The use of colour in the game Journey

Case Study

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Abstract

This thesis aims to find out the usage of colour in the game called Journey (2012). It is a case study which focuses on three different scenes in the game and how their colour scheme affects the game both emotionally and the storyline progress. The question that will be answered is:

How does the choice of colour affect the players perception on an emotional level?

This thesis talks about how different colours affect us in different ways and why this plays a major part in gameplay situations and how the drastic change of colour portrays different emotions. The colour choice is of great importance since it affects humans on an emotional level that enhances the experience felt by players during different scenes.

Keywords: Game Studies, colour, color, player experience, emotions, Journey,
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1 Introduction

Colours have an enormous impact on our everyday life and it is inevitable to say that they affect our emotions and feelings in everything we perceive (Hemphill, 1996 p. 275-281). But how does the colour affect us when it comes to games and the mood and setting of the scene? According to Mahnke F. (1996) it is important to implement colours and understand their meaning when it comes to both architecture and design.

In this study I analyse the colours used in the game “Journey” (2012) and how the company has used different colours to guide the player through the game. I also write about how different colours are used to set an emotional mood to a scene/environment.

1.1 Background

There are several ways of looking into colour and design, and some decisions are hard to make when it comes to include several cultural aspects on colour. For example, a study that focused simply on cultural design in computers was written by Paula Bourges-Waldegg (1998) where it is stated that designers avoid certain colours due to their different meanings in culture. This might limit the variety of colour depending on where the game is developed.

In this study, all the test-subject remains anonymous to the reader, yet the result shows us all from gender to origin. An interesting statement I reacted to in this was regarding the colour Purple:

“Another typical stance in Culturalisation is that different cultures have different tastes, beliefs and values, and therefore need different designs. However, we observed that these factors represent a problem for designers only to the extent that they interfere with the user’s interpretation of the meaning that the designer is intending to communicate through representations. In the specific case of Subject S from Japan, it is clear how a specific cultural context - in which the colour purple signifies God” (Bourges-Waldegg p. 17)

From a self-observation of the children movies of Walt Disney Home Entertainment (1923) I noticed that most villains wear the colour Purple, Red, Black and Green. This fascinates me in the matter that, according to Ryberg (1991) colours affect us both emotionally and physically according to our biological instincts. The human mind can react to colours by reflex or simply by awakening abstract associations, and in the case of early Disney movies, the colour purple with villains. Kaya (2004) talks about this colour in both positive and negative ways:

‘The color purple elicited the feelings of relaxation and calmness, followed by happiness, sadness, tiredness, power, fear, boredom, excitement, and comfort’ (Kaya 2004, p. 4)

Regarding feelings and emotions, it is important to consider why different emotions are triggered at different times. Damasio (1994) states that emotions are not guaranteed to be embraced by the same events for every living creature. Social beings associate differently to various events or objects due to our own experience in life. There are, however, basic emotions and reactions that our human mind has already programmed for us which are crucial for our survival.
Because of the nature of our experience, a broad range of stimuli and situations has become associated with those stimuli which are innately set to cause emotions. The reaction to that broad range of stimuli and situations can be filtered by an interposed mindful evaluation. (Damasio 1994, p.130)

There are a few terms of colour that needs to be defined for the ease of reading. When it comes to colours it can be separated into four parts and they are: Value, Hue, Temperature and Saturation (Sandberg, 2009).

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>In short it’s light and shadow. Every shade from the clearest white to the darkest black.</td>
</tr>
<tr>
<td>Hue</td>
<td>The actual on the colour circle. This is a Neutral colour.</td>
</tr>
<tr>
<td>Temperature</td>
<td>A slight variation in the hue creating different temperatures of a neutral colour to either warm or cold. If mixed too much with neighbouring colours in the colour wheel it changes to another hue instead of temperature</td>
</tr>
<tr>
<td>Saturation/Desaturation</td>
<td>The intensity of the Hue. Saturated is a clear pure colour whiles low saturation, or ‘Desaturation’ to more grey. It does not affect the lightness or darkness of the colour.</td>
</tr>
</tbody>
</table>

Figure 1, Color wheel, wetcanwas.com (2006)
When it comes to the more abstract view of colour, Ryberg (1991) tells us more about how colour and light can affect both human and animals in different ways in his book “Levande Färger”. He claims that there can be similarities between our will to live and beautiful colours. He thinks that a seeing human would probably die due to total colour absence since colour awakens memories, feelings and dreams. Ryberg does, however, mention later in his book that colour primarily affects our emotions and instincts, therefore it is nearly impossible to clear the deeper symbolic of colour with words.

1.2 Previous Research

1.2.1 Drastic colour changes

There has been research regarding how colour affects the players emotionally. However, according to Joosten, Van Lankveld, and Spronck (2010), it has been limited in three different ways:

- only a few colours have been evaluated
- simple games have been chosen for the research
- the importance of the emotional influence of colours has been considered out of the range of the subject itself.

They examined the theory of how colours could be used in a videogame to evoke specific emotions by transacting an experiment. By using a home-built game followed by a questionnaire they were able to identify the players emotions based both on score and on the answered questions. With this information they were in fact able to establish that colours can be used to evoke specific emotions from the players.

Some researchers talk about how colour and light combined can affect the tension in the scenes of a game. They analyse various ways movies have used lighting to inflict emotions into the viewers and came up with some guidelines on how they are used. This shows that you can influence an audience by making drastic changes in colour and light in an environment or a scene in a game or a movie.

- patterns that subject an audience to low contrast images followed by high contrast images (in terms of brightness contrast or warm/cool colour contrast) increase projected tension
- patterns that subject an audience to low affinity of colour (in terms of saturation/brightness/warmth, followed by high affinity of colour, in terms of saturation/brightness/warmth) increase projected tension
- patterns that subject an audience to high contrast images followed by low contrast images (where contrast is defined in terms of brightness or warm/cool colours) releases projected tension
- patterns that subject an audience to high affinity of colour (in terms of saturation/brightness/warmth, followed by low affinity of colour, in terms of saturation/brightness/warmth) releases projected tension
patterns that subject an audience to a long duration of high contrast or high affinity of colour (in terms of saturation/ brightness/ warmth) causes an increase in projected tension.


These are what they mention as patterns in a game that influences the narrative story through light and colour. Analysing games that consist of a consequent mood also influences a players experience by adjusting the environment to the emotional feeling you want to evoke in the audience.

One key way in which survival horror games create their emotional effect is by maintaining a state of player vulnerability, often by suspending the player in a state of incomplete knowledge. The perceptual conditions for this state of vulnerability are enhanced through visual obscurity (El-Nasr, 2006, p. 6)

1.2.2 Different kinds of emotion

Frome (2007) attempted to create a model to account emotions any player could experience during her videogame play in single player games. He claims that there are various ways for a player to stumble upon emotions and thus decided to limit his scope to not enter complex emotions that can be portrayed in multiplayer games. Frome claims that, in order to understand the emotional responses to videogames, we must gather the reaction of all different aspects such as: fictional narrative, Simulations of reality and Crafted aesthetic objects.

There are different things that make the player experience emotions during gameplay and the most common ones are Game and Narrative. Frome states that Game emotions can be thought of as competitive emotions which are generated by winning or losing a game, frustration and accomplishment. When playing in group Game emotions can be linked to her feeling satisfaction in others failure, loyalty to her team or even failing in protecting other team-members from danger. Game emotions can only be caused by playing a game and thus cannot be generated by watching movies or reading books. These emotions are generated directly from your performance in videogames.

Unlike game emotions, narrative emotions are trigged by settings, events or characters described and thus can be experiences in every narrative art-form. These emotions are the most common we feel when interacting with artwork.

The two other categories Frome (2007) brings up are the artifact emotions and ecological emotions. Artifact emotions are generated by our admiration for different crafted items.

Artifact emotions are those that are generated by our response to a work as an artifact, or crafted art object. Although every emotional response to art is prompted by an artwork, artifact emotions are about the artwork as an artwork; they are about the way the artwork represents its story or content. In other words, artifact emotions are emotions of aesthetic evaluation. (Frome 2007, p. 833)
Frome (2007) explains Ecological emotions as how the player responds to a videogame in the same way she would react in the real world. Our mind is built with different systems that do not always agree with the evaluation of what the player perceives. Surprise appearances onto the screen can cause our visual systems to activate, making us jump and/or scream out of fear. However, the reasoning system knows that it is not real in our environment which prevents us from running out of the room away from danger.

Damasio (1994) talks about primary emotions and how we are obligated to respond emotionally when different stimulations from the world or our body is perceived. Some of the mayor features triggering the primary emotions are when confronted by features including size, large span, movement patterns or unusual body state.

Such features, individually or conjunctively, would be processed and then detected by a component of the brain’s limbric system, say, the amygdala; its neuron nuclei possesses a dispositional representation which triggers the enactment of a body state characteristic of the emotion fear, and alters cognitive processing in a manner that fits the state of fear. Note that in order to cause a body response, one does not even need to “recognize” the bear, or snake, as such, or to know what, precisely, is causing pain. (Damasio 1994, p. 151)

1.3 Purpose and Research Question

The purpose of this study is to identify the colours used in the game "Journey" and to compare these with the emotional effect of colours described in the existing literature. The finale aim is to find what emotional impact colours have on the player, which is addressed by the question:

1. How does the graphic designer’s choice of colour affect the player’s perception on an emotional level?

The reason for this question is to better understand the importance of colour and how to implement this knowledge in future projects and hopefully also to be used in a future career within the game graphic industry. I want to know how to use colours in game design and game graphics to intensify the emotional feeling of joy and sadness.

1.4 Method

The selected game for colour analysis was Journey, a game published in 2012 by Sony Computer Entertainment America (SCEA). The qualitative analyses of colours in this game ware based on comparative method and literature studies. During the comparative studies, the colour used in the game and the players experience was compared with the existing descriptions of emotional value of colours.

The research was based on three different parts focusing creating an essay of high quality, comparing different claims with those of others and using different literature as a research method.
Qualitative studies: parallel with the qualitative methods are fundamental in scientific studies. Larsson (2005) claims that it is critical for researchers within the scientific circuit to see whether an essay or a research maintains good quality of conclusions and claims. In qualitative studies conclusions are derived by non-numerical analysis means. Qualitative research is exploratory and is based on an inductive process in which themes and categories emerge through analysis of data collected by techniques such as interviews, observations, video/game analysis and case studies.

The comparative method is used to compare two or more different situations, objects or claims. It was used in this essay to compare different colours and scenes to each other and with that being able to establish what greater elements differed between the two and how this affected the player.

Lastly, the literature research was used to gather information on previous research and how the authors of books, internet documents and interviews came to different conclusions. By doing this I was able to better understand the importance of the subject and also learning how to utilize their findings in my own research.

1.4.1 Phase 1, Colour Identification

During the first phase of the study, it was necessary to play through the game and point out every colour used, including the colour of light and shadows. This process was chosen with the purpose to identify the colours specific for the game. The important factor in this approach was to experience the environments without being affected by the sounds and music. According to Kollins (2008), sound has an enormous impact on how we experience games.

‘Although the goal of many game developers is to create an immersive experience, the body cannot be removed from the experience of video game play, which has interesting implications for sound. Unlike the consumption of many other forms of media in which the audience is a more passive “receiver” of a sound signal, game players play an active role in the triggering of sound events in the game (including dialogue, ambient sounds, sound effects, and even musical events). While they are still, in a sense, the receiver of the end sound signal, they are also partly the transmitter of that signal, playing an active role in the triggering and timing of these audio events. Existing studies and theories of audience reception and musical meaning have focused primarily on linear texts.’ (Kollins, 2008, p. 3)

To prevent the influence on my visual perception, I played through the entire game without sound and collecting colours at the same time from every game environment.

1.4.2 Phase 2, Colour and Game Play

The second step of the study was to analyse how only the change of colour and lighting guides the player to what is about to happen and where the passage through the gameplay is going. By doing this, it was possible to analyse every hue and colour used. As the player ran through the scenes with great colour changes, looking both at the colour and the reaction of the player, I was able to take specific colours in consideration.
1.4.3 Phase 3, Colour and Emotions

In the third phase of the analysis, I studied the literature’s interpretations on how colours can emotionally affect people. This information was compared with hues represented in eight game scenes.

During this step, I separated the different hues in warm and cold parties to see where these are used in big or small amount in one scene. By comparing a warm and happy scene with a cold and scary it became easier to see what emotional mood the designers wanted to implement onto the player. Therefore, by comparing the opposite and visually contrasting scenes it became possible to define the emotion expressed in each scene. It is however important that I do not approve that certain colours are either cold or warm. There is no colour that is strictly categorised as warm or cold.

“Temperature shift is a slight adjustment of a hue. It is not “one side of the color circle is warm and the other side is cold” like I had mistakenly been taught. Any hue can have a neutral, warm and cold version’ (Sandberg, 2009; Imagine p. 92)

This method does include some flaws that are inevitable. The results given from this study will be analysed and translated by one individual and thus the chances might be influenced by my own beliefs and association with colour if I will be unable and separate fact from emotion.

1.4.4 Scene Selection

The colour analysis process was based on eight scenes from Journey (2012) game. In the selection of scenes, three or four scenes were taken into consideration depending on the relevance to the subject. The game was cut into eight parts consisting of different environments and supposedly these have the different ways of emotional transition. In this game the player’s avatar also experiences “epiphany”. This consists of short films that play out at the end of each level of the game. These scenes all have a connection with each other and were analysed as separate parts.

2 Analysis

2.1 Game presentation

The investigated game; Journey (årtal den släptes ut) is the third game developed by “thatgamecompany”. It was published by SCEA (Sony Computer Entertainment America). It is one of the most talked about games in 2012 and has won an amazing amount of rewards including “Game of the year” from four different parties and “Best Visual arts”, “Innovation” and “Best game Design” from Game developers Choice awards (2012). Journey is a third person view game (meaning that you can see the character in front of your screen) anonymous online game where the player experiences a person’s life passage through an interactive world of ruins and desert.
In an interview, producer Robin Hunicke and creative director Jenova Chen (2012) talk about how they wanted to create a unique experience between two complete strangers. In difference to other online games, for example Little big planet which also is an adventurous game for the same platform where you can chat both by talking and writing and also see the username of the players around you, there is no way to communicate with the other player until the game is ended. They designed to limit the communication so you can only communicate through a small sound and the players own way of act. To make the experience more fluent they deliberately chose to design the game without any explanation in the beginning of the game to see player transformation. Creating a human-like creature without gender or race, making it easier for every player to identify him or herself with the avatar (Avatar is the game industry name for the figure you’re playing).

2.2 Presentation of the eight parts of the game:

“Birth”: The beginning of your Journey. This environment does not have many colours to investigate. It is completely covered in beige due to its simple design of scenery.

It is where the player starts to learn how to navigate your avatar and thus it does not contain much in its surrounding to not confuse the player. The main target that you as player are able to see is the mysterious light from a mountain far away and it is obvious that it is the target of your journey to reach it.

Figure2, Screenshot from the game, Journey 2010

The landscape is mostly covered in a huge sea of beige desert sand and the only colours standing out from this are the odd looking grey rocks that look similar to grave-stones and the red/brown ruins here and there. Also there are white shining symbols with a yellow tint to the light. Your avatar has a red robe with yellow markings that matches other “creatures” that you encounter for the first time on this level.

“The Bridge”: This is the first level where you have the chance to encounter other online players if you have the settings on the game put to online gaming.
On this level the sand, avatar and creatures remain the same colour, also the light-symbols keep the same. These objects will contain their colours throughout the game.

Figure 3, Screenshot from the game, Journey 2010

The players interacts more with the cloth creatures by calling on them. In the previous level they only helped you to jump further than you can by yourself, on this level they help you build a bridge to reach closer to the mountain of light. You do this by freeing cloth-pieces from metal cages. These cages have not been seen earlier in the game and stands out quite a lot.

“Cloth-creatures”: The first level where the colour changes drastically and also the first level where the player experiences cloth as another life form that talks and tries to communicate with you.

If the player has not gone online to be able and meet other players, this is where the game gets more interesting. On this level you get to set cloth-creatures free from cages all over the desert and the player, if alert, will notice that these creatures want to guide her to other trapped creatures.

Figure 4, screenshot from the game, Journey 2010

Later in this level the environment gets darker and the player also finds a huge building with trapped cloth-creatures that needs to be set free. It is also the first time where the player experiences the mechanic work of their ancestors and how they work.

“Surfing”: After freeing all the creatures from their cages they take you to some ruins that create a long downhill-area covered with desert sand. The day is coming to its end and the player gets to, what I call it, surf down the hills.

On this level the player does not have any way of exploring the area more than going down and see where the sloping leads you. It is however one of the most beautiful scenes according to me full with strong colours and emotions.

Figure 5, screenshot from the game, Journey 2010

At the end of this level the player continues to fly with the cloth-creatures but ends up falling into a pit of darkness unable to get up again. This is the first time in the game where the player gets to explore a dark area and the colour scheme changes completely from red and yellow to green and blue.
“Tunnels”: This is an entirely different environment to the previous ones. There is no direct sunlight and it is mostly dark.

Figure 6, screenshot from the game, Journey 2010

In this level the player gets to face the more haunted side of their journey where she actually needs to be conscious of where she walks. This is where you can get hurt. The player will not die but will lose most of her power if hit by one of the machines in the tunnels.

The machines are previous constructions made by the same race as the player’s avatar. They feed on the cloth-creatures.

“Temple”: This is one of the levels most filled with magic and mysteries. It gets filled with a glow where the player can swim freely and gets to explore more about their purpose in life (in the game) and also learns about the legend that lays in their future. It does not have many colour changes.

Figure 7, screenshot from the game, Journey 2010

“Winter”: When winter comes, so do the strong and cold winds. The player needs to walk through a snow-covered landscape where the cloth-creatures either get eaten or freeze to death. The cold almost prevents the player from jumping and later on even speak.

Figure 8, screenshot from the game, Journey 2010

The more you travel, more winds, monsters and darkness appear before you until you reach the mountain where you, sadly, die of exhaustion.

“Heaven”: After death the player reaches up to the sky and gets to fly around with all different creatures met along the way, this includes the other online player if encountered one. This is where the player reaches the goal of her journey towards the mountain reaching up and seeing a clear blue sky for the first time in the entire game.

Figure 9, screenshot from the game, Journey 2010
When it comes to the prophecy, explained through cut-scenes (short films within the game), it shows the player a story, a legend about their ancestors and how the world has become the way it is. It shows us how life was created and how the ancestors build machines fuelled with cloth-creatures after realising how the cloth works. They end up in war and almost the entire civilisation was buried in the desert. This history goes through some interesting colour schemes as well. To begin with, it opens up with a creature, besides the player, covered in white. The colour scheme of the prophecy goes through the colours white, beige, black, grey and blue in this specific order. As the prophecy progresses, the creature in white appears to be an ancestor of the players avatar who tells words of wisdom about the fall of their civilisation.

I decided to go with the scenes “Cloth creatures”, “Surfing” and “Tunnels” due to their more interesting ways of using colour and because they show greater differences in colour throughout the entire scene. I will also go through the prophecy shown through cut-scenes

2.3 Colour Scheme for the Game

![Color Scheme](image)

Figure 2 Matt Nava, (2012): “The Art of Journey” page 69

Matt Nava, Art Director and Lead Artist of the game Journey, has created the picture above. It has been used as concept for the entire colour flow and as you can see they have places where the colour changes drastically or the hue of a similar part shifts from one colour to another.

In the scenes I analysed I have seen some similarities linked between their own way of changing colour for different emotions and also their hue, saturation and temperature change in each scene.
2.4 Comparative Colour Studies

2.4.1 Cloth-Creature Scene

The first scene was the “Cloth-creature” scene. As shown on the figure (4), it consists mostly of pink and green hues in the beginning of the level. It is consistent in its light and warm hues of these colours. Sandberg (2006, p. 98) explains that colours that are opposite from each other in the colour wheel are called ‘complementary colours’ which this hue of green and pink are. As the colours were used as ground and sky where green is the sky and the sand under the characters is pink, it creates a harmony of colours. If you break the harmony of colours it is easy to create discomfort.

In the book “Levande färger” Ryberg (1991) explains that the colour green often is used to soothe emotions and influences most people with calm and relaxation. This assumption is strengthened by Kaya’s (2004) view of the colour where they claim green influences people with happiness, calm, hope, peace and excitement.

“The color pink is mostly used with positive connotations such as to see everything in pink light’, where the meaning is related to optimism and happiness” (Zock, Michael and Rapp Reinhard 2010)

The pink colour goes in harmony with the sky and together they create a relaxed emotion towards the player. However, later on the colours change in the terms of hue and saturation. It becomes more dull and brown tone in its shifting of colour with a hint of purple. (Figure 11)

In this scene, the player is a subject to a long duration of connectedness of colour where the hues are on opposite sides of the colour wheel and goes over to a scenery where the surrounding is made out of almost only one hue. This increases the tension between a happy and calm environment to a more unknown feeling and this causes confusion and strong feelings.

2.4.2 Surfing Scene

In the surfing scene the colours are intense and the saturation is on top. The main colours of this scene are yellow and red. These colours are what Sandberg (2006) calls Analogous colours. This means that they are next to each other in the colour wheel.
According to Kaya (2004), the colour red is mostly associated with blood, Satan and evil, but in this case it is purely intended to for the opposite. The reactions in this case would be the other half of the red emotional reactions, such as: Love and romance. The colour Yellow is generally seen to be elected as a source of energy and liveliness. It is also full of happiness and excitement because it can be associated to the sun. This also sums up Ryberg’s (1991) view of yellow as energetic, fast and alert. The emotional response of the player in this scene and colour choice awakes a feeling of safety, trust and attachment to the cloth-creatures in the scene. It gives the player a warming feeling of love and hope.

The scene later goes over to the opposite side of the colour wheel and goes into the hues of blue and purple. Once again, the colour purple has been used to create a deeper feeling of loss. Interesting enough the transition from red to blue is explained by Ryberg (1991):

*Translated into English:*

‘Red and blue seem to create a paired couple of opposition when it comes to physiological reactions. Eye blinking will not be as tight in blue light and rear brain visual spectrum is relatively more passive. Now instead activated the parasympathetic branch of the autonomic nervous system and the adrenal cortex secretes corticosteroids. Blood pressure, heart rate and adrenaline production drops which also means sedating or calming effects.’ (Ryberg 1991, p. 73)

If we return to El-Nasr (2006) and his collaborators this is a pattern that shows the player a high saturated and warm contrasted images followed by low contrast and cold images, this creates a big tension between the two parts of this scene. If we draw the line to the colour associations from Ryberg(1991) it is possible to draw the assumption of this scene going from happy and excited to the complete opposite, which is sadness and indifference. The player experiences a feeling of loss and loneliness due to the high contrast changes and the cold intake of colour intensifies the feeling of loneliness.
2.4.3 Tunnel Scene

The tunnel scene starts with the dark and blue/green colours. Again the cold hues and dark surrounding is different from the other parts of the game, making it into a greater tension-change than just from a scene to another. In this case, the blue colour is somewhat intoxicating. When a person is exposed to blue for a long time, it becomes tiresome and lonely which can lead to depression. In this case, these emotions combined with the sound of the environment cause a slight feeling of fear; however colour alone makes it only feel slightly hopeless. The green tint only contributes to this factor. The purple hue is no longer surrounding the player and thus the feeling of sickness and loss is slightly lifted.

![Figure 13+14 Screenshot from the game, Journey 2010](image)

In the end of this part of the game the player reaches the light of yellow that she is used to from the first “joyful” parts of the game, filling the player with relief and happiness once again. In this case, the pattern shown in this scene is going from low saturated and low valued environments to higher saturation and slightly more value. The colours also go from cold colours to warm which also strengthens the hope of the player.

2.4.4 Prophecy

When entering the cut-scenes representing the prophecy, the player is met by a creature much like herself, all dressed in white. There is no shading in these scenes. The environment is plane and only shows a white canvas. She is later confronted by wall-paintings consisting of brown/beige, red, black, grey, blue and white. The one colour that stands for something important in this phase is White, representing life and wisdom. Creatures of the wall paintings focus on the light and life of their surroundings, discovering the cloth creatures and their power. Later, as the game proceeds, at the end of the surfing scene, blue is added to the list representing destruction, hatred and death. It is added to, what seems to be the machines of war, and puts a cold and uneasy atmosphere around this part of the story.

As you put the cut-scenes together with the actual gameplay you come to understand the link between the colour-scheme from the prophecy and the actual gameplay world. Just as the prophecy, the colour scheme goes through a natural phase, a phase full of life and a part of destruction.
## 3 Result

The results of the study are summarised in the table below where colours represented in “Journey’s” stages are described by emotions to which these colours relate according to literature studies.

<table>
<thead>
<tr>
<th>Colour</th>
<th>Emotions</th>
<th>Scene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pink</td>
<td>Optimism, Harmony, Happiness</td>
<td>Cloth-creature</td>
</tr>
<tr>
<td>Lime-green</td>
<td>Soothing, relaxation, Admiration</td>
<td>Cloth-creature</td>
</tr>
<tr>
<td>Purple</td>
<td>Trouble, Uncertain, Boredom, Loss</td>
<td>Cloth-creature</td>
</tr>
<tr>
<td>Red</td>
<td>Negative: Danger, dear, horror, shock</td>
<td>Negative: Tunnels, Winter</td>
</tr>
<tr>
<td></td>
<td>Positive: Love, Happiness, Excitement</td>
<td>Positive: Heaven, Surfing</td>
</tr>
<tr>
<td>Yellow</td>
<td>Excitement, Joy, Trust</td>
<td>Surfing, Temple, Heaven</td>
</tr>
<tr>
<td>Orange</td>
<td>Interest, excitement, joy</td>
<td>Surfing</td>
</tr>
<tr>
<td>Blue</td>
<td>Negative: Loneliness, Cold, Loss, Remorse</td>
<td>Negative: Tunnel, Winter</td>
</tr>
<tr>
<td></td>
<td>Positive: Calm</td>
<td>Positive: Heaven</td>
</tr>
<tr>
<td>Green/blue</td>
<td>Awe, Fear, Immersion, Dillusion</td>
<td>Tunnels</td>
</tr>
</tbody>
</table>

Each and every scene has its own dominant colour which gives the player an emotional intake of the situation and the narrative story in a specific line. An example of emotional intake of these colours: The cloth-scene is mainly dominant of the colour green and pink. As separate colours, pink gives the player an emotional experience of harmony and happiness and the green/lime-green colour adds relaxation to the player. The combination of the two colours creates a harmony between the two colours which enhances their positive influence on the player and she gets emerged into a feeling of safety and calmness.

As the game progresses, the colour flow throughout the game gives its own narrative without saying it in words, only showing the player different environments with colour and sound. She goes through various drastic changes as well as smooth gradient flows between the different scenes which brings every feeling expressed through colour to its extent.

## 4 Conclusion

The result of the analysis is that it is in fact crucial for this game to use colour in a good way. The choice of colour has a big emotional impact on the players’ intake of the scenery. The creators of Journey have used the colour script (see image in results) created by Nava (2012). The colour script shows how the colours evolve throughout the game as a metaphor of how the story progresses from scene to scene, which on the other hand means that it is important to balance the game into the different schemes of harmony such as the analogous and complementary colours. By not using these changes, the game would show entirely different kind of emotion and the emotional journey through the game would not be as intense.
With help of the drastic changes in value, hue, saturation and temperature the developers have been able to portrait different emotions to each scene. It affects the storyline by making the player able to pass through emotions and understanding its surroundings using only what is visually near there. By putting the colours from the prophecy and the progression of the game together creates a link between the two.

Every scene has its own colours and thus its own emotional story. Without the drastic changes in hue and saturation in, for example, the surfing-scene to the tunnel the player would not experience the loss of company in the same way as if it were with the same colour scheme.

5 Discussion

The results of this study were greater than the expectations. The love put into this development has been far more extent than I had ever imagined. Defining colour experience and influence from shape and movements were harder than expected but manageable. I was unable to define the colour purple as a colour used only for the purpose of expressing fear or evil.

Regarding future studies it is important to get a greater grasp of how the psychological part of the colours can be interpreted and also how they can affect different cultures in its own. I would also want to go deeper and wider into the colour usage of this game since there is more than just environmental usage of the game, such as using white as the colour of wisdom after a player has experienced all secrets of the game.

Furthermore, making a study on how children see colours and their meaning differently from teenagers and adults is an interesting question to take in mind. The direct input of colours for children can vary from the ones of adults. What I would like to know is, does the interpretation of colour change as we age? As mentioned both in the background and the previous research, Damasio (1994) talks about how personal experience changes the perception of emotions due to associations with situations and stimuli.

For future studies it would be great to use text subjects to analyse their reactions to the game and its colour choices. Also giving a chance to study the players behaviour changes between single player and multiplayer play though. A personal realisation to the game and playing behaviour is for two players to play closer to the narrative expectations. For example, two players tend to stay closer to each other in dark and scary environments than in bright and fun scenes.

5.1 Reflections

The way Thatgamecompany have presented the game in its full content with art, music and the fact that you are completely anonymous and your only way of communication is through your movement, actions and use of sound reinforces the experience of a beautiful surrounding. It enhances every feeling, how you emotionally take in the information of the scenes when it comes to light and colour and also brings out your playful side. This is the main reason Journey was chosen for the analysis and what I wanted to dig deeper into is how the colours affected people.
The results of the performed test shows was that different people acted differently when entering the darker and colder areas contained with blue and green colder hues, less light and more solid creatures than fabric. Going from a warm, light and playful environment with gold, red and brown colours to a colder, darker and quieter area made the players to play less and not trying to “speak” with the other player by doing the little sound, yet the interaction was still there. The big impact of a darker environment made the players walk and move almost as one since, what I think, they were afraid of leaving each other alone, or being left alone. When it came to playing alone without a partner, the immersion of darkness became much more intense and fear of dark areas and luring creatures became far greater than expected.

My reflection on players colour perception that, after the player has gone through the warm and loving part of the game, she firstly journeys through the darkness and blue environment but also the entire game fades in hue and saturation throughout its progression. The strong colours, including blue, fade out to a grey-almost lifeless tone. This continues until death. At this point, hope is so far gone from the player since the prophecy never passes. Should the fading of colours be a metaphor of hopelessness? And should the following scene, “Heaven”, be part of what people call reincarnation?
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**Videos**

Journey part 4- Sand Surfing [PS3HD]: at 06:35
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