loss upon its conclusion, and certainly it is rare that the loss leads them to cry.

Another way a video game might cause sadness is not by creating a loss during gameplay, but by activating a player's individual emotional memory about a previous real-life loss. Consider the introduction of *Max Payne* (Remedy Entertainment, 2001), which shows Max arriving home just as intruders are murdering his family. Although highly unlikely, someone playing this game might have experienced a similar incident in real life, which would activate their emotion-laden memories. Even if the player does not consciously think about her past experience, the cognitive network that constitutes her memory will be partially activated, causing her to react to the game with more intense emotion (Hogan, 2003: 156).

Whereas these types of personal sadness are limited to individual players, sympathetic sadness is often widespread. Sympathetic sadness is based on narratives written by game creators; creators decide the predetermined narrative events as well as which choices are ceded to players. Thus, creators can script narratives that evoke sadness in much the same way that the stories in films and novels do. Therefore, sympathetic sadness is much more likely to be a widespread, intended emotional response to a video game than personal sadness.

In video games, the relationship between the player and player-character blurs the line between personal and sympathetic sadness. We might feel sad at the end of a non-interactive narrative artwork because we can no longer experience these familiar characters we care about living their lives in their fictional world. When the artwork ends, we might feel sad about the loss of that perceived relationship. For video game players, this type of loss is enhanced due to their vicarious relationship to the video game world through their player-character. Consider *Planetfall*. In the real world, the player does not have a friendship with the fictional character Floyd, since the robot does not actually exist. Within the world of the fiction, the player-character does have a real friendship with Floyd. This description of character relations applies equally well to films, of course. However, in video games, players have game goals that relate to their player-character's narrative goals. In *Planetfall*, the player's game goals and the player-character's narrative goals are coextensive, which is typical for video games and also potentially intensifies both the player's feelings towards Floyd and thus the perceived loss upon Floyd's death. *Planetfall*'s nature as a text-adventure further blurs this line because it is written in second person; it addresses the player as "you," and leaves the player-character unnamed.

In fact, it might seem impossible to distinguish between personal and sympathetic sadness during video game play because there is such an overlap in video games between

the player's and player-character's goals. Yet we should recognize that there is a distinction to be made. It is clear that we feel sympathetic, not personal, sadness when listening to Lauren Winter describing her deceased son in *Heavy Rain*. And despite the blurred lines between the player and player-character, we can feel discrete sympathetic sadness for the player-character upon the death of a non-player character regardless of our feelings towards the deceased character or the way the death of that character affects our game goals. In other words, the death of a non-player character can create sympathetic sadness in the player even if there is no personal sadness created. For example, one player's comment on a forum thread titled, "Videogames That Made You Cry" described his reaction to Aerith's death in *Final Fantasy VII* (Square, 1997) by saying, "Aerith's death, in itself, wasn't all that tragic, but it made me feel sorrier for [player-character] Cloud, than anything else [sic]" (Oneironaut Zero, 2012).

In *Passage*, the loss underlying player sadness is death. *Passage* is successful in evoking sadness by activating players' personal memories of and emotional associations with death and encouraging them to reflect on the possibility of their own death. We saw earlier, in the *Max Payne* example, that generating emotion through activation of emotional memories is rarely an intended and widespread emotional response. Very few *Max Payne* players have had family members murdered, so in analyzing emotional responses to that game, we would not focus on the emotional memories that the opening scene elicits. In *Passage*, however, the emotions surrounding death are ubiquitous among players. In his artist's statement, *Passage*'s creator Rohrer confirms his intent to encourage players to reflect on their own mortality:

> As I said before, there's no right way to play this game. Part of the goal, in fact, is to get you to reflect on the choices that you make while playing…. Yes, you could spend your five minutes trying to accumulate as many points as possible, but in the end, death is still coming for you [2007].

Sadness, Cause and Expectation

Since a necessary precondition of crying is intense emotion, and the emotion we are discussing is sadness, we must understand the factors that determine the intensity of that emotion. In short, sadness is based on loss, and the emotional intensity of sadness is determined by three aspects of the loss: its cause, expectedness, and significance. For each of these three factors, video games face obstacles in generating intense sadness.

Sadness is most intense when loss is perceived to have an impersonal cause, such as disease, nature, or fate (Ellsworth and Smith, 1988). When loss is caused by a person or other intelligent agent, we tend to feel emotions that overwhelm or compete with sadness. If we blame someone else for our loss, for example, we tend to be angry. If we blame ourselves, we might feel regretful or ashamed. If no one is to blame, in contrast, then we are most likely to feel sad (Barr-Zisowitz, 2000). To intuitively grasp this distinction, consider the death of a beloved pet. If someone runs over your pet with a car, immediately killing it, you would feel anger and shock. If you ran over your own pet, the anger would be replaced or combined with regret or guilt; sadness would come later as you accept the loss. However, if your pet dies from a terminal disease rather than a car accident, your sadness when she dies will be more intense because there is no one to blame. In this case, you focus on your loss rather than on possible coping actions, and your sadness will not be competing for attention with other emotions, such as anger. This example demonstrates

why, when feeling mixed emotions, each emotion is felt less intensely than if the emotion were felt in isolation. If we feel both sadness and anger, or sadness and confusion, we have less attention to focus on the sadness itself. Further, when there is someone to blame for our loss, the consequent anger encourages us to seek coping actions, such as revenge, that undermine the sense of helplessness essential to crying.

Films effectively demonstrate how the cause of loss affects the intensity of sadness. Narratively, we can think of a character as suffering loss when they experience negative events. Most film genres put characters through such events. In genres such as action-adventure, horror, and crime, characters are harmed by villains—that is, by agents we can blame. Consequently, sadness is less common in these genres. But in sad films, characters typically suffer loss due to situations with causes that cannot be blamed on individual people. Typical causes include terminal diseases, such as a character dying of cancer in *Terms of Endearment* (James L. Brooks, 1983); natural disasters, such as the devastation caused by a tsunami in *The Impossible* (Juan Antonia Bayona, 2013); and broad social forces, such as racism in 1950s America driving a mother and daughter apart in *Imitation of Life* (Douglas Sirk, 1959). Although we think of sad films simply as films in which sad things occur, it is more accurate to think of sad films as films in which bad things occur for which no one is to blame.

Video game designers face difficulties in creating loss without blame. In video games, characters are blocked from their goals due to in-game characters, environmental obstacles (such as spikes that must be avoided), or game mechanics (such as time limits). Other characters are perceived as villains that can be blamed for narrative or game losses. Although environmental obstacles or game mechanics may initially seem to be blameless causes of negative events, players frequently interpret them as constructions placed by game designers, who can be blamed if they are too hard (i.e., if they cause undue loss). Video game features such as heads-up displays and introductory tutorials make video games' constructed nature even more salient, undermining the notion that bad situations in games arise in an unforced and blameless manner.

Planetfall overcomes this obstacle to sadness by using several techniques to minimize blame for Floyd's death. First, it is Floyd himself who suggests that he go into the room with "hideous, mutated monsters," which reduces a player's perceived culpability for causing Floyd's death. Second, Floyd is not killed by a villain, but by mindless monsters who are less blameworthy for the act due to their lack of moral awareness. Third, players know or come to accept that they cannot save Floyd and still win the game, which reduces their moral culpability as it makes them feel that they had little choice in the matter. In *Passage*, players also experience loss without blame. The losses underlying player sadness include players' real-life losses, evoked by the game through association, and the in-game death of the blond man (and possibly the female non-player character) from old age. No agents are responsible for either.

Expectation of loss is a second factor influencing sadness. Sadness is most intense when loss is neither surprising nor inevitable. An unwanted surprise can cause shock and create emotional arousal that readies the body for action, which is counter to sadness's tendency to cause "inaction, or withdrawal into oneself" (Lazarus, 1991: 251). We see this when someone receives bad news that they are completely unprepared for, such as a report that a loved one has died in a car accident. Their initial reaction is usually not sadness, but shock and denial. A "situation [that has] a predictable outcome," however, is associated with "the experience of resignation" rather than sadness (Ellsworth and

Smith, 1988: 291). Presumably, when we anticipate a likely or inevitable loss, we aim to emotionally cope with the loss before it occurs. People whose loved ones die after a long battle with a terminal illness often report that, when learning of the actual death, their sadness is tempered by a relief that the ordeal has ended. Sadness is maximized when we anticipate the possibility of a significant loss, but still retain hope that the loss will not actually come to pass.

Video games may initially seem to provide just this sort of expectation: your completion of a video game is not surprising, since you get as many attempts as you want, but neither is it inevitable, because you must be skilled and persistent to make it to the end. Upon reflection, however, this description applies to game events, not the narrative events that might underline intended, widespread sadness. For many games, the narrative depicted in the game is, in some sense, both surprising *and* inevitable. Consider the game *Halo: Combat Evolved* (Bungie, 2001), a first-person shooter with a strong central narrative involving a war between humanity and an alien race. Each level requires that you enact key narrative events (such as boarding a spaceship) before you can continue to the next level. In this way, you gradually reveal the game's pre-determined storyline. The events in the narrative are often surprising at a local level because modern video games derive much of their challenge from unpredictable enemies. You will frequently be surprised by a gunshot from a hidden alien or the fortunate discovery of additional ammunition as you turn a corner. In contrast, the ending of *Halo*'s overarching narrative is inevitable: the player-character, Master Chief, will succeed. The player may not succeed at first, but if the player is skilled enough to reveal the entire narrative, the player-character will inevitably succeed. It is simply true of the fictional world of *Halo* that Master Chief saves the world, and this is true whether or not the player actually completes *Halo*. This structure is typical for the video games under discussion.

Planetfall provides an example of how a video game can establish expectations in a way that sets the stage for sadness. During gameplay, players perceive Floyd's death as neither surprising nor inevitable. It is not surprising because the danger is suggested at the beginning of his death scene. Floyd and the player-character stand outside of a laboratory, looking through the window at the magnetic card inside that they need to repair a computer. Their obstacle is a group of dangerous mutants in the laboratory. Floyd suggests that he go get the card. The player doesn't contemplate the possibility that Floyd could be injured until Floyd says, "Robots are tough. Nothing can hurt robots." Floyd's voice "trembles slightly," suggesting a lack of confidence in his claim, or even fear. As the player opens the door, letting Floyd in, and closes it, locking Floyd in with the monsters, more clues accumulate that Floyd may be in trouble. The player-character hears "ferocious growlings" from the hostile mutants, a "high-pitched metallic scream," the sound of "tearing metal," and when he ultimately lets Floyd out, the robot is badly damaged and leaking oil. The player must take action between these descriptions of Floyd being attacked, slowing down the gameplay in a manner that allows the player time to think about possible outcomes, including the notion that Floyd may be killed. After all of these suggestions about the danger of the mission and the time to consider them, it is not shocking when Floyd actually dies. On the other hand, the player doesn't initially perceive Floyd's death as inevitable (even though it is). There are numerous opportunities for player action during this sequence. Since video games usually enable players to overcome obstacles, it certainly seems possible, at least on a player's first playthrough, that the player could acquire the needed magnetic card without Floyd dying. It is easy to imagine *Planetfall* players

figuring out how to get the magnetic card, replaying the sequence multiple times to see if they can both get the card and save Floyd, and slowly coming to realize and accept that Floyd must die for the game to continue. By providing opportunities for players to reflect on Floyd's death, *Planetfall* successfully generates sadness.

Passage, like *Planetfall*, encourages sadness by making the player's in-game loss neither surprising nor inevitable. As noted earlier, after every few seconds of gameplay, the blond man moves one pixel to the right relative to the screen, and he slowly ages during gameplay. These two factors provide visual clues that strongly suggest to the player that the game will end within a few minutes, and the blond man's death is therefore not surprising. Yet video game conventions also suggest that death is not inevitable, since it is extremely rare for a video game to force the player-character to die regardless of player actions.

The third factor that determines the intensity of sadness is the significance of a loss. Clore (1994) argues that the intensity of sadness is based on the amount of cognitive restructuring required to continue on without the object of the loss. More generally, he states, "the intensity of event-based emotions depends on the desirability of the event" (1994: 392). For example, we might be mildly sad upon discovering that a famous actor has died. But our sadness will be greater if we were a fan of the actor, and thus had some emotional investment in him. If we considered him one of our favorite actors, or even knew him as a personal friend, we would have deeper attachment and consequently more intense sadness. The same holds true for abstract losses, such as being rejected from a job. If the job was unpleasant, you would not be emotionally attached to the opportunity to work there, and the rejection would not cause the same intensity of sadness as a dream job that you had spent lots of time and money pursuing.

Video games have not commonly engendered the types of significant loss that would underlie player sadness. One reason is that video games conventionally have positive endings; when you complete the storyline, the player-character has inevitably succeeded. In *Halo*, Master Chief stops the universe from being destroyed, in *Grim Fandango* (LucasArts, 1998), Manny Calevara makes it to the next afterlife, and in *Prince of Persia: The Sands of Time* (Ubisoft, 2003), the Prince rescues the princess, defeats the evil Vizier, and prevents him from taking over the kingdom. The protagonists of these stories overcome obstacles rather than succumbing to them. Some exceptions exist: one way *Heavy Rain* is ground-breaking is that several of its possible endings are tragic, with major characters dying, and in *Red Dead Redemption* (*Rockstar San Diego*, 2010) the player-character unavoidably dies near the end of the game. Current trends suggest that these sorts of tragic endings will become more common. The historical convention for happy endings accords with the issue of irrevocable loss discussed earlier. In some highly-narrative adventure video games, such as *Grim Fandango* and *Myst* (Cyan, 1993), the player-character cannot die; no narrative events will end the game session. Other video games, such as *Halo* or *Planetfall*, follow the more common convention that every time the player-character dies, the player has the chance to revive the character and try again. Although a video game where you can't die may seem to be vastly different from a game in which you die many times before succeeding, structurally, they are very similar. Both have one central, predetermined narrative. The only narrative difference is cosmetic: in one, when you fail to meet the challenges, your gameplay is interrupted and you try again; while in the other, you continue to play without interruption and you try a new solution. In both, however, you play over and over until the game is won and the ending is reached—an ending that is most likely to be a happy one.

Even games that have made players cry, such as *Planetfall*, follow this narrative convention. They generate sadness by situating sad sub-plots within a larger structure of victory. In *Grim Fandango*, for example, Manny Calavera must say goodbye to his dear friend Glottis, but fulfills his overarching goal by traveling to the next afterlife. In *Planetfall*, although the protagonist loses his loyal robot companion, he ultimately regains control of his spaceship and escapes to another world.

Positive endings are not the only obstacle to giving players a sense of significant loss in videogames. Another is failing to create characters that players genuinely care about. Most games that aim to make players cry do so by killing non-player characters, but few games successfully create enough attachment to characters to make the death significant for players (see Bernard Perron's essay in this book). Many people attribute the lack of emotional connection between most players and characters to poor writing (e.g., Freeman, 2004; Milligan, 2011). Similarly, others say that good writing is central to creating sympathetic characters. Mark Wallace, for example, suggests that Aerith's death in *Final Fantasy VII* is so tragic only because the videogame is "*very* well written" and Aerith's "personality has been so well developed, we've grown attached to her" (Wallace, 2006, original emphasis). One reason *Planetfall* is a touchstone for video game emotion, even decades after its release, is that the game's writing effectively portrays Floyd's enthusiastic, childlike personality. When waiting for the player to take an action, the game may report that "Floyd rubs his head affectionately against your shoulder." Floyd regularly wakes the player-character up by jumping on the bed and saying, "About time you woke up, you lazy bones! Let's explore around some more!" Though sparse and straightforward, the writing is successful at encouraging players to form a strong attachment to Floyd. Floyd is thus an exception to the rule that video game characters are too thinly drawn to elicit real sympathy.

Passage: *Sadness and Interactivity*

For video game players, emotional loss and interactivity are closely related. A character's death will have emotional impact only if it is perceived as irrevocable, and it will only be seen as such if a player's ability to interact with the game world is restricted. This fact has caused some game creators, such as the aforementioned Koster, to call this type of character death "cheating" on the part of the game creator. Hideki Konno, producer of the pet simulation game *Nintendogs* (Nintendo, 2005), suggests that "instead of trying to emulate the way a film imparts emotion, games can exploit their own interactive power to achieve something entirely new" (Kushner, 2006: 125). *Passage*'s creator Rohrer is one of the most vocal proponents of this viewpoint, arguing that "we should figure out what we want to express with our games and then devise game mechanics that best communicates that message. The heart of our games, the gameplay, should be our primary vehicle for expression" (Rohrer, 2008). The most common strategy for making players cry, using character death to create irrevocable narrative losses, is inconsistent with Rohrer's view because it requires limiting player interactivity during important moments of a game.

Allowing or limiting interactivity, however, affects players not just in their gameplay actions, but also in the ways they attend to the experience of play. An essential element to generating sadness is managing player attention. As I have argued elsewhere (Frome, 2007), players emotionally respond to video games using at least four cognitive frameworks:

they can view elements of a video game as aspects of the real world, of a fictional game-world, of gameplay, and of art. But players cannot interpret video games through all of these frameworks simultaneously; rather, they must switch between these frameworks during gameplay. Our engagement with video games thus trades-off in a manner similar to visual processing. Just as visual attention to one target inhibits cognitive processing of other targets (Driver, 2001), attending to a video game through one cognitive framework inhibits us from simultaneously interpreting it through another. This trade-off inhibits video games from producing sadness and crying. Sadness is a response to a loss, and feeling sad involves withdrawing and attending to that loss. Crying accompanies the cessation of action, encouraging us to look inward and soothe ourselves. These emotional responses are simply not compatible with video games' historical focus on gameplay over narrative. It is easy for film viewers to reflect on narrative events because they cannot take any actions to affect them. Video game players do not spend much time reflecting on narrative events because they have to decide what to do next.

Video games that can cause crying build in moments where players are allowed or forced to momentarily cease interactive gameplay, allowing them to reflect on narrative situations. *Planetfall*, like most text-adventure games, allows players to pause for an unlimited time between each action entered. Other games that have made players cry, such as *Final Fantasy VII*, present their tragic moments during cut-scenes that cannot be affected by player actions, allowing players to fully attend to the narrative without having to worry about gameplay.

The creative achievement of *Passage* is eliciting sadness without depending on any of these common strategies. *Passage* does not create sadness based on players' emotional attachment to characters. In fact, the game design prevents such attachment; the characters are completely minimalist, with no personality and almost no differentiating characteristics. Players interact with the characters for only five minutes. The narrative could hardly be more sparse. Since video games cannot create significant player loss during the game without limiting interactivity, *Passage* does not aim to do so. Instead, as noted earlier, it creates sadness by intentionally activating emotion networks, using musical and visual elements and widespread associations with concepts of aging and mortality.

Passage foregrounds its constructed nature in ways that encourage players to speculate on the subtextual or symbolic meaning of the game. The pixelated graphics are so basic that players safely assume the style is an intentional choice rather than the consequence of a limited budget or rudimentary artistic skill. As with art cinema or modernist literature, when style is foregrounded to the audience, they frequently interpret it as authorial commentary (Bordwell, 2008). The *Passage* player sees that the game flouts graphic conventions and asks, why did the game designer do this? What goals does Rohrer have, and what ideas might he be trying to communicate? By considering these questions, players activate cognitive emotion networks related to mortality, and reflection on these themes may make them quite sad.

There is an incompatibility between the active coping typical of video game play and the passive reflection associated with sadness. This opposition suggests that video games can generate sadness only by limiting interactivity in order to allow players to focus on loss. *Passage* is designed in a way that allows players to reflect on emotionally evocative ideas during gameplay by minimizing cognitive demands that might otherwise compete for players' attention. One way it does this is by removing all game elements which require players to act in a timely manner. The game has a timer limit, but since

there is no defined game goal, players feel no time pressure. The player always has the option of taking action, but is never required to do so. There are no enemies and no actions can cause a premature death. No diegetic events occur outside of those that invite a response from the player. Further, the controls could hardly be simpler—all players can do is move the blond man in different directions using the arrow keys. (Compare this to a console shooter, which requires players to memorize the gameplay functions of two thumbsticks, a direction pad, and up to twelve additional buttons.) These simple game mechanics free the player to respond to the game using cognitive frameworks *other* than a game framework, such as a framework of aesthetic evaluation. Most importantly, by reducing the tension inherent in so many video games, the player is free to investigate the game's narrative themes and to indulge in emotional reflection about mortality.

Conclusion

Non-gamers are often surprised to learn that, for decades, the video game community has actively discussed making players cry, and that games that have made people cry are often considered to be the best examples of the medium. Yet this discussion has been premised around a faulty assumption: that since great works of narrative art have made audiences cry, what game designers must do to make players cry is to simply create higher-quality video games. Reflection on the specific prerequisites of crying and sadness reveals that the problem is not video game quality, but that the most common characteristics of video games are simply not conducive to crying. We cry most readily when we feel significant irrevocable loss, when we have no one to blame, and when we reasonably hope for a good outcome that fails to materialize. But video games offer players nearly infinite opportunities to reverse losses, allow blame for losses to be put on in-game enemies or game creators, rarely suggest hope where none exists, and ultimately present good outcomes rather than bad.

Planetfall and *Passage* are particularly illuminating as two extremely different games that both manage to cause player sadness that is intense enough for some players to make them cry. *Planetfall* manages to create significant player loss through the death of a sympathetic non-player character. It bypasses video game conventions through excellent writing that creates real player attachment, undermines blameworthiness, and conveys irrevocable loss. *Passage* is Rohrer's attempt at generating emotion in a way that embraces interactivity rather than minimizing it. The genius of *Passage* is that it instantiates its themes about the inevitability of death by providing interactivity that is ultimately futile for avoiding that fate. Since games cannot create significant irrevocable loss without significantly restricting player interactivity, *Passage* uses existing associations in players' minds to evoke emotional responses. It foregrounds its constructed nature in ways that encourage players to speculate on the creator's intent, and presents gameplay so simple that players can easily reflect on these ideas during gameplay. Ultimately, we see not only how two particular video games manage to skillfully elicit emotional responses that are particularly challenging, but the importance of understanding video game emotions in terms of the specific elements of each type of emotion rather than under a general concept of emotional response.

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