

From Agasa Cristie to Group Image Play - Analysis of Horror Survival Game Panic Room: Escaping from the Den on Emotional Elements Development

Doo Heon Song¹, Hae Kyung Rhee², Ji-eun Kim³, Jong Hee Lee⁴

^{1,2,3}Department of Computer Games, Yong-In SongDam College, Yong-in 17145, Korea

⁴Department of Computer Engineering, Silla University, Busan 617-736, Korea

Article Info

Article history:

Received Nov 20, 2017

Revised Feb 2, 2018

Accepted Feb 16, 2018

Keyword:

Fear elements

Game contents analysis

Gaming elements

Group image play

Horror survival game

ABSTRACT

A maniac computer game genre called 'Survival Horror Games' is aimed for making gamers feel cathartic feeling when they escaped from the designed horror successfully. The degree of gaming quality, however, is not easy to measure. In this paper, we apply Caillois' game playing categories and other standards to measure how a game induces the feeling of fear and other emotional experience to players. Once dominated horror survival game series called Panic Room: Escaping from the Den was chosen to analyze and evaluate with those standards as well as its narratives and subsystems. Especially the 2nd version was most welcomed to users among 4 versions thus we focused on the difference between the version 1 and the version 2 in terms of game playing and fear elements in the game content and story structure. In result, version 2 showed much more Agon and Mimicry and all other fear elements than version 1. The group image playing structure and conference/collection subsystem that were newly provided to version 2 were attributed to its success.

Copyright © 2018 Institute of Advanced Engineering and Science.
All rights reserved.

Corresponding Author:

Doo Heon Song,
Department of Computer Games,
Yong-In SongDam College,
571-1 Cheo-in Gu, Yong-in 17145, Korea.
Email :dsong@ysc.ac.kr

1. INTRODUCTION

The cathartic psychological effectiveness of feeling pleasures from the framed fear has been mentioned since Aristotle and it is reported that people feel ecstasy of escapism when they successfully escape from such framed horror situation [1]. While that has been the goal of many horror media contents like horror movie, computer games are particularly relevant as a multi-faceted medium where visuals, audio, narrative and rule- and level-design come together in an interactive experience to magnify those emotional stimuli [2]. Survival horror games are such maniac computer game genre that focuses on the survival of the character as the game tries to frighten players with either horror graphics or scary ambience.

Survival horror games, however, work against normative game grammar of mastery, seeking alternative palette of affect. Survival means scraping through, simply to face yet another dire situation, rather than providing any clear signification of dominance and moral distinctions are obscured [3]. Thus, unlike the role playing games that attract players with hero-like character identification, there will be minimal combat, vulnerability, and being victimized in this horror survival games. Players want to be scared and feel helplessness within a good narrative of the game and usually such structure gives people to feel a different experience than normal life. Thus, the quality or the completeness of a horror survival game may depend on how well the game designer induces such fearful feelings of players during the game and eventual catharsis at the end.

The effect of feeling fear within the game situation might be quantized by biofeedback signal investigations according to given stimuli (e.g. sound, scene, monster etc.) [4]. For example, attributes of motion and sound do exaggerate the uncanny phenomenon and how frightening that character is perceived to be. Strong correlations were identified for the perceived eeriness for a character with how human-like a character's voice sounded, how human-like facial expression appeared and the synchronization of the character's sound with lip movement; characters rated as the least synchronized were perceived to be the most frightening [5].

However, we can also analyze the game in terms of emotional elements inducing fear for players. According to [6], in this horror survival game genre, three similar but different emotions namely fear, anxiety, and suspense play an important role to make players in immersion where the player has one's full attention in the game and will start to forget time and space around him/her. Fear is a negative emotion related to the expectation of failure, contrary to sadness which occurs when we experience actual failure [7]. Anxiety is similar to fear in almost every way, except the nature of the stimuli. Fear is triggered by some identifiable and real threat. Anxiety can occur without any immediate threat, and is therefore often referred to be future orientated "expected" fear [8]. Suspense can be defined as: "a noxious affective reaction that characteristically derives from respondents' acute, fearful apprehension about deplorable events that threaten liked protagonists, this apprehension being mediated by high but not complete subjective certainty about the occurrence of the anticipated deplorable event" [9]. In order to achieve the greatest sense of fear and anxiety, the player should feel like a victim rather than a contender. This can be done by removing or greatly limiting the combat ability from the player, and/or unbalancing the change of defeating an enemy in direct confrontation [6].

While such emotional structure of continuation desire for horror games developed based on intensive focused group interviews and surveys [6] is helpful to understand the value of the horror survival games in general, it is still vague and abstract in analyzing the game contents of that genre in quality. In order to analyze a horror survival game to examine why that game is successful / unsuccessful, we need more concrete and countable measure from the player's side throughout the game scenario provided.

Since a digital game is still a game for amusement and closely attached with the cultural aspects in many ways, we are interested in applying Caillois's seminal work on game playing theory [10] in the game analysis of this specific genre. His notions of four categories of games – Agon, Mimicry, Alea, and Ilinx – can be interpreted within the context of 'horror' as shown in Table 1. Based on [10], Yoon and Oh [11] also defines four different elements of fear that can be found in horror survival games as shown in Table 2. The two standards are similar in a way but we feel that both are meaningful in the game analysis of this specific genre.

Table 1. Four Gaming Categories [10] interpreted in Horror Situation

| Type | Attributes |
|---------|---|
| Ilinx | Feeling of relief coming from psychological fear and physical confusion, coming from fear to overcome |
| Agon | The thrill of competition |
| Alea | Leave everything to luck, anticipation Psychic entertainment fear |
| Mimicry | Playing immersed in virtuality |

Table 2. Four fear Elements for Amusement [11]

| Type | Attribute |
|-------------|--|
| Sensational | Fear from Sound, Visual , or Haptic elements |
| Anticipated | Fear from encore of bad past experience, |
| Limited | The thrill of overcoming constraints, rules, limitations, etc. |
| Behavioral | Fear from controlling and interacting game characters |

In this paper, we analyze a maniac horror survival mobile game called Panic Room: Escaping from Den. Panic Room series are published between 2008 and 2011 by EA Mobile Korea with four different

versions and its second version Panic Room 2 was regarded as “legendary” among Korean gamers in that it opened a new form of survival horror games but no other game has been successful in that regard since then. The game service was stopped since 2012 due to management affairs but still there are many maniac fans recalling characters of that game and many scary scenes of the game as an online game community [12].

Panic room version 1, mostly known as ‘Black room’ among Korean users, is greatly affected by Agasa Christie’s novel [13]. This version is though, regarded as a mystery detective style to find a serial killer while escaping from a secluded rooms in a mansion. Thus, its strength on amusement is largely from the problem solving structure in Agasa Christie style under serial killing format. The next version Panic Room 2: Escaping from the Den is truly a horror survival game format and greatly welcomed by Korean game players. Version 3 and version 4 further develop the series with rich gaming subsystems and better graphics within the narratives of escaping from an isolated place against the threats of a serial killer on revenge.

Thus, our focus is on version 2 that was evolved from mysterious adventure style game with horror to real horror survival game and the research question is what aspects made the game more successful horror amusement contents based on game playing theory/standards [10], [11].

2. PANIC ROOM SERIES: THE NARRATIVES

2.1. Panic Room 1 Narrative

The game is on the first person view of the main character Ryu. One day, Ryu and his girlfriend Yeon are invited to a place to expiate a child’s death at the collapsed scene of a department store that they were involved years ago. At the invited place, they were attacked by unknown force and became blacked out. When Ryu was awakened, he found himself locked in a room without any explanation. The room is connected with another room and he meet another person one by one including his girlfriend and nobody knew the reason of such confinement. People are then killed one by one by a mysterious serial killer and each character start doubt of other character as that serial killer and some character is killed by another captured person under such doubt and fight between themselves. Only hint of such tragic killing is a mysterious voice of broadcasting saying that “Everybody has sin”.

Actually the serial killer and kidnapper is Heo whose two younger brothers were killed by accident at the department store collapse and committed suicide at the army. In order to revenge, Heo invites all people he thinks they are responsible for his two brothers’ death and locked them in that mansion he owns and start killing them one by one with his helper Choi who eventually killed by Heo after such serial killing.

This story line is influenced by Agasa Christie’s novel “*And Then There were None*” thus the game has several commonalities and differences with that novel which are summarized in Table 3 and Table 4.

Table 3. Commonalities between Panic Toom 1 and Agasa Christie’s novel

| Common | Panic Room 1 | Agasa Christie |
|-----------------------|-----------------------------|----------------------------------|
| Killer & Accomplice | Heo & Choi | Justice Wargrave & Dr. Armstrong |
| Locked Venue | Abandoned mansion | Isolated Indian Island |
| Process | Reveal sins of victims | |
| Destiny of Accomplice | Killed by Killer Afterwards | |

Table 4. Differences between Panic Toom 1 and Agasa Christie’s novel

| Differences | Panic Room 1 | Agasa Christie |
|--------------------------|----------------------------------|---------------------------|
| Viewpoint | First Person | Omniscient |
| Killing | Attack weak point of each victim | Follow Ten Little Niggers |
| Relationships of Victims | Related Heo's brothers' death | No Specific Relationship |

Actually, the game has two phases such that the first phase is a sad ending like *And Then There were none* but then the player can repeat the game with the second phase to escape from the house successfully although several characters are still killed in the process.

2.2. Panic Room 2 Narrative

The second version takes another revenge story but the killer of the version 1 and several survived characters of the version 1 are again related to this story. Years after version 1 incident happened, the main character Ryu becomes a traffic police. One day, Ryu and other survived character of version 1 Ha (another police) were attacked by Heo again and kidnapped in a ship with other characters and then the killing begins again. Ryu and Ha play the main role to lead kidnapped people in escaping from the ship and find the killer.

In this version 2, there is another main character Miss Yang who is 24 years old college student kidnapped with her fiance Kang. Actually, she is the real killer of this version 2 but behaves like one of kidnapped victims in most part of the story.

There was a cruel connection between Yang and other kidnapped people except Ryu and Ha. Two years before this version 2 story begins, Yang and then-fiance had a car accident when Yang drove the car. Yang had a minor injury but her then-fiance was in comma and then an organ trading group killed him and trade his organs to others since then-fiance has no other family member. Actually Yang's current fiance Kang was the leader of that organ trading group and other kidnapped people are whom the victim's organ was transplanted to. Thus, Yang approached to Kang intentionally for the revenge and make other transplanted people gathered in a ship. All this revenge plot and kidnappings are actually setup by Heo who was the killer of version 1 and he persuaded Yang to do this revenge plot. Heo kidnapped Ryu and Ha for the bad relationship through version 1 in order to give them another hardship.

Unlike version 1, this version 2 takes 'Group image play' plot. Group image play (群像劇) is a generic term for creative things that progress with multiple characters with "each story". This type of the plot was tried in many Japanese animations/games before. In this structure, the same incident is interpreted many times by other characters with different personality, environment, intension and sometimes different mental state. In a horror survival contents like this, it can give another source of suspense with reversal of the plots. In this specific version 2, there exist Yang's interpretation and Ryu's interpretation and the game is proceeded with changing viewpoints of two main characters.

3. GAME STURUCTURE AND ELEMENT ANALYSIS

Panic Room version 2 has many different functions in the game structure. Table 5 summerizes the difference in the game system functions.

Table 5. Difference between Panic Room 1 and panic Room 2

| | Panic Room 1 | Panic Room 2 |
|--|---|--|
| Story | A series of serial killings stemming from the death of a family | The resentment and revenge of the person who was sacrificed to the organ trading |
| Place | Abandoned mansion | Remodeled Ship |
| Process | First person Viewpoint | Group Image play(群像劇) |
| Doubt , Conference & Introspection | None | Used in Critical Scene |
| Collection | None | Guide to Hidden Ending |
| OST/Sound effect | Repetitive Use of Classical Music | Remix of Classical Music/More Sound effect |
| Time attack | 1 | 3 |
| Player Character | Ryu | Ryu and Yang |
| Role of puzzle | | Escaping Tool |

The major difference between version 1 and version 2 is taking group image play format so that the story line has more reversals and the player has more close identification with two main characters – Yang and Ryu. Another technical development as a substructure of a horror game, version 2 has 'conference and

introspection' system to solve in-game puzzle to obtain a valuable hint of escaping. Figure 1 shows a snapshot of an example of such cooperation of users in conference system.

Sound is always an important tool to deliver uncanny feelings to users. Sound effect is related with Mimicry in playng games [10] amd also the sensational fear element by Yoon and Oh's standard [11]. One can see more effective use of sound in version 2 compared with version 1.

We analyze Panic Room version 1 and version 2 from user's viewpoint in that while clearing the huddles of the system, we count how many scenes are related to two emotional elements standards we adopt [10], [11]. With such process, we can also examine in what aspects version 2 is better welcomed by players than version 1. Table 6 and table 7 summarizes such analysis with numbers.



Figure 1. Solving Puzzle via the Conference system in Panic Room2

Table 6. Gaming Elements Difference between Panic Room 1 and panic Room 2

| Gaming Element [10] | Panic Room 1 | Panic Room 2 |
|---------------------|--------------|--------------|
| Ilinx | 4 | 5 |
| Agon | 5 | 10 |
| Alea | 5 | 2 |
| Mimicry | 7 | 12 |

Table 7. Fear Element Difference between Panic Room 1 and panic Room 2

| Fear Element [11] | Panic Room 1 | Panic Room 2 |
|-------------------|--------------|--------------|
| Sensational | 9 | 12 |
| Anticipated | 2 | 11 |
| Limited | 3 | 10 |
| Behavioral | 4 | 14 |

From Table 6, we can observe that Panic Room version 2 has far many Agon elements than version 1. In story plot of version 2, we have two poicemen in the game – main character Ryu and another policeman Ha, In version 1, since the game was explained solely by main character Ryu and the role of policeman Ha was not clearly given. However, in version 2, policaman Ha plays a certain role to make inference on who might be the killer and how to solve the puzzle. That makes internal competition element in version 2 and thus Agon elements are increased.

From Table 7, we can see that the version 2 has much more emotional tension than version 1 in all aspects. If the player has the feeling that they do not have a fair chance of winning, there is a great change that fear will be triggered, and if the player has this knowledge, a constant sense of anxiety might exists [6].

Increasing such feeling of anxiety can be the answer for increased anticipated fear elements in Table 7. Limited element in [11] is also increased since there exist more gaming actions such as time attack and player have more chance of breaking given constraint by utilizing collection system and conference system that version 1 did not have. Most importantly, version 2 shows more behavioral fear elements than version 1. It indicates that there are more player-character identification than version 1 and such attachment can develop the immersion state more easily.

4. CONCLUSION

Horror survival games form a distinguishable maniac community in general compared with first person shooting(FPS) game community or role playing game(RPG) community. From an extensive survey, this community shows strong narrative involvement in that the player is emotionally affected by the game to experience happiness, fear, sadness, joy etc. by the game content [6]. Thus, for a game in that genre, we should focus on how the game narrative is connected to player's emotional state and what mechanism the game is equipped to induce such empathy.

In this paper, we try to analyze a once phenomenal mobile game of this horror survival game that has so many maniac fans when it was in service and an online community is still alive – even after five years of ceasing the service due to management issues since 2012. Among 4 versions of the game, we analyze Panic Room version 2 which was most welcomed by players and had showed many then-creative gaming elements.

In analyzing the game of this genre, we adopt two different types of measuring standards that can be countable by analyzing the scenes of the game story from player's viewpoint - Cailliois's game playing categories[10] and Yoon and Oh's fear element standards [11]. In result, Panic Room 2 had considerably many Agon and Mimicry elements in Cailliois's standard and had stronger fear elements in all categories by [11]. Such evolution of Panic room game version 2 from version 1 which was largely influenced by Agasa Christie's novel is mostly attributed by adopting group image play structure in the story plot and internal conference/collection system that can facilitate puzzle solving mechanism inside the game. Group image playing format gives deeper observation of characters and strengthening behavioral fear elements by playing more diverse stories and then gives more positive attachment with the player character.

Very recently, with rapid development of visualizing tools, horror survival games are on target of virtual reality market [14]. However, in this genre, sensational element is not the only factor to make player in immersion state. Rather, the story structure and player-character identification is more important as we show in this paper. Thus, game designers in this genre should make effort in increasing such qualitative elements of the game as we have seen in Panic room2 evolved from its earlier version.

REFERENCES

- [1] Campbell J, Moyers B. "The power of myth". Anchor; 2011 May 18.
- [2] Liapis A, Yannakakis GN, Togelius J. "Computational Game Creativity". In Proc. of ICCG 2014; 2014 pp 46-53.
- [3] Krzywinska T. "Gaming horror's horror: representation, regulation, and affect in survival horror videogames". *Journal of visual culture*. 2015 Dec. 14(3):293-7.
- [4] Garner T, Grimshaw M, Nabi DA. "A preliminary experiment to assess the fear value of preselected sound parameters in a survival horror game". In Proceedings of the 5th Audio Mostly Conference: A Conference on Interaction with Sound 2010 Sep 15 (p. 10). ACM.
- [5] Tinwell, Angela and Grimshaw, Mark. "Survival horror games - an uncanny modality". Games Computing and Creative Technologies: Conference Papers (Peer-Reviewed). Paper 11. 2009
- [6] Nielsen, D.L. and Schoenau-Fog, H., "Mood for Horror: A Game Design Approach on Investigating Absorbing Player Experience in Horror Games". In *Future and reality of Gaming (FROG)*, 2013, New Academic Press.
- [7] Ekman P. Handbook of cognition and emotion. 1999, John Wiley & Sons.
- [8] Sylvers P, Lilienfeld SO, Laprairie JL. "Differences between trait fear and trait anxiety: Implications for psychopathology". *Clinical psychology review*. 2011 Feb 28; 31(1):122-37.
- [9] Zillmann D. "The psychology of suspense in dramatic exposition". *Suspense: Conceptualizations, theoretical analyses, and empirical explorations*. 1996:199-231.
- [10] Cailliois R. Man, play, and games. University of Illinois Press; 1961.
- [11] Yoon, J.W. and Oh, K.S., "A study on Amusement Fear of Video Game and Player's Response". *Journal of Korea Game Society*, 2009, 9(2):3-12.
- [12] <http://cafe.naver.com/darkroom2.cafe>
- [13] Agatha Christie, *And Then There were None* (Translated by Lee, G. H.) Haemun printing Co. (2000)
- [14] <https://vrtodaymagazine.com/vr-horror-games/>

BIOGRAPHIES OF AUTHORS

Doo Heon Song received a B.S. from Seoul National University in 1981 and M.S. from the Korea Advanced Institute of Science and Technology in 1983 in Computer Science. He received his Ph.D. Certificate in Computer Science from the University of California in 1994. He has been a professor at Department of Computer Games, Yong-in Songdam College, Korea, since 1997. His research interests include machine learning, artificial intelligence, fuzzy systems, medical image processing, and computer game design. He is currently the vice president of Korea Institute of Information and Communication Engineering.



Dr. Hae Kyung Lee obtained her B.S. from Sungsil University in 1979, M.S. from University of Illinois at Urbana-Champaign, USA in 1985, Ph. D. at Sungkunkuan University, Korea in Computer Science in respectively. She has been a professor professor at Department of Computer Games, Yong-in Songdam College, Korea, since 2001. Her research area includes database development, Data modelling in Game design, Information Security



Ms Ji-Eun Kim is a student at Department of Computer Games, Yong-in SongDam College, Yong-in, Korea majoring in Computer Game Design



Dr. Jong Hee Lee received his B.S., M. S., Ph. D. In Electrical Engineering from KyungBook University in 1978, 1984, 1990 in respectively. He has been a professor at Division of Computer Software Engineering, Silla University, Busan, Korea since 1988. His research area includes intelligent system control, computer science education, agent system.