

Playing in Absentia: Exploring Meaningful Loss, Memory and Bereavement in
Video Games

A Thesis Submitted to the
College of Graduate and Postdoctoral Studies
In Partial Fulfillment of the Requirements
For the Degree of Master of Arts
In the Interdisciplinary Program
University of Saskatchewan
Saskatoon

By

Elly Cockcroft

© Copyright Elly Cockcroft, January 2025. All rights reserved.

Unless otherwise noted, the copyright of the material in this thesis belongs to the author

Permission to Use

In presenting this thesis/dissertation in partial fulfillment of the requirements for a Postgraduate degree from the University of Saskatchewan, I agree that the Libraries of this University may make it freely available for inspection. I further agree that permission for copying of this thesis/dissertation in any manner, in whole or in part, for scholarly purposes may be granted by the professor or professors who supervised my thesis/dissertation work or, in their absence, by the Head of the Department or the Dean of the College in which my thesis work was done. It is understood that any copying, publication or use of this thesis/dissertation or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and the University of Saskatchewan for any scholarly use which may be made of any material in my thesis/dissertation.

Disclaimer

Reference in this thesis/dissertation to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not constitute or imply its endorsement, recommendation, or favouring by the University of Saskatchewan. The views and opinions of the author expressed herein do not state or reflect those of the University of Saskatchewan and shall not be used for advertising or product endorsement purposes.

Requests for permission to copy or to make other uses of materials in this thesis/dissertation in whole or part should be addressed to:

Interdisciplinary Program Coordinator College of Graduate
and Postdoctoral Studies
University of Saskatchewan
Room 116, 110 Science Place
Saskatoon, Saskatchewan, S7N 5C9 Canada

OR

Dean
College of Graduate and Postdoctoral Studies
University of Saskatchewan
116 Thorvaldson Building, 110 Science Place
Saskatoon, Saskatchewan S7N 5C9 Canada

Acknowledgments

I am grateful for the endless patience and guidance from my supervisor, Jon Bath, and the advisory committee members Regan Mandryk, Ulrich Teucher, Cody Phillips, and Allison Muri.

This thesis draws on research supported by the Social Sciences and Humanities Research Council.



Social Sciences and Humanities
Research Council of Canada

Conseil de recherches en
sciences humaines du Canada

Canada

Table of Contents

Permission to Use	i
Acknowledgments	ii
Table of Contents	1
List of Figures	3
Introduction	5
Chapter 1 - Understanding Motivations and Engagement in Video Games	8
Play and Games	8
Distinctive Dimensions of Video Games	10
Meaningful Play: Motivations for Games Beyond “Fun”	12
Chapter 2 - Methodologies for Analyzing Affective Experiences in Video Games	17
"Let's Play" and Netnography	17
Chapter 3 - Grief in Games: Understanding Loss and Making Meaning	21
Confronting Death Through Reflective Play	24
Embodied Cognition and Loss: Examining the Intersection of Mind and Body in Video Games	27
Chapter 4 - Case Studies - <i>Jocoi, Brothers: A Tale of Two Sons, and That Dragon, Cancer</i>	30
<i>Jocoi</i> : Processing Experienced Grief Through Collaborative Game Design	30
Exploring Gameplay	34
Let's Play (or not?)	37
<i>Brothers: A Tale of Two Sons</i> - Navigating Loss Through Intuitive Control Mapping and Intentional Design	39
Exploring Gameplay	40
PewDiePie	43
BogOtter	45
<i>That Dragon, Cancer</i> - Bearing Witness: Video Games as Living Memorials	47
Exploring Gameplay	50
Let's Play Case Studies:	52
The BS	52
PewDiePie	54

Spedicey	59
Conclusion	61
References	64
Video Game References	72

List of Figures

<i>Figure 1. Negative/positive and low/high arousal chart.</i>	13
<i>Figure 2. Screenshot from Papers, Please show invasive body scanners being used.</i>	15
<i>Figure 3. Memorial stone at Woodlawn Cemetery for unborn children by Author (Elly Cockcroft).</i>	31
<i>Figure 4. Jizo statue, Great Vow Zen Great Vow Zen Monastery (credit: Deena Prichep for NPR).</i>	32
<i>Figure 5. Physical wireframes created during collaborative game design for Jocoi.</i>	33
<i>Figure 6. Feeding your lamb flowers, creating the colours/patterns of its wool in Jocoi.</i>	35
<i>Figure 7. After killing your lamb, the wolf now has the same colour/pattern as your lamb.</i>	36
<i>Figure 8. The start of the brothers journey to save their father.</i>	39
<i>Figure 9. Opening cinematic in Brothers: A Tale of Two Sons showing the youngest failing to save his mother in a storm, resulting in his fear of water.</i>	40
<i>Figure 10. Dead giants litter one scene in Brothers: A Tale of Two Sons.</i>	41
<i>Figure 11. Saving a man who has attempted to hang himself in Brothers: A Tale of Two Sons.</i>	42
<i>Figure 12. The young girl transformed into a monstrous spider, ultimately killing the older brother in Brothers: A Tale of Two Sons.</i>	42
<i>Figure 13. Burying your brother, a participatory ritual scene in Brothers: A Tale of Two Sons.</i>	44
<i>Figure 14. Bogotter gets emotional during the scene where the older brother dies in his Let's Play of Brothers: A Tale of Two Sons.</i>	46
<i>Figure 15. The video game idea that inspired the creation of That Dragon, Cancer.</i>	48
<i>Figure 16. An empty hospital room with an empty chair originally mistaken for intentional pause in That Dragon, Cancer.</i>	50
<i>Figure 17. A unique game affordance being used to show each character's voice on the situation in That Dragon, Cancer.</i>	51
<i>Figure 18. Matt and Lissy, already emotional very early into the Let's Play of That Dragon, Cancer.</i>	52
<i>Figure 19. An emotional scene in That Dragon, Cancer where baby Joels crying for minutes... ..</i>	53
<i>Figure 20. Final scene of That Dragon, Cancer is a digital afterlife where Joel can have all the things he loved.</i>	54
<i>Figure 21. PewDiePie during an emotional scene in That Dragon, Cancer wiping away tears.</i>	55

Figure 22. PewDiePie during the talking wheel scene in That Dragon, Cancer. 56

Figure 23. An emotional personal story shared by Jackspedicey while playing That Dragon, Cancer. 59

Figure 24. One of many benches in the game Brothers: A Tale of Two Sons, designed to allow players to pause and reflect on the gameplay experience. 62

Figure 25. Cards left by supporters line an entire hall where players can view them at their own pace, in That Dragon, Cancer. 62

Introduction

One of the most impactful things I remember from an early Art History class was a professor's words regarding one essential question when viewing visual art: "What do you see?" On the surface, it's a simple question. However, once you understand that the visual language of art borrows from what came before and carries important context, viewers often understand an image without knowing why. Examining precisely what you see and researching the context of its creation and reception become the keys to unpacking art and how it conveys its message. I often think back to that question when looking at any visual-based medium. Yes, video games are art, but what message are they conveying, what are they hoping players will feel, and why? What experience are they hoping to allow players to have? How is the developer's original intent integrated, and how does the game (engine, mechanics, pacing, story) frame loss and bereavement? How is the player's agency included, and how are their own experiences considered in the game, or are they? I try to keep all these questions at the forefront of my mind as I examine video games' subjective and affective experiential intentions when focused on serious themes like loss, bereavement, and grief.

In my second year of grad school, one of my classes was a small group, just my advisor and another graduate student interested in the emotional impact of games. We had just started playing *This War of Mine* (11 Bit Studios, 2014) at the beginning of December before the break. I went to my sisters in Ontario for Christmas and returned after the stunning announcement about a new SARS-CoV-2 virus sweeping China and possibly the globe. I sat beside a nervous woman who, like me, was scrambling to find antiseptic wipes and seemed ill at ease with being on a packed plane. She had been posted overseas for research but was on her way home back to Canada. The idea that the airports would close seemed unreal, and we laughed nervously at the news. It seemed like the start of a video game; reality didn't fit with what I had experienced previously, only with what I had encountered in video game scenarios, and as a result, it felt like something I was playing rather than directly experiencing. When I got home, news of the coronavirus spread, as did the virus, and the shutdowns started. I found solace in the last game we played in class. *This War of*

Mine became my only real focus at that time. I was wrapped up in the feelings of isolation, alienation, and survival that the game explored, and how death in the game was without any fanfare; you died without any ceremony or reason. Your body lay where it fell, and the people you loved or lived with moved on because that was all they could do. I found comfort in that feeling that surviving was what you did because it was the only thing you could do. It brought me some measure of peace and catharsis at the time.

I wanted to start with this story to establish that video games support many of us in times of need. My experience was with a specific game that told a story of struggle, survival, and the consequences of war, but it could have been many others. In times of trauma, loss, or grief, we sometimes need to experience something familiar, something comforting or something that lets us live a life away from the one we are currently in. I needed comfort in understanding that other humans have been through bad things and that, ultimately, how we react and tell our stories is what matters. That is what games are for me: stories that lend themselves to points of human contact that can have a meaningful impact.

My focus in this thesis is to shed some light on the study of death, bereavement, and grief in the context of video games. Despite the rise of empathetic or existential video games (Chittaro and Sioni 2018), they still come from a craft-based history rooted in entertainment. However, video games are uniquely situated to facilitate experiences of difficult, and often taboo topics like death and bereavement beyond the “game over” screen and other visual mediums (Curtis 2015). Video games can offer a glimpse into the very core of human experiences, creating empathetic, transformative, and novel ways of perceiving more serious topics like bereavement and loss.

I review the methodology and literature on grief, bereavement, and video game experiences and motivators in Chapters Two and Three. In Chapter Four, I use what Olli Tapio Leino refers to as “Research Play” (Leino, 2012), as well as Sapach's (2018) “Let's Play” research as outlined in Radde-Antweiler/Zeiler (2015), to examine three games as case studies: *Jocoi*, *That Dragon, Cancer* and *Brothers: A Tale of Two Sons*. The idea here is to center the focus on experiential gameplay, treating games less like “games” (something frivolous) and more as “playable artifacts” (Neto, 2016). Each game uniquely offers players a different encounter with death and loss through various design choices. I explore how these games use an affective approach to a death-related

loss, with game scenarios that require players to witness and even participate in the loss. Games that use slower-paced narratives and focus on death through the lens of the human experience can create situations where players must act as more than distant bystanders or observers; instead, players are active participants, creating impactful experiences. This can be through the collaborative creation of a story told through the eyes of a group of people who have experienced tragic, disenfranchised loss like a miscarriage in the case of *Jocoi*. It can also be through novel mechanics like in *Brothers: A Tale of Two Sons*, where embodied gameplay connects with narrative and gameplay to create a tangible bereavement experience for players when a narrative loss occurs. Finally, in *That Dragon, Cancer*, players experience the real-life story of a family's tragic loss through a game developed to give their son a digital memorial by sharing his story with the world. Through analysis of "Let's Play" content on YouTube, comments on those videos, and my experiences with the games selected for case studies, I examine how grief and bereavement are made into meaningful encounters through these video games. Through this research, I explore a few fundamental questions about loss in video games: Can video games foster meaningful engagement with grief, loss, and bereavement? What distinguishes games that achieve transformative impact on players from those that simply entertain? How do story-driven games based on real-life experiences of loss, such as *Jocoi* and *That Dragon, Cancer*, resonate with players? How might video games empower voices that society often silences, especially when dealing with themes like miscarriage or child loss?

Chapter 1 - Understanding Motivations and Engagement in Video Games

This chapter aims to understand how video games can be used to create meaningful experiences that are not fun in the traditional sense but that players still choose to engage with. I start by examining the concepts of “play” and “games” in general and what makes video games a unique form of expression. I start by reviewing the concepts of “play” and “games” in general and what makes video games a unique form of expression. I then discuss players' motivations for engaging with games, including using Self-Determination Theory (SDT) to explain how video games can keep players engaged by meeting three core intrinsic needs: autonomy, competency, and relatedness (Ryan, Rigby, and Przybylski 2006). Meeting these intrinsic needs allows players to learn and master skills, feel their actions are freely made, have an impact, and make connections or feel connected to the game. Considering these motivations when designing a game can help inform decisions that lead to better, more meaningful games (Ballou 2020). Next, I move to how video games can create “meaningful play” experiences by incorporating multiple modes of engagement. I use Arousal Theory (Bryant and Zillmann 1986; Zillmann, Hezel, and Medoff, 2006) and its discussion of negatively and positively valenced emotions to frame player motivations for engaging with difficult topics through games. Moving beyond merely the entertainment value of games offers players a safe but effective way to step into roles that may be outside their own experience. I finish the chapter by discussing how games can create transformative spaces for reflection and experiences with loss and grieving.

Play and Games

The act of play and games have persisted throughout human history in many forms; Caillois and his categorizations of play include two forms, ludus and paidia, and four types of play (Caillois, Barash, and Berger 1963). Caillois's framework offers a valuable perspective for examining the multifaceted nature of video games, their influence on players, and their significance within modern culture. Video games defy simple categorization as mere sources of entertainment. Instead, they constitute intricate play ecosystems, encompassing a broad spectrum of human experiences, emotions, and creative possibilities. This perspective urges us to see video

games not solely as vehicles for fun but as intricate realms of play that host a rich tapestry of interactions, motivations, and limitless possibilities for creative design. Frasca (2003) argued more stringently about *paidia*, relegating it to childhood development and noting that it does include some rules understood by the children that play (Frasca 2003, 229). Within these two types, there are forms: *agon* (competition, skill), *alea* (luck, chance), *mimicry* (role-playing, imitation), and *Ilinx* (vertigo, confusion, like spinning or swinging).

Jesper Juul (2005) sees games as structured in two ways: emergence and progression. Emergence is the core structure of many games, with rules creating countless instances and scenarios. Players use strategies to tackle different situations within the games' rules; for example, card games, board games, sports, and strategy games of any kind (Juul 2005). Progression games are more recent and are storytelling or narrative-driven games; players follow a set of predefined actions to complete the game, and game designers have a lot more control since they control when events happen or do not (Juul 2005).

Mary Flanagan, in her text *Critical Play* (2013), argues the point that games are social constructs and not restricted to children but places where anyone, child or adult, can exist in a state where the same rules do not bind us, we can transgress, have agency, and move through situations and experiences we might not have otherwise had the chance to do. Flanagan delves into the historical evolution of play, encompassing a broad spectrum from traditional board games to more transgressive forms like doll play (Flanagan 2013, 33). She draws intriguing parallels between doll play and contemporary practices in digital worlds, where platforms such as *The Sims* (Electronic Arts and Maxis 2000) or *Second Life* (Linden Lab 2003) serve as modern-day equivalents. In these virtual spaces, we engage in activities that echo Huizinga's concept of play in *Homo Ludens* (Gillin and Huizinga 1951) by creating alternate realities that captivate our focus. The allure of these virtual realms lies in their capacity to offer a liminal space—a realm of transformation where we can enact or even transgress without fear of breaking social norms or taboos. Whether it involves whimsically removing a swimming pool ladder in *The Sims* or conducting unorthodox experiments, such as enclosing characters within walls, these actions underscore the inherent freedom and agency intrinsic to the act of play.

Modern video games, however, cannot always be explicitly categorized using the terms already discussed; they transition and change over time and form and re-form. An example of this

would be games that emphasize “choices matter” design elements, allowing players the opportunity to impact the virtual world they are inhabiting. As will be discussed later in this thesis, *Jocoi* and the types of flowers you decide to feed your lamb would be a simplistic example of this; its coat changes depending on what you choose to feed your lamb, visually marking your choices in the game-world. The nature of interactions in video games means player actions change the space and world around them, and the game changes in reaction to players’ actions. In one of my favourite games, *The Witcher 3* (CD Projekt RED 2015), this site of contention is something Will Wright (Maxis’ chief designer/co-founder) referred to as a “possibility space” (Wright 2004).

Given the complexity of defining “games,” I will be relying on a definition that focuses less on what games are and more on what they enable. Games are:

A site of constant but productive, generative conflict between order and chaos, between rules and uninhibited play. Consequently, playing video games can and should be understood not as an escape from reality, but as an engagement with the socio-cultural values that inform, and are informed by, play itself
(Jensen 2013).

Games are transformative spaces that allow players to immerse themselves in a place and time outside their everyday lives. They create freedom and the chance to take risks that might otherwise not be available in the real world or that would have severe consequences.

Distinctive Dimensions of Video Games

In his book *A Play of Bodies: How We Perceive Videogames* (2018), Brendan Keogh examines the discourse on what makes video games unique and what doesn’t and how we can better understand how players engage with and experience them. He suggests that video games are not a unique and utterly “different” form of visual screen-based medium because their inherent interactivity isn’t the only thing that defines them. While video games have many media (sound, animation, 2D and 3D art, etc.), at their heart, they are experiences that people interact with and interpret. Video games embody experiences, allowing players to map their own life stories and peer into possibilities in virtual worlds and lives (Keogh 2018, 196).

Video games are more than a textual medium; they extend beyond what cinema has in terms of player participation and interaction. Games are more than the sum of their parts, more than a screen, code, and controller, more than input, sound, actions, and choices; combined, they create something wholly unique. While they share similarities with film, literature, and interactive art, they can also deviate dramatically, allowing players to co-share space in virtual bodies and worlds (Keogh 2018). The interconnected experience that video games are steeped in is the core of where these experiential narratives live. Keogh points out that game developers can focus on mechanics, sound, narrative, or the game's overall feel. However, all these elements combine through gameplay; mastery over input devices like a gamepad or timing an action to sound is nothing without context, and the result is a holistic experience. Video games are an embodied, experiential engagement, which is "meaningful in itself: how a videogame 'feels' to play is fundamentally tied to what that videogame is 'about' (Keogh 2018, 258).

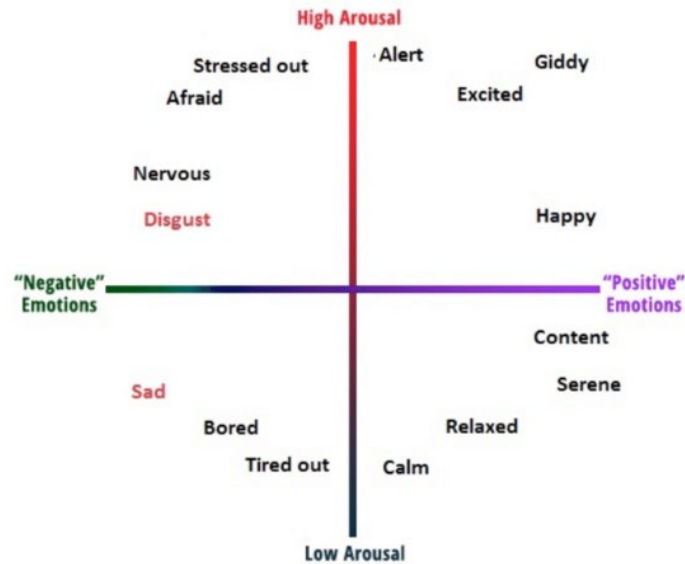
In his discussion on *The Myth of Ergodic Video Game*, James Newman (2002) focuses on the idea that video games are often considered unique and different from other screen-based media in that they are interactive, ergodic literature (Aarseth 1997) that require non-trivial interactions to experience. Ergodicity, the idea that players must actively interact with games to experience them, unlike watching a movie or reading a book, requires action; however, this isn't always the case. For example, in the Let's Play videos, spectatorship is experienced, and games can be played collaboratively. Harrer's response to the interactivity myth (Harrer 2019, 36) that the definition of interactivity can be applied more broadly to "any experience requiring interpretation and construction between audience and creator" may also apply to ergodicity in Let's Play analysis. Newman argues video games offer meticulously organized and segmented experiences. The nature of games, the interactive and ergodic elements, are defined by play sequences interspersed with cinematic scenes, map interfaces, and feedback screens (UI elements) like scores or health bars. The unique nature of interactivity and interactivity, as Smethurst (2015) points out, explains the back-and-forth between the game and the player. Harrer (2019) further expands on this idea by noting that it isn't restricted to games in which the player is in complete control with full agency over that game world; games that limit agency in unique ways can also profoundly impact player experience.

Newman (2002) brings attention to the fact that not only the people behind the controls experience the game, but bystanders and other people observing the gameplay also experience it, even without the agency/pleasures of control. In the last decades, the line between cinema and video games has grown narrow as video games borrow from cinema's long history and known visual language. As a result, video game experiences are not limited to the game involving the person behind the controller/keyboard. Keogh (2018) acknowledges this will change the game experience by saying, "... the rising trend of spectated videogame playthrough Let's Play videos and live streaming provides exciting challenges for a phenomenology of videogame experience when many experience video games primarily as viewed rather than played media" (Keogh 2018, 263).

Meaningful Play: Motivations for Games Beyond "Fun"

Video games represent objects and ideas already encountered and understood within a player's social understanding of the world, their unique mental model. However, it is more difficult to understand how meaning is made. Meaningful play happens between players' interactions, the game's rule system, the context in which the players and the game exist, and the interpretation of game actions (Salen and Zimmerman 2004, 31). The game becomes more than the sum of its descriptive parts if the gameplay and actions are coherent and meaningfully integrated contextually (Ibid). Throughout my own experiences, I can think of times I played and had a completely different interpretation of a game, distinct from the game design's intention and different from other players I see in the same game. My experiences influence how I see games unfold; they affect how I make meaning of the game, and the narrative makes sense to me. However, players are not the same, and even in a predetermined environment with a specific set of rules, it can be ambiguous or tell a distinctly different story to different people depending on their own lived experiences.

Often, when people think of video games, the assumption is that they exist solely for fun, enjoyment, escapism, or hedonic play. While many games throughout history have focused on providing enjoyment and positive emotional experiences, while this is true for some, it is not valid for all video game experiences. There remains an ongoing association with games as sources of fun and enjoyment, but hedonism and escapism are only a few of the experiences that video games can offer. It is more accurate to reframe the idea of games as meeting various player needs,



The two dimensions of emotions. Valence (negative/positive) and arousal (low/high). Every single emotion can be placed on this two dimension graphic.

Figure 1. Negative/positive and low/high arousal chart.

extending beyond straightforward enjoyment. For example, when applied to video game research, SDT can be directly seen as meeting the needs of competence, relatedness, and autonomy due to how video games are made. Green, Brock, and Kaufman (2004) posited that in transportation theory, people who want to be entertained by games have affective and cognitive responses that lead to an enjoyable experience. There is no question that most entertainment people reach for daily will result in satisfaction, like sitcoms, comedy, and games with simple goals that do not challenge you on any cognitive level or, at the very least, allow you to forget about the outside world for a while. That is one of many things video games provide, and it is not the main driving factor for all games or why a player chooses to play them. Often, entertainment is separated into clear definitions that are distinct and identifiable emotions, like sadness for drama, happiness for comedy, and fear in horror/thrillers. This oversimplification of how people experience appreciation and feelings can lead to assumptions that if people appreciate something, they feel joy or a positively valenced emotion. This chart by Munoz-De-Escalona and Enrique & Cañas, José (2017) displays a visual chart depicting high and low arousal and negative/positive valenced emotions, noting how "sad" is at the far end of negative and low arousal (see Figure 1). So where does this leave video games or any entertainment that leaves players sad yet appreciative of having played and with an overall positive experience? It truly does represent a paradox; enjoying tragic themes seems counterintuitive. Zillman and his colleagues have done studies within the lens of mood

management theory (Bryant and Zillmann, 1986; Zillmann, Hezel, and Medoff, 2006) to explain arousal theory and why we choose the media that we do and the experiences it gives us.

Video games often try to place themselves in the sweet spot of challenge within the game's design, not too hard or easy, just enough to create an experience with players returning for more. Challenges can be broken down further into functional and emotional ones. Functional focuses more on skills, such as the physical timing of buttons and timing, and cognitive skills, such as memory or problem-solving (Denisova, Guckelsberger, and Zendle 2017). The other challenge players can face here is the emotional challenge, which focuses on compelling characters, narratives, and ambiguity (Denisova, Guckelsberger, and Zendle 2017). Emotional challenge questions the idea of enjoyment as "fun;" instead, the term "appreciation" (Oliver and Bartsch 2010) encapsulates a more holistic player experience, one beyond hedonism as the core motivator. "emotional challenge" was first used by Cole et al. (2015), who distinguished between traditional video games and indie games. Some of the key elements that "indie games" often use that conventional games don't are the use of "emotional challenge, ambiguity and solitude" (Cole, Cairns, and Gillies 2015, 1), which serve to offer more profound emotional *experiences* for players.

Looking at games as more than a chance to experience something pleasurable or purely about challenge allows us to examine them as opportunities for something more than hedonic; instead, they can be a platform for developers to speak to a large audience about complex topics and to provide a means for players to engage empathetically with these topics, even if the games are not "fun" in the traditional sense. Zillman (1986) explores the motivation of people who enjoy sad films (Bryant and Zillmann 1986). He uses mood management theory to support his theory that people seek out experiences that help prolong feelings of joy and fight off negative emotions. It's a very human compulsion to want to see good people win and bad people lose (Oliver 1993). Players who engage in games with sad themes or suspense do so at different levels of emotions: a direct level (emotional responses) and a more reflective level or meta-response (Oliver 1993, 318). Baumer et al. (2014) explore reflection in game design, stating that "[W]e see reflection as reviewing a series of previous experiences, events, stories, etc., and putting them together in a way as to come to a better understanding or to gain some sort of insight (Baumer et al. 2014, 94)". Video games that focus on serious play, with intended meta-responses focused on insight,

reflection and player appreciation rather than hedonic enjoyment, can help players to be more mindful of life experiences they may or may not have personally been through.

Bopp, Mekler, and Opwis (2016) found that “sadness was the most salient affective reaction, followed by meaningfulness and happy affect” (Bopp, Mekler, and Opwis 2016, 2999). While SDT (competency, relatedness and autonomy) is a primary indicator of game enjoyment (Ryan, Rigby, and Przybylski 2006), meaningful affect was a much better predictor of appreciation. Even more surprising was evidence that sad affect was “a better indicator of both appreciation and enjoyment (Bopp, Mekler, and Opwis 2016, pg. 2999)”. Bopp et al. note that in their study, they found “... the experience of in-game loss inspired players to think about themselves, with some even interrupting their gaming session to reflect on the game events (Bopp, Mekler, and Opwis 2016, 3000)”. As will be seen later in my own “Let’s Play” research around *That Dragon Cancer*, YouTube streamer Jack Spidicey reflects during the gameplay in the hospital on his own grandmother’s death. It was an emotionally moving anecdote that was a direct result of the emotionally charged content about the loss of a child and the hospital setting he was exploring in-game.

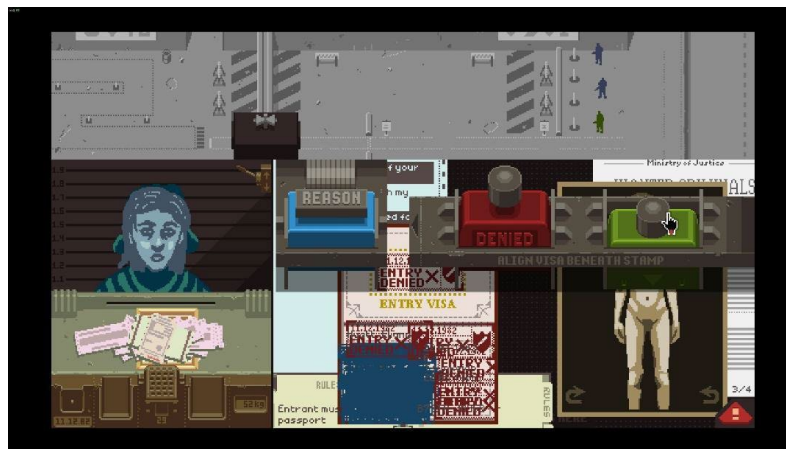


Figure 2. Screenshot from *Papers, Please* showing invasive body scanners being used.

Jesper Juul discusses two distinct types of tragedy represented in video games: self-destruction (the physical tragedy) and the way games can create complicity (psychological tragedy), both of which can overlap, complicity being unique to the medium of video games (Juul 2013, 111). Kathrine Isbister (2017) examines a board game called *Train*, created by game designer Brenda Brathwaite Romero (2009). The game elements encourage players to complete the tasks to shuttle “people” into trains, actions that, upon learning their meaning and narrative,

create a complicit narrative and instill “feelings of guilt from a fictional experience is unique to games” (Isbister 2017, 10). Juul's idea of complicity is apparent in the game *Papers, Please* (3909 LLC, 2013), where you act as an immigration officer, approving or denying people in the fictional dystopian Eastern-bloc-like country of Arstotzk (see Figure 2) while also trying to support your family.

Games that deal with complicated subject matter, whether taboo topics or just war, crime, and challenging subjects, are not "fun" but are appreciated and enjoyed on a different level. The games examined in my thesis are the same; they are on complex subjects, whether that is miscarriage in *Jocoi* or the experience of watching a family struggle with cancer and the death of their child, like in *That Dragon Cancer*. They are powerful and create a lasting impression; you do not play them for “fun” in the same way you would a game like *Super Mario Kart* (Nintendo). Appreciation and enjoyment are motivators for engaging with the media, but they aren't the only reasons. Games can create compelling narratives that allow players to experience fictional worlds and experiences players might not have otherwise. Immersive worlds create emotional landscapes for players to imagine themselves, and a game “allows us to experience alternate situations and ways of being human, which in turn informs on our own experience of being human (Isbister 2017, 8).”

Chapter 2 - Methodologies for Analyzing Affective Experiences in Video Games

This chapter will focus on the methodologies used to examine bereavement and loss in video games. I first discuss the general psychology around grief, loss, and bereavement and various frameworks for how people process grief. I then move on to an examination of the research methodologies employed in my case studies. Using public forums and comments on “Let's Play” videos provides a basis for exploratory analysis of the subjective, experiential, and affective potential of loss and bereavement in video games. My research involves “Research Play,” my own game experiences, and analyzing Let's Play video game playthroughs recorded and posted online through passive Netnography.

"Let's Play" and Netnography

My research into affective, experiential game design and how loss and bereavement in video games can be a powerful and reflective tool for players to examine their own experiences relies upon my personal experiences and the experiences of others in their subjective play of *Jocoi*, *Brothers: A Tale of Two Sons*, and *That Dragon, Cancer*. Additionally, I reviewed published player experiences via YouTube and online forums, in both comments sections and the players' experiences directly. My methodology combined close reading (of both the game and the gameplay), autoethnographic research (Poulos 2021), and Sonja Sapach's (2018) "Let's Play" research, which involves watching gameplay videos to observe players' interactions. I also conducted a simple analysis based on gathered online comments from players and viewers, a form of passive netnography (Kozinets 2015).

Sapach (2018) outlines the importance of conducting research based on experience by analyzing YouTube “Let's Play” videos. This methodology builds on the work of Radde-Antweiler and Zeiler (2015), who identified three key elements of each video: the game the player is playing, the video and how the player performed it, and the comments made in response to the video. When assessing content generated by players conscious of being observed during their gameplay, one fundamental aspect to remember is the notion of “performative gaming.” This acknowledges that players may alter their in-game behaviour and reactions when they are aware of an audience

watching their gameplay. When individuals play games in the comfort of their homes without an audience, their interactions with the game world and their emotional responses are often more genuine and unfiltered. However, as soon as they realize that a potentially vast and attentive audience is watching their gameplay, there is a natural inclination to adapt their actions and emotions to create a more captivating or entertaining experience. This phenomenon highlights the dynamic relationship between player, game, and audience, demonstrating how the awareness of being observed can significantly influence how players engage with and interpret video games. Sapach takes this one step further to argue that the researcher's gaming experiences are a valid and essential part of their auto-ethnographic research; Sapach plays the game with video running and talking aloud without breaking immersion to take notes (Sapach 2018, 3). Speaking the game aloud to review the affective impact comes from a history of using think-aloud methodology to dig into the cognitive processes that may otherwise be less easily recorded (Knoll 2018). The cognitive method of speaking aloud the problems players encounter during gameplay, also called think aloud, is used by games user researchers to gain insight into how players/users work through a game (Someren, Barnard, and Sandberg 1994). In his study of Let's Play methodologies, Derrit Mason discovered that it was as much an affective exercise as it was cognitive, referring to it as a "think-and-feel-aloud" (Mason 2021, 201) rather than just thinking.

My playthroughs focused on what creates meaningful affective gameplay, how it works, and how players experience those gameplay elements. On my first playthrough of the games, I tried not to interrupt the experience by taking too many notes unless it was something of impact or interest. I want the experience to be as close to a first-time user experience, documenting important moments with screenshots. I then played them again, focusing more on the moments I had noted the first time. I also recorded my playthroughs of the games to examine them further. I kept a notepad and pen beside me as I played through the games, recording my initial reactions on paper, and kept vital questions I wanted to answer in mind as I played all three games. I followed the same pattern when watching the Let's Play videos and reading comments on forums, comment sections, and online communities. The following questions were ones I tried to keep in mind during this process:

1. How was this game created, and who created it? Is it telling a fictional story, or is the creation a vital part of what makes this game unique? If the account occurred in real life, does that lend more gravitas to the overall experience?

2. Where did the death occur? Did death occur in or outside the game in the case of a true story? How does the experience of bereavement compare if death occurs in real life or the game's virtual world?
3. At what point in the game does the death happen?
4. How did this impact the immediate gameplay and long-term game experience? Does the experience stay with players after the game has ended?
5. How did the game move forward after the death or loss? Was there a ritual involved? Did it simply move forward without much said about it?
6. What changed in gameplay after this loss for the bereaved character, moving forward?
7. After playing, was there some natural crossover of emotions, grief, or embodied loss?

In an ideal scenario, gathering valuable insights by asking questions like these in interviews would be possible. Additionally, engagement diaries could be used to measure a longitudinal study of the games' enduring impact and if the game experience changed mindsets or ideas around loss and bereavement. Engagement diaries entail participants logging their thoughts and experiences over a designated period, typically a few months. Participants document their thoughts while actively engaging with the game during this timeframe and any lasting impressions it leaves on them, whether during or after gameplay. This method provides an excellent way of assessing the long-term emotional effects of games, particularly those where I seek to understand the emotions experienced after the game has concluded or during the periods when the game is not actively played. However, as a methodology, it was too time and resource-intensive for this thesis.

Having lost a child and years of playing (and studying) video games puts me uniquely positioned to speak about these topics. However, I recognized the bias in my analysis, so I used other "Let's Play" videos and used passive netnography to examine other players' experiences with the games. Netnography can take the form of observation and interaction of communities and data collection (active) or non-participatory (passive) data collection from various online or digital sources (comments sections, forums, online communities) to see themes and trends. This method generates data from what people post about their experiences in digital spaces and sees it as valid, lived experiences. Netnography generally emphasizes the participant-observational research methodology; it is used extensively in marketing and tourism to access large pools of online community data (Wu and Pearce, 2014). It provides a glimpse into the user/player experiences online and remains driven by participants. Given the constraints of this thesis project, I chose to

focus on passive netnography. These online spaces where gaming communities gather, such as Twitch, YouTube, Reddit, or Itch, can offer data and insights about video games and how they are experienced. Comments often go back and forth while a game is played for their viewers or posted after it's live on YouTube, leaving it open for comments or queries.

The COVID-19 pandemic in 2020 changed many aspects of research methodology. Due to physical restrictions, data from general forums (like YouTube and Reddit) and public social media posts became invaluable, allowing researchers to access more honest expressions of people's thoughts and feelings. People also may speak more openly and, at times, more vulnerably due to the internet's anonymity. Research by Baglione et al. (2018) supports this idea, as they found that online spaces contributed significantly to participants' journeys with grief: 15% of participants cited online resources as crucial in navigating their grief, and 91% were part of online support groups. These forums gave participants more control over when they engaged with difficult topics, providing them with the space to process grief at their own pace (Baglione et al. 2018, 5). Online support groups and media that participants during their grief journey also were cited as being something they felt they had more control over, felt they were able to opt in and out of difficult discussions more quickly, and were important as a first step towards opening up about their loss (Baglione et al. 2018, 6).

I do not consider my work an ethnography or complete netnography but rather a close reading of the experiences of players posted in online spaces to gain insight into what they experienced and to bring up questions I may have initially considered. So much of our world now occupies an online space of some kind, especially in a post-COVID world; we continue to form new ways to examine how we interact in these spaces, including how we play. I agree with Kozinet's warning against dehumanizing people by breaking them down into quantifiable data rather than stories (Kozinets 2015, 12). The spaces in which we gather and share those stories constantly change. New technologies have reshaped our understanding of culture and community, making them more flexible concepts that now encompass online social interactions as valid components of these constructs.

Chapter 3 - Grief in Games: Understanding Loss and Making Meaning

Understanding bereavement in video games goes beyond death as a mechanic for teaching skill mastery and requires understanding grief and bereavement on a basic psychological level. Bereavement and grief are terms used in various ways; for this thesis, bereavement (the bereaved person) refers to someone who experiences a significant loss. In contrast, grief is the emotional response to this loss (Corr 1999, 7-10).

Freud, in his text *Mourning and Melancholia*, wasn't as concerned with grief and loss as he was with depression but did set the stage for other approaches to grief (Freud 1953). These include the more well-known "stages of grief," which were introduced by Elisabeth Kübler-Ross. Many people think of the stages of loss (denial, anger, depression, bargaining and acceptance) as linear. However, Ross stated they were never intended to be seen as checkboxes for accepting a loss but instead to outline the various emotions during the experience (Kübler-Ross 1973). In a review of Kübler-Ross' stage system of grief, Corr (2020) notes that bereaved experiences around grief are unique and cannot be understood as a rigid, linear stage-based system. Instead, Corr believes that the personal journey of grief is highly individual and isn't only about feeling the loss, but rather, the bereaved person's life after the loss and how that relationship changes. Another issue with this stage-based model is the focus on *acceptance* as the all-important final stage, pushing each person to get to this "goal" when it may be impossible to accept death. Or, "acceptance" can differ for individuals, rather than always being peaceful (Kübler-Ross 1973, 161). Acceptance of death means no longer "fighting" or actively treating people who are terminally ill.

Grieving, while universally experienced, is not something that can be widely explained for everyone, and the contextual and cultural understanding of grief is varied. In Western thinking, grief is often seen as something that needs to be sorted out, as a problem that needs to be dealt with to resume daily life. The idea is that normalcy can't continue until grief has been worked through; "reducing attention to the loss is critical, and good adjustment is viewed as breaking ties with the bereaved and the dead" is something that was commonly believed in the Twentieth century (Klass, Silverman, and Nickman 1996, 34).

The Dual Process Model of grief was outlined in 1999 by Stroebe and Schut; it outlines the dynamic process of oscillation between loss-related activities and restoration. These activities include actively seeking memories, reminiscing, and facing loss head-on (Stroebe and Schut 1999). The other end of the Dual Process is denial and avoidance, when the bereaved do not choose to remember, perhaps purposefully putting away objects that can trigger emotions or memories or staying too busy to pause and reflect on them (Stroebe and Schut 1999). The outcome of this model is a linear process that focuses on restoring normalcy and acceptance of loss. While it is a more flexible and personal model of grief compared to the “stages,” in that, it considers people mourn and work through loss at their own pace and in the context of their culture, it still assumes that at the end of the process, the bereaved person has “moved on.”

More recently, grief frameworks and theories have changed dramatically, moving from more rigid phase or stage-based systems to ones that consider the nuances of culture, memory, and socio-politics of the people in grief. Newer researchers, like Klass et al., focus on the idea of Continuing Bonds and how grief, for some people, is part of their lives moving forward; grief becomes something you are rather than something you accept and move past (Klass, Silverman, and Nickman 1996). The focus is on how bereaved individuals continue to connect in meaningful ways to loved ones they have lost. The game *Jocoi*, which will be discussed in the next chapter, was made by women who experienced a miscarriage and is a game-based example of Continuing Bonds; it shows how relationships continue to exist in an altered way after a loss.

One of the problems with many earlier models (like the Dual Process Model) is that they conclude that the grief work has an endpoint and don't consider the idea that Continuing Bonds exist after a loss and, for some, become something they never truly “get over” but rather exist as a part of their identity after that point (Klass, Silverman, and Nickman 1996). Loss is, instead, something that changes the bereaved person fundamentally. Rituals that become part of a bereaved person's life, such as visiting a grave, making time to say goodnight to a photo, or keeping and treasuring objects related to that lost person, are normal, valid, and ongoing aspects of the grieving process that may help cope with the loss (Klass, Silverman, and Nickman 1996). Continuing Bonds makes it clear that rather than a cessation of love or a relationship, the bereft relationship with the deceased changes but does not end (Klass, Silverman, and Nickman 1996). Many psychologists now consider grief an ongoing element of one's life (Corr, Corr, and Doka 2019).

Complicated Grief is grief that causes clinically significant problems for bereaved individuals, much like how a wound can become complicated when healing, leading to serious infections. Complicated Grief leads to “harmful dysfunction in that a normal healing process has been derailed” (Shear et al., 2011). Baglione et al. (2018) argue that the very framework of Complicated Grief has changed dramatically in the digital age. This new framework is represented in five phases: *fog*, *isolation*, *exploration*, *immersion*, and *stabilization* (Baglione et al., 2018). Fog refers to the sense that the bereaved often seem unaware of available resources or what would help them process the loss and heal. Isolation is just that: people frequently distance themselves from loved ones or don't trust those trying to help them. Isolation can also be the feeling experienced when the people who are supposed to support a bereaved person after a death-related loss don't, leading to the bereaved person feeling even more alone (Baglione et al., 2018). Exploration in the digital age includes reaching online for support, be it information, support networks, or just online groups where people can chat and share their stories of loss. Immersion happens when the bereaved person's journey through grief is marked by becoming more active in a community or group that lets them feel heard within the group. While people can move between exploration, isolation, and immersion, immersion eventually leads to a tipping point where lives can stabilize (Baglione et al. 2018).

Bereavement has also changed with the advent of the internet and social media. People once mourned in a more secluded and less globalized way or weren't reminded with notifications and photos of their lost loved ones on every anniversary or birthday via social media. Sometimes, people seek out distractions from those triggers, as in the Dual Process Model (Stroebe and Schut 1999). At other times, they seek out digital spaces where loved ones may have existed, like in a massively multiplayer online game (MMO), as Kohn outlines in their research (Kohn 2012). People also use these online spaces to share stories and memories with others who have experienced something similar; many bereaved individuals find the nature of online support helpful since it lets them opt in and out when they choose to engage with the restoration process (Baglione et al., 2018). Video games can act in both spheres of the Dual Process Model by allowing players to distract themselves and avoid facing grief emotions, but also allowing players to mingle in online spaces or perhaps play a game of a shared interest.

Kenneth Doka's work on disenfranchised grief (Kamerman and Doka 1991) outlines it as a loss that social norms did not consider legitimate, grievable, or accepted. He defines it as “the

grief that persons experience when they incur a loss that is not or cannot be openly acknowledged, publicly mourned, or socially supported (Kamerman and Doka 1991, 4). Doka outlined three ways grief is not recognized: the relationship isn't recognized, the loss itself isn't recognized, or the griever is not recognized (Ibid). In those instances, either the relationship isn't considered close enough, like a friend, colleague, or illegitimate partner, or the loss isn't seen as valid, like in the case of perinatal deaths like miscarriage, or the mourner isn't recognized, like children, elderly, or people with disabilities (Ibid). As will be discussed, *Jocoi*, a game centred around miscarriage, an often-disenfranchised loss in Western culture, is discussed. The game gives what is often considered a trivial loss a voice by empowering women who have experienced this loss to speak about it and share their stories with a broader audience.

Confronting Death Through Reflective Play

Carl Jung was a psychologist who never shied away from focusing on death and reminding people that it was healthy and natural to work through our lives, which he called seasons, with the winter and loss of bodily form being the final and utterly natural end of a well-lived life. He stated in letters to another psychoanalyst, "As a doctor, I am convinced that it is hygienic - if I may use the word - to discover in death a goal toward which one can strive and that shrinking away from it is something unhealthy and abnormal, which robs the second half of life of its purpose" (Jung 1969). Death creates meaning in life and reminds us of our time as something to work towards rather than be ignored or feared, willfully or not. Jung considered the developmental time of later in life, the "afternoon" of life, as important in the development of the self and that the quest for meaning doesn't end as you age (Kelleher, 1992). But for this growth to happen, the person must have experiences with death.

Jennifer Malkowski's book *Dying in Full Detail* examines death and how it has been represented in media, from intimate home videos to violent viral videos of death. She notes that most people in contemporary Western society (at least pre-COVID-19) have never seen an actual deceased person. Instead, they have seen some news/viral video of a glimpse of a dead body, a violent spectacle of death, or a made-up representation of death in some form of interactive media (Malkowski, pg. 13, 2017). Photos and videos of the dying seem removed somehow from the dying person's face, reducing the understanding of suffering and death that comes with confronting death

in person. Malkowski states that the camera distances itself by “letting us gaze as voyeurs at the suffering face without having to respond to it” (Malkowski, pg. 83, 2017). Coming face to face with death can feel overwhelming, at least in my experience, and there is a fear of talking and interacting with the dying. The distance the camera creates is where video games can become a tool to bridge this voyeurism by making death and loss seen, heard, and experienced in novel ways. Even if players haven't experienced a death-related loss, games can provide experiences where players can consider loss and, in turn, their place in life with greater appreciation. Stepping into someone else's shoes for a moment through the actions inherent in video games allows players to interact with the story and to experience “death” through a mediated experience.

Video games provide an excellent medium for death because they offer safe transformative spaces for players to experience death and loss in a place that doesn't require real-life tragedy. Players are required to engage with things even when it's a difficult situation to handle. For example, in a specific scene in *Brothers: A Tale of Two Sons*, a funerary practice occurs, and players are required to participate in it by pressing buttons and moving through the space. Stephen Curtis (2015), in his discussion of deathsetics, explains why games differ from other mediums in that:

Playing with death, or, even, playing at death, in this way opens dying up as an aesthetic experience for the individual, enabling to a certain extent an otherwise unknowable moment to be lived through. Obviously, such virtual death is not commensurate with its biological analogue, but its interactivity distinguishes it from the more static engagements with mortality to be found in traditional media (Curtis 2015, 99).

Loss in video games isn't new; death was used as a mechanic to teach players how to master the controls of a game very early on in arcades. While at one point, an in-game death may have cost real-world money to play again, the rise of home entertainment systems meant games no longer relied on the same value system. Instead of a coin, time and effort could be lost if players failed and died in the game world. Death as a failure mechanic now encourages players to gain mastery of in-game mechanics and game loops. However, Sabine Harrer asserts that loss in video games must focus on grief rather than mastery and a focus on the player's improvement, attachment and care instead of success within a game (Harrer 2019, 11).

Harrer also argues for the interactivity of games rather than the myth that simply because a video game is interactive makes it more emotionally powerful because players are given agency in a way that they aren't in other media. She explains that video games are "sites for emotional projection and personal meaning-making" (2019, 38). She explains how games, as cultural texts, create a unique picture of socio-political history through whom the game chooses to represent. Harrer uses close reading to analyze specific games that challenge the "death-as-failure" mechanic, or the trivialization of loss as a subject, and focuses on games that use unique strategies that model grief in the medium of video games (Harrer 2019). She discusses how important it is to consider games as a whole rather than removing one specific component (sound or UI elements, for example) and removing it from that contextual analysis. On this point, Harrer states, "Videogames have a cross-referential function in that they repurpose visual and auditory elements. They mediate art, history, and politics (Harrer, 2019, 12)."

Video games focusing on serious play can help players reflect on their life experiences and consider complex social issues. This reflective and transformative play can deepen their appreciation of the game's content and emotional impact. Reflective spaces can serve as touch points for processing complex emotions, challenging players to engage with darker themes of loss and grief in ways they might otherwise avoid. Games can act as what Khaled (2018) refers to as "reflective machines," a way to foster behavioural and attitudinal changes in players (Khaled 2018). Reflection can happen in superficial players' experiences, which may be present or considered regarding game experiences, or in a way that reflects on perspectives intentionally challenging players' beliefs, something Baumer called "transformative reflection" (2014). Immersion is often thought of as being moving. However, this might hinder players from seriously reflecting on complex social issues in video games. Experiences must be memorable enough to stick with players after turning a game off and allow players to go beyond the pursuit of "fun" in the way most developers consider it. Also, immersion can be counterproductive if it reduces the "safety" or distance of the game space. Nell (2002) applies this safety of the narrative space to assert that our denial of death and the mechanism that it creates, called Terror Management Theory (TMT), allows players to engage in risky behaviours we usually would not (for fear of death) or even to allow our playable character in the game to die. Nell posits that "the delight of the narrative

is its safety: the story-world, unlike dream worlds and the real world, is above all safe and non-threatening" (Neill 2013, 17).

The idea of “lingering” experiences that continue to resonate after the game ends encourages developers to design “serious experiences” that go beyond pure hedonic gameplay and narrative elements (Marsh and Costello 2013, Oliver and Bartsch 2010). I have included three example games in this thesis to push the norms of what players may consider “fun.” As Costello and Marsh recommend, I examine if they are serious experiences and look for evidence that they caused players to reflect on their lived experiences. I want to know if they affect players in the lingering way that continues after they have ended and how they achieve that result. I argue that the three games are subversive in specific ways, allowing time for players to consider their choices and the game itself. They require players to make hard choices in the game world, which means sitting through or acting upon complex content and serious situations (which they may not have encountered before).

Embodied Cognition and Loss: Examining the Intersection of Mind and Body in Video Games

When discussing how games affect us, it's necessary to remember that we are contextually located just by being in our bodies, a place and time, and our bodies influence our cognition and perception. Life experiences in those bodies form the background of how we process, perceive, and understand the world around us. Wilson (2002) states that their breakdown of embodied cognition has six claims. The most important of these claims for this thesis is that our cognition is situated; how we think is deeply tied to what our bodies do in the space around us, whether virtual or real (*Ibid.*). For video games, the idea is that even when we are not actively doing something, our brain is thinking about what to do next, and our bodily experience forms our thought processes even when we are not actively engaged in action (*Ibid.*).

Rusch, in the book *Making Deep Games: Designing Games with Meaning and Purpose*, outlines embodied experiences and how the experience can be more impactful than the content:

What is important to note is that embodied experience's potential to facilitate unique, medium-specific insights into the human condition lies in how it

enables understanding and sense making. Its lifelikeness or vividness concerns the process of experiencing, not the content (Rusch 2017, 73).

For a video game developer to use the embodied cognition framework, creating an experience that develops an easily understood narrative and taps into some level of the human condition is vital. Understanding how we think about the world through bodily experiences could help explore the human condition through meaningful game choices and actions.

How we see bodies in games relates to our understanding of our own bodies, how bodies function in the real world, and the cultural contextualization that informs our mental models. Jonne Arjoranta (2014), in their article on embodied cognition, discusses how our bodies are mapped to avatars. In their example of handedness in *Skyrim* (Bethesda, 2011), limitations of technology and how mice are mapped by default make it challenging to overcome the left click being a primary attack in games, making it hard for someone left-handed in a game like *Skyrim* to feel that the controls are intuitive. With the advent of more intuitive controller options, ones that mirror the bodies we inhabit and actions we intuitively know how to perform based on the knowledge we already have from the real world.

In *The Graveyard* (Game of Games 2008), players are presented with a short but moving story without much interaction. An older woman appears on screen, and players can only perform a few actions (left, right, forward, and backward). She ambles at a limping, unhurried pace, relying on a cane for balance. What works for *The Graveyard* is a sense of connection between the older woman and her movement; by being deliberately slow, unable to make sharp turns or run (things players expect in most games), the sense of her frailty and her age is embodied for the player. In *WIRED*, Chris Kohler explains why this game is so effective:

The Graveyard could have been a short film on YouTube and lost none of its presentational qualities or message. Nevertheless, even with the minimal interaction with the character—you can walk her forward and backward or turn—it instantly makes the connection more profound and powerful than it would have been if you were simply watching (Kohler, 2008.).

By forcing the player to walk in the elderly woman's shoes this way, we experience a connection with the character even though we know little about her and her life. As will be seen in the

discussion of *Brothers: A Tale of Two Sons* in the following chapters, this embodiment can be used significantly to engage the player in an experience of loss.

Chapter 4 - Case Studies - *Jocoi*, *Brothers: A Tale of Two Sons*, and *That Dragon, Cancer*

I have chosen three games to investigate in depth because of the unique ways they address bereavement and loss. Each will be examined as a case study, drawing from my playthrough experiences and analyzing Let's Play recordings of playthroughs from various popular game content creators. All the videos are publicly available; I have chosen to watch them on YouTube, though some were streamed live at one point or available elsewhere at one point (like on Twitch) and then posted to YouTube later.

The three games I have chosen to discuss embody or affect emotional player reactions in varying forms. *Jocoi* validates the often-disenfranchised loss of miscarriage by allowing women who experienced them to speak personally about their loss. *Brothers: A Tale of Two Sons* (referred to as *Brothers: A Tale of Two Sons* from here on) embodies gameplay in a way that few games have, using the physical controller's hardware to separate two unique playable characters played simultaneously, each with unique traits and behaviours. Losing half of your controller leaves the player with a deep sense of loss. It also uses made-up language to allow players to focus on the gameplay and story without getting caught up in what is being said. Instead, they act out and experience the narrative with each brother through their actions and interactions with the digital world. *That Dragon Cancer* also tells a real-life story: a family (the Greens) going through the diagnosis, treatment and death of their son Joel with a terminal illness. The stylized pixelated art of the game creates a surreal fly-on-the-wall experience that we walk through "with" the Greens. The fact that the game is such a personal story for the family brings players emotionally closer to the narrative. This game isn't about choices or interactions but about experiencing the same things the Greens have: hope, hopelessness, despair, confusion, and loss as they went through the unimaginable, the loss of a child to something as horrible as cancer.

Jocoi: Processing Experienced Grief Through Collaborative Game Design

Jocoi (Copenhagen Game Collective, 2017) by Sabine Harrer is a compelling game, and it impacted me personally because of the circumstances around my first pregnancy and subsequent

miscarriage. It's horrible to lose a child; no one wants to talk about it or even imagine it since it seems almost unnatural for parents to bury their children (or not even have that opportunity in the case of miscarriages). Disenfranchised grief is a topic that doesn't receive attention because it has no space or place to fit in culture or the spaces we deem worthy of memory or grief (Corr 1999, pg. 3). Without ritual, losses feel even more isolating; without the ability to talk or express our grief around a loss like a miscarriage, it becomes internalized, and the blame often falls on ourselves. It's horrible, feeling responsible for the death of your child, knowing they are gone forever, and at the same time willing to do anything to get them back. You lose a child, and the world doesn't acknowledge it as genuine; even the spaces where grief is allowed, like cemeteries, often have no place for something like this. For example, in Germany, among the rows is what you usually expect to find in some cemeteries, including smaller markers that often only contain one date or name. They call them *sternenkinder*, which means starchildren (Blane 2021), and they refer to lives lost before they had a chance to live them. From 2010 onwards, there was a shift in awareness around unspoken losses such as stillbirths and miscarriages.

I found a place in my hometown of Saskatoon, SK, in the Woodlawn Cemetery to create a space for the child I never got to meet, a place I found helpful in creating space for grief around something that often doesn't have one (see Figure 3). When I often go to the memorial, I find new toys, balloons, children's stuffed animals, or small baby items left at the stone, showing that many



Figure 3. Memorial stone at Woodlawn Cemetery for unborn children by Author (Elly Cockcroft).

people find comfort in having a space like this to go and remember physically. (some are starting to).

Some countries handle these pre-term losses better, socially and culturally. Japan, for example, has something called Mizuko Kuyo (Prichep 2015), a Buddhist ceremony that focuses on the pre-term loss of a child; this provides a ritual and place to grieve. The Buddhist God Jizo watches over them to guide them to the afterlife, and the family may purchase a small child-shaped



Figure 4. Jizo statue, Great Vow Zen Great Vow Zen Monastery (credit: Deena Prichep for NPR).

box and knit a small red hat and bib for Jizo, allowing some agency in caring for something in proxy of their child. This ritual validates loss and allows the bereaved to experience and speak about grief in a socially accepted way. Speaking about difficult and disenfranchised loss is hard; most societies don't want to talk about death, let alone a child's death, making it much harder for the bereaved. Some in Western countries have adopted this Buddhist ritual to help create a space for these losses where none exists, as discussed in an NPR article:

“The idea that life is suffering is one of the essential truths of Buddhism. And seeing that laid out so plainly — especially for losses that are usually so private — can bring people some peace. The American mizuko kuyo, at its heart, isn't about Jizo statues or chants. It's about compassion — for the losses we suffer, for everyone around us and for the lives all of us are living (Prichep 2015).”

The dialogue surrounding miscarriages still exists, and many families still feel the stigma around this sort of disenfranchised grief. In Victoria, BC, as of 2010, the [Little Spirits Garden](#) (“Little



Figure 5. Physical wireframes created during collaborative game design for *Jocoi*.

Spirits Garden,” n.d.) was created for this purpose. Parents of stillborn children wanting a burial in the Netherlands had to fight the restrictive laws around weight limits to have legal access to one. The monuments showing up in cemeteries to mark these losses in 2000 caused a large media reaction (Faro 2021). Loss is never easy; the loss of a child is a horrible thing. Having no way even to give voice to that loss and being told it isn’t valid in the first place is simply not acceptable. The beautiful and powerful thing Sabine Harrer has managed to do with *Jocoi* is to provide a way for women who have experienced a tragic loss to create a game that tells their story. The ordinary story of loss being explored from a personal experience as inspiration for game design is highlighted in her DIGRA talk in 2015. She argues for inviting grief into game design, claiming that she has “embraced a paradigmatic shift from game design as producing meaning and emotion towards game design as facilitation or mediation (Harrer and Schoenau-Fog 2015)”.

Through an Austrian self-help group, she collaborated with a group of women who had experienced a miscarriage and asked them to physically represent their experience or feelings around that loss with objects of their choice (see Figure 5). Each woman created wireframes from materials they brought from home that held meaning for them or with physical objects available to them to represent their lived experience of loss. Their experiences and objects led to a playable game made available to the public for free on itch.io, a platform to find and share video games. Itch is similar to Steam but more accessible for creators; it often has a free or “pay-what-you-can” option. The creation methodology and the resulting game gave meaning to a group of women who had experienced loss; it validated their experience, and the stories shared in the collaboration and creation were particularly unique and powerful to the resulting game *Jocoi*.

Harrer spoke about the game design she used for *Jocoi* at the GGC 2017 (Campus Gotland GAME 2017); she compares her style to the artist/muse relationship rather than working in a traditional game development process where the player is only involved in playtesting rather than in the actual design process (Harrer 2017). Instead, she tries to lay out the game in simple ways so that even players with minimal game experience can successfully navigate the game, including them in the creation and the accessibility by design gameplay. The simplicity includes one-click interactions and not overly complicated controls or cameras, so knowledge of game design conventions isn't needed to get through the game. The women who collaborated with Sabine Harrer were encouraged to share their stories in a group setting, discussing things about the children they lost or the point in the journey of grief they were in. This collaborative group setting allows everyone to discuss a taboo topic, giving them a platform to speak and be heard from. *Jocoi* isn't about challenging gameplay in the traditional way most games are, like mastering the controls. Instead, it allows a story that often goes unheard to be seen and heard in a way that validates grief.

Exploring Gameplay

Sabine Harrer prompts players in the introduction to *Jocoi* on itch.io with a breakdown of what the game is about:

Jocoi has been made as part of a research project investigating how video games can represent love, loss and grief through gameplay aesthetics. The landscapes and symbols used in Jocoi are inspired by images of four mothers who have lost their babies during pregnancy. They are intentionally left open to interpretation so that players can make sense of the game in response to their own experiences and the experiences of others. The game is made to honour the ongoing mother-child connection of bereaved parents. It can be used as a playful tool for sense-making in grief (Harrer 2017).

Jocoi's controls were made as simple as possible (left click for child-care, right click for self-care) to reflect the larger audience it wanted to offer this experience to, regardless of experience at playing games. The game is a product of this healing and meditative collaborative effort on the part of the women who gathered in a community and told their stories of grief to create a digital

product that reflected this shared validation and memory space. *Jocoi* grants players agency in shaping their lamb's coat colours and pattern through food selection and care; the inevitable loss feels more impactful since player actions create a unique lamb that is different every time. The idea of Continuing Bonds (Klass, Silverman, and Nickman 1996) rather than “moving on” is emphasized through caring for your lamb and yourself after its death. The process is meant to be followed through to the end, reflected in the loss that is created and the need for Continuing Bonds and family bonds through the sheep's continued existence alongside the sheep after the loss.

The controls that initially seem simple become confusing when used for everything from feeding, cuddling and settling down with your flock for the night. However, one thing that the gameplay does beautifully is the effects of how you nurture your lamb. Each flower you choose for your lamb is reflected in its coat, and the music in the background changes with the flowers you choose (see Figure 6). I didn't feed myself once from the flowers; instead, I gave my beautiful songs written in coded flowers to the lamb that jumped merrily by my side in our two-dimensional

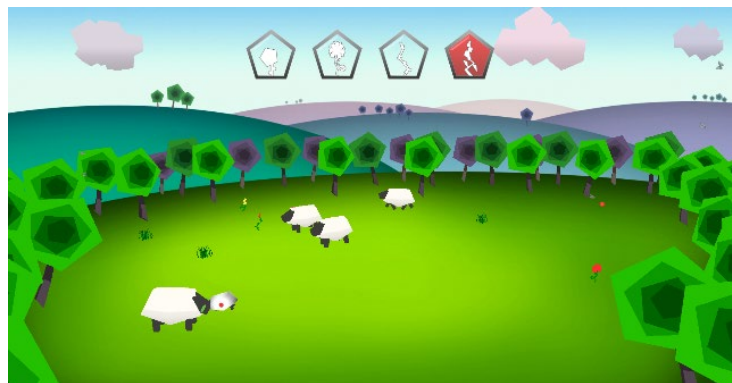


Figure 6. Feeding your lamb flowers, creating the colours/patterns of its wool in Jocoi.

virtual world. The other flock didn't pay any attention to us except to keep us warm on snowy mornings in the game. Life goes on like this within the game for a while, your little lamb's wool taking on the colours of every song/flower you've fed, a lovely mix of dots, spots, and beautiful lines.

Settling to sleep one night, you hear a crashing sound, thunder from a storm perhaps, or an earthquake on the rise near your perfect little meadow. You wake up the following day and the

lamb is gone; all the other sheep in the flock are staring across a river that's now visible, all except your lamb. Upon realization of her absence, one glance across the water shows a pack of wolves around a fire (see Figure 7). A wolf in the pack now bears the same colour patterns your lamb once had. A deep sense of foreboding takes hold. The other sheep return to their routines, eating and



Figure 7. After killing your lamb, the wolf now has the same colour/pattern as your lamb.

millling about, seemingly oblivious to your horror. Trying to get across the water to confront the wolves is futile; the screen goes black with only two words, "Let Go." You can't follow your lamb; it's dead, and you are alone. You can stand at the edge of that river watching the colours, once beautiful on your lamb's fleece and a sign of how you fed and nurtured it, now dancing on the wolf pup across the water. You can bleat at the wolves, which does nothing. The self-care button is the only thing you have now, but if you're like me, you stood in that meadow, looking across at the wolves and wondering, "Why?" Why me, why my lamb? Was it my fault? Did I do something to bring this down on them?

These are the same questions I asked after the initial numbness of the news of my miscarriage passed. The doctor told me she was sorry; she heard no heartbeat, and that was it; she left, and I was left alone to sit with that loss, eventually following her into her office to decide what to do next about my "problem." It was as if the world had somehow stopped for me, and it seemed surreal that everyone else didn't feel the same sense of wrongness and horror while people still went about their day. Crying didn't happen until I left; I sat in the car, began sobbing, and didn't believe it; how could I? I had heard that little heartbeat only weeks ago. How could it be gone? Nothing I could do would change that; it would do no good, like trying to swim across the river to get my dead lamb back from a pack of wolves. The game hit me hard in this aspect. The game continues while you sit and stare across the river, or perhaps you finally start to care for yourself, eating little songs and filling your belly for a while because it's all you have left.

The unique and powerful aspect of *Jocoi* lies in the game's creation and collaboration process; Sabine and the game collective only had a day to code this game with the help of a team. The women involved got to talk through their grief, share stories, and hold space within a group of people who deeply understood what they had been through. This process reflects lived experiences, and the game gives those disenfranchised losses a platform of validity. It also emphasizes breaking taboo topics in a setting that fosters empathy. For anyone playing the game, it gives them a way to experience some of that helplessness and frustration and the realization that, ultimately, all you can do is keep going, holding space for the loss but carrying it rather than letting it control you. This emphasizes that in bereavement, grief for some people can continue for their entire lives; the idea of Continuing Bonds (Klass, Silverman, and Nickman 1996) makes it clear that the end of a life doesn't necessarily mean the end of a relationship. *Jocoi* doesn't have a traditional win/lose end state; life continues, the sheep wake up and eat, sleep, seasons change, the river flows, and the bereaved sheep continues to live on in the herd. In my first playthrough of *Jocoi*, I quit after the lamb died and took some time away from it. When I picked it up the next time, I went through the motions, my sheep sleeping with her flock, seasons changing around us, but it didn't seem essential to play anymore with my lamb dead.

The ambiguous visual metaphors provide a way to journey through these stories of grief without it becoming overwhelming. It offers a chance to "journey through love and loss, but it didn't tell them what it was; it gave them a platform (Campus Gotland GAME 2017)," Harrer explains in her GDC 2017 talk on Inviting Grief Into Games. She stresses how ambiguity is essential to have many people map their own experiences into a video game to create virtual spaces for people to map their own experiences of loss or bereavement onto or perhaps to understand better what it would be like to experience loss. We all encounter losses, not all of which are death-related.

Let's Play (or not?)

Harrer (2019) discusses the need for loss and bereavement to be acknowledged and heard by society in general. In her research, Harrer emphasizes authentic voices of grief to be heard; her research develops a framework for grief-based design and the idea that uncomfortable or difficult experiences can be made "more speakable" through interactive media (Harrer 2019). The death-as-failure mechanic used in most known games (think *Mario Brothers: A Tale of Two Sons*

Nintendo 1985) contradicts many aspects of death and how it plays out in real life versus the virtual world; Harrer clarifies that her work tries to tackle this contradiction.

Apart from being performance-oriented, the kind of 'death work' found in many games is framed as a solitary rather than a social activity. This is the third contradiction to death in life. Loss necessarily raises the question of social connectivity, not least because the loved one was part of a social fabric before they died. So, while dealing with a loss may include self-management and introspection, it also affects social constellations and requires the bereaved to reframe their place in society (Harrer, 2019, 10).

Harrer aims to examine representation in games, how grief is understood as a valid lived experience, the need for grief, rather than self-improvement, to be the focus, and the necessity of loss in games being associated with care and attachment rather than the usual functional aspects of mastery and success (Harrer 2019). *Jocoi* meets these needs; it involves voices of lived experiences of grief, loss, and bereavement and gives them a medium to speak to others about a difficult and uncomfortable topic. This game validates lived experiences of grief in a way that surpasses the standard death-as-failure paradigm often seen in mainstream Triple-A (AAA big-budget game makers) games.

There are no "Let's Play" videos that I could find available to review for affective insight into player experience or many reviews on Itch. Reading Harrer's book, *Games and Bereavement*, and my background, having experienced a miscarriage in my second trimester, puts me in a unique position to discuss this topic. When it occurs, child loss is something that mainstream hegemony does not like to speak about in my society (Anglo-Canadian); it becomes taboo, met with quick subject changes or odd silences. Suffering a miscarriage, even very early in the pregnancy, takes more away than just the physical; you lose a future. The possibility of life brings new thoughts, expectations, dreams, and images of how things might be; losing that child in utero makes it no less horrifying or deeply felt. Every Mother's Day, I write a letter to the child I never met or held. I leave it on the tombstone where her name is carved in stone, Rue. I light a candle and remind myself that her heartbeat once beat; it matters to remember, to recall the sound. Rituals allow us to create meaning from a chaotic and horrific experience, and games can create and allow players to experience or witness them.

In her talk at GGC 2017 (Campus Gotland GAME 2017), Harrer discusses grief-based game design and her annual ritual of returning to her child's grave to paint the headstone with beautiful, playful colours and themes, creating space to speak about being a bereaved parent, which she insists needs to happen. She also talks about finding support groups and the comfort they gave her in a world that doesn't want to acknowledge the bereavement that lives with her every day (Campus Gotland GAME 2017). This inspired her to make spaces for grief to be experienced playfully; she recognized loss as ordinary, and if it's shared, that joy can exist alongside heartache.

Brothers: A Tale of Two Sons - Navigating Loss Through Intuitive Control Mapping and Intentional Design

Unlike *Jocoi* and *That Dragon Cancer* (covered next), which tell stories of a lived experience, *Brothers: A Tale of Two Sons* takes a more classic "gamey" approach to its core mechanics. It is a puzzle platformer-style game (think Nintendo's *Mario Brothers: A Tale of Two Sons*). It uses timing, skill mastery, and clear-cut "levels" to navigate its story. However, platformer games are often associated with simple narratives, not the type of story you see in *Brothers: A Tale of Two Sons*. This game is about sacrifice, navigating loss, and overcoming challenges hidden in an adventure game. A pair of *Brothers: A Tale of Two Sons* must grow up faster than they should, relying on one another to navigate a dangerous world and save their dying father (see Figure 8), and in the process, learn resilience in the face of adversity and loss.



Figure 8. The start of the brothers journey to save their father.

One of the critical design elements of *Brothers: A Tale of Two Sons* is how the player interacts with each brother through the physical controller. Each brother is mapped to a distinct controller side and has unique abilities to solve the game's many puzzles. Which platform/hardware the player uses to play the game can dramatically change how the game is

experienced. The player controls each brother with either the left or right hand. This control scheme requires high coordination to navigate the *Brothers: A Tale of Two Sons* through their shared tasks. However, it also gives a sense of satisfaction (skill mastery) when the two *Brothers: A Tale of Two Sons* get it right; they genuinely need to work together to succeed. Partnership, love, and conquering fears in the face of adversity are the general themes of *Brothers: A Tale of Two Sons*. Playing two unique characters simultaneously, with unique actions, and becoming accustomed to having two sets of actions representing two people in your hands that losing one, even after only a few hours, feels like someone has stolen something from you. Players are left at a loss in the last piece of the gameplay, suddenly unsure of how to move forward and continue without using the other side of the controller, bereft of a brother, of access to half your known controls.

With the idea of bereavement in a video game having an affect, *Brothers: A Tale of Two Sons* reaches across the perception gap into embodiment. Mapping each brother to a specific part of a controller, with which players interact (and it, in turn, reacts back), can lead to what Rusch described as a way of creating understanding and sense-making (Rusch, pg. 73, 2017). In this way, the controller becomes part of an embodied experience by making sense contextually, and the experience becomes impactful in a way that traditional controls wouldn't.

Exploring Gameplay

The game begins with a cutscene of a young boy, Naiee, on a boat during a storm. A blonde woman, we assume his mother, is seen drowning (see Figure 9) just beside the boat; there is a

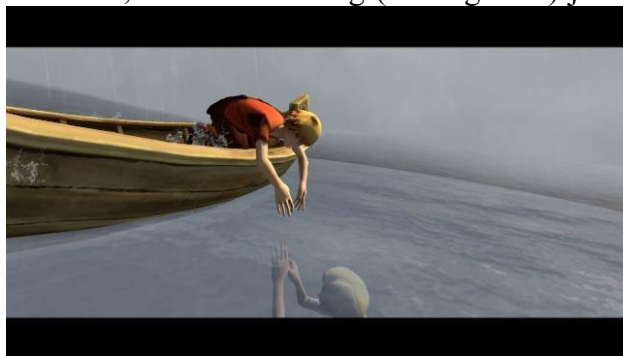


Figure 9. Opening cinematic in *Brothers: A Tale of Two Sons* showing the youngest failing to save his mother in a storm, sense of helplessness; players watch during a cutscene as she drowns despite Naiee's attempts to save her. Their journey begins with Naiee, the younger brother, and his older brother, Naia, each

willing to risk their lives to save their father, who is now ill and dying and needs a cure from a far-off magical tree.

The digital world of the game is visually stunning. Its soundscape is carefully curated with haunting melodies and lyrics in an unknown language, creating an emotionally charged experience. Even though the language is fiction (like Simish in *The Sims* games), words aren't necessary to convey the story, and actions reveal each brother's take on the world. When Naia tries to politely wake a guard near a closed bridge to no avail, Naiee wins with his childish pranks. At another point, Naiee stops to rock a grandmother on her chair playfully. The brothers' actions are intrinsically tied to their character. This unfolds as you play the game: the younger Naiee is playful and sincere, while Naia must make his way through the world while carrying the weight of being the oldest, caring for a brother and saving a father.

Naia needs to take his position as an older brother much more seriously because as the story progresses, we realize how dangerous this world can be and how monumental the task the doctor assigned them. The story continues past an angry dog and close calls in a cave with great spanning heights and ancient technology. The boys help a troll who requires assistance after his partner is kidnapped; it is only possible because Naiee can fit through the narrow bars of the cage while Naia operates the large levers. Here, as in many of the game's challenges, it is apparent how vital each brother is to carry out specific roles to navigate this world. Their success depends on each other's skills and the player's actions to advance the storyline.

Death is a central theme throughout the game, visualized in many images and themes. In one area (see Figure 10), players face down corpses of giants, the aftermath of a war, now existing



Figure 10. Dead giants litter one scene in *Brothers: A Tale of Two Sons*.

only as more paths to discover, manipulating giant arms or legs as pathways to the next area. Later in the game, players can see a man about to hang himself (see Figure 11) unless players intervene

quickly by cutting him down before he drops. If players do cut him down, he merely crumples to the ground, sobbing. The charred remains of his dead family are wrapped beside him, something



Figure 11. Saving a man who has attempted to hang himself in *Brothers: A Tale of Two Sons*.

most players overlook (I certainly did) until after they have already intervened. That scene left me unsure whether I did the right thing in saving him. In another scene, you navigate a wasteland of war; bodies left where they fell, some with weapons through them or limbs at odd angles that become part of navigating through the space.

One issue with *Brothers: A Tale of Two Sons* worth noting is the representation of women in the game. They serve as either a plot device to forward the male storylines or as a seductive and deceitful predator to be defeated. The women in this game include the boys' mother, who dies in the first scene, the troll captured and saved by the *Brothers: A Tale of Two Sons*, and a young girl rescued from a sacrificial ritual. The young girl they rescue appears at first to be a victim but instead transforms into a monstrous spider/woman (see Figure 12), becoming the game's final



Figure 12. The young girl transformed into a monstrous spider, ultimately killing the older brother in *Brothers: A Tale of Two* fateful battle. Barbara Creed (1993) highlights how women are often represented in film and pop culture as victims and as the monstrous feminine (Creed 1993). The young girl is saved, only to become the monstrous instrument of death for Naia. While it is beyond the scope of this thesis, the representation of women in video games deserves to be considered. Sarah Stang (Stang, 2019) and her research into the idea of the monstrous feminine as it pertains to media, in this case, video

games, continues the work done by Barbara Creed on the representation of women and the monstrous feminine in horror movies (Creed 1993).

As mentioned earlier, one element that sets the game apart is splitting the controller into two halves. Naia is your left hand, and Naiee is your right; each boy has one side, from the trigger buttons to the analogue joystick. The importance of how all the puzzles work is that each boy has unique skills. Naia is older, stronger, and capable of pulling heavier mechanisms. In contrast, Naiee is physically smaller, can fit through bars and smaller spaces, and is lighter on his feet. This unique separation of the two *Brothers: A Tale of Two Sons* on the controller becomes a necessary part of the gameplay because when you eventually lose one of the *Brothers: A Tale of Two Sons*, the profound loss is felt not just through the narrative and gameplay elements but also physically. Suddenly, strategies you have developed for the last six hours to solve problems no longer work. I stopped, stared at the screen briefly, and tried to figure out what to do. I can speak personally about my experience with loss (and have heard similar accounts); it's like time stands still, and you don't understand how you can keep going or why. Losing one of the *Brothers: A Tale of Two Sons* in this game gives the same feeling of turmoil and confusion. You stand, unsure of what to do to complete the game. Suddenly, half the controller is unusable, puzzles are unsolvable, and the daunting task of moving forward seems impossible. You eventually can continue the game bereft of half the controls when you figure out that you must use both sides regardless; the controller rumbles (haptic feedback) as if he were still there with you. It helps to reinforce the idea that people we love may die, but those relationships continue. You aren't alone; remembering can be a gift, though sometimes it may not feel like it. In the end, that is the message of this game: we must experience loss and grief and move forward after experiencing trauma, relying on our love and memories of those who are now gone.

Let's Play Case Studies

PewDiePie

Felix Arvid Ulf Kjellberg, known online as PewDiePie ([@PewDiePie](https://www.youtube.com/channel/UCX6OQ3DQ64N21i3hZ888888)), plays *Brothers: A Tale of Two Sons* from start to finish in a video titled "LETS GO ON A JOURNEY - *Brothers: A Tale of Two Sons* - full gameplay" on YouTube (Kjellberg 2014). His videos are often comical, the banter rather silly, which continues throughout most of this video. After Naia is injured in the encounter with the spider woman, Naiee is forced to help his older brother to the healing tree; the

game's end goal is in sight. PewDiePie is saddened by the brother being sick, but the change in his demeanour is suddenly apparent when Naiee gets down from the tree to find his older brother dead against the tree. At 2:06 in the video, we first see that Naia has died, and the burial begins (see Figure 13). When Naia dies, he comments, "God damn it, I had a feeling one of them would die; that sucks; well, he's with his mom now." PewDiePie sighs loudly, and the dismay on his part is evident; the idea that even in the game, he feels a sense of peace knowing that Naia is now with the mother who had died earlier in the game seems powerful.



Figure 13. Burying your brother, a participatory ritual scene in Brothers: A Tale of Two Sons.

As the burial starts, it creates substantial emotional changes in PewDiePie's tone and words; sudden silence starkly contrasts with PewDiePie's usual banter. He blinks repeatedly and swallows hard. He focuses entirely on the game and ignores the spectators watching him. PewDiePie encourages Naiee to dig his brother's grave in-game with his bare hands and walk back to his brother's corpse between sobs. He even gives small words of encouragement like "It's ok, you're almost done, almost there," until PewDiePie is actively forced via controls to pick up the body of his brother and carry him to the grave, to which he responds, "this is pretty fucked up." The actions he takes in-game seem surprising to him. He participates in the burial ritual of a character he previously played and grew to have a relationship with through their joint actions and narrative. This participation pushes the player into active participation rather than a passive viewer in the burial ritual. Requiring the player to partake in and interact with a burial is not something most video games ask players to do.

According to the definition of meaningful play (Salen and Zimmerman 2004, 31), creating something more than the sum of its descriptive mechanics creates meaning for players; the gameplay and actions are discernable and integrated to make sense and contextually relevant within the game. My examination of PewDiePie's playthrough does not assume that merely

creating emotion is enough to cause a meaningful encounter with death; however, it shows the immediate effect this game can impart and how a player reacts contextually to the narrative and gameplay elements, even when they are aware of their audience (like a streamer). Reviews and comments on the game through the Steam platform (a program used to download and play games) range from remarking on the game's style to personal anecdotes about the game's theme and story. It is also clear from the comments that people found the game powerful and moving. They talk about how impactful the game was, how they cried, and how storytelling is a powerful tool in video games. One player's comment was retelling their story about having lost a sibling themselves and how they felt even more moved by this game:

I have two sons... like the characters of this game, they stick to each other like in the game and behave like in the game. But there is always the possibility that some dies for real... I think if you have some experiences in your life like the death of a brother, sister, parent, spouse or raise a family etc., this game is even more heartbreaking. I really cried, when I have to swim at the end, feeling my dead brother disappear. Everything will stay and will leave it's footprints in everything that was touched before. My thoughts are with you."
(gauspohl 2017).

Our death-related experiences and attitudes are reflected in our reactions and perception of death in media (Corr, Corr, and Doka 2019) and carry over to video games. One issue with video games is the history of death being reversible, something trivial, a risk-free endeavour (Klastrup 2006). The idea of taking death seriously as a topic in video games becomes more critical as the focus shifts from the inner digital game space to our own experiences with loss and grief. This gives players a chance to reflect on their experiences with loss, colouring the digital game world with personal experiences of loss through reflective gameplay.

BogOtter

Richie Procopio, aka Bogotter ([@BogOtter](#)) "Let's Play" video of "Brothers: A Tale of Two Sons Full Playthrough" is available on their YouTube channel (Bog Otter 2016). Again, these streamers are accustomed to performing for an audience. The silliness that usually accompanies them vanishes, much like PewDiePie's, in the emotionally challenging scenes I focus on for this thesis. BogOtter is singing a song from a Disney movie and joking around in the moments leading

up to Naias's death. Upon his death, BogOtter remains silent, the banter broken, and his quiet sighs and sniffles make it clear that he struggles to control his emotions. He blinks back through tears while he remarks on the scene's beauty, but he can no longer contain his feelings (see Figure 14).



Figure 14. Bogotter gets emotional during the scene where the older brother dies in his Let's Play of *Brothers: A Tale of Two*

His comments on the burial scene are like PewDiePie's: "We literally have to drag him to his grave? This is like gut-wrenching. Unbelievably sad, we literally have to cover him with dirt. Oh my god" (BogOtter 2016). Afterwards, when facing the gameplay at the end without the big brother, he remarks, "We don't have the brother anymore... my whole left hand isn't doing anything anymore! He's afraid of water by himself; he doesn't have his brother" (BogOtter 2016). He then realizes that the left trigger, which used to control Naia, is now what you continue to use even after his death: "It's incredible that the mechanics use the controls of the big brother to continue to help him; he wasn't able to use (the switch) before if I use the right trigger alone he still can't but if I use the left too he can, oh my god" (BogOtter 2016). The way the game's controller mechanics embody each brother was not lost on BogOtter; the results were impactful based on his behaviour after losing half the controls and learning how to use them again.

As seen in the "Let's Play" with BogOtter, it's clear that this scene (burying the elder brother) consistently seemed the most impactful. The affective nature of the combination of narrative storytelling, soundscape, visuals, mechanics and interactions allowed players to reflect on loss, bereavement, and life's continuity. People are shocked that they are forced to actively bury Naia as Naiee, participating personally through the controls rather than being passive bystanders. As discussed previously, SDT posits that for a game to have that "pull" to it, it requires autonomy, competence, and relatedness (Ryan, Rigby, and Przybylski 2006). In this case, *Brothers: A Tale of Two Sons* allows players a high level of autonomy by creating many meaningful opportunities to stop progress, pause, and reflect throughout the gameplay. It also allows players to connect with the characters; competency and skill mastery of controls are already baked into the game's

mechanics by design (platform, puzzles, managing two characters). *Brothers: A Tale of Two Sons* removes a level of personal autonomy and forces players to engage in something they might expect to like, such as participating in the funeral scene rather than viewing it as a cutscene. This creates an impactful moment in the game by breaking the known expectations and preconceptions, like in this case:

Holy crap. Wow. I still can't fully talk yet, you know, it's not every day you have a game or a book or a movie or tv show that hits you like this, you know; I like when this happens, you know? You really feel it's powerful; wow. That's the most broken down I've ever been on stream before; it's a very rare game that combines it all like that (Bog Otter 2016).

Embodiment in gameplay is a commonly discussed behaviour, and this is an excellent example of bringing the theoretical into the physical. Mapping the *Brothers: A Tale of Two Sons*' personalities and actions to physical, in-game mechanical and haptic systems changes how players interact with the game. It creates a shock when half your mapped controls suddenly stop working. After that initial shock of the burial comes a moment of shock, "How do I tackle this new puzzle without my big brother?". This line of questioning could have real-life reflection built into it, asking players: how do I move on after I have lost someone? Why do tasks that I could do before now seem daunting without support and companionship? These are difficult to answer and require a personal journey through grief. It may even allow players to realize that, like in the game, the power of resilience and self-discovery can happen after a tragic loss.

That Dragon, Cancer - Bearing Witness: Video Games as Living Memorials

Much like *Jocoi* (Copenhagen Game Collective, 2015), *That Dragon, Cancer* explores a family's story of the heartbreak of losing a child and how they coped during the diagnosis and after the loss. The impact of *That Dragon, Cancer* lies in the emotional narrative and unique blend of interaction, storytelling and living memorial for a family's loss. It also allows players to bear witness and hold space as they follow along in a story of loss. Amy and Ryan Green discovered

that their youngest son (at the time), Joel, was diagnosed with cancer at one year old. On a harrowing night of treatment at the hospital, Ryan was attempting to console Joel when he was



*Figure 15. The video game idea that inspired the creation of *That Dragon, Cancer*.*

crying despairingly and sick to the point that nothing Ryan tried helped. He thought, “This is like a videogame where the mechanics are subverted and don't work” (Tanz 2016). This inspired them to create a video game to share the narrative they had lived, a story they wanted to share with the world. Memorials are essential ways to mark the lives of lost loved ones; this is true in the corporeal world as much as in digital ones, like in video games (for further reading, see Carpenter 2020, Kohn 2012). The rise of digital spaces and social networking means people grieve differently (Baglione et al., 2018). The Green family was able to create a story that also captured a memorial of their son and their experience through terminal illness and losing a child.

The Greens intended to show how life can sometimes feel overwhelming, but that in the emotional rollercoaster of losing a child, they felt, in the end, they did the best they could. All they could do was rely on grace and their faith; it was out of their hands. The struggle to get to that point of acceptance is where the game takes place. The game uses moments of joy, crushing lows, and confusion to tell how hope can be exhausting. In the Green family's eyes, it was God's decision; they could only pray for him now. I can't imagine how freeing it must have felt for the Green family to sit back and say, “It's now in someone else's hands,” be that doctors, God, or fate. The game requires players to work through this emotional labour, holding space with the Greens as the story unfolds in the game.

The game was created to tell the story of love and loss, though it began development before Joel's death. It says a lot about the families' desire to memorialize that loss and create a space for Joel to exist eternally, for themselves and for the people Joel's story touched. It also brings up so

many things universally experienced when someone close struggles with a terminal illness. Common themes we all question are hope, faith, love, and whether expectations are realistic.

This study of interactive grief in video games has shed light on the transformative power of the medium in navigating emotional experiences. By examining how players engage with and respond to these games, we continue to explore the potential for video games to provide unique avenues for healing, catharsis, and personal growth in the face of loss and adversity. It is not only about building narratives around taboo topics; it also gives rise to communities around them, allowing people to feel heard and validated. In a study focused on a model for complicated grief in the digital age, Baglione et al. found people sought out art, media, and other experiences that reflected their own, and over 91 percent of their respondents joined online support groups over half found it helpful (Baglione et al. 2018). This ties into the Dual Process Model of grief (Stroebe and Shut 1999), in that sometimes people seek out the connections and reminders of loss and actively avoid them. It isn't a far stretch to suggest games that deal with these topics help ease some of this burden, helping those who have had similar experiences, feel less alone.

Santos, Maciel, and Periera (2018) analyzed players' perceptions of *That Dragon, Cancer* and *Valiant Hearts: The Great War*, two video games focused on narrative impact and empathetic gameplay. Using netnography, they studied the impact of these games on players, especially concerning loss and grief, through comments in online communities and on the Steam page (Santos et al., 2018). In this study, they discovered video games can be helpful in personalizing stories, creating powerful narratives that move beyond static mediums, and allowing players to reflect on the experiences they encounter in video games in a safe environment (Santos et al., 2018).

That Dragon, Cancer isn't about complex gameplay mechanics or confusing combat systems; it's a linear walking simulator, slowly guiding players through the Green family's path of Joel's diagnosis and death. It builds in areas of exploration and rest between game sections, allowing players to explore art left on walls, many with clear religious symbols and notes from Kickstarter patrons (a crowdfunding platform that initially made this game possible) who left cards and letters to loved ones they lost, or just words of support for whoever happens to wander down those hallways in the future. These spaces feel essential to the game experience; they create liminal spaces between gameplay beats to sit with emotions. In these catacomb-like spaces, long hospital hallways littered with children's handprints and letters of loss, love, and hope, players can find a

sense of loss and hope. I didn't read every letter, but their vastness is telling. It shows that many people have experienced profound loss; you're not alone. Much like the benches strategically placed in *Brothers: A Tale of Two Sons*, *That Dragon, Cancer* creates room for reflection because it teaches its players something valuable (Baumer et al. 2014): the value of life, love, and grief.

Exploring Gameplay

The game opens with a scene of simple joy: a family feeding ducks on an island surrounded by water. There is, however, an overarching feeling of dread. The trees are stark and black, and clumps of black pulsating objects are in the water. Whispers of doubt are spoken if you stray down specific paths, hinting that nothing is as it seems; it is quickly revealed that Joel has cancer. The next scene drifts away from the island of play, no longer isolated from the bad things that happen outside. It's here that the story unravels. An empty room and a lone chair (see Figure 16), the words "Hospital Time" accompany the new chapter.

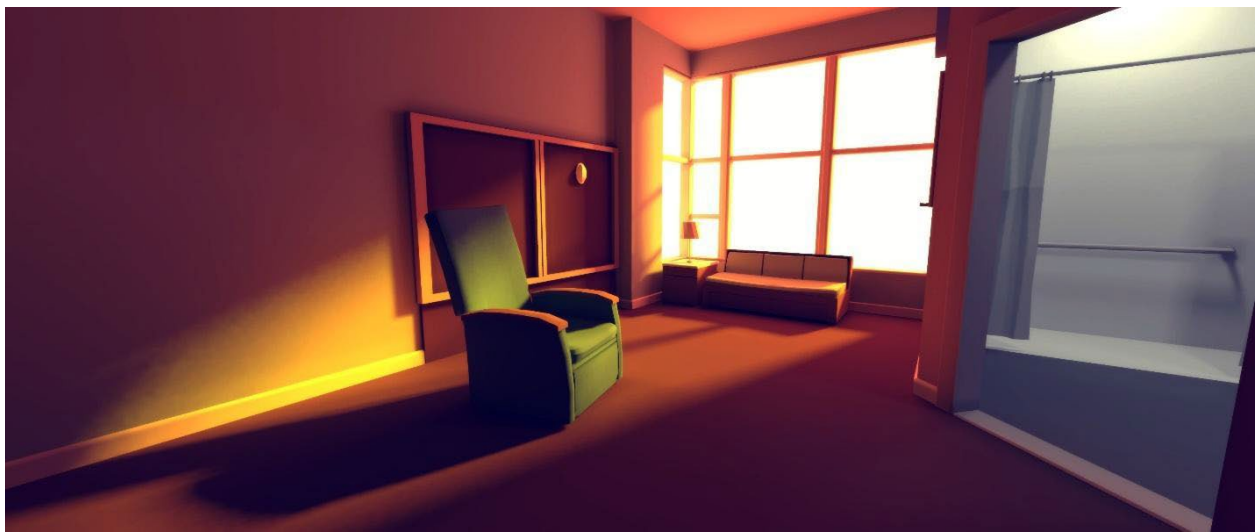


Figure 16. An empty hospital room with an empty chair originally mistaken for intentional pause in *That Dragon, Cancer*.

I stared at my monitor in the real world, displaying that empty chair in the hospital room, and waited for what felt like forever. It took at least 5 minutes before I realized something had gone wrong. At this moment, I took a step back from the game and pondered why it felt so fitting, even as a glitch (which I now knew it was). Why did it feel so appropriate to sit and wait? It's hospital time; I know from personal experience what that means. I have sat in emergency rooms at all hours of the night and into the morning, worrying, and waiting for what feels like an eternity. I have also remained with loved ones in life-threatening situations in hospitals where time seems

to stop. All the hectic movements and noises around you disappear, and you can't comprehend how anyone else hasn't noticed that the world has ceased to exist. Then, in the next moment, it can move frenetically, leaving you unable to keep up and feeling left behind at every word someone tries to tell you.

The game is broken up into scenes, with a title explaining it; each move through the diagnosis and treatment Joel will receive. The game features a lot of Christian imagery and themes since the Green family is Christian, and their faith is a central part of Joel's story; it also creates some issues between Ryan and Amy regarding hoping beyond hope that miracles happen and being realistic about outcomes. One scene, titled "I'm Sorry Guys, It's Not Good," stands out; it's when the Green family hears the news that Joel's tumour is terminal. It begins with a child's toy (see Figure 17), employing known affordances, meaning players intuitively understand how to use an object in the game world because it is understood outside the game world (Rowley, 2022). This



Figure 17. A unique game affordance being used to show each character's voice on the situation in That Dragon, Cancer. toy shows animals on a plastic ring; a string is pulled, and that animal makes its sound. This mechanic is re-used as the news about Joel's terminal diagnosis is told to the family, and suddenly, the doctor, nurse, and Greens are on the game. Pointing the arrow to an individual and pulling the string lets you hear the thoughts running through their head. You notice the room filling with water as you listen to their thoughts. A storm rages as Joel's avatar sails away in a boat to the next scene.

In the next scene, Joel lies in his mother's arms in the boat, and her thoughts are of hope for a miracle. However, Ryan faces darker thoughts and insists that, despite his envy of his wife's unstoppable optimism in the face of dire news and their son's impending demise, he also needs to process his feelings. He needs to come to terms with a loss he understands as inevitable while also counting on the impossible to happen. This is an example of how grief isn't universal; everyone processes those emotions uniquely and at their own pace. Even though it's tempting to put timelines on grief or fixed frameworks like Kubler-Ross (Kübler-Ross 1997) in the stages of grief,

even she made it clear that they were never intended as a rigid model. Ryan wants to sit with these feelings without feeling guilty about not having the same sort of hope that Amy has. As players, we try to desperately swim back up to the water's surface and into the boat with Joel and Amy, but no matter what the player does, the only option is to go deeper into the dark water. Ryan and Amy both deal with Joel's illness in different ways. *That Dragon, Cancer* lets players hear the confessions of a family in crisis and watch the family struggle with their thoughts and feelings around loss, what it means to them, faith, and family. It's a rare game that can allow you a window into such a raw story, within the context of a video game, a digital memorial shared with the world.

Let's Play Case Studies:

The BS

My favourite "Let's Play" view was with Matt and Lissy, [@bowlingotter](#), a couple who play games and stream them on their YouTube channel [The BS](#) (<https://www.youtube.com/watch?v=cSolvwVuz0>) (The BS 2016). This playthrough is unique since it is a couple's view of another family's struggles and contains two reactions to the game. The game starts quickly with the scene of the Green family playing out over Joel's laughing and interacting with his brother and the ducks. They pause the game only a few minutes after realizing that the dialogue felt too emotional to be scripted; the game uses audio from home movies to provide authenticity. It quickly becomes apparent that the game isn't a warm, heartfelt journey through a cancer diagnosis but rather a memorial.

As the second chapter opens in the hospital, the couple are silent, eyes wide, as they realize this isn't going to be a "fun" playthrough. Lissy comments that she needs to prepare herself. Thirteen minutes in, Lissy is already wiping tears from her eyes (see Figure 18). By twenty-six



Figure 18. Matt and Lissy, already emotional very early into the Let's Play of *That Dragon, Cancer*.

minutes, Matt is swiping away tears very sneakily during one of the mini games; Lissy asks, "Are they picking up fruit or something?" only to see the colourful pieces collected in the go-kart were chemo drugs and treatments like lumbar punctures. Lissy and Matt frequently comment on their dread of progressing through the game. Lissy remarks, "Nowhere is a friendly place, and any good moments you have are smashed by what's happening," the idea that even with moments of silliness or humour, you can't escape the story of loss unfolding in front of you.

During the scene with the animal toy where they find out Joel is incurable, they noted how it was very clever: how the wheel teaches you to use it, then swap out the animals for the people in the room to hear each person in the room's thoughts during that conversation. Absolute silence reigns in this part of the game. At the point where the game tells the story of "Joel the Baby Knight" and the quest to kill the dragon named Cancer, they realize that even though they have done very well in the mini-game boss fight, they can't win. No matter how well you do, sometimes you can't win, along with words like "that's messed up."

During the dreaded "Dehydration" scene, where Joel begins crying inconsolably, Lissy notes with a grimace how uncomfortable it is to hear (see Figure 19). It is painful to listen to a child letting the world know how much pain they are in and be completely unable to help. I



Figure 19. An emotional scene in *That Dragon, Cancer* where baby Joels crying for minutes.

approached this scene with my discomfort but felt it was my lot to at least hear it out because I couldn't imagine what it must have been like for the Green family. The scene is brutal to experience and emotionally challenging to get through. Lissy notes it's "one of the most horrible things I've experienced." When the scene ends and Joel sleeps, Lissy describes how helpless she feels; she wants to comfort Joel. The feeling of hopelessness and loss of control is brilliantly translated into five minutes of raw screaming (which *feels* like an hour). Even ten minutes later, they still

remember Joel's scream, how it stuck with them, and how it sparked something in them that they can't shake; several times, they call it the worst thing they have ever heard.

At the end of the playthrough, the couple sits with Joel in the envisioned "heaven" his parents created for him (see Figure 20). They remark on how long you can sit in the end scene, reflect on the game, and be present with Joel. The catharsis of having a space like that for grieving



Figure 20. Final scene of *That Dragon, Cancer* is a digital afterlife where Joel can have all the things he loved.

a lost child is precious; it's a space built into a virtual world that the Greens can go to at any time to exist with and blow bubbles for Joel and his pug, Manju (he always wanted a dog). As the scene fades out, Lissy is shocked that they can't just stay and asks several times why she can't stay with him and the pancakes instead of moving up and onwards. The photo credits at the end seem to drive home the reality of the situation they just witnessed, including photos of Joel and the Greens and their journey through his life and cancer. At the end of the game, Lissy and Matty remark: "He had such good parents. At least he had that. I mean, they made this game for him. He's immortalized in this." Despite acknowledging how difficult the game was to sit through, especially the scene with Joel crying uncontrollably, they still appreciate it and laud it for pushing the medium of video games in a new way. They feel "closer" to death and cancer than ever before because of how the game involved them.

PewDiePie

PewDiePie ([@PewDiePie](#)) also did a playthrough of *That Dragon, Cancer* titled "THIS GAME WILL MAKE YOU WEEP (*That Dragon, Cancer*)" viewable on YouTube channel (PewDiePie 2016). His mannerisms and playful demeanour make him an interesting case for this game as a "Let's Play" since it seems to be at odds with that type of commentary and play style. He begins,

as usual, with some comical jokes and observations about playing as a duck: "Best game ever!" As the game progresses, PewDiePie's typical charisma leaks through in some scenes, but there are pauses and quiet that permeate his gameplay. In the "Hospital Time" scene, he remarks that he is "not sure if he is emotionally prepared for this" and notes that it feels "very, very heavy." He sometimes feels confused, "I don't know what I am doing, but I am doing it," he mentions at one point in the "Hospital Time" scene. I think this drives home the idea that the Greens embedded memories and thoughts, as well as their personal experiences, into the game experience, and it sometimes feels challenging to follow or make sense of; this is a lot of what losing someone or remembering experiences can be like. PewDiePie remarks that he works with many Make-A-Wish requests to meet him, and he feels it is motivating that his content helps people in tough times, and he is glad to be a part of their experience. PewDiePie talks at the start of the go-kart scene about how he does not talk about it much, but he realizes through the Make-A-Wish program that he is engaged with how vital our health is and how we take for granted that we are healthy. He also notes that every time he does a Make-A-Wish program, it opens his eyes to the hardships others face, and this game "brings that feeling back." He takes on a sombre tone here and sniffs occasionally, the game affecting him emotionally (see Figure 21).



Figure 21. PewDiePie during an emotional scene in That Dragon, Cancer wiping away tears.

In the radiation treatment room or the "Temple of Man" scene, Joel is being silly and showing people his favourite game (letting a full balloon go). The way PewDiePie interacted with Joel in this part was heartfelt. He laughed with him and answered his questions ("Do you want to hear me roar?") almost as if he was talking to the real-life version of Joel. He does an excellent job portraying moments of peace or silliness between all the awful scenes for his audience, even if they are bittersweet. PewDiePie notes that he is not good at exploration games and always looks for progression (something this game does not prioritize); it is interesting that he reads only a few of the cards in the halls left for players to read and mostly walks past, looking for the next scene rather than lingering.

During the "animal wheel" scene in the office, we learn Joel is terminal and has no options left. PewDiePie continually rubs his eyes, which are now quite red (see Figure 22). He mentions, "This is the darkest game I have ever played," a few moments later, he corrects himself to the "realest" game. He also remarks on how the Greens brought up how they did not like that people



Figure 22. PewDiePie during the talking wheel scene in *That Dragon, Cancer*.

do not comment a lot (or at all in some cases) on the Let's Plays of this game, which defeats the general purpose of this performative type of playthrough and encourages people not to play it for themselves. However, PewDiePie points out that he feels speechless; he does not know what to say and does not expect to feel this way, making it difficult to say anything.

The heavy nature and silence of this playthrough (and the others examined) leads me to believe that it is more important to view/play these types of games. Breaking this silence is one of the most challenging yet most important takeaways. Sabine Harrer talks about how after her two-week-old son died, people avoided her, and she didn't see herself or her story represented in the media (Campus Gotland GAME 2017). Her disenfranchised grief meant it was like holding onto a secret, mourning in private. In the silence of grief, these built-in spaces for quiet reflection allow players to sit with the emotional questions that emerge through the gameplay. It can be hard to envision if you haven't personally experienced losing a loved one, and it becomes compounded by the way Let's Play works; you know others are viewing you, so you must comply with the norms of what your stream is like. However, when faced with a topic most of us do not regularly engage in, that typical performance disappears, opening a space for dialogue about death and loss to accept that loss is all around us. It encourages us to think about how we spend our life more mindfully. With tears in his eyes, he cringes and says, "Goddamn... I can't play this; this is too much." Even at the beginning of the next chapter, "Adrift," he checks in with his audience, glancing

at the camera to ask, "How are you doing?" He acknowledges the complex nature of this game and that it is hard for him to play and view it.

PewDiePie's usual candour returns in the little video game story, which doubles as a story told to the Green boys in bed. This is the game that Ryan Green imagined when he said that his life felt like a game where the controls are broken (something they often do in this game, not allowing player input to change the trajectory of the game or manipulate the linear story). During the arcade mini-game, PewDiePie remarks, "Of course the baby Joel can kill a dragon!" which is how game rules generally work: a win state is known, health bars tick down as you hit an enemy, even the possibility of another life when you lose. In this case, however, the dragon never drops below half-life, and the impossible task of defeating the dragon consumes the player until there is no beating it. After nearly killing the dragon (down to one bar), PewDiePie exclaims after dying in the end, "How do I even dodge that? Get out of here!" Frustration over losing an inevitable battle plays out.

The "Dehydration" scene, where Joel screams for minutes, is cut shorter than the original. The cutting of content leaves me unable to comment on the full effect, but it's possible it was too long or difficult. PewDiePie says very little; once the scene starts, his face tight and eyes red, he blinks rapidly and sighs heavily several times while cringing through the screaming. The contrast of his silence throughout that scene with the backdrop of Joel's screaming is a strange dichotomy. He stops the game at this point and ends his Let's Play. Through some tears, he tells the viewers that he will respect the Greens' wishes that he does not stream the entire game. The viewers may want to know how the game ends and purchase it, supporting the game and the developers. He states that it was very, very, very heavy. Still, he will keep playing it; his choice to respect the creators' wishes, "especially with a game like this," shows that he understands the gravitas of the game and the issues the developers had.

A good case study of one player's experience with this game and the emotional work (and affect) it had on them features in an *Epilogue Gaming: Video Games as Art, Literature and a Storytelling Medium* article with Flora Merigold entitled "Why I Almost Stopped Playing *That Dragon, Cancer*" (Merigold 2020). She describes the scene, which references the critical moment Ryan Green identifies as this game's genesis: Joel lies in his crib, crying inconsolably. It becomes

clear you must play the entire scene out, knowing as Ryan did at that time that no action taken will cease his distress. It's a hopeless feeling that I am sure was familiar to the Greens. Merigold recalls having to remove her headphones and quit the game, the crying being too much for her to bear. After listening to an interview with Ryan about his inspiration to make the game, the night with Joel, she returned to the game:

The frustration that I felt in response to this scene while playing That Dragon, Cancer was something that I was supposed to feel. As a player, I was inhabiting that space with Joel, utterly without control in a tense situation. Whereas you would normally expect to be able to do something to help make Joel's cries stop, this video game thrusts you through the despair and powerlessness that Ryan Green felt that night alone with his son in the hospital. Ryan Green's real-life account that inspired this scene is a microcosm of how That Dragon, Cancer makes the player endure the spiritual struggle alongside the characters. From the Green family's perspective as presented in the game, they are trying to do everything right by their son and by their faith, and yet they must come to terms with the fact that they don't get to control this situation but to surrender themselves to it. And as a player, I was unable to surrender myself to it, a humbling realization after finishing the game (Merigold 2020).

The original experience the developer was trying to give players left her feeling humbled that she couldn't tolerate it for the few minutes it forced upon her. It's uncomfortable; you want it to stop, leaving you wondering when it will. Time seems distorted as the scene seems to go on longer than you feel it should; no one wants to hear a child in such discomfort, the shrill cries pleading for help that can't be given, by us as players or by his parents in the real-life moment that inspired this scene. She remarks how the game reminded her of something Ryan Green often said, "We doubt other people's pain, but our own pain is undoubtedly to us" (Merigold, 2020). Empathy is very much at the core of this statement; our own experiences colour our world and influence how we react, but it's much harder to understand other people's pain because we didn't go through it. This game helps players do that: walk alongside a family that has experienced a lot of pain, suffering, and loss.

Spedicey

I want to give one last example of an emotionally moving moment during a Let's Play. In his video titled “Jacksepticeye Reacts To The Saddest Moment In *That Dragon, Cancer*,” YouTuber Spedicey (@jackspedicey) shares a moment during his Let's Play of *That Dragon, Cancer* (Spedicey 2023). Spedicey beautifully articulates how, through games like this, we bring our own life experiences into focus and how these experiences can lead to sharing grief as he did, allowing others to reflect on and empathize with your loss.

While reading through the cards in the hospital hall in *That Dragon, Cancer*, he stops to read a few. It's here in this silent hallway that he starts to get emotional, blinking and choking up (see Figure 23) as he recalls his grandmother and her sudden spiral through illness and, ultimately, death. He comments that the cards are "very sad" and starts to cry quietly, remarking how many



Figure 23. An emotional personal story shared by Jackspedicey while playing *That Dragon, Cancer*.

cards there are. He tells the story of the last few days his granny was alive. He dropped his mic to wipe his eyes while telling the story. He describes how she eventually lost her memory and did not recognize him as he sat with her in the hospital and how hard that was for him. He comments that she did not die of cancer, but the game reminded him of that moment. *That Dragon, Cancer*, opens dialogues with our own experiences with death and can be a way to spark those conversations with other people. Spedicey's Let's Play is probably one of the most emotional I watched; it was nice to see someone talking about their emotions openly and honestly. At the end of this story, he comments that he must move on or will not be able to progress the game. This moment of personal reflection references back to what the development team for *That Dragon, Cancer* had mentioned in its call for Let's Plays not to stream the entire game, "...but instead use

portions of our content as a context to share your own stories and start conversations with your viewers. (Green 2016)."

That Dragon, Cancer explores grief through the lens of a family, and their narrative is the highlight. Calling on the public to fund and participate in the game creation also created space within the game itself for anyone to be included. Cards in the hallways and bottles bobbing in the water around the makeshift boat are available for players to read as they please, or not, as they continue the journey, showing how games can explore real-life narratives and memorials within games. One such story was a family who supported *That Dragon, Cancer* on Kickstarter. They lost their 14-year-old daughter to cancer, but during her illness, she found a game called *Legends of Terris*, a game that allowed her to live in that fantasy and imagine a life where her life and her choices were her own. It changed her outlook on the life she had left. These real-world stories in the game allow people to share moments of sadness and memories, maybe in a way they hadn't been before. And they would live forever in this game, an eternal memorial for those involved who lost loved ones. It also speaks to Sabine Harrer's work, opening conversations about deaths around children and how the topic is challenging. Grief in the modern age looks different than before social media, which makes sense. When family or doctors don't seem to understand, there are entire communities online where you don't have to find the energy to face a group of people in real life when that is just too hard (Baglione et al., 2018).

Through the experiences of the Green family in *That Dragon, Cancer*, we can see as bystanders the family's journey through the grief models outlined in Baglione's assessment of the new model for complicated grief in the digital age. The final frame of the entire loss experience is a digital world, where Joel has been memorialized through players' interaction with the game, creating a loop that shows the tipping point for the Greens, a time when they have put their story in public, their lives have stabilized, moving forward with the grief becoming a part of their history and now their future as well. Using interactive media like video games makes this an incredibly moving story. Not only is the game an interactive story, letting other players experience even a piece of that living memory of Joel and his short life, but also for parents who have experienced that kind of loss, allowing them to feel like their experience is valid, and being spoken, something that is such a complex and often taboo topic.

Conclusion

Exploring interactive grief and loss in video games provides valuable insights into understanding these complex experiential landscapes. Through analyzing games such as *Jocoi*, *That Dragon, Cancer*, and *Brothers: A Tale of Two Sons*, we have seen how intuitive control mapping, narrative design, player agency (or the removal of it in forced, uncomfortable interactions/rituals), and real-life experiences can contribute to empathy and appreciation and open opportunities for dialogue of taboo topics such as death, bereavement, and loss.

The case study of *Jocoi* highlights the power of collaboration and shared experiences, allowing players to engage with personal narratives and find solace in communal grief, in this case, with the group of women who lost a child and acted as a muse for Sabine Harrer's Copenhagen Game Collective game creation. The game's simple mechanics allow for self-care and child-rearing with single clicks, creating a highly accessible way to engage with the game (especially for those who don't usually engage in video games). The game effectively conveys the complexity of grief, emphasizing the importance of empathy, understanding, and moving forward after a loss when it becomes a part of you, following the idea of Continuing Bonds, even when it feels like grief is always there, just across the river.

Brothers: A Tale of Two Sons offers a distinct approach to interactive grief by combining puzzle mechanics and platforming elements with a poignant narrative. The game's innovative control mapping and dual-character gameplay effectively convey the theme of loss and the siblings' bond. By physically experiencing the loss of one of the *Brothers: A Tale of Two Sons*, players are immersed in emotional turmoil and must navigate the challenges of grief themselves.

In *That Dragon, Cancer*, the Greens' autoethnographic narrative invites players to walk with the family in their story of grief and loss. In this way, it builds an emotional impact by developing their story and creating connections through meaningful interactions that keep players invested by allowing them to mingle in memories, pause in doorways and witness the story and the process of loss and restoration. Players can hold space with the Green family and feel some of the pain, helplessness and confusion. *That Dragon, Cancer* demonstrates a unique blend of simplistic mechanics with compelling storytelling, providing players with an intimate portrayal of a family's journey through loss. It is a memorial, allowing us to walk with the Green family on their journey. The game uses design elements like childlike colours, mini games highlighting children's play, and simple but compelling narratives to create poignant moments and a profoundly

emotional and reflective experience. It confronts players with the raw reality of despair and powerlessness, inviting them to bear witness to the Greens' grief and contemplate their understanding of pain and empathy. The moment where Joel screams in the hospital only to find no comfort in anything truly stands out to most players, sometimes causing them to leave the game because the uncomfortable feeling of helplessness becomes unbearable. Some people might assume that uncomfortable gaming experiences create a game that is less likely to be enjoyed, but that is only sometimes the case, as we have seen in the player responses to *That Dragon, Cancer*.

All three games I've discussed allow players to take their time, explore the areas around them, and be present with the game and its characters. *That Dragon, Cancer* and *Brothers: A Tale of Two Sons* also emphasize liminal spaces where the game design encourages breaks, letting players set their own pace and appreciate the story, world and any emotions that may evoke. In *Brothers: A Tale of Two Sons*, the in-game benches (see Figure 24) allow for this pause, with



Figure 24. One of many benches in the game *Brothers: A Tale of Two Sons*, designed to allow players to pause and reflect on the gameplay experience.

soaring atmospheric moments during gameplay to rest and reflect. In *That Dragon, Cancer*, those liminal spaces for reflection and exploration appear in hallways containing notes (see Figure 25), left for players by people in the real world, acting as memorials and spaces for remembrance and contemplation.



Figure 25. Cards left by supporters line an entire hall where players can view them at their own pace, in *That Dragon, Cancer*.

As we explore emotional landscapes in video games, it becomes apparent in the "Let's Play" analyses that this medium can elicit profound emotional responses. Games like these can deepen our comprehension of the human experience and show the transformative potential of video games as a medium for dynamic exploration and empathy. While escapism and hedonism are often associated with gaming, it is essential to recognize that motivations for playing video games are vast (Hollebeek et al., 2022). In these games, we are not merely escaping into different worlds; instead, we actively engage with experiences that may not be our own. We process the emotions conveyed, and they often leave a lasting mark on the players who immerse themselves in these narratives. Whether it is as witnesses in *That Dragon Cancer*, listening to the histories of women that would otherwise be overlooked in *Jocoi*, or even forming a bond with the siblings in *Brothers: A Tale of Two Sons* through powerful storytelling and clever control mapping, each game exemplifies how video games can evoke emotions and offer meaningful experiences that can stay with players long after they turn off the game. Game makers can explore how ambiguous gameplay can emerge in transformative ways and how designing space to reflect creates room for players to pause and consider the game's impact. The takeaways here can go beyond games as they are often viewed on the surface as idle things to pass the time and get some amusement. Video games can offer genuine ways to process grief, explore stories that matter to us, or even memorialize loved ones.

References

- Aarseth, Espen J. 1997. *Cybertext: Perspectives on Ergodic Literature*. Baltimore, Md: Johns Hopkins University Press.
- Arjoranta, Jonne. 2014. “Games & Embodied Cognition What Is It Like to Be a Cat-Person?” *First Person Scholar*, no. March 5, 2014. <http://www.firstpersonscholar.com/games-and-embodied-cognition/>.
- Baglione, Anna N., Maxine M. Girard, Meagan Price, James Clawson, and Patrick C. Shih. 2018. “Modern Bereavement: A Model for Complicated Grief in the Digital Age.” In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, 1–12. Montreal QC Canada: ACM. <https://doi.org/10.1145/3173574.3173990>.
- Ballou, Nick. 2020. “Self-Determination Theory in Video Games: Misconceptions about Basic Psychological Needs.” *Nick Ballou* (blog). February 28, 2020. <https://nickballou.com/blog/sdt-in-video-games-basic-needs-misunderstandings/>.
- Baumer, Eric P.S., Vera Khovanskaya, Mark Matthews, Lindsay Reynolds, Victoria Schwanda Sosik, and Geri Gay. 2014. “Reviewing Reflection: On the Use of Reflection in Interactive System Design.” In *Proceedings of the 2014 Conference on Designing Interactive Systems*, 93–102. Vancouver BC Canada: ACM. <https://doi.org/10.1145/2598510.2598598>.
- Blane, Bachelor. 2021. “These Public Spaces Honor the Private Grief of Pregnancy Loss.” *History and Culture*. National Geographic. December 17, 2021. <https://www.nationalgeographic.com/culture/article/these-public-spaces-honor-the-private-grief-of-pregnancy-loss>.
- Bog Otter, dir. 2016. *Brothers: A Tale of Two Sons Full Playthrough*. <https://www.youtube.com/watch?v=KbsW6MTNa48>.
- Bopp, Julia Ayumi, Elisa D. Mekler, and Klaus Opwis. 2016. “Negative Emotion, Positive Experience?: Emotionally Moving Moments in Digital Games.” In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*, 2996–3006. San Jose California USA: ACM. <https://doi.org/10.1145/2858036.2858227>.
- Bopp, Julia Ayumi, Klaus Opwis, and Elisa D. Mekler. 2018. “‘An Odd Kind of Pleasure’: Differentiating Emotional Challenge in Digital Games.” In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, 1–12. Montreal QC Canada: ACM. <https://doi.org/10.1145/3173574.3173615>.

- Bryant, Jennings, and Dolf Zillmann. 1986. *Perspectives on Media Effects*. Communication. Hillsdale (N.J.): Lawrence Erlbaum Associates.
- Caillois, Roger, Meyer Barash, and Bennett M. Berger. 1963. "Man, Play, and Games." *American Sociological Review* 28 (4): 651. <https://doi.org/10.2307/2090095>.
- Campus Gotland GAME, dir. 2017. *GGC 2017: Grief Based Game Design* (by Dr. Sabine Harrer). <https://www.youtube.com/watch?v=ZmnMYtyAl18>.
- Carpenter, Nicole. 2020. "Animal Crossing Players Are Building In-Game Memorials: 'It's Kind of like She's Living on in the Game.'" *Polygon* (blog). July 1, 2020. <https://www.polygon.com/2020/7/1/21309893/animal-crossing-new-horizons-memorials-nintendo-grief>.
- Chittaro, Luca, and Riccardo Sioni. 2018. "Existential Video Games: Proposal and Evaluation of an Interactive Reflection about Death." *Entertainment Computing* 26 (May):59–77. <https://doi.org/10.1016/j.entcom.2018.01.004>.
- Cole, Tom, Paul Cairns, and Marco Gillies. 2015. "Emotional and Functional Challenge in Core and Avant-Garde Games." In *Proceedings of the 2015 Annual Symposium on Computer-Human Interaction in Play*, 121–26. CHI PLAY '15. New York, NY, USA: Association for Computing Machinery. <https://doi.org/10.1145/2793107.2793147>.
- Corr, Charles A. 1999. "Enhancing the Concept of Disenfranchised Grief." *OMEGA - Journal of Death and Dying* 38 (1): 1–20. <https://doi.org/10.2190/LD26-42A6-1EAV-3MDN>.
- . 2020. "Elisabeth Kübler-Ross and the 'Five Stages' Model in a Sampling of Recent American Textbooks." *OMEGA - Journal of Death and Dying* 82 (2): 294–322. <https://doi.org/10.1177/0030222818809766>.
- Corr, Charles A., Donna M. Corr, and Kenneth J. Doka. 2019. *Death & Dying, Life & Living*. Eighth edition. Boston, MA: Cengage.
- Creed, Barbara. 1993. *The Monstrous-Feminine: Film, Feminism, Psychoanalysis*. Popular Fiction Series. London ; New York: Routledge.
- Curtis, Stephen. 2015. "To Fatality and Beyond: The Deathsetics of Failure in Videogames." *The Luminary - Lancaster University Department of English and Creative Writing Visualizing Fantastika* (6): 98–108.
- Denisova, Alena, Christian Guckelsberger, and David Zendle. 2017. "Challenge in Digital Games: Towards Developing a Measurement Tool." In *Proceedings of the 2017 CHI*

Conference Extended Abstracts on Human Factors in Computing Systems, 2511–19. Denver Colorado USA: ACM. <https://doi.org/10.1145/3027063.3053209>.

Faro, Laurie. 2021. “Monuments for Stillborn Children and Disenfranchised Grief in the Netherlands Recognition, Protest and Solace.” *Mortality* 26 (3): 264–83. <https://doi.org/10.1080/13576275.2020.1779202>.

Flanagan, Mary. 2013. *Critical Play: Radical Game Design*. Cambridge, Mass. London: MIT Press.

Frasca, Marco. 2003. “A Modern Review of the Two-Level Approximation.” *Annals of Physics* 306 (2): 193–208. [https://doi.org/10.1016/S0003-4916\(03\)00078-2](https://doi.org/10.1016/S0003-4916(03)00078-2).

Freud, Sigmund. 1953. “Mourning and Melancholia.” In *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, edited and translated by James Strachey, 14:243–58. London United Kingdom: Hogarth Press.

Gillin, John L., and J. Huizinga. 1951. “Homo Ludens: A Study of the Play-Element in Culture.” *American Sociological Review* 16 (2): 274. <https://doi.org/10.2307/2087716>.

Green, Melanie C., Timothy C. Brock, and Geoff F. Kaufman. 2004. “Understanding Media Enjoyment: The Role of Transportation Into Narrative Worlds.” *Communication Theory* 14 (4): 311–27. <https://doi.org/10.1111/j.1468-2885.2004.tb00317.x>.

Green, Ryan. 2016. “On Let’s Plays.” *That Dragon, Cancer*. March 24, 2016. <http://www.thatdragoncancer.com/thatdragoncancer/2016/3/24/on-lets-plays>.

“Grief-Based Game Design | Gotland Game Conference 2017.” n.d. Accessed November 26, 2024. <https://gotlandgameconference.com/2017/sessions/grief-based-game-design/>.

Harrer, Sabine. 2017. “*Jocoi* by Enibolas.” 2017. <https://enibolas.itch.io/Jocoi>.
———. 2019a. *Games and Bereavement: How Video Games Represent Attachment, Loss, and Grief*. Vol. 55. Media Studies. Transcript-Verlag.

———. 2019b. “Games That Care: GDC Talk 2019.” *Sabine Harrer* (blog). March 26, 2019. <https://enibolas.com/2019/03/26/games-that-care-gdc-talk-2019/>.

Harrer, Sabine, and Henrik Schoenau-Fog. 2015. “Inviting Grief into Games: The Game Design Process as Personal Dialogue.” In *Diversity of Play: Games - Cultures - Identities*, 15. Lüneburg, Germany.

Hollebeek, Linda D., Amir Zaib Abbasi, Carsten D. Schultz, Ding Hooi Ting, and Valdimar Sigurdsson. 2022. “Hedonic Consumption Experience in Videogaming: A

Multidimensional Perspective.” *Journal of Retailing and Consumer Services* 65 (March):102892. <https://doi.org/10.1016/j.jretconser.2021.102892>.

Isbister, Katherine. 2017. *How Games Move Us: Emotion by Design*. First MIT Press paperback edition. Playful Thinking. Cambridge, Massachusetts London, England: The MIT Press.

jacksepticeye, dir. 2016. *EMOTIONALLY DRAINED | That Dragon, Cancer*. <https://www.youtube.com/watch?v=mJbwy459VkY>.

Jensen, Graham H. 2013. “Making Sense of Play in Video Games: Ludus, Paidia, and Possibility Spaces.” *Eludamos: Journal for Computer Game Culture* 7 (1): 69–80. <https://doi.org/10.7557/23.6148>.

Juul, Jesper. 2003. “The Game, the Player, the World: Looking for a Heart of Gameness.” In *The Game, the Player, the World: Looking for a Heart of Gameness*, 30–45. Utrecht: Utrecht University. <https://www.jesperjuul.net/text/gameplayerworld/>.

Juul, Jesper. 2011. *Half-Real: Video Games between Real Rules and Fictional Worlds*. First MIT Press paperback edition. Cambridge, Massachusetts London, England: The MIT Press.

———. 2013. *The Art of Failure: An Essay on the Pain of Playing Video Games*. Playful Thinking. Cambridge, Mass.: MIT Press.

Kammerman, Jack, and Kenneth J. Doka. 1991. “Disenfranchised Grief: Recognizing Hidden Sorrow.” *Contemporary Sociology* 20 (1): 136. <https://doi.org/10.2307/2072146>.

Kelleher, Karen. 1992. “The Afternoon of Life: Jung’s View of the Tasks of the Second Half of Life.” *Perspectives in Psychiatric Care* 28 (2): 25–28. <https://doi.org/10.1111/j.1744-6163.1992.tb00367.x>.

Keogh, Brendan. 2018. *A Play of Bodies: How We Perceive Videogames*. The MIT Press. <https://doi.org/10.7551/mitpress/10963.001.0001>.

Khaled, Rilla. 2018. “Questions Over Answers: Reflective Game Design.” In *Playful Disruption of Digital Media*, edited by Daniel Cermak-Sassenrath, 3–27. Gaming Media and Social Effects. Singapore: Springer Singapore. https://doi.org/10.1007/978-981-10-1891-6_1.

Kjellberg, Felix Arvid Ulf. n.d. “PewDiePie.” YouTube. Accessed August 21, 2024. https://www.youtube.com/channel/UC-IHJZR3Gqxm24_Vd_AJ5Yw.

Kjellberg, Felix Arvid Ulf (aka PewDiePie), dir. 2014. *LETS GO ON A JOURNEY BROS! - Brothers: A Tale of Two Sons: Gameplay - FULL GAMEPLAY*. YouTube Video. <https://www.youtube.com/watch?reload=9&v=mHg0nrjSHYs>.

Klass, Dennis, Phyllis R. Silverman, and Steven L. Nickman, eds. 1996. *Continuing Bonds: New Understandings of Grief*. Series in Death Education, Aging, and Health Care. Washington, DC: Taylor & Francis.

Klastrup, Lisbeth. 2006. "Why Death Matters: Understanding Gameworld Experience." In , 29. <https://doi.org/10.1145/1178823.1178859>.

Kohler, Chris. 2008. "The Graveyard's Ten-Minute Tale Of Death." *Wired*, March 21, 2008. <https://www.wired.com/2008/03/the-graveyards/>.

Kohn, Martin Gibbs, Joji Mori, Michael Arnold, Tamara. 2012. "Tombstones, Uncanny Monuments and Epic Quests: Memorials in World of Warcraft." *Game Studies* 12 (1). http://gamestudies.org/1201/articles/gibbs_martin.

Kozinets, Robert. 2015. "Netnography." In . <https://doi.org/10.1002/9781118767771.wbiedcs067>.

Kübler-Ross, Elisabeth. 1973. *On Death and Dying*. 0 ed. Routledge. <https://doi.org/10.4324/9780203010495>.

Leino, Olli Tapio. 2012. "Death Loop as a Feature." *Game Studies* 12 (2). http://gamestudies.org/1202/articles/death_loop_as_a_feature.

"Little Spirits Garden." n.d. Royal Oak Burial Park. Accessed November 26, 2024. <https://royaloakburialpark.ca/little-spirits-garden/>.

Malkowski, Jennifer. 2017. *Dying in Full Detail: Mortality and Digital Documentary*. Durham, North Carolina: Duke University Press.

Marsh, Tim, and Brigid Costello. 2013. "Lingering Serious Experience as Trigger to Raise Awareness, Encourage Reflection and Change Behavior." In *Persuasive Technology*, edited by Shlomo Berkovsky and Jill Freyne, 7822:116–24. Lecture Notes in Computer Science. Berlin, Heidelberg: Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-37157-8_15.

Mason, Derritt. 2021. "I Suck at This Game: 'Let's Play' Videos, Think-Alouds, and the Pedagogy of Bad Feelings." *Teaching and Learning Inquiry* 9 (1): 200–217. <https://doi.org/10.20343/teachlearninqu.9.1.14>.

MBClife, dir. 2020. [VR Human Documentary] *Mother Meets Her Deceased Daughter through VR Technology*. <https://www.youtube.com/watch?v=ufTK8c4w0c>.

Merigold, Flora. 2020. “Why I Almost Stopped Playing ‘*That Dragon, Cancer*.’” *Epilogue Gaming* (blog). June 24, 2020. <https://epiloguegaming.com/why-i-almost-stopped-playing-that-dragon-cancer/>.

Munoz-De-Escalona, Enrique, and José Cañas. 2017. “Online Measuring of Available Resources.” In . <https://doi.org/10.21427/D7DK96>.

Nell, Victor. 2002. “Mythic Structures in Narrative: The Domestication of Immortality.” In *Narrative Impact: Social and Cognitive Foundations*, 1st ed., 21. Taylor & Francis.

Neto, Marcelo D. Viana. 2016. “A Heros Death: Human Mortality and Video Games.” https://www.academia.edu/10622358/A_Heros_Death_Human_Mortality_and_Video_Games.

Newman, James. 2002. “The Myth of the Ergodic Videogame: Some Thoughts on Player-Character Relationships in Videogames.” *Game Studies - The International Journal of Computer Game Research* 2 (1). <http://www.gamestudies.org/0102/newman/>.

Oliver, Mary Beth. 1993. “Exploring the Paradox of the Enjoyment of Sad Films.” *Human Communication Research* 19 (3): 315–42. <https://doi.org/10.1111/j.1468-2958.1993.tb00304.x>.

Oliver, Mary Beth, and Anne Bartsch. 2010. “Appreciation as Audience Response: Exploring Entertainment Gratifications Beyond Hedonism.” *Human Communication Research* 36 (1): 53–81. <https://doi.org/10.1111/j.1468-2958.2009.01368.x>.

PewDiePie, dir. 2016. *THIS GAME WILL MAKE YOU WEEP (That, Dragon Cancer)*. <https://www.youtube.com/watch?v=xBQYLXX2Mk0>.

Poulos, Christopher N. 2021. “Conceptual Foundations of Autoethnography.” In *Essentials of Autoethnography*, by Christopher N. Poulos, 3–17. Washington: American Psychological Association. <https://doi.org/10.1037/0000222-001>.

Prichep, Deena, dir. 2015. “Adopting A Buddhist Ritual To Mourn Miscarriage, Abortion.” *NPR*. <https://www.npr.org/2015/08/15/429761386/adopting-a-buddhist-ritual-to-mourn-miscarriage-abortion>.

Procopio, Richard. n.d. “Bog Otter.” YouTube. Accessed November 28, 2024. <https://www.youtube.com/channel/UCSzOtbN2xTsI8aQPM2sMmpQ>.

Radde-Antweiler, Kerstin, and Xenia Zeiler. 2015a. "Methods for Analyzing Let's Plays: Context Analysis for Gaming Videos on YouTube," January.

———. 2015b. "Methods for Analyzing Let's Plays: Context Analysis for Gaming Videos on YouTube," January.

Romero, Brenda. 2009. "Train." Game Designer Website. Brenda Romero. 2009. <http://brenda.games/train>.

Rowley, Nat. 2022. "The Importance of Affordances in Games." *Medium* (blog). August 12, 2022. <https://medium.com/@Nat.Rowley/the-importance-of-affordances-in-games-556a03986baa>.

Rusch, Doris C. 2017. *Making Deep Games: Designing Games with Meaning and Purpose*. Boca Raton, FL: CRC Press, Taylor & Francis Group, an Informa business.

Ryan, Richard M., C. Scott Rigby, and Andrew Przybylski. 2006. "The Motivational Pull of Video Games: A Self-Determination Theory Approach." *Motivation and Emotion* 30 (4): 344–60. <https://doi.org/10.1007/s11031-006-9051-8>.

Salen, Katie, and Eric Zimmerman. 2004. *Rules of Play: Game Design Fundamentals*. Cambridge, Mass: MIT Press.

Santos, Danilo Barros dos, Cristiano Maciel, Vinicius Carvalho Pereira, and Eunice Pereira dos Santos Nunes. 2018. "Analysis of The Perception of Users of Empathic Games in Discussion Forums and Their Relation to Death." In *Proceedings of the 17th Brazilian Symposium on Human Factors in Computing Systems*, 1–10. IHC 2018. New York, NY, USA: Association for Computing Machinery. <https://doi.org/10.1145/3274192.3274198>.

Sapach, Sonja. 2018. "Let's Play with Research Methodologies." *First Person Scholar*, January. <http://www.firstpersonscholar.com/lets-play-with-research-methodologies/>.

Shear, M. Katherine, Naomi Simon, Melanie Wall, Sidney Zisook, Robert Neimeyer, Naihua Duan, Charles Reynolds, et al. 2011. "Complicated Grief and Related Bereavement Issues for DSM-5." *Depression and Anxiety* 28 (2): 103–17. <https://doi.org/10.1002/da.20780>.

Smethurst, Toby. 2015. "Playing with Trauma in Video Games: Interreactivity, Empathy, Perpetration." Ghent, Belgium: Ghent University, Faculty of Arts and Philosophy.

Spedicey, dir. 2023. *Jacksepticeye Reacts To The Saddest Moment In That, Dragon Cancer*. <https://www.youtube.com/watch?v=uvQcy7UtPuI>.

Stang, Sarah. 2019. "The Broodmother as Monstrous-Feminine—Abject Maternity in Video Games." *Nordlit*, no. 42 (November). <https://doi.org/10.7557/13.5014>.

Stroebe, Margaret, and Henk Schut. 1999. "The Dual Process Model of Coping with Bereavement: Rationale and Description." *Death Studies* 23 (3): 197–224. <https://doi.org/10.1080/074811899201046>.

Tanz, Jason. 2016. "A Father, a Dying Son, and the Quest to Make the Most Profound Videogame Ever." *Wired*, January 2016. <https://www.wired.com/2016/01/that-dragon-cancer/>.

The BS, dir. 2016. *That Dragon, Cancer | Full Playthrough*. <https://www.youtube.com/watch?v=cSoIvfwVuz0>.

The BS. n.d. YouTube. Accessed August 16, 2024. <https://www.youtube.com/channel/UChJFW1wepoluTQuifSz-rhw>.

Wilson, Margaret. 2002. "Six Views of Embodied Cognition." *Psychonomic Bulletin & Review* 9 (4): 625–36. <https://doi.org/10.3758/BF03196322>.

Wright, Will, dir. 2004. *Sculpting Possibility Space*. Online. Accelerating Change 2004. <http://itc.conversationsnetwork.org/shows/detail376.html>.

Wu, Mao-Ying, and Philip L. Pearce. 2014. "Appraising Netnography: Towards Insights about New Markets in the Digital Tourist Era." *Current Issues in Tourism* 17 (5): 463–74. <https://doi.org/10.1080/13683500.2013.833179>.

Zillmann, Dolf, Richard Hezel, and Norman Medoff. 2006. "The Effect of Affective States on Selective Exposure to Televised Entertainment Fare1." *Journal of Applied Social Psychology* 10 (July):323–39. <https://doi.org/10.1111/j.1559-1816.1980.tb00713.x>.

Video Game References

- 11 Bit Studios. 2014. *This War of Mine*. PC.
- 3909 LLC. 2013. *Papers, Please*. PC.
- Bethesda. 2011. *Skyrim*. PC.
- CD Projekt Red. 2015. *Witcher 3*. PC.
- Electronic Arts, and Maxis Games. 2000. *The Sims*. PC.
- Game of Games. 2008. *The Graveyard*. PC.
- Harrer, Sabine. 2017. *Jocoi*. PC. Copenhagen Game Collective.
- Linden Lab. 2003. *Second Life*. PC.
- Nintendo. 1985. *Mario Brothers: A Tale of Two Sons*. NES.
- Nintendo. 1992. *Super Mario Kart*. SNES.
- Numinous Games. 2016. *That Dragon, Cancer*. PC.
- Starbreeze Studios. 2019. *Brothers: A Tale of Two Sons*. Nintendo Switch.
- The Chinese Room. 2012. *Dear Esther*. PC.