

Sign of a Threat: The Effects of Warning Systems in Survival Horror Games

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ABSTRACT

This paper studies the way survival horror games are designed to frighten and scare the gamer. Comparing video games and movies, the experiential state of the gamer and that of the spectator, as well as the shock of surprise and tension suspense, it focuses on the effects of forewarning on the emotional responses to survival horror games.

Keywords

video games, survival horror, fear, surprise, suspense, game design, gameplay.

There is no terror in the bang, only in the anticipation of it. (Alfred Hitchcock)

1. INTRODUCTION

David Bordwell, one of the most important figures in promoting a cognitive approach to cinema, once wrote that filmmakers were “practical cognitive psychologists” because they take advantage of the ways spectators draw upon everyday thinking while viewing a film (for instance, going beyond the information given by categorizing, drawing on prior knowledge about real-life or films, forgetting some elements in order to remember others, making informal, provisional inferences, and hypothesizing what is likely to happen next) [3]. Such assertions can obviously be made about game designers, too. In comparison with the spectator, it is even more plausible that a gamer may choose to play a video game in alternative ways (freely setting his own goals, testing the limits of the game, playing *with the game* instead of playing *the game*) or that a game might be used to other ends (to help overcome phobias, for instance¹). Regardless of how the game is used, game designers know how to elicit the sort of activities and emotional responses that will create the

experience they want the gamer to have. When it comes to survival horror games — the subject of this paper — designers know exactly how the gamer shapes his journey to hell.

This paper, therefore, studies the way survival horror games are designed to frighten and scare the gamer. They do so by **relying on horror mythology and conventions of horror movies**. According to Ed S. Tan, they create both fiction emotions (emotions rooted in the fictional world and the concerns addressed by that world) and artefact emotions (which arise from concerns related to the artefact/artifact, as well as stimulus characteristics based on those concerns) [26]. But above all, their design is made to elicit gameplay emotions. That is to say fear, fright or dread that arise from the gamer's actions in the game-world and the consequent reactions of this world. Gameplay emotions come from various actions: exploring, being lost, fighting, being attacked, feeling trapped, dying, using various weapons, being challenged, solving problems, etc. In an overall analysis of the *Silent Hill* series (Konami/Konami, 1999-2003²) [21] in which I examined these gameplay emotions, **I talked about one of the famous features of the series: the avatar's pocket radio that transmits white noise to warn the gamer that one or many monsters are nearby. I referred to the notion of forewarning, but did not develop this subject**. While my observations will stem and borrow from my visits to the town of Silent Hill, I wish to broaden the examination of warning systems by broaching a few other PlayStation games: *Resident Evil* (Capcom/Capcom, 1996), *Resident Evil 2* (Capcom/Capcom, 1998), *Fear Effect* (Kronos Digital Entertainment/Eidos Interactive, 2000) and *Fatal Frame* (Tecmo/Tecmo, 2002).³ What then are the effects of warnings? I do not mean visual and audio devices informing us of the avatar's health or remaining ammunition (although these warnings are part of a whole), but rather those signals of on-coming monsters off-screen? What are the emotional responses these signs of a threat induce? To answer these questions, I'll be relying in part on empirical psychological research. Psychological approach, results and discussion are indeed very relevant to this study.

2. SHOCK AND TENSION

Generally speaking, survival horror games follow the same formula, and gamers know what gaming experience to expect.

¹ The Cyberpsychology Laboratory Of The University Of Quebec In Outaouais (<<http://www.uqo.ca/cyberpsy/>>) is using *Half-Life* (Valve Software/Sierra Entertainment, 1998), *Unreal Tournament* (Epic MegaGames/ GT Interactive, 1999) and *Max Payne* (Remedy Entertainment Ltd/Gathering, 2001) to treat spiders and heights phobia.

² *Silent Hill 4: The Room* is to be released in September 2004.

³ This list is far from exhaustive. Consequently, my argument remains inductive.

At the plot level, the hero/heroine investigates a hostile environment where he/she will be trapped (a building or a town) in order either to uncover the causes of strange and horrible events (*Alone in the Dark*, *Resident Evil*, *Siren*) or to find and rescue a loved one from an evil force, be it a daughter (*Silent Hill*, *Fear Effect*), a mother (*Clock Tower 3*), a wife (*Silent Hill 2*) or a brother (*Resident Evil 2*, *Fatal Frame*). At the action level, in a third-person perspective⁴, the gamer has to find clues, gather objects (you cannot do without keys) and solve puzzles. In order to survive with the weapons he has (or will come across), the gamer has to face numerous impure, disgusting, creepy and threatening monsters (zombies, demons, mutated beasts, abnormal creatures, spirits, vampires, etc.). The conflict between the avatar and those monsters is the dominant element of horror.

Since the release of *Silent Hill*, one way of differentiating these games has been to distinguish the more gruesome action-based and quick thrill jump scares of *Resident Evil* from the chilling atmosphere and psychological approach of the Konami series. In fact, this comparison mirrors the acknowledged opposition between horror and terror. As Will H. Rockett puts forward, horror is compared to an almost physical loathing and its cause is always external, perceptible, comprehensible, measurable, and apparently material. Terror, as for it, is rather identified with the more imaginative and subtle anticipatory dread. It relies more on the unease of the unseen. "The most common time of terror... is night, a great absence of light and therefore a great time of uncertainty" [22: p. 100]. Without daylight, certainty and clear vision, there is no safe moment. Terror expands on a longer duration than horror does. By plunging its gamer alone in the dark or in mist and giving him only a flashlight to light his way (and so forcing him to play alongside the imperfectly seen), *Silent Hill* and *Fatal Frame* succeed at creating the fundamentals of terror. Though the young girl Miku, the gamer's avatar in *Fatal Frame*, suddenly finds herself face-to-face with a spirit or Jill in *Resident Evil* frequently meets up with zombies, these encounters are not the same when the hero can't clearly see their enemies or their surrounding environment. With the presence of monsters and their unavoidable onslaught, these kinds of games would be more aptly called survival *terror* games. But as long as the contrast between horror and terror relies in great part on the building and, above all, on the sustaining of a feeling of dread, another suitable way for this study to view this contrast is to refer to the another famous distinction.

Crawling with monsters, survival horror games make wonderful use of surprise, attack, appearances and any other disturbing action that happens without warning. According to Robert Baird's analysis in "The Startle Effect. Implications for Spectator Cognition and Media Theory", the games have the core elements of the (film) threat scene's startle effect at their disposal: "(1) a character presence, (2) an implied offscreen threat, and (3) a disturbing intrusion [often accentuated by a sound burst] into the character's immediate space. This is the essential formula (character, implied threat, intrusion) one

⁴ There are also first-person horror games, but they are indeed called such. For instance, *Nosferatu. The Wrath of Malachi* (Idol Fx/iGames Publishing, 2003) is presented as a "first-person shooter survival horror", and *Clive Barker's Undying* (EALA/EA Games, 2001) has been categorized among others as a "survivaque horror".

finds repeated hundreds and thousands of times since Lewton's first bus effect" [1: p. 15]. In the aforementioned famous scene of Jacques Tourneur's *Cat People* that Val Lewton produced in 1942, the spectator is lead to believe that the female character is followed by something from the left, only to be caught off guard by a bus barreling in from screen right. As hostile as the environment might be, it is very unlikely that the gamer (who has embarked upon a lengthy exploration) will not be taken off guard and be surprised. Improving the surprise effect of the long fanged monsters breaks through the cellar and the first bedroom window in *Alone in the Dark* (I-Motion Inc. & Infogrames/Interplay, 1992), the dogs that burst through windows when you cross a corridor at the beginning of *Resident Evil* is considered a classic game startle effect (Figure 1). There is more than one bursting window effect in the *Resident Evil* series. Zombies or creatures can always burst out of window whether it is barricaded or not. In *Fatal Frame*, it is above all the sudden appearances and disappearances of spirits that give you a start. The *Silent Hill* series has few monsters that launch underhand attacks. In the first game, there is also a great scene in the elementary school that gives you a good scare: A cat springs out of a box at the very moment Harry, the gamer's avatar, is about to open it. The game-world of *Silent Hill* is haunted by sudden noises here and there that have no visible or identifiable source.



Figure 1: A dog bursting through the right window in *Resident Evil* (Capcom/Capcom, 1996).

To trigger sudden events is undoubtedly one of the basic techniques used to scare someone. However, because the effect is considered easy to achieve, it is often labeled as a cheap approach and compared with another more valued one: suspense. As in the well-known example of Alfred Hitchcock, a bomb that suddenly explodes under the table where two people are having an innocent conversation will surprise the spectator for only few seconds at the very moment of the explosion. However, if this spectator is made aware that the bomb is going to explode at any minute, he will participate in the scene and feel suspense for the whole time preceding the explosion. "The conclusion is", Hitchcock says, "that whenever possible the public must be informed" [27: p. 73]. The shock of surprise is consequently taken over by the tension of suspense.

As Noël Carroll asserts in *The Philosophy of Horror or Paradoxes of the Heart*, suspense is not unique to horror, but

rather is a key narrative element in most horror stories [7: p. 128]. In Carroll's curiosity theory⁵, although the emotions of horror and suspense might be different (the object of horror is an entity – the monster – and that of suspense is a situation), they can coexist and bring about a concerted effect, especially when it comes to one of the most characteristic themes of horror narration: discovery [7: p. 144]. Discovery is also the theme of a large number of survival horror games. In a "drama of corridors" (one of Carroll's expressions that applies quite well to the maze structure of these games and many others⁶), the gamer has to find the virus or the supernatural force responsible for the rise of the monsters. And he can expect to fight a last boss monster at the end. Although suspense can be created in the overarching structure of the plot, it can also be generated during short events or incidents. To borrow, yet again, from Carroll's terminology [8], suspense can arise in regard to the plot's few macro-questions (e.g., will the hero/heroine find the loved one?) or the more numerous micro-questions that connect one fictional event to another. As the tension intensifies when we have to answer these micro-questions (e.g., will the bomb explode under the table while the two people are still talking?), and because it touches the action level of video games, I'm interested in suspense at the episodic level. But still, as Greg M. Smith does regarding film, we have to argue that the primary emotive effect of games is to create a mood, i.e. "a preparatory state in which one is seeking an opportunity to express a particular emotion or emotion set" [23: p. 38]. A fearful mood therefore encourages and prepares you to experience fright, and a good dose of panic bolsters the mood in return. Just as gamers do not like boring games, neither would they appreciate being panic-stricken all the time. It's all about maintaining a good balance.

Suspense becomes significant to the study of the cross-media genre of horror when one looks at its fundamental elements. For Dolf Zillmann, "suspense is conceptualized as the experience of uncertainty regarding the outcome of a potentially hostile confrontation" [30: p. 283]. Three psychologists quoted in Carroll's "Paradox of suspense" give this definition: "We view suspense as involving a Hope emotion and a Fear Emotion coupled with the cognitive state of uncertainty" [6: p. 78]. The notion of uncertainty is, without a doubt, at the core of suspense. When a danger or threat is revealed and you are sure of the situation's outcome, there is no suspense. The more the chances of succeeding are slim, the more the presentation is suspenseful. Suspense is a future-oriented emotion, but also a character-oriented one. Doubt and insecurity are bound to one or a few protagonists. You're made to adopt the protagonist's position to follow the event and to live side by side with him the length of the action. But, studies of suspense have revealed that a character does not only have to be in a distressing situation, he also needs to be liked. Comisky and Bryant's experiment of varying levels of perceived outcome-uncertainty and disposition toward the protagonist confirm that audiences get involved with and become more anxious about a hero with whom they have a

strong affinity [9: p. 78]. Bonded with the character that represents him in the game-world, the gamer is visibly driven to have this disposition toward his avatar. Being fond of the protagonist causes more hope for a favored outcome and more fear about the possibility that it might not occur. As a matter of fact, fear emotions are also central to the understanding of suspenseful drama. Again according to Zillmann, suspense in drama is created predominantly through the suggestion of deplorable and dreadful outcomes. "It features people about to be jumped and stabbed, about to walk into an ambush and get shot and about to be bitten by snakes, tarantulas, and mad dogs. The common denominator in all of this is the likely *suffering* of the protagonists. It is impending disaster, manifest in anticipated agony, pain, injury, and death. Suspenseful drama, then, appears to thrive on uneasiness and distress about anticipated negative outcomes. In short, it thrives on fear" [31: p. 136]. This emotional response only evolves during the anticipation of the final result, a rather limited result. Micro-questions raised by expected dangerous and harmful events have, as Carroll remarks [6], only two potential and opposite outcomes. In most cases of survival horror games, the avatar survives the attack, runs away from or kills the monster or he does not.

3. TO BE WARNED

To put the gamer in the wanted emotional state, game designers draw upon the relation between emotion, cognition, and perception. As cognition arouses emotion on the one hand, emotion organizes perception on the other hand. Following Carroll's analogy, emotions can be seen as searchlights. "They direct attention, enabling us to organize the details before us into signification wholes or *gestalts*. Where the emotional state is one of fear, we scan it for details highlighted as dangerous..." [5: p. 28]. This is much the same as the preparatory state of a mood described by Smith: "A fearful mood puts us on emotional alert, and we patrol our environment searching for frightening objects. Fear makes us notice dark shadows, mysterious noises and sudden movements and thus provides more possibly frightening cues" [24: p. 114]. Undeniably, there isn't a better frightening cue than the sign of a threat by a monster.

In psychology, the concept of threat is associated with the one of "anticipatory fear" and psychological stress [17]. Incidentally, much empirical research has studied the effect of anticipation and the emotional impact of prior information. For instance, relevant to the distinction between shock and tension is an experiment by Nomikos et al. that shows two versions of a film portraying wood-mill accidents. The first without warning and the other one with warning (as shots depicting the victim's finger approaching the whirling blade of a milling machine), demonstrate that: "(a) Long anticipation of a harmful confrontation (suspense) is more disturbing than short anticipation (surprise); and (b) most of the stress reaction occurs during the anticipation or threat period, rather than during the actual confrontation when the subject views the accident itself" [20: p. 207]. In general, studies reiterate these conclusions. Such is the case in the article by de Weid et al. entitled "Forewarning of Graphic Portrayal of Violence and the Experience of Suspenseful Drama" [10], and in Hoffner and Cantor's article, "Forewarning of a Threat and Prior Knowledge of Outcome" [15]. Though I could expose the details of these experiments, I would rather discuss an earlier experiment

⁵ Mark Vorobej calls Carroll's solution to the paradox of horror a "curiosity theory" because for Carroll horror appeals to cognitive pleasures associated with the discovery of monsters, the objects of fascination [29].

⁶ Furthermore, as I pointed out [21], the play of ratiocination that Carroll associates with horror fiction becomes literal in horror games.

conducted by Cantor, Ziemke and Sparks concerning the “Effect of Forewarning on Emotional Responses to a Horror Film” [4] which is at the root of my remark. Cantor, Ziemke and Sparks show that if, intuitively, prior knowledge about an upcoming frightening event would seem to reduce its emotional impact by decreasing uncertainty about what will happen, it is not what actually happens. In fact, on the contrary, the notion “forewarned is forearmed” does not lead as much to “emotional defenses” or effective coping strategy as to a build up of lasting arousal prior the event [4: p. 22-23]. Using heart rate as the measure of physiological arousal (a method they call into question however) and varying the conditions of the forewarning of forthcoming events in four scenes of the “made-for-television” movie *Vampire* (one version with no forewarning, a second with a vague warning and third one with explicit forewarning), the researchers asked their subjects to rate their anxiety, fright and upset⁷. The following observation resulted from the answers they collected: “[f]orewarning of upcoming events did the opposite of ‘forearming’ subjects against emotional reactions. Subjects who were given prior knowledge of upcoming frightening events reported more intense fright and upset in response to the movie than did those who had no forewarning. It is interesting to note that reports of fright and upset were intensified by forewarning, but reports of anxiety were not. As will be recalled, fright and upset were expected to reflect responses to specific depicted or anticipated events, whereas anxiety was presumed to denote an uneasiness over uncertain outcomes. Given that forewarning should have decreased rather than increased uncertainty, it does not seem surprising that anxiety ratings were not increased by forewarning” [4: p. 30]. The results also show that forewarning did affect only the two scenes related to disturbing and brutal events. In the final analysis, simple forewarning is not a way of preventing intense emotional upset. It is worse than having no information about an upcoming event. We can understand why designers of horror games take advantage of this technique.

As opposed to the conditions of an experiment, the use of forewarning in an ongoing experience of survival horror game is governed by specificity. Because the gamer controls an avatar, the game narratives tell only what this main protagonist knows (i.e. the narration is restricted in a way that is characteristic of investigation stories). Even when there are different playable characters such as the three mercenaries in *Fear Effect* or even the ten in *Siren* (Sony/Sony, 2004), playing alternatively does not really change what you have to do in each segment. If it did, it might be just finding another playable character as in *Resident Evil 2*. Anticipatory fear is therefore elicited during specific sequences. What’s more, because of the antagonism of harmful monsters and the game’s confined spaces (usually rooms and corridors), threat is always impending. This is even more the case in the immediate off-screen than in far away places. In fact, the duration of the suspenseful anticipation has to be kept in perspective, though it can sometimes be quite long and it always depends on the

(re)action of the gamer (we’ll come back to this question later on). Anticipation is not to be counted in minutes, as in Hitchcock’s example, or even in tenths of a second. The duration is equal to the short anticipation (4.33 and 6.67 seconds) of the aforementioned experiment carried out by Nomikos et al., rather than with long anticipation (18.75 and 25.75 seconds). Nevertheless, as a video game is defined by the here and now of a situation, the question is still to differentiate the effects of anticipation versus none at all (0 seconds). So as to warn its gamer, survival horror games have various warning systems built on physical cues and/or audio and visual cues either displayed on the screen, presented at an extradiegetic level, or integrated into the game-world. We’ll now look at these different types of warning systems in the previously mentioned and chosen games.

Fear Effect has a Fear Meter displayed in the upper left corner of the screen (Figure 2).

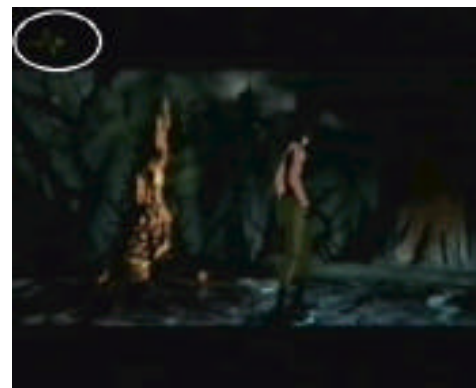


Figure 2: A Fear Meter appears in the upper left corner of the screen as Hana is about to face devils in *Fear Effect* (Kronos Digital Entertainment/Eidos Interactive, 2000).

The meter represents the heartbeat of Hana (and of the two other playable characters, Royce and Deke). You see and hear it increase as she becomes more afraid. Since there aren’t any health power-ups available in the game, you have to perform well in a stressful situation. The Fear Meter appears when you are about to face human guards or monsters. In the underground hell, the scene in Figure 2, the Fear Meter becomes visible in order to show the threat in a empty space clear just a second before. When Hana goes forward, she is attacked by red devils with hand scythes falling down from the sky. This happens more often then not when her enemies are nearby. The Fear Meter sometimes appears long before she encounters danger.

⁷ “Consistent with their common dictionary definitions, anxiety was assessed to reflect a non specific sense of uneasiness and uncertainty about what was occurring or was about to occur. Fright was thought to reflect a more direct response to specific threatening events. Upset was used to detect any negative experiential aspect of a subject’s response” [4: p. 26].



Figure 3: The Fear Meter remains visible for a while in the village of *Fear Effect* (Kronos Digital Entertainment/Eidos Interactive, 2000)

The Meter remains visible for about two minutes in a search scene in the village, for instance (Figure 3). Although Hana (armed with her pistol as we can see) has faced green zombie-like natives in the left branch, you yet still anticipates more action on the right branch.

Fatal Frame also has a visual device to warn. In third-person perspective (Figure 4) or through the viewfinder of Miku's camera (Figure 5), the screen displays a filament at the lower right corner in the former case and in the upper middle in the other.



Figure 4: At the lower right corner of the screen, the filament turns orange as Miku, in the middle of the frame, is about to enter a room in *Fatal Frame* (Tecmo/Tecmo, 2002).

Coupled with heartbeats, eerie sounds and the controller's vibration, the filament turns orange when spirits are nearby (and blue when you are near a clue). This device is more than essential in *Fatal Frame* as you face incorporeal entities that are otherwise translucent and as you are plunged into darkness with only a



Figure 5: Through the viewfinder, in the upper middle of the screen, the orange filament signals the presence of a spirit, here hanging from the ceiling in *Fatal Frame* (Tecmo/Tecmo, 2002).

flashlight to lit your way. As a typical warning system, the filament turns orange when spirits are in a room with you. But because of their nature, it also glows when the spirits are in another room. While most of the survival horror games segment their spaces making you cross doors through a straight cut or an opening loading screen, *Fatal Frame* frightens you by making you anticipate what you'll face when you open a door. As in Figure 4 where Miku stands in front of the door to the Rubble Room, a bad omen can make you delay your entrance because you're terrified. And when you go into a room with the filament turned on, the situation can be just as suspenseful given that the spirits need to be located. You might switch to the viewfinder of the camera (Miku's weapon against spirits), but you still have to look often for spirits when the filament indicates their location by fading in and out. You have to know that the spirits move and conceal themselves, and that some are attacking while others don't. The Crucified Man in Figure 5 was nowhere to be found in the Naruki Shrine, for instance. You had to look up to the ceiling to find him.

Just after the prologue at the beginning of *Silent Hill*, Harry gets away with a good start when, in a cut-scene identical to the bus scene of *Cat People*, a first window bursts in the background creating a distraction and allowing a flying reptile to burst from the foreground window. From this moment on, Harry is in possession of a great forewarning tool: a pocket radio transmitting white noise that warns the gamer that one or many monsters are nearby (Figure 6). There are no visual displays on the screen of *Silent Hill*. The gaming experience of the whole series is driven by the terrifying static that comes to break the silence. Furthermore, the variations of white noise give information about the monsters and how far away they are.⁸ During significant parts of *Silent Hill* and *Silent Hill 2* taking place outdoors in the mist, the duration of the

⁸ In the Official Strategy Guide of *Silent Hill 3* [2], there is an explanation of how frequency, pitch and volume affect the radio. A chart gives the range of the radio for each monster: 14 meters for Double Head dogs, 20 meters for an enormous monster called a Closer, 15 meters for a zombie-like nurse, etc.

anticipation is actually extended compared to the parts that take place indoors. In the streets, the static fades in when you advance towards an unseen monster and fades out when you change direction to hurry away. It fades in again along with the monster's own noises when you cannot avoid a confrontation. Frequently this can last more than half a minute. You're always kept on your toes. What's more, when the radio begins to transmit noise and you cannot see outside the light beam of your flashlight, fear seizes you rather intensely.



Figure 6: Harry is off to a good start before getting the red pocket radio at the beginning of *Silent Hill* (Konami/Konami, 1999).

Tanya Krzywinska notes that “[m]any video games deploy sound as a key sign of impending danger, designed to agitate a tingling sense in anticipation of the need to act” [16: p. 213]. In that sense, though there is no specific device in *Resident Evil*, the game warns you in the most classical way by using off-screen sounds (similar to what happens in the underground locations of *Silent Hill* where the radio doesn't work). The moaning of the zombies and the shuffling of their feet indicate that they are nearby in a room or corridor. In fact, most of the time they are waiting just outside the frame, lurking to jump on you. But sometimes, they are farther away. For instance, if you do not move, it takes more than 15 seconds for the first zombie to enter the frame in a scene on the second floor of the Police Station in *Resident Evil 2* (Figure 7), and 5 more seconds for two more zombies to come.



Figure 7: Leon has been waiting long seconds for this first-heard zombie to enter the frame on the right in *Resident Evil 2* (Capcom/Capcom, 1998)

Other examples of this waiting occur on the first floor when zombies moan in an office you'll have to enter, and later on in the Vacant Factory where Leon and Ada hear an approaching zombie for no less than 40 seconds. Be that as it may, the forewarning does not rely only on this technique. Now and then, the search of a room is accompanied by typical, suspenseful extradiegetic music. *Resident Evil* also makes use of a few cutaways. Interestingly, it shows the impending attack of a Hunter twice. The first with a cut to an 18-second, fast traveling shot when this monster initially appears, and the second with a cutaway in the underground courtyard path (Figure 8).



Figure 8: A cutaway to the impending attack of a Hunter in *Resident Evil* (Capcom/Capcom, 1996).

There is also a cut in *Resident Evil 2* to what happens to a reporter (an NPC) in his cell which portends a frightening encounter.

To different degrees, all of the above examples put you in the state of uncertainty. Consequently, and most importantly, compared to the last forewarning of Cantor, Ziemke and Sparks' experiment which precisely described what would happen in the vampire movie scene, the sequences of survival horror games also elicit uneasiness about how uncertain the outcome is. You know that you'll have to face a monster, but you do not know how it will turn out. Not only your fright, but your anxiety as well is therefore intensified. Furthermore, as Torben Grodal stresses about video games, “suspense is interwoven with the interactive and repetitive nature of the game” [14: p. 206]. While aggressions, battles, mutilations and deaths remain final and unchangeable facts in a movie, in a game they are not. Events can be different or, at least, can be triggered in a different order. If you have killed the zombie-like native that was lying on the ground during a first exploration of the right branch of the village of *Fear Effect* (following Figure 3), it will not rise from under the frame the next time you go by. But if you come only once into the right branch, the lying zombie-like native will rise unexpectedly. The opposite is also true: “What was surprising in the first game is transformed into a suspense-like coping anticipation in the following games. When the player advances toward the space/time in which the surprising event previously has occurred, say the sudden appearance of a fierce antagonist, it will induce an increased arousal” [14: p. 205-206]. Having to replay a game from the last save point in order to go back and

face a boss monster that you have not yet defeated is a great forewarning situation. Replaying a game at the most difficult level, instead of at the normal one, also has the same consequences.

4. I'M SCARED

The connections of the aforementioned key elements of suspense and forewarning with horror seem obvious and definitely help to understand the gaming experience of survival horror games. However, it is necessary to highlight an important distinction between games and dramas or films which was an underlying principle in the preceding two parts of this paper. Though they are not addressing video games directly, Vorderer and Knobloch summarize the matter nonetheless: "According to the [Zillmann] disposition theory, a necessary condition for suspense is that the viewer witnesses the conflicting forces (...) without being able to intervene in the goings-on. If viewers could influence the plot, for example, the fate of the characters, their experiential state would change into actual fear or hope" [28: p. 64].

The spectator of a horror film and the gamer of a horror game are akin in the way that both are always aware that they themselves are not the victim of the monster's assault and that it is someone else doing the *suffering*. But while, ideally, their emotional responses run parallel to those of the characters, their way of feeling fear is different. In a horror movie, Carroll observes [7: p. 17], the emotional responses of the characters cue those of the audience. Both responses are synchronized. The characters exemplify for the spectator the way in which to react to the monsters by the reports of their internal reactions. In that sense, "one of the most frequent and compelling images in the horror film repertoire is that of the wide, staring eyes of some victim, expressing stark terror or disbelief and attesting to an ultimate threat to the human proposition" [quoted in Carroll, 7: p. 243 n. 45]. The spectator is consequently prompted to respond the same way. Often shown in close shots and in shot/reverse shot where both the point of view of the victim and that of the monster are shown, it is the spectator that is forced to witness these bloody confrontations. Furthermore, referring to Zillmann's necessary condition of suspense, the spectator has what Tan and Frijda call witness emotions [25: p. 52]. These emotions are related to Tan's fiction emotions mentioned in the introduction [26]. The spectator sojourns, in the imagination, in a fictional world where he can feel *as if* he were physically present, a world where he runs absolutely no risk. The emotional experience is based on a safe involvement. But since the significance of the fictional character's situation is relevant to his emotional response, the spectator has empathetic emotions. Feeling *with* the protagonist, he experiences empathic distress in seeing, for example, a babysitter terrorized by the idea that a monster is stalking around the house. But whatever happens, the spectator is forced to have an observational attitude. He is controlled by the filmmaker who guides him around as he pleases through the time and space of the fictional world. The spectator cannot participate in the situation. On the brink of finding the action too scary, he only can cover his eyes to defend himself against the horrible sights (though he still hears what's going on).

In a survival horror game, cut-scenes can depict a horrible scene in a filmic way. Since the plot is unfolding through

those cut-scenes, it elicits fiction emotions. However, at the action level, a game does not rest on the reports of characters' internal reactions. The third-person perspective always shows the avatar in a long shot, and generally, in a long take, too. What's more, to face the monsters, the avatar is often seen from the back. With the exception of *Fatal Frame*, which shows a close shot of Miku in a short cut-scene before the attack of some ghosts (similar to the *Resident Evil*'s short cut-scenes showing the upcoming attacks of the hunter), there is generally no prior or subsequent reaction shot of a face expressing stark terror and attesting to the threat. Again, *Fatal Frame* allows you to switch to a first-person perspective through the viewfinder of Miku's camera and, in *Clock Tower 3* (Capcom/Capcom, 2003), the camera switches to a first-person view when Alyssa hides from the monsters. But in those cases, the effect of the filmic subjective shot structure (which makes you feel *as if* you were in the situation of a character) is replaced by the sense of agency. Janet Murray has defined this characteristic delight of electronic environments in *Hamlet on the Holodeck. The Future of Narrative in Cyberspace*: "Agency is the satisfying power to take meaningful actions and see the results of our decisions and choices" [19: p. 126]. You indeed control your avatar in the game-world (and the subjective point of view when it is the case), a control that leads to a mutation in the way you experience the scene.

It is certainly not the avatar that is meant to be scared in a survival horror game, but rather the gamer, i.e. you. If we can still refer to empathy since you experience emotions *with* an avatar, it is clear here that we cannot talk about identification with the character or about *becoming* the character in the game-world.⁹ This is because the emotional state of that character is not identical to yours. When a monster bursts through the window, it makes you, not the avatar, jump.¹⁰ Upon the sign of threat, the avatar does not express apprehension. When the visual warning system is displayed on the screen or the audio cues are extradiegetic, these signs are not for the avatar's benefit. Although the various avatars make themselves heard during their fight, scream when assailed and audibly breathe their last breath, they remain impassive on the action level. Whatever situation is faced in *Silent Hill*, *Raccoon City* or elsewhere, the avatars keep a "stone face" while responding to your actions. Instead, their reactions are behavioral and external. You are linked and synchronized with them physically. You see their actions and are made to feel their suffering not only as you see them being attacked, but also as you receive feedback from the Dualshock controller as in *Silent Hill* and *Fatal Frame*. Now a typical function found in many games, the controller vibrates every time your avatar is touched or hit. It vibrates throughout a confrontation in the Himuro mansion and goes very fast when touched by a spirit. In *Silent Hill*, to indicate avatars' health status, it also shakes more and more violently as they absorb more damage, echoing the acceleration of their heartbeat. This tactile simulation

⁹ The notion of identification is not simple to deal with. Much has been written in film studies since its psychoanalytical description. It has been rejected, supplanted, revised and revived. To have a general view of the question, one can check the major literature about this notion.

¹⁰ Manifestly, it is indicative that a gamer would say: "I was scared", not "My avatar was scared" when talking about what happened in a game.

focuses on physical strength for the simple reason that it helps you keep them alive. And that's another departure for video games. In movies, Carroll says, "the fear that the audience emotes with regard to the monster is not fear for its own survival. Our fear is engendered in behalf of the human characters in the pertinent films. We cringe when the Werewolf of London stalks his prey, not because we fear that he'll trap us, but because we fear for some character in the film" [5: p. 38]. Again, you do not fear for your own survival in a horror game either. However, in the game-world, since you merge with your avatar at the action level, and since your main goal is precisely to make him/her survive the threatening monsters, you're indeed made to be afraid that the monsters will trap you, in other words to fear *as if* you were in danger. This time, when the action becomes really scary, you can't simply cover your eyes. Holding your controller, your extradiegetic activity must be to try to overcome the diegetic situation of your avatar.

Fear — as the most commonly referred to emotion in philosophy and psychology, characteristic of an emotion prototype like Greg M. Smith remarks [24: p. 269 n. 4] — helps to distinguish the emotions generated by gameplay from fiction/witness emotions. For psychologist Nico Frijda, whose work has inspired Tan [26] and Grodal [14], emotions can be defined as "modes of relational action readiness, either in the form of tendencies to establish, maintain, or disrupt a relationship with the environment or in the form of mode of relational readiness as such" [12: p. 71]. Emotions are action tendencies. Given that fear is clearly object- and goal-oriented, it provides, as Smith notices once again, a strong action tendency. In the presence of a monster, fear urges you to act in one way or in another to disrupt the relationship. In a horror movie, when the hero/heroine is in danger, you cannot do anything but hope he/she will overcome the threat. Your action tendency is virtual. On the other hand, in survival horror games, you can do something. You can make your avatar act. You actually (even if it is related to a *virtual* game-world) have a repertoire of controls: draw and choose weapons, shoot, attack, guard attack, charge in, turn 180°, run away, use items to replenish life gauge, etc. Those actions give you gameplay emotions, emotions related to the ways you react to the situation. "Video games therefore", asserts Grodal, "simulate emotions in a form that is closer to typical real life experiences than film: emotions are motivators for actions and are labeled according to the player's active coping potentials" [14: p. 201].

5. I HAVE TO COPE

In following with the preceding comments, we have to agree with Grodal who has emphasized [13, 14] that the notion of coping is fundamental to the experience of video games. According to Susan Folkman and Richard S. Lazarus' definition, "coping consists of cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person. These cognitive and behavioral efforts are constantly changing as a function of the appraisals and reappraisals of the person-environment relationship, which is also changing" [11: p. 323]. The appraisals-reappraisals are very significant to determine the emotional effects of forewarning in survival horror games. Anticipatory fear is less important when oncoming monsters are directed by corridors or walks like the

outdoors marked paths in *Fear Effect*, but it is greater when the monsters are free to move in the streets of *Silent Hill*. This fear is amplified when you can't clearly see around, specially when you find yourself in the scary places in the vein of the nightmarish world of *Silent Hill* where streets or floors are replaced by rusty grates over bottomless abysses, where walls and floors are splattered with blood and where you hear all kinds of industrial and creepy sounds. Then, we also have to take the way game designers can be playing with you into account. They are intentionally putting you in a state of terror. An example of this happened at one point during my experiential route of fear in *Silent Hill 2*. I was of two minds as to how to get out of the laundry room on the third floor of the Wood Side Apartments in the beginning of the game (Figure 9). The radio was transmitting white noise, but I could also hear footsteps of some sorts and what seemed to be the growling and shrieking of a huge monster. I was too scared to move. When I finally came out, I was very tense and anticipated an encounter with what turned out to be no more than a normal lone Patient Demon. The appraisal of the situation might have been different with a weapon other than just a wooden plank. I would have certainly felt more secure with a gun in my hand. But then, in *Resident Evil*, it is not a handgun, but a bazooka that you need in order to be at ease in front of a Hunter, a monster much faster and powerful than the zombies.

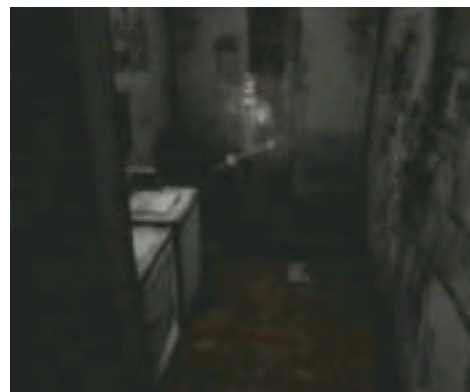


Figure 9: Too scared to get out of the laundry room of the Wood Side Apartments in *Silent Hill 2* (Konami/Konami, 2001).

To explain the relation between coping and emotion, Folkman and Lazarus distinguish two general and interrelated coping processes. The first strategies, called emotion-focused coping, are employed to regulate the situation causing distress. As Folkman and Lazarus talk among others about avoidant and vigilant strategies, another way to understand this is to refer to the degree to which individuals will either monitor (seeking information) or blunt (avoiding information) under threat [18]. Dispositional differences show that monitors (Miller is talking about high monitors/low blunners) scan for threat-relevant information and prefer to attend to information signaling the nature and onset of the shock as well as information about their performance when carrying out a task. Contrarily, blunners (i.e. high blunners/low monitors) tend to avoid informational cues and distract themselves from threat-relevant signals. Using this distinction to study the interaction between forewarning and preferred coping style in relation to emotion reactions to a suspenseful movie, Glen G.

Sparks discusses his findings: "Instead of an increase in negative emotion for all participants due to forewarning, the data indicate that forewarning may operate differently for individuals with different preferred coping styles. Monitors may actually prefer forewarning in order to cope with a scary movie, while blunters may prefer no prior information" [11: p. 337]. Although this experiment and the previously mentioned ones deal with the effects of forewarning outside the time flow of a film viewing and don't set forth to explain the appeal of such suspenseful movies and horror movies (see studies of sensation seeking for more on this issue), the results still indicate that monitors have more intense emotional reactions when they are forewarned, while blunters do not. Monitors would probably prefer the warning system of a game like *Fatal Frame* which gives audiovisual cues as well as making the controller vibrate when a spirit appears. In fact, I refer to this distinction in order to explain why a few web reviewers have suggested turning off the radio in *Silent Hill* because it detracts from the surprise-factor of *Resident Evil*. The copying preference seems to be one explanation. At least, this demonstrates that, according to the type of gamer you are, the effects of a warning system will be different.

If the preceding remark proves to be questionable because emotion-coping strategies are, above all, used to deal with stressful events the outcomes of which are considered to be unchangeable, the second type of coping process stressed by Folkman and Lazarus is undoubtable. Called problem-focused coping, those coping strategies are directed at altering the situation that causes distress. They are used this time for outcomes that are amenable to change. Thus, in Grodal's terms, you have active personal coping potentials in video games. And you will undoubtedly make use of them. Among the available types of control, you especially have behavioral control. With the Dualshock controller, you can change the actual terms of the person-environment relationship. A forewarning is an emotional cue, but also a cognitive cue for problem solving. Let's quickly distinguish two forms of such coping. In survival horror games, a confrontational coping strategy that makes an individual fight back somewhat aggressively when facing a difficulty comes down to killing the monster. When you know that there is a monster nearby, you go to destroy it. This is how fearless gamers are likely to handle threats. In the other way, you can manage the situation in a more rational and planned manner. You appraise more consciously the magnitude of the threat before you face it. You then decide if it's better to attack or to avoid and escape the monster. A timorous gamer can be expected to react in this way. In any case, the coping process can change through out a game. As Folkman and Lazarus point out: "[d]uring the anticipatory phase of the encounter, cognitive coping strategies can transform a threat appraisal into a challenge through their affect on secondary appraisal [during which you ask yourself what are your options for coping]" [11: p. 321]. One will agree that it is less stressful and much more fun to face a monster (and even more so a boss monster!) when you have the appropriate weapon, plenty of ammunition and first aid kits to recover from damage. It is also reassuring to know that you have mastered all the controls of a game and that you can move freely and (most importantly) quickly in the game-world. With all adequate coping resources, you can interpret the sign of a threat differently.

6. CONCLUSION

Because forewarning intensifies emotional reactions about upcoming frightening events and increases anxiety when there is still uncertainty about the outcome of those events, this paper should have ultimately prepared you to play your next survival horror game. Now it's up to you to play and cope with your next ludic journey to hell.

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