Do we emotionally connect with video games?

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Abstract

This extended essay examines how video games create emotional attachment on the part of players. Although video games seem to many in today's world to lack depth I explore whether they have qualities of other forms of media that create attachment between people and objects. I consider the role of design, the combination of gameplay and emotional connection, and focus on design, color and music as major factors in triggering key emotions. I analyse a segment of *Kingdom Hearts II* (2005) to show how these design elements can emotionally engage the player in a fictional world.

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Introduction

For over 35 years now video games have been dramatically evolving into one of the worlds highest grossing mediums, going from \$6 billion to becoming a \$24 billion annual industry surpassing film and music according to the film *Video Games: The Movie* (2014). Not only have we made advances in graphical fidelity, blending gameplay with action as well as narrative, but also to crafting compelling stories, worlds and characters, leading to the question are we at a point where we emotionally connect with Video Games?

Chapter I: Games and Other Media

The point where one can identify emotional connection varies for individual players and for commentators. The different backgrounds that people come from play a huge part in this rare experience. In the book *Psychology of music: from sound to significance* by Rom Harre in the chapter "*Emotional power of music*" he asks, "How and why does music rouse such strong emotions in us? What gives music its affective power? It is important to consider that the psychological definition of emotion is more nuanced that one might expect. Colloquially, the term "emotion" feeling and "mood" are often used interchangeably but the standard definitions within psychology (though over lapping) are not interchangeable" (Harre, 2010). It's clear that the answer to this question is not as simple as we might think.

Miguel Sicart stated in his book *Beyond Choices* (2011) that "Games are emotional objects. Some aspects of games-such as menus, user-interface elements, and gameplay information like health status or timers – need good

usability. However, games also demand emotional attachment. The pleasure of uncertainty in some strange games may come from the use of fog of war, a design that increases cognitive friction to enhance a particular type of experience." However art critic Jonathan Jones claims "No one "owns" the game, so there is no artist, and therefore no work of art." (Jones, 2012) and even game designers have stated they do not and very likely will not see video games as anything more than a form of popular entertainment such as John Carmack. Another is famed film critic Roger Ebert who claimed that he saw video games as something that cannot be viewed as art as he felt no attachment to them, the same way he felt about something like chess. (Ebert, 2010) However others have spoken out about their emotional connection to games, one being American media scholar and university professor Henry Jenkins. In his book *The Wow Climax* he mentions what culturally significant developments there have been in video games, stating that "Games have gone a long way towards cultural respectability and artistic accomplishment over the past few decades, but what will come in the future will boggle people's brains (Jenkins. 2007). To add to this he talks about Newsweek critic Jack Kroll who sparked a debate in the gaming community over the issue, saying that he felt that "audiences will probably never be able to care as deeply about pixels on the computer screen as they care about characters in a film." Against which Jenkins argues that "countless viewers cry when Bambi's mother dies, and world war II veterans can tell you they felt real lust for Esquire's Vargas girls, why should pixels be different?" (Jenkins. 2007).

Chapter II: Our attachment to Objects

To learn more about how we can grow attachments to video games we need to look more deeply into our attachments within our everyday lives, particularly with objects close to us as well as fictional characters we relate to. An article by M.Farouk Radwan from the web site 2KnowMySelf asks the question "Why do we become emotionally attached to things?" and explains that these emotions come mainly from loss, stating that "People become attached to certain objects to satisfy certain emotional needs and the threat of loss of the object triggers anxiety because it threatens the loss of the status the person has earned." (Radwarn, 2008) This is an interesting theory as it suggests that much emotional connection focuses around our negative emotions instead of our more positive ones. This certainly seems true enough as some of the more recent games such as The Walking Dead (TellTale Games, 2012) and The Last of Us (Naughty Dog, 2013) have become more memorable for their more depressing moments as opposed to their more upbeat moments.

A middle ground that can be found between our attachment to objects and the potential within video games is with the next best thing, other forms of fictional story telling and bond that some feel with their characters. A web article from the website 'Birdies' by Kevin Loader asks "Why do we get so Attached to Fictional Characters?" Stating that "When we see our ordinary characters go through extraordinary challenge sometimes coming out on top, we look up to the character as a role model and an example of how we should be ourselves." (Loader, 2014) This brings up a valid point in that many of us take

strength from these characters that we relate to and use that same strength they use to overcome their own obstacles and translate that to our own.

Maybe the same can be said with video games?

Another relevant viewpoint can be found in author Sherry Turkle's book *Evocative Objects*. (Turkle, 2011) containing essays by scientists, humanists, artists and designers about their strong attachments to various objects in their lives and what they mean to them. One that seemed especially relevant was written by Henry Jenkins entitled *Death-Defying Superheroes* (*Jenkins*, 2011), in which he talks about how he used comics to help him deal with the passing of his mother and began to find himself greatly attached to these heroes seeing them as immortal beings that would not leave him, even staying the same when he returned to them after long periods of time. This also brings up a strong point that we want so badly for our heroes and idols to stay with us because it makes us feel like we can do impossible things and even in our darkest points we continue on to fight another day. It also connects back to Radwan's comment that the strongest attachments come from loss.

Chapter III: Our Attachment to People

The question of "Can we connect with objects in games?" seems to be more one sided than the question of "Can we connect with characters in games" due to our understanding of what we can relate to more as shown before with people like Ebert who loved the emotional drive he could find within films but admitted that he just did not see the same potential in games. A relevant example to bring up about with this is in the game "Portal" (Valve, 2007) where you the non-speaking protagonist has no one to interact with except for the small boxes named "Companion Cubes" that are left for you to use to solve the puzzles you are tasked with. These cubes are designed with no significant features except for a simple heart drawn on the face of each side but despite this however many players have become connected enough to draw fan art of the protagonist and Companion Cube as if they were inseparable. But what is the reasoning behind this supposed attachment people seem to slowly form with this inanimate virtual object?



Fig 1: Portal Cube Fan Art

In the 1950s Psychologist Donald Hebb ran psychological tests where he placed volunteers into small testing capsules and used equipment to cut off sound and sight to the patient leading to many failing the test within a few days. Proving how much of a social species we are, to the point that we believe inanimate objects are alive with emotions and intentions when we have been alone for too long. An example of this theme can also be found in the book *Robinson Crusoe* (1719) by Daniel Defoe in which he explores the theme of human isolation. Others have also written similar stories such as *Lord of the Flies* (1954) by Sir William Golding and the Robert Zemeckis Film *Cast Away* (2000). These examples really show that we strive to find interaction with anyone or anything, particularly when there is none to be found, this can also explain much about why in games like *Mass Effect* (BioWare, 2007) and *Knights of the Old Republic* (BioWare, 2003) some of us want to find out more about these characters that we interact with even when we know it won't change the direction of the story.

Chapter IV: Emotional Connection within gameplay

The hardest part with games seems to be that they are at a long distance from other forms of media, character design may have reached a point where some can't tell the difference between real life and games, and stories are becoming deeper than simply going from point A to B. But the fact is that gameplay is and always will be at the centre of any game and some just can't overcome that. When asked about his opinion on story telling in video games former lead programmer co-founder of id software John Carmack stated in David Kushner's book *Masters of Doom: How Two Guys Created an Empire and Transformed Pop Culture* that "Story in a game is like a story in a porn movie. It's expected to be there, but it's not that important." (Cormack, 2003)

In terms of representing characters, a common hurdle that game designers try to overcome is what was named "The Uncanny Valley". Over the years video games have made great advances with graphics and how they create fully realized characters. Thanks to newly developed motion and facial capture technology, developers have come closer than ever to blurring the line between the game and real life such as with games like *Uncharted 3* (Naughty Dog, 2011) *and Beyond: Two Souls* (Quantic Dream, 2013). Even then many still hold dear to the simplicity of Mario and other non-representational characters, so are more realistic characters like those in *The Last of Us* (Naughty Dog, 2013) or *L.A. Noire* (Team Bondi, 2011) more likely to gain our sympathies? Things can get even worse with the problem of game glitches shattering the illusion that the designers have worked to create as seen with the recently released *Assassins Creed Unity* (Ubisoft Montreal, 2014) where

animations and facial capture would occasionally break as shown in an article in Kotaku. (Hernandez, 2014)

One element that is not noticed as much as the Uncanny Valley is the use of pacing. In a book by Scott Rogers entitled Level UP! (Rogers, 2014) where he looks over much of the complexity behind game design, he looks at what he refers to as "Gray Matters" to design a level's pacing from point A to B. Rogers' book is written more as a "How to Instruction Book" than some of the more philosophical books that have been addressed so far, however his work is still relevant. He states for example "Another pacing technique is to change the player's emotion every 15 to 20 minutes. Sadly the gamut of emotions experienced in most video games is pretty limited but you can make a player go from mystery to fear to panic using geometry alone. Divide your gameplay between "big moments" and "small moments". Don't stack too many big moments next to each other; you'll wear out your players. Conversely, small moments of calm and quiet will only feel boring if there are too many of them in a row. "Shadow of the Colossus" successfully balances the big moments of battling giant monsters and quiet moments of traveling through the expansive game world." (Rogers, 2014) This very convincingly shows us that many games do really depend on a steady balance of how emotional prompts are designed into the game.

Another case of forming a connection is the implementation of choices, which has certainly expanded over the years within games, from picking levels and weapons, to having to choose whether your character will act as a Paragon or

Renegade, to use the terms from *Mass Effect* (BioWare, 2007). But it seems that today we have reached a point where developers have started to challenge our very morals by having us make choices that not only radically change the overall ending of the game but also make us question ourselves about why we choose them. Rogers elaborates on this in his chapter titled Goal Setting by stating "Morals and consequences have been in games since the early adventure games like Star Wars: The Knights of the Old Republic and the Mass Effect series allow players to experience "good" or "bad" endings based on choices made during the game. But recently players are being morally tested beyond "good and evil" with themes such as morality during wartime (Spec Ops: The Line), loyalty to individuals versus groups (The Walking Dead: Season One), and even whether or not to perform torture (Call of Duty: Black Ops). These games use choice and consequence to deliver the level's moral goal and then make those choices impact gameplay." (Rogers, 2014) These moral choices lead to many discussions between gamers over their differences, one design choice that was made in *The* Walking Dead (2013) is that after the end of an episode the player would be able to see what decisions the rest of the player base had made throughout the episode. Where as some choices, for example whether to lie to a man you just met are biased on one side, others, for example whether to let a zombie bitten girl kill herself almost balance out. A lot of this makes us question why we made our decisions and why others made theirs. As lan Bogost argues in his book 'Persuasive games: The expressive power of videogames' the interactive power of games produces the "procedural rhetoric" which sets up these moral choices. (Bogost, 2010)

Another form of gameplay that may help the player form a stronger attachment is with the creation of an avatar for them to use in the game as opposed to the readymade protagonist designed for games such as Lara Croft (Tomb Raider, 1996), Nathan Drake (Uncharted, 2007) and Mario (Super Mario Bros, 1985). This allows the player to design the protagonist to their own liking, as well as allowing them more freedom to choose the path they would like to follow, as seen in games like The Elder Scrolls series (Bethesda, 1994) and Fallout series (Bethesda, 1988). However this may also have an opposite effect as stated by Adrienne Shaw in a paper titled "He could be a bunny rabbit for all I care": Exploring identification in digital games that "It is important here to distinguish between video game characters and avatars. Avatar is often used to describe the visual, digital embodiment of the player in the game world. When applied to video game characters, however, this is imprecise. When a person creates a representation of themselves in games, online or off, that is an avatar. The term avatar implies selfrepresentation. Video game characters, on the other hand, are entities unto themselves, which players control. Lara Croft, Mario, the Master Chief, Blanka, etc., are characters, not avatars." This shows that not all games can balance out player choices with emotional investment as even though we may enjoy crafting our own avatar they are constrained by the limitations of todays technology as most avatar characters feel more like 'sock puppets' than actual people.

Another game that proves to be an interesting one to examine is the game entitled Brothers: A Tale of Two Souls (Starbreeze Studios, 2013), which puts you in the control of two brothers on a quest to save their sick father. One unique aspect of the gameplay is that each of the two analog sticks controls a brother, so that you are forced to see both points of view, a key point within this is in the game's ending (which must be spoiled to go into much more detail.) In the game's final section, the oldest brother is mortally wounded and for the first time you must play as the younger brother on his own, because of the older brother's absence you must continue on with half the controls unavailable to you. After the brother sadly passes away you, in control of the younger brother, must drag your sibling to a grave you have dug for him and then push the dirt into the grave, all this you the player must do. An important gameplay function to know is that both brothers can only achieve certain goals with the other brother's advantages like the older brother being stronger or the younger one being skinnier, also there are points where the two must work together to reach a goal such as the older brother boosting the younger one up to a high ledge. This is all mentioned because at this final point in the game the younger brother must overcome the last few obstacles without his older sibling's help. The younger brother has to now cross the deep water which he needed his brothers help with, it is at this point where you the player must use both sides of the controller in order for him to cross over the water. The same must be done as well for a heavy lever he was too weak to pull before, and a ledge he needed his brother to reach. There is a lot to be taken from this ending, both from the emotions evoked by the story to the real

meaning behind the gameplay. An article from the website *Kinja* by writer DanimalCart titled *DSB: How About That Ending to Brothers*, where he in depth looks over every moment of the ending, stating "*The symbolism of controlling Little Brother with the left analog stick is such a prime example of narrative impacting gameplay that it should be written in text books for video game writers to study for years to come" (Cart, 2013) This could also be worked back to Jenkins and his talk on drawing strength from others, however where he mostly talks about drawing strength from superheroes who he saw as immortal beings who would never leave, the younger brother on the other hand takes strength from his deceased brother who could swim and pull heavy objects, making a point that maybe those that are gone never really leave us and continue to push us forward.*

Chapter V: Emotional Connection with Imagery and music in games Another form of attachment that we seem to have is with different types of imagery and music. A good example of a game that presents a strong aesthetic style and thereby achieves a powerful impact can be found in the game Journey (ThatGameCompany, 2011) An example of why can be seen to be explained in an article by Codemasters design director Nick Harper for The Guardian in which he explores much about the design work behind Journey in an article titled 'Journey and the art of emotional game design'. A huge range of topics are brought up though out his article such as the protagonist, narrative and overall meaning but the part that proves the most significant here is his look at the landmarks used throughout the game. He states that "Another key element of design is the use of signs and feedback to help the player understand the game systems. The clearest evidence of signs within Journey are landmarks and collectibles. The latter speak for themselves: they're white, they glow, they are placed against contrasting backgrounds for player clarity. The landmarks are more interesting. I think one undervalued aspect of Journey is the brilliance in the simplicity of the level design. The very first scene presents the player with a barren landscape. The player has to rotate the camera in order to see something, thus teaching you a basic input through a natural process. The only point of interest is a hill, on top of which two flags capture our attention. Let's go there, then." This presents the idea that simple and easy to understand game design could help someone connect to a game more as it dose not try to confuse them.

Another strong aspect that is made apparent in Journey is the use of a wide

range of vibrant colors that the designers have used to progress the story that the player embarks on to the summit as seen by this piece of art made by *That Game Company*.

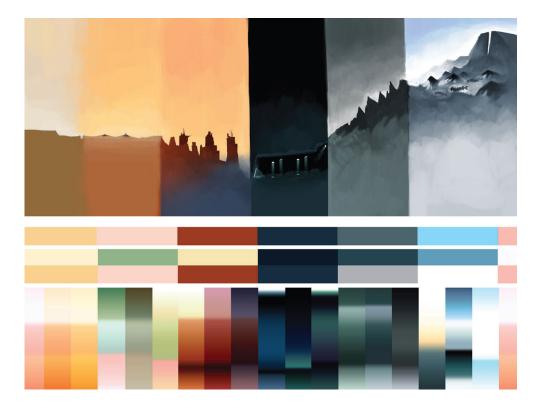


Fig 2: World Color Flowchart

As stated in Chris Solarski's book 'Drawing Basics and Video Game Art' in his section on Color and Digital Tools stating that "Color can communicate emotions in a very primal way. Although the symbolism of color varies between cultures, there are constants to be found in color practice that will help you significantly enhance the emotional messages of your designs."

(Solarski, 2012) this presents the idea that different colors invoke different emotions within different cultures. The discussion is applied to Journey where he sates that "Journey takes advantage of color contrasts to create subtle emotional effects. In the opening desert section, the environment and characters feature warm colors that sit very close to each other on the color

wheel. The emotional effect of such closely related colors is one of harmony." (Solarski, 2012) This helps prove that the use of colors helps to create the tonal shift we are meant to feel as we progress, even the game's director Jenova Chen has claimed that much of the game's narrative was based on Joseph Campbell's "hero's journey theory" as stated in the *The Making of* Journey film that came with the collectors edition of the game. (That Game Company, 2012) Much of the Hero's journey can be referenced back with Scott Rogers and his "Gray Matters" theory, the reasoning behind this form of narrative came from Chen's past studying of Campbell's work, in interview title 'Game Designers Jenova Chen on The Art behind his "Journey" 'stating that "He is a comparative mythologist and a lot of his work is the study of all the folktales and the religious stories all around the world, from the Japanese Shinto to the Native American religions to Buddhism. After I go through those, I realize there is spiritualism missing in my early life. I am actually quite a spiritual person, but because of my experience in the past, my religious belief can't really fall into any particular one. Now that I have studied all of them, I feel they are all connected, they are all very similar. I would say I am a faithful person." This really does present the idea that even though we may come from different cultures we can find intertwining links and emotional connections between forms of story telling, the same can also be said for different forms of media, that maybe those who love films but don't understand video games simply have not found that link.

Another element that seems to contribute well to video games in the same way it can for films, is music. Just like graphics, video game music has

evolved over the years to the point that Austin Wintory was even nominated for Best Score Soundtrack for Visual Media at the 2013 Grammys with *Journey*.

In Paul Hoffert's book Music for new Media: Composing for Video Games, Web Sites, Presentations, and other Interactive Media he states that "Something special happens when music is coupled with visuals, the mysterious neural connections in our brains that create our perceived reality store these stimuli as linked memories a type of powerful relational database that automatically accesses an image when its associated music is remembered, and vice versa. These mental links between visual images and music are so strong that they have given rise to a shared vocabulary that's used to describe both music and visuals. Words such as light, dark, bright, dull, blue, and colorful are taken from their original visual context and used to describe music likewise, rhythm, tempo, meter, harmony, consonance, dissonance, noisy, muted, cadence, and counterpoint are taken from musical context and used to describe visual images. When music is synchronized with images, the two are usually experienced together as an enhanced perception of visual media." (Hoffert, 2007)

In an episode of *Reality Check* they ask the question 'Why do we love classic game music?' Musician Lindsey Stirling was interviewed about this and stated that "I think that in video games it creates kind of a culture almost like a lifestyle for people that either like for me brings me back to my childhood when I hear video game music you know it brings back fond memories and I

think for a lot of people it ties them in to an actual culture that they feel very connected to and a part of." (Stirling, 2013) The episode looks closer at the reasoning behind our fondness for certain music by referencing an article from Advances in Consumer Research Volume 19, 1992 titled Remembrance of Things Past: Music, Autobiographical Memory, and Emotion containing documents on professors research on music headed by Hans Baumgartner. In the final discussion on the testing Baumgartner states "The results of this study suggest that the subjects who participated in this research had experienced a situation in which a piece of music had become associated with an event from their lives so that hearing the piece of music evoked memories of the original episode. Most of the instances of this phenomenon reported by undergraduate marketing majors involved relationships with past or present lovers or experiences with family and friends, and although some people described unpleasant episodes, overall there was a significant bias toward remembering happy events. Most personal experiences for which the phenomenon occurred were strongly affectively charged, and the recollections triggered by the music were described as vivid and emotional and as involving a reliving of, and being accompanied by imagery descriptive of, the original episode." (Baumgartner, 1992) This all circles back again to memory playing a big part with small links to our past having a greater effect than we notice. Considering the idea that the more time we spend with a person we grow more attached to them due to more long term memories with them, this could indicate a function that games have over films and music, that they are longer and more complex.

To bring up an example of a set piece within a game that tries to combine all of these elements with the intention of forming a bond with the player, we look at the location of 'Twilight Town' from the beginning of the game *Kingdom Hearts II* (*Square Enix*, 2005). The introduction to the game has you play as a new character to the series named Roxas, who we later find out is not a whole person and needs to give his life up so that the main protagonist Sora can live. At the beginning of his story he is experiencing what he believes to be his last days of summer vacation with his friends in there home town know as Twilight Town but he finds out over the 6 days that what really is coming to an end is his existence.



Fig 3: World - Twilight Town

This story arc plays a big part in the game's overall themes of friendship and destiny and helps to engage the player in the game's stakes but it also is

helped by the design work that is used for this introduction. The images as shown here give an idea of the design and color used to evoke the emotions of this story within this town. The endless sunset that is used within this town creates a warm feeling as well as a reminder that just as the last few hours of day remain so do the last few days of summer vacation and Roxas's time are almost up as well. As described by Solarski the color is used here help to address the emotions that are proven to be very different from the beginning from the first *Kingdom Hearts* game (*Square Enix*, 2002), which began on a sunny Island (Fig4).

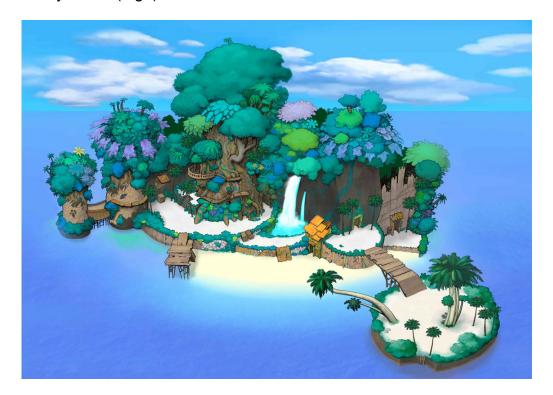


Fig 4: Destiny Island

While the introduction to the first game lasts 2 days, in the second game it is spread over 6 days. Some may wish that the game's introduction was much shorter but as proven by Baumgartner testing memory is an important part of our emotional connection towards characters. For the

sake of building up an attachment to these characters we need more time to know them, so we can feel that sense of loss when they're no longer there, as we have seen from the ending of *Brothers: A Tale of Two Souls*.

This part of the game is also skillfully orchestrated to engage the player with different locations and characters as seen. Unlike films we have the option to interact with many of the towns people who share their thoughts on their day. Unlike much the rest of the game there are very few times that enemies will confront you, which may seem unengaging for many as it has to use quite a bit of the players time to set up characters and future plot points but even then they find ways to combine important story elements with gameplay such as the town jobs you have to complete on the 2nd day to gain money to go to the beach or the school report you have to complete with your friends on the 5th day.



Fig 5: World - Twilight Town

The music also plays a big part in this combination as it help to further reflect the emotions. The song "Lazy Afternoon" by composer Yoko Shimomura is played throughout the time spent in the town but only for the short time you are playing as Roxas, as the music changes to "The Afternoon Streets" when you switch over to Sora for the rest of the game. This better separates the time you spend as Roxas from that as Sora, helping to associate Roxas more with this location and the themes that it brings with it. The soothing quality of the song also melds well with the colors, giving the location a real identity to help stand out from other memorable locations within the game. At the end of this introduction to Kingdom Hearts II, through these elements of design we can find universal connections regardless of our individual culture or life experience.

Conclusion

This research has clearly shown that many developers are finding ways to

really push us to find connections within games, some having us interacting

with complicated characters we can relate to, whereas others cut us off from

interacting so that we appreciate it more when we return to them. Games like

Brothers: A Tale of Two Souls prove that deeper meanings are being

implanted through clever manipulation of gameplay and narrative. As games

become ever more sophisticated we can expect deeper meaning, but the

emotions triggered by games are complex because of our individual

experiences as players.

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