

Can a Video Game Make You Cry?
Case Studies Analysing the Emotion of Sadness in Video Games

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Declaration

I declare that the work described in this research Paper is, except where otherwise stated, entirely my own work and has not been submitted as an exercise for a degree at this or any other university.

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Abstract

This research paper uses five case studies of recent video games to analyse the emotion of sadness as depicted in the narrative and design. The study uses a theoretical framework based on film theory to analyse three elements of the case studies: story, game design and gameplay mechanics. It demonstrates how the depiction of death and loss is the main element used to elicit sadness in video games. The analysis suggests that graphics are not crucial to the experience of sadness for the player. It also demonstrates the apparent lack of a requirement for interactivity during an event when the emotion of sadness is present. Lastly this paper concludes that the gameplay mechanic of choice is important to the development of interaction between the player and the emotion of sadness.

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Chapter 1: Introduction

'Right now the game industry is still at a very young phase. There is a lot of space for people to go deeper on emotion.' – Jenova Chen (Peterson, 2013)

In recent years, researchers and developers are increasingly interested in video games¹ that produce emotional content similar to that of novels and film (Frome, 2007). This increase in interest has been reflected in a steady proliferation in the development of video games that attempt to elicit an emotional reaction. Some games research suggests video games are generally aimed at a heavily desensitised core base of game players in terms of exposure to violent gratification (Biocca, 2012, Jones, 2005). Developers are attempting to expand and attract more game players, whose enjoyment is not solely reliant on action-orientated gameplay. This research paper aims to explore why emotion, and specifically sadness has become such an interesting topic for both researchers and developers in recent years.

Developers are experimenting with various approaches to creating an interactive game experience whilst still producing a commercially viable product (Freeman, 2004, Bura, 2013). These new approaches and the discussions that surround them have drawn controversy and debate with many in the games industry. Different developers have varying views on the subject of emotional content in video games. Jenova Chen (*Flower*, 2009, *Journey*, 2012) and David Cage (*Heavy Rain*, 2010, *Beyond: Two Souls*, 2013) are two prominent developers whose ideas on the use of emotion as a lead component in the games industry will be explored in the following chapters.

Emotions presented in a video game are now used to create diversity in mainstream genres e.g. action adventure, first person shooters (FPS). Examples of this approach where this new experience are being crafted are, *Mirrors Edge* (Electronic Arts, 2008) and *Portal 2* (Valve, 2011). *Mirrors Edge* (2008) is a FPS action adventure game based around free-running, where the protagonist, Faith, has to evade capture instead of directly confronting

¹ The term video games in this research will be used to describe a variety of media: Video games (console games i.e. PlayStation 3 & 4, Xbox 360, Xbox One, Nintendo Wii), Computer games (PC & Mac), Handheld (mobile) games (Playstation Vita, Nintendo 3DS, iOS) and Arcade games.

enemies. *Portal 2* (2011) is a FPS puzzle game which has players using a 'portal' gun which instead of causing harm, is used to move objects and solve puzzles. Other approaches build upon pre-existing genres, such as *Journey* (2012), a third-person adventure game which uses emotional content to intensify the narrative.

Video games can depict a broad range of emotion (Freeman, 2004) and in this study it will not be possible to thoroughly analyse the wide spectrum of emotions. Instead this research will focus on the emotion of sadness used in current video games. It closely follows Zagalo, who believes the emotion of sadness is crucial to the development of video games.

Sadness, as defined by the Oxford English dictionary is:

- Feeling or showing sorrow;
- Unhappy;
- Causing or characterized by sorrow or regret; unfortunate and regrettable.

To be sad is often categorized as depressing, gloomy, miserable, cheerless, distressing, heart-breaking, heart-rending, poignant and moving.

The central question for this study is how game developers are attempting to use sadness in video game media? It will explore how both the game characters and players might experience sadness in a video game. The following chapters will attempt to portray how games produce emotional situations for their game characters while attempting to connect and resonate with the player at that moving moment on-screen. This study will focus specifically on a research approach which explores:

- Effective narrative and character design through study of film and game studies.
- Engineering emotion through game play and mechanics.

Some studies criticise the story depth of video games in comparison to film. Juul (2001) states that games and narratives share similar traits but the narrative and interactivity cannot exist at the same time, and that games cannot compare to film and novels. A fundamental question remains if games can be as narratively and emotionally sophisticated as film. Suttner

(Larchuk, 2014) has identified independent developers that pitch ideas to Sony and states that they focus around storytelling more than mechanics, which perhaps indicates a shift in perspective for the games industry. Video games have also attempted to mimic action and characters previously used in Hollywood blockbusters (for example, *Tomb Raider* 2013) which have attempted to combine narrative and interactivity.

This research paper will use five video games as case studies to analyse the emotional content of each to identify the approaches that were taken to use the emotion of sadness. This analysis will attempt to deconstruct how sadness was portrayed and use the findings for future research.

Chapter 2: Literature Review

2. I: Introduction

The role of emotions in video games is a growing area of research (Freeman 2004 and Bura 2013). Chen (Peterson, 2013) asks if games can ‘make you and another human experience an emotion that's deep enough to touch adults?’ thereby ‘making emotional games and making them intellectually relevant’. Ochs, Sabouret & Corruble (2009) found that ‘emotion plays a key role in determining the behaviour of individuals’ whilst playing games. However the portrayal of emotional content and its resonance with the player are a new phenomenon and are still open to different methodological designs (Mehrabian, 1997) and theoretical approaches (Bura, 2013) as to how video games provide emotional content. Research is becoming more widely available but there still remains a lack of any significant in-depth exploration into the area of emotions within the video game industry.

Much research on video games focuses on the depiction and impact of violence in the games industry while there is a lack of research based on the rising significance of emotions portrayed and felt through the medium of video games (Bura, 2013). Developers have recently begun to explore the possibilities that can be achieved through the incorporation of emotional content. This study can possibly help future research to find another method of engaging human interactivity by simulating real-life experiences. This could be accomplished by increasing the range of emotional responses felt by players through game narrative and design.

2. II: Research Reviews

2. II. a. Psychology and Emotions

Psychology researchers have different definitions of the meaning of ‘emotions’. Ekman (1982) classified emotions into the following basic types: joy, sadness, disgust, fear, anger, surprise, interest and contempt. He later went on to update these basic emotions and categorise some as either positive or negative types (Ekman, 1992). These types are categorised through the study of facial expressions and Ekman (1992) labels each expression a particular emotion. Others have also categorised emotions as negative and positive, such as the *EARL* (Emotion Annotation and Representative Language) by *HUMAINE*, 2006 which researches emotion-orientated computing.

A useful tool devised by Russell (1980) is the ‘Circumplex Model of Affect’ (Figure 1), a diagram that maps emotions on a two-axis model of maximum / minimum pleasure and/or arousal (arousal was represented by the vertical axis and pleasure on the horizontal axis). The model was used to test the stimuli of emotional tests on subjects based upon the level of arousal and pleasure. It uses a large set of emotions that differed from Ekman’s research.

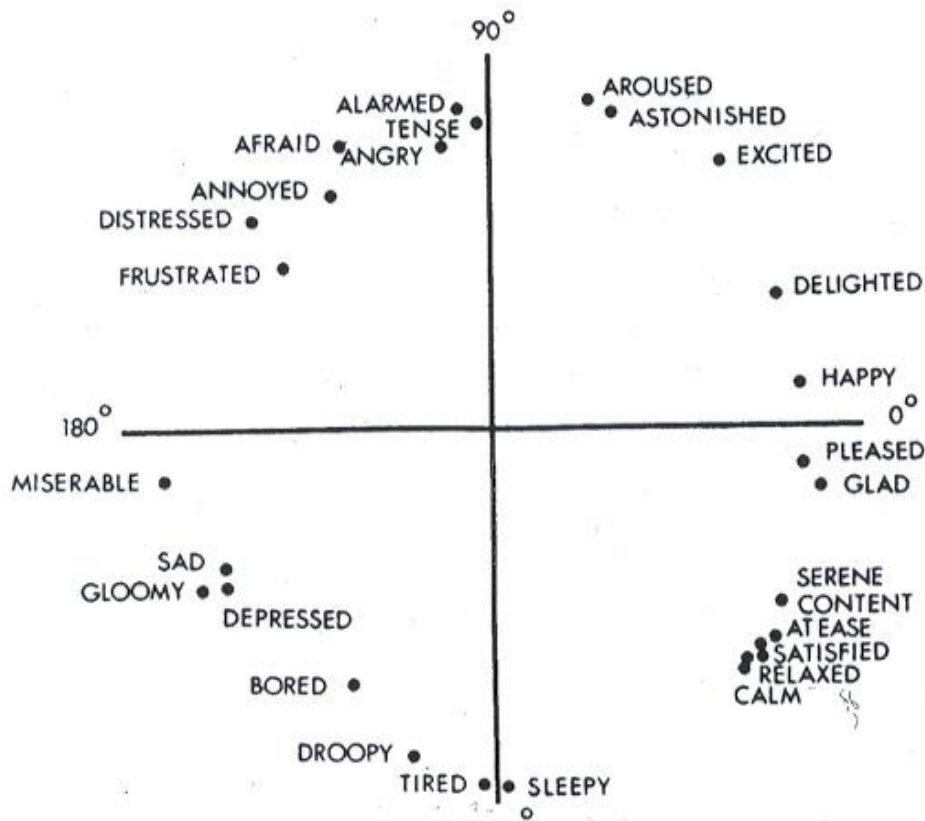


Figure 1: Circumplex Model of Affect.

2. II. b. Film Theory and the Sad Film Paradox

'I think that video games [have already been] learning from films for 30 years' – David Cage
(Corriea, 2013)

Games may be potentially as capable of producing emotional experiences as a film; players can have a direct influence over game characters and story whilst viewers passively participate while watching a film or television. Though researchers, for example Morley (1980) has theorised that audiences may be actively participating, named Active audience theory. It states that audiences unconsciously accept or reject a media message through their knowledge and experience.

Ed Tan (2000) developed a framework for the analysis for emotions in film; they are classified as *represented-world emotions* and *artefact emotions*. Represented-world emotion

relates to the human condition whereas the artefact emotion is in relation to the aesthetics. Similarly Frome (2007) uses Tan's definition of artefact emotions in the video games context to describe how video games are aesthetically evaluated. Frome (2007) states that artefact emotions may not be generally thought of as emotions but more as judgements and preferences in the game. Frome went on to state that these aesthetic evaluations are still capable of causing varying emotions similar to how game play and narrative elicit emotions.

Frome (2006, 2007) evaluates that Tan's categories of emotions cannot fully compartmentalise everything felt in a video game. Frome goes on to devise another two categories; *game emotions* and *ecological emotions*, to further help analyse emotions in games. Game emotions are determined by the players' success or failure, and are influenced by the players' performance, which are similar to Pohl's (2008), characteristics of instantaneous emotional involvement. Ecological emotions are generated in a similar way to those in real-life, through '...the interaction between people and their environment' (Frome, 2007). This references the theory of ecological psychology (see Gibson, 1979) which is the study of the (direct) perception of how the environment of an organism *affords* various actions to the organism. How we perceive emotion and how our minds cope with it is determined consciously. In one of Frome's examples, he discusses *Fatal Frame* (Techmo, 2001) where an enemy may genuinely cause fear, making a player shout out in surprise but not run away in fear. Competing areas of the mind perceive the event differently, so whilst a player may consciously know the enemy cannot harm them, the initial encounter may still rouse an emotional response. The development of *ecological emotions* is important as it connects the game emotionally to the player, whilst before it has been the player connecting emotionally with the game.

Whilst these categories provide a framework for how game design is attempting to influence emotions, Frome (2006) goes on to categorise two types of player engagement: observer-participation and actor-participation. Observer-participation is when the player responds to a medium without direct engagement with the content presented (for example, a cut-scene²). Observer-participation is generally associated with traditional artwork and media, such as poetry. Within this, the media is observational and the player evaluates the media based on cognitive interpretation. Actor-participation is the reverse aspect of

² Video or in-game cinematic sequences with no player interaction.

observer-participation; the player participates by direct action and activity with the content through game devices. Traditional media, such as film and books rarely solicit actor-participation whilst the medium of video games it is generally the norm.

In film theory, sadness is also under researched, a phenomenon described as the ‘Sad Film Paradox’ (Oliver, 1993, Krameo and Witschel, 2010). Theorists constantly present different models for how emotions are induced in media; Scherer (1998) presents a very popular and widely regarded theory: Induction, Empathy and Contagion. Induction is when a viewer is personally involved with an event which elicits an emotional response. Empathy is the emotional reaction to observing a reaction from another source. Finally, Contagion is a socio-emotion, or the reaction to somebody else’s emotion. In the context of video games, empathy would be the most relevant as the majority of video games depict a player observing fictional characters. Krameo and Witschel (2010) concluded after their analysis that sad films do not generate primarily negative emotions as the content of sad films include uplifting moments. This balance of positive and negative emotions provides an entertaining experience.

2. II. c. Emotion Engineering

Buras’ (2013) recent research developed a theoretical approach as to how to engineer emotions through the combination of game mechanics and interactivity. Using the basis of game design developed by Will Wright (Maxis, 2003) and emotional design by Donald Norman (2004), he devises a comprehensive model. It attempts to establish a tool to help clear uncertainty for developers over singular emotions connected to particular behaviours. Bura claims this model may prove more beneficial once his game design theory is further researched as to how design and mechanics interconnect with each other. So far it is the most comprehensive and understandable scientific approach to developing video games. His research will benefit from more industry input and a more streamlined graphical design. Currently it highlights several methods of how to use mechanics to elicit emotion that may prove useful for this research.

Bura (2013) specifically attempts to narrow down emotional engineering in a more defined and easily approachable manner, whereas Freeman (2004) approaches emotion engineering in games in a multi-faceted way, making it very complex. He refers to this as Emotioneering. His approach attempts to categorise the elements that are essential to using emotions in a video game for both entertainment and commercial purposes, stating that it can be used to enrich games. Freeman's (2004) Emotioneering is an extensive list of 300 techniques that fall into 32 categories; many are based purely around the narrative. This structure makes it highly complex and therefore difficult to hone in on a particular emotion, such as sadness.

Bowen Research (2011) conducted a survey to find out whether video games could make players cry. They allude to how Walt Disney felt some of his early cartoons could do the same. Hugh Bowen notes that the emotional component in games is elusive and suggests that the industry should better understand that component to see how it impacts on business. The study which surveyed a combination of gamers and non-gamers, reports that a third of participants found games to be an emotional experience. RPGs (Role-Playing Games) being the most influential genre at evoking emotions. As Bowen mentions, emotions are a key aspect to the business model for game developers with Freeman (2004, p1) also asking "Why put emotion into games? The answers are art and money".

2. II. d. Interactivity and Emotion

Recently Zagal's (2011) research asks how games may encourage emotional responses through "ethically notable" video games, wherein the player is encouraged to reflect on moral dilemmas encountered in a video game. His research focuses on the emotional content of guilt and shame presented through a video game. He proposes this was done by creating emotionally meaningful experiences in the video game and the subsequent moral reflection required by the player. He states that games that encourage emotional responses require a players' investment in the narrative whilst simultaneously reflecting upon choices and decisions. Furthermore, Zagal found that when a game character was troubled while in a moral dilemma, a player may also experience an emotional response. This is

usually triggered when a player thinks they are violating a moral standard. However due to the detachment of the player from the moment in question, the impact loses its momentum as the dilemma concerns the character and not the player. Zagal suggests that emotional responses are generally received when a player is confronted by a choice. This paper explores this aspect of emotions in games further.

Pohl (2008) categorises two forms of involvement with video games: instantaneous and spontaneous. ‘Instantaneous’ involvement describes the players’ need to win and the ‘Spontaneous’ refers to the players’ involvement with the story. Spontaneous involvement is more relevant to a players’ immersion in the narrative, as the player is frequently engaged with the fate of the character.

In a frequently cited study in which both players and non-players are questioned, Lazzaro (2004) explores how to identify ways to create emotion without the need for story cut-scenes. Her research found over thirty emotions within game-play. She went onto classify four key aspects in relation to the mechanism for the creation of emotions and how it relates to player response.

The previous studies identify how involvement in the video game helps a player immerse themselves in the narrative. While these studies require interaction with the narrative, other researchers have stated that interactivity is not as important as narrative. Filipowich (2013) suggests that interactivity should not be too prevalent as it is distracting player agency in the video game world and immersion in the narrative. Wherein some video games, players are tasked with collecting objects (such as health packs), this should be justified by the context it has in the story. Filipowich (2013) states that ‘Interaction is meaningless without a purpose’ and many games would benefit by limiting the players influence on the game’s surroundings.

Schaap and Bidarra’s (2008) research into the emotional aspects of characters in video games is motivated by the absence of studies on emotive expression in video game characters – ‘Character expression is not getting the attention it deserves to get’ (ibid, 2008). Freeman (2004) also states that advances in game graphics and mechanics are not being matched by advances in emotional content.

Filipowich (2013) does make a strong argument that interaction is not required without a purpose; he states the lack of interaction helps to increase immersion. While Zagal (2011) and Pohl (2008) argue that interaction in the story increases immersion, with Zagal (2011) specifically mentioning choice being essential to emotional responses. Choice in a video game requires interaction with the game and would require input from the player. This research paper will look into how immersion in the narrative occurs, either through interactivity or cut-scenes.

2. II. e. Games Industry Perspectives

Game developers display varying opinions on the development of published titles that carry emotional resonance with the player. Cage (Kain, 2013) states that for the advancement of emotion in video games, there needs to be an increase in the processing power provided by games technology. This increase would allow for a greater amount of polygons (which are used in 3d models to replicate facial / body detail). Therefore this increase in realism would expand the level of expression available to character animation (Schaap, Bidarra, 2008). He claims the higher quality of detail would enable players to identify and immerse themselves in the virtual world, and this would heighten any emotional response present in the video game.

Contrary to this, Chen (Smith, 2012) believes that the interactivity between player and game, or player and player is the aspect that developers must focus on for any significant change in emotional feedback. He claims that this approach is not reliant on graphical power and can be accomplished with technologies currently available.

2. II. f. The Emotion of Sadness

Zagalo (2007) claims that the question of whether games are as emotional as other media such as film and books is not for debate, he further points to a difficulty in using sadness in an interactive manner. His research aims at testing the possibility of using sadness from experiments with video games. He concludes that sadness in video games is an academic area that should continue to be researched. In his research an experiment was conducted by participants playing *Final Fantasy VII* (Square, 1997). Some emotions successfully identified include surprise, anger, disgust, fear and happiness. Sadness was only elicited through non-interaction cut-scenes. Another game researched is *Max Payne* (Remedy, 2001) which, although identified with anger, manages to also be associated with sadness. Zagalo (2007) states that all sequences that were able to produce sadness were either non-interactive (the use of cinematic cut-scenes) or mixed (QTE, Quick Time Events with non-interactive parts), none of the games have any full interactivity during the relevant sad scene.

Zagalo (2007) names the general source of sadness in his study as loss, which is tied closely with the usage of death and loss in the Sad Film Paradox (Oliver, 1993, Krameo and Witschel, 2010). Zagalo's (2007) research also stipulates that passive interactivity is required to maintain the sadness. His research notes that virtual touch is the best technique and that through somatic displacement, when a player projects their own identity onto another form (Holopainen & Meyers, 2001), helps to connect the event to a real life situation. The research concludes that there are three challenges in examining sadness in video game narrative: first, the low demographics playing relevant video games particularly the lack of female players playing video games; secondly he states there is a lack of interest among developers and players for games depicting sadness; finally, he claims there is an absence of in-depth themes in video games (for example self-introspection), where video games are not solely for the purpose of entertainment but used for deeper meaningful experiences.

2. III: Conclusion

In summary, numerous researchers are attempting to identify and capture the many emotions experienced in video games (Bura, 2013, Zagalo, 2007, Zagal, 2011). Other studies are attempting to develop methods to elicit / examine an emotional response (Freeman, 2004, Bura, 2013, Frome, 2007). However, with the exception of Zagalo (2007), few studies focus specifically on the emotion of sadness. This area is identified as challenging both for development and in creative terms. It is also just as important in developing the commercial aspect of emotional games (Freeman, 2004, Bura, 2013). Further research is required into the area of emotion and the mechanics, design and narrative of games, as stated by Freeman (2004, p. 9):

“Emotion will be one of the key to the mass market in games as well. Thus, from the point of view of economics, Emotioneering in games is good business”.

Chapter 3: Games Analysis

3. I: Introduction

In this chapter, video games that have been previously used in research, or have been highly critiqued by the games industry and subsequent games communities are researched as to whether they will prove beneficial for analysis in the case studies. These video games are analysed through a detailed play analysis using the methodological framework outlined in the next chapter.

3. II: Video Games with Strong Narrative

Narrative is a strong core foundation for developers to experiment with emotion, similar to its use in novels and films. Bowen Research (2013) has a survey which found that 78% of gamers found RPGs emotional. It notes that it was due to the involvement with characters and depth of story. This depth of story is critical to engagement with many video games.

The earliest video game frequently cited in studies is *Final Fantasy VII*, released for the PlayStation console in 1997 and the first commercial success for a Japanese RPG worldwide (for example see Bowen, 2013 and Zagalo, 2007). This title is used for research for the initial reaction to the murder of a main playable character *Aeris*. She dies the hands of the games' antagonist *Sephiroth* in one of the games' cinematic cut-scenes. Research notes that players who had been playing the game for some considerable time found this dramatic event shocking, and ultimately sad. The death of *Aeris* is continuously mentioned in the study and many gamers comment that they cried and couldn't forget it. Other RPGs analysed by the game researchers and community are *Lost Odyssey* (2007), *Final Fantasy X* (2001) and *Zelda: Ocarina of Time* (1998).

Bioware is frequently noted to have been able to successfully balance the interactive and narrative in their earlier games (*Knights of the Old Republic*, 2003, *Mass Effect*, 2007). Known for using RPG elements in all their games, *Mass Effect* (2007) is the flagship trilogy that effectively uses empathy in their narrative. Through the use of multiple choice and ‘Paragon’ (Good) and ‘Renegade’ (Bad) affiliations, players are given a degree of directorial choice of how the narrative progresses. The narrative spanned three games (*Mass Effect*, 2007, *Mass Effect 2*, 2010, *Mass Effect 3*, 2013), each building upon Commander Shepard’s story. The relationships you forge whilst playing give an emotional depth to the game whenever the narrative strives for emotional and moral reflection.

3. III: Public Discourse of Emotional Video Games

Recently, there are media discussions on emotion in video games, including an article published in *The Guardian* newspaper (‘*Beyond: Two Souls and the new emotions of gaming*’ Gillett, 2013³) on their choice of emotional video games. Gillett (2013) lists *Beyond: Two Souls* (2013), *Gone Home* (2013), *The Last of Us* (2013), *Shadow of the Colossus* (2005), *Portal 2* (2011) and *Papers, Please* (2013). *The Last of Us* (2013) and *Shadow of the Colossus* (2005) appear in other articles concerning which video games are the most emotional (Buzzfeed, 2013). *Papers, Please* (2013) is controversial due to the subject matter of the game, the player is cast in the role of a border control officer. The emotional content leans more towards guilt and its implications on ethical and moral reasoning (Zagal, 2009).

This article was not the first to be available online. Previously at the end of each year or after a new published title that was intended to define a new emotional experience, writers and gamers would list their own opinions of the most emotional video game. Games also included are *Tomb Raider* (2013), *Journey* (2012), *Metal Gear Solid* (1998), *Halo 4* (2012) *Red Dead Redemption* (2010) and *The Darkness* (2007). These titles are included on such lists due to the impact of one particular event that moved the player, e.g. the murder of Jenny in *The Darkness* (2007) or Sniper Wolves’ death in *Metal Gear Solid* (1998).

³ www.theguardian.com/technology/2013/oct/2013/11/beyond-two-souls-emotional-gaming

3. IV. Interactive Dramas

Beyond: Two Souls (2013) is classified by Cage (Lejacq, 2013) as an ‘interactive drama’, a attempt to classify this video game as a blend of film and video game. This new classification is intended to have direct interaction over choice and action whilst presenting the game as if it was filmed like a movie. Cage is known to be publicizing a change in the video game industry, though *Beyond: Two Souls* (2013) was not his first attempt to change the perceived nature of narrative in a video game.

Through the use of QTEs (Quick Time Events), the narrative is broken into chapters revolving around the main protagonist, Jodie Holmes. The player is tasked with selecting choices in the game which could alter the narrative for bad or good. These conditions could be quite severe with main characters dying at certain points, thus altering the ending. With various combinations of game play choices, the player could have 23 different endings ranging from happy to sad to depressing.

3. V: Emergence of Episodic Video Games

The games industry has recently seen a sharp increase in a trend of episodic video games; this model allows developers to concentrate on the development of the narrative based on feedback on the previous episodes. Valve made an episodic structure with its *Half Life 2* (2004) franchise, *Half Life 2: Episode 1* (2006) and *Half Life 2: Episode 2* (2007). The narrative of each episode continues from a cliff hanger but many in the industry have deemed these episodes to be similar to ‘expansions’ rather than episodic.

Telltale Games successfully uses the episodic framework for its publications and has been an advocate of using episodic story-telling in the video games industry. Recently they have been releasing episodic games monthly to critical acclaim. *The Walking Dead: Season*

Two (2014) is the most recent episodic adventure game based upon the comic and television show and is using Telltale Games' formula from its previous games (*Jurassic Park: The Game*, 2011, *The Wolf Among Us*, 2013), of storytelling and player choice to create a unique experience for players in an dynamic story.

3. VI: Rise of the Independent Game Developer

Gillett (2013) categorises *Papers, Please* (2013) in his list of emotional video games, a game developed and published by an independent developer, Lucas Pope. The rise of small independent game studios is slowly impacting on the culture of games development. These aspiring small developers have gained strength each year. This is due to the cost of development hardware decreasing rapidly as well as the open source programming languages available on the internet. Unrestricted by large publishing companies, the creative scope they possess is unlimited which has seen a large diverse catalogue of independent titles being released since 2008.

Dear Esther (2008) is a mod⁴ available for PC that demonstrates that simple narratives are capable of provoking the mind and heart. The player finds themselves stranded on a remote island in the Scottish highlands with eerie and beautiful surroundings and letters from the characters deceased wife. This game is notable due to the lack of linear progression; players are able to wander the island with no objective in their search for answers.

More linear-orientated independent games released recently are *Limbo* (2010) and *Journey* (2011). *Limbo* (2010) is a side-scrolling game that used light and shadow to create a uniquely inspirational tale of a young boy looking for his sister. *Journey* (2011) is a game by Jenova Chen and proved that interaction with other players and the environment could produce a uniquely moving and entertaining experience.

⁴ A mod is a user generated *modification* that uses game programming from a game and allows the user to modify that game's code into a new experience that operates differently from the original game.

Chapter 4: Methodology for Research and Analysis of Video Games

4. I: Introduction

This chapter will outline the theoretical framework and the methods of research that will be in the following chapter. The first section details the aim of this research paper with its relevance to the video game industry. Following that, will be the methods of analysis which will be used to analyse the selected video games and the reasons as to why they were chosen. Lastly, the case studies will be outlined according to the criteria specified.

4. II: Aims and Methods of Research

The aim of this research paper is to examine and analyse the use of sadness in the medium of video games. In this research the rising importance of emotion in video games notably sadness, an emotion that is generally themed as negative, will be explored in published video games. The video games that will be researched will either be mainstream or independently released. For this reason, the specifically named video games for the case studies will provide a valuable asset in the analysis.

This research paper uses a qualitative analysis to assess researched data gathered. In order to conduct a representative analysis, a selection of different video games will be analysed in order to compare common themes and practices used in their development. This research paper will examine five titles which represent various different approaches to game design: The criteria for choosing these titles are:

- A combination of AAA-rated video games and smaller self-published video games. This will help to compare how published titles with various budgets and development teams have used sadness in their title.

- Titles released after 01 /01/ 2000, so that titles compared are relatively recent to this study.
- Video games with different game play mechanics, then comparisons to how sadness was used interactively can be compared.
- Video games with different aesthetics, the analysis will then compare whether sadness can be achieved with un-realistic or realistic graphics.

In addition to the above criteria, the titles should also display strong narrative and have been accepted by the games industry to have strong emotional storylines.

4. III. Case Studies

For this study, the five following video game titles have been chosen for analysis: *Max Payne* (2001), *Heavy Rain* (2010), *The Walking Dead: Season One* (2012), *The Last of Us* (2013) and *To The Moon* (2011). As noted in the criteria in the methodology for this thesis, the titles chosen represent a large spectrum of video games whilst also having similar connections.

The case studies chosen match the criteria set at the beginning of the methodology. *Max Payne* (2001), *Heavy Rain* (2010) and *The Last of Us* (2013) are developed by large development studios while *The Walking Dead: Season One* (2012) and *To The Moon* (2011) are developed by smaller development teams. Each have different mechanics and could be placed into particular genres: *Max Payne* (2001) is a third-person shooter, *The Last of Us* (2013) is a third-person survival horror, *Heavy Rain* (2010) *To The Moon* (2011) and *The Walking Dead: Season One* (2012) are adventure games though differ in graphical presentation.

Commercially all the case studies vary in sales though all did garner attention from the games community for their emotional content. *Max Payne* (2001) sold well and was released across numerous games consoles. It also spawned two follow up sequels, *Max Payne 2: The Fall of Max Payne* (2003) developed by Remedy and *Max Payne 3* (2012), which is

developed by Rockstar Games. *The Last of Us* (2013) sold 3.4 million units within three weeks after launch, and became the fastest selling PlayStation 3 title in 2013. Commercially it is a huge success while simultaneously being a critical achievement for the games industry. It is discussed prominently on various news sites (Frum, 2013) and recently featured on Charlie Brooker's *How Video Games Changed the World* (2013) at 2nd place. Commentators state it highlights the rise of emotional content in video games. Though the budget for *Heavy Rain* (2010) was estimated at \$40 million (Lincoln, 2013) to develop, it earned at least \$100 million. For a game that was not heavily publicized, the positive word of mouth and reviews helped sales of the game. The positive reception of *The Walking Dead: Season One* (2012) led to strong sales across multiple platforms via digital distribution and an accolade of Game of the Year awards in 2012. Praised for its story and ending (Gamespot, 2011, WIRED, 2011), *To The Moon* (2011) is not widely known and it was through game sites that it became known to the games community. Due to the success of the original, a sequel is currently being developed.

4. IV: Theoretical Framework for Case Study Analysis

The analysis will use topics drawn from previous studies and will allow a concise analysis of three themes that allow the use of sadness. Researchers Freeman, 2004, Bura, 2012, Zagalo, 2007, Frome, 2007 have identified the three themes as:

- a. The narrative / story
- b. Game and character design and aesthetics
- c. Gameplay / Game Mechanics

Each section of analysis will focus on a particular theme and specify whether they interrelate with one another in that particular video game.

The framework for the analysis uses Frome's (2007) four categories for emotion in a media outlet, in this case video games. Frome describes four different ways that a user can emotionally connect to a video game. *World-represented emotions* are the emotions displayed

by the characters in the video game; these may or may not affect the player as it can vary upon various conditions. For example, how the characters displays the emotions aesthetically or if a player has become attached to a character due to long periods of playing the game. *Artefact emotions* are the player's aesthetic attraction to the video game, so the game's design of the characters, environments, weapons, user interface, etc. all contribute to the visually pleasing aesthetic of the game. *Game emotions* refer to a player succeeding or failing a game, so if a player wins they feel happy while losing they may feel sad, depressed and angry. And the fourth category *ecological emotions* are how the game can become emotionally involved with the player. This can be achieved by imitating real-life situations, in the context of this analysis; a player becomes sad at an onscreen death. Even though the player subconsciously knows that the virtual experience is not real, the initial reaction should be to feel as though the death is real.

The narrative / story section will analyse the emotional parts of the video game. How the event occurs and what happens during the event while mentioning any relevant gameplay that contributed to the progression of the story. Characters will be discussed and whether the *world-represented emotions* of the characters affect the player. It will also discuss if the game is able to produce *ecological emotions* to the player through events / characters. Game and character design and aesthetics will focus on the design of the game, specifically characters that are the main conduit for emotional content. This section will use primarily *artifact emotions* and *world-represented emotions* for analysis. Gameplay / Game mechanics is a broad category for a video game but the analysis will analyse the mechanics (*game emotions*) used in the events that contain the emotional content. The mechanics of the game allow the player to interact with the characters and virtual world, in the context of this study, the mechanics will allow the player to interactively move / talk / touch a character during an emotional event.

The analysis will use Frome's (2007) classification for interactivity, actor-participation and observer-participation. Both suitably identify the two elements of video games, the non-interactive (observer-participation) and the interactive (actor-participation). These classifications will help identify how the emotional content was presented.

Chapter 5: Analysis of Selected Video Games (2001-2013)

5. I: Introduction

This chapter presents an analysis of the case studies selected for how each attempts to use sadness. The analysis is in five parts: *Max Payne* (2001), *The Last of Us* (2013), *Heavy Rain* (2010), *The Walking Dead; Season One* (2012) and *To The Moon* (2011). Each case study will analyse the approaches to and use of emotional narrative, character and game design and lastly, gameplay and mechanics.

5. II: Max Payne (2001)

“The team wanted images and ideas seen in countless action and crime movies, even in pop culture generally. Just something that hadn’t been seen much in games.” – Sam Lake (Edge, 2013)

Max Payne (2001) revolves around the gritty tale of renegade NYPD Detective Max Payne, a man avenging the murders of his wife and child while uncovering a conspiracy about the drug named Valkyrie. The story primarily progresses through graphic novel cut scenes and Max’s inner monologue that draw influence from the hard-boiled detective genre.

The emotion associated with *Max Payne* (2001) is anger, an emotion commonly connected with violence. Previous research indicates that anger is predominant; but players who played the game comment that they also experience sadness (Bowen, 2011). The loss and death of Max Payne’s family is a powerful catalyst for many of the games’ events which lead Max into his downward spiral of anger, bullets and painkillers. These events are linked with the hallucinogenic drug, Valkyrie.

At the beginning of the game the player is given hope that they will be capable of stopping the tragic deaths from happening. This may have been more emotionally moving if the scene had been in-game but as the player was changed from *actor-participant* to *observer-participant* with the use of graphic novel panels (Figure 2), the crucial impact was lessened. The reversal from positive gameplay to negative content combined *game emotions*, and *artefact emotions* (Frome, 2007). Both create an emotional moment which can be described as sad, depressing and annoying as the player failed (*game emotions*) to save Max's family.

His family's deaths are replayed numerous times throughout the campaign when Max is injected with the hallucinogenic drug. During these segments the player hears the cries of his daughter whilst wandering blood soaked corridors; the imagery and sound evoke quite intense feelings of sadness through *artefact emotions*. This is the game's attempt to elicit *ecological emotions* through the use of emotional content in a depressing environment.

Max is originally depicted as a hard working police officer, a figure of law and order, until the death of his wife and baby daughter. After this major event, Max abandons the law-abiding persona and becomes an anti-hero. The emotional event in the prologue compels the player to help Max in his quest for revenge while justifying his change of personality. The design of Max's face is on constant display for the player through all the levels (Figure 3), the pained expression helps to define his character through *artefact emotions*, the player visually understands Max is in pain.

Compared to recent aesthetics in video games, Max's design is basic but players are still able to associate the character with a real life person. His inner monologue uses dark undertones to set a mood for how he feels, which emotionally immerses the player in the action-oriented game. He is characterised as a person who is constantly surrounded by death and loss. It is hard for the player not to be emotionally involved with Max's quest of vengeance.



Figure 2: Graphic novel panel depicting Max Payne cradling his dead wife (Remedy, 2001)



Figure 3: Max Payne as he is depicted in-game (Garv, 2011)

Emotionally the game provides the player with empowerment, through the use of the mechanic of 'Bullet-time', where time would slow down in the game. This mechanic was popularised by the film, *The Matrix* (1999) and used to great effect in *Max Payne* (2001). Mechanically the game gives players an abundant amount of power to progress through the game but it is through the hallucinogenic dreams that Max's prowess and power are disabled. The dreams limit player control with the movement mechanic the only control available. Max is also lethargic in his movement and the screen distorts to add confusion and disorientation while the player attempts to complete the event.

Max Payne (2001) is predominantly an action-adventure / shooting game, yet still manages to use feelings of sadness. Importantly, this happens early in the game through the deaths of Max's wife and baby. At the time of its release, primarily only RPGs (Bowen, 2007) managed to use sadness which is crucial as *Max Payne* (2001) uses sadness in a new genre.

5. III: The Last of Us (2013)

'We strive to make the gameplay and mechanics system match the emotions of the game, and let the player feel and play through that, and become more involved with the character and their universe.' – Benson Russell (Davies, 2013)

The Last of Us (2013) is a complex video game that deals with themes of sacrifice, hope and self-awareness. It deals with the human condition in a post-apocalyptic world; in which the player takes on the role of Joel and Ellie (Figure 5). *The Last of Us* (2013) revolves around the journey of these two characters during which the player must overcome physical and emotional hardships. The narrative is well structured, offering many tense and emotional events that resonate with the video game community (IGN, 2013, BuzzFeed, 2013).

There are four parts of the narrative that have significance with the narrative and eliciting an emotional state with the player:

- The Death of Sarah
- The Deaths of Henry and Sam
- Ellie kills David
- Joel rescues Ellie

These parts will be used in this research paper for analysis as they have been heavily critiqued on games community forums and websites (Error Not Found, 2013, Eurogamer, 2013). Though critics (Swain, 2013) state that *The Last of Us* (2013) is designed to be emotionally manipulative in its narrative, it could also be said that all works of fiction are produced in the same manner, to elicit emotions.

One of the more poignant moments of *The Last of Us* (2013) is the prologue. The player begins in control of Sarah, Joel's daughter. This perspective enables players to understand the relationship between father and daughter and adds greater impact for the game's prologue. The players' perspective of Joel is established through the dialogue exchanged between the two characters, that Joel is a devoted and loving father (*represented-*

world emotions). Furthermore as the player would have parental bonds in real-life, this could extend to being *ecological emotions*, as the game may have connected on a personal level with the player.

The narrative then changes to the outbreak of the apocalyptic infection. The perspective changes to Joel, and the players' first task is to run away with an injured Sarah in his arms. This sequence is a good example of *game emotions*, as the player is limited to the movement mechanic to evade danger. Once over, the player believes they have successfully passed the challenge but Sarah is then murdered. The player must witness Joel cradling a dying Sarah in his arms. This scene provokes an emotional reaction because the player can save Sarah through gameplay (*actor-participation*) but she is killed during a cut-scene (*observer-participation*). Taking away the interaction subjects the player to feelings of helplessness and sadness as they witness a father mourning his daughter's death. This all happens within the first thirty minutes of starting the game, so in a similar manner to *Max Payne* (2001), death is present early on in the game.

Twenty years on, Joel is tasked with escorting infection immune Ellie across America to produce a vaccine for an anti-government rebel group. At the end of the first act ('Summer'), Joel and Ellie encounter Henry and his teenage brother, Sam (Figure 4). After a close encounter with the Infected, a cut-scene shows Ellie attempting to bond with Sam, not knowing he is infected. After succumbing to the infection, they grapple into another room, where Henry reluctantly shoots him dead. Grief-stricken, Henry blames Joel and threatens to kill him, but suddenly puts the gun to his head, and shoots. The player is an observer to this happening and has no interaction with the scene (*observer-participation*). Though the player is aware of Sam's infection and inevitable death, it is Henry's actions that create the tension and sadness in the cut-scene. His decision to kill his brother and himself, happen in such a short amount of time that the player is not given time to reflect on the first death when the second death occurs.

In the third act ('Winter'), Ellie becomes the playable character aiding a wounded Joel. Hunting for food, Ellie meets David the leader of a local conclave and gives her medicine in trade. While tending to Joel, she is captured by the conclave. David explains to her that Joel had killed scavengers previously but don't slaughter her as David wishes her to join. Ellie eventually escapes capture. The chase ends with a fight between Ellie and David,

with the player actively participating in attacking David (*actor-participation*). Once the player deals the final attack, they are returned to controlling Joel who finds Ellie stabbing the corpse of David in a cut-scene (*observer-participation*). This scene is a crucial point, Ellie has killed another human and Joel accepts the bond he has formed by referring to her as ‘baby-girl’ (a term of endearment he originally had for Sarah) while she weeps in his arms. While the player feels the *represented-world emotions* of Ellie (guilt, sadness), the bond that the player has with both characters is now fully realised in game as Joel has broken his barrier with Ellie, seeing her as a ‘second’ daughter. This scene can be both sad and happy, culminating in a bittersweet feeling.

At the end of the final act (‘Spring’), Joel and Ellie locate the rebels and Ellie agrees to go under surgery to find her immunity. Meanwhile Joel learns that the surgery will kill her so ‘rescues’ her out of the facility and kills all of the rebels including Marlene, an old acquaintance (Figure 5). In comparison to the other events in the game, Joel’s actions may not reflect those of the player even though the player engages this part mostly with *actor-participation*. Depending on the player this part consists of a separation of *world-represented emotions* and *ecological emotions*, as the players’ feelings have no impact on the story. Yet the player must control Joel as he continues to do what he believes is right, even if the player believes differently.

During the campaign, *The Last of Us* (2013) focuses primarily on Joel and Ellie. The strength of the game is the aesthetics of these two, while both are visually appealing, the game is able to capture the humanity of both of them through the use of Motion Capture⁵. The actors give a semblance of realism to the digital characters, almost as if the player were watching a television show. Joel is portrayed as the grizzly and distant warrior who once knew what civilisation was like while Ellie is the brash and impulsive teenager brought up without any law and order. These two contrasts enable conversations to remain engaging between the two characters as they began hostile then they slowly become amicable towards one another. The player witnesses the relationship building (*world-represented emotions*) while also connecting at a personal level in the well-being of the characters.

⁵ An animation technique that captures the real life movements of an actor digitally which can then be used to animate a video game character.



Figure 4: Sam and Ellie (Naughty Dog, 2013)



Figure 5: Joel rescuing Ellie at the end of The Last of Us (Berida, 2013)

Secondary characters are introduced to progress the game's narrative and enabling events that may emotionally involve the player e.g. Henry and Sam. The narrative utilises these characters by using them for significant portions of an act therefore allowing players to spend time to accustom themselves with their characteristics and back-story. When any of these secondary characters feel pain / suffering / death, the player who has been in contact with the character for a period of time should experience emotional feedback for the character (*ecological emotions*).

The game mechanics compliment the aesthetics, unlike *Naughty Dog's* previous games (for example *Uncharted*, 2007, *Uncharted 2: Among Thieves*, 2009) which have highly dramatic action sequences with game mechanics matching the gameplay. *The Last of Us* (2013) has a more serious approach to an action adventure video game, the mechanics focus more on realism.

The events in the analysis have no full actor-participation; the player witnesses the sad content through the use of a cut-scene. Three of the events analysed, as Frome (2007) described were a mixture of actor-participation and observer-participation. The player is included in the initial run-up to the *death of Sarah*, *Ellie killing David* and *Joel rescuing Ellie*, while the *deaths of Sam and Henry* are only shown in a cut-scene. The three parts have player interaction before the initiation of the cut-scene, and notably the *death of Sarah* and *Joel rescuing Ellie* events give the player a limited amount of interactivity. In both of those events, the player can only move Joel whilst evading obstacles as he was carrying another character. This limited interactivity heightens emotions for the player, making them more susceptible to emotional content further on. It is also a good example of how narrative and gameplay working together to create a unique experience. *Ellie killing David* differed as the player had full control of Ellie; the player is capable of all the gameplay mechanics (moving, attacking, stealth, etc.). If discovered and caught by David during the fight, Ellie would instantly be killed. The player has to navigate the level to ensure they were never seen while avoiding obstacles (for example, fire) to approach David from behind and attack. This mechanic uses David as the source of tension for the player, as if not properly played it would result in failure.

The Last of Us (2013) successfully manages to combine narrative, design and mechanics in its portrayal of emotional content. The strong lead characters were the crucial element to the game; their design and portrayal by the actors add depth to the narrative and immersion for the player. This immersion helps the player connect with the world portrayed and strengthens any *ecological emotions*. Good use of actor-participation helps the impact of sad events when it occurs. Unfortunately the games replayability would diminish any emotional impact due to its linear narrative.

5. IV: Heavy Rain (2010)

'I wanted to find a way to allow the player to become the actor, co-director and cowriter of this experience. I created the context, but at the end of the day, I allowed the player to tell the story through gameplay and not through cut-scenes.' – David Cage (Parker, 2011)

Referred to as an '*Interactive Drama*' (Cage, 2010), *Heavy Rain* (2010) is a psychological thriller that revolves around the crimes of the Origami Killer. The game follows four protagonists (Ethan Mars, a father, Scott Shelby, a private detective, Madison Paige, a photojournalist and Norman Jayden, a FBI investigator) solving the kidnapping of Shaun Mars, son of Ethan, before he is killed. The game uses multiple routes for players based upon choices in-game. Unlike other games which rarely punish the player for bad choices, if the wrong choice is made or if a timer runs out in *Heavy Rain* (2010) a character can die. The narrative then takes into account that a character has died, changes to the next playable character and affects the games conclusion.

The games choices can alter the experience; typically games would allow players to restart if they failed to choose the correct choice but *Heavy Rain* (2010) accounts for these mistakes. This creates tension for the player to choose the correct choice and if the player fails, they have to continue playing without certain characters or crucial evidence. This can elicit various emotions (guilt, shame, sadness) if the player fails (*game emotions*). As the narratives objective is to rescue Shaun through different character paths, the game challenges the player's willingness to choose from potentially morally corrupt choices. For example, Ethan is given morally challenging tasks for Shaun's location; one task has him choose to go kill another person. Whereas Norman uses his investigative skills to find the location while combating a drug addiction, giving the player the choice to either continue using the drug or stop. Both choices have ramifications for the narrative. Unfortunately the game does lack motivation for the player early in the game; the player rarely sees Shaun and this does not build any *ecological emotions* with the player. This lack of relationship between player and Shaun provides a weak motivation for the players' actions.

The games conclusion is determined by player choice, if the player doesn't succeed at various points in the game, the endings become worse. The bad endings use strong emotional content. If all the characters survive and the Origami Killer is killed then the player is rewarded with a happy conclusion. If the player fails in rescuing Shaun, he dies; Ethan will be devastated over the loss of his son and commit suicide. The game uses *game emotions* to build the narrative, if the player has failed to choose the correct choices will lead the narrative to produce various depressing and sad endings.

Cage (2013) says that video games need high quality detail to evoke stronger emotional responses from the player. *Heavy Rain* (2010) is an example of his work that pushed technology to visualise high quality environments and characters. The virtual depictions of the characters by the actors partnered with the high quality 3D models (Figure 6) create a visually pleasing gaming experience. This detail allows the player to immerse themselves in a virtual world similar to the real world. The high quality of detail creates believable experiences in the game and heightens any emotional content. On the other hand the level of detail negatively impacts the player; as the graphics can be distracting. Distracting the player from crucial story elements or crucial choices lessens the impact of dramatic parts in the narrative.

Gameplay focuses on player input during conversations and action sequences by completing commands, similar to QTEs. These commands are symbols present on-screen and are completed by pressing a button or moving the joystick. The commands are intuitive and help immersion in the game world. Though they do involve the player during a crucial choice in the story, they also used for meaningless choices e.g. flushing a toilet. These actions don't contribute to the player immersing themselves in the narrative and can detract the player from the gaming experience.

Heavy Rain (2010) effectively uses death and loss in the narrative and game mechanics. By allowing characters to die, the game changes the narrative and increases the possibility of losing Shaun. This increases the emotional complexity of the narrative by including any player failure.



Figure 6: High resolution video game graphics in Heavy Rain (Bruno, 2011)

Heavy Rain (2010) manages to depict a visually stunning emotional video game that incorporates death as a tool for the story. The system changes the narrative depending upon the player's interaction / choice, creating a tense atmosphere for the player who could unintentionally kill a main character and altering the game's conclusion for good or bad. In the end, the game manages to use positive / negative choices to build an array of happy, sad and depressing endings.

5. V: The Walking Dead: Season One (2012)

‘The goal is not to make the emotional content so narrow that other people can’t accept it.’

– Sean Vanaman (Klepek, 2013)

In *The Walking Dead: Season One* (2012), the player controls the protagonist Lee Everett. Unbeknownst to other characters at first, Lee is a murderer who escapes incarceration due to the zombie outbreak. While trying to survive, Lee finds Clementine, an eight year old girl who was left without her parents. Promising to take care of her, they set off in search of her parents. Along the way, they meet other survivors including Kenny, wife Katjaa and their son Duck, a family from Florida.

The narrative in *The Walking Dead Season One* (2012) offers various possibilities for events and dialogue. Due to its gameplay of offering players choice, the structure of the narrative can vary from player to player. The game is broken into five episodes which all use pivotal moments of sadness. For the analysis, three events have been chosen:

- Zombification of Duck
- The Walker in the Attic
- Lee says goodbye

In the third episode “*Long Road Ahead*”, after escaping from bandits, the group of survivors operate a train headed towards the ocean. During the previous attack, Duck is bitten by a ‘walker’ (game term for zombie) and the infection worsens during the journey to the point where there is no other option other than to kill Duck. Due to the mechanics of the game, the player can opt to either let Lee or Kenny kill Duck. The importance of this scene is the reaction to the death by the characters, the notion of choosing to kill a child is sad especially as the player has the power to take that responsibility or give it to the child’s father. Once Duck dies, Katjaa also kills herself which similar to Sam and Henry in *The Last of Us* (2013) emotionally intensifies the scene. These deaths affect the narrative dependant on the players’ choice, as Kenny becomes distant for the remaining episodes.

At the beginning of the next episode “*Around Every Corner*”, the group of survivors find shelter in an abandoned house. Whilst the group search the house, Kenny comes across a walker in the attic. Though the player is used to encountering walkers, this walker is different. It is a young boy, manacled to the floor and he seems to have died from starvation as he is depicted as skin and bones. Similar to the previous event, the player is given a choice of choosing who kills the child walker, Lee or Kenny. The characteristics of this event remind Kenny of Duck and his distress becomes more prominent than before.

Finally at the end of the final episode “*No Time Left*”, the most emotionally driven event occurs. Unlike previous the games where the protagonist is the eventual ‘hero’ of the tale, *The Walking Dead: Season One* (2012) changes this as Lee is bitten by a walker. This means he will turn into a *walker*; the player can attempt to stop the infection by removing the arm that was bitten. Unfortunately, though the game offers the player numerous ways of progressing through the narrative, this cannot be changed. After a suicidal rescue to free Clementine from a deranged kidnapper, Lee succumbs to the infection. The player gives Clementine orders and advice before he turns into a walker. This conversation highlights the relationship that has been built up through the five episodes and reveals the devotion and love that both characters have for one another (*represented-world emotions*). This event also uses *ecological emotions* to maximise emotions during the event as the player witnesses the protagonist dying, the role that players have taken on (*somatic displacement*). The player may ask Clementine to shoot Lee in order to protect him from turning into a walker (Figure 7), as she gets emotional produces another emotional layer. This culmination of various emotional elements produces an extremely sad event⁶.

⁶ <http://www.youtube.com/watch?v=oX8kSihzoA0> (MetalEater22, 2013) A YouTube video that shows how the ending affected some of the people that played *The Walking Dead: Season One*.

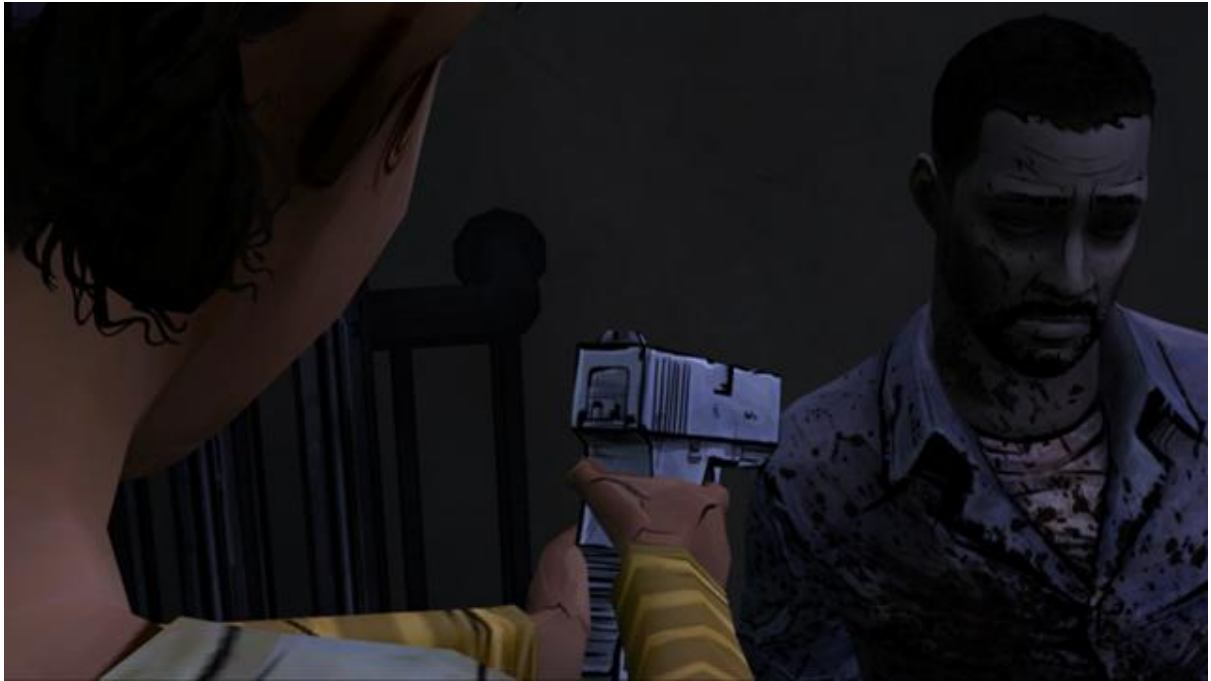


Figure 7: Clementine pointing a gun at Lee (Corkyandpals, n.d.)

Graphically *The Walking Dead* resembles the graphic novel it was based on; characters and environments are designed as if drawn with paint and ink. In contrast to *The Last of Us* (2013) and *Heavy Rain* (2010), both of which use highly detailed 3D models, *The Walking Dead* (2012) uses basic 3D models with detailed textures that resemble a hand drawn / painted aesthetic. The player would not instantaneously associate the game world with reality but the characters have been animated and voiced accurately to resemble living people. This enables the *represented-world emotions* shown in the game to be effective and over time the game builds *ecological emotions* to the player through detailed animation and dialogue, which is why the strongest emotional content was shown in the last three episodes of the game.

The design for Clementine is significant for the narrative. Her innocent design (mannerisms, speech) is meant to instil in Lee and the player the need to protect her. This strengthens the emotional bond not only between Lee and Clementine, as he becomes a surrogate father to her but also between Clementine and the player. The *ecological emotions* a player has with Clementine dramatically boost the impact of the games finale with her responding to the harsh situation she is in with Lee, and through him, the player.

Uncomplicated and easy to use *The Walking Dead: Season One* (2012) uses very little interaction from the player. The player is required to move Lee at certain points, press certain buttons for QTEs and is offered up to a choice of four options in conversations / decisions. Though the game doesn't use many gameplay mechanics, the player was continuously involved in the direction the narrative took (*actor-participation*). This approach is reminiscent of *Heavy Rain's* (2010) system of actor-participation which allows players to be involved to the content depicted when it occurs. For example, when Lee is saying goodbye if the player chooses the dialogue for Lee telling Clementine to kill him, it affects the player on a personal level instead of observing dialogue in a non-interactive cut-scene. It is as if the player were telling another person their wishes before they died a traumatic experience that is rarely encountered in real-life.

The emotional content of *The Walking Dead: Season One* (2012) proves that video games can elicit strong emotional reactions similar to a sad film / novel. Building a relationship with the main characters while simultaneously choosing options for the welfare

of a small child, culminates in one of the most emotional experiences in any of the case studies. The death of the protagonist Lee effectively combined narrative, character design and mechanics for the strongest sad event analysis in the case studies.

5. VI: To The Moon (2011)

‘While there are some rather sad undertones of the game, I think the parts that got many people were actually happy ones... or maybe more accurately, bittersweet.’ – Kan Gao
(Mulrooney, 2011)

To The Moon (2011) is a linear narrative that deals with life and death. The story’s premise revolves around the construction of artificial memories by the in-game company Sigmund Corp. These memories are implanted into recipients close to death by technicians so as to fulfil a wish. In this video game Johnny Wyles wishes he had visited the Moon but cannot remember why. Rosaline and Watts, the scientists assigned to Johnny, journey through Johnny’s memories, reliving the good and bad times of his life to figure out the cause of his wish to be able to make it come true. Unlike the other games in the analysis the emotional component of the story isn’t solely focused on one moment but instead is present throughout the whole narrative. If broken down, the first part of the game contains the sad emotional content while the second half builds up to a happy conclusion.

Unlike the other case studies, *To The Moon* (2011) slowly builds up emotional moments through immersion and dialogue. The player becomes involved in the life of Johnny as the layers of his life are revealed. The linear structure presents mysteries which are then revealed by exploration into his youth and his relationship with his wife, River. This story focuses on death and loss but differs in method; instead of on-screen death being a catalyst for sadness, the revelations behind the deaths and losses is what culminates in the heart-breaking moments of the game.

River, Johnny’s deceased wife, is the emotional core of the story. In the beginning the player is not given any indication why Johnny wants to go to the moon. As the story continues, we learn that the relationship between Johnny and River was difficult due to her pervasive development disorder (a real disorder, similar to autism), and players question, along with Johnny, whether River loved him due to her odd behaviour towards him (for example, making hundreds of paper rabbits). Witnessing personal memories of a character

immerses the player in the narrative, and similar to a book, the player wants to find the answers just as much as the characters (*somatic displacement*).

Near the end of the game, the narrative distorts previous perceptions. It is revealed that Johnny had forgotten meeting River for the first time at a carnival. After his brother dies, his memories were altered and he forgets the promise to meet on the moon. As River had not forgotten but had instead tried to jostle his memories through her odd behaviour (for example, making the paper rabbits which they saw whilst gazing at the stars) and was unable to tell him directly. Unfortunately, she dies before he remembers. This revelation, as Gao (2011) states is 'bittersweet': a mixture of happiness that River did love Johnny but sad as her attempts to remind him never occurred.

Borrowing from the 16-bit video game generation (Figure 8), *To The Moon* (2011) aesthetics are elegant and simple. The design highlights a trend to move away from highly detailed graphics to focus on emotional content. It does create the problem of immersion as graphically the games characters are not portrayed realistically. Additionally characters do not communicate through sound but text displayed at the bottom of the screen. This is overcome by the quality of the writing, similar to a novel; characters are given characteristics and memorable dialogue that help to portray them as human.

While the graphics do not enhance the emotional content, the game's musical soundtrack adds ambience and immersion to the narrative. The music is so effective at setting the mood on screen, that without it the game would lack the same emotional impact.

The game mechanics of *To The Moon* (2011) are basic and had no real impact in the emotional content of the game. Players guided Rosaline and Watts by clicking on an area in search of mementos to unlock the next memory. They are simple mechanics purely because they are acting as a vehicle for the game's narrative.



Figure 8: Johnny and River (Sprinkles, 2014)

To The Moon's (2011) combination of life, death and memories create a story that a player can connect to. The characters though visually not striking, the story portrays them in a very human way. The game uses *world-represented emotions* and *ecological emotions* effectively through the good and terrible memories of Johnny.

Chapter 6: Conclusions

The video games that have been analysed using Frome's (2007) framework for emotions in media have all been deliberately developed to give intense emotional experiences and elicit the desired response to the narrative. In this way, the games present a careful balance of positive and negative emotions, giving players positive experiences allows the negative experiences to be felt more strongly. All of the games have this rollercoaster effect although *Heavy Rain* (2010) could potentially be a singularly downward experience if all the wrong choices were made.

Through the analysis of the five case studies here, this study has found that none presented sadness outside cut-scenes / QTEs. *Max Payne* (2001), *The Last of Us* (2013) and *To The Moon* (2011) only showed sad content in cut-scenes. *The Last of Us* (2013) does have interactive sequences before the cut-scene which helps to improve the impact of the emotional content. *Heavy Rain* (2010) and *The Walking Dead: Season One* (2012) use QTEs for sad content. This corresponds to Zagalos' (2007) findings that games only present sadness through observer-participation (cut-scenes) or a combination of actor-participation and observer-participation (QTEs). However, while Filipowich (2013) found that interactivity during games distracts the player, the analysis shows that actor-participation immediately before the emotional content helps to boost its impact during the observer-participation through the use of *game emotions*, *represented-world emotions* and *ecological emotions*. In this way interactivity was beneficial to the narrative in the case studies, as gameplay built up to the emotional delivery shown in the cut-scenes.

The analysis highlights that the key moments using sadness in the case studies involve death and loss. *Max Payne* (2001) uses the death of Max Payne's family as a motivation for the narrative. *The Last of Us* (2013) has various deaths throughout the story with the early death of Joel's daughter setting a tone for the rest of the game. *Heavy Rain's* (2010) endings use poignant death scenes if the player was not successful. *The Walking Dead: Season One* (2012) uses the bold decision to show the death of its protagonist. Finally, *To The Moon* (2011) doesn't show death or loss but uses it to tell a bittersweet story. These games correspond to studies by Oliver (1993), Krameo & Witschel (2010) and Zagalo (2007). All the video games used death or the prospect of death as the primary use of the emotion of

sadness. As the player become instantaneously involved with emotional content (Pohl, 2008) the game can successfully make use of *ecological emotions* (Frome, 2007). This is strengthened through the interaction and bond developed between characters and the player, the somatic displacement (Holopainen & Meyers, 2001), where the player projects their identity onto the virtual character strengthens real world similarities. Using a strong emotional real life experience such as death, subconsciously affects the player even if they know the death is not real.

Aesthetically the case studies reveal that emotional content is not reliant on realism. *To The Moon* (2011) successfully conveyed an emotional narrative with 16-bit graphics. Contrary to Cage's (2013) findings, computer graphics are not necessarily required in a video game to present emotional content. The benefits of realistic graphics are the ability to portray characters animations with realism, allowing the player to understand any emotions used visually. The disadvantage of this is if the character is high quality but lacks a realistic personality, any emotional content will not resonate with the player. For example, Shaun's kidnapping in *Heavy Rain* (2010), due to the poor portrayal of Shaun, the initial emotional reaction to save him is lacking. On the other hand, Clementine's kidnapping in *The Walking Dead: Season One* (2012) has an emotional resonance with the player as her personality is portrayed as real even if she is graphically unrealistic. Sophisticated graphics are an additional layer which can boost the narrative. If the narrative is lacking strong emotional content, graphics alone are not sufficient to ensure the content will elicit an emotional reaction.

This study has analysed a selection of video games from the subjective perspective of the author. Therefore it remains a challenging area for research due to the potential variety in the emotional spectrum of the player base. Certain players will be capable of feeling emotions much more easily than others, but as these games are designed to appeal to video game players interested in a story, the narratives have been designed to attempt to elicit emotions. This area of research would benefit from further quantitative research which is beyond the scope of this paper. For future studies, a large survey could be carried out for selected candidates to play and write about experiences during a full play-through of selected video games.

6. I: Future Possibilities

There are numerous potential directions that emotional content may take in the future of the video game industry. First is the method of interaction with the narrative, as both *The Walking Dead: Season One* (2012) and *Heavy Rain* (2010) have shown, it is possible to create a video game capable of producing emotional experiences through the players' selection of a choice. This was expanded upon in *Heavy Rain* (2010) where a bad choice does not end the game but is used for a purpose in the narrative. This could diversify how narrative and interactivity combine to create more tangible gameplay and emotionally powerful experiences while acknowledging players mistakes and using them to construct unique stories.

Secondly, can emotions in video games not just be used for entertainment purposes? Interactive games can explore deeply personal stories that are not to entertain but to encourage thought and self-introspection. Television and books are considered sources of information and education so the possibility of video games, for example *Minecraft* (2009) is now used for educational purposes such as History or Social studies (Bristow, 2013), offering new and engaging approaches to learning.

All future game studies could include an analysis of particular emotions used in the game. As games are becoming more sophisticated in their depiction of emotions, which is becoming more important in the narrative and design, it would be beneficial for game studies to understand how emotions are affecting the player. Further research should attempt to answer whether emotional content is beneficial to the development of the video game industry.

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