

**W** UNIVERSITY OF WASHINGTON HUMAN COMPUTER INTERACTION DESIGN PROGRAM  
CAPSTONE PROJECT SECOND RESEARCH

# EMOTIONAL SOCIAL VIDEO GAMING

**ABSTRACT**

Video games, especially for those RPG (Role-playing Game) and some of the Indie Game (Independent Game), are conveying story that trigger game players strong emotional feeling during the game-play experience. This second research report talks about emotional design from early engaging video game to the contemporary storytelling or role-playing based video games and discusses social, cultural factors, values and future trends of emotional video games.

**KEYWORDS**

Video Game; Indie Game; Emotional Design; Game Interaction; Game User Interface; Interactive Media.

## **INTRODUCTION**

As member of the interactive media, video games works as a way of relaxation for game player. Video games calls for game players full engagement and trigger players' strong emotional feedback. Nowadays, video games explore more on experience design, which conveys emotional, social and cultural values. Some of the video games are also called as 'Interactive film' based on a complicated storyline. Emotional design has been used in this area to induce players' emotional response or the target emotion state for a successful gaming experience [1].

## **BACKGROUND RESEARCH**

Early video games [2] induce players' sense of accomplishment. Those storylines behind it are usually simple an easy to understand. Most of them are action game, such as shooter game or survival game, action game, which are more about empowerment. Players get better at performing certain skills and get the feeling of achievements, which is a powerful emotion. Those games include Mario, Adventure, etc.

In the last 20 years, more games in different genres are coming out. Cooperation work appears in the gaming, as online game has been more popular. Communication is allowed between game players as a way to induce player' emotion. But most of those games are still focus on empowerment and violence, which has been reported that those games have a bad effect among teenagers who play the game [3]. Those games induce strong and powerful emotional response of the players. It conveys a feeling of accomplishment, power and excitement. They allow players fully engaged in a virtual environment to achieve certain goals. At this time, lots of game publishers and developers arises [4], for example, EA (Electronic Arts), and Capcom, etc. Besides, games are on various platforms such Game Console (Play Station, Xbox and Wii), PC and Mobile Devices.

At the same time, some evolutional games appear in the Indie Game (Independent Video Game) [5] Industry. Those created by individuals or small teams generally without financial support often focus on innovation and rely on digital distribution. Indie gaming has seen a rise in the latter half of 2000s decade. Some successful games are Braid [6], Journey [7] and Blueberry Garden [8]. Some of those successful games create and induce emotion of players using a complete, touching story line. They treat emotional design and requirements as a big part of the design of the game. This is how the game is also called as an interactive film, which contains great visual interface and touching story behind.

## **EMOTIONAL GAMING**

Game designers today pay much attention on emotional response pattern and sense of presence during video gaming [10]. Emotional response to games is an important target of investigation. Some research also mentions that video game design requires the capture and expression of emotional requirements: how the payer is supposed to feel while playing the game. Emotional requirements

express the emotional intent of the designer and the means by which the designer expects to induce the target emotional state [1].



**Emotion Palette** –Every game can induce players’ emotion. If we use color to express those emotions as showed in the picture below. From the color blue to the color red, the emotions we have in games can be generalized in a color palette.

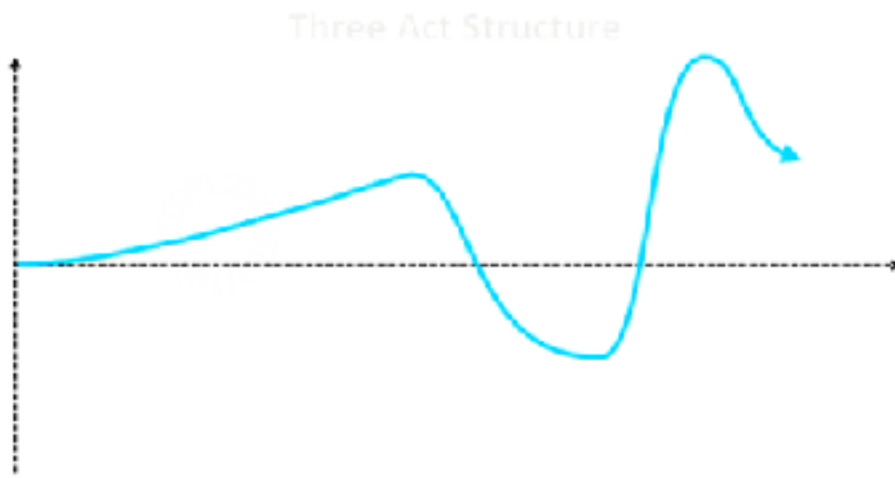
Those different levels of emotion can be generalized in the emotion color palette showed below [11]. Those games we familiar, like Angry Bird and Fruit Ninja, are in the yellow area because they induce happy and exciting feelings. Action games, such as shooting, racing and combatting games, are in the red areas that cause players’ exciting, progressive and imperious feelings and sense of empowerment.



Social related games are in the purple areas, such as Draw Something and Sims, which give player’s peaceful and relaxed feelings. Those games bind people

together and allow communication. Some games are filled the blue areas, such as Journey. They induce feelings of mystery, loneliness, fear and merely hopeless.

**Emotional Storytelling** –Most of these successful storytelling executing emotional catharsis, which is a sudden emotional breakdown or climax that constitutes any overwhelming change in emotion that results in renewal, restoration, and revitalization. And this catharsis should come at the end of the story. The three act of Structure [9] theory from Hollywood explains that how we should organize the storytelling in an emotional perspective.



### **AN EMOTIONAL GAMING CASE STUDY**

In this case study, I did some research work on a new independent game called Journey [7], which is a representative emotional game in the recent game industry. Journey, developed by Thatgamecompany [12], was released on March 13, 2012, via the PlayStation Network. In this game, the player controls a robed figure in a vast desert, traveling towards a mountain in the distance. Other players on the same journey can be discovered, and only two players can meet and assist each other, but they cannot communicate via speech or text and cannot see each other's names. The only form of communication between the two is a musical chime. The robed figure wears a trailing scarf, which when charged by approaching floating pieces of cloth, briefly allows the player to float through the air.

### **Identify the Emotion**

Many popular online games (social gaming) include lots of team fights, or team survival cooperation. In those games, people keep telling how they hate online players. And they are mean online and don't want to know who they are. But what Journey want to convey is something that makes people trusts each other better. The developers sought to evoke in the player a sense of smallness and loneliness, also a feeling of awe and wonder, towards the mystery behind the game world.

## **Prototype The Emotion**

It took three years for the team to finish the game design. For the former two years, they were working on the prototyping.

### **Music**

The team started to prototype the music first. It is not the interactivity, but it is the most effective and powerful media that can create emotion. The creator of Journey worked with Austin Wintory, who is music composer. The music [13], dynamically responds to the game's emotional arc throughout the story.

### **Graphics is Game Play.**

Journey starts with someone in the desert and try to walk towards a mountain in the distance. However, as the player is walking, the mountain is so far that almost nothing changed on the screen. This is one of the challenges the team met in early days. In order to get player out of this boring situation and create more emotional feedback, for simple traverse like walking, they added the sun trail. In that way, players can sense how long they have been walked. They also added lots of things like dunes that will be passing by. So when players walk, the entire screen is giving players feedback rather than just staring at the image.

### **Avoid Emotional Distractions and Social Distractions**

Normal online games have complicated user interfaces. Before start the real game, players need to figure out a lobby, check out a room and everybody's pin number. Also, some times, those players who have aggressive names will have emotional distractions to those who are not. Some players even criticize other players in a group gaming. Their social activity cause distractions during game play. What journey does is hiding all those interfaces. In order to let players collaborate and connect, there are at most two players appearing in one game (one on one interaction) and those two players can't talk with each other and won't know the other player's name either. The only way they allow players to connect with each other is at the very end of the game after all the player roles they show player the ID of the other player.

### **Collaboration rather than Competition**

As a psychology theory, flow [14] is about balance between the player's abilities and the challenge of the game. The concept of flow for collaboration tells that there is a balance between individualism and the group conformity. That means, in a group, we can't just act too much for ourselves, otherwise, the group will abandon us. We can't just do what the group wants. Otherwise, we lose ourselves.

In order to let players have the choice to actually navigate through a comfortable collaboration experience to stay in the flow, the team creates Journey's seamless online lobby system. At first, Journey will match players with all kinds of players. So there are chances that players might not match one or another. For those who are not satisfied, they might want to finish the game as soon as possible. So if the player has the choice to walk away from a player, eventually he will run into someone who is the similar type of players. Then players would love to be next to the player. So when the players have the choice

to leave, the cooperation will be more real and sincere, which leads to a possible stronger emotional connection.

### Executing Emotional Catharsis

Journey sought the felling of awe and mystery. So before the storytelling, the team started to look for works of Joseph Campbell, who is a master on myth and awe creation. Joseph's famous theory 'The Hero's Journey' (or Monomyth) [15] tells how to build up a great hero people respected. In a monomyth, the hero begins in the ordinary world, and receives a call to enter an unknown world of strange powers and events. The hero who accepts the call to enter this strange world must face tasks and trails, either alone or with assistance. In the most intense versions of the narrative, the hero survives; he may achieve a great gift or "boon". The hero must then decide whether to return to the ordinary world with this boon. If the hero does decide to return, he or she often faces challenges on the return journey. If the hero returns successfully, the boon or the gift may be used to improve the world.



The hero's journey is essentially a structure of storytelling about a transformation of human being. They can be a transformation of a farm boy into a galaxy saver, or a hacker guy turning into the One. So Journey uses this theory creating a transformation of a character's life from birth to death.



Based on the arch, the team created the arch of Journey. At the same time, they created the landscape and the world of Journey. They figured out the characters' growth from young to old, and eventually transcend. They set the colors and modes based on the story line.

### **Lower The Mountain**

The game is almost done after two years. But after an initial user testing, the team met another challenge. The team didn't get positive feedback from their users. After some analysis research work, the team found that the problem is that the emotional change at last is not enough to call players' strong emotional feeling about death and transcendent. So the team took another one year to fix the problem. What they did is to make sure the mountain, which is the level before the final rise, is low enough, to increase the catharsis.

So in the final level, the players are walking weakly against the strong blowing wind. They climb slowly, jump slowly and shout weakly. Their clothes are frozen and heavy. Generally, those settings will give players a sense of lifeless and hopeless. After that, when players move to the summit, the summit is more exciting, climatic and free, which give players sense of great freedom.

### **RESEARCH QUESTIONS AND FUTTHER DISCUSSION**

Video Game gives experience designers chances and challenges at the same time. Emotional Gaming will be an opportunity for game experience design and should be paid more and more attention in future game design. Besides, in todays' world, as educational game design has been a popular and common topic, the information and emotion of a game should be more meaningful to our human life. Video Game also acts as a way of interactive media or interactive film. In future, the players' could be more broad and diverse due to cultural and social issues. More in this field are under exploration.

The potential research questions could be:



No.1 How to use emotional storytelling to build up an engaging and impressive game experience?

No.2 What is the emotional requirements for a game design?

No.3 How to build up a harmonious social gaming experience, which protects the emotional feelings of the players?

## SUMMARY

In this second research report, I talked about emotional gaming as a promising design matter in future game design, a brief history of the emotional game design with some successful games, and a short discussion about the future trends in this area. Emotional game design, in general, talks less about control of the game, but more about the story behind and how to have a good storytelling executing emotional catharsis. Methods of how to value emotional response in game design has already been used as a way to measure game user experience.

## REFERENCE

- [1] Callele, David, Eric Neufeld, and Kevin Schneider. "Emotional requirements in video games." Requirements Engineering, 14th IEEE International Conference. IEEE, 2006.
- [2] History of Video Games: [http://en.wikipedia.org/wiki/History\\_of\\_video\\_games](http://en.wikipedia.org/wiki/History_of_video_games)
- [3] Bartholow, Bruce D., and Craig A. Anderson. "Effects of violent video games on aggressive behavior: Potential sex differences." Journal of Experimental Social Psychology 38.3 (2002): 283–290.
- [4] List of Video Game Developers: [http://en.wikipedia.org/wiki/List\\_of\\_video\\_game\\_developers](http://en.wikipedia.org/wiki/List_of_video_game_developers)
- [5] Indie Game: [http://en.wikipedia.org/wiki/Independent\\_game](http://en.wikipedia.org/wiki/Independent_game)
- [6] Braid (Video Game): [http://en.wikipedia.org/wiki/Braid\\_\(video\\_game\)](http://en.wikipedia.org/wiki/Braid_(video_game))
- [7] Journey (2012 Video Game): [http://en.wikipedia.org/wiki/Journey\\_\(2012\\_video\\_game\)](http://en.wikipedia.org/wiki/Journey_(2012_video_game))
- [8] Blueberry Garden: [http://en.wikipedia.org/wiki/Blueberry\\_Garden](http://en.wikipedia.org/wiki/Blueberry_Garden)
- [9] Three Act of Structure: [http://en.wikipedia.org/wiki/Three-act\\_structure](http://en.wikipedia.org/wiki/Three-act_structure)
- [10] Ravaja, Niklas, et al. "Emotional response patterns and sense of presence during video games: potential criterion variables for game design." Proceedings of the third Nordic conference on Human–computer interaction. ACM, 2004.
- [11] Teamwork on Video Game Journey: <http://gamerboom.com/archives/81509>
- [12] Thatgamecompany: <http://en.wikipedia.org/wiki/Thatgamecompany>
- [13] Journey Original Game Soundtrack: <https://www.youtube.com/watch?v=2m9d4ae0Psg&list=PL61BEACFAA6FC4E04>
- [14] Flow (psychology): [http://en.wikipedia.org/wiki/Flow\\_\(psychology\)](http://en.wikipedia.org/wiki/Flow_(psychology))
- [15] Monomyth: [http://en.wikipedia.org/wiki/The\\_hero%27s\\_journey](http://en.wikipedia.org/wiki/The_hero%27s_journey)