# Playing the Story Computer Games as a Narrative Genre<sup>1</sup>

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In the recent humanistic research concerning computer games there is an ongoing and lively discussion about the narrativity of computer games. Do computer games tell stories or not? In this article I will try to focus on different views by discussing both the perspective of the gaming industry and the academic perspective. While discussing narrativity, game designers and game researchers often talk at cross-purposes. I, myself, do not find it hard to see narrative structures in computer games. Many of the recent games follow a pattern that we are familiar with from movies and popular literature. But one main difference between games and other narrative genres concerns the audience's role; in computer games the players have to interact with the story, something that challenges the linearity of the narrative structure. The storyline of a computer game is often a branching one, which complicates the game's ability to tell a compelling story in the way we are used to. The term "branching storyline" is thus not easy to define. In the article I discuss different non-linear story structures found in computer games and I try to show the narrative benefits and drawbacks with different structures. Throughout the article there are many examples from computer games which aim to give a nuanced understanding of computer games as narrative genre. It is not about reading a story, it is about playing it.

In an article published in *Human IT* in 2000 I discussed if computer games can be read as narratives. I concluded that this was possible but also found that computer games could not be described as good literature, at

least not if we had to compare them with ordinary paperbound genres. But comparing games with classic literary genres must be seen as aiming for the wrong goal. Computer games make up a genre of their own that needs to be discussed for its own merits.

Why discuss computer games in the first place? Obviously, because this medium expands and becomes more important every year. Today it is a strong part of our popular culture. For example, computer games attract many people and the number of players grows all the time. In Europe, children between 9 and 16 years old played computer games between 40 and 60 minutes a day (figures from 1998, see Drotner 2001). A similar tendency can be observed in the USA; computer and video games were sold for about 5.65 billion dollars in 2000 (ISDA report 2001, 6). Statistics also show that 43% of the gamers in the USA are women, 72% over 18 years old. Together, this tells us that the culture of playing computer games is becoming more widespread and more accepted on the whole. Games are part of our reality in modern society. It is therefore important that they undergo serious critical analysis. We must learn to study them so that we can understand the medium and its effect on humanity.

My primary purpose with this article is to continue discussing computer games as a narrative genre. In my contribution I aim to emphasise some characteristics that, in my opinion, distinguish the narrativity of computer games, such as narrative structure and non-linearity. As a linguistic researcher of text I will emphasise the narrative structure as a variable used for communication between the sender and the receiver of the text. I will also discuss the benefits and drawbacks with the more and more common use of non-linearity. When discussing the latter, I will try to answer questions such as: Do the game designers want this? Does the audience, i.e. the players, want this? What do you win and what do you lose with a branching storyline?

A secondary purpose with this article is to compare the different views on computer game narrativity among game theorists and game producers.

## The Disposition of the Article

The article is arranged as follows: first I present the programmers' and researchers' view of computer games as narratives. It is quite clear that these two parties define the term "story" in different ways, but still, both views are important for a deeper understanding of the medium. If computer games are to be seen as narratives they must follow some sort of narrative structure, but not necessarily the same one as other narrative genres. Therefore, I will discuss different theories of narrative structures that can be used for analysing a successful computer game. I will consider the multiform story, the nine-act story and the structure of the hero's journey. I will also present game designer Celia Pearce's game analysis theory in order to get a different perspective from somebody in the field. The third part of the article discusses an important difference between game narratives and traditional narratives, namely non-linearity which challenges the narrative structure that we are used to find. Finally, in my conclusions I will try to draw a sketch of what the future may look like within game design.

By using both the game trade's view and the academic perspective I will, hopefully, be able to understand how narrativity in computer games functions. I have an impression that game designers and game researchers are not always talking the same language. Once we have a glimpse of their respective perspectives, we can proceed to see how computer game stories fit in different models of narrative structure. This discussion can then be followed by the more specific problem of narrative structure in computer games: the question of non-linearity. Together this can give us a deeper understanding of narrativity in the digital medium.

#### To Be a Story or Not. The Question of Computer Games

Throughout the article, I will assert that computer games contain stories, especially games from the last five years. My analyses are mainly of games that the game industry describes as strategy games, role-playing-games, adventure games and first-person-shooters, as those games are often described as epic games. Still, they do not behave as traditional narratives. The main difference is that computer games cannot function on their own, the games need at least one player who plays the game and interacts with the story. This means that the story is not in the box, it is found in the interplay between the code and its users (Rouse 2001, 217).

The main similarity with traditional narratives is that both derive their emotional power from the player's or the reader's uncertainty of the outcome. How will the game end? However, while a story in film or literature is generated by a storyteller, a game partly lacks the storyteller (for a theoretical discussion of the storyteller in digital media, see Ryan 2002, 584 ff.). It is the players themselves who take the plot forward. They narrate their own actions (cf. McGann 2001, 158 ff.). A fight in a printed story is pre-determined; in a game the outcome of the fight depends on the player's skill. But it is important to remember that even when the player seems to be the narrator in an electronic text, he or she is playing a role determined by the program and the fictional world (see Walker 2001). The game does have its point of departure in a frame story, and it is that story that makes the player's actions logical and acceptable. The frame story is narrated by a storyteller.

But do players experience that they are taking part in a story? I would argue that they do. The discussions in a number of seminars with game players conducted at Umeå University and different Swedish upper secondary schools indicate that this is the case. Many players can easily accept that they are following a storyline while they are playing a game. If I, for example, ask someone in the middle of playing *Commandos 2: Men of Courage* what it is about I am likely to get an answer like "It is about a group of specialised commando soldiers who try to steal the enigma machine. They need the machine to prepare for the allied invasion of Normandy." Another gamer is playing *Arcanum* and his or her answer will be something like "Arcanum is a story about a realm where there has been a confrontation between users of magic and users of technology. My protagonist has been responsible for the future fate of the world and he has to mind his steps in the uneasy dichotomy of magic and technology." Even if the question of whether computer games are narratives or not seems to be easily answered by the players, an important question remains: does the player's description of the game as a story concern the game itself, or does it concern the player's individual interaction with the computer? It is possible to interpret the player's view as a reconstruction of his or her experience while playing the game. Compare this to if I am taking a walk in the park. Of course I interact with the environment, but I would not describe the walk as a story. However, when I tell my wife about the walk it becomes a story. It can be argued that the relationship between games and game presentations constitutes a similar case. The player's view of computer games as stories may be seen as a reconstruction after the event, so we need further proof before we confidently can handle the games as stories.

The player's narrative experience while playing a game can also be induced from many so-called *walk throughs*, which can be found on the Internet.<sup>2</sup> A walk through is usually written by a player and describes how a player can beat a game. Also, walk throughs can be described as reconstructions of the story.<sup>3</sup> The structure of a walk through is often built like a narrative but with more metacomments than usual. Another important difference between a walk through and a traditional story is that walk throughs often focus on the reader by use of second person pronouns and present tense, for example:

Raven's patron desires the Black Jinx ring, and Raven asks you to bring it to her. She believes it is somewhere in Sadrith Mora. If you ask around you will be told that the ring belongs to the Morag Tong, who happen to have a guildhall in the northeast part of the town. Go to the guild and speak to Alven Salas, who will admit that he has the ring and challenge you to a duel for it. If you kill him you can take the ring from his body. You could probably also pickpocket it from him, which might be a better solution although I haven't yet found any repercussions for killing him. Take the ring back to Raven.<sup>4</sup> This means that the walk through is just a guide to the story, it is not the story in itself. The walk through just allows another player to repeat the story in a successful way. But, once or twice the walk through is composed like a story, for example Cyberjag's guide to *Baldur's Gate* or Steven W. Carter's guide to *Syberia*, but this is not common.<sup>5</sup> I will, thus, maintain that most of the players believe that they are experiencing a story while playing the game.

If we proceed to the game industry it is also quite obvious that the game producing companies present their games as stories. Interplay describes their best-selling game *Fallout 2* as follows:

You are the Chosen One, the direct descendant of the Vault Dweller. The village elders have selected you to wear the sacred Vault-suit of your grandsire and, in time, to ascend to the leadership of your people. First you must prove your devotion to your people. Your tribe needs help.

If you are truly the Chosen One, then you alone are capable of claiming the heritage of the Vault Dweller, to take back your birthright. Among the many wonders described in hallowed yellow pages of the Vault Dweller's Survival Guide is the Garden of Eden Creation Kit. The GECK<sup>TM</sup> is said to have the power to turn the harsh Wastes into a fruitful paradise. The Vault Dweller's Survival Manual promises the redemption of the GECK<sup>TM</sup> to all Vault Dwellers.<sup>6</sup>

Another example is Activision's presentation of *Return to Castle Wolfenstein:* 

You are B.J. Blazkowicz, a highly decorated Army Ranger recruited into the Office of Secret Actions (OSA) tasked with escaping and then returning to Castle Wolfenstein in an attempt to thwart Heinrich Himmler's occult and genetic experiments. Himmler believes himself to be a reincarnation of a 10th century dark prince, Henry the Fowler, also known as Heinrich. Through genetic engineering and the harnessing of occult powers, Himmler hopes to raise an unstoppable army to level the Allies once and for all.<sup>7</sup> Observe the opening two words "you are" in these presentations. The player is in focus right from the start. This denotes that it is not about any ordinary story, it is about an interactive story. The story is not found in the game itself, only in the interaction between player and game.

The standpoint of the players and the producers is quite different compared to the common academic view. Many researchers deny that computer games can be described as stories (cf. among others Ryan 2002, 601 ff.).8 Danish researcher Jesper Juul says for example that a computer game must not contain narration. According to Juul, one of the traits of narration is that it is about something that happened at some other time. This does not correspond to real-time interactive products (Juul 2000, see also Juul 2001). Game researcher Henry Jenkins does not agree, he maintains that Juul is confusing story and plot. Jenkins writes "Games are no more locked into an eternal present than films are always linear. Many games contain moments of revelation or artefacts that shed light on past actions." (2002) But for certain games Juul may be right: the story in games like *Tetris, Pac-Man* etc. is non-existent.<sup>9</sup> Still, the use of interaction forces computer games to tell stories in the present tense. This does not have to disqualify games from being narratives, they only narrate in another way (cf. Carlquist 2000, 164 ff.).

Espen Aarseth argues in a way similar to Juul's. He describes games more as simulations than narratives. Games are not static labyrinths like hypertexts or literary fictions. Instead, they are both object and process: "they can't be read as texts or listened to as music, they must be played." (Aarseth 2001) Aarseth uses the literary theorist Gérard Genette's distinction between description and narrative together with his own term ergodics to show why he cannot see a computer game as a narrative. The game has ergodics (action) and description (graphics, sound), but not narration. The event space in a computer game is not fixed before the time of play (Aarseth 1999, 35). One major problem with Aarseth's reasoning is that he focuses on the experience of the audience, not the game designer's perspective. The producers of computer games do talk about an embedded story (Rouse 2001, 214 ff.) that the player has to unfold. But this kind of narrative is not accepted by Aarseth (1999, 35). I mean that it is important to understand that there are at least three different layers of storytelling in games, one is *out-of-game* storytelling, which includes cutscenes during which the player loses control over his character. Another is *in-game* storytelling that occurs while the player is actually playing the game as in dynamic conversations etc. The third kind of storytelling is found in *external materials*, which include any storytelling made outside the computer such as in the game manual (cf. Rouse 2001, 219).<sup>10</sup> If, like Aarseth, you are just looking at the in-game storytelling, you are not analysing the game as a whole.

The standpoint of game researcher Gonzalo Frasca differs in some important ways from Aarseth's and Juul's. Frasca says that computer programs share elements such as characters, chained actions, endings and settings with traditional stories, but that the researchers interested in games ignore one vital point: that computer games are games. It is about winning. Game theory is thus not about narratology, but about *ludology.* And ludology, according to Frasca, needs its own theory and its own analytical methods. And again, the main distinction is about the need for player activity. Computer game players are not just observers or readers, they are participants in the story (Frasca 2001). Frasca's view is rather attractive, since he opens up for a more vital discussion about computer games as a whole.

In some way, Celia Pearce shares the same view as Frasca. She maintains that it is important to understand that narrative has a profoundly different function in games than in other narrative-based media.<sup>11</sup> Games centre on play, literature and film on story. Game designers want to create a compelling framework for play, not necessarily a compelling story (Pearce 2002).

In spite of this, programmers and designers of computer games maintain that they are working with stories. Scott Osborne argues for example that "One constant in gaming's short history has been designers' attempts

to tell stories" (Osborne 2001). But, he continues, this has not been an easy task. With the development of the computer, the processors and the video cards, visuality has taken centre stage. It is important to present fantastic realms and creatures on the screen. But the use of visuals has, according to Osborne, hurt the game's ability both to tell stories, and to make you feel like an active part of them. He writes: "Because of the third-person isometric perspective and the small scale of the figures on screen, playing feels more like watching an animated film than being in the world yourself." The visual techniques of today's computer games cannot tell a complex story by themselves and so, according to Osborne, the game designers are referred to the use of written parts for disclosing more detailed information. Over the last years, the designing of computer games has switched focus, from creating exciting gameplay to telling epic stories, but without using the benefits of close-ups etc. This means that many games neither give justice to the story nor to the play. As I understand Osborne, the ability of creating fantastic realms by using impressive video technique has placed the experience of computer game players somewhere between watching a film and playing a game.

Scott Osborne's rather negative viewpoint about the change of focus in the latest computer games has not stood uncontradicted. Another game designer, Craig Hubbard, argues that watching films is not a passive experience, "storytelling relies on our ability to lose ourselves in someone else's ordeals" (Hubbard 2001). Hubbard concludes, "My complaint is that he's [Osborne] trying to impose limitations on a medium that doesn't have any." I must say that here I agree with Hubbard; the borders between watching and interacting have been challenged in the later games, see for example *Mafia: The City of Lost Heaven*, and this improves the possibilities for great storytelling in a game environment.

A computer game genre that seems to be of great importance when discussing if computer games can be called stories or not is the roleplaying-game (RPG). In RPGs there is always a reason behind the

player's actions. The RPG has its roots in oral role-playing where the dungeon master gives the frames (for example time, environment, tasks, conflicts etc.) for an adventure in which the other participants interact as "leading actors". You can say that the story of the adventure becomes a symbiosis between the dungeon master's capacity of creating an inspiring atmosphere and the interaction of the other players. Whenever the players' characters act in some way, the roll of dices will decide the result. In the digital environment, the RPG has to rely on the programmed story, the computer cannot change the outcome afterwards. Also, the players are not as free as in oral role-playing. Both oral and digital RPGs have to rely on tempting stories and – and this is important – on compelling frameworks for play to attract players. Game designer Gavin Moore points out one rule that states that the story of computer games should always make the player the focus. The player is integral to the plot, and all events should revolve around him (2001, see also Rouse 2001, 39).

Game designer Warren Spector wonders whether the quality of the story has anything to do with the game's success and claims that the stories of digital RPGs can seldom be described as strikes of narrative genius (Spector 1999). He writes that "it's tough to tell a great story when you can't recreate a young lover's shy smile or allow players to tell a joke rather than bludgeon somebody." The players' creativity in digital RPGs is not as free as in oral RPGs. The stories in the computer games become more conventional and this, according to Spector, has a negative effect on the quality of the narrative.

Pascal Luban, another game designer, is not as pessimistic as Spector and Osborne. He agrees with them saying that today the game industry is not able to tell a story in the way a movie or a novel does. However, Luban maintains that the game industry is very close to recreating the experience of, for example, watching a movie (2001). It is quite obvious that the game developers think more and more about storytelling when developing a game. Even if I am not convinced that the commercial success of a game depends on the quality of the story,<sup>12</sup> it is obvious that the game industry today puts a lot of time and energy into story writing. And as I see it, this will have a positive effect in the future. Computer games will develop towards both more exciting game play and more fascinating stories.

It is clear from the discussion above that the borders between narrative and game play are rather blurred. All of the writers cited above agree that the main function of computer games is game playing but there is a dividing line between game theorists who claim that game playing cannot go hand in hand with narrative storytelling and game designers that say the opposite. I understand the theorists' arguments, but I am not sure that they are being fair to the games. Many computer games aim to let the player unfold a story based on a narrative structure while playing. It is not just about playing; it is also about being a hero, solving a plot or participating in a drama. And this perspective is important for an understanding of the medium.

# To Tell a Story. Different Views of Narrative Structure in Computer Games

If we accept the opinion that computer games do tell stories we must ask ourselves, what kind of stories do they tell? Do they tell the same stories as we find in written literature? No, computer games cannot be compared to written text. One main reason is that they lack one important criterion for textuality called *cohesion*, which takes a linguistic quality as given (cf. Beaugrand and Dressler 1981 about the seven criteria for textuality, see also Carlquist 1999, 143).<sup>13</sup> But in a wider perspective games can be compared to texts. Especially if we use textual linguist Per Ledin's statement that a text is a well-defined unit with a communicative function (1999, 37). A minor problem here is whether or not we can see games as a well-defined unit with a beginning and an end, and if the story in the game belongs in a social setting. I mean, which I will try to discuss further later in the article, that these assumptions can be accepted for most computer games.

One main difference between computer games and many other types

of narratives is that games of today are not primarily verbal texts.<sup>14</sup> It is also important to understand that the "author" of a game has to trust the users, as they must interact in the creation of the discourse.<sup>15</sup> The audience of computer games participates in the narrative in a lot of ways: steering the car, shooting the rifle, casting the spell etc. The programmers are only dungeon masters; without users the story will never be told. You usually cannot turn on a game and then leave.<sup>16</sup> Nothing will happen. This discriminates computer games not only from books, but also from films. Films can, of course, tell stories without printed text, but the audience of a movie does not interact. A movie broadcast on TV will always tell a story, even if no one is watching.

We could also compare games with oral narratives. The stories of this medium also need audiences. But audiences of oral narratives are mostly passive. They may give feedback, but this is not demanded by the storyteller.

Then, we can ask, who is the author of a computer game if the "readers" participate? Is it the audience, who interacts, or is it the writer/designer? I will strongly argue in favour of the latter. The audience is only using the story given by the writer/designer. They are participating on terms set by the producers of the game.

The demand for interaction in computer games is something that Janet H. Murray has observed. She maintains that this is one important distinction from other media. The genre that Murray is interested in is *multiform stories*. A multiform story is defined as "a written or dramatic narrative that presents a single situation or plotline in multiple versions, versions that would be mutually exclusive in our ordinary experience." (Murray 1997, 30). Murray claims that when a writer expands a story to include multiple possibilities, the reader assumes a more active role (1997, 38).<sup>17</sup> She exemplifies the multiform story both with different movies like *Back to the Future* and *Groundhog Day* and with oral roleplaying, but she also discusses electronic games. There are often many different ways in which you can beat a game, i.e. the game story includes multiple possibilities. But Murray sees an interesting problem when discussing games as narratives: the game story often works against involvement. The possibility to choose different paths for continuing the story does not automatically improve the narrative. Different players act in different ways and this does not always favour a good storyline. Instead, the active role taken by the player often trashes the out-lined story. For example, the player's morality does not have to be the same as the one in the game. The player can order his or her avatar to do things that the player him- or herself never would do in a real life situation and thus break the behaviour assumed by the game's producers.<sup>18</sup>

The question of narratology and computer games is complex, and I will try to look at it from different angles. I will discuss it from a multiform point of view, show similarities and differences with the nineact-story, compare the games with Joseph Campbell's theory about the hero's journey as presented by Christopher Vogler, and present Celia Pearce's view of game theory.

By discussing computer games from all these angles we are presented with a fuller picture of how computer games manage to tell a story, in spite of the fact that they are interactive. As we lack useful analysing tools that are created for the medium we need to try other sources. The discussion of how the narrative structures of computer games can be described are also of importance for the further discussion of nonlinearity that will be found in the next part of this article.

### The multiform story and computer games

Janet H. Murray is a well-known scholar working with interactive narrative technology. In her book *Hamlet on the Holodeck* she describes the future of narrative in cyberspace. She sees the computer as a new medium with a great capacity for telling stories. The power of the medium is explained by the facts that the digital environment is procedural, participatory, spatial and encyclopaedic (Murray 1997, 65 ff.). Stories in this medium that present a single situation or plotline in multiple versions will, as mentioned above, be called *multiform stories*.

Murray's discussion of multiform stories can be used for analysing

the narrativity of computer games. Games can be seen as a subgenre of multiform stories and it is quite clear that her views play an important role for understanding the frames of storytelling in computer games. Three components, *immersion, agency* and *transformation,* characterise the multiform story, according to Murray.

Immersion is about "the experience of being transported to an elaborately simulated place" (Murray 1997, 98). In the multiform story the audience is given the opportunity to be engulfed by a fictional world. We can visit the castle of Camelot, steer the spaceship *Enterprise* etc. This is very typical for computer games. As an example, playing *Medal of Honor: Allied Assault* is like visiting Normandy during D-day. The immersive perspective is also present in the game designer's guidelines<sup>19</sup> that, for example, state that the player must always feel that he or she is exploring interesting areas. It is important that the fictional world reflects the ways in which the player has personalised his character (see Moore 2001).

Agency is also very important for the multiform story. It is "the satisfying power to take meaningful action and see the results of our decisions and choices" (Murray 1997, 126). In computer games we navigate our avatar through a spatial environment in the fictional world we are exploring, as for example when playing Baldur's Gate we travel through the Forgotten Realms, or in Deus Ex we navigate J.C. Denton to the hostages held in the Statue of Liberty and then over to New York City. The game designer's guidelines maintain that each level of the game world must have an exploratory potential, and that the player must feel that he or she is exploring interesting areas.<sup>20</sup> This means that while you are travelling through the game world, the landscape must change in ways similar to that in which the real world is changing. One game designer describes this in the following terms: "areas always need to have a unique feel to the art" (Moore 2001). The game *Elder Scrolls: Morrowind* follow these guidelines very nicely. The vegetation in the northern and southern parts of the island differ. In the desert there is only sand and bare stones. Also the weather changes depending on where on the island you are.

Thanks to transformation we can influence and effect things and characters in the digital world. If your gunshot misses its mark in *Return to Castle Wolfenstein*, the wall behind it will be damaged and then stay damaged. But it is not just details that are transformed. We can, in the virtual world, transform history (e.g. in *Age of Empires*), the development of civilisation (e.g. in the *Civilization* series) etc. Of course, this is sometimes crucial for the game designer. Gavin Moore points out that the player must feel as if he or she is having an effect on the environment or on the history. It is no fun playing a World War II game if the Germans always lose (see e.g. *Battlefield 1942* where it is very hard for the allies to invade Normandy). The player's actions make a very visible difference to the game world. Actions have consequences and games must support this (Moore 2001).

Together this means that within the digital world we can do new things with narratives. The limitations of the genre seem to be minimal, at least according to Murray. But of course there are limitations. As Janet Murray maintains, it is hard to produce a tragic computer game; a game with no heroes, only losers. How would that be narrated in the digital world?<sup>21</sup> Can we accept to play a game that we cannot win? Take for example the story of *Max Payne*. The game starts and ends with your avatar being arrested. The playable story in-between is a flashback explaining why you were arrested; you are playing the background story. You cannot win, only do your best. The players' motivation is that for them Max Payne is a good guy who takes the law in his own hands aiming for justice.

#### The Nine-Act-Structure

The Nine-Act-Structure is a tool developed by screenwriter David Siegel for making sure conflict is legitimate and resolutions work in a story. Siegel himself presents the Nine-Act-Structure like this: it "is to the screenwriter what the blue-screen is to the cinematographer" (Siegel). The structure is an attempt to theorise about how action films and computer games are constructed. It is about narrative form.

# Siegel distinguishes nine different acts, which can be found in a lot of films and computer games. These are (with examples from Siegel):

Act o: Someone toils late into the night. – Something has happened which will start some kind of conflict. It can have happened a long time ago like in *Batman* where the hero's parents are killed by the Joker, see also the background story in the adventure of Harry Potter. Or it can be something the protagonist has been waiting for all his life, for example Keys waiting for an extra-terrestrial in *ET*.

Act 1: Start with an image. – The establishment of arena and tone. In movies this is often a moving shot that sets either the place and time, or the theme.

Act 2: Something bad happens. – The nemesis either beginning the siege or making a critical error. It can be a murder or something mysterious that appears.

Act 3: Meet the hero (and the opposition). – The hero is often seen in his or her daily life, like Indiana Jones teaching in the beginning of *Raiders of the Lost Arch*. But the hero's qualifications for extraordinary performance are also implied. He or she has a potential. We also meet the bad guy or someone doing his dirty work.

Act 4: Commitment. – The hero has to fight the bad guy; there is no turning back. He or she can be pushed or pulled into the adventure. Marty McFly is pushed back to the past, but Richard Kimble wants to prove that he did not kill his wife in *The Fugitive*.

Act 5: Go for the wrong goal. – The hero does not have all the facts so he or she cannot accomplish the objective yet. The act ends at the lowest point for the protagonist. It looks bad.

Act 6: The reversal. – Just when we think the hero will never be able to finish his or her task, the bad guy reveals the last clue. This gives sense to act 2 ("aha, that's why Goldfinger is buying all the gold"). The hero gets the vital information just in time to save the day.

Act 7: Go for the new goal. – When the hero realises the real situation a new plan takes form. The hero goes for the new goal and fulfils the objective. But it never really goes as planned, and it is only with a bit of luck that the hero can defeat the bad guy. This act is even in motion pictures often shown in real-time.

Act 8: Wrap it up. – The cops show up (mostly after the bad guy is defeated). The world is saved. Loose ends are tied up and the hero gets his credits (often the girl). The story fades away.

As you can see, the nine-act structure is a rather simple narrative structure that can be seen in many Hollywood productions, as for example in *Romancing the Stone* or *The Last Action-Hero*. The simplicity of the structure makes it translatable to computer games. But there are certain differences between what a film can do and what a game can. Act o and I are often shown in the game's cinematics and the hero is introduced before something bad has happened (cf. what Rouse calls out-of-game story, 2001, 219 ff.). It is quite common that the bad things occur in the cinematics or in the background story found in the game's manual (cf. what Rouse calls use of external materials to tell stories, 2001, 227 f.), as in *Pool of Radiance: Ruin of Myth Drannor*, in *American McGee's Alice* and in *Outcast.* In some games, like *Baldur's Gate* or *Starcraft*, the bad things happen during the real-time playing of the game, but then they are always stressed in video clips where the player cannot interact.

It is also hard to force the hero of the computer game to go for the wrong goal. As the player has the role of the protagonist, he or she wants to go for the right goal all the time. The programmer has to set up some key scenes that the player must visit if he wants the hero to go for the wrong goal. In *Baldur's Gate*, the hero thinks that it is the "Iron throne" that supports the dark forces. But when the player gets there, he or she finds out that it is not, the "Iron throne" is merely the real bad guy's, Sarevok's, tool. In *Planescape Torment* the hero starts looking for the collector Pharod, but finding him does not achieve the objective, it only leads the hero on the right track through new clues. A good example of a game that forces the hero to go for the wrong goal is *Deus Ex* where his first allies and mentors soon are proved to be the real enemy.

Once again, it is obvious that the problem with writing a story with depth for a computer game is different from writing a script for a movie. The main problem is how to force the player to make important mistakes. It can be done in a linear story but it is much harder in a branching one. It is also quite clear that the player acts as the hero. Even if the player knows that he or she is on the wrong track, the hero – the player's avatar – does not. The player must allow him- or herself to play the hero's part of the game, otherwise there cannot be any story.

It is thus quite clear that it is easy to borrow narrative techniques and tools from the film medium when making a game. This can be explained by the fact that today computer games are a visual medium. Game designer Bernd Kreimeier sees this as a problem. He maintains that "The real issue is not the shortcomings of narrative techniques with respect to their utility in game design, but the lack of techniques genuinely for interactive media" (2002). He continues by arguing for the importance of distinguishing narrative patterns, which are genre specific for computer games. These patterns, called *Alexandrian patterns* after the work of Christopher Alexander (1979), are simple collections of reusable solutions to solve recurring problems in game narration. Just like word processors can be configured to handle the canonical format for script writing, the Alexandrian patterns can open the door to software tools for maintaining and editing game design documents.

## Computer games as a hero's journey

The theory of the hero's journey is built on a simple idea: all stories consist of a few common structural elements found universally in myths, fairy tales, dreams, and movies (Vogler 1998, 1). When we are telling a story about a hero, it is always a story about a journey. The hero leaves his or her comfortable life to venture into a challenging, unknown, often dark and lethal world. This world can be a labyrinth, a forest, a cave, a strange city etc. Here, in this new world, the hero makes new allies and faces enemies (see Vogler 1998, 13).

The theory of the hero's journey goes back to the mythic studies of Joseph Campbell (see for example Campbell 1973) and has been used for analysing many popular stories. The theory is also useful for analysing the narrative structure of computer games since the hero is an important archetype in most of these. The hero occurs in adventure games, in first-person-shooters (FPSs), in action games and in RPGs.

In the hero's journey there are different stages; the hero follows a well-worn path which many other heroes have strolled. The Hollywood story consultant Christopher Vogler defines and exemplifies 12 different stages.

The first stage is called *the ordinary world*. Here the hero is at home

in his or her normal world (cf. act 3 in the Nine-Act Structure). Vogler mentions *Star Wars* where, in the beginning, we see the hero Luke Skywalker as a farm boy in his ordinary world. In *Die Hard* we meet the alcoholic cop John McClane just awakening with his usual hangover ready for a new day. The same stage is not hard to find in computer games. In *Baldur's Gate* for example, the protagonist starts at home in Candlekeep where the player gets a chance to learn the game.<sup>22</sup> It is rather common, thus, that this stage of the game is met out-of-game in the cinematics. The game *Outcast*, for example, starts with a rather long video sequence where we meet the soon-to-be hero, Cutter Slade, in his normal environment. The same pattern is present in *Arcanum* where the protagonist is safely travelling in a Zeppelin ship in the introductory cinematics.

The first stage of the hero's journey is almost always very short in computer games, which of course implies another problem with the communication between sender and receiver. Computer games do not give the audience the opportunity to get to know the hero. Games seldom use the contrast between the ordinary world and the special adventure world to create a feeling of depth in the story. Instead they are often in a hurry to start the action, to let the users start interact. It is also hard to introduce the hero to the audience because the audience is playing the hero. They do not need to identify with him or her, they just have to act. Game developers give the basics, the rest is up to the player to create if there is any need for it.

Precisely because the player participates in the story as the hero it is hard for the hero to make a dramatic entrance. But in some of the newer games the hero really makes an entrance, for example in *Max Payne* where the story begins with the hero getting arrested, or in *Arcanum* where the Zeppelin ship carrying the hero crashes. In *Medal of Honor: Allied Assault* the hero is introduced while he is trying to survive the allied attack on Normandy during D-day.

Next stage is *the call to adventure*. This is similar to when the detective is being asked to solve a crime that has upset the order of things. In *Die* 

*Hard*, the hero John McClane finds himself trapped in the building where some terrorists have taken hostages. The hero's goal is set out at this stage. McClane has to rescue the hostages: if he fails, they die. This stage also comes very early in computer games, often in the opening cinematics. For example, in *Pool of Radiance: Ruin of Myth Drannor* the opening cinematics show how the good powers of the realm give the hero the task to save the world from the evil powers which have grown strong again. In *No One Lives Forever*, the opening video shows how three agents are murdered and how Cate Archer gets the mission to solve the case.

The call for adventure is an important stage for the game's narrativity. It explains to the audience why the hero has to act. In some early FPSs you start in a building with some sort of weapon, enemies soon come running towards you. You pull the trigger but why you are attacked is not always that obvious. Sometimes the call to adventure is found in the external materials, as in the text on the box containing the CDs that the player is supposed to install.<sup>23</sup> This makes the textual cohesion between story and game play rather vague.

It is maintained (e.g. by Rouse 2001, 231) that the background story is a rather minor part of the game genre. This stage is often closely connected to stage four, m*eeting with the mentor*. Games count for the actual playing, the story-setting is not primary (cf. Darley 2000, 151). I think that this once was true, for example in *Quake*, but not any longer.<sup>24</sup> The masses of games that are released today make players harder and harder to please. If a player can choose between just playing or playing in interaction with a story, many players choose the latter. This is indicated by the fact that the games released this year (2002) often have a very strong background story that is motivating the players' actions (e.g. *Return to Castle Wolfenstein* and *Medal of Honor: Allied Assault*).

The third stage is called *the refusal of the call* (Vogler 1998, 17) and is about fear. The hero thinks of turning back. He or she does not feel ready and hesitates. Usually some kind of mentor then steps in and explains the hero's duty. See for example how Frodo reacts when he understands what power lies in his ring in J.R.R. Tolkien's masterpiece, *The Lord of the Rings*. Then his mentor, the magician Gandalf, takes his responsibility and gives Frodo courage to start the journey.

As with the previous stages, *the refusal of the call* is not obvious in computer games, either. Players do not hesitate to take on the call to adventure; they have bought the game for this sole purpose. If the game includes the refusal, it is nearly always in non-interactive parts of the game. But in the RPG *Planescape Torment* the refusal is rather obvious. Here the protagonist is a man who cannot die, he is doomed to live forever and his task is to halt this curse. The dialogue of the story is all through the game very complex and important for the development. When, in the beginning, the hero must be convinced that this is the only solution, this is accomplished with the help of dialogue. One important mentor here is the ghost of the hero's former lover, Deionarra, who explains the situation. If the hero cannot come to peace, neither will she. He must take on the call to adventure, at least for the sake of saving his former lover. Another example of refusal is found in *Mafia* where the hero at first refuses the mafia's offer to join.

Meeting with the mentor is a frequently used stage in movies and literature. Examples are when Luke Skywalker meets Obi-Wan Kenobi in *Star Wars* or when Marty McFly meets the eccentric Doc Brown in *Back* to the Future. The mentor is, however, not a standard figure in computer games. He or she is often lacking in FPSs and strategy games, but is rather common in adventure games and in RPGs. In *American McGee's Alice* for example, the Cheshire cat has taken on the role of the mentor. The cat explains the plot and gives clues. In the RPG *Pool of Radiance: Ruin of Myth Drannor*, the blind cleric Beriand has this role. He gives vital information and introduces different quests.

The fifth stage of the hero's journey is called *crossing the first threshold*. This means that the hero finally commits to the adventure and enters the *Special World* for the first time. Here the adventure gets going and there is no turning back. It is only winning or losing that counts. A villain may kill, harm, threaten, or kidnap someone close to the hero and there are no other options besides starting the adventure (Vogler 1998, 128). This is often the first playable part of a computer game.<sup>25</sup>

Close to the threshold there can be guardians who will test the hero. This is a rather common archetype also in computer games. For example, in *Fallout 2* you have to test your avatar's ability of being a hero at the beginning level called *Temple of Trial*. The hero must face another tribe warrior and defeat him with bare hands. Threshold guardians have a long history in narratives: in Greek mythology there is the monster dog Cerberus who guards the entrance to the underworld, in Nordic mythology Heimdall is guarding the bridge Bifrost. They both stand in the way of an adventurer trying to force his way to the climax of the story.

In the special world, the hero encounters new challenges, and he or she makes allies and enemies. Because of this, Vogler calls the sixth stage of the hero's journey *tests, allies and enemies* (1998, 19). Of course, this stage is very significant for most computer games. The hero has to solve puzzles, and defeat different kinds of enemies: monsters, undeads, nazis, terrorists etc. The tests are often arranged as puzzles that have to be solved if the player wants to go further into the fictional world. This is characteristic of adventure games.

Important for this stage are saloons or seedy bars. Here the hero has his or her skills tested, meets allies and gets a glimpse or more of the enemies. Especially in RPGs, bars are important meeting places. Water holes are used in the same ways as in other story media. The hero gets new quests from the bartender, he or she faces enemies and meets friendly allies. Just like Frodo meets Aragorn at an inn in *The Lord of the Rings*, the protagonist in *Baldur's Gate* meets his campaigners Jaheira and Khalid at a bar, in *Planescape Torment*, the Nameless one (the player's avatar) meets Dakkon, one potential follower, at the *Smoldering Corpse Bar* etc. Also, in the RPG *Elder Scrolls: Morrowind* many of the questgivers are found in different bars.

The difference between computer games and more classical stories is that this stage of the hero's journey takes a great deal of time in computer games. *Tests, allies and enemies* is often what the game is about. Often, 80–90% of the game time can be enacted at this stage. This means that the narrative of computer games loses in depth in comparison to other story media, but maybe it wins something else (cf. Darley 2000, 152).

Stage seven is called *approach to the inmost cave*. Here it is time for the hero to make the final preparations for the main ordeal of the adventure, like Sigurd Fafnesbane outside the dragon's cave, James Bond getting his materiel explained by Q etc. Outside the inmost cave, there can be new guardians whom the hero has to beat before he or she can enter. Compare how Harry Potter and his friends have to win the chess game before Harry can reach the real danger in *The Philosopher's Stone*. In computer games this stage can be described as the hero approaching the "boss". Often the hero has to, as in *Diablo II*, fight some rather tough enemies that guard the inmost cave. In *Baldur's Gate II: Shadows of Amn*, the protagonist and his or her allies have to pass six different demons before they can break the seal of the door that is leading to the final fight against Irenicus in the nine hells.

After this challenge, the hero enters stage eight, *the ordeal*. Here the hero must confront the ultimate challenge. In James Bond movies, the antagonist tries to kill agent 007 in some spectacular way. In computer games the protagonist meets the game boss, for example Mefisto in *Diablo II: Lord of Destruction*, Sarevok in *Baldur's Gate*, Heinrich I in *Return to Castle Wolfenstein* etc. The player must of course use all his or her skills to win this battle. The battle is not optional; it must be won.<sup>26</sup>

Often computer games end after this stage but the hero's journey does not. When the hero has survived the ordeal he or she takes possession of a *reward*. It can be a treasure or the Grail or knowledge.<sup>27</sup> In computer games this is, if included, mostly shown out-of-game in the closing cinematics.

Of course, certain games contain many different levels and then each level ends with an ordeal. After the player has slaughtered the level's boss he or she gets some kind of reward like a better weapon, knowledge, experience, understanding of the past etc. Then he or she must continue. The narrative structure becomes repetitive. Repetition works here as a creation of cohesion, it is a return to something we know about, but it is also pushing us forward to the future (cf. Brooks 1984, 124 f.).

It is thus quite clear that most games do not use the ending stages of the hero's journey. They concentrate on stages 5–8. For example, *the road back*, which is stage ten in the hero's journey, is seldom used. If it is in the game, it is mostly found out-of-game in cinematics. The hero's journey also has a second life-and-death moment called *resurrection* (stage II). The dark forces gather their powers for the very last battle. One example is James Bond kissing the girl on the train when Jaws reappears for a final fight. This stage is very uncommon in games but can be found occasionally. See for example *Baldur's Gate II: Shadows of Amn* where the avatar and its followers have to defeat their main opponent Irenicus three times.

The last stage of the journey is called *return with the elixir* and contains the hero's return to the Ordinary world with the treasure. In movies boy gets girl. If this stage is included in computer games it is in the closing cinematics.

So in conclusion, computer games borrow parts from the hero's journey but they very seldom use all stages. Very much of the background story is given by out-of-game storytelling. The in-game storytelling focuses very hard on action and puzzle solving. This means that computer games lack the narrative depth of the story. Parts where it is hard for the player to interact are often left out of the game or at least out of the playable part. They can be shown in cinematics, in textual recapitulations, in audio clips etc., but not in game playing. *Deus Ex* is one example of a game with a very compelling story, but very much of the story setting is found in video clips, non-playable dialogues etc. The same solution is used in for example *No One Lives Forever* and in *Max Payne*. Therefore, an analysis of a computer game must be done at two different levels, one that concentrates on the narrative structure, another on the difference between out-of game and in-game storytelling.

It is thus easy to maintain that the storyframe of computer games is

non-interactive. The player takes responsibility for the action, the game for the story. This is important when discussing stories and games. If you are saying that games do not include stories, you are focusing only on the player, and neither on the interplay between player and game designer, nor on the player's experience while playing the game.

#### Game theory and narratives

Game designer Celia Pearce maintains that the medium of computer games is still in its infancy (2002). Computer game theory is a relatively new discipline that according to Pearce has been adopted by film and literary theorists within their own idiosyncratic frameworks. This has, of course, been fruitful, but as Pearce strongly proposes, academics are missing a fundamental understanding of what games are about. Narrative has, according to Pearce, a profoundly different function in games than it has in other narrative-based media. Games center on play; literature and film on story. This means that "the function of narrative in games is to render compelling interesting play" (Pearce 2002). The structure of a game includes some type of goal, obstacles to that goal, and resources to help achieving the goal.

To help analysing games, Pearce identifies six different narrative operators that can exist within a game.

- Experiential: The emergent narrative that develops out of the inherent "conflict" of the game as it is played, as experienced by the players themselves.
- Performative: The emergent narrative as seen by spectators watching and/or interpreting the game underway.
- Augmentary: Layers of information, interpretation, back-story, and contextual frameworks around the game that enhances other narrative operators.
- Descriptive: The retelling of description of game events to third parties, and the culture that emerges out of that.
- Meta-Story: A specific narrative "overlay" that creates a context or framework for the game conflict.
- Story System: A rule-based story system or kit on generic narrative parts that allows the player to create their own narrative content; story systems can exist independent of or in conjunction with a Meta-Story.

Many games lack one or more of these operators. Pearce discusses, for example, basketball, which is an excellent example of the first four operators but do not include a Meta-Story or a Story System. Some games have a pure structure but no Meta-Story, for example *Tick-Tack-Toe*.

Strategy games like *Chess* or *Age of Kings* (the latter a computer game) thus include all of the operators. Obviously the Experiential operator can be found. A narrative emerges when a scenario is being played and is experienced by the player. Someone who is watching the scenario but is not playing it can also follow the drama. They see the enemy building up forces to make a deadly attack (the Performative operator). Also the Augmentary operator can be found. The spectators know the background-story. They have seen other games, can identify sub-plots etc. The Descriptive aspect is shown in the common statistics displayed after a scenario in Age of Kings is finished. Here you can follow the time-line, the rewards and the penalties. There is also a specific narrative overlay that is understood as a battle between different kingdoms. We can also observe a rule-based Story System. In Age of Kings there is an asymmetrical structure in which all players do not start with equal assets. This can enhance the drama, as well as the potential variations in the emerging narrative (see also Pearce 2002).

Pearce also discusses so-called MMORPGs, i.e. "massively multiplayer online role playing games", which combine Meta-Story with Story System and allow players to evolve their own narratives within the game's framework. Pearce calls this a social storytelling, or a collaborative fiction, since the story emerges as a result of social interaction. She compares this with the single-player game *The Sims* that can be described as a virtual dollhouse, a human behaviour simulator. The players have a God-like view over the game terrain and are at the same time spectators and players. The Story System results in an experiential narrative and the game has a built-in descriptive component, a family album (snapshots from the game).

The computer is a two-way medium, a dynamic medium. It is in Pearce's view not so much a storyteller as a context creator. The players in their double role as actors and spectators build the stories (cf. Laurel 2001, 110).

## The Aesthetics of Branching Stories

As we have seen, computer games use in many parts traditional narrative elements but they never fulfil a narrative structure in the same way as a novel or a film does. This can probably be understood with Pearce's argument that the function of narrative in games is not primarily to create a fascinating story, but to render compelling, interesting play. Many of the differences between traditional narratives and game play are due to the fact that game play must be interactive. The audience is not just listening; they are taking part. They must be given the opportunity to make their own choices. A way to stimulate this is by creating branching stories in opposition to the linear stories of non-interactive media. In this part of the article I will discuss more thoroughly the aesthetics of branching stories, and ask the question if the branching stories of computer games also are multilinear.

Of course we can find examples of multilinear stories in print (see e.g. Aarseth 1997, 9 ff.) and we can find digital stories that are linear. But let us now focus on linearity. How do you write good branching stories? How do readers or players react? By using a multilinear storyline, computer games, just like hypertexts, challenge the notion that there is only one sequence and one plot in the text (Ryan 2002, 588). But as George Landow maintains, "a lack of linearity does not destroy narrative" (Landow 1997, 197). Marie-Laure Ryan states: "Hypertext is like a construction kit: it throws lexias at its readers, one at a time, and tells them: make a story of this" (2002, 589). The same can be said about computer games.

Let us for a moment consider computer games as movies (cf. Bryce & Rutter 2000, 9 f.). The computer game development companies have been called "The New Hollywood" (Friedman 1995). The difference between stories from the old and the new Hollywood is, as has already been mentioned, that computer games are interactive, where the game

player takes on the role of the protagonist, while watching a movie is a passive occupation. Does this mean that the whole idea of story is opposed to the idea of interactivity (cf. Ryan 2002, 607)? Probably not, but interactive storytelling needs to be defined and analysed more in detail. An attempt is made by game designer Randy Littlejohn who says that there are two basic ingredients in interactive storytelling: intuitive design and compelling stories. While the development of design has gone far, the capacity of telling compelling stories has not been valued as much as needed among game developers (cf. Pearce's argument above). Littlejohn defines a compelling story as "one that grabs and holds the attention of the audience" (Littlejohn 2001). It is not hard to find game players who are totally absorbed by a computer game but is this due to a thrilling story or due to an exciting game play? Probably the latter. To succeed with creating a compelling story, Littlejohn suggests that game developers should take drama into consideration, as drama is about human conflict and is communicated by means of speech and action to an audience (see also Laurel 2001). In dramatic presentations, conflict is expressed through visible actions, and, this is something that Littlejohn stresses, the reason for the action is more important than the action itself. If game designers are to succeed in writing compelling stories, they must understand that the audience's interest in action is not enough. The audience also wants to know the reason for the conflict. Littlejohn concludes: "we should make sure that the motivation for the conflict is centred on wants, needs, and desires that we all can relate to. This will help us to identify more strongly with the protagonist(s), the theme, and the goal that has been set forth." (2001)

The main problem of story in computer games is thus that it only comes into existence when a player interacts. This depends, naturally, on the player being an active participant in the joint construction of meaning (Beavis 1998), which in turn means that one never "reads" the same text twice. So in a way, all computer games are multilinear.

But we should all be aware that there are certain different genres of computer games and that the genre determines in what way the games

use the opportunity to branch the story. Many action games, such as most FPSs, are based on running in corridors and shooting monsters or enemies. Here, the player is limited to a certain space and can only perform certain actions. The only exit from the corridor is one final door (other doors are locked or lead to dead ends like in No One Lives For*ever* or *Max Payne*). There is a preset number of enemies in each room. The narrative in those games is rather linear (of course the player can choose in what order he or she will shoot the monsters etc., but that, strictly speaking, does not challenge the linearity). Typical examples of this kind of games are *Doom* and *Duke Nukem* 3D. In recent years, the FPS genre has developed and the choices the player can make have increased, see for example Deus Ex, Return to Castle Wolfenstein and Medal of Honor: Allied Assault. Especially Deus Ex is set in a large game world where the different missions can be solved in many ways. The player can for example choose to shoot all the enemies in cold blood or, like a thief, sneak around them. Both possibilities have been used for finishing the game.

But it is clear that no one has devised a really satisfactory "branching story". This is not a problem for games that offer sufficiently compelling game play such as *Starcraft* and *Diablo II*, but for many adventure games the story is very important for attracting players. The puzzles that those games involve must make up a considerable part of the story. Another problem is that once you have solved the puzzles, you know the whole story and there is no real reason to play the game again (see Adams 2001).

How can this be changed? Game designer Ernest Adams says that it is not a question of the games' narrativity, but of how the game story is told. If the story is linear, it is important to make it so good that it is worth hearing it again and again, even if we know the plot. But playing a branching story is something else. You can always try different solutions and replaying the game does not automatically give you the same story (cf. *Hitman 2: Silent Assassin*).

What then is a branching story? Is it as simple as to choose if you

should turn left or right at an intersection? No, this is found nearly all the time and in all kinds of games. Important for a real branching story is setting the player free, to use him or her as a resource. Danish game researcher Jonas Heide Smith gives this hypothetical example:

The player starts in the castle vestibule and in the attic we place a dragon. The behaviour of the dragon is controlled by a number of variables, e.g. joy/sadness, aggressivity/passivity, courage/fear. If dragon and player meet, the dragon interprets any action of the user according to these variables, set by the designer. If the player comes within a certain range of the dragon, its aggression level determines what it will do and so on. (2000)

This is in many ways an ideal branching story. The programmer becomes more the architect of the narrative, the player is free, and his or her actions have consequences for the story.

One important benefit with branching stories is that they make the player feel that there is a reason for talking to or killing people and monsters (cf. Littlejohn's arguments discussed above). What you do is what you get. If you kill the wrong person you cannot use this person's information; if you are cheating in a dialogue option this has consequences for the future of the story. Players get some sort of freedom in following the threads of the plot (cf. Spector 1999), but this is not unconditional freedom. The game story changes and your actions open new ways but also close others. If a player chooses one branch in a game he or she cannot return to choose another. This can of course be frustrating and many players cheat. They understand that the consequences of a single action are fatal and they reload a saved game instead of following their chosen road. Warren Spector who has designed the award-winning game *Deus Ex* says:

Done well, branching can provide a powerful illusion of freedom for players. But, that's all it can provide - an illusion. The reality is that, if we don't put something in the game, on the screen, in the mouths of

nonplayer characters (NPCs), it doesn't happen – and no amount of branching can allow players to do things we don't allow them to do. What this means is that the choices available to players solely as a result of branching are false, because eventually players are forced back onto one of the paths that we've created for them. (Spector 1999)

The illusory freedom of branching games thus makes the authoring of a compelling story difficult. If you let the player jump from place to place in the story, it makes the game designer's work very hard to pace. It is hard to build in suitable reasons for every possible action a player can take. The ambition to give every player freedom to make his or her own choices works against for example Randy Littlejohn's position that each action must have a reason. Therefore, game designer Troy Dunniway is quite positive to more linear story progression where the player is expected to pass through most of the major story's plot sections. He mentions for example the hero's journey as a good base for a game's storyline (Dunniway 2000), and says that it is quite possible to structure the initial training and learning parts of the game within the context of the two first acts. The game really begins in the third act.

A good example of Dunniway's view is *Planescape Torment*, that in many ways is a linear game, despite all the choices the player must make. The player still has to follow the main plot in a certain way. This enriches the story. The hero gets flashbacks of earlier events, and the player receives the important keys for solving the main quest in a linear order. The story comes into its own. But still, the player is rather free to choose which subquests he or she will engage in. It is the player's responsibility to gather an adventuring party, to choose if the hero will be good or evil etc. The well-written story with its narrative depth together with this limited freedom for the player is a successful combination. *Planescape Torment* is still one of the best tales told in the context of computer games.

A rather different standpoint, compared to Dunniway's, is represented by game developer Richard Rouse III. He maintains that "non-linearity gives interactivity meaning, and without non-linearity, game developers might as well be working on movies instead. The more parts of your game that you can make non-linear, the better your game will be." (Rouse 2001, 125)

But Rouse's definition of non-linearity is not as strict as for example Dunniway's. He does not want to give the player total freedom, either. In his reasoning, a non-linear story has different beginnings and goals (something that is quite opposite to the text definition given by Ledin above). And non-linearity, the branching of the story, takes place inbetween. Non-linearity is the different paths a player can take to go from A to B. The purpose of non-linearity is, according to Rouse, to provide the player with some meaningful authorship, in the way he or she plays the game, i.e. to let the player make meaningful choices that have effects on the storyline, otherwise the player will tend to feel trapped and constrained. The use of non-linearity also makes players want to replay the game. Non-linearity is not about having the player wander around the game-world aimlessly, it is a tool for creating better game play (Rouse 2001, 125 ff.).

The discussion above provides us with at least three different kinds of story structures in computer games. Let us exemplify them one by one. Consider a game with five story stations, A, B, C, D, and E. In A the hero gets invited to the story; B, C, and D stand for different tests or sub-quests; E, finally, for the main ordeal.

I) In a linear story the player starts at A, then he or she goes to B, C and D in a given order, and the story ends at E. Of course there are here also more or less non-linear elements in each section. The player has a choice of deciding which monster he or she will shoot first, if his or her hero should pick a lock on a closed door or if the hero should force the door with strength. Still, the story follows a figure like this:



This kind of computer game is more like reading a book or watching a film, with the main difference that it is a game. The structure is rather typical for many FPSs, adventure games and platform games. The game becomes more difficult for each section and the player's skill is tested. The problem is that if a player gets stuck there is no easy way to go further in the story. This structure forces the less skilled player to re-load again and again. It is often the game play that becomes the interesting part in these cases: shoot new kinds of monsters, try new weapons etc. The story can be exciting, of course, but the player has no influence over it. A game like *Deus Ex* is linear in this way. Despite the many solutions to the different missions, the principal plot follows a main line. Often, the story in linear games is narrated in the cinematics, as in *No One Lives Forever* where all intriguing parts of the story are told in different video clips. It is the video clips that give reasons for the player's actions.

One can also maintain that many single-player campaigns in strategy games follow a linear story setting. *Starcraft, Age of Kings* and *Warcraft III* are all telling stories, and it is possible to see every chapter (level) as one quest, notwithstanding that the strategy applied is optional. The narrative is thus distinguished in non-interactive parts of the game as in cinematics and video clips. This means that the game play itself does not tell the story, it is just the result of the conflicts given in the game's non-playable parts.

2) The second structure is the standard form of a branching story in computer games. The structure can be visualised like this (observe that this is a very simple sketch of the structure, to visualise a whole computer game of today would be far more complicated):



Here, there is a starting and an ending section. The player has to start the story in section A and end it in section E. Then it is optional what he or she does in-between, if or in what order the subquests are played. Of course, this can be further elaborated. If the player for example visits section C, he or she cannot visit section D. There are also at least two different submodels of this type of structure: a) one where the player always has admittance to the whole middle section. The multilinearity in this kind of games consists in the order of doing the offered missions or quests being free. The game offers a lot of things to do and the player can select when and if he or she will do them. In the other kind, b) there is a main plot that the player has to follow. This plot involves a lot of choices, and depending on what the player does, certain ways are opened and others are closed. This is a more linear variant of the structure. The player follows one road but the game itself contains multiple roads.

These kinds of story settings are quite common in for example RPGs and in some strategy games such as *Commandos 2: Men of Courage*. It is a powerful narrative method for computer games. It differs from the traditional telling of stories and offers something new. The computer is really used for its unique possibilities. The interaction becomes meaningful. The player gets the feeling that he or she is in control of the game and that he or she can influence the story, but still the game designer is the author of the story. He or she is in charge of what can possibly appear. The players can only choose between the options that the designers have created in the game. There cannot be any other sections than those given.

3) The last type of narrative structure is the totally non-linear story. This is quite rare in singular games, but more common in certain online games like MUDs or MMORPGs like *Ultima Online* and *EverQuest*. An important aspect of this structure is that it often lacks a normal ending. There is a starting point and then the player begins his or her experience of the game world. Of course there can be certain quests but the player can choose to accept them or not.



In this structure, the player begins the game in section A but after that it is completely optional what he or she does. Everything can be solved in multiple ways and the order of events is free. This structure encourages exploration, and making personal choices. Naturally, this can be stimulating in a creative way for the player, but the structure does not support a narrative structure.

A single-player game that functions like this is *The Sims*, where the player starts with creating an optional number of "sims" and lets them move into a house. What happens after that is up to the player. Another example of this kind of game structure is simulations of different kinds, for example *MS Flight Simulator* and *Counter Strike*.

It is interesting that some games offer a mix between structure 2 and 3. This is very obvious in *Elder Scrolls: Morrowind* that presents a gigantic game world to the player. The game always begins in the same way but very soon the player is free to explore the world. There is a main quest to follow but this quest is not that important. Instead the player can take a job for some faction. When deciding to work for one faction, the player makes an important choice as the quests that different factions give work against each other. Hypothetically, one faction can order you to guard someone, while another faction orders you to kill the same person. If the player solves the main quest, the game does not end. You can still engage in subquests and explore the world. It is the player that chooses what kind of story structure the game will have.

No matter what kind of computer game is being played, the game can always be described as a series of choices. In each game, the final result depends on thousands of different choices. This does not mean, as mentioned above, that all games are non-linear. The art of the branching story does not depend on the player's choices, it depends on the game's design. How it is meant to be played, in a linear way, a *one* true path to wisdom, or in a non-linear way, has to do with what opportunities to find one of *many* true paths the game designer has given the player. I would argue that only the second of the presented narrative structures gives this opportunity. Structure 1 can tell good stories, it can form very good games, but these games are linear. Structure 3 does not tell stories but the game play can still be enjoyed by many players.

While the success of the two first structures, especially structure 2, depends on both story setting and game play, structure 3 only depends on game play.

# Conclusions

As I have shown in this article, I would state that computer games can be interpreted as a narrative genre. But both game designers and game researchers agree that it is a genre of its own. It is neither literature, nor film; still most games consist of stories. The comparisons made above with different models of narrative structure show both differences and similarities with other narrative genres from other media. One explanation to this is that games do not only require a good storyline, they must also provide interesting play. The players must be invited to interact with the story. This means that traditional models of narrative structure do not function smoothly. Computer game stories must focus on parts of the narrative structure where the player in an easy way can interact. Many game designers have solved this opposition by structuring their game stories in a linear way, but involving multilinear elements so interaction can be allowed. But in recent years we have met other solutions that use the computer's possibilities as storyteller in an improved way. For example, when a game contains both a compelling story and a compelling game play it can be described as something inbetween the linear and the branching story.

This is complicated. It is not certain that a compelling story also gives a compelling game play. It can be hard to combine these two features, which can be seen as a drawback for the genre. Compelling game play is still more important than telling a good tale. Some examples of games that succeed in both ways are *Baldur's Gate, Deus Ex, Age of Empires, Max Payne, Elder Scrolls: Morrowind* and my personal favourite *Planescape Torment.* All of these are also bestsellers. The commercial success has made the combination of exciting stories and rich game play an important issue for game developers.

The combination of, in many ways, a linear story that allows the game designer the power to give the game's narrative a psychological depth, with branching elements that give the player an opportunity to interact and a feeling of participating in the story seems today to be the ultimate solution for game development. In the future, I think this will be the focus for the single player games. Computer games do not make new stories, they just change the ways old stories are told. They let us play the story.

#### HUMAN IT REFEREED SECTION

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## Notes

- 1. This article is written within the project Computer games as meeting places and fiction: Beyond simulated reality and traditional storytelling, which is financed by The Swedish Research Council.
- 2. One of the best web sites with walk throughs for computer games is GameFaqs at http://www.gamefaqs.com/.
- 3. About the discourse of walk throughs, see Sunnen 2001, 82 ff.
- 4. The example is taken from http://db.gamefaqs.com/computer/doswin/file/morrowind\_house\_telvanni.txt.
- 5. See http://www.cyberjag.com/baldur/walkthrough/lyngellen/lyngellen.htm and http://db.gamefaqs.com/computer/doswin/filw/syberia\_a.txt.
- 6. See http://www.interplay.com/fallout2/story.html.
- 7. See http://www.activision.com/games/wolfenstein/game/story.html.
- 8. It is quite clear that game research is a growing academic discipline, quite the opposite to what many articles claim, for example Henriksson 2002, 32. Academics from many different fields have taken an interest in studies of game play, game structure, game narratives, game culture etc. Constantly growing bibliographies of game research is found at for example

http://www.digiplay.org.uk/ or http://www.game-culture.com/.

9. See also Henry Jenkins' statement that "Not all games tell stories" (2002). Thus, it is important to distinguish between different computer game genres when discussing narrativity.

- 10. Here and further on I make use of the same terminology, *in-game*, *out-of-game* and *external materials*, as Richard Rouse does (see 2001, 214 ff.).
- 11. See also Jenkins (2002). He states for example that "If some games tell stories, they are unlikely to tell them in the same ways that other media tell stories."
- 12. See for example the story of the best-selling games *Diablo II* and *Dungeon Siege* where the story is quite banal.
- 13. Of course it is possible to find some sort of cohesion and coherence in many computer games, otherwise there would be no story. But in games such as Tetris or Minesweep it is difficult to speak of cohesion at all.
- 14. Many games include both spoken and written texts but the narrative is mostly based on visuality.
- 15. But this may change. Soon we may have digital documentary soap operas like Temptation Island where the player can influence but he or she does not necessarily have to interact.
- 16. This can be done in some simulation games, for example in the virtual dollhouse *The Sims.*
- 17. Murray's view has not stood uncontradicted; for a critical discussion of the multiform story, see for example Ryan 2002, 590 ff.
- 18. Marie-Laure Ryan maintains that this is not quite unproblematic. She writes "I can imagine games in which users would be given a concrete task but would also be invited to take breaks in the action, during which they would explore the landscape and meet characters who would entertain them with stories about the fictional world. But hardcore game players would probably resent these narrative interludes as aggravating interruptions of the forward momentum of the game and as temporary loss of control over their fates. The competitive involvement of the game player is basically incompatible with the detached contemplation of the aesthetic experience, and my proposal will only be viable if the works I am imagining are able to foster a new attitude in the user, namely, the willingness to switch back and forth between the contemplative and the active stance." (2002, 604)
- Used by game developer company BioWare and presented by Gavin Moore in Gamasutra (2001).

- 20. This is also something that is used in publicity for games. For example the game *Mafia: The City of Lost Heaven* attempts to attract customers with the following text: "Convincing environments pull you into the 1930's with their attention to detail and style. From seedy bars and hotel rooms to train stations and airports every location is rendered in fantastic detail by the 3D 'LS3D' engine, such as the Lost Heaven International Airport and Chinatown." (example taken from the Illusion softworks' web site, http://www.illusionsoftworks.com/)
- 21. An interesting example of the tragic in computer games is when the friendly robot Floyd in *Planetfall* sacrifices himself to save the player (see further Murray 1997, 52 f.).
- 22. It is interesting that Candlekeep is a famous library in the fictional world. The hero consequently learns to play the game in a scholarly environment. This cannot be merely a coincidence.
- 23. See for example the description of the game *Syberia*: "Kate Walker, a young and brilliant lawyer from New York, has come to Europe to negotiate the purchase of a famous Robot/Toy factory, but will soon have her future completely turned upside down...

The owner of the factory, Anna Voralberg, has just died. The Heir to the factory, Anna's brother, Hans, who is a genius inventor, has been missing for decades; lost somewhere between the Alps and Siberia... Kate must find this enigmatic man to finalise the deal. But, in her journey from the West to the East, she will progressively discover and understand the reasons, which have made Hans leave his family and never return."

- 24. At least not for single player games. In online games, the background story is not that important, see for example the success of the *Half Life* MOD *Counter Strike*.
- 25. In some cases there are starting levels where the player can learn how the game functions. In the beginning of *Tomb Raider: The Last Revelation*, you can practise jumping and other things in Lara Croft's own house. When she leaves the house the adventure begins. The same stage is found in for example *Deus Ex.*
- 26. Sometimes this battle can be won just by using rhetoric, as in the ordeal of *Planescape Torment* where the hero has to defeat his three reincarnations and his own soul.
- 27. In some games, as in *Deus Ex* and in *Baldur's Gate*, the reward is that the hero becomes a god.

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