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A Critical Analysis of the game *Heavy Rain* as a Successful Representation of the Contemporary Cyberdrama.

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Abstract

Traditional narrative as it is known, is linear such as with books and film. Over the last two or three decades narrative has changed to become something different. Stories are no longer linear and no longer presented as a passive activity. With the invention of digital narrative they have become interactive and allow for participation on the part of the viewer. The *Cyberdrama* is something more than this concept of interactive narrative. It is a contemplative participation that is reliant on the relationships that exist between the author, viewer and the medium through which it is represented. This paper is a look into Janet Murray's original theory of the *Cyberdrama* and its emergence in contemporary digital games. This will be done through a critical analysis of the game *Heavy Rain* (2010) in order to show how it exemplifies Murray's theory.

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Chapter I

The Cyberdrama

I.I - *Introduction*

The *Cyberdrama* is a term coined by Janet Murray in her book *Hamlet on the Holodeck* (1997). Within the book she explains the *Cyberdrama* as being a new digital medium for storytelling. This should perhaps be seen more in terms of a new method for digital storytelling that has developed out of the medium of digital games. She describes it as not one but many methods for presenting and telling narratives through the use of a digital means. This method of storytelling that she theorised in 1997 is now being realised in many ways, one of the most common forms being that of modern day digital games. The *Cyberdrama* in essence is a different kind of storytelling from that of the linear, non-interactive narratives that were, at Murray's time of writing, the most prevailing form of stories that were available to the general public.

At Murray's time of writing books and film where, and are still in many ways today, the two dominate and accepted forms of narrative the public had access to. As computers and consoles became more available as a commodity within the general household the field of digital narrative gained access to a far wider audience. Gamers and game developers were still in the early stages of exploring what they could achieve within the Digital Environments they were creating. Although games had been available to the public via arcades and first generation consoles for about 20 years[1] prior to this, the types of games and what they could offer players was still very much in the early stages of development. Game design was essentially still in its infancy, with most games being very limited in the kind of actions gamers could perform. There was a very discernable difference between the types of narrative seen in films and books with that of the narrative found in games. As Rokeby states in *Transforming Mirrors: Subjectivity and Control in Interactive Media* (1996) traditional narrative art forms can be said to be interactive to the degree that they involve a certain level of participation from the viewer, however they do differ from the digital (Rokeby, 243). In traditional art forms the artist creates a work and when viewed by the public it can be perceived to have multiple interpretations. Drawing from these theories Rokeby states that the artist can anticipate these interpretations beforehand and alter the artwork accordingly in order to change the work's significance in relation to the viewers' perception (244). He goes on to say that in essence traditional art forms begin with a wide range of possibilities and, through the artists' selective process, are narrowed down to a single one. Whereas with the digital interactive narrative form

[1]Such as *Computer Space* (1971) which was the first mass produced video game released, and *Pong* (1972) created by *Atari, Inc.* which was founded the same year.

there is usually a single starting point that branches out to provide multiple possibilities (Rokeby, 244). It is this multiplicity that Murray saw as being the future of narrative in the digital realm, the *Cyberdrama*.

The *Cyberdrama* is a digital form that that finds the balance between narrative and interactive freedom. Allowing the interactor to take an active role in determining the pathway towards the eventual outcome of the story and the events that take place on the way. In order to fully understand the concept of the *Cyberdrama* we first need to contextualise it with regards to where it exists within the spectrum of digital categories. In her book Murray helps to do this by first explaining the Digital Environment and its makeup.

I.II - *The Digital Environment*

Murray describes the Digital Environment as being comprised of four principle properties. She says the Digital Environment is procedural, participatory, spatial and encyclopaedic (Murray, 71). Both collectively and separately these four elements make the Digital Environment a powerful tool for narrative creation (71).It is through these principles that the Digital Environment is given the ability to create not only realistic worlds that mimic real life or worlds that provide a fantastical view of the impossible, but it also enables these worlds to be altered and acted upon by the interactor and be able to respond to this in some way. Murray further breaks these four principles into two separate categories, that of the Interactive and the Immersive. She places the principles of procedural and participatory into the category of Interactive, and the principles of spatial and encyclopaedic into the category of Immersive (71). Through an examination of these categories we begin to reach a greater understanding of the principle properties. If we look simply at the names the categories are given we can make a few assumptions as to what they may contain or represent. Interactive immediately gives us the indication of action, involvement or input. The Oxford definition of Interactive is "(computing) that allows information to be passed continuously and in both directions between a computer and the person who uses it" or if we look at the definition of interact: "(with something) if one thing interacts with another, or if two things interact, the two things have an effect on each other." Now if we look at Immersive we can imagine being submersed in something or deeply engaged in something to the point of giving it our complete focus. The definition of Immersive is described as "used to describe a computer system or image that seems to surround the user" or if we look at immersion "the state of being completely involved in something."

Within the text I will be referring to Interactive Narrative as Murray uses it in her book. However it should be considered more in terms of Espen Aarseth's use of the term in his book *Cybertext* (1997). Very briefly Cybertext is what Aarseth describes as more than simply "a struggle for interpretive insight but also for narrative control" (Aarseth, 4). Essentially it is a story that belongs to the reader and would not be without them (4), or as David Rokeby states in *Transforming Mirrors*, "the audience becomes a creator in a medium invented by the artist" (Rokeby, 251). It is important to consider Aarseth when looking at the concepts surrounding Interactive Narrative, or ergodic texts as he would call them, because not only does he address many of the topics looked at by Murray but he was also writing around the same time. His most notable book on the subject *Cybertext* (1997) being released in the same year as Murray's *Hamlet on the Holodeck*. Aarseth states that the concept of cybertext focuses on the "mechanical organization [sic] of the text, by positing the intricacies of the medium as an integral part of the literary exchange. However, it also centers [sic] attention on the consumer, or user, of the text, as a more integrated figure than even reader-response theorists would claim." (Aarseth, 1) In this we see that Aarseth is concerned with the study of interactive narrative with the focus being that the mechanism that allows the interactor to take part or take action on the text itself be an integral part of the narrative experience. The main aspect of this being the interactor becoming a part of the experience through their ability to take action in it. Aarseth goes on to describe the cybertext as being a machine that is designed for the manufacture of a diversity of expressions (3). In essence it is capable of generating a multitude of manifestations of the same material. Aarseth relates this to the term ergodic. A term he has appropriated from physics which derives from the Greek words *hodos* and *ergon* or "path" and "work" (1). He states that "in ergodic literature, nontrivial effort is required to allow the reader to traverse the text." (1) What we can see from this is that within the process of the cybertext the interactor will have in some manner effected the sequence of the text. Aarseth states that "this selective movement is a work of physical construction that the various concepts of 'reading' do not account for." (1) With this brief look at Aarseth and his cybertext we find that it is based upon several key points: The mechanism or method in which the interactor takes part and moves through the text, the interactor being vital to this traversal of the text, the text being able to provide multiple expressions of the same material and finally that the users traversal of the text is done through nontrivial effort. As we proceed with the study of Murray's concepts we will see how these ideas are found in both authors work but perhaps with different terms or views behind them.

If we look at the categories in which Murray has placed the key principles of the Digital Environment, we can identify the possible qualities each of the principles might have. The category of Interactive

immediately tells us that the principles it contains deal with actions. The user being able to in some way take part in the environment and through this become a part of the experience. So we see that this category of Interactive is just that, the idea of being able to interact with the Digital Environment and in some way have a part in how it works or reacts to us. Now if we examine the category of Immersion simply by the term it is given we can see that this area of the Digital Environment deals with creating a sense of being within or involved in the environment, not in an interactive sense, but instead from the point of creating a believable and explorable world. In a sense this is the Narrative of the Digital Environment.

From this point onwards we can now enter into a closer study of what Murray describes each of the four principles of the Digital Environment as being and how they make it up. I will be using the example of a First Person Shooter game in order to help illustrate these ideas. I am looking specifically at an infiltration mission from the game *Medal of Honor* (2010). First Person Shooter titles generally follow a very strict linear structure in which players are always working towards a set narrative end. This type of game structure does not allow for much if any deviation from the narrative. The mission structure becomes a series of procedural events within the environment, which are activated by the participatory actions of the player, this in turn drives the narrative forward. Players are given a goal or objective for each mission that they must achieve in order to proceed to the next point of the narrative. Within this structure the designers may include optional side quests for the player, but these do not change the overall outcome of the narrative other than perhaps allowing for a mission to be completed in a slightly different fashion or reward the player with some kind of bonus. While First Person Shooter's are not usually designed to follow what is considered an Interactive Narrative structure, the single mission style of the game will still be suitable in illustrating the principles of the Digital Environment because while players cannot alter the course of the overall narrative based on their actions, the progression of the narrative and the events within still rely on the player to drive them. The FPS example is suitable because of its simplicity in narrative structure and will make a good study as the discussion will not become cluttered.

The mission I have chosen from the game is called "Running With Wolves..." in which the player controls the character of Deuce, a member of the AFO Wolfpack unit. The mission brief is as follows: "Infiltrate the rugged mountains surrounding the Shaihikot Valley on stealthed out ATVs. You will encounter enemy outposts and villages along the way to Observation Post Clementine. It's there you will rain down tactical air strikes on enemy positions." (Medal of Honour) Once the mission

commences, the player's unit breaks off into two groups. The first team is that of the unit leader "Vegas" and "Panther", and the second team being made up of the player's character and "Dusty". The teams set off in opposite directions in order to place homing beacons on the enemy positions that will be hit during the planned air strike attack. The player and his ally are equipped with a knife, silenced pistol, suppressed machine gun and suppressed scoped rifle. They also have night vision goggles and a high powered sniper rifle. Using this they move between the enemy encampments dispatching the patrolling sentries and placing the homing beacons as they go. During this the player has to work with their ally in order to succeed. The game incorporates elements that enhance the idea of keeping hidden and maintaining what Dusty calls "noise discipline." (Medal of Honour) At certain points while traversing on their ATVs the player has to stop driving and turn off their headlights in order to avoid being seen by an enemy convoy. At other points they will have to wait for enemy sentries to move off along their patrols before continuing. The player will also have to assists the other team at certain points by picking off enemies in the distance with their sniper rifle in order to aid their allies in reaching their destinations. This is also designed to enhance the theme of stealth, with the player having to make precision shots without alerting the enemy of their presence. If the player is too hasty and misaims a shot and misses Dusty will make comments such as "Get your head together D!" or "Kill shots, not quick shots." Throughout the mission these elements of stealth and working together with your ally are reinforced.

I will first begin with a look at the category of Interactive and its principles of participatory and procedural. Within this section I will be discussing interaction in terms of Murray's arguments and my own discussion will follow based on this. I am, however, aware of the scope of this term and that it embodies a far greater area of scientific theory than will be discussed within my own research. In his text *Transforming Mirrors: Subjectivity and Control in Interactive Media*, Rokeby describes technology as being interactive in the way in which it takes our actions and decisions and reflects the consequences of them back to us (Rokeby, 242). This is also seen in Murray's text where she states that these Digital Environments are procedural in the way in which they respond to us the participating viewer. This is done through the computer's defining ability to execute a series of rules based on certain conditions (Murray, 71). This can be a pre-defined event that will occur at random intervals or the event could be programmed to start only when the viewer performs a certain action. So for example in one scene you enter an encampment that has a number of enemies on patrol. Dusty says something like "Move quickly D, and stay quiet. We can do this without trouble." The player must then infiltrate the camp stealthily. If, however, they rush in the enemy will attack and be alerted to his location. The enemy will react in this way based on the players action because this

is the procedural action that has been created in order to respond to that action. The enemy responds logically based on this and does not instead turn away and continue their patrol which would be the result of poor procedural programming. This creates what Rokeby calls a dialogue between the interactor and the interactive system (Rokeby, 245). The interactor performs an action and the system will respond to this, the interactor then uses that feedback to form a decision and respond again. Rokeby says that through this "a feedback system is created in which the implications of an action are multiplied" (Rokeby, 245).

Murray argues that we find these kind of environments appealing because we are able to, through our own actions, induce behaviour from them (Murray, 74). This is where the environments become participatory. Murray describes the computer as being an engine; it is not simply a pathway along which information is travelling, but a complex machine that embodies complex groups of behaviours based on inputs and other information it receives (72). The Digital Environment needs to constantly be checking for procedural elements that are occurring either automatically or induced through the participating viewer's actions. In order for the Digital Environment to provide the correct response to these it needs to be able to identify rules of behaviour, whether they be exact or general ones, and with this information execute the correct response (72). The key point to these procedural elements that are contained within the environments is that they are all designed so that if the viewer or player performs an action the most appropriate response will be given. This is because the action they will have performed was a deliberate and exact behaviour unlike an automated general rule that does not require the viewer's input.

if we look at the example of the infiltration mission and the player decides to stick to the shadows and watch before he attacks, then the enemy will most likely be unaware of the player and continue about their patrol routes. These patrol routes are the general behaviours or rules that the enemy AI has been programmed to follow. If, however, the player is not cautious and is seen by a sentry then the AI will execute appropriate behaviour based on the new situation. The enemy calls for help and his comrades will come running in order to subdue the player. This would be the most logical choice for the AI to make and would return the most believable response. This is why the procedural aspects of the Digital Environment are so important, because they provide believable feedback based on the participatory actions the player performs within the environment. So if the player was to throw a hand grenade at an enemy he would not simply stare at it but run and try to get behind cover just as you would in real life. Murray states that the environments we can create with the

computer can be a "... compelling medium for storytelling if we can write rules for it that are recognisable as an interpretation of the world." (Murray, 73).

Procedural elements of the Digital Environment work towards creating a more convincing representation of, in this example, a stealth infiltration mission. This can be applied to many other scenarios as well. If game designers are able to consider as many of the possible choices a player might make within the environment they will be able to create procedural responses to them, allowing for a greater feedback system between the player and the environment. This is anticipatory design which Murray calls scripting the interactor (Murray, 79). By predicting the interactor or players actions the designers can create rich environments with the ability to respond to this. In order for the procedural elements to be able to provide the correct feedback to the interactor the participatory elements need to be able to provide them those options. Predicting the player actions and providing procedural responses to this is not enough. In order for these responses to happen the player first needs the mechanisms to perform the actions. In other words these Digital Environments need to be simple enough for the interactor to quickly grasp and understand the rules of interaction, as well as be flexible enough to "capture a wider range of human behaviour." (79). Therefore what is needed is a wide range of opportunities for the interactor to be able to choose from in order to create a richer environment. The game *Zork* (1997[2]) did this incredibly well by giving the player multiple opportunities to make decisions and then through those actions enacted the results of the player's choices (77). While it was possible to do this with a game like *Zork* which was a text based game, it becomes far more difficult with modern games which are most often focussed on creating interesting and brilliant visuals. This becomes more difficult because the games are no longer simply focussed on narrative and the movement through it in the players own mind. Digital games now visually represent these narrative worlds in which the players move through and interact with the story. This creates the issue of having to create and visually represent the enacted results of every action the player takes. Whereas before with games like *Zork* the visuals were made up of the players own imagination as they read along through the text. In order to allow for the same diversity of actions and responses in a visually driven game brings the challenge of realising these situations on screen as images instead of leaving it up to the imaginations of the player's.

Murray states that most interactive narrative written at that time used a standard branching structure which limits the number of choices the player can make (Murray, 78). These branching

[2] *Zork* was published in 1980 by Infocom. I am referencing it as seen in *Hamlet on the Holodeck* (1997)

structures block off narrative passages when a player makes a decision to travel down one of the paths. For example in the game *Mass Effect* (2007) the player is placed in a situation in which they must decide to help one of two allies. Whichever ally the player does not assist will die and be unavailable to them for the rest of the narrative. This impact becomes even greater when we look to *Mass Effect 2* (2010) in which the consequences of the players actions from the original game are carried over. The character that died in the original game will obviously still be unavailable. In order for the player to experience both paths they would have to play through at least twice to see the difference. What we see is essentially a limiting of the narrative in the direction chosen by the player. They cannot experience both situations in one play through of the narrative. This is done to limit the work that the Digital Environment needs to do, because it becomes incredibly difficult to try think of every possible decision a player will make as they progress through a level or mission and trying to incorporate all of these into the program would make it so unwieldy that it is impossible. Forking structures in essence allow for far simpler programming. This is where procedural elements become key in providing feedback to player decisions. Instead of trying to anticipate the player's every action, the designer can instead focus on the things they have to interact with within the environment. This could be enemies, weapons or any other key elements in the environment. They can then focus the kinds of procedures they want to create based on these objects. Murray talks about this concept in her book, it is called object-orientated software design (Murray, 78). Here again I must point out that while I am aware of the scope of object-orientated design outside of Murray's own theory, I will not be focussing on it in my own paper. Returning to the earlier example, if the player is trying to infiltrate a particular base and has already used up all his ammunition for his silenced pistol he will have the option of trying to find more without being seen; try to complete the mission using only his knife in which case there would be the added difficulty of needing to get in close to take out his enemies; or the player can use his machine gun and "go loud" and now the enemy will know where the player is, but in this situation the mission might go quicker as the player does not need to sneak around silently eliminating each enemy. The player could essentially have three different experiences of the mission simply because they did not have the right ammunition before they entered the area. These situations could become far more complicated if we simply take into account where the player eliminates the enemy. For example if the player kills a sentry in a position that is close to another enemy patrol route this could quickly become a dangerous situation for the player if the body is discovered. In this situation the enemy would now know the player is in the area, if not their exact location. This is just one kind situation in which the participatory elements or player choices can be affected by the procedural feedback and together work to create an interesting experience for the interactor.

Now that we have seen the Interactive side of the Digital Environment we can look at the Immersive category which influences it. Within the category of the Immersive Murray places the principles of spatial and encyclopaedic. If we look at the previous category of Interactive which dealt with how the viewer takes an active role in the environment and how it responds to those actions, we can begin to see, based on our brief look at what the term immersion entails, that the category of the Immersive holds the principles which deal with the content the environment contains and how the viewer navigates through it.

The first principle contained within the category of Immersive is the principle of Digital Environments as being spatial. Essentially the spatial principle of the Digital Environment deals with navigation of the environment. Murray describes the Digital Environment as being characterised by its ability to represent navigable space (Murray, 79). Within the Digital Environment the interactor has the ability to move around and navigate the space in whichever way they decide. The limits of this navigation would be determined by the procedural principle or as Rokeby states "the surrounding architectural structure" (Rokeby, 247) of the environment. The participatory principle would also determine how the viewer traverses through the space. They may be able to walk or drive through the space but not fly or jump over the obstacles. Within these environments space is created through the retracing of the interactor's steps. This is what Murray describes as the "interactive process of navigation" (Murray, 80). Space is created for the player and seems real to them because they can move through it and know if they follow the same path back will be able to return to their original location. If the space was simply changing every time the player went down a path, then they would have no way of grounding themselves and the space would simply be ambiguous to them. It is through the coherent retracing of steps that gives the player a frame of reference with which to orient themselves and create the sense of space. For example in our infiltration example the player is confronted with a small building. It is only by the players movement through and around this building that they will learn that it has two stories and an entrance to the front and one to the back. With these digital spaces there is usually a general starting point and from there a multitude of paths from which the interactor can choose from in any order (Rokeby, 247).

Murray states that the Digital Environment is unique because unlike other narrative forms such as film or books that depict space through images or descriptions, the Digital Environment is the only narrative form that can represent space that the participant can actively traverse through (Murray, 79). She states that the distinction between the narrative forms comes from the difference in the

immediacy of the action. It is dissimilar to a book in which you are reading about an action that has already occurred. It is also unlike watching a film or theatre in which the event or action has happened at that exact moment but to someone else. In the case of the Digital Environment the event is happening at that exact moment and to you as the interactor (81). Murray goes on to say that this kind of navigation of the Digital Environment is far more concrete for us because the worlds we are experiencing have what she calls an "objective reality" (82). In other words they are more believable for us because the interface in which we use to interact with them is a transparent one and the world we are exploring is also the story we are playing through (Murray, 82). This means that as we explore and traverse the environments through the games interface we do so through our own eyes and through our own actions. We are not watching from another person's perspective but our own and the actions we take are the result of our decisions. The world we explore becomes more believable for us because of the ability to take part in the progression of the narrative as opposed to simply sitting and watching the retelling of it from someone else. Although the Digital Environment is designed to allow the interactor to move back and forth through the landscape, with the ability to retrace their steps in order to create the sense of space, it is sometimes not possible for them to retrace every step. This is not necessarily a bad thing depending on the type of narrative being told, as long as the movement through the space creates a coherent pattern that the interactor can follow (82). Rokeby says that what is important is not necessarily the path chosen but instead the experience of the journey through the space that is the key point (Rokeby, 247). This holds as long as the navigation does not break the immersion of the interactor within the environment. The choices the player makes and the directions they decide to move in "shapes their navigation into a dramatic enactment of the plot" (Murray, 83). It is through the interactor's chosen movement that the narrative will begin to take shape and eventually form the final experience. Murray states that the challenge of the Digital Environment is to create a seamless system for navigation that will allow for greater expressive narrative landscapes (83).

The second principle of Immersion is what Murray calls the encyclopaedic which she feels "holds the promise for the creation of narrative" (Murray, 83). Within the Digital Environment everything we see is made up of data. This data is stored and transferred electronically based on how and when it is needed by the Digital Environment. Murray states that with the advancements in technology and data transfer, the Digital Environment holds the possibility to create and depict narrative worlds with unbelievable realism and accuracy (Murray, 84). This is very easy to see when we compare *Zork* or *Pacman* (1980) which were created on some of the earliest computers to a game such as *Mass Effect* (2007). Zork contained only text based instructions for the player to work with and the

environments described existed only in the imaginations of the players. While *Pacman* was lacking a narrative that contained the same depth as *Zork*, it did have some of the first moving graphics and an environment which the characters could navigate visually. These early games could not recreate the visuals or gameplay we see today with games such as *Mass Effect* simply because the machines which they were designed on and for could not handle the amount of data needed to contain a game such as *Mass Effect*. So with the progression of technology and the now available Giga and Terabyte it is now possible for designers and writers to create worlds with far greater detail and to tell intersecting stories that players can experience from multiple viewpoints (Murray, 84). There is the ability to create moments within the narrative in which the player is given suggestions or hints as to how to progress. These are not forced upon the player and so they can choose to either follow a suggestion or ignore it completely (89). This allows players to create a sense of personal identity and further their experience of the narrative world by taking their own unique path (Rokeby, 248). At the time there was debate, and there is still today, as to whether this kind of storytelling was a good thing. Jesper Juul is one of many who has pointed out the idea of an Interactive Narrative as having problems (Juul, 2). In his text *A Clash between Game and Narrative* (1999) he quotes the game designer Walter Freitag "There's a conflict between interactivity and storytelling: Most people imagine there's a spectrum between conventional written stories on one side and total interactivity on the other. But I believe that what you really have are two safe havens separated by a pit of hell that can absorb endless amounts of time, skill, and resources." (Juul, 1) Murray speaks about a few points that could be a handicap to the encyclopaedic nature of the Digital environment. Firstly there is the concern that players, if given the opportunity to experience different endings to a narrative, will question which ending is correct as well as whether they have seen all there is to see in the game (87). With these multiple endings and the freedom to explore at the interactor's leisure there was also concern as to the narratives being too long winded or being formless (87). Much of this concern stemmed from the fact that the idea of the digital narrative as providing all of these possibilities was still quite new. There was no established way in which to blend the navigation with the different segments of the narrative effectively in the same way that a book uses chapters to divide the narrative into sections (87). The problem in this case was whether the technology had the ability to successfully merge two intrinsically different concepts into one form. Through this blending the technology now has to be able to bestow the interactor with the same level of creative freedom as the original author. Aarseth points out that a crucial issue here is whether any technology by itself can promote readers to the position of authorship (Aarseth, 171). It is key for these Digital Environments to create a believable narrative world for the interactor to experience without creating a sense of pointless exploration or longwinded sections of information. While

there may be the ability to create the worlds in the highest detail it needs to be tempered with effective narrative to make those worlds exciting for the interactors to experience.

Through the study of the Digital Environment and the four key principles that make it up we can see that these environments are to be designed in such a way as to give the interactors the ability to not only experience digital narratives as a spectator but also as a participant taking an active role in shaping the events within and the flow of the narrative arc. Through this active role they are not only given the ability to create their own stories but through this become an author and engage on a deeper level thus allowing them to become far more involved within the narrative and its development. It is through these principles that the Digital Environment becomes both Interactive and Immersive for interactors to experience.

I.III - *The Cyberdrama*

In this next section I will be looking at the *Cyberdrama* as Murray theorised it. I will be doing this through an examination of the three elements that Murray foresaw as being key factors to the successful creation and implementation of the *Cyberdrama* within the Digital Environment. Within the *Cyberdrama* exist the concepts of Agency, Transformation and Immersion. I shall now be examining each of these elements individually and in detail in order to illustrate just what it is that makes up the *Cyberdrama*. In these sections I will now be referring to the 'interactor' from before as the 'player.' I feel this is important since I am looking at the Cyberdrama in relation to a game and the term player will aid in my later discussion of the relation between the two. At certain points I may use the terms 'reader' or 'user' but this is simply to remain true to the author I am paraphrasing and to help retain understanding of the original statement.

III.I - *Agency*

Murray defines Agency as the ability to perform an action with the expectation of seeing a result (Murray, 126). However Agency should not be equated with simple interaction. Agency is to interact in a manner that requires the player to think through their actions before they make a decision as to how they should proceed. In her book Murray uses the example of a game of chess which has a high level of Agency because it requires the player to plan not just one but several of their potential moves before they are played (128). At the same time they must consider the resulting responses from their opponent in relation to the all of the possible moves they will make.

If we look at it in terms of choice and consequence then what we see is that Agency is essentially making the player consider all of the possible options available to them and the resulting consequences of the choices they make. Aarseth discusses this in his book *Cybertext* and he speaks about the politics of the author-reader relationship. What Aarseth points out as key in this situation is whether the "user has the ability to transform the text into something the instigator of the text could not foresee or plan for" (Aarseth, 164). In Murray's example of the chess game we would look at the relationship between the player and the opponent, in a Digital Environment this could be a computer generated AI, and with regards to the player transforming the *text* we would be talking about how they manage to plan their own moves in order to out think the opponent. Here we begin to see that the interaction within a *Cyberdrama* is not random or at least not performed without first using conscious thought as to the consequences of those actions.

Agency is also reliant on the structure of space and the ability to navigate through that space based on the players choices. These spaces or navigable structures are being designed in such a way that is not wholly dependent on the final outcome or destination of the player. What this means is that while navigation of the environment is key, the direction or the player's ending point is not the key aspect. As we saw within the Digital Environment and its principle of navigation, the pivotal idea of these structures is the unfolding of the experience and not the actual path the players choose to reach their destination (Rokeby, 248). The player is being given the option to follow certain paths or to ignore them if they choose to. It is this ability to decide upon their own path that gives the player a feeling of power or control over their "fate." This allowing of the player to control the direction in which the narrative flows needs to be done in a way that is meaningful and not simply for the sake of giving them control. The choices they make need to have real meaning or the experience will be the same as any other interactive narrative. This means that the choices the player makes must have an impact on the narrative and it's progression, they must have consequences that are recognisable to the player. As Aarseth points out authorship depends on the recognition of authorship (Aarseth, 172). It is only through the interactive experience's ability to change depending on the choices made by the player that it will have real value for them. We can look at this in terms of navigation, where Rokeby states that these digital experiences are designed in a manner in which the player begins at a basic starting point and are able to navigate through the environment based on their own choices which become more specific to them as they progress. He says this encourages "a more focussed and structured exploration in which each choice carries with it a responsibility" (Rokeby, 247). Murray describes this as the liberation from the tyranny of the author (Murray, 133). The player is able to assess a situation, interpret it and then navigate through the situation based on

their own decisions. This movement is constrained, as has been pointed out, by the rules governing the Digital Environment and is dependent on the amount of interaction available and the overall branching structure of the narrative. Aarseth, however, states that it is foolish to assume that the player has taken over the role of the author completely (Aarseth, 165). The player cannot be given full control over the environment because if this was so there would be no need for the original author to begin with. The players would simply be creating their own narratives and experiences from the start and not experiencing any of the original thoughts set in place by the author.

Murray describes Agency as "the satisfying power to take meaningful action and see the results of our decisions and choices" (Murray, 126). An important aspect of Agency that allows players to engage with these digital spaces is the ability to act on their fantasies in a safe environment. Within the digital world they are protected from the irreversibility of the situations they are faced with (134). A main goal in the creation of Agency for the player is the inclusion of anxiety. The player should be faced with situations where the outcome will be greatly determined by the decisions they make. These decisions, if not considered carefully, will have negative consequences. However, while these situations may not develop in the manner the player would have intended, they are safe in the knowledge that they are able to go back later and retrace their steps and perhaps take another path. It is only through this retracing of the player's steps that they gain a full understanding of the entire narrative and the events that occur within it. Although not every player will experience the best ending or take the easiest path, it is not a negative aspect of Agency, instead it creates a greater sense of participation.

It is the goal of designers to move the player from being predominantly a spectator to, instead, taking a greater contemplative role (Marsh et al, 100). This concept of contemplative gameplay has to be balanced with the interaction. If the player is faced with too much or too little interaction they will either grow bored from a lack of involvement or the repetitiveness of too much play time. Henry Jenkins states that there is a need to determine how much freedom a player can have while still creating an interesting plot and narrative framework without the two disrupting one another (Jenkins, 8). Players' decisions within these kinds of narrative have a greater impact on the overall arc and its flow. Their decisions and interactions are balanced with the progression of the narrative which will reflect the consequences of their choices in the story. It is through their interactions that the narrative moves forward and the player has the ability to retrace their steps within the environment and alter events that have already occurred thus changing the way the narrative plays out. This ability to see all of the angles of a situation and change how it plays out are all aspects of

Agency in terms of creating meaningful experiences based on player choices, and this in turn allows the player to experience a greater sense of immersion within the Digital Environment.

Agency relies on the aspect of immediacy: that when the player interacts with an object within the Digital Environment something will take place. This event or reaction that happens needs to have an immediate effect in order for the reaction to correspond to the action the player has performed. This idea that Murray calls object orientated agency is also a key point to *Cyberdrama*. Murray speaks about reaching a point in which all objects will be able to offer a sense of Agency. We will one day be able to interact with any and all objects within a Digital Environment and use them in some way. In order for this to succeed there is the need for immediacy. This relies on the system being able to detect when a player interacts with an object and immediately provide some sort of feedback. These ideas of immediacy and object orientated Agency have already begun to emerge in the Digital Environment. Many consoles are now offering this form of Agency and are now providing tools such as the PlayStation's "Move" and the Xbox's "Kinect" which mimic movements made by the player and translate them into the game they are playing. This interactive technology has been described as a "mirror" (Rokeby, 242). These mirrors do not simply mimic or reflect our actions back to us, but process and transform them (242). In his text Rokeby discusses the interactive model called Transforming Mirrors (253). He states that while all interactive works reflect the players actions back at themselves, it is through this model that the idea of the mirror is openly invoked (253). This is technology that works directly with the players silhouette or image and incorporates their actions and movements directly into the interface itself. Games can then use this as a driving element with the player being a tool in the environment. For example the player could be faced with the scene of an archery range and then they must mimic the action of drawing an arrow, pulling the bow string taught and releasing with the hope of hitting the target. The technology uses the player as the controller and detects the movements the player makes. Rokeby states there are two kinds of mirroring that can be used. That of the perfect mirror-like and synchronised reflection or the delayed and distorted reflection or echo (253).

It is through these new technologies that players are now able to experience interactive narratives in a far more physical manner, with the technologies being incorporated in a manner that is not obtrusive or disrupting to the player. The interaction system is designed in a way that it becomes transparent to the player and they are no longer focussed on the controller in their hand but instead the Digital Environment they are exploring. Marsh et al state that in order for interaction to disappear from the main focus of our attention it must be performed with minimal conscious

thought (Marsh et al, 99). This allows for the player's focus to shift from the interaction to a more immersive state of mind. When the player is truly immersed in the experience, if for example they are playing a fighting game they do not think to themselves 'I must push X to have my character hit my opponent'. They are thinking *I* must hit him.

Murray states that through these systems it is thought that a new "repertoire of expressive gestures" shall be developed (Murray, 150). This will allow for a greater sense of interaction with the Digital Environment on the part of the player. Consider Aarseth and his statement of whether technology can alone promote readers to authorship. Essentially what this asks is whether these new technologies will support the creation of Agency on their own and thereby have the ability to allow players to alter the Digital Environment based on their decisions? While we consider this we must also look at Murray's statement that the interaction within these systems should not simply be concerned with acquiring a mastery of new skills, but also to raise moral questions (Murray, 147). What she means by this is that within the Cyberdrama there is the need to move away from actions such as simply firing off a gun to create a sense of immediacy. Instead there is the hope that designers can create moments in which the player is drawn in so deeply to the characters point of view that the subtlest of changes in position based on the actions taken that the resulting events from this will be able to raise moral questions within the player.

III.II - *Transformation*

Transformation in the context of the *Cyberdrama* is essentially change or variation of the original experience. In linear narrative there is no way of changing the outcome or final conclusion of the story. The viewer or reader can only sit back and watch as an audience member with their own hopes and thoughts for the characters remaining internalised. Transformation in *Cyberdrama* is thought to give the spectator the ability to externalise their own ideas and take routes otherwise unavailable to them. With this Agency they have been given the former spectators can move away from the linear narrative and follow the alternate paths and discover the different variations of the experience. This is entirely dependent on the decisions of the player, and the narrative will develop based on these choices. These experiences they have of the narrative are not of one final ending that is complete, but results in a different kind of closure. Within the *Cyberdrama* what players are able to experience is not one single story but what is described as a "coherent system of interrelated actions" (Murray, 181). It is only through exploration and a retracing of their steps that they can hope to gain a fuller understanding of the greater narrative. Each of these transformations of the

narrative is a whole experience in themselves for the player. Murray states that what is unique to this type of narrative is that the player is able to replay through the story and experience a different take on the same simulation (Murray, 181). It is through this that the player can "play all the parts, exhaust all the possible outcomes" (181). Each of these experiences is a transformation of the narrative and is based on the player's choices throughout.

Transformation is also key to the Immersion of the player within the Digital Environment. Through the act of transformation the players are able to embody the characters within the Digital Environment. Through these transformed versions of themselves the player is able to step into the facade of the created world. Murray states that players are able to project their emotions onto the characters they control within the digital environment where it is safe to think about them (Murray, 169). Murray says that because these emotions are now externalised they can be manipulated (169). The characters are now embodiments of their own ideas and fantasies and they can explore situations in which they can bring their "deepest emotional conundrums into it, and then play them out in multiple ways until they come clear" (169). These characters then traverse the Digital Environment and perform actions based on the players wishes. This capability to alter the characters, landscapes and how the people in these worlds perceive the player all come together to give the player a "completeness of engagement" within the Digital Environment (169). It is thought that players are able to immerse themselves in the world through their characters, and the experiences they have within the digital world are not external from themselves, instead players absorb them as personal experiences because they are acting through a fantasised version of themselves (170). Murray states that to enact an experience as opposed to simply witnessing it is a far greater experience in terms of immersing the player and providing a deeper sense of involvement (170). As we begin to see through a players ability to experience the narrative of their own accord and by their own decisions this works to enable transformation in creating a greater sense of immersion.

Murray argues that for these digital worlds to become truly effective in transforming the player's actions, the actions themselves and the reasons for performing them need to be based on more realistic desires in order to elicit a higher level of expressiveness (Murray, 167). The experiences that the player enacts within the Digital Environment need to be dealt with in a manner that they bring forth the same emotions and anxieties they would in a real life situation. Through the Digital Environment players can explore what some consider antisocial material but still feel safe in the knowledge that at any point they can return to reality. This allows for creative practice and

exploration on the part of the player (172). Murray states that this material needs to be handled in a way in which the player is able to engage with (Murray, 173). When a player is given this kind of freedom within a Digital Environment and is able to explore thoughts and emotions they cannot deal with in their everyday lives it allows for a sense of release. Murray states that through this process players can find ways in which to deal with their feelings and finally transfer them to the external world (169). In *How Far Would You Go For Love?* (2010) a short documentary on *Heavy Rain* by Neil Labute, he begins to address these issues. The documentary is a collection of interviews of directors, writers, actors, photographers as well as Labute himself and David Cage the creator of *Heavy Rain*. Within the interviewee's talk about the question put forward by the title as well as emotions and love in the creation of art. Within the documentary there is a point in which Ben Chaplin, a director, and Tom Craig, a photographer, talk about the experience of exploring these Digital Environments. With Chaplin speaking of the bliss of being able to explore in a safe and artificial environment and Craig stating that these digital worlds as being like a deck of cards in which the player can lay them out in any order they choose (Chaplin, Craig, 2010). This is what makes transformation within Digital Environments so unique. With books you progress from the start to finish and experience all there is to experience. However, in a Digital Environment the player is not able to know every aspect of the story unless they go back and explore every route available to them. It is this going from the unknown to the known that makes transformation within a Digital Environment so captivating to the player (Murray, 174).

Although players are able to explore these digital worlds and perform actions that mimic those from their real lives, the representations the player sees is what Murray calls "a comic vision of life" (Murray, 175). This is because within these worlds' the player is able to control certain aspects that would be impossible in real life. The player can retrace their steps and correct mistakes and even in some cases cheat death. This has to be balanced with limits to what the player can and cannot do. These limits are put in place in order to increase the player's sense of vulnerability and create a greater sense of achievement when correct decisions are made or a greater sense of loss when they fail. The player quickly discovers the extent of their influence and through this the game narrative begins to emerge. This is determined by what remains constant within the narrative and what changes based on a series of decisions made by the player that give meaning to their actions (179).

III.III - *Immersion*

Immersion is the state of mind we enter when we focus our attention on one point or event, and in doing so are unaware of everything else that is happening around us, and this state of mind occurs most often when we are involved in experiencing a form of narrative. The most common forms are usually when we are reading a book or when watching a film. When we become immersed in these forms of narrative it is what is called "a willing suspension of disbelief" (Murray, 110). We allow ourselves to enter into the worlds that the author of a book or director of a film have created; and for those moments when we are totally immersed in the fiction we allow ourselves to forget that what we are experiencing does not exist. Murray however states that this description is not quite accurate enough. She believes that instead we *"create belief"* (110). This means that through our experience of the narrative we are not suspending our disbelief of the fictional world, but instead we use what we know and our own intelligence to focus on the created world and strengthen the actuality of its existence (110).

The essential difference between the immersion we experience when reading or watching a film and that of an interactive experience is exactly that: the ability to interact and take part in the experience as opposed to just witnessing it. With books and films we experience the fantasies of the worlds and their inhabitants in a passive manner. However with the creation of interactive environments we are able to go beyond the role of simply being the viewer and can instead become a participant. We are able to become a part of the created world and act out our fantasies (Murray, 98). An important aspect of immersion is that in order to be truly successful, the player must in some way still be grounded in reality. According to Murray there needs to be certain boundaries in order to show the player what they can and cannot do, what is changing and what remains consistent (102). This does not hinder the experience but instead enhances it because they are able to immerse themselves completely while retaining a sense of reality with which they can recall themselves. Murray uses the example of *Harold and the Purple Crayon* in which a little drawn boy travels across the pages of a book drawing new situations for himself as he goes. He gets scared and lost and is only able to find his way home by remembering the crescent moon that has been consistent throughout the experience and that it was always just outside his bedroom window (Murray, 101-102). Giving the player boundaries to work in allows them to quickly determine the limits of what they can do. With these constraints the player can immediately see the impact of their actions within the game world and are provided with instant feedback (Rokeby, 248). We are reminded of these borders within the Digital Environments not in order to pull the player out of their immersed state but instead to make it stronger. In *Prince of Persia: The Sands of Time* (2003) it is set

up in order to appear as if the Prince from the game is telling the player the tale of his adventures. If the player pauses the game at any point the voice of the Prince comes in and makes comments such as "Ok let's stop here for a moment." When the player un-pauses the game he says "Alright let us continue with the story." These subtle reminders of the Prince and his tale allow the player to feel as though they are truly taking part in the narrative. The Prince cannot finish his tale unless the player takes part and completes their role in the game. It is only through them that the narrative can come to a conclusion.

Through the study of the *Cyberdrama* we have seen how each of the three tenets work both separately and jointly to create the experience for the player. Agency gives them the power to make important decisions that have real weight within the experience and have the ability to determine the outcome and direction of the narrative flow. Transformation takes these choices made by the player and altering them and the narrative in a direction unique to them. Finally Immersion is a combination of both working together to create a deeper sense of involvement establishing emotional links between the player and the experience.

Chapter II

Interactive Narrative

In the previous chapter we looked at Murray's Cyberdrama as well as the elements that exist to make up the composition of the Digital Environment. What the Cyberdrama is proposed to achieve is the successful merging of interactivity and narrative. Both of these elements exist within the Digital Environment. However up until now there has been much debate around the subject as to whether they can exist together into a single form. In my text I am placing a focus on the interactive narrative specifically within the digital environment however I am also aware of Aarseth's argument that the interactive narrative is not necessarily bound to digital forms.

II.I - *Opposing Ideas: Ludology versus Narratology*

The interactive narrative exists within the boundaries of the Digital Environment and contains the principles pointed out in Chapter I. Interactive narrative, as its name suggests, it is comprised of two central elements. Firstly, that of the narrative or story which drives the experience and relies on the immersion of the player. The second part is that of the interactivity, enabled through the technology or interface through which the player or user is able to take some form of control and make decisions which themselves elicit responses from the digital environment. The concept of Interactive Narrative as a single cohesive medium is one that is still contested by many. It has been described as "a holy grail for new media" (Manovich qtd. in Frasca, 229) and "a hypothetical beast in the mythology of computing, an elusive unicorn we can imagine but have yet to capture." (Laurel qtd. in Frasca, 229)

A popular research approach into the area of Interactive Narrative has been to consider games as extensions of narrative and drama (Frasca, 221). Though it is argued by many that story and games are directly opposed to one another (Jenkins 1). With narrative being contained within the control of the author it is written with one linear direction that it moves in and the reader is guided along that path. The narrative is designed in such a manner so as to immerse the reader within the story. Interactivity, as we have already seen in the previous chapter, deals with the user as a participant that has a degree of control over the events taking place. So within the arc of the narrative the participant is able to alter the direction in which it flows. The two ideas are backed by theorists from the areas of Ludology[3] and Narratology. Narratologists are interested in and study games alongside other storytelling media while Ludologists believe in the need for a focus on the mechanics of

[3] "A discipline that studies games in general and video games in particular" (Frasca, 222).

gameplay (Jenkins, 1). Many theorists from both camps believe that the two areas cannot exist together in one cohesive state. Ernest Adams states that "Interactivity is almost the opposite of narrative; narrative flows under the direction of the author, while interactivity depends on the player for motive power" (Adams qtd. in Jenkins, 1). Greg Costikyan also states that "There is a direct, immediate conflict between the demands of a story and the demands of a game. Divergence from a story's path is likely to make for a less satisfying story; restricting a player's freedom of action is likely to make for a less satisfying game" (Costikyan qtd. in Jenkins, 1). Much of the confusion around the area comes from differing concepts of "immersion as an outcome of mediated experience" (Bizzocchi, 1). In the case of Interaction, which allows the player creative freedom to explore, there is a loss of authorial control of the structured narrative and therefore many of the storyworld elements (1). Others such as Gonzalo Frasca feel that the associations that are being drawn between digital games and the storytelling model are inaccurate and limit our understanding of the medium (Frasca, 221).

Frasca feels that researchers rely on, and look for, literary theoretical tools from Narratology and film within the area of digital games due to the fact that there is a lack of a coherent, formal method of study of games themselves (Frasca, 222). He goes on to state that while games and narrative may share several similar elements such as story, characters and events, the mechanics of the two are essentially different and holds that Ludologists argue that games are not held together by this narrative structure. Through their design games and narrative both provide authors with a means of conveying their feelings and opinions but both do so in differing fashions (222).

Frasca looks at the areas of interaction and narrative but uses the terms simulation and representation respectively. He describes simulation as "to simulate is to model a (source) system through a different system which maintains (for somebody) some of the behaviours of the original system." (Frasca, 223) This is where simulation differs from representation. Frasca states that traditional media are representational because they are skilled at producing the descriptions of qualities and sequences of events, but they differ from simulation because they cannot convey the behaviours of those events. Traditional narrative media such as a film or book could depict or describe the infiltration mission described in Chapter I, however the reader or viewer would have no control over what takes place and could only make assumptions as to what is happening or will happen to the characters. With simulation they have the ability to alter the events taking place and control what the characters do within the environment, which will then react accordingly by way of pre-programmed responses as well as through the AI within it. This is because the simulation is not

only a visual depiction of the events and environment but also a model of its behaviours that will react to certain stimuli such as inputs from the user (Frasca, 223). These ideas seem to fall in line with Murray's concepts of procedural and participatory that exists within the Interactive category of the Digital Environment. Frasca states that while simulation and representation may outwardly appear the same, simulation cannot be understood purely by its output. He uses the example of watching a soccer game and playing a soccer game in which the act of watching as opposed to playing being very different experiences (224). He describes video games as being a form of structuring simulation, while narrative is a form of structuring representation (224). He believes that because of these differences simulation can express things representation cannot and vice versa (225).

Frasca argues that with traditional narrative authors only have a single chance at creating their story. It is one single path containing a sequence of events that is unalterable (Frasca, 227). In a film, for example, there will only be one final ending to the narrative that the viewer sees. Even if the film depicts its events in a non-linear manner, those events will never change in nature or sequencing, the outcome will always be the same. This is not so with the area of simulation. As Frasca states, simulations incorporate not only a set of sequenced events but also a model of behaviours (227). They are not single isolated experiences but a series of events that can be altered based on actions and inputs made by the user. Frasca argues that we associate this with games because we understand that with games we can always start again and retry something if we fail or are not happy with the final outcome (227). With simulation the events we see are not like those in traditional storytelling due to the fact that the user has the ability to alter the course of events and make changes in how they flow and when they occur. The sequencing of events is never fixed (227). While users have the ability to shape certain events within a simulation there are other aspects which are out of their control. Frasca states that the simulation could randomly input constraints that the user must adapt to (227). This could be based on pre-programmed conditions originally designed to be triggered based on certain actions performed by the user, or perhaps a more likely situation would be one in which the simulation uses the information it receives and through complex behaviours will generate a response that would surprise even the original author (Rokeby, 256). Through this system all simulations will always contain a level of indeterminacy that will be unpredictable to both the user as well as the author (Frasca, 227). While there are these random moments, or as Frasca calls them, moments of fate, within a simulation it is the actions of the user that will ultimately determine the conclusion of the events. In simulation we are responsible for our

actions and the eventual outcome, whereas this kind of narrative development is not available to us in traditional storytelling methods.

Frasca argues that one of the biggest misconceptions surrounding Interactive Narrative is the concept of the Aristotelian notion of closure as being the source of the user's pleasure (Frasca, 229). It is believed that if there is no definitive ending to the narrative structure that the user will feel disconnected or unfulfilled at the conclusion. Frasca states that it is believed that within the Interactive Narrative, users are given a greater sense of freedom than there actually is, while at the same time maintaining a consistency throughout the narrative (Frasca, 229). Rokeby also speaks about this in his text when he discusses the concept of navigable structures. He states that it is often found that by giving the user too much freedom within the environment it is unsatisfying for them because the impact of their actions are not always immediately clear, whereas if the interactive artist (or author) places constraints as to what the user can and cannot do this provides a point of reference for the user and therefore a context within which their interactions can be perceived (Rokeby, 248). Therefore the freedom the user feels is actually a "representation of freedom" and gives them the illusion of a greater sense of freedom than they actually possess.

With this in mind simulation authors take greater creative risks than that of authors of traditional narrative. Within the area of simulation the author has given the user the opportunity to take control of the flow of the narrative and in doing so have given away part of the control over their work (Frasca, 229). This is naturally constrained by certain rules and behaviours that the author has decided on beforehand. These rules can be followed by the user or ignored as well as manipulated. This is closely shaped on Augusto Boal's work in the Marxist drama school. Frasca argues that the pleasure of the narrative comes from the ability to stop and alter it as the user pleases and it is up to the user how they choose to react to the constraints placed on them by the environment (229). This is all intentionally built in by the author, because if they didn't want the user to have a part in shaping the narrative, they would never have included the capability to do so (232).

II.II - *Narrative: A story of space*

We can already see that Frasca takes a definitive stand within the area of Ludology and does not focus much, if any, of his theory on narrative. Therefore I shall now examine two authors who have attempted to take a neutral stance however their views tend to be in favour of a focus on narrative.

One view on the subject put forward by Celia Pearce is that we should not look at games in terms of whether they are or not narratives but instead we should look at them with the question "in what ways are they narrative?" (Pearce, 1) She speaks about the fact that there are many different perspectives as to what makes games "story-like." Digital games are unique because of their ability to generate complex animations that have the potential for user interaction and ways to respond to these actions (3). With the graphical capabilities that are now available to designers the ability to create more recognisable characters has become a standard that is visible in most digital games today. Thanks to this Pearce brings up the Aristotelian notions of empathy and argues that we should consider this when we evaluate our connections to the characters we are exposed to in these games (3). She poses the question of whether a "compelling narrative framework" is created through our empathy for the characters and their stories within the narrative world, or whether it is created through Murray's idea of Agency and our ability to have part of the control over them and their lives?(3) In other words do we feel for these characters because with Agency we are accountable for our actions and the resulting consequences of them on the characters we control; or is it through the inclusion of empathy, or as she states in her text "people I care about", that narrative is created?

Pearce goes on to posit that with the advent of 3D spaces within the digital environment a major point of narrative within these realms is the study of spatial storytelling. She says that with this ability to explore beyond the realm of simple 2D landscapes navigation becomes an even bigger part of the storytelling mechanism (Pearce, 4). Pearce examines the structure of the "God Game" in which navigation is key to the unfolding of the narrative. She describes the "fog of war" technique employed by most cases of this genre, such as the Age of Empires series, wherein players must venture out from the safety of their home base in order to discover what lies beyond the fog that obscures the map (4). It is only through this exploration of the hidden landscape that they will find possible quests, enemies and other opportunities for them to further their experience within the narrative world. In addition to these she also investigates Murray's procedural authorship and states that it is probably the "greatest divergence from traditional narrative forms" (4). It is through the play of the user that the story emerges, a state which Pearce argues is essentially the merging of the consumption and production of the story in what she calls "emergent authorship" (Pearce, 4).

While Pearce investigates games in terms of how they exhibit narrative qualities, she is by no means the only person to look at the concept of authorship of narrative within the digital environment. Henry Jenkins puts forward several of his own theories on the subject in his paper *Game Design as*

Narrative Architecture (2005). Jenkins states that his ideas are to be seen as what he hopes to be a middle ground between the two areas of Ludology and Narratology. In his text he says, like Pearce, we should look at digital games less as stories but instead as "spaces ripe with narrative possibility." (Jenkins, 2) Jenkins is of the belief that the Ludologist point of view is far too close minded with a view that only takes into account a very narrow model of narrative and the conventions of traditional linear storytelling. He feels that there is too much focus on the idea of authorial control and the actions of the storyteller (3). He also feels that Ludologists have the belief that only complete games tell stories and do not concern themselves as to whether games can contain story elements at a more "localised" level (3).

Jenkins brings certain points to our attention that he believes both Ludologists and Narratologists can agree upon. Firstly that not all games tell stories and many may be more experimental or abstract; therefore in order to understand them we need to look at other concepts beyond narrative such as interface design (2). Secondly, while the above is true many games do have a narrative ambition; in this case we need to understand how games relate to narratives and, in most cases, this depends on our understanding of the genre and its goals (2). Thirdly he states that there need not be a single direction in which game design should go. There is a need for diversification in the medium and the technology that powers it and allows for multiple areas of exploration that is only dependent on the designers themselves. Jenkins states that the central point here is that if game designers are going to create and tell stories that they should be able to do it well, and in order for this to happen they need to become skilled in the rhetoric of narrative theory (2). The fourth point Jenkins raises is concerned with the idea that the experience of playing games cannot be simplified to just the experience of a story. This is because games are composed of many elements not related to storytelling that allow for a greater experience for the user. He goes on to state that this area in particular is where the argument made by Ludologists to further the study of game mechanics holds the most weight (3). Finally the fifth point Jenkins puts forward is that when we look at game narrative we need to study it from the perspective of how it differs from traditional narrative as well as which elements they share (3). This falls in line with Pearce's goal of looking at games with regards to what makes them narrative.

Jenkins argues that game designers are not simply telling stories in their games. Instead they are designing worlds and spaces that exist within them (4). Therefore we should think of game designers less as storytellers and more as what he terms "narrative architects" (3). Space has always been a key characteristic within games, beginning with board games such as Cluedo in which players

move pieces around the house searching for clues as to who murdered its owner, with what and where. Jenkins even points out that early games such as *Zork* which was a purely text based game makes use of space a great deal. Whenever the player enters a new area within the game the surroundings are described to them, everything from the direction they are facing to the items and characters within it. This kind of visual storytelling is translated through the imagery of games such as *Far Cry* (2004) and *Mirrors Edge* (2009) which are designed with the environments and spaces in mind from the outset. The imagery contained within them is often extremely rich and visually appealing and in itself is used as an element of the storytelling. Jenkins states that game reviewers, whether they be reviewing for magazines or websites, will often use screen shots and other images obtained from the game when discussing things such as gameplay as opposed to simply talking about their narratives (Jenkins, 4). He also believes that with the advent of next generation consoles they should be looked at as machines for generating compelling spaces in which narrative can take place (4).

Jenkins believes that with these spatial stories there is the possibility to explore several different kinds of narrative experiences (Jenkins, 4). He feels that generally heroic stories such as Tolkien's *Lord of the Rings* and Homer's *Odyssey* lend themselves to the area of spatial storytelling. This is because with the genres of fantasy and science fiction the narratives are generally focussed on world building and the creation of rich environments to explore. Thanks to the depth to which the authors go in creating these worlds there is the possibility to explore what Don Carson of Walt Disney Imagineering calls environmental storytelling (5), the use of the environment to convey elements of the narrative to the viewer. In environmental storytelling parts of the narrative are actually built into the space itself to evoke a sense of atmosphere. For example in the game *Fable* (2005) each of the landscapes is designed in a way to convey the emotions or feelings of that location to the player. In the peaceful town of Oakvale the whole concept is that of an idyllic village and so the landscape has been designed with a bright pallet of colours and the surrounding area is full of fields and pleasant villagers. Whereas the Darkwood, as its name suggests, has a much darker palette and the area is full of creatures and bandits trying to kill the player. Environmental storytelling even goes beyond this with the use of smaller design techniques to convey subtler elements of the story. A player may stumble onto an area covered with blood splatters or broken objects littering the space. These details may be as subtle or overt as the designers choose, but either way it gives the player a notion of an event that has taken place. Through their discovery of the blood they can assume that sometime in the past someone or something was killed here and with this in mind the player will

unconsciously shift into a more heightened state. They will now be on the alert for the danger that may lurk just beyond the next corner.

Jenkins says that "environmental storytelling creates the preconditions for an immersive narrative experience" (Jenkins, 5). He states that this can be achieved through four different narrative types. The first being that of Enacted Narrative which is structured around the movement of the player and the story unfolds based on this. The second narrative type is Embedded Narrative which most often follows the genre style of a detective novel as this form of narrative acts as a memory space in which the player must sort through the contents it contains in order to decipher and unravel clues. The third variation is that of the Emergent Narrative in which the space is designed with the potential for rich narrative creation by the player themselves. This can most often be seen in games such as *The Elder Scrolls: Skyrim* (2011) in which the player is given a huge landscape which they can explore at their own discretion and decide which quests to partake in at whatever time they feel most appropriate thus shaping their own unique experience within the world. The fourth and last of the narrative types Jenkins puts forward is that of the Evoked Narrative, which addresses spatial design. Depending on how it is dealt with, it can either reinforce our sense of immersion within a familiar world or it could be a reimagining of the world to create a new perspective for the player (Jenkins, 5). An example of this used by Jenkins is in essence the recreation of Tolkien's Middle Earth and following the narrative elements he originally set out to reinforce the sense of immersion. Whereas American McGee's *Alice* is a look at Lewis Carroll's Wonderland but through the now broken mind of Alice where we see the original characters and settings but they are distorted and redesigned to create a new take on the world.

In this section we have seen that many of the ideas that exists around narrative in the digital space are concerned with moving through space. This can be through physical or conceptual space. A constant factor through all of these narrative types, and this may vary between them all, is the element of interaction within the environment.

II.III - *The Debate: Where we are now*

So far we have looked at the two sides of the Interactive Narrative debate. We have looked at Frasca who takes a firm stand behind the ideology of Ludologists and we have also seen Pearce and Jenkins, who both attempt to find a middle ground between the two sides. But both seem to still take a stance that leans more to the side of Narratology. While there are compelling arguments

from both sides, many theorists have come to the conclusion that the debate surrounding Interactive Narrative is a pointless one (Pearce, 1). Instead many have turned their areas of study to the subject of how they can work together as opposed to what it is about them that makes them different or how it is their differences can be exploited in order to find a successful balance.

I will now examine a perspective that seems to find a better footing on the shaky middle ground. In his text *Games and Narrative: An Analytical Framework*, Jim Bizzocchi states that the confusion surrounding the ideas of Interactive Narrative make it a misleading focus for analysis of game narrative. In his paper he reaffirms the statements made by Jenkins in his text. Like Jenkins he says there are several things both sides can agree upon but simplifies this into three key factors. One, games do not necessarily involve story. Two, there are core differences between interactivity and narrative. Three, that story can often significantly add to the pleasure of gameplay (Bizzocchi, 1). What Bizzocchi believes is that in order for researchers to broaden and examine the context of gameplay and the other elements that surround them, we should turn away from the idea of a grand narrative arc (1). He states that the reason this dispute began is because academics who are not involved directly with the area of game study feel the need to use theoretical tools from a medium they are familiar with (2). This however is not an effective method of study because game design and its use of narrative have a complex relationship that may have similarities to traditional media but is simultaneously unique in the way in which it is handled.

Throughout the areas of the Digital Environment, traditional and Interactive Narrative, as well as Murray's Cyberdrama there are several recurring terms that appear. One of the most prominent we see is that of Immersion. Bizzocchi singles Immersion out as being a key factor that needs to be assessed. In his paper he points out that Immersion has several forms, each of which differs from the other in the way in which they function. The earliest form of Immersion was originally pointed out by Coleridge who's well known "suspension of disbelief" I have already mentioned in Chapter I. This term was based on cinema which was the dominant cultural medium of the time. Coleridge's understanding of Immersion was the willing surrender to the pleasure of story and the suspension of the viewers' disbelief for that time. While this idea of Immersion was sufficient for this context, it is not suited to the medium of games. Another form of Immersion is Csikszentmihalyi's Immersion of active engagement with dynamic process, or shortly, the immersion of "flow" (Bizzocchi,2). Flow relies on similar principles to Coleridge's suspension of disbelief such as the need for a high degree of focus on a narrow point of interest but it also incorporates several very different ones. Flow requires clear goals in which expectations and rules are discernable, direct and immediate feedback,

the activity is rewarding and thus effortless in the action. Bizzocchi states that the discourse now recognises these differences and has placed Immersion into distinct types; Coleridge's has been termed imaginative immersion, while Csikszentmihalyi's has been called challenge-based immersion. There is also a third type that is known as sensory immersion which deals with the sensory outputs of the game system (Bizzocchi, 2). What Interactive Narrative seems to want to achieve is the merging of the three. In order to do this game designers need to be able to find a balance or rhythm between contemplation and engagement (Marsh et al, 99). These are the moments of imaginative and sensory immersion dealing with the players contemplation of what they are seeing and challenge-based immersion being the players engagement with the narrative world and its characters.

In his paper Bizzocchi states that for us to be able to study game theory correctly we need to look at it from a different perspective. Due to the fact that game narrative has its similarities and differences to traditional narrative such as film, there is naturally a different structure to them. With the traditional narrative form of film there is the established narrative arc which follows an accepted formulation. The first step in this formulation is the setup in which the characters and the story world in which they exist are introduced. Secondly the complication in which a challenge is introduced which the characters must overcome. The development makes up the majority of the storytelling and is the phase in which the protagonist of the narrative works toward the overcoming of the challenge. The resolution is the climax in which the characters achieve some sort of victory or defeat. Finally the denouement would tie together the final strands of the story and end gracefully (Bizzocchi, 3). This narrative framework relies on a careful balance and a tight control over the design and implementation of details and timing. As Bizzocchi states, the simple fact is that interaction denies the detailed control needed in order to maintain Coleridge's suspension of disbelief (3).

In order to deal with interaction Bizzocchi proposes the use of a simpler framework that handles limited narrative parameters. In this structure Bizzocchi looks at storyworld, character, emotion, narrative interface and micro-narrative (Bizzocchi, 3 - 4). Bizzocchi believes that the storyworld is a critical narrative parameter for game experience (4). As I have stated earlier, games do not always have a narrative and even when they do it is not always weighted in favour of the narrative to be a good game. This does not mean to say they are not storyworlds. Jesper Juul has divided storyworlds into a four level hierarchy ranging from abstraction to representationalism. They are: Abstract,

Iconic, Incoherent and Coherent. Bizzocchi draws on Jenkins and points out that storyworlds can be connected to his concept of spatial storytelling.

The next key area is that of character. The characters, be they "heroes, villains, player-avatars, and non-player characters", within the gameplay worlds enact the narrative (Bizzocchi, 4). As Bizzocchi states they "live the enactment of the game and the story" (4). The characters within games are key to bringing players into the narrative and allowing them to become immersed within it. This is no different from film or books but in games players have an active role in leading the characters through the narrative and the actions they perform. In his text Bizzocchi references Miller and her identification that personification is a key component of the definition of narrative (5). It is believed that character is central to reader identification and character-driven drama is suggested as a starting point for the story construction (5). He states that this is a favoured formulation and during the process of gameplay is consistent with the construction of character and meaning (5).

Bizzocchi next speaks about Emotion in games. This is a tricky area and has been separated into three branches. The first branch being the emotions of the characters in the game or 'gameplay emotion'. The second branch being the identification the players have to the emotion in the game has been called 'fiction' or 'witness emotions'. The third and final branch being that of artefact emotion (Bizzocchi, 5). Bizzocchi states that it is significant that these three forms of emotion map directly into the three immersions; fiction emotion sits in line with imaginative immersion, artefact emotion with sensory immersion and gameplay emotion with challenge-based immersion. Most emotions that people experience during gameplay are fear, humour and frustration all of which can be seen to be connected in some way to the emotion of gameplay (5). Bizzocchi says that the elicitation of deeper emotion based on connection or identification with character may be a more difficult challenge for game design.

The next area is that of Interface design. With Interactive Narrative the interface becomes increasingly important to consider during its design. When we look at the ideas of immersion it is easy to see that while the process of watching and the process of interacting are both forms of immersion themselves, it becomes a complicated matter when both are placed within the same medium. There cannot be a break in the player's immersion, there should be no shift between watching and interacting and so the interface should be designed in such a way as not to disturb the progression of the narrative or the immersion of the player. Bizzocchi points out that a way around this would be the incorporation of the narrative into the design of the interface itself (Bizzocchi, 6).

He gives the example of changing the cursor in order to mimic the personality or mood changes of the protagonist. Another method that is being used in many games is the use of transparency. In *Film Informing Design,* Marsh et al refer to a quote by Nardi who states that "to describe a good user interface... [and following mastery] one that is supportive and unobtrusive, but which the user need pay little, if any attention to" (Nardi qtd. in Marsh et al, 99). This is clearly illustrated in the evolution of first and third person shooters. Originally these games had a Heads-up Display (HUD) which displayed the players health, ammunition, armour and other vital information. In many of these games today the HUD has been simplified or even stripped away completely. This is seen in many next generation FPS titles such as Gears of War and Medal of Honor. The game designers rely on other techniques to indicate these statistics to the player, if a player is low on health the screen may begin to redden or go dark as opposed to the traditional health bar or green percentage symbol.

The final point Bizzocchi speaks about is the use of Micro-narrative in games. This is a topic Jenkins covers in his paper as well when he talks about localised incidents within games. With interaction and its meddling with narrative direction there comes the issue of the grand narrative arc. Micro-narratives are a proposed solution to the problem of authorial control within games. It is suggested that in games it could be possible to treat each level or mission separately, each with their own goals or arc. The problem with interactive narrative arcs being that unless there is a method of furthering the narrative based on these actions taking place within levels, there is the need to bring the player back in the direction of the grand narrative arc. This is usually done with methods such as blocking off certain areas of the game until the player has completed specific quests or achieved a certain level of experience. However these can also be used in a manner similar to side quests. Players need not complete a mission and it might not have any bearing on the grand narrative, it could instead just complicate their experience. These micro-narratives should be looked at as a chance for broadening the players experience and giving them a chance to experience localised narrative that will further them in the overall background narrative as well as fleshing out their characters. This kind of technique is already used in games like *Skyrim*. Throughout the game the player is able to follow the narrative in any order they choose. Either going straight into the central narrative arc or choosing to ignore it. Early on characters have the chance to perform a central storyline mission in which they discover dragons have returned to the land. After this the game world begins to become populated by other dragons which can be seen brooding on mountain tops or flying through the land attacking towns. If the player however does not complete this mission early on they can simply journey around the world and perform other tasks, however they will not encounter a single dragon

as they have not yet performed this key mission. This would greatly change their overall experience of the story and probably allow further missions to be far simpler than if they had attempted them early on. Bizzocchi states that we can "frame game design as a process that sets the stage and the conditions for a series of micro-narrative events that are triggered and completed (or not) by the player's success or failure in the moment of play." (Bizzocchi, 7). He feels we can "no longer draw a distinction between game and narrative, but we see the two conjoined in an ongoing process of engagement." (7)

Within this chapter we have looked briefly at the debate that surrounds Interactive Narrative. We have seen that there are differing arguments made by Ludologist and Narratologists as to what researchers should be studying and trying to further within the field of game theory. We have also looked at several points that have been made with the hope of finding a middle ground between the two. We can see that despite the debate there is the belief in the cohesive merging of the two ideas as long as a careful balance is kept and the understanding that the two methods of communicating narrative are ultimately different. This gives us an understanding of just what it is Murray's Cyberdrama hopes to achieve. In the following chapter we shall be looking at the case study of Quantic Dream's title *Heavy Rain* (2010) and I will attempt to point out the aspects it possesses that exemplify the qualities Murray describes as being central to the *Cyberdrama*.

Chapter III

Heavy Rain - A critical analysis

In the following chapter I shall perform a critical analysis of the game *Heavy Rain*. In this section the game shall be described in detail. This will be in reference to the design choices made by the developers, the key ideas behind the creation of the game and the main goals that were set out during the game's conception.

III.I - *Fahrenheit*

Before we can begin to understand *Heavy Rain* we need to first look back at the game *Fahrenheit* (2005) which was the second title to be released by Quantic Dream. We need to take this brief look because David Cage, the writer and director of *Heavy Rain* as well as the CEO of Quantic Dream, describes the genesis of *Heavy Rain* as being *Fahrenheit* (Cage qtd. in Kendall). He called it their first try at telling and creating this kind of story, and says they didn't know what they were doing (Cage qtd. in Welsh). When Cage and Quantic Dream set about developing *Fahrenheit* they did so with the intention of creating something that was interesting and had value. *Fahrenheit* is a story about real people being faced by real problems. Cage wanted to create emotional experiences in which players are faced by moral choices (Cage qtd. in Welsh). In the designing of the game Cage says it was important that it was done in a way that broke away from traditional game paradigms (Cage qtd. in Welsh). There are no weapons for the character to wield, no cars to race around in, no puzzles for the player to solve and no traditional game mechanics such as *ramping*[4] (Cage qtd. in Welsh). Cage said that with this game he wanted to "recreate a richness and diversity of emotions comparable to a film by using similar mechanisms (narration and characterisation), but ones that are also peculiar to the medium (interactivity and immersion)" (Cage qtd. in Lessard, 20).

The game was designed with the purpose of creating a new way for players to interact and experience narrative. They wanted players to be able to "play physically with the story" (Welsh). Cage says the game was important to him and Quantic Dream because they saw it as "the first time someone tried to tell a story through actions and not through cut scenes" (Cage qtd. In Kendall, 2010). The narrative could shift and change based on the decisions players made and the actions they chose to take. Guillaume de Fondaumiere the game's Executive Producer describes this as what they call "bending stories" (de Fondaumiere qtd. in MacDonald). Like any other game narrative *Fahrenheit* has a beginning, middle and an end. Where it is different from other games is

[4] A mechanic used in many games, where the gameplay becomes increasingly more difficult as the game progresses.

in its branching structure. At certain points players are able to *stretch* or *bend* the story depending on the choices they make (de Fondaumiere qtd. in MacDonald). For some players the story would therefore have more depth in certain areas or their experience may be longer than for others.

This meant that Quantic Dream had to design a new method of interaction for players. Players control the flow of the narrative progression during a scene based on their actions. Cage describes the interface as being designed with an approach that was entirely based on motion which he says is a new approach to what interacting means (Cage qtd. in Kendall, 2010). This was very different from other games that were instead focussed on action as being the key to interaction. Quantic Dream needed to change the way players interact and how the controls were mapped into the game. This had to be done in a way that still allowed for an exciting and enjoyable experience without obscuring the narrative but instead adding value to the players time within the game (de Fondaumiere qtd. in MacDonald). Cage also speaks about the interaction system as using what he terms "physical immersion" which attempts to place the player in the same physical mind-set as the characters in the game (Cage qtd. in MacDonald). So when a character needs to perform an action the player will mimic the motion with their mouse or analogue sticks, or if the character is in a difficult or high stress situation the action that must be mimicked will rely on a better sense of timing or reflex on the part of the player. All this is combined together to help heighten the sense of narrative tension in certain moments, such as when Lukas, the main protagonist, attempts to escape from the police, as well as to emphasise moments of quiet when the player's other characters, Carla and Tyler, are at their homes taking time off from the murder case they are investigating.

Due to the fact that Quantic Dream wanted to move away from traditional game paradigms as well as create an emotional experience for the players it was important for the music to fit the mood perfectly. Many games that were being released around the time of *Fahrenheit's* development had soundtracks that used much more up-beat and heavy sounds. An important aspect of *Fahrenheit* for Cage was that the music should not simply be there just for the sake of having a back track but instead it should add to the emotional experience. Quantic Dream brought in the skills of Angelo Badalamenti, a composer who has worked on many of the films by David Lynch. Cage felt he had the ability to create the atmosphere he wanted for the *Fahrenheit* world. With Badalamenti's help Quantic Dream where able to compose a soundtrack for the game that would not be out of place in a Hollywood film. Each character had their own theme within the game that fit their personality. For example Tyler is described as being originally from the streets and having grown up in a rough neighbourhood before joining the police force. He is an African American male with a lot of style.

So for the game he was given a groovy 70's theme to fit his style and background. These personal themes for the characters were then integrated into the game so they could transform seamlessly into the composed elements that were scored by Badalamenti.

While *Fahrenheit* was generally well received in the gaming community it did have several shortcomings. Cage and Quantic Dream acknowledged this and realised that there was much to consider before they could begin working on their next Interactive Drama.

The first thing that Cage wanted to look at was the narrative of the new game. At the time of creating *Fahrenheit*, Cage felt as though they did not yet possess the means to tell exactly the kind of emotion driven story he wanted to make. He believed it was necessary to have the outlandish supernatural elements to capture the player and get them to fall into the story. Thanks to the next generation of consoles and the technology they possessed around the time of *Heavy Rain's* conception, Cage now felt he could effectively tell the kind of story he wanted.

With this in mind Quantic Dream decided that they would produce *Heavy Rain* for a single platform. The natural choice was the PlayStation 3 because it had the best processing power and graphic capability of all the new consoles. This decision of developing the game for a single platform was a deliberate one. *Fahrenheit* had been produced across the PC, PlayStation and Xbox which had proven to be a much greater challenge than the team had originally conceived. Many difficulties arose with regards to the interactivity and the graphical elements of the game. With the creation of *Heavy Rain* for only one console they could develop the game without having to adapt the standard for other consoles. There was no need to worry about how the game would function on the PlayStation, Xbox and the PC which all have very different control systems and graphical capabilities.

Within this new Digital Environment that Cage had envisioned he felt that there was much he wanted to change with regards to the game mechanics. This ranged from the dialogue control to the types of interactions the player could perform. *Fahrenheit* seemed like a slightly disjointed experience when in the dialogue system because players had to shift from what was happening with their characters to the dialogue options at the top of the screen. Then, when they had made their choice, they had to shift back once again to the character action. It was two separate actions that were happening. Similarly with the QTE (Quick Time Events) in the game the prompts where placed above the action and this created a very definite separation between the player controls and what they are affecting. This was something Cage wanted to address in the changes for the new game.

Through these changes they wanted to make and other elements they wanted to keep, Quantic Dream began work on *Heavy Rain*.

III.II - *Heavy Rain*

After *Fahrenheit* had been completed and the gaming community had seen and played it, Cage began to think about what he wanted to do next. *Fahrenheit* had been a success but in Cage's mind it was still not quite right. He felt that it had not fully accomplished what he had wanted it to. So Cage and Quantic Dream began work on *Heavy Rain*. Before they began development they created a shortlist of things they wanted to change or make better in the new game. They wanted to continue with the same approach based on interactive storytelling and emotions (Cage qtd. in Ohannessian) and Cage points out that this time they wanted a much bigger story with more realistic characters in situations that we find in real life (Cage qtd. in Ohannessian). He says that at this point they felt that the technology that was available to them was complex enough to allow them to convey more subtle things and trigger more complex emotions within the audience (Cage qtd. in Ohannessian). With these first few basic goals delineated they set out to create *Heavy Rain*, a game that would soon be described as an Interactive Movie.

III.II.I - *Narrative*

Since Cage and Quantic Dream saw the narrative of *Heavy Rain* as being crucial to the success of the game they focussed a huge portion of the development on simply writing the story. Cage was not only the director of the game but he was also the writer of the entire script. Cage estimates that the writing of *Heavy Rain* took him about a year (Cage qtd. in Labute). The length of a typical Hollywood film script is around 120 pages. Cage says that the script for *Heavy Rain* was about 20 times that because the game runs at around 10 hours in length which is about five times that of a standard movie (Cage qtd. in Kendall). This is largely due to *Heavy Rain's* non-linear nature. Players are able to alter the direction and flow of the narrative based on the decisions they make as they progress through the game. Cage states that because *Heavy Rain* is non-linear and does not employ typical game mechanics, the volume of work that has to be done on the script is greatly increased (Cage qtd. in Kendall). Most games employ elements such as shooting or driving as the interactive portion of the game and the actual narrative then progresses through the use of cut-scenes (Cage qtd. in Ohannessian). With Heavy Rain this is very different because players are not interacting randomly

but each of their interactions in some way, whether it be small or big, will alter the course of the narrative.

For example, early on in the game the player is introduced to one of the main protagonists Ethan. In this early scene the player is tasked with getting ready before his family come home to prepare for his son's birthday. The player can then choose to dress themselves or not. Walk around the garden, listen to the radio, watch TV, catch up on work as well as a number of other things to keep them busy. All of this is to begin familiarising the player with the character and generally placing the early building blocks that will hopefully link the players emotionally to the character. These are all small seemingly insignificant things for the player to do but they do impact the character in different ways. If the Ethan finishes his work before the family gets home he is visibly happy when he tells his wife what he got done. If not he seems regretful that he wasted the chance by doing other things. His wife also seems momentarily disappointed in his lack of work ethic. While these might not affect the overall outcome of the game they are intended to make the player feel slightly regretful and think that they might have been able to perform better.

Because of this literal changing of the story and the many different directions the players can take it, Cage felt that it was really important early on to begin planning the gameplay elements for each scene, enabling them to have a proposal for the narrative as well as the gameplay (Cage qtd. in Ohannessian). This was essential as the gameplay could be so different from one scene to the next due to the game's non-linearity. Cage goes on to say that it is a huge creative task and was very technically challenging to write the narrative in a way that advanced both the situations and the interest within the characters (Cage qtd. in Kendall). It was important for Cage to find a way in which to write the narrative that would ensure the same consistent quality of story throughout each path regardless of the decisions made by the player (Cage qtd. in Kendall).

Since one of the main goals that Cage and Quantic Dream had shortlisted was to continue telling these kind of interactive stories through emotions, the story had to be written in a way that would help evoke these emotions in the player. In one interview Cage speaks about writing narratives for games and that in most cases when you write a narrative for a war game or a zombie apocalypse for example, you don't really know what that would feel or be like because you have never experienced those things (Cage, Video Interview: David Cage). He didn't want any supernatural or sci-fi elements, just real people and real situations (Cage qtd. in Kendall). The writing of *Heavy Rain* was very important for him because it was centred on an experience that he had personally been through as a

young father when his wife and child of about five or six were out at the mall. At a certain point he thought his son was with his wife and she thought he was with him. He says that when they realised that they had lost him that all he felt was total panic (Cage, Video Interview: David Cage). Even though it only lasted about ten minutes before they found their son, he said that the number of emotions and thoughts that went through his mind was incredible (Cage, Video Interview: David Cage). With this in mind he began thinking about what would have occurred if they hadn't found him? What would it be like if that was the last time he ever saw his son? More importantly, what would he do to save his son if faced with the question? This was the starting point for the narrative of *Heavy Rain* and the beginning of Ethan's story. Cage says that he wanted to tell this story and question what it means to love your child because this kind of love is very different from the love you have for a sibling or a girlfriend (Cage qtd. in Ohannessian).

Cage felt that at the time there wasn't much content for mature gamers in the market (Cage, 1UP Specials: Interview with David Cage & Gameplay Reveal). Cage wanted to address this in the game and says Quantic Dream's goal was not to simply create new technologies but to see what kind of need they could create within the market (Cage). The themes contained within the game are all related to this core idea. They wanted to incorporate mature topics such as death, serial killers and child abduction among others. Many people may consider these sensitive topics to deal with but Cage feels that if there is something that exists within real life then why should it not be shown in a game? (Cage qtd. in Burrows, 43) In one moment of the game the player is faced with a scene of Madison Paige naked in her shower, it is done in a way to try to show her vulnerability and femininity reflecting Cage's philosophy that everything is created with a purpose and that nothing is gratuitous. He says that if you have violence for the sake of violence or sex for the sake of sex then it has no interest and does not tell you anything (Cage qtd. in Burrows, 43). Each element incorporated into the narrative of *Heavy Rain* is placed there with the intention of enriching the experience for the player and not simply there to distract them.

III.II.II - *Character Design*

Once Cage had the idea for the kind of story he wanted to tell he needed to figure out who the characters where that he would incorporate into that story. Early on he knew he wanted to bring in more than one protagonist for the player to control, a technique Quantic Dream had used before with both their first game *Omikron: The Nomad Soul,* in which the player comes back to life as other people, and *Fahrenheit* where the player controls three different characters. Cage says he is very

interested in schizophrenia but also in being able to be someone else (Cage qtd. in Ohannessian). It is the ability to experience a story from multiple perspectives and mindsets other than your own that makes his games intriguing. He is interested in the idea of being able to play through several full stories that can overlap and collide at certain points. This allows the player to see several points of the same scene from the perspectives of different characters. Cage states that he was told (on *Fahrenheit*) that people will not feel empathy for several protagonists and do not want to play many characters but instead only want to be the hero (Cage qtd. in Ohannessian). Cage, however, feels that this is not so and that if people can easily feel empathy for many characters in a movie, they can also do so in a game (Cage qtd. in Ohannessian).

For *Heavy Rain* Cage decided on giving the player the ability to control four protagonists through their journey of the game's narrative. Each of the characters were designed with fully fleshed out backgrounds in mind and each character has their own strengths and weaknesses. Cage gave each of the characters some kind of flaw and says that it helped make them feel more real and balance out their personalities (Cage qtd. in Ohannessian). He says that this was a homage to traditional video games, referencing elements such as a fighting game where there are characters that might be strong but slow, or very fast but weak. For *Heavy Rain* he took this concept and approached it from a narrative perspective (Cage qtd. in Ohannessian). Looking at the four main protagonists this strength/weakness approach is evident in each of them - There is Ethan Mars who is a good father but he is consumed with guilt over the death of his first son. Madison Paige is a journalist who suffers from insomnia and can only feel at rest when she stays in a motel or hotel. The FBI agent following the case of Ethan's missing son suffers from an addiction to Triptocaine, a fictional drug in the *Heavy Rain* world. Finally there is Scott Shelby, a private detective employed by the families of the other missing children to try and solve the case, who suffers from a bad case of asthma. Cage says that it was these flaws and weaknesses that were incorporated into the characters that aided in making them look and sound real (Cage qtd. in Ohannessian). This is not the first time Cage has employed this with his games; here we can see another link with *Fahrenheit* where the detective Carla Valenti has an extreme case of claustrophobia that she has to overcome in order to progress through certain areas of the game.

To further add a level of realism to the characters Quantic Dream used not only the actors' voices but their actual physical appearances and performances. Each actor was fitted with motion and facial capture equipment. They would then act out their scenes in a studio and their performances were captured. The voice performances could then be directly linked with the actors actual facial

movements to create more realistic experiences in the game. Through this process the game contains roughly 30 000 unique animations (Heavy Rain the Making of 1: Crafting Virtual Actors). The decision of which actors to cast was an important one for Cage and Quantic Dream and there was an extensive selection process. There were 457 actors auditioned for the roles over 14 casting sessions. In the end only 90 were chosen (Heavy Rain the Making of 2: Casting Real Actors). Each of these actors lends their own unique performance to the experience of the game.

Within the game there is an element that is ever present at the periphery of the players mind and yet never truly acknowledged as a character within the experience. That is the constant rainfall throughout the bulk of the experience. This represented a link between each of the characters. Any of the characters can at any point look out of at the falling rain and be reminded of the time that is slipping away (Cage qtd. in Ohannessian). The rain is a constant presence to the protagonists because each knows that it is a signal of how much time Ethan's son has left to live. Every time a child is taken in the game they appear two or three days later having been drowned in rainwater. So as a character Cage felt it was an interesting one because the rain can go from being calm and quiet to very violent and dense (Cage qtd. in Ohannessian). It can quickly change the mood of a scene from one of quiet contemplation with the depiction of a gentle summer rain, and in a single moment it can become a sombre moment where the dark clouds hang low and rain is falling heavily with all the colour seeming to have been washed away. He says it is a very interesting visual element because it can change the look and texture of a scene very quickly. It is also something that we all feel and understand that we have no way of stopping it (Cage qtd. in Ohannessian). Within the game the rain is not only a passive presence, it is also indirectly the murderer of several of the victims and, possibly, Ethan's son.

III.II.III - *Visual Design*

Due to Quantic Dream and Cage's goal of creating an emotional experience for players, it was very important for the game to have a believable world in which the characters existed. This was very dependent on the visual design of the game. Everything within the world had to be considered carefully beforehand in order to enhance the experience for the player. Every scene was created with visual cues to direct the player through them and elements to indicate not only the atmosphere but also the general mood. In the first scenes in which the player is given control of Ethan the environments are well lit and the colour palette used is very bright and vibrant. This is all to compliment the happy light hearted mood that players should get from the actions they are able

perform, for example the initial scene in which Ethan is setting up for his son's birthday and playing with his boys in the garden before the party begins. The change from this to *Heavy Rain's* darker palette of grey, black and browns is immediately noticeable when we see the very first scene after his son dies. The tone throughout has changed to a darker far more brooding mood that is seen not only in the colours but also the textures used. Ethan no longer lives in his big open home, but now lives in a run down two bedroom house. The lighting is far more subdued and dull in these scenes and the colours are now washed out greys. Everything seems to echo the depressive mood of the characters within the scenes.

The city in which the game takes place was given no specific name or landmarks to identify it as a place within our world. Cage says that this was in order to allow the world of the game to be universal and accessible to everyone (Cage qtd. in Ohannessian). The majority of the game takes place in rundown industrial district. The landscape is dotted with factories and ramshackle homes. Cage said the inspiration for the design of the cityscape came from Michael Moore's *Bowling For Columbine* (Cage qtd. in Ohannessian). He said from a European perspective he was completely surprised at the social background shown in the film, because what he knew up until that point was simply the Hollywood perspective usually found in movies, and so he was very interested in Moore's documentary which showed how people actually live (Cage qtd. in Ohannessian). Cage wanted to depict this same reality within *Heavy Rain*. It was important to him to convey the same atmosphere and mood that would be found in these environments. He wanted to accurately show these elements in the game and decided the best way to do this was to see them for himself. Therefore Quantic Dream arranged for a tour of the poorer parts of Philadelphia. Cage says that they did not simply want to imagine these environments but they actually wanted pictures (Cage qtd. in Ohannessian). Cage describes an experience he had during this period of research for himself and Quantic Dream: A movie scout had been hired to arrange tours through several of the poor districts of Philadelphia. Cage says that when they arrived at one of the pre-arranged locations they found the family sitting in their kitchen crying. Their ten year old child had died the day before. Cage and Quantic Dream immediately said they would leave, but the family insisted on them staying since they had come all the way from Europe. He says that this experience really stuck with him because here they were taking photographs while this family was in mourning (Cage qtd. in Ohannessian). He felt this was a really emotional memory that he hoped translated into the writing of the game. He wanted to convey these feelings of intense depression, death and sadness (Cage qtd. in Ohannessian).

With the game's atmosphere and mood it was very important to Cage that the emotions of the scene were not only conveyed through the characters but also through the environments they take place in.

III.II.IV - *Audio Design*

With a game such as *Heavy Rain* that relies on the player becoming immersed within the narrative and the environment it exists in, the music and other audio elements become key to creating the atmosphere needed to achieve this. Cage confirms this and says that they believe that the music plays a vital role in an experience like this and they rediscovered this when creating *Heavy Rain* (Cage, Heavy Rain the Making of 3: Music). He goes on to say that they believe that the impact of the music is fifty percent, if not more, of the impact than the images (Cage, Heavy Rain the Making of 3: Music). In order to capture the emotions and atmosphere that would be needed to bring the narrative world of *Heavy Rain* to life Cage and Quantic Dream felt it important to have the right kind of soundtrack.

David Cage was originally a composer (Cage, IGN Video Interview: David Cage) before becoming involved in the creation of Quantic Dream and so at the outset he says that he already had sounds and music in his mind for the game (Cage, Heavy Rain the Making of 3: Music). Quantic Dream brought in the composer Norman Corbeil to score the soundtrack for the game. Corbeil says that *Heavy Rain* was a unique challenge because of the sheer scope of the game and to begin with it was difficult, but because he had previously worked with Cage and knew the kinds of things he likes it made the process slightly easier and allowed him to save time when working on the score (Corbeil, Heavy Rain the Making of 3: Music). Cage states that many of the actors working on the game felt the amount of work was like that of working on three or four films at once. He goes on to say that this also applied to the writing and producing of the music (Cage, Heavy Rain the Making of 3: Music). The amount of music that had to be produced was proportional to the amount of gameplay that was created, so for each path a player might take in the narrative the music had to be designed to shift and change based on the direction the player turned the story. Cage believes that this was a challenge not only because of the large volumes of music that had to be recorded but also because they wanted to keep the same focus and intensity on each track to create a seamless and powerful score throughout the game no matter the player choices (Cage, Heavy Rain the Making of 3: Music).

With the game most of the visuals and the narrative were all in place before the music for the game had been scored. The story and character performances were already there and through them the emotions of the scene were already in place. Therefore, as Corbeil says, composing the music for the game is not about building something new but instead works in the same way as if he were working on the score for a movie, what he does is to add or create more focus to what we would expect from a scene (Corbeil, Heavy Rain the Making of 3: Music). This idea of simply adding to the story is backed up by Geoff Zanelli the composer from the film *Hitman* (2007) based on the Eidos game *Hitman Codename 47* (2000). He says that with a film (or game) it is the composer's job to make the "music symbiotic to the picture and story" and to help to translate the concepts (Zanelli, Hitman - Settling the Score, 2008). He states that the director has already given the story and the composer is there to tell it musically (Zanelli). What the composer essentially does is create music that further enforces the ideas the director is trying to get across. Zanelli also says that at certain points in the film there are 'music only' moments in which the composer has a chance to comment on something that is happening or about to happen. Corbeil has taken these concepts that are commonly used in film and applied them to the creation of the score for *Heavy Rain*. He states that emotions and how people interpret them is different for everyone and says that with composing it is not you (the composer) who will express something through the music but the music that will express something through you (Corbeil, Heavy Rain the Making of 3: Music). This approach is taken from a quote by Igor Stravinsky in which he said he considered "that music is, by its very nature, essentially powerless to express anything..." (An Autobiography, 1936). Corbeil goes on to say that the attributes we associate with music are simply conventions we have all unconsciously come to associate with it. Therefore while the composer creates the music to build upon the story and the emotions it is only through our own associations and preconceptions of music that we relate to it in our own individual way.

III.II.V - *Gameplay*

The gameplay for *Heavy Rain* was designed alongside the story because, as already stated, the type of game dynamics change almost every scene (Cage qtd. in Ohannessian). For example when the player is controlling the protagonist Ethan they go from one scene in which all they do is decide on what he says to another character, to one where they are placed in a QTE scene in which they have to react to on screen symbols that appear, to another scene in which the player has to move through a darkened tunnel in which they are crawling on broken glass. In the first the player is making deliberate decisions and can take their time deciding on what to say. In the second they are forced

to react instinctively and quickly. In the third the player has to move slowly through the environment in order to prevent their character from cutting himself too badly and bleeding out. The player then also needs to regularly check that they are moving in the right direction based on visual cues they get from the environment, if not they could get lost and may die. These three scenes are just a few of the different types of game mechanics employed and show the way in which pacing and decision making are used to further the narrative.

According to Cage Quantic Dream wanted to start from a blank page with regards to the QTE's or action sequences with *Heavy Rain*. He says that with *Fahrenheit* it was something that they had tried but did not work out exactly as they had hoped and they weren't completely satisfied with it. For *Heavy Rain* they looked more extensively at the original Quick Time Event system they had incorporated in *Fahrenheit* and by expanding and reworking the technology they created what they call the "PAR" system; symbols appearing on screen based on timing (Cage, Video Interview: David Cage). Cage said that through their system they wanted to be able to encourage the player to react and interact in a way that leads the narrative forward. He said that they wanted the players to be rewarded through the pacing. For this to work the players need to be immersed within the gameplay with both interaction and cinematics taking place in a single moment with no disjunction between the two. This all needs to be initiated by the player themselves without them having to think about the interface. Cage says they set out to do this by creating physical immersion for the player. They wanted the player to make use of the entire range of interactions available to them with the PlayStation 3 controller such as the motion sensor and the analogue sticks as well as the buttons. The interface was designed to be transparent with all of the symbols the player interacts with being designed in 3D within the environment itself and not sitting on top of the screen (Cage, Video Interview: David Cage).

A key factor to the gameplay that is the most prominent to the interactive movie style is the multiple pathway's that the player can take through the narrative of *Heavy Rain*. Players can have completely different experiences based on the decisions they make and how they react to certain events that take place along the way. Their characters can die but the narrative will still progress as long as there is at least one protagonist remaining. However the player will now only experience the narrative from that characters perspective and will miss out on other details. They will have to replay through in order to see the other ways in which the story can arc in order to see everything. However it does not matter if they do not, as each ending is a complete story in its own.

All of these elements combined are what make up the interactive drama *Heavy Rain*.

Chapter IV

Heavy Rain a successful representation of contemporary Cyberdrama

In this chapter I will be performing a critical analysis of how *Heavy Rain* exemplifies the principles Murray has laid down that make up her definition of a Cyberdrama. Although I am using *Heavy Rain* as my case study I do not presume it to be the only example of Cyberdrama. Many games, both the previous generation and more contemporary, have exhibited elements of the Cyberdrama. I will not however be performing critical studies of them and I simply refer to them here to establish that there are other digital games that are doing similar things in the field of game design. *Heavy Rain* in my opinion is one of the best examples because it displays the fullest understanding of what is needed in order to create a Cyberdrama.

As I have already looked at in Chapter II, there is the perspective that games should be examined as an extension of narrative and drama. This seems quite fitting considering the fact that *Heavy Rain* has been described as an Interactive Movie as stated in Chapter III. In fact when playing the game the designers have included a free trophy titled "Interactive Drama" that players automatically unlock simply for playing and supporting the game. So before the actual story commences we can see the game designers are consciously attempting to further this idea of Interactive Narrative storytelling and how this storytelling begins to lean towards Murray's concept of Cyberdrama. In an earlier chapter I unpacked Bizzocchi's proposal for studying games in terms of a different narrative framework. While I do agree *Heavy Rain* can be assessed using his model of storyworld, character, emotion, narrative interface and micro-narrative, I also see the need to fall back to what he has asked us to cast aside, the idea of the grand narrative arc.

I believe this to be important in this study because of the fact that *Heavy Rain,* while striving to create an immersive and interactive experience like many games, does have much of its grounding in this traditional narrative arc structure. Being constructed in quite a filmic structure *Heavy Rain* incorporates the ideas of the traditional narrative arc. It has a distinctive *setup* in which we are introduced to the central protagonist and his family. Within this section of the game the player is encouraged to engage with the environment and the characters. We find out that the character Ethan is a happy husband and father and has what could be considered a good life. It is important to note that the player is not simply being introduced to the lead protagonist and his background but also to the interface of the game at this point. As they move through the environment they are learning the control system and how it functions. In the next portion of the game or the

complication the player is faced with the now divorced and much darker Ethan after the death of one of his sons. Soon Ethan's second son is abducted and held by a serial killer. The player is now faced with the task of performing a set of trials in order to find and save him. The *development* follows Ethan and the three other protagonists along their separate and sometimes conjoining paths as they try to find the missing boy and stop the serial killer. The resolution of the game would be the final success or failure on the part of the protagonists. The boy can live or die. Ethan might save him or he could be saved by any of the other protagonists. The player's actions throughout the game will determine the resolution. Finally the *denouement* would be the closing off of the experience. The moment in which the player can sit back and watch the final ending cinematics and see how their decisions affected the overall story.

With this outlined as a overall grand scheme of the game, I think it is helpful to keep in mind the terms of the more basic narrative framework when looking in detail at the finer points of the game as much of it relates to Murray's Cyberdrama.

Within the study of the Cyberdrama I pointed out that Agency is a much greater contemplative form of action that that of simple interaction. Once the interactor has performed an action there will be consequences for it, whether good or bad, and they will have to continue on through the experience with the memory of that decision and its outcome. Decisions in the envisioned Cyberdrama are not random and require forethought and sometimes planning before taking action. This is true of *Heavy Rain* and is used in both the grand arc of storytelling as well as within areas of micro-narrative arcs such as Jenkins and Bizzocchi have described them. Within the game Cage and Quantic Dream have given the players the ability to take control of the narrative and drive it in the direction they choose. Forethought plays a key role in the game, so much so that it is reflected not only in the outcome of the decisions made by the player but also in the characters themselves. Throughout the experience at any moment the players can press a button and be shown the "thoughts" of the character at that given moment. They can then select whichever they please and listen to the characters perspective on that particular thought. These thoughts change as the situation does and their depiction mimics the mental state of the character. So, if the character is in a high stress situation, the thoughts may be unclear or blurred and jump around rapidly making it difficult for the player to focus on the correct one. Here we can see the idea of thought coming out in the characters as well as being promoted to the player.

This freedom that has been granted to the player is not without certain ties. In several of the situations the player is afforded the chance to explore and interact as they see fit. In these situations there is usually some sort of main goal they are moving towards in order to progress the main narrative arc in the direction most suited to their decisions. How they do this is at their own discretion, but what is also important to note is the use of micro-narrative or localised narrative arcs in these situations. An example of this would be the scene described in Chapter III in which Ethan has the choice to either work or relax before his family comes home. The decision made by the player has no overall effect on the progression of the narrative, however it is successful as a moment of accomplishment for the player if they do finish the work instead of doing nothing. Either way the greater narrative flow will progress despite the player's choice. It is these moments in which we can see how effective Rokeby's statement is when he speaks about the experience and not the path taken as being the main focus. These smaller narrative opportunities may not have great importance to the narrative at large but will grant the player a fuller and more fleshed out experience of the game. While there are many chances for the player to experience the effects of micro-narrative, the majority of decisions made by the player will in some way effect the larger narrative as a whole. As the game begins to enter the darker elements of the plot the decisions in many of the situations become a balancing act between life or death.

It has been asked how much should users be made to contemplate and one response to this is the statement that "users should not be made to think" (Krug and Black qtd. in Marsh et al, 101). This argument is in direct conflict with the idea of Agency. Without the time for contemplation there would be no reflection made by the player and therefore a lack of enjoyment of the intricacies of the greater narrative. An example of contemplation that works very well in eliciting a reaction from players is a scene in the game where Ethan is faced with the decision of killing a man as one of his trials. Personally, of all the trials that I faced during my experience of the game this one was the one that stopped me and made me think the most. In previous trials Ethan is placing himself in danger and inflicting damage on himself. For some reason I felt these tasks were sacrifices that were needed in order to save his son. However when it came time to kill another character I found I could not make Ethan kill him. The man is a drug dealer but he reveals that he is a father of two young girls to Ethan. This was what made me stop. The game designers have used reflection here extremely well, with Ethan sitting in a motel room crying and upset that he could not do what was needed in order to save his son. If however on a replay of the game I killed the man in order to see a difference in endings there is still the use of reflection but it is used slightly differently. After killing the man Ethan falls to the floor vomiting in horror at what he has done. The final shot as he leaves is

a pan down with the camera to stop on a photograph of the man's two little girls. This subtle camera movement is used to shift the player to a contemplative state over the events that have just transpired due to their decisions.

This handing over of authorship to the player and the inclusion of real life anxiety filled situations works perfectly with the concept of Agency as Murray outlined it. In the moments of great peril or heavy moral decision the players need to consider carefully just what it is they intend to do and how they wish to move forward. This is what Aarseth means when he speaks about the acknowledgement of authorship. Their decisions have real value and a real impact within the world of *Heavy Rain*. If, for example, the player decides that the trials Ethan must face are too dangerous and they do not want him to die, instead of trying to succeed in them they can instead choose to walk away. The results of this would however most likely be the death of Ethan's son. The player would not have gained the information needed in order to save him and in all likelihood the boy would die. Each of these decisions the player can make will shift the narrative in a different direction, all of this based on the choices the player makes as well as how they are able to react and adapt in different situations. In the text *Film Informing Design* the Marsh et al. speak of Engagement which is related very closely to Agency. It is implied that through engagement it is possible to direct the player subtly in certain directions through the use of sounds, lighting and camera movement (Marsh et al, 99). This is done in a manner that is suggestive and not forceful so as not to push the player down a certain path. *Heavy Rain* uses the character thoughts in this manner to suggest what the character might feel like doing. Another way in which they implement this is through the use of split screen. The screen will be divided into several sections each showing different angles or important figures and objects. For example, in one scene Ethan is sitting talking with his Psychologist. There is a single panel focussed on Ethan, one on his Psychologist, one with Ethan's vital signs and the last showing ink blot images the doctor is asking Ethan to comment on. This technique is used when the player is lost or searching for a key item. The camera will focus on the object in its own panel for a few moments suggesting where it is and then it will disappear.

Heavy Rain also makes use of the element of immediacy that is linked to Agency. Immediacy is the idea of being able to interact and immediately see response from the system, and more importantly, the ability to interact physically with the system. Cage places a large emphasis on this in his games, not just *Heavy Rain* but also in the previous title *Fahrenheit*. The control system is designed in such a way as to be unobstructive or transparent to the user. During the game the player mimics movements with the controller that they would make in their day to day lives in order to interact

with the environment. This is even more apparent in the updated version of the game that is available with PlayStation Move capabilities incorporated into it. The idea of transparency is handled in a way that the symbols the player reacts to are not on top of the action. The interaction is not separated from the game but instead the symbols are integrated in 3D into the environment itself allowing for a smoother and faster interaction from the players since they are not distracted by the symbols sitting on top of everything they are seeing.

With the Cyberdrama the idea of Transformation is a key to its success. Transformation is described as a change or variation in the original experience. The player should be able to go through the experience and then come back and do it again from another perspective that they didn't follow before. This hinges on the previous idea of Agency. The paths the player can take through the narrative are determined largely by the decisions they make as they make their way through the story. *Heavy Rain* is reported by Guillaume de Fondaumiere to have over twenty 'main' ways for the narrative to end (de Fondaumiere qtd. in Pavey). In the game the designers promote the idea of playing through and dealing with the consequences of your actions until the game is complete. However, it is possible to go back to certain chapters and replay from those scenes if the player was not happy with the outcome. The ability to return and experiment with the different methods for completing the game is an interesting one. For example in one scene the character of Scott Shelby is attacked while trying to help a young woman, he then has to defend himself against the attacker. Depending on how well the player defends himself they may or may not succeed in defeating the attacker. If they are unsuccessful in later scenes Shelby appears dishevelled and has a few bruises and cuts on his face, whereas if the player defeats the attacker this is not the case. It is these small subtle differences that allow for unique experiences each time the game is played.

As already discussed in Chapter I, the goal of this kind of experience is not that of a whole or completed one. Instead it is what Murray terms a "coherent system of interrelated actions" (Murray, 181). What this means is that each experience is a single take on one of many different outcomes. With the game we can see this in the number of endings. *Heavy Rain* is also unique in the way in which it handles character death realistically. If one of the protagonists dies the entire narrative does not simply grind to a halt, with the player having to reload and attempt to perform the scene again with better precision or make a better choice, the game carries on regardless of this death. As long as there is a single character for the player to lead through the game the narrative will continue. Even if all four of the protagonists die, Cage says this is not a failure on the part of the

player. This is just a different kind of game over situation; it is simply a different ending to the narrative.

A key to Transformation is the ability for the players to immerse themselves within the narrative of the game world. This is often done through the players' connection to the characters they control. As I pointed out earlier, it is believed that personification is a key definition of narrative and through this the creation of empathy for the characters. In most games this link between player and character is very superficial and we seldom feel emotions beyond that of fear, humour and frustration when playing games. With *Heavy Rain* Cage wanted to create characters that the player would be able to connect with on a much deeper level. His hope was to create characters that would be loved and thought of as friends. Characters that could make you cry. This is what Cage calls social emotions. These emotions are created through Agency and Transformation. We are encouraged to see the characters in their most vulnerable times. We are shown their flaws and their weaknesses and then we are given control of them. It is the player who controls whether they will succeed or fail. It is the hope that the player will become emotionally invested within the characters. This transforms the experience from that of a simple game to a story that deals with mature content in which player decisions effect the characters they have become emotionally familiar with. If this sense of emotional attachment can be formed between the player and the characters then the experience becomes much more rewarding when the player succeeds and there is a far greater sense of loss if they fail.

Immersion is probably the biggest area of the Cyberdrama that affects the overall experience. Immersion is key to the belief in the world and the characters and the trials they must go through. The player needs to believe in the world and its inhabitants for the game to be truly captivating. With *Heavy Rain* Cage spent most of the pre-production process writing the world and its characters. He wanted them to be believable, to be real human beings. He created them with flaws and it is these imperfections that make them more real to us as players. We can identify with the characters because they are not perfect and they are not heroes; they are ordinary people put in an extraordinary situation. It is through the lives of the characters that we are drawn into the immersion of the narrative. The players point them in the directions they wish them to go and the resulting consequences are what pull the players in. It is not however the act of performing an action and then watching, it is a combined sequence of acting and watching simultaneously.

Bizzocchi speaks about the classic narrative modes of Diagesis - the story as told, Mimesis - the story as shown, and Praxis - the story as enacted (Bizzocchi, 7). *Heavy Rain* attempts to join all of these together into the game. Players have the ability to interact during moments of narrative that are taking place. For example in one scene the protagonist Norman Jayden and his partner are interviewing Ethan's Psychologist. During this scene there is a constant back and forth of dialogue between the characters. The player is able to move around the environment, changing the camera perspective, deciding on what his character should say as well as interacting with certain elements of the environment in the scene. In this single moment there is an example of all three narrative modes. The conversation happening between the characters is made up of Diagesis, this would also fall into the category of imaginative immersion. Mimesis would be the actions taken by the non-player controlled characters as they act out the scene, or sensory immersion. Finally the elements of Praxis would be the interactions of the player while in the environment, or challenge-based immersion. These interactions being both the dialogue choices they make as well as what they make Jayden do within the scene. This is a good example of Murray's idea of players being able to watch and interact within an experience simultaneously without a division between the two actions.

A key issue with Immersion is that there seems to be difficulty in managing the transitions from different immersion types or one sequence of narrative to the next. Traditional narrative such as books deal with this by the use of Chapters in order to clearly define a new section. *Heavy Rain* has managed to achieve this by using their characters as if they are each their own story and each section of the game in which they feature is a new chapter in that story. The game employs a loading screen between these chapters with a close up view of the character's face you are about to engage with. It allows the player a brief moment of contemplation and reflection as to the previous chapters events and thought on what is to come based on that. Each instance of the game, whether it be images, dialogue, characters or gameplay, has been designed with the intention of immersing the player deeply within the world of *Heavy Rain*.

Conclusion

Within this chapter I have attempted to, through the use of examples, suggest the elements of *Heavy Rain* which bring together the principles of the Cyberdrama into a single digital form. While *Heavy Rain* may not be the only digital game to exist that has shown these elements within its design it is definitely one of the most thought out and well developed examples that can be found to

exhibit what Murray foresaw as the principles of the Cyberdrama. It has taken authorial control and handed it to the player changing the way in which we see this often contested relationship. The game designers have found ways in which to join the elements of narrative and interaction and created a complex and compelling experience for its audience. While many of the concepts and theories she proposed in her book may yet be out of reach, many of them do exist today in the field of game design. Game theory and design is fast becoming a key point of reference for academics in today's technological society. Games shall continue to push and blur the boundaries between interaction and narrative and there will always be some level of debate surrounding the two. It is through this debate though that the field will continue to grow.

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