Case study: Emotional Design of the Videogame "Silent Hill - Restless Dreams"

Dr. Doris C. Rusch (Institute for Design and Assessment of Technology, University of Technology Vienna, Austria)

A brief history

Before I plunge head first into this case study, I would like to clarify the background to this paper: When I stumbeld over Ed Tan's work on "Film as an Emotion Engine" (Tan 1996), I found his psychological approach highly promising for the analysis of digital games and decided to try it on a game that has been on my mind and Play Station for a long time: *Silent Hill – Restless Dreams*. In the beginning, my intention was solely to finally understand, why this game had such an impact on me, why I played it not once, but several times and did not stop thinking about it, even when I had long put the controller down. Why did it stick to me in a way only good books or films had done before? And why did this game manage to couple rules and fiction in a way that is still very rare in current computer games? And so I sat down to study the case. The result was never intended for a stand-alone publication. But I showed it to some colleagues and they seemed to find some valuable insights in it and when my friend Pilar Lacasa suggested that I should submit it for our MIT5 panel, I did.

Introduction

Categorized by its game-play, *SH2* is a single player adventure game that includes exploring, collecting and examining objects, as well as some fighting and puzzle solving. Categorized by the fictional world, *SH2* could be rather called a horror survival game, although depending on how one chooses to play, survival is only a goal as long as the over all mystery has to be solved. The game allows for a complex emotional experience, although fear, paranoia and uneasiness stand very much in the foreground. But loneliness, sadness, desperation and regret add to the emotional cocktail *SH2* provides. Playing it in the dark, alone, with headphones is a real challenge, not only for the faint hearted. *SH2* is highly symbolic, but that does not make it less "real", less scary, but more meaningful, providing an emotional depth and multi layerdness that is still very rare in current computer games.

The following is a detailed analysis of the medial aspects and factors that constitute the emotional experience of *SH2*. I will specificially deal with the following questions:

- how does the game construct verisimilitude?
- Which source concerns are addressed
- How is player interest regulated?

It is important to note that these questions will be tackled with all three operational levels of the game in mind: the level of fiction (including the game-world and its characters as well as pre-scripted narrative moments), the level of interface (where the events are audio-visually represented and the communication between game and player takes place), and the level of the game as system (which contains the rules and determines the game-play).[1] Although I deal with these levels seperately for clarity's sake, it is of course the interplay between the various levels that constitutes the game-play experience.

1. Why should I care?

According to Tan, emotion is defined "as a change in action readiness as a result of the subject's appraisal of the situation or event." (Tan 1996, p.46). Emotional responses are evoked by addressing human source concerns like security, love, freedom, etc. which are endangered in the course of events. The wish to restore the desirable states that result from the fulfillment of the source concerns promotes action readiness. In games, source concerns are addressed on the level of fiction as well as on the level of the game system. In the introductory video sequence we learn that James Sunderland comes to Silent Hill, because he has gotten a letter from his dead wife Mary. The letter, which is in Mary's handwriting, tells James to meet her at their "special place" in Silent Hill, where she is waiting for him. One part of James seems to be aware of the absurdity of the situation, but the other part of him just wants to hope it is true. He muses:

> It's ridiculous, couldn't possibly be true….That's what I keep telling myself. A dead person can't write a letter. Mary died of this damn disease three years ago. So then, why am I looking for her? Our "special place"…What could she mean? This whole town was our special place. Does she mean the park on the lake? We spent a whole day there, just the two of us, staring at the water. Could Mary really be there? Is she really alive…waiting for me?

There is a lot of emotional potential in this fictional set-up. The grief one feels over the death of a loved person, the sudden hope that arises by the thought of being reunited with one's love – these themes appeal to the source concerns "love" and "togetherness."[2] It is easy to identify with James, to understand his grief but also his hope (and of course his skepticism). But there is another source concern the fictional set-up addresses: the need for cognitive assessment, the wish to solve the mystery, to find out if Mary is really alive or not, to find out who had written the letter (in her handwriting!) and why. Wanting to find out the truth can be coupled with empathetic concerns, like wishing for

---

[1] For a more detailed description of these levels see: Rusch, D.C.: Emotional Design of Computer Games and Fiction Films. In: Jahn-Sudmann, A. / Stockmann, R. (eds.): *Games Without Frontiers - War Without Tears. Computer Games as a Sociocultural Phenomenon.* Palgrave Macmillan (forthcoming).
[2] In the course of the game or maybe only in retrospect, it becomes clear that other source concerns are much more relevant than the above mentioned, namely the wish for reparation, redemption and peace of mind.

James to be happily reunited with Mary or at least to find consolation by the solution of the mystery. But it can also stand alone as a purely intellectual concern allowing for the feeling of competence on the level of fiction.

More generally one could say that *SH2* (like most current fictional computer games) satisfies the source concern for experiencing something out of the ordinary. The satisfaction of this need for sensation is a team effort of a game's various operational levels. Thus, the level of interface on which the audio-visual representation of the game takes place plays an important role in the sensation seeking process. The atmosphere established by the graphics and the sound-design greatly influences the emotional experience of playing, making Silent Hill a really scary place to be at and conveying a strong feeling of uneasiness and paranoia that makes you jump when suddenly the telephone rings in the real world. Apart from these affective reactions prompted by the level of interface, *SH2*'s audio-visual representation also serves the need for an aesthetic experience. The way the uncanny atmosphere is established is pleasurable in itself. Taking a step back, one can appreciate the design of the fictional world and the way the camera movements and perspectives as well as the lighting visually support the fiction.

SH2 also addresses the game-specific source concern "agency". This need to feel in control is mainly addressed by the game as system although the level of interface is essential in conveying the feeling of agency by providing appropriate visual, acoustic and hapitc feedback to the player's actions. The fact that one can move in the fictional world, exploring it and its secrets, and interacting with its objects, makes the emotional experience very rich and complex. Due to the factor of agency, the wish for an extraordinary experience can (almost) transcend from the virtual to the actual. E.g. the way you play *SH2* cannot only change its meaning but also its outcome. Thus, agency can be a means of expressing identification with James. Even if the player is not aware of doing so, the game system interprets some of the player's actions as an expression of James' mental state. Running around with a constantly low health status, examining the knife James gets from Angela and taking no interest in Maria, his dead wife's look-a-like, is interpreted by the game system as acting suicidal which will lead to the "in water" ending, where James and Mary are finally reunited in death.

The complex combination of source concerns *SH2* addresses bears the potential for a very rich emotional experience. However, not every player will feel addressed by all the source concerns mentioned here. Some will play the game only to solve the mystery. Others might solely enjoy the possibility to explore the game world and to kill the monsters, thus experiencing agency and a certain aesthetic pleasure. And some might use the game as a foil for their own fantasies or as a therapeutic instrument, killing the monsters to prove to themselves that there is nothing to be afraid of. All these various strategies of play are possible. Still, *SH2* derives its main attraction presumably rather

from its fiction than from the game-play in the sense of mechanical manipulation, because it is not very challenging on the level of game mechanics, compromising realism for ease of play.

2. Making it real

"The law of apparent reality (Frijda 1988) states that emotions are evoked exclusively by events that are appraised as real and that their intensity corresponds to the degree to which this is the case." (Tan 1996, p.67)

A computer game's emotional potential can only be realized if the game conveys the impression of reality. On the level of the game system, this is rather easy, because the game as such has an inherent reality status that does not need further motivation. It does not need a believable fiction for the player to accept the system of the game as real. It is enough to accept the rules, the goals and the mechanics available to achieve them, to feel immersed in the game-play. The game as game is real, playing as such is real. As Jesper Juuls says in his book "half-real. Videogames between Real Rules and Fictional Worlds": "video games are *real* in that they are made of real rules that players actually interact with; that winning or losing a game is a real event." (Juul 2005)

Of course, the game-play is also an important part of the emotional experience *SH2* allows for. The focus, however, lies on the construction of a believable fictional world. *SH2* is a game that tries to camouflage its gameness. In the following, I will analyze how *SH2* tries to achieve the impression of reality on the level of fiction and the level of interface and how the functions of the game system are integrated into the fictional world to fit its apparent reality.

2.1 Construction of reality-status on the level of fiction

In the beginning of *SH2*, reality-status is established on the fictional level with the help of naïve psychology. It is quite easy to understand that James misses his dead wife, Mary, that he wants to be reunited with her and that his hope of doing so, which is kindled by a mysterious letter from Mary, is stronger than his skepticism and he thus comes to Silent Hill to find her. Naïve psychology further explains why he does not heed Angela's warning about proceeding into town. He is too desperate to care if it is dangerous or not and he will not stop his search until he has either found Mary or solved the mystery of the letter. This distinguishes *SH2* from other survival horror games where the way back is blocked and the reason to proceed is to get out alive. In *SH2*, James has an inner motivation to get himself into danger in the first place. The game suggests that he could turn back any time, but that he does not want to because there is nothing left for him to return to. He has to go on and to face his deepest fears.

Naïve psychology makes James' actions believable, but it does not help understand the strange things that are about to happen. There is something terribly wrong with this world and a letter presumably written by a dead person is just the beginning of a series of uncanny events and encounters. On the fictional level *SH2* strongly conveys the feeling of *unreality.* The town is deserted, there are no residents, but the streets are full of strange creatures, demons of some sorts that attack James when he comes too close. An unnatural fog makes it hard to see. The only other people James meets are strange and secretive and like himself they seem to have been somehow summoned by this town. What is it with this town anyway? James finds hints about its past, saying it has been erected on sacred ground. But the town itself does not seem to be bad or dangerous. It just is for some people. Laura, a young girl James meets and who claims to have been friends with Mary, does not see any demons. When he asks her what a young girl like herself is doing in a place like this she asks: "huh? Are you blind?" For Laura, Silent Hill is a safe place. And then there is Maria. James meets her at Rosewater Park, where he first hoped to find Mary. Maria looks like his late wife, could be her twin sister, but she is somehow sexier, more coquet. She is not the first to suspect that James might not have loved Mary. Maybe he hated her, she says. She accompanies James for a while wanting him to protect her, but no matter how caring he behaves, like Mary, she dies. She is killed – not once but a couple of times – by a creature called Pyramid Head. He appears at some points throughout the game and is characterized as an especially dangerous and potent enemy. Maria knows things only Mary could know, she knows about James always being forgetful, knows about a video he had made of Mary at the Lakeview Hotel and that he had forgotten to take with him when they left. How could she know all that? What strange analogy is there between her and James' late wife?

In short, *SH2*s dominant hermeneutic mechanism is the uncanny. "The uncanny is characterized by seemingly unreal events that are symptomatic of a hidden, unsafe, fearful, dreadful or dangerous reality" (Spoors 2005, p.98). The tension that arises between the seemingly unreal events and the dreadful reality that lies behind them is an essential factor for the regulation of player interest in *SH2* (more about this later). The reality that lies behind the unreal world of Silent Hill is the fact that James Sunderland has killed his ill wife. The key mechanism that constitutes *SH2*'s reality-status is projection, the projection of James' mental state onto the fictional world. James's search for Mary is a dive down the abyss of his psyche. Read in terms of James' psychological state, *SH2* makes a whole lot of sense and the games unreality becomes (in retrospect) emotionally intelligible. The whole game world is a metaphor for James' fears and repressed feelings and the way he deals with them. For example, James slaying some of the demons he encounters reinforces his role as a killer. Depending on how one chooses to play, trying to run past the demons without fighting or smashing as many as possible to bloody pulp, James appears as a victim of the circumstances that drove him to commit

an act of desperation or as the "Oppressor" he is implicitly referred to in a riddle one has to solve during the game.

The omnipresent symbolism of the fictional world becomes most obvious in Silent Hills' Historical Society, the last station James passes through on his way to the Lakeview Hotel, the special place where he finally has to face the truth. After entering the Historical Society building, there is only one way left to go: down, down and further down. Spatial logic does not apply anymore, because James has lost his sense of reality. For him corridors are not horizontal but vertical shafts he has to jump through. He jumps into the dark, into the unknown (or the repressed as we know with the benefit of hindsight.) It is like a trip to hell – a very personal hell where one has to fight one's own demons – where at one point James has to literally jump down his own grave to advance. This is a reference to an earlier point in the game, where James reads a note on a wall in Neely's bar that seems to be addressed to him. It says: "If you really want to SEE Mary, you should just DIE. But you might be heading to a different place than MARY, James." Meaning that Mary is dead but whereas she probably went to heaven, James might go straight to hell. The interesting thing is that it seems like Silent Hill represents both. For Mary, this town is the epitome of peacefulness, where she dearly wanted to return to someday. For James it is a place of painful memories.

After having jumped down many holes, James finally goes through a door and finds himself in the open. One should expect that after going down so far one would have to climb up again to reach the surface, but the world has not lost its symbolic status yet; James has not yet left his private purgatory. He has to continue his journey into the land of the Dead, which he does by crossing Toluca Lake on a rowing boat until he finally reaches the Lakeview Hotel. Analogies to the mythical river Acheron that separates the land of the Living from the land of the Dead (Hades) come to mind. In the Lakeview Hotel, James has to face the truth, namely that what he has feared the most is true: he had killed Mary. The key to this insight is the video he has made when he had visited Silent Hill with Mary and forgot to take with him when they left. He watches the video in the hotel room where he had stayed with Mary. The disturbing pictures of him suffocating Mary with a pillow that suddenly appear on the TV screen can again be interpreted as projections of his repressed memories. When the video is over, he hears Mary's voice. She is calling him, telling him she's nearby, waiting for him. And so the journey continues. But before he finds Mary, he is again confronted with Maria who had died a couple of times before, and who is now speared by two Pyramid Heads. At this point James realizes that he had invented Maria and it might dawn on the player that the Pyramid Heads represent the distorted image James has of himself. On the "Misty day, remains of the Judgment" painting in the Historical Society, the Pyramid Heads are introduced as the executioners of past times. With their phallic heads and brutal behavior they stand for oppressive masculinity. This interpretation is supported by the fact that in

some scenes in the game they are shown raping mannequin demons, which have a very peculiar anatomy: where the upper part of the body should be, there is another lower part…

James seems to identify with these executioners. That they kill Maria over and over again, is a projection of James' bad conscience about him killing Mary. He realizes: "I was weak. That's why I needed you [Maria]…. Needed someone to punish me for my sins…. But that's all over now. I know the truth. Now it's time to end this." After that, James attacks the Pyramid Heads until they give up and kill themselves. One could call it a big breakthrough in the therapeutic process and one does not have to be a clairvoyant to sense that the end of the game is near. In the last scene of the game before the final video sequence, James finds himself sitting at Mary's sickbed and he tells her everything, how desperate he was, how he could not see her suffer, but also that part of him hated her for taking away his life and that he wanted her to die. His emotional dilemma is revealed at this point, the mystery is solved. He has come to Silent Hill to be forgiven, to find peace of mind, to come to terms with what he has done. And Mary understands. She had asked him to kill her, had wanted to die, had hated herself for being sick and ugly and she forgives him: "You killed me and you're suffering for it. It's enough, James." After these last words, the reality-status rises in retrospect on the fictional level. What one has seen and heard was true – as true as projections of psychological states can be. In retrospect, naïve psychology helps to explain the fictional world, rendering the unreal real. Due to its atmosphere, *SH2* is thrilling to play, but what makes the experience last for some time after one has finished the game is the emotionally gripping story behind it.

2.2. Construction of reality-status on the level of interface

SH2 is a game that aims at conveying the feeling of being in a real world at a real place and in real danger. For a fictional world to feel real, it does not have to correspond exactly to real-life, neither in terms of what it represents nor in terms of how it represents it. Still, there are a few basic factors that help to constitute a common sense understanding of the world, which lends it immediate verisimilitude and helps to make those things which deviate from every day observation more easily acceptable. These factors are: behaving according to naïve physics, the impression of depth that is brought about by the illusion of perspective and further enhanced by the movement within the game world, a photorealistic representation as well as a convincing sound-design. As *SH2* is in accord with all of these codes of verisimilitude, it has a high degree of "magic-window" reality. Communication between the player and the game system also works fine and so the movements of the avatar look realistic and feel smooth and immediate, enhancing the feeling of agency thus adding to the verisimilitude of the fictional world.

Apart from the above mentioned basic codes of verisimilitude that aim at giving the impression of reality, *SH2* also deviates from real life observations in some relevant aspects, supporting the symbolism of the fiction on the level of interface. One of these aspects is stylization. Stylization in *SH2* mainly takes the form of diegetic camera perspectives and movement in combination with atmospheric sound design. The camera perspective is often not aimed at giving the impression of objective observation, but at adding a sense of uneasiness and paranoia to the represented world. This makes sense because as has been shown above, the fictional world itself is not objective, but a projection of James's mental state, and one can safely claim that James' psyche is a bit off balance. A good example of how (literally) cinematic effects support this off-centerdness is the introductory video sequence. The game starts with James standing in front of a mirror in a dirty public restroom, staring at his reflection. Following this point of view shot, the camera takes position in a far corner of the restroom, watching James from beneath a lavatory. The camera angle is tilted to the right, straightening itself a little during the scene. There is no objective reason for this perspective or shifting of camera angle. Instead it visually underlines the hermeneutic mechanism of the uncanny that is employed on the level of fiction. One could also go a step further and interpret the first shot – James looking at his reflection in the mirror – as a prelude to his journey into his subconscious. He is looking at himself, questioning himself, wondering if Mary is really alive and waiting for him in Silent Hill. And then the camera moves away from James and looks up at him from the bottom suggesting that there is something lurking down there, waiting for a chance to come to the surface. And to the surface come his fears and his repressed feelings. They emerge from the bottom of his mind, creating the images that make Silent Hill a dangerous place.

Another example for diegetic camera movement / perspective is the scene at the graveyard where James meets a woman called Angela. At first, the camera is slowly circling around the two people, but camera angle and perspective are unobtrusive. Then, the camera again takes position near the ground and the angle shifts to the side, making the situation look off center right at the moment when Angela warns James about proceeding into town, telling him that it might be dangerous (Angela has killed her abusive father and is tormented by her feelings of guilt and like James she is not able to see reality). During the dialogue between James and Angela, the camera moves up until it reaches a bird's eye view, conveying the feeling of danger on a visual level.

Diegetic camera is also used to restrict the player's vision. In dark corridors or labyrinths, the camera sometimes sweeps right over the avatar, producing a few seconds of total darkness. Restricted vision is an important symbolic element on the level of interface. Apart from camera movement, the player's vision is restricted by darkness and the unnatural fog that covers the town. It is not hard to imagine that these elements not only

function to make the game scarier, but to symbolize the blind spots in James' mind. He cannot see clearly, cannot see the truth.

2.3. Construction of reality-status on the level of game system

The game as such has an inherent reality-status. But in games that try to hide the fact that one is only playing and emphasize the reality-status of the fictional world, the game system is made as invisible as possible. This happens on the level of interface where expressions of the game-aspect of the game are hidden behind metaphors that are in accordance with the fictional theme so as not to disrupt the reality-status of the game world more than absolutely necessary. Consequently, in *SH2*, which is such a game, the interface is completely devoid of obvious system information during movement through the world. There is neither a status bar that shows James' condition, nor information about how much ammunition he has in his gun. There is an inventory, though, which one can enter via the menu button. Doing so pauses the action and temporarily reduces the reality-status of the fictional world, bringing the reality of the game itself into the foreground.

Saving, providing the player with power ups and steering the player through the game are the main functional components of *SH2*. Although the game tries to hide them, they are easily recognized, but due to generic verisimilitude resulting from the player's knowledge of game's conventions, they are just as easily accepted as essential aspects of the game and one also does not wonder too much about the plausibility of the locations healing supplements, weapons and ammo are found at (especially in a game like *SH2*). That does not mean that camouflaging game functions is superfluous. For once, it certainly makes a difference for the impression of reality of the fictional world whether one is only seldom and carefully reminded of the game's game-aspect or whether this aspect is openly displayed all the time and no effort is made to hide it. Secondly, decoding the signs with which the game functions are integrated into the fictional world is pleasurable in itself, especially if the signs have been well chosen. One can feel devilishly clever deciphering and interpreting the metaphors for saving and healing et cetera.

In *SH2* saving takes place at save points that can be found frequently throughout the game. These save points are indicated by glowing red pieces of paper. The first one is located at the bottom of a well in the woods. When James looks down the well, writing appears on the screen, displaying his thoughts: "There's something in the well. What's that…? Looking at this makes me feel like someone's groping around inside my skull…It gives me a weird feeling." The red piece of paper alone would not be so special. But the accompanying words make it symbolically meaningful. They fit into the fictional theme of psychological archeology and can be interpreted as milestones in the process of

discovering the truth. They are points in James' memory to which he can return when he got overwhelmed by his personal demons, and try anew.

The power ups the game provides are less interesting. There are health drinks and first aid kits for healing, various weapons for fighting, maps to help with orientation, and a flashlight that allows the player to read the maps in dark places. These metaphors are pretty worn out and used by many games. This is not to say that they are not useful. They are straightforward, easily understood and intuitive to use. But at least for the healing function the designers could have been more imaginative. Like saving, healing might have been better symbolized as a psychological process in this game and it is somehow irritating that a health drink should do the trick of recovery. Lying on a couch for some seconds or breathing into a paper bag would have been much nicer and in coherence with the fictional theme.

Concerning the problem of unobtrusively steering the player through the game world to ensure his / her progress, some clever solutions have been found in *SH2*. One is the direction of player attention towards relevant objects like keys, health drinks, ammunition and clues that help to solve riddles: every time James comes close to something interesting, he looks in the direction of the object or hint. When positioned in front of the object, the player can gain further information about it by using the action button on the controller. Writing will then be displayed on the screen, explaining what one has encountered e.g. "I got the purple key." One can also get information about objects that have no particular game function, but make the world more concrete, like: "Different types of papers and documents. But there's nothing of interest for me". Once, this written analogy to a voice over is also used to provide information about James. Pushing the action button in front of a shelf full of bottles in the "Heaven Night" bar, the following lines appear on the screen:

> Liquor bottles. I don't need that right now. It's not that I don't drink. In fact, I drink a fair bit. To get away from the pain and the loneliness…But the drinking never changes anything….Anyway, I don't need it now. There's something I have to do."

Providing information about things that cannot be interacted with is also a sort of camouflage, but this time in the reverse direction. It's not a game function that is hidden, but the absence of one. That the world has its limitations is also something that should not be too obvious.

Steering a player in the right direction is not only achieved by showing him / her what is of interest, but also by making it clear, what is not or at least not yet. When the player wants to navigate James out of the apartment building too soon, before he has found all the clues necessary to continue, the game does not let him / her leave. It does so by using what I would like to call an "identification-trick": James pauses in front of the gate and the following lines appear on the screen: "I think I'll look around this apartment

some more. Something's not right." This should create the illusion of James/the player wanting to stay in the building, and helps to hide the fact that the necessary tasks for progression have not been fulfilled yet. Of course one notices that it is the game system hinting to the player that there is something left to do, but it is much more charming than just locking the gate without any comment. It further adds to reality status. This identification-trick is used every time the player wants to do something the game does not allow him / her to do because it would divert the player from the right way (i.e. leaving buildings to soon, or wanting to interact with objects that are not relevant for the game as such). Using it too often would destroy its effect, making it again too obvious that the game is steering the player. It is all right if the game – by means of displaying James' thoughts – sometimes suggests that the player should look around some more, but doing so all the time would soon create a distance between the player and the avatar, destroying the illusion of the player *being* James. If James said all the time "I don't think I want to go there", with no obvious reason of why this should be the case, who would not get annoyed and think: "Oh, yeah? But I want to go there!".

One prominent example of how this problem has been solved in *SH2* is the metaphor of blocked-off roads. James encounters them frequently during his journey in Silent Hill. By being a phenomenon of the real world that is instantly and easily accepted as a hindrance for progress, they very cleverly camouflage the fact that the fictional world is a confined space, thus adding to realism. They further turn the town into a constantly changing labyrinth that determines which parts of the town are accessible to the player at any given point in the game. This prevents the player from making too many unnecessary virtual miles, focusing his / her attention on where the action is. Seen in the bigger context of the game's fiction and its symbolic system, the barricades can further be interpreted as metaphors for the blockades in James' memory that have to be slowly overcome by solving one puzzle after the other until the final confrontation between James and his late wife can take place.

Concluding, one can say that *SH2* has a high reality-status concerning its fictional world, with all three operational levels aiming at providing the player with a coherent experience of this world. The game's symbolism, which has its origin on the level of fiction, is expressed on the level of interface by corresponding camera work, graphic design and a fitting sound design including the music. The game functions that are displayed on the level of interface are camouflaged so that they do not disturb the dominance of the fictional world's apparent reality by means of according metaphors and the so-called identification-trick.

3. Making it interesting

"In various theories of emotion, interest is seen as a basic emotion, that is, one that cannot be reduced to one or more other emotions" (Tan 1996, p.85). Interest in a narrative is defined as the action tendency of the recipient to keep attuned to whatever mode it is the narrative is received in (watching, reading, listening or even playing). The real-time regulation of interest is determined by the prospect of return. "That is, interest at a particular point in time depends upon a player's "investment" of time and effort in a sequence, relative to the "anticipated return" (AR) on that interest in the future, and, the "actual net return" (NR) on that investment." (Spoors 2005, p.64). Cognitive return derives from the appreciation of a sound narrative and the composition of the artefact. Affective return results from sequences that correspond to the viewers' (positive or negative) dispositions towards the characters and their values (Tan 1996, p.96).

According to Tan, interest is self-enhancing.

> The action tendency inherent in interest raises the investment and this increase, in turn, has a positive effect on interest by increasing the contrast between NR already gained and the maximum future return that can be expected. (Tan 1996, p.111).

The more I invest, the more I want to keep following the narrative, because I have invested so much already and this has to pay off in the end. "The increase in interest is due to the fact that the narrative postpones closure" (Tan 1996, p.114). This is especially true for mystery or action films, where the whole plot is oriented towards the end. Of course, expected return cannot be postponed indefinitely, because behavior that is not rewarded will eventually die out (Tan 1996, p.115). Therefore the numerous retardations a game includes on the fictional level might be considered problematic for the regulation of player interest – Spoors addresses the problem as the "dys-regulation" of player interest. But this would only be the case if the story were the most important factor in keeping the player playing. In current games and probably also future ones, this is not the case. The story can reinforce the player's interest and provide additional rewards, but there are many games where the story recedes so far into the background during game-play that it is completely forgotten until the next video-sequence reminds the player of its existence. Retardations are what games are all about, they prolong play, give the player something to do, provide the rewards one expects from a game. But if story and game-play are not well integrated, player interest will be reduced. The narrative sequences force him / her to watch a story unfold that has lost its attraction. Infuriating. Certainly, retardations, which are not rewarding in terms of game-play, because one gets stuck for example and does not know where to go or what to do next, or because a task is simply too difficult, can become quite a nuisance, too, and frustrate players to the point that they quit playing. It is quite a challenge for designers to make computer games difficult enough but not too difficult and to estimate which riddle is solvable even if one does not possess an Escher mind.

3.1 Keeping the player guessing

The most dominant hermeneutic strategy of *SH2* is the strategy of "mystery/curiosity". "Mystery, or curiosity, is characterized by the representation of an outcome without any, or an adequate, initiating event, giving rise to ongoing hypothesis about causes." (Spoors 2005, p.65). In the following I will give an overview of *SH2*'s key events from the beginning of the game to the first encounter with Maria, thus identifying some of its hermeneutic codes. The focus lies on illustrating their twofold function of kindling curiosity but also enabling the player to build hypotheses about what is going on, thus ensuring accumulative cognitive return. Because a balance between investment and return can only be maintained if the hermeneutic line of the narrative – the one that presents the recipient with questions – rubs against a proairetic line which brings him / her closer to the solution of the mystery, a new narrative element often presents the player not only with a riddle, but also with a hint towards the answer (Barthes 1987).[3]

Because the role of the camera and other means of visual and acoustic composition in regard to meaning-making have been discussed earlier, the following puts more emphasis on the game's fictional content than its presentation.

The game starts with James in a public toilet, staring at himself in the mirror. The player learns about a letter James has received from his wife, who had died from a disease three years ago, telling him that she is waiting for him at their "special place" in Silent Hill. This introduces very precisely the mystery the player is confronted with: how can a dead person write a letter? Or, rephrased a little with the benefit of hindsight: what has happened to Mary? From this, two other questions can be generated, which later will give rise to hypothesizing: How can it be that James is not entirely sure if Mary is dead, especially if she did not die in an accident and her body was never found, but from an illness? If he is sure, why has he come to Silent Hill anyway? The genre and the whole look and feel of the game (see "reality status" above) indicate that the mystery the player is confronted with, is a dark one and that solving it will demand good nerves.

The introductory video sequences also serve the purpose of providing the player with the first goal: Rosewater Park at Toluca Lake. James thinks of the Park as their special place and hopes to find Mary there. From now on, the Park is expected to be a hinge point in the narrative. One knows from the start that something crucial will happen there that brings the player closer to the solution of the mystery. But *SH2* would neither be a good game nor make for a worthwhile story if this first goal were to be reached instantly and

---

[3] It must be mentioned here that in a game, the investment of the player never takes place exclusively on the level of narrative. One can only follow the narrative if one keeps playing, promoting narrative progression via the game-play. The investment to follow the narrative of a game is therefore much higher than the investment one has to make in watching a movie. Consequently, narrative return alone might not be enough to keep the player interested. In *SH2* it certainly plays an important role, but only because narrative and game-play are cleverly integrated into each other, one acting as reinforcement of the other, as will be shown later.

easily. It is something to be kept in mind, a long-term goal that serves as a lighthouse in this ocean of riddles to solve, things to do and obstacles to overcome. It further promises a return for the investment the player has to make by trying to get there. So, James sets out to find Mary, following a sign saying "Toluca Lake". The way leads through a forest and finally to a cemetery, where James encounters a dark haired woman called Angela. She tells James that she is looking for her mother and seems to be surprised that James is lost, but then points him in the direction of Silent Hill. The only thing strange about her at this point is that she seems a bit confused and that she speaks of her mother as her "mama", which sounds odd for a grown woman. She warns James about proceeding into town, indicating that it might be dangerous in a way she cannot really explain. Here, some more questions are raised that foster curiosity: why and in what respect is the town dangerous? Is it only a coincidence that Angela, like James is also looking for somebody? That James meets Angela at the cemetery and startles her when she is obviously reading a gravestone further gives the impression that Angela's mother – like Mary – is dead. But then one learns that Angela thought her father and brother were buried there, although she cannot find their graves…

When one finally gets to Silent Hill, its atmosphere, especially the unnatural fog that makes it hard to see, indicate that there really is something wrong with this town. There are no people on the streets and the buildings look deserted. What has happened here? Silent Hill looks like a ghost town. The next step is to retrieve a wooden plank from a construction site a bit outside of town. There one also encounters the first monster, which one has to kill with the wooden plank. The appearance of the monster, which James identifies as not human, raises more questions but also indicates in what respect Silent Hill can be considered dangerous and why it might be deserted: the people might have fled because of the monsters – a hypothesis that has to be tested and eventually dismissed. At the end of the scene, James finds a radio that crackles with static, but through the static a female voice can be heard. The voice is not very clear, but sounds similar to Mary's and says things along the lines of "James, I'm here!". Now, this is interesting, because modern mystery thrillers have introduced the idea that ghosts can communicate via electronic devices like radios and TVs. So, maybe Mary is a ghost, qualifying for being dead but also somehow alive and able to write mysterious letters. And as it is a well-known fact in the context of ghost stories that there is always a reason for somebody to hang on to this world, one might hypothesize that Mary has a) not died peacefully and b) has a score to settle with somebody, although she does not sound angry and hungry for revenge, but pleading and sad, like her letter.

The game leads the player back into town, which is now full of monsters that have to be avoided or killed, and into the Wood Side Apartments, where many tasks – mainly lock and key riddles – have to be performed to ensure progress through the game world. At one point, James sees a key behind an iron gate, but just when he reaches his arm out to

grab it, a little girl (Laura) comes along, stepping on James' hand, kicking the key away from him and running off into the darkness. This event, like many others in *SH2*, serves the purpose of slowing down one's progress, but also enriches the hermeneutic line of the narrative with questions about the girl. Although the environment is rather grim and apparently full of monsters, she does not seem to be afraid at all, because she mocks James and obviously holds a grudge against him. Is she a ghost or why else doesn't she seem to be affected by the dangers of Silent Hill? How come that the child is alone? Of course, one has to wait or – more in the sense of the ergodic medium – to work to find out.

A little later, the first Boss – Pyramid Head – is introduced. It does something that looks shockingly like rape to two Mannequin monsters. In the following video sequence, James hides in a closet, observing the gruesome scene. When the Pyramid Head comes close, James fires at him with his handgun until Pyramid Head leaves the room. The monster is indicated as not only having brutal notions towards females, but also as being extremely strong, because the bullets seemed to merely annoy it. This scene creates expectations about a Boss fight coming up soon – it is almost certain that one will have to fight the Pyramid Head sometime in the future and it is going to be a tough fight, too. But the scene is also meaningful on the level of fiction, because it raises questions about the identity of the monster. Everybody who has ever played a computer game that involves monsters knows that monsters usually are rather mean than meaningful. They probably have special skills and they are ugly and dangerous, but they hardly give rise to speculations about what they symbolize. With Pyramid Head, this is different. Its appearance is peculiar. It looks somehow like a human with a Ku-Klux Klan cowl. And its overdimensional knife is not just an instrument of death, but a very archaic and extraordinarily brutal one. It looks like an overlarge butcher's knife. The cowl, the knife…in combination these two attributes conjure up images of executioners from past times. And later one learns that this is indeed the case, that Pyramid Heads represent executioners from past times. It might still be quite subtle and will probably not be noticed by many players, but the appearance of Pyramid Head in the rape scene introduces three essential narrative themes: guilt, punishment and brutal masculinity. The first two themes are elaborated in the following scenes. After the encounter with Pyramid Head, James meets Eddie. The following dialogue provides important hints about the secret of Silent Hill. Eddie, who heavily vomits into a toilet, complains to James that he is not even from this town. And James says: "You too, huh? Something just brought you here?" And Eddie confirms: "Ummm…yeah. You could say that." So Silent Hill magically attracts people. What kind of people? What do Angela, James and Eddie have in common? Well, James and Angela are looking for somebody – somebody who in James' case is very probably dead. More material for hypothesis building is given in one of the following scenes, when James meets Angela again. In the meantime he has left

the Wood Side Apartment building through a window and has entered the Blue Creek Apartments where he finds Angela lying on the floor in one of the deserted rooms. She is holding a knife and it looks like she's about to kill herself. A very strange but highly illuminating dialogue takes place:

> Angela: "You're the same as me. It's easier just to run. Besides, it's what we deserve."
> James: "No…I'm not like you."
> Angela: "Are you afraid? I, I'm sorry."
> James: "It's o.k. Did you find your mother?"
> Angela: "No, she's not anywhere."
> James: "Did she live in this building?"
> Angela: "I don't know…"
> James: "So, all you know is she lived in this town?"
> Angela: "What did you say? How do you know that?"
> James: "Well, I just figured, cause this is where you're looking for her. How else would I know?"
> Angela: "Yeah…"
> James: "Am I right?"
> Angela: "I'm so tired…"
> James: "So, why did you come to this town anyway?"
> Angela: "I, I'm sorry. Did you find the person you were looking for?"
> James: "Not yet. Her name's Mary. She's my wife…"
> Angela: "I'm sorry."
> James: "It's okay. Anyway, she's dead. I don't know why I think she's here."

Angela tells him that she needs to find her mother. James asks her about the knife and she is about to give it to him, but before he can take it, she screams and threatens him with it. Then she realizes what she is doing and apologizes. Angela: "I'm sorry…I've been bad…Please don't".

This dialogue further strengthens the hypothesis that Silent Hill attracts a certain kind of people, because although Angela does not say that her mother did not live in Silent Hill, she seems surprised at James suspecting that she did, indicating that Angela does not have a clue where her mother could be and that she got here by chance…or rather bad luck…or because of some other sinister reason. It also reinforces the guilt-theme through Angela's endless apologies and her wish to kill herself, which can be understood as self-punishment because she has been bad and deserves to die. So, it might be the case that Silent Hill attracts people who are guilty of a crime. But James seems so nice and caring and one does not know much about Eddie. And what about Laura?

After all tasks have been fulfilled in the Blue Creek Apartments, James exits and finds himself at the other side of town and considerably closer to Rosewater Park, where he hopes to finally meet Mary. But as he walks along the street, he meets Laura again who has formerly stepped on his hand and kicked away the key in the Woodside Apartment Building. He asks her what she is doing in a place like that and she does not seem to understand. "Huh? Are you blind?" is her answer. She does not seem to be scared or to see any monsters at all. But she seems to strongly dislike James. When he asks her from whom the letter is that she is carrying around, she says something quite astonishing:

"None of your business. You didn't love Mary anyway." James – like the player – wants to know how she knows Mary's name, but the girl has already run away, leaving some open questions behind, but also a further hint towards the solution of the mystery, namely that James also might be guilty: guilty of not having loved Mary. Or maybe it is more complicated than that? After all, Mary is dead. So, there must be more to it. The question from the beginning of the game – "what has happened to Mary" – might now be changed to the more specific "what has James done to Mary?".

The encounter with Laura is further important to provide the player with a new goal. As it is quite clear that the girl has information that could help to solve the mystery, it is safe to assume that one has not seen the last of her and should take the chance to talk to her again as soon as it presents itself. This becomes even more obvious when James finally gets to Rosewater Park and does not meet Mary there, but a woman that is called Maria. It is not only the name that is basically the same only a bit more exotic, but Maria with her mini skirt, boots and pink leopard top could be Mary's sexier – and definitely more alive – twin sister. It is highly improbable that meeting her right at the place where James had hoped to meet his dead wife is just a coincidence and this gives rise to speculations about who she is, if she is real or if James has just dreamed her up and she is a product of his wishful thinking. Maria, like Laura, suspects that James has not loved Mary. Maybe he hated her, she says and although it sounds as if she is just teasing him, the suspicion gains shape that James was not the loving husband one might have believed him to be. But this, too, does not seem to be right. He behaved so caringly towards Eddie and Angela, he simply cannot be that bad. Moreover, his pain about the loss is believable. There is nothing fishy about it. Could it be that he is repressing something? Here, it might begin to dawn upon the attentive player that what he / she is dealing with is not a ghost story in the conventional sense, but a psychological drama, a mystery that has no supernatural cause, but is the result of a personal tragedy, an act of desperation and the feelings of guilt and regret arising from it.

Of course, in a game, the background story is only one component that can make the game interesting – but it can just as well be totally overlooked by the players, presenting a mere interruption of their game-play. Because of the way the story is integrated into the game-play it is quite unlikely that this is the case in *SH2*. But still, the game does not primarily work because of its background story but because of the way the story is used to enable meaningful play.

3.2 Keeping the player playing

Moving the avatar around with a joystick and experiencing agency by the immediate feedback of the interface is one of the most basic pleasures of playing a computer game. Developing one's sensorimotor competencies, seeing how one gets more skillful over the time, is also a rewarding occupation, especially if one's performance is adequately

represented on the level of interface in the way of fluid and realistic looking movement, or gory squashing noises when an enemy is beaten to pulp. The voyeuristic pleasure of navigating in the fictional world, exploring it and enjoying new locations and intriguing settings is another return one usually gets from playing a computer game. It has been argued before that *SH2*'s fictional world is one of its major attractions and feeling immersed in its eerie atmosphere is a great pleasure in itself for those who seek the thrill. A further important reinforcement for playing games in general and *SH2* in particular, is the feeling of cognitive competency that arises from building correct hypotheses about where to go and what to do next and developing successful strategies to overcome obstacles.

In *SH2* all of these game-play reinforcements are tightly coupled with the embedded narrative of the game, because what first and foremost gets the player going and keeps him / her playing are the goals which are delivered by the embedded narrative. Since *SH2*, like many other computer games, is a spatially dominated game, the goals mostly present places the player has to reach. They can be mentioned in monologues (James wondering about where to find Mary: "Does she mean the Park by the lake?") dialogues (Maria: "So the hotel was your special place?), memos (memo on the couch in the motorhome: "I'll wait at BAR Neely's") or appear as symbols on a map (in Bar Neely's James finds a map with a question mark at the top of Martin street). Goals can also be represented by objects one finds during play, like keys which indicate that they belong to a door one has to open, or the other way round, a suspiciously locked door indicates that there is a key to be found. So, the embedded narrative gives the player clues about where to go and what to do next, thus motivating navigation and exploration of the fictional world and kindling cognitive and sensory curiosity. As spatial progression goes hand in hand with narrative progression, the reward for keeping playing is not only the voyeuristic pleasure of seeing new locations etc., but also the step by step revelation of the mystery. Of course, the relation is not one to one, because the player often has to fulfill many tasks before another bit of the story is revealed. But the feeling that one can influence how soon one gets to know more, by hanging on just a bit longer and being more efficient at riddle solving, fighting and game space navigation, creates a strong pull, a strong desire to keep going. If the things one has to do are sufficiently clear but still adequately challenging and there is always the next task visible on the horizon before the first one has been resolved, the player experiences a phenomenon Csikszentmihalyi (1990) has called "flow. The main characteristic of "flow" is that one loses one's sense of time and space and becomes totally absorbed by the task(s) at hand.

Here is an example of how elements of the embedded narrative and the resulting enactive sequences are staggered in *SH2* in order to create a compelling chain of goals

that calls up and maintains certain expectations that are clearly to be fulfilled in the foreseeable future (Tan 1996, p.104), thus potentially creating flow:

Maria has just been killed at the Brookhaven Hospital by the Pyramid Head. James is very depressed. What shall he, resp. the player do now? At the moment, there seems to be no direct goal that keeps him or the player going, only the long-term goal of getting to the hotel, but this might have receded too far into the background to be thought of by the player at the moment. The only thing left to do at the hospital is to visit the director's office once again where one finds a memo saying: "He who is not bold enough to be stared at from across the abyss is not bold enough to stare into it himself. The truth can only be learned by marching forward. Follow the map. There's a letter and a wrench." This cryptic message tells the player that it is not over yet, that if he / she keeps going, he / she will be rewarded by information that will help to reveal the truth. It also evokes expectations about a new danger that will have to be confronted – an abyss is mentioned the exploration of which requires boldness. It will become clear later that this abyss is a metaphor for James' own psyche into which he has to delve to finally learn the truth and be forgiven. But first, one has to find the place where the letter and the wrench should be. This will certainly lead the way to the next goal. Since the letter and wrench are in the other part of town it might take a while to get there – at least for people who share my poor sense of direction.[4] Finally in the other part of town, where one can consult the corresponding map, one sees the words "letter and wrench" at Lindsey Street where one is rewarded by finding both items on the porch of a house. But of course, this was only the first step towards a more important, more promising goal – the afore mentioned abyss. Where could it be? What could be meant? The letter provides a further hint:

> Or perhaps you are a fool. The truth usually betrays people. A part of that abyss is found in the old society. The key to the society is in the park. At the foot of the praying woman, inside the ground, inside of a box. To open it, I need a wrench. My patient buried it there. I knew, but did nothing. It made me uneasy to have such a thing near. I wasn't looking for the truth, I was looking for tranquility. I also saw that thing. I fled, but the museum was sealed as well. Now no one dares to approach that place. If you still do not wish to stop, James, I pray to the Lord to have mercy upon your eternal soul.

Two more goals are introduced here: the park, where one finds the key to the old historical society museum, and the museum itself, where the abyss is located. The letter evokes further expectations about the unspeakable dangers and psychological challenges that await James if he insists on proceeding. And it raises an interesting question: how come the hospital director, who has written the letter, directly addresses James? And

---

[4] Surprisingly this running around, looking for a way to get back into the other part of Silent Hill is not just a nuisance, but somehow adds to the atmosphere of the scene. Although one has a new and concrete goal now, there is still the pain about the loss of Mary and the feelings of guilt because one was unable to safe her. In real life, this would probably hinder goal oriented action. So, the retardation produced by the player who searches for a way back adds a feeling of confusion and aimlessness to the scene, making it appear more authentic, more desperate.

why are the letter and wrench on a porch? It seems like the director is directing James to the museum. Is he a psychiatrist, whose voice reaches James in his nightmarish hypnosis, leading him to the source of his trauma? Whatever it is, the next destination is the praying woman in the park where one finds the key that unlocks the door to the historical society museum. The historical society, like the Apartment Buildings and the Brookhaven Hospital, presents a new chapter or level in the game, and opening its door is an act seething with expectations about the new adventures one is about to experience very soon. It also has been announced as an important step towards the solution of the mystery, thus bringing the background interest of the embedded narrative into the foreground again, giving the player an additional reason to stay put.

Apart from preventing closure and creating flow by staggering goals and sub-goals, this episode shows how *SH2* alternately stimulates the player's phasic and tonic interest in the game, by relating the enactive sequences strongly to the narrative sequences and vice versa. That the things one has to do are meaningful in terms of the background narrative makes the game more fun. According to Spoors – and I share his opinion – the staggering of narrative and game reinforcements might be more potent in prolonging play than the staggering of different game activities alone (Spoors 2005, p.84).

The reinforcement of the narrative through enactive sequences is an essential characteristic of *SH2*. There is another interesting episode that beautifully illustrates that *SH2*'s riddles and tasks are not (or at least not always) arbitrary, serving the mere purpose of occupational therapy for the player, but can be cognitively very satisfying if one makes the effort of thinking about them in terms of their narrative meaning:

James has begun his descent into the abyss and is confronted once more with Eddie. Eddie admits that he has murdered someone, but takes it back again. When he has left the room, James finds an object that is called "Tablet of the Gluttenous Pig". A little later, in the shower room of the subterranean prison into which the abyss led, James finds another Tablet, the "Tablet of the Seductress". "The Tablet of the Oppressor" is found in a prison cell. Of course the peculiar denominations of the tablets make one wonder what they might stand for and in fact, this is not so hard to guess. The gluttenous pig represents Eddie, who is a bit on the heavy side and has been shown earlier eating pizza and being called a gutless fatso by Laura. The seductress stands for Angela who has probably been raped by her father. Since it seems to be common knowledge that rape victims often have the urge to cleanse themselves, her tablet is located in the shower room. As there is only one male person left, the oppressor must be James. The strange analogy between James and the Pyramid Head mentioned earlier strengthens this hypothesis.

When the three tablets have been collected, one can enter a courtyard (yes, there is a courtyard, although James has already jumped down many holes and should be deep

underground, but spatial logic does not apply anymore). In the middle of the courtyard there is a scaffold. The three tablets now must be inserted into slots at the base of the scaffold. When this is done, a scream is heard. The symbolic execution of the three murderers (yes, Angela too. She has probably killed her father to set an end to the abuse) obviously was successful.

This is one of my favorite riddles because it works on so many levels. First of all, one must comprehend that the three tablets serve as sort of a key. Then the corresponding lock has to be found. If this is done correctly, the reward is a horseshoe one receives at reentering the underground prison and which is the first step to solve the next lock and key riddle (with the horseshoe, a lighter and a wax doll, one has to build a handle for a trap door!). But apart from that, the tablet riddle potentially provides the attentive player with the huge satisfaction of not only having performed all the necessary tasks to proceed in the fictional world, but also of having understood the underlying narrative meaning. Maybe complex riddles like that are not always appreciated in every aspect when one plays the game for the first time, but they keep the player guessing – what does it mean? What do the tablets stand for? Why a scaffold? And who is screaming? – and this relates the phasic interest, which is evoked by the moment to moment game-play, to the tonic interest in the background narrative. This has assumingly a positive effect on player interest because narrative and game-play do not interrupt, but reinforce each other.

In *SH2* the interplay between embedded narrative and game-play also becomes apparent in sequences where the narrative symbolic code is decided within the enactive sequence (see also Spoors 2005). The Pyramid Head for example is first introduced in a video sequence. The appearance of the monster and its behavior (it seems to be bullet-proof) suggests that it is not a trivial opponent, but one only knows for sure when one actually gets to fight Pyramid Head. As a general rule one could say that impression formation in a game, be it about a character or an object, always depends on two factors: the representation on the level of interface (including controller vibration) and the way it "behaves" in game-play. A player might choose a particular weapon because it looks extremely powerful, but has to find out during a fight that its appearance was deceiving. Building hypothesis about the behavior of an object or character in the enactive sequences heightens engagement in the game. Finding out if an enemy is really as strong as he / she looks or a weapon is as powerful as one hopes is part of the fun. Acquiring useful items and getting power-ups is an important game-play reinforcement, but discovering the functions and (hidden) qualities of objects or e.g. the weaknesses of seemingly overpowering opponents is also highly satisfying and presents an additional reward.

The strong coupling of the embedded narrative with enactive sequences in *SH2* constitutes a smooth shifting between the level of fiction and the level of the game system. This prevents the dys-regulation of player interest through retardations.

Conclusion

Silent Hill-Restless Dreams is a rare example of an emotionally rich, multi-layered and highly symbolical video game. In this case study I have attempted an in-depth analyis of its emotional design by exploring what human source concerns the game addresses, how it creates verisimilitude and how it regulates player interest. Each of these aspects has been investigated on the level of fiction, the level of the interface and the level of game system. However, I do not think this case study to be encompassing, since I did not explore identification processes and the question of player empathy, which also play a crucial role for player involvement. It has further never been my intention to deduce design strategies for educational games from this case study. It seems obvious, however, that a systematic understanding of the involvement and meaning-making mechanisms of games in general is crucial when it comes to creating games for learning. The analysis of *SH2* served the sole purpose of helping me understand why this game intrigued me so. Hopefully it provides some useful insights for others as well, may they be other puzzled *SH2* players, designers or game scholars.

References

Barthes, Roland (1987): *S/Z.* Frankfurt am Main: Suhrkamp Verlag.

Csikszentmihalyi, Mihaly (1990). *Flow: The Psychology of Optimal Experience*. New York: Harper and Rowö

Juul, J. (2005): *half-real. Video Games between Real Rules and Fictional Worlds.* Cambridge MA: The MIT Press.

Rusch, Doris C.: Emotional Design of Computer Games and Fiction Films. In: Jahn-Sudmann, A. / Stockmann, R. (eds.): *Games Without Frontiers - War Without Tears. Computer Games as a Sociocultural Phenomenon.* Palgrave Macmillan (forthcoming).

Spoors, Glenn R. (2005): *Meaning and Emotion in Squaresoft's* Final Fantasy X*. Reo_theorising „Realism" and „Identification" in Video Games.* (Dissertation Thesis) Edith Cowan University. URL (consulted May 2005) http://www.upnaway.com.au/~waldemar/index.htm

Tan, Ed S. (1996): *Emotion and the Structure of Narrative Film. Film as an Emotion Machine.* Mahwah, NJ: Lawrence Erlbaum Associates.