

Master Degree Project



GAME NARRATIVE CONVEYED THROUGH VISUAL ELEMENTS IN DIGITAL GAMES

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Abstract

This thesis compares the different concepts of game narrative and traditional narrative, and aims to explore and analyze the relationship between visual elements and game narrative in video games. Game narrative is an emerging narrative based on digital media. It can not only include stories from traditional narratives, but also convey narratives through the virtual environment and mechanisms of games. This thesis discusses the concepts of traditional narrative and game narrative from the basic concepts of narrative, and lists different visual narrative elements and video games of different narrative types on this basis. In addition, this thesis designs a study that includes different dimensions of immersion to investigate the impact of narratives conveyed through visual elements on player immersion.

Keywords:

video games, game narrative, visual elements, immersion, game interaction

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1 Introduction

Nowadays, the video game industry is growing and expanding constantly. Although video games are a relatively new entertainment medium, according to market research in the past three decades, it has become one of the most popular entertainment industries, especially among young people. In some countries, such as the United States, the number of people who play video games has exceeded those who watch movies (Przybylski, Rigby & Ryan, 2010). With the development of video games, genres have become diverse, and game narrative as one of the key points of game design has received more and more attention. Different from the traditional concept of narrative, game narrative has its own unique characteristics. Narrative is considered to be the framework or foundation of video games because it can integrate games into logic (Qin, Rau & Salvendy, 2009). Compared with traditional narrative, one of the main characteristics of game narrative is interactive, which shows that the relationship between games and players is two-way, while novels and movies with traditional narrative show the story to the audience one-way. Another characteristic of the game narrative is that it has the non-linear structure. Different choices that players make in the game interaction process will affect the final direction of the game, so players are considered to be part of the game narrator (2009). In contrast, in traditional narrative, the audience does not participate in the story.

In terms of game narrative, a closely related part is the visual design of video games, because interaction and player immersive experience are inseparable from visual elements. A lot of studies have shown that visual image is an effective mechanism to convey information and emotions, the design of visual element can also guide players or stimulate their curiosity, concentration, empathy, etc (Qin, Rau & Salvendy, 2009). Although there is a lot of research on game visual design and game narrative, there are few studies discussing the connection between them. The purpose of this thesis is to compare the difference between traditional narrative and game narrative, and to clarify the concepts of the two respectively. This thesis will explore and analyze how game narratives are conveyed in digital games through visual elements, and discuss how they affect the player's immersive experience. In order to clarify the above-mentioned research questions, this thesis selects games that have won visual design awards at the Independent Game Festival over the years as samples, and collects players' experience and feedback through a combination of questionnaire survey and open interview.

The next chapter will explain the theoretical background of this article. Starting from the narrative itself, the concepts of traditional narrative and game narrative and their respective characteristics are discussed separately. After the concept of game narrative is laid, the next chapter lists common and effective game visual elements: cut scenes, environment, characters, interface and micro-narrative. The third chapter divides the types of narrative games into 4 types according to the ratio of the game's initial narrative to the player's game narrative: game story dominance, game and player story balance, player story dominance, and ninety-nine percent of player stories. Chapter 4 introduces the research of this thesis in detail, including research design, method and process, and results. The later chapters are analysis and discussion which based on research data and interview.

2 Background

Narrative is one of the most indispensable parts of daily life. From everyday communication to famous literary works and movies, narrative is basically inseparable wherever words and texts are needed. Scholars' discussions, definitions and research on the term “narrative” can cover various fields such as communication, humanities, and art. Since this term is widely used in different occasions, the concept of narrative is complicated. Like all cultural phenomena, narratives are now steadily being continuously influenced by computing and the Internet (Bizzocchi & Tanenbaum, 2012). As a way of human expression, narrative is continuously expanding in contact with interactive digital media (Koenitz, 2018). However, just like the problems encountered when film became the main cultural medium of the 20th century, as game narratives are more and more mentioned, its concept and existence have caused controversy.

One of the reasons for the academic debate between video games and narrative is because video games emphasize entertainment and interactivity. It seems impossible for narrative as a linear structure to have such characteristics. Scholars on the opposing side of this view believe that video games can connect and interact with the background story through an interoperable narrative method, thereby affecting the direction of the story. In the article, Majewski enumerated different situations in this debate: games as a non-narrative medium, games as the future of narrative media and gameplay and narrative as a problematic combination (Majewski, 2003). In his article, he reviewed some typical arguments for and against game narratives as well. Although some of them seem a bit extreme today, the contradictions and disputes are of reference value in the process of forming the game narrative theory. The following will discuss the definitions of narrative and game narrative separately, and discuss the similarities and differences between them.

2.1 Narrative

In emerging and dynamic fields, the definition and nature of knowledge are often derived from controversy. In the debate between game scholars and narratologists, there is a contradiction in the concept of game narrative. The focus of the debate is that there are core differences between the two narratives and whether the game and narrative are compatible (Majewski, 2003). Another question which arises from here is what are the characteristics of the game narrative itself? Although narrative is not a new field, it has existed in the literary and film industries for a long time, but the concept of game narrative has not been systematically studied to evaluate and analyze.

Before that, back to the word “narrative” itself. In Majewski's book, he mentioned that the film theorists David Bordwell and Kristin Thompson define narrative as:

“A narrative is a series of events that occur in time and space in causality.”
Majewski (2003, p.5)

Therefore, he believes that narration refers to the act of conveying a story which composed of a series of events to the audience. At the same time, in order to build the integrity of the story, the events need to contain enough information and causality (2003). This can be corresponded to the current definition of narrative on Wikipedia:

“...A narrative consists of a set of events (the story) recounted in a process of narration (or discourse), in which the events are selected and arranged in a particular order (the plot, which can also mean "story synopsis"). The category of narratives includes both the shortest accounts of events (for example, the cat sat on the mat, or a brief news item) and the longest historical or biographical works, diaries, travelogues, and so forth, as well as novels, ballads, epics, short stories, and other fictional forms...” (en.wikipedia.org,2021)

So one of the main characteristics of narrative can be regarded as the combination of events and logical relationship. Due to the existence of causality, the narrative in the process of transmission brings the audience into the rank of the participant rather than just the receiver. How events happened, why they happened, and what is the connection between them? The answers to these questions are constructed through the subjective thinking of the audience. After the narrative is selected by the author, based on the audience's understanding of the objective or virtual world, a series of events will be perceived and recognized on an emotional level.

It is worth noting that although they sound alike, narrative is different from story. Even if narrative contains story or plot, it is more biased towards their manifestations and the way of express.

In addition to the fields of art and literature, narrative is also being highlighted in the social sciences. In Sparkes's article, it mentioned that the narrative study of lives had become an important field for analyzing life experiences and identities which related to social groups, situations, and events (Sparkes, 2005). Because of the value of narrative in the field of health such as psychotherapy, its concept and theory have also attracted the interest of scholars in this discipline. In his article, he mentioned part of the viewpoint of "narrative turn", which means that people often construct memories and experiences through stories, so human beings are essentially story-telling creatures. Thus, definition of narrative in his article is:

“...narrative is the linguistic form uniquely suited for displaying human existence as situated action. Narrative descriptions exhibit human activity as purposeful engagement in the world...narratives also provide a structure for our very sense of selfhood and identity, ‘we tell stories about our lives to ourselves and to others. As such we create a narrative identity.’ ”

Sparkes (2005, p. 191)

It can be concluded that another characteristic of narrative is that it can embody self-consciousness, or it can be operated as a structure of human consciousness. In addition to getting information about the event through narrative, the identity, intention, and way of telling the narrator can also be inferred. Sparkes explained in the article that self and various identities are like culture, which is projected and maintained over time (2005). It is not preserved in the story, but is created and modified according to the narrative. It can be known from this that narratives can also help analyze the subjective trends of individuals or groups.

From this extension, another part worthy of attention is the narrative structure. Relying on some specific and unique structures, narrative can arrange and combine events together. The first analysis of narrative structure can be traced back to Aristotle's essay "Poetics". He believed that all narratives have a beginning, middle and end. Later, after the rise of

structuralism in the twentieth century, more formal and detailed analyses of narrative structure gradually emerged (Boyd, Blackburn & Pennebaker, 2020). Sparkes's article described this part as narrative with formal and recognizable attributes (2005). Narrative plays a directional role in the process of expressing and conveying events. For example, when describing the same event, according to the original time sequence of the development of the event and using flashback to describe the event, the effects of the two will be completely different. Gergen and Gergen noticed when exploring narrative forms that the evaluation characteristics of events tend to change over time. As a result, they proposed three narrative forms based on plot development: the stability, progressive and regressive narratives (Gergen & Gergen, 1983). As can be seen in Figure 1, the plot in the stability narrative can remain stable over time. In the progressive narrative, the plot shifts in time and presents an upward trend, and regressive narrative is the opposite, it will decline gradually as time progresses. With the help of narrative structure or form, the types of events described can be more easily distinguished or categorized, for example, comedy events usually use the regression narrative first, then followed by progressive narrative.

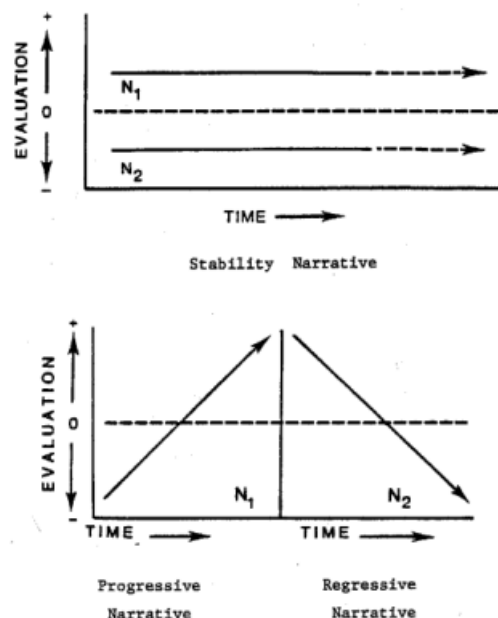


Figure 1: three narrative forms (Gergen & Gergen, 1983, p.25)

The interesting thing is that scholars in the medical field will also develop frameworks for different pathologies based on narrative features. For example, Sparkes proposed a narrative framework that includes three broad types for the study of chronic diseases: the restitution narrative, the chaos narrative and the quest narrative (Sparkes, 2005). They reflect the effects and changes of chronic diseases on the body, self and social relations through the description of the disease by patients. Such narratives reveal the connection between the patients' experience and the deeper cultural meanings associated with illness and suffering (2005). The attention to narrative will allow scholars to notice the overt and potential effects of chronic diseases, and at the same time help them find and trace the cause of the disease, so as to specify treatment plans more effectively. However, due to their relatively strong

pertinence, such narrative frameworks may not be widely used in other fields, so they will not be discussed in depth in this paper.

The next two chapters will focus on narrative in a general sense. The concepts of traditional narrative and game narrative will be explained separately and the differences between them will be compared.

2.1.1 Traditional narrative

Compared to the narrative used in new media and across disciplines, traditional narratives often refer to events expressed in classic media such as novels or movies. In Bizzocchi's article, this term is functioned as a shorthand for the more specific term "narrative arc". The typical elements contained in the narrative arc are: setup, complication, development, resolution, and denouement (Bizzocchi, 2007). The narrative arc is not only a basic framework for connecting events or story sequences, but also an effective tool for guiding the audience and readers to experience them. Each stage has its own unique function, and each stage can be connected in series to form a complete narrative line:

- Setup: The background setting of the whole story, introducing the characters and world they live in, and their laws or rules of operation.
- Complication: Contradictions or problems that need to be resolved.
- Development: The progression of the story.
- Resolution: The climax part of the story, the culmination of conflicts, and usually has the impact on the ending.
- Denouement: The ending of the whole story, the end of the narrative

The excitement of the story depends on the detailed design of each part, but in general these have proven to be an effective engine for the narrative arc because it can string loose events into a whole. In addition, a classic pyramidal narrative fragment model which created by Gustav Freytag is mentioned in Blackburn's article (2020), it clearly shows the unfolding of the narrative structure (Figure 2). It shows that the narrative is carried out by the setting of the story background and character information, and then the activities or conflicts between the characters promote the narrative to rise or advance. The third part is the climax of the whole story which includes the most intense or exciting story. The plot, the subsequent part, after passing through the top of the climax, begins to show a downward slope. Because at this time the contradiction between the characters and events often begins to be resolved, the last part is the ending of the story after the conflict is resolved, and the entire narrative ends.

Freytag's Pyramid

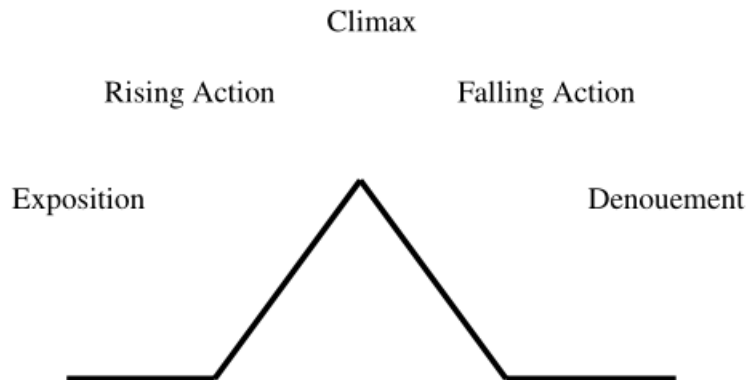


Figure 2: Freytag's Pyramid (Blackburn, 2020, p.6)

In traditional narratives, what attracts readers and audiences is usually the second part above. Blackburn's article mentioned that the two-time Pulitzer Prize winner Jon Franklin said that a good story must have a certain degree of complexity. The complexity he defined refers to situations that can promote the development of the plot or force the characters to make choices or changes (Blackburn, 2020). Complexity can trigger the thinking of readers and viewers, so it naturally attracts their attention. For example, the French classic novel *Les Misérables* can resonate with many French people, because many plots described in the novel can echo the real revolutionary history at that time.

In addition, the distinctive feature of traditional narrative is linear. Based on the above content and academic consensus, traditional narratives follow a timeline consisting of beginning, middle, and end (Sparkes, 2005). The plot and character activities move from beginning to end on this narrative axis. This process is one-way and irreversible. This framework shows that traditional narratives are based on such a basic structure, and on this basis, the content attached to this structure can have countless changes (Bizzocchi & Tanenbaum, 2012). In this case, the narrative is largely determined by the author or director, and the reader and audience are the recipients of the terminal position. Their immersion and resonance are influenced by the content of the story, the stronger deep emotions such as happiness, sadness, tension, anger, regret, etc., the deeper they can put themselves in the role.

2.1.2 Game narrative

Compared with the mature and long-established narratives such as literature and movies, game narrative seems to be still in its infancy. However, through the vigorous development of digital media and the game industry, game narrative has gained a lot of attention and progress over the past decade (Bizzocchi & Tanenbaum, 2012). With the increase in the types of digital games, the mode of incorporating stories into games has become very common. However, game narrative does not only refer to digital games which include the background of some stories, it can also be reflected in gameplay, game art, etc., which is very different from traditional narrative.

Narrative is considered the basis or framework of computer games because it integrates games into logical series (Qin, Rau & Salvendy, 2009). The definition of game narrative is like:

“ the computer game narrative is defined as the methods or styles used to tell the story of the game. The story includes the plots prewritten by game writers and developers and created by players in the course of playing the games...Although computer games share some of the characteristics of narrative (character, plot, setting, events) like traditional media, they are essentially different. The reason is that a game narrative is not based on representation but on simulation.”

Qin, Rau & Salvendy (2009, p.5)

It can be seen that the focus of game narrative and traditional narrative is different. Rather than focusing on the story itself, game narrative is more concerned with the way and effect of conveying events and information to players. At the same time, the identity of players is no longer just the receiver, they are both the experiencer and the creator of the game narrative. In the process of participating and exploring the game, players are improving the progress of the entire game.

One of the most unique characteristics of game narration is interactivity. Interactive narrative is a representative narrative which using video games as a medium. Although narratives are always considered passive and regular, interactive narratives break such restrictions and constraints. As mentioned in Ip's article, the interactive narrative balances the conflict between these two. This gives the player partial control over the development of the story (Ip, 2011). It means that part of the process in the game is controlled by the player and different choices and operations from the player will affect the direction of the game's progress. Grace's article compares the differences between participants in traditional narrative and game narrative. He believes that participants in traditional narratives, such as readers of books or audiences of movies, are just observers of the events unfolding in the narrative, which are considered passive consumers. However, participants in video games are more inclined to be regarded as narrative active consumers, because they have a specific identity in the virtual world, and they can perceive or even construct a fantasy world (Grace,2016). Theoretically, the more parts that the player can manipulate, the greater interactivity and influence the player can perceive, and the stronger the sense of immersion can be get. For example, in the game Sims, players can choose character styles, behaviors, professions, etc. for virtual citizens and trigger corresponding events and results in the game. Interactivity emphasizes the player's intervention in the progress and results of the game(Qin, Rau & Salvendy, 2009).

Another important characteristic of game narrative is non-linear structure. Compared with traditional narrative, game narrative has more than just the core purpose of conveying the story to the player, it pays more attention to the transmission of information. It is more like a drama, which unfolds the event in front of the player, and not only promotes a story according to the inherent structure. Ip's article also mentioned that those video games want to have a more advanced narrative mode have the development of a branch structure. In addition to interaction, players can mainly gain a sense of control of the game during the game process (2011). Non-linear structure has become an effective alternative to traditional narrative expressions, it is also one of the commonly used methods in game design. By increasing the opportunity for players to influence the rhythm of events in the game, and providing them with the ability to change the trigger sequence of specific events, it enriches and optimizes the game narrative while also supporting interactive storytelling, as shown in Figure 3.

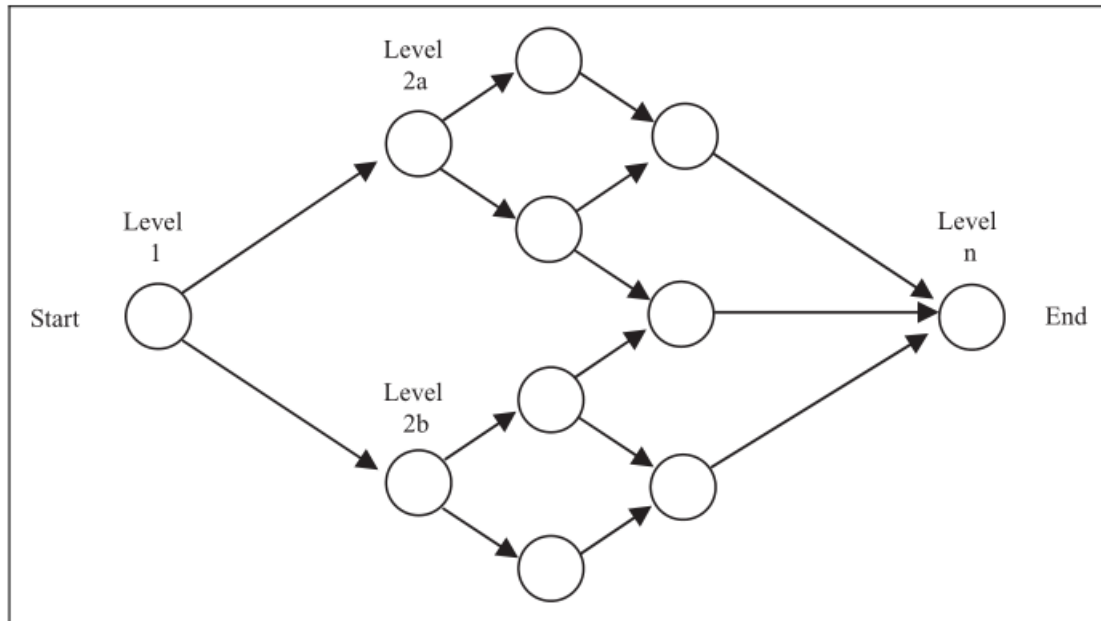


Figure 3: Nonlinear/branching game structure (Ip, 2011, p.9)

The presentation of nonlinear structure in game narrative mainly includes multiple endings and branching path (Lebowitz, 2009). Multiple endings are the most common and popular non-linear narrative. It usually includes a fixed backbone plot and different endings which can be decided by the player. This is a relatively easier way for game developers, because the content before the ending part can be considered as a traditional narrative which does not need to be changed drastically. However, in Lebowitz's article, the disadvantage of this method is also mentioned, that is, it is difficult to use in a series of stories, especially if there are contradictory relationships between different endings, which will not be conducive to the subsequent narrative (2009). The open ending can be regarded as a more advanced narrative mode, but it often has more paths, and is likely to be composed of a large number of branch narratives, such as the Final Fantasy series. The branching path represents the mode in which the player can make several important decisions and influence the direction of the narrative (2009). This kind of game narrative contains multiple backbone plots and endings. This does not rule out the possibility that the branches lead to a common direction or share the same main story, but in general this is a richer and more flexible non-linear structure.

2.2 Visual elements of game narrative

Narrative is an important part of human beings to express themselves and transmit information. Narratives can be presented in many different forms, but this paper will focus on the narrative based on visual elements. The narrative expressed in the form of graphics or pictures has a long history, which can be traced back to cave paintings and hieroglyphs (Cohn, 2013). In Cohn's book, he mentioned that the panel, which is the discrete image, is the basic unit of visual narrative. The panel can connect different information in series by controlling the number and arrangement to awaken the understanding of readers or viewers. From the scene to the specific object, then to the details on the object, the same method can also highlight specific content in the process. Cohn prefers to view narrative as a way of conveying concepts, so this is no longer limited to "storytelling" itself even though it is indeed a typical example.

After discovering the value of narrative in the visual space, game developers apply this inspiration to video games and use it as a visual language (Dillman et al, 2018). They proposed that visual elements, especially visual interactive clues, can play an effective guiding role for players in the virtual world, such as using clear signs such as arrows in video games, or changing colors, lights and other elements to guide players' attention and further make the player's gaming experience and immersion better. So another conclusion drawn by Dillman et al.(2018) is that effective visual elements should have two characteristics: markedness and narrative. The former refers to whether it is visually attractive enough, while the latter refers to whether it is practical. Through gameplay and game narration, players perform activities in a large-scale virtual world to achieve a certain goal or training effect. Gameplay is the driving force for players to explore in video games, while game narration allows players to generate specific awareness and motivation to change trends in the environment. In the following, these representative narrative visual elements will be discussed: cut scene, environment, characters, interface and micro-narrative.

2.2.1 Cut scene

Cut scene is one of the most common narrative techniques in video games. Cut scene has been used in the early stages of the development of video games. In some video games of the last century, cut scenes are presented in the form of simple screen text to convey content (Ip, 2011). With the advancement of computer graphics and electronic media, nowadays cut scenes in video games are becoming more and more refined. At the same time, it is gradually becoming one of the standard narrative techniques in modern video games. For example, the action role-playing game *The Witcher 3: Wild Hunt*(2015) which was released in 2015, it was once called one of the most complex games in history by the gaming community because of its strong story background and interactivity(2016). In particular, it will tend to 36 different endings due to players' different choices in the game. Another reason which makes it famous is that the quality of its CG cut scenes are very close to movies, which can be seen in figure 3 below.



Figure 4: Cut scene from *The Witcher 3: Wild Hunt*(2015) (*The Witcher*, 2014)

Ip's article defines it as a pre-rendered video, sometimes using a computer or host hardware for real-time rendering. At the same time, during the playback of the cut scenes, the player's interaction is temporarily stopped, and the player will become a passive audience at this stage (Ip, 2011). It usually appears at the beginning of the game to show the background story of the game, set the scene for the game and attract the player's attention. Although cut scene is a relatively passive narrative mode, it plays a universal and needed role in today's video games. Cut scene has three main functions: explain the background of the story or events which take place in the game, play a transitional role in the game, and show the results of player actions or choices (Ip, 2011). Although cut scene can be considered as a piece of movie which interspersed in the game or integrated into the gameplay, it is evolving towards a more complex structure since it is part of a video game. In order to increase players' participation and entertainment in this part, interactive cut scene has been developed, that means players can choose what happens next before, after, or even during the cut scene. This feature also appears in *The Witcher 3: Wild Hunt*(2015), as shown in Figure 5 below.



Figure 5: Interactive cut scene from *The Witcher 3: Wild Hunt*(2015) (*The Witcher*, 2014)

2.2.2 Environment

The narrative which relies on traditional media is often based on a linear timeline, but the narrative in video games emphasizes spatial relationships. As a result, the concept of narrative space was proposed, which refers to a virtual environment that allows players to interact with other players, non-player characters, and the environment (Dickey, 2010). The method of providing a narrative background through spatial design can even be traced back to before the invention of video games. In the Jenkins article, the tabletop game Monopoly is listed as an example (Jenkins, 2004). Players move on the board and build their own territories. As the game progresses, they gain or lose wealth through different territories or opportunity cards with plots. This can be completely regarded as players playing in a narrative environment even though it does not have any electronic media. Jenkins also called very influential early games such as *Super Mario Bros* "scroll game", because it projects the passage of time in the unfolding space like a traditional Japanese scroll paintings. This is also used extensively in subsequent video games, such as the click-and-click adventure game *The Lost City* which released in 2003, it put puzzles and story clues in the environment for players to discover. This

game also expresses the changes of time and seasons through the conversion of scenes, which represented by Figure 5 below.



Figure 6: One of the scenes from The Lost City(2013)(Göransson, 2020)

Dickey stated in his article that the rationality in the game narrative is established through the interaction between characters, events and environments. The background and setting are in the form of narrative story, and the feasible boundaries are determined by sketching the parameters that may exist in the game environment. Players will try to overcome or solve problems based on the possibilities within certain boundaries (Dickey, 2010). If the narrative environment has enough complete and reliable information, the curiosity of the player can be stimulated through it.

Therefore, the narrative conveyed by the environment in the video game can be regarded as creating a narrative space, providing a scene for events to occur, and better helping players build associations in the virtual space and thereby increase their sense of immersion. It can also contain information by itself.

What's interesting is that the theory of creating an immersive experience through narrative environments can even be used in real life. For example, different themed areas in Disneyland will make full use of physical facilities to create an animation-like atmosphere for visitors.

2.2.3 Characters

In the vast narrative space, whether it is the main character representing the player's virtual avatar or the non-player character who conveys information, the character is one of the essential narrative elements. One theory worth mentioning here is that one of the enjoyment mechanisms of video games is character identification. It can be understood as the illusion of "feeling like" or "becoming" a key character in the video game (Hefner, Klimmt & Vorderer, 2007). This sense of role substitution can not only increase the player's immersive experience during the game, but also make the player a participant in the game narrative. The

article by Hefner et al. specifically compares the differences in participant identities between traditional narratives and game narratives. They believe that in non-interactive narrative situations such as watching TV, the user and the characters on the screen are at a distance, because in this situation people are just watching the actions of the characters and evaluating or empathizing with them from the perspective of an observer. But this will not be applied to video games. In contrast, players have a process of self-identification in video games, and they can even participate in it to shape the main character they want. The representative example here is the action-adventure game Grand Theft Auto series. One of the most attractive features in the initial stage of the game is that the player has a lot of freedom to shape his/her own character, including the appearance, clothing, skills, and even genetics. As shown in the character creation interface in Figure 6. Players can use themselves as prototypes, or design characters according to their preferences which helps self-awareness in video games, thereby enhancing empathy and pride of accomplishment.

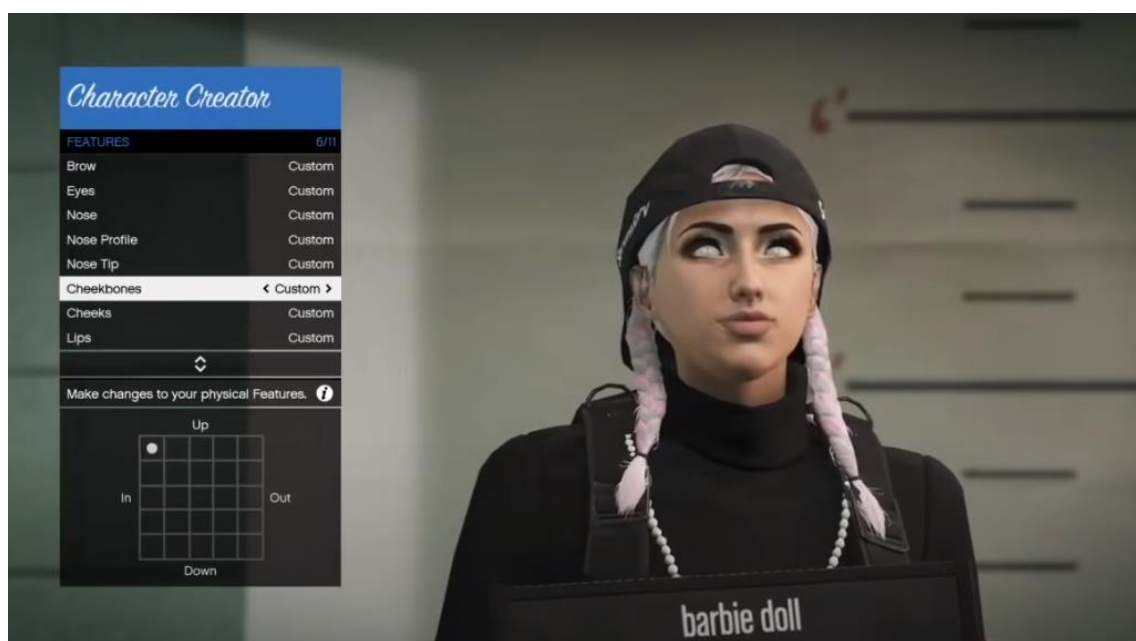


Figure 7: Character creation interface from Grand Theft Auto 5 (2013) (Merron & Alex, 2017)

Another argument mentioned in the article by Hefner et al. is that escaping from reality is another motivation for players to get entertained. They believe that if media users or viewers cannot obtain pleasure by observing or transforming into others, then temporarily ignoring or forgetting the limitations of real life is another effective way (Hefner, Klimmt & Vorderer, 2007). Game narrative can indeed achieve this goal, because video games provide an independent environment and space, and allow players to explore in it, and even make them a part of it to change or create. Through the game narrative, the player is given a specific identity or operating a specific role, and when interacting with the video game, the player (or the player's virtual avatar) can actively move on the screen. In this case, the role activity can be regarded as a projection of the player's consciousness rather than the result of the player's observation.

The narrative expressed by the non-player character(NPC) is slightly different from the main character. The types of emotions in reality can be roughly divided into two main types: those directed at ourselves and those directed at other creatures (Ryan, 2008). The former are

feelings caused by self-directed emotions such as excitement, depression, relaxation, etc. The latter can be understood as the result of empathy, that is, psychologically bringing into the role of others or imagining the situation of others, so as to get the feelings that others may have. Therefore, the narrative conveyed by NPCs is on the one hand as a knowledge carrier in video games to convey information to players, on the other hand, they will lead the players to substitute their identities to achieve the effect of emotional immersion and interactive narration. As the game plot advances, the relationship between the characters will also change, sometimes they need to be redefined when player plays the game. Players' thinking and adjustments based on the current situation are also part of building the game narrative.

2.2.4 Interface

Different from other visual elements, the game interface should be designed with practicality and guidance in addition to its aesthetics. The game interface has been proven to combine gameplay activities and narrative recognition as a key link, interface elements usually play a narrative role by strengthening the narrative theme, character information and the details of the story world (Bizzocchi , Lin & Tanenbaum, 2011). There are two common design techniques to combine game interface and game narrative. The first is to incorporate narrative elements into all visual interface media of video games, such as images, cursors, fonts, etc., so that game interface elements are as extensive as game narrative elements. The other one is to add narrative elements to the specific interface to emphasize the most important information in that interface (2011). Adding a narrative dimension to a more functional game interface has been proven to help create a more powerful narrative experience, which undoubtedly helps the game narrative better integrate with other aspects. The game interface that includes narrative assists the construction of the entire game world, so that there is a natural and smooth transition between plot connection and interface switching. Figure 7 shows the interface of Warcraft III: Reign of Chaos(2002) for characters from different factions.



Figure 8: The interface of Warcraft III: Reign of Chaos (2002)

2.2.5 Micro-narrative

The concept of narrative arc is mentioned above. If the process of the whole game is regarded as a big narrative arc, then small events in the game, such as branch lines independent of the main storyline, independent small games, etc., can be regarded as micro-narrative. Bizzocchi defines it in his article as "a moment of narrative flow and less coherence that occurs in a broader game context" (Bizzocchi, 2007). Its function is to enrich the gameplay of video games and increase the challenge and interest of players in the game process. In addition, micro-narrative can be seen as a short and independent narrative arc embedded in the development of a longer narrative, so it still serves the entire game narrative. For example, a large number of micro-narratives were used in the point-and-click adventure game *Machinarium* which was released in 2009. The task of this game is to solve a series of puzzles and the puzzles are related to each other. Players can obtain information by clicking on objects or NPCs in the scene. In addition, one of the characteristics of *Machinarium* is that there are no text prompts throughout the game. All the information transmission, including decryption information and story description, is integrated into the game by micro-narratives, which as shown in Figure 8. Except for the teaching level which is included in the initial scene of the game, this game uses a thought bubble system instead of readable text.



Figure 9: Cut scene from *Machinarium* (2009) (RedSevenNine, 2015)

2.3 Immersion

Many terms have been developed and used when describing the user's in-depth contact experience with common traditional media, such as flow, cognitive absorption, presence, etc (Qin, Rau & Salvendy, 2007). However, immersion is a widely used term in the game field. It means that players have strong intuition and cognitive beliefs in the virtual world which constructed by video games. It is a psychological process involving multiple dimensions, and it is also one of the important criteria for measuring the player's involvement in video games. Similar to the immersion brought by traditional narratives. In video games, players will project

their consciousness on events or stories created in virtual space, like readers and audiences who are immersed in novels and movies, it is a process of gradually ignoring the creativity and combination of text and pictures. Taylor defines it as "diegetic immersion" (Taylor, 2002). In her article, she defines immersion based on video games as immersion which comes from narrative space because she believes that games can create illusions that are powerful enough to make players think that they are a part of it. On this basis, Taylor proposed two levels of immersion possible in video games: diegetic immersion and intradiegetic (or situated) immersion (Taylor, 2002). The former means that after entering the virtual space field, players will shift their attention to other events or things in it over time, thereby gradually ignoring the existence of the space field. At the same time, players will partially downplay their sense of existence. The other one is that players not only pay attention to the gameplay itself, but also experience the narrative space by substituting themselves into the characters in video games. This is also confirmed in the article by Zhang, Perkis and Arndt (2017). They believe that the main factors affect immersion are spatiality and emotion, so they divide the types of immersion into spatial immersion and emotional immersion. Spatial immersion refers to the type of immersion triggered and kept by the spatial quality of the virtual environment. In spatial immersion, the realistic effect of the virtual environment can be achieved by designing some spatial composition of the scene, or by using film shooting techniques such as the advancement, zooming out of the lens or changing shoot angles to make the player seem to be able to enter, feel and control the whole space. Emotional immersion refers to the immersive feeling that players feel when they are attracted by narrative content such as events or stories. This is more about the empathy that players have towards specific characters or plots rather than treating themselves as part of the game space.

Immersion can not only reflect the impact of video games on players, it can also reflect the player's subjective wishes and tendencies. People play video games out of a kind of escapism, which refers to escaping from the real world into a fantasy world (Jennett, 2010). Jennett's article explains three reasons for this phenomenon. First of all, one of the reasons video games are attractive is because it is different from the real world. Players can easily gain experiences that are difficult to achieve in real life, such as traveling to the ancient world, etc. Second, video games help people pass the time. When they are free, they can still maintain a relatively busy state through games and keep their thinking active. In addition, video games can effectively relieve stress and negative emotions. Sometimes it is considered as a treatment because it can help people distract in a short period of time. Although this may not help solve the problem, it is a low-cost way to adjust status. After clarifying the above reasons, she transferred to the grounded theory associated with escapism, which are also the key factors of game immersion, they are: sense of control, game performance and appropriate level of challenge (Jennett, 2010). In her article, a total of five experiments were conducted to discover the influence of these factors on the player's immersion. The process of the experiment will not be described here, the conclusions of the experiment are as follows: The sense of control is necessary and positive for players, and receiving signals of good performance can promote their enthusiasm and immersion; game performance is not only the key part of attracting players to continue playing, but also an effective mechanism for players to evaluate themselves. The more positive feedback players receive in this session, the more motivated they are to continue the game. But it is worth noting that appropriate negative feedback such as level failure is also needed, otherwise the monotonous positive feedback will also make the game uninteresting; the appropriate level of challenge difficulty must be considered in the game design process. If the game is too difficult, then it will easily make the player lose the motivation to continue

exploring. Conversely, if the game is too simple, then the player's sense of accomplishment is meaningless. Game immersion depends on the balance of the challenge difficulty setting.

Experiments in Jennett's article (2010) have proved that other factors in video games will definitely affect the degree of immersion as well, such as music and sound effects, but in-depth research on these topics will be beyond the scope of this paper, so they will not be discussed here.

3 Narrative Game Categories

Video games that include narrative often contain two parallel narratives. One is set by the game developer and is the same for all players who experience the game, and the other one is selected based on the player's wishes, the game narrative generated through various interactive elements in the game and the player's different decisions (Skolnick, 2014). The simplest puzzle games such as Tetris are not discussed in this chapter, because although they are video games, it is difficult to classify them into any of the narrative game categories mentioned above. In addition, the types of narrative games can be divided into 4 types according to the ratio between the initial game narrative and the player's game narrative: Game story dominant, balanced game and player story, player story dominant and ninety-nine percent player story (2014).

3.1 Game story dominant

This type of game is characterized by a linear story as the theme and guides the player to a pre-designed game route. In this process, the player's behavior and choices are in a designed narrative, which means that even different players may experience similar experiences in this type of game. The screenwriter or director can show artistic or personal stylized content in this type of game instead of the players. So correspondingly, the player's degree of freedom and operability will be weakened. Although as video games, they will definitely include playable parts and motivated mechanisms, from the perspective of game narrative, players can only control and use very limited space. For example, the action-adventure game God of War is a series of games with a mythological story background. All its versions are based on Greek and Norse mythology, as shown in Figure 10.

The advantage of game story dominant is that usually it has a rich story and allows players to immerse themselves in the gameplay. Although it does not provide much dominance to players, the narrative experience it brings can still be very attractive.

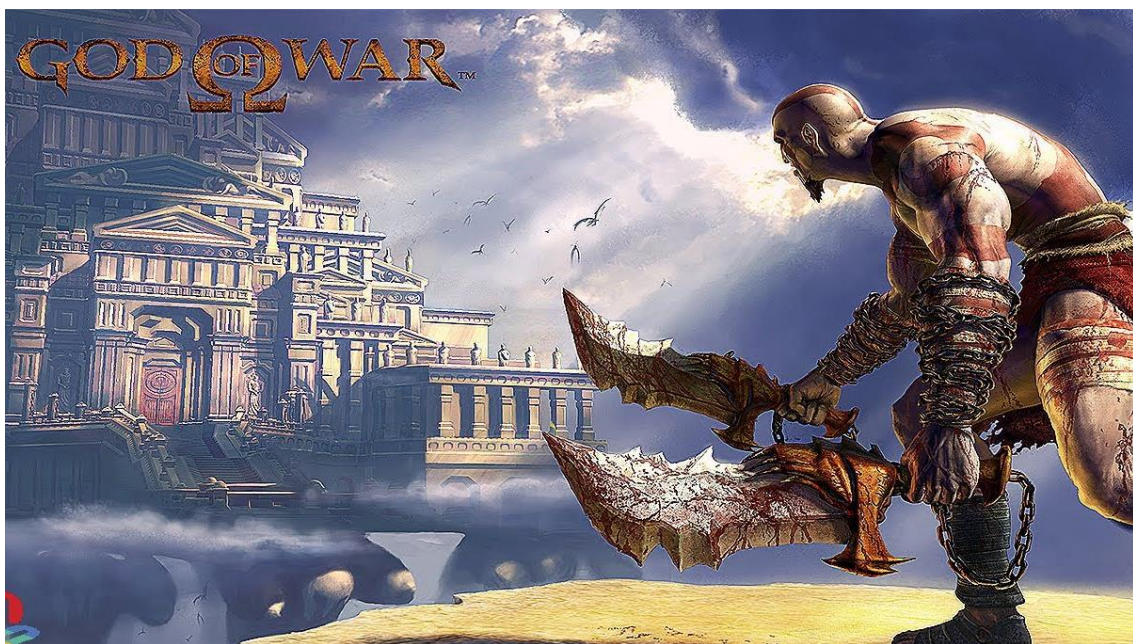


Figure 10: The first God of War game released in 2005

3.2 Balanced game and player story

This is a game design that aims to balance game narrative and player participation. It is an ideal and popular game narrative mode because it reasonably combines both the original narrative determined by the game designer and the dynamic narrative determined by the player. Its characteristic is that the game has a main narrative framework, but at the same time players can make decisions according to their own wishes in the game. Such video games are usually non-linear and have multiple interactive elements. The iconic game is the Grand Theft Auto series, which is shown in Figure 11. Players can create an avatar that represents themselves in the game according to their preferences. In a broad and open narrative environment, players can receive tasks from the NPCs or just explore the world freely. There will be unexpected events in the game from time to time to stimulate the excitement and entertainment of the player.



Figure 11: Scenes from Grand Theft Auto 5 (2013)

3.3 Player story dominant

Most of these games are strategic games. They also have storyline or traditional narrative, but they emphasize the player's choices and arrangements. Players seem to be facing the same game, but in the end they will create various situations due to different tactics or habits. The active unit in this type of game is usually a team or group, and the player plays the role of leader. Another feature of this type of game is that the NPCs in it do not monotonously convey tasks and information, they will have certain characteristics to establish interaction or relationship with the player. Game narrative is also conveyed through this kind of personalized characters. The representative game here is the StarCraft series, which is shown in Figure 12. The game revolves around the war between the three races in the galaxy as the background story. Players complete the plot levels by controlling the troops of each race.

This type of game can also use the player's understanding and empathy to achieve game narrative.



Figure 12: Scenes from StarCraft 1(1998)

3.4 Ninety-nine percent player story

From a theoretical point of view, the narrative of this type of game is not outstanding, but due to their powerful gameplay and interactivity, they are also very popular among players. There is almost no clear story as a background or main structure in this type of game. Most of the time, its original narrative is only based on the environment and rules. Similar to the previous type, it also emphasizes tactics and arrangements. The different part is that players will frequently play games with other real players and it highlights the characteristics of the characters controlled by the player. The popular genre worth mentioning here is multiplayer-only battle arenas (MOBAs). One of the typical games here is League of Legends (2009), as shown in Figure 13.

The strengths and weaknesses of this type of game are obvious. The reason why it is very attractive in the player community is that team competition in the shared virtual world itself is full of challenges and unknowns. Players' participation and playability are particularly strong. But at the same time, this type of game narrative is irrelevant, and for game developers, it becomes more difficult to set stories or plots in it.



Figure 13: Scenes from League of Legends(2009)

4 Problem

According to the concept of game narration, the expression of narrative in video games is richer and more diverse than traditional narrative. Game narratives can either rely on traditional narratives, such as incorporating one or more stories into video games, using player emotions and empathy to increase the immersive experience, or building narrative space through other visual elements, through environment and gameplay to attract the player's attention. In this paper, the narrative conveyed through visual elements will be clarified how it works and how it affects the player's immersive experience.

4.1 Research design

4.1.1 Research problem

The relevant theories of game narrative and visual narrative elements have been described above. In this paper, an experiment was conducted to explore the relevance of the above concepts and the game narrative conveyed through visual elements. Specifically, this research aims to answer the research questions:

- How is the game narrative conveyed through visual elements in digital games?
- What is the effect of the visual elements on the immersion of the player ?

The method used in this research combines questionnaire survey and open interview, because instead of judging whether the game narrative will affect the player's game experience, this research is more inclined to study the specific impact and immersion of the game narrative on the player.

4.1.2 Participants

According to the statistics of The Entertainment Software Association (ESA), 75% of all American households have at least one game player, 64% of American adults and 70% of adults under the age of eighteen regularly play video games. In addition, players between the ages of 18 and 34 are the largest group of age breakdown of video game players. Others in turn are those aged 35 to 54 accounted for 26%, those under 18 accounted for 21%, those aged 55 to 60 accounted for 9%, and those over 65 years old accounted for 6%. In this experiment, a representative target group is expected to be included. So after sample screening, the ages of the participants were between 18 and 30. A total of fifteen participants took part in this study, of which 8 were males and 7 were females.

The snowball sampling method was used in the selection of participants in this study. This method is one of the most widely used methods in qualitative research in various disciplines of the social sciences (Noy, 2008). It is often used as the main method to obtain resource providers, or as an auxiliary method to help researchers enrich sampling clusters. The advantage of the snowball sampling method is that its sampling process is informative and efficient, because it is a process in which informants who have met the conditions recommend other suitable informants they find to the researcher. At the same time, it is also the way to help find potential samples and build relationships in a short period of time. In this study, some of the participants were selected by the researcher, while the remaining part was recommended by the first batch of participants who fit this study.

According to the results of the background investigation in the questionnaire, this group of participants has the habit of playing video games in their daily lives. 46.7% of them play games every day, and 33.3% play games at least 3-5 times a week. In the survey on the duration of a single game, 33.3% of the participants said that they will play more than 3 hours each time, and the proportion of participants between 2-3 hours and 1-2 hours is both 26.7%, and the remaining 13.3% of the participants chose a single game for less than 1 hour. It can be seen that video games are a very common form of entertainment in their lives. The reason for selecting this group of participants is that they belong to the broadest audience of video games, they are representative, and they all have experience in playing video games, so there is no need to worry that they will encounter technical or understanding problems during the research process. In addition, before the start of the test, a simple survey of the professional background of the participants was conducted to ensure that they did not have a professional background in game-related majors.

4.1.3 Game selection

The examples selected in this experiment are games which has won the prize in the Independent Game Festival. The Independent Game Festival is a game developer conference held annually since 1998. It has set up a series of honors such as Excellent Visual Art Award, Sound Effect Award, Technology Award, etc., which has always attracted much attention from the game industry. Considering the above-mentioned definition of game narrative and the visual narrative elements worthy of attention, two different types of video games were selected in this research. Both of them won the Visual Art Excellence Award of the Independent Game Festival.

The first one is Hyper Light Drifter (2016) which won the award at the 2017 Independent Game Festival. It is a 2D action role-playing game in a pixelated style. In this game, players can control the drifter to explore the map. They need to use an energy sword to fight monsters and gain access to other modules that expand their weapon and ability arsenal, power them by finding rare batteries which scattered around the map. It can be seen from Figure 14 that the road connecting the steps will guide the player where to go. If players go outside the set path or map, they will lose one block of XP. If players died, they can just start over from the save point. The complete map in the game is very large, and the scenes and combat mechanisms in each direction are slightly different. Players can freely choose the route they want to take.



Figure 14: Map scene in Hyper Light Drifter (2016)

In Figure 15, the key prop that players need to obtain and use are marked in bright green in the game scene. Sometimes it is hidden in a more inconspicuous place, but through the design of colors and graphics, it can be highlighted in the environment.



Figure 15: Key prop (the green battery) in Hyper Light Drifter (2016)

Hyper Light Drifter (2016) is a video game with no dialogue and specific storyline. It just reflects the background through bubble frame of NPC characters (which only including pictures) and cut scenes at the beginning of the game and interspersed during the game, so game narrative is mainly reflected in map design, prop design and interactive design in this game. It is tested as a sample without a story background, focusing on the gameplay.

The other game is Oxenfree (2016) which won the award at the 2016 Independent Game Festival. It is a graphic adventure played from a 2.5D perspective, with 3D characters navigating 2D environments. The background story of this game is that the protagonist Alex and his companions are exploring paranormal forces on the island. The mechanism of the game is called "walk and talk". When players manipulate the protagonist to explore the game scene, there will be two or three dialogue options (Figure16). Players can select dialogue options at any time during conversations, choosing to wait for other characters to finish, to interrupt, or to remain silent. Players' choices will affect the development of the main storyline and lead to several different endings.



Figure 16: Dialog options in Oxenfree (2016)

In addition, there is a radio in this game as an important item carried by the player throughout (the player can use it anytime and anywhere by pressing Shift), and it will play a key role in promoting the plot in a specific scene. On ordinary occasions, players can also tune the radio to obtain additional information about the background of the story, such as the history of the island, the story of a specific statue, etc. It can be seen in Figure 17.



Figure 17: The scene of using the radio in Oxenfree (2016)

According to the above definition of game narrative, Oxenfree (2016) is typically non-linear. Although it also has design for maps and props, the game narrative is mainly reflected in dialogue and interaction, which is the context and clues that run through the entire game.

This video game is tested as a sample with a clear story background, focusing on the relationship between characters and events.

4.2 Method and procedure

4.2.1 Ethics statement

According to the Swedish Ethical Review Act (SFS 2003:460) regarding human research permission, the research in this paper does not involve human tissue or sensitive personal data, so there is no need to apply for ethical review.

The entire research process is private and confidential, and only one participant and the researcher herself are involved in each test process. The questionnaire and interview data of the participants are both anonymous and no sensitive personal information will be kept. There is no results can be traced back to any individual. The 15 participants participating in this study were all volunteers, and informed consent was obtained after detailed explanations of this game test.

4.2.2 Research method and process

The research in this study uses a combination of questionnaire survey and open interview.

The design of the questionnaire is based on the sample in the article by Qin et al (2009). It's about player immersion in the computer game narrative. They initially proposed a questionnaire containing six dimensions (curiosity, concentration, challenge, control, comprehension and empathy) in the article. They correspond to the three stages of dimensions of flow experience: antecedents, experiences, and effects. According to the different data of each category, the feelings of the participants at the beginning of the game, the process of the game, and after the end of the game will be reflected. Each of these categories corresponds to a different state of the participants and can be further analyzed. For example, curiosity is the beginning of the player's cognition and interest, concentration is the player's attention and immersion, etc.

There are two slightly different questionnaires have designed in this study for both games, and there are five related feeling descriptions in each category. Due to the different types and focuses of Hyper Light Drifter (2016) and Oxenfree (2016), general questions or the same questionnaire are difficult to work well. However, the six main categories of the two questionnaires haven't been changed, so they will not be affected by the difference when analyzing data. Samples of the questionnaires are attached in the Appendix A and Appendix B and different parts have been marked with different colors.

The entire content of this experiment was carried out online and it was one-to-one every time. Participants were required to use the dedicated steam account for the test, which includes Hyper Light Drifter (2016) and Oxenfree (2016). The software used in this experiment is Discord and Tencent Meeting, both of them have the functions of sending messages, calling and screen sharing.

The entire testing phase can be divided into four parts:

- **Background research and statement:** Before the start of the entire test, the researcher will declare to the participants that all the content and data in this experiment are only used to help the writing of the paper, and their information and data are protected. During the

experiment, only the researcher will observe their behavior in the game. After being approved by the participants, the researcher will explain to them the process and content of this experiment, and conduct a simple investigation of their background.

- **Game experience:** The experiment will start after participants have successfully logged in to the account and downloaded both games. Participants can choose which game they want to start first, and share the screen with the researcher before starting. Participants can ask the researcher questions or ask for help if they need during the game, but the researcher will not ask them any questions or talk to them during the game. This is to ensure that participants are as minimally affected as possible by the researcher while playing the game. Participants were asked to play each game for at least 15 minutes because this would ensure that they had the most basic gaming experience. They can continue the game or stop according to their subjective wishes on this basis. The researcher will not actively interrupt them in this process. The length of time participants play the game will be recorded.
- **Questionnaire:** After the participants finish the first game, they will be asked to fill in the corresponding questionnaire. There will be a short break before starting the next game to ensure that the participants experience the two games independently and are not affected by the other game. They will fill out the other questionnaire after the second game is over.
- **Open interview:** Open interview: The interview duration in this experiment is about 10 minutes. Before the start of the interview, the researcher will ask the participants' wishes, the entire interview will be recorded if they accept (Fortunately no participant rejected this part in this experiment). The interview is composed of fixed questions and dynamic questions. The fixed questions are focused on the content of the questionnaire and the two games, such as "Do you think the content of the questionnaire covers all your feelings", "Which one of the two games do you prefer and why?"; and dynamic The question is for the performance of the participants in the game, such as "Why did you suddenly change your strategy route?". In addition, the interview will also record the personal feelings and evaluations of the participants.

4.2.3 Pilot test

Before starting the formal research, the researcher conducted a pilot test to simulate the entire experiment process, including game testing, questionnaires and open interviews. The questionnaire survey is also the part of attention to ensure that its description is accurate and understandable.

This pilot test only invited one participant, and the whole process was about one and a half hours. Most of the time, the participant were experiencing the two video games, while the questionnaire and interview only took about fifteen minutes. The participant spent about forty minutes in the game on Hyper Light Drifter (2016), while the game time on Oxenfree (2016) was about half an hour. From the time spent on the game, this participant is more interested in Hyper Light Drifter (2016). It can also be seen from his interviews that he prefers more operable video games. While playing the game, the researcher had some brief conversations with the participants, some of his feelings in the dialogue were also recorded as the data, such as a certain map he tried many times.

Judging from the survey results of this participant, Hyper Light Drifter (2016)'s immersive experience feedback is more positive than Oxenfree (2016)'s. However, certain categories of

Oxenfree (2016) (such as attention and understanding) are more positive than those of Hyper Light Drifter. Therefore, the researcher speculate that the player's immersion is related to their preferences and the length of the game. From the analysis of different categories in the questionnaire survey results, it can be guessed that game-focused video games score higher in operation and challenge categories due to their game mechanics, while story-based videos like Oxenfree (2016), this kind of games will have higher scores in concentration and understanding, because the story is the background of the entire game, and players need to pay attention to this part at all times.

After this pilot test, the researcher adjusted the description in part of the questionnaire content and the order of the interview questions.

5 Result

In this study, the results of the analysis of data are derived from the results of the questionnaire, the video and audio during the interview, and the content of the notes during the observation of the participants during the game.

5.1 Questionnaire data

According to the above, the questionnaire in this study is about the player's immersion in the video game. The six dimensions it includes are curiosity, concentration, challenge, control, comprehension and empathy. Their meaning and corresponding questions are as follows:

- Curiosity (question 1-5): The first feeling the game brings to the player, the attraction and impact to the player and player's desire to explore game narratives.
- Concentration (question 6-10): The player's ability and duration to focus on the game narrative.
- Comprehension (question 11-15): The player's ability to understand the content and structure of the game narrative.
- Control (question 16-20): The player's ability to exercise and control the game narrative.
- Challenge (question 21-25): The degree of difficulty presented in the game narrative and the player's own game experience and abilities.
- Empathy (question 26-30): The player's sense of substitution and imagination of the game narrative.

Table 1: Questionnaire Scores

Questionnaire: Player immersion in game narrative		
	Hyper Light Drafter	Oxenfree
	Category average score	
Curiosity (question 1-5)	3.093	4.146
Concentration (question 6-10)	3.173	3.800
Comprehension (question 11-15)	3.160	4.133
Control (question 16-20)	3.360	4.280
Challenge (question 21-25)	3.213	3.333
Empathy (question 26-30)	2.613	3.453
	Average score	
	3.102	3.857

The degree of agreement for each question ranges from one point to five points, with one point representing the lowest agreement and five points representing the highest agreement. The method of calculating scores in this study is based on the values represented by different levels of agreement. In order to facilitate calculations, this study calculates the average scores of the 30 questions in the questionnaire according to their corresponding categories, and compares the different feelings that the two games bring to players. The higher the score, the more the players agree with the description of the questionnaire, which also means that their sense of immersion is stronger.

Table 1 lists the average achievements of players' immersion scores in the two games. For example, the row about "curiosity" represents the set of questions from the first one to the fifth one, and the number represents the average of the scores obtained by all participants after answering this category. The following categories are the same. Finally, based on the average

scores of all categories, the final scores of Hyper Light Drifter (2016) and Oxenfree (2016) are calculated respectively. This score represents the immersion level of the entire game, and it is also the standard for comparing the two games in general.

5.2 Interview data

According to the process of this research, interviews will be conducted after the participants have completed the questionnaire. The average duration of the interview is about ten minutes. With the permission of the participants, a recording will be made at this link to ensure the complete collection of information and feedback.

The open interview structure in this research is a combination of fixed and dynamic questions. The fixed questions are aimed at players' feedback on the questionnaire and their preferences for the game, while the dynamic questions are determined by the researcher based on the player's performance during the game. The interview guidance is shown in Appendix B.

Table 2 lists the basic information of the participants anonymously, and records each person's game time and game preferences in this experiment. At the same time, the average game time of players in Hyper Light Drifter (2016) is 31.73 minutes, and the average time in Oxenfree (2016) is 49.26 minutes.

Table 2: Participants' information, game duration and preferences

Participant	Gender	Game duration 《Hyper Light Drifter》	Game duration 《Oxenfree》	Game preference
1	M	25 mins	43 mins	Like both
2	M	25 mins	20 mins	《Oxenfree》
3	M	27 mins	52 mins	Like both
4	M	1 h 8 mins	55 mins	《Oxenfree》
5	F	26 mins	1h 7 mins	Like both
6	M	52 mins	2h 30 mins	《Hyper Light Drifter》
7	M	19 mins	15 mins	《Hyper Light Drifter》
8	F	24 mins	1 h 14 mins	《Oxenfree》
9	F	16 mins	36 mins	《Oxenfree》

10	F	32 mins	25 mins	《Hyper Light Drifter》
11	M	18 mins	42 mins	《Oxenfree》
12	F	36 mins	49 mins	《Oxenfree》
13	M	48 mins	18 mins	《Hyper Light Drifter》
14	F	25 mins	48 mins	《Oxenfree》
15	F	35 mins	45 mins	Like both
Average game duration		31.73 mins	49.26 mins	

6 Analysis

From the questionnaire data in this study, it can be seen that the final score of Oxenfree (2016) is higher than the score of Hyper Light Drifter (2016), which means that it gives players a stronger sense of immersion. Based on the average game time of the participants, it can also be seen that they spend more time on Oxenfree (2016). This result supports the accuracy of the questionnaire survey results. In addition, according to the data in the last column of Table 2, there are more participants who prefer Oxenfree (2016), which also shows that it was more attractive to players.

Returning to the questionnaire data, among the six dimensions of Hyper Light Drifter (2016), the category with the highest score is "Control" and "Challenge", the lowest score is "Empathy"; and in the Oxenfree (2016)'s values, the category with the highest score is "Control" and "Curiosity", and the lowest score is "Challenge". As shown in Figure 18, the reddish brown represents the highest score, and the gray represents the lowest score.

Questionnaire: Player immersion in game narrative		
	Hyper Light Drafter	Oxenfree
	Category average score	
Curiosity (question 1-5)	3.093	4.146
Concentration (question 6-10)	3.173	3.800
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Challenge (question 21-25)	3.213	3.333
Empathy (question 26-30)	2.613	3.453
	Average score	
	3.102	3.857

Figure 18: Questionnaire data

Analyzing from the type of game, this result is reasonable. Since Hyper Light Drifter (2016) is a game with stronger operability and weaker storytelling, its game narrative is transmitted through the gameplay, so the degree of immersion it affects the player depends on the player's activities and the events which happened in this video game's narrative space. The part that requires more manipulation by the player is that the player drives the protagonist to explore the map and fight the monsters in the game. The behavior and attention that the player is guided in this kind of game narrative are the key factors that can affect their immersion. This can be seen in the 19th question of the questionnaire "I can defeat most of opponents (npc) in this game" and the 20th one "I can arrange the main character to do the task which I want to do in this game". More than half of the participants are choosing a more positive degree of

agreement (shown in Figure 5-1). The vertical axis represents the number of participants, and the horizontal axis represents the degree of agreement among participants on this question.

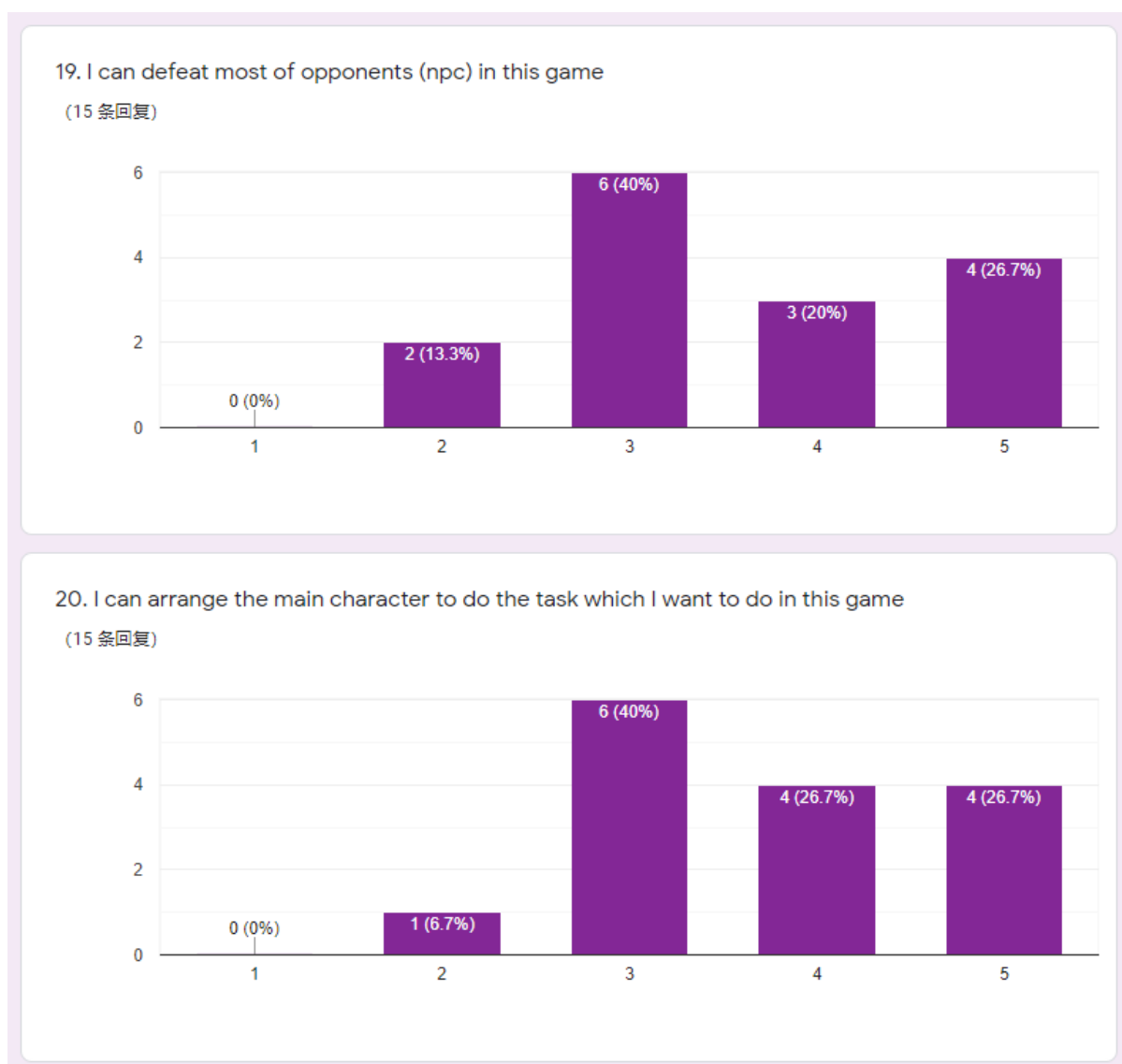


Figure 5-1: The 19th and 20th questions of the questionnaire

At the same time, the story in Hyper Light Drifter (2016) is weakened. It only relies on the cut scene at the beginning of the game and the fragmented pictures in the game to convey information, so it is very limited for the participants to bring themselves into the game when they explore in the game which can be seen from the 27th question of the questionnaire "I can bring in the main character's identity while playing this game." and 28th one "I need some time to come back to reality when I finish playing this game" (shown in Figure 5-2.). Then it is understandable that the "Empathy" in the questionnaire data is the lowest.

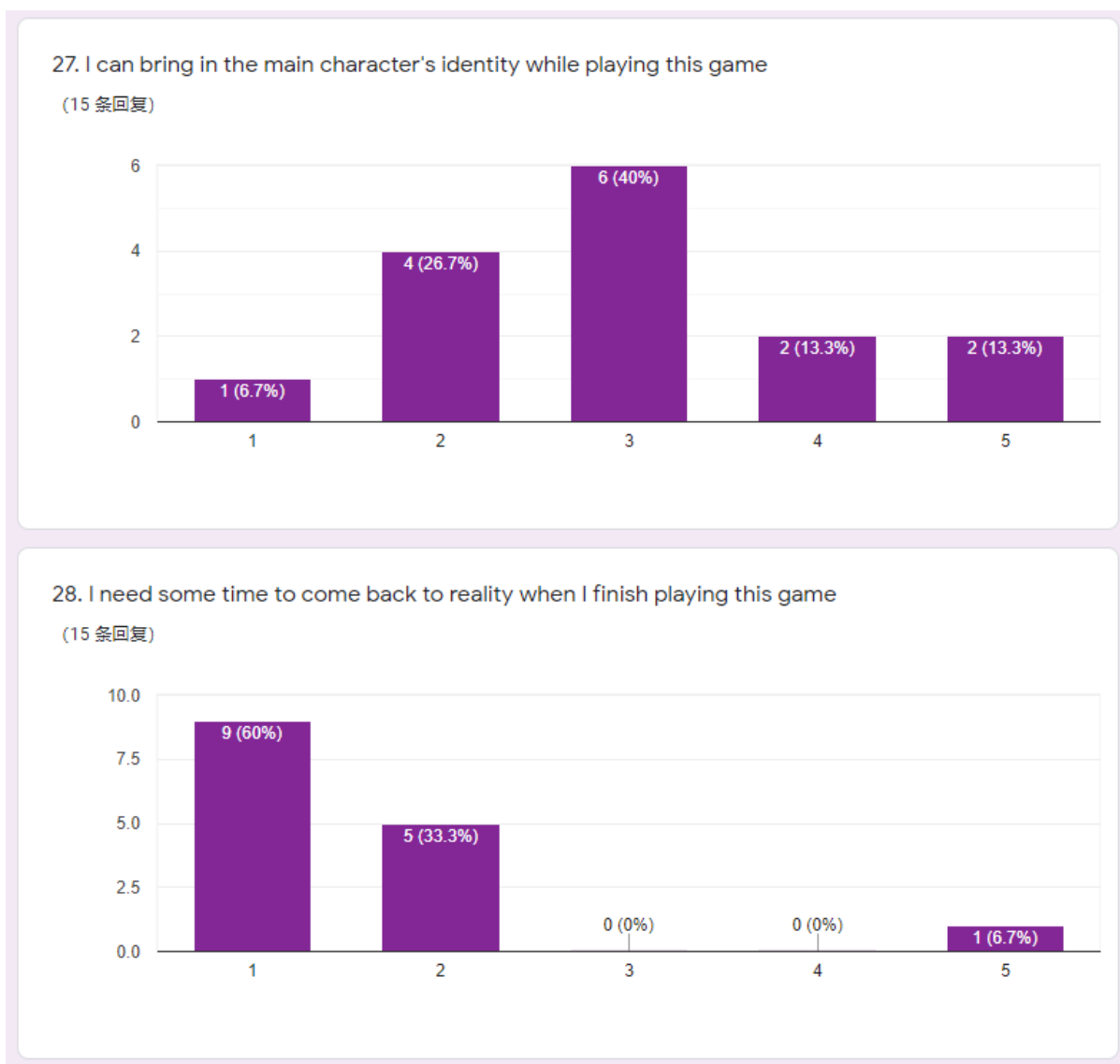


Figure 5-2: The 27th and 28th questions of the questionnaire

Continue to analyze Oxenfree (2016) from the type of game, which has a rich dramatic plot and characters. Its game narrative relies heavily on the stories and interactive scenes written by game developers. The game starts to unfold the background story and set the suspense from the beginning. It can be considered that the player relies on the backbone story every moment of the game. In this game, in addition to the protagonist (the player), there are four other characters. Each character is designed with a different background story and character. During the game, the player will have dialogue and interaction with them, and further trigger more Stories and events. At the same time, the story of Oxenfree (2016) contains some supernatural and suspenseful plots. This can be used as an explanation for why "Curiosity" can achieve a high score in this study. In the questionnaire corresponding to Oxenfree (2016), question 4 "This game can quickly attract my attention" and question 5 "When I was playing this game, I wanted to know what would happen afterwards" received almost all participants' high score agreement (as shown in Figure 5-3). Consistent with the above, the vertical axis represents the number of participants, and the horizontal axis represents the degree of agreement among participants on this question. The result of a few low scores of agreement is from participants who don't like this type of game. For most participants, the story of this game is fascinating.

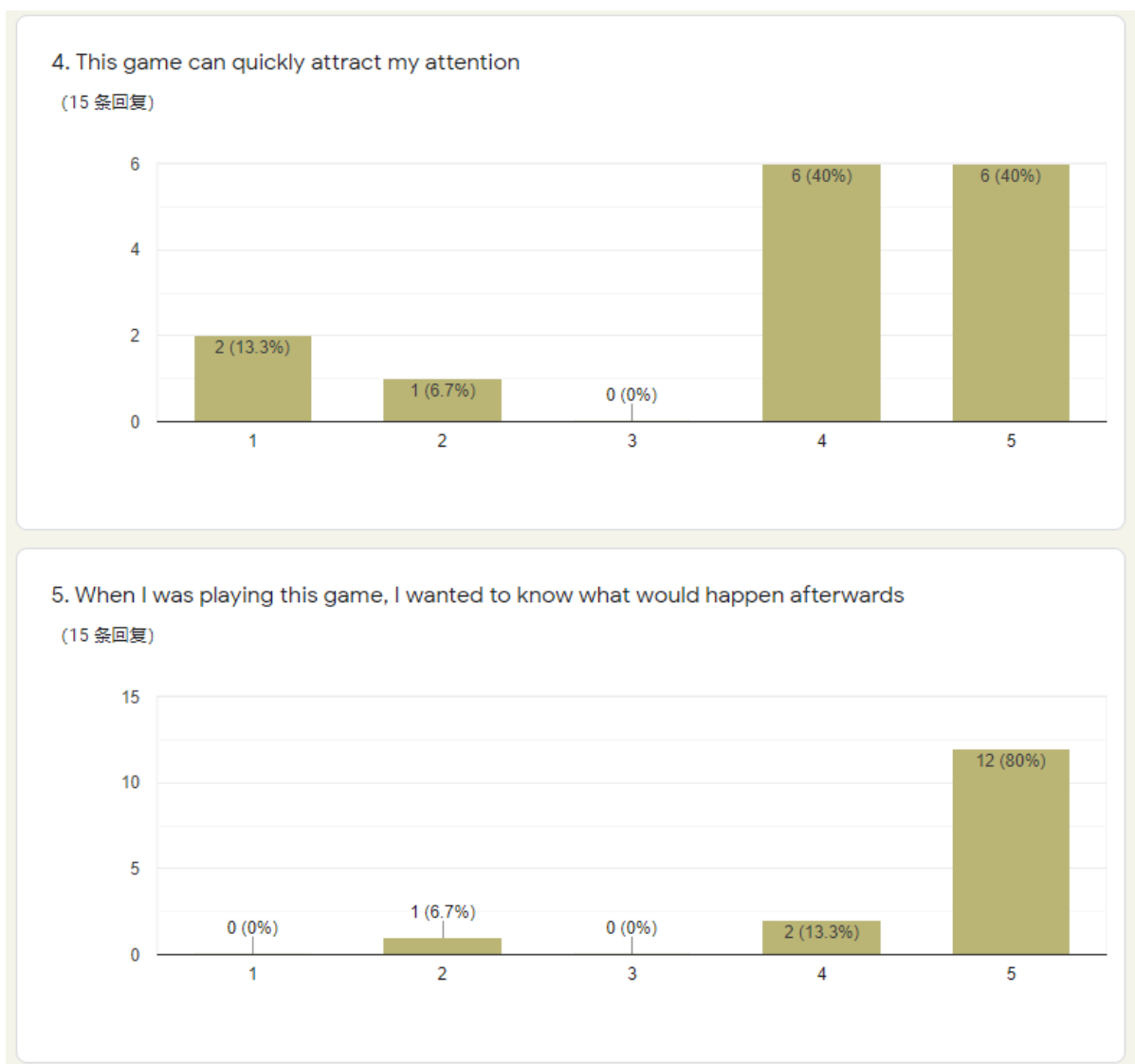


Figure 5-3: The 4th and 5th questions of the questionnaire

In Oxenfree (2016), there is almost no part that tests participants' operability. It is not a game that emphasizes game mechanics. However, it has the highest score in the "Control" part. From the perspective of game narration, the "Control" dimension in this game represents the player's control over the entire game plot and rhythm. Oxenfree (2016) is a typical non-linear narrative game because its story development is determined by different choices made by the player and it has several different endings. From the 19th question "I felt parts of the story are formed by me in the course of playing this game" and the 20th "I felt I can control the progress of the game story", we can see that there are more than Half of the participants chose the degree of agreement with a full score (shown in Figure 5-5).

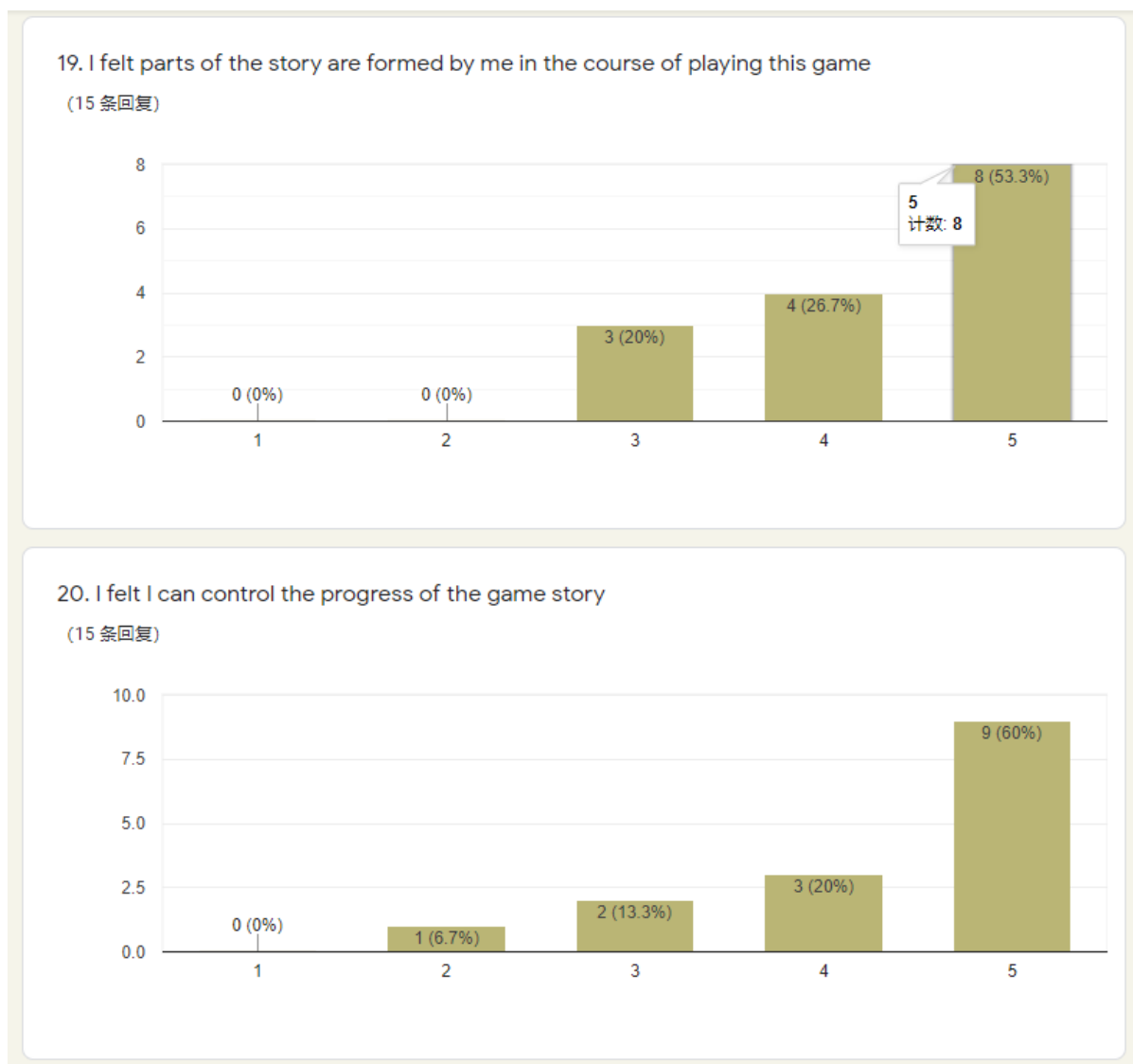


Figure 5-4: The 19th and 20th questions of the questionnaire

Each category score of Oxenfree(2016) is higher than that of Hyper Light Drifter (2016). Relatively speaking, it performs better in all dimensions. It can be seen that Oxenfree (2016) is the video game with an excellent story and mature game narrative.

After comparing their own dimensional scores, the two sets of data from these two video games were compared together. From the average scores of the six dimensions, "Curious" is the category with the largest difference in scores, the difference between their values is 1.053. "Challenge" is the category with the most similar scores, the difference between their values is 0.12. As shown in Figure 19, the reddish brown represents the category with the closest score in the two games, and the gray represents the category with the largest difference in scores in the two games.

Questionnaire: Player immersion in game narrative		
	Hyper Light Drafter	Oxenfree
	Category average score	
Curiosity (question 1-5)	3.093	4.146
Concentration (question 6-10)	3.173	3.800
Comprehension (question 11-15)	3.160	4.133
Control (question 16-20)	3.360	4.280
Challenge (question 21-25)	3.213	3.333
Empathy (question 26-30)	2.613	3.453
	Average score	
	3.102	3.857

Figure 19: Questionnaire data

"Challenge" category with the closest score shows that the game abilities of these participants in this study are similar, or that the two video games are within the control of these participants. According to the criteria for selecting participants above, it can be seen that the participants in this study can be regarded as ordinary players in the case game. Because there is no difficulty affecting the game testing process, this group of participants can be seen that they can operate games well from the results of the questionnaire. At the same time, the difficulty of these two video games is not much different.

As for the "Curious" category with the biggest difference, compare the game types of Hyper Light Drifter (2016) and Oxenfree (2016) again. The scene of Hyper Light Drifter (2016) before entering the main map is a linear route similar to the teaching level, which means that the player has no choice but to advance according to the designed route. In this scene, players will fight with some low-level monsters to learn how to use weapons and trigger terrain changes. According to the data in the open interview, some players believe that Hyper Light Drifter (2016) is a slow-heating game, which means that players need to spend some time to adapt to it (As shown in table 3). A game with a little difficulty at the beginning of the game may make the player lose patience and interest. At the same time, the beginning of the game of Oxenfree (2016) is a dialogue that explains the background of the story. It is the beginning and foundation of the entire game development. Players are easily attracted at this time. The beginning of Oxenfree (2016) confessed that the protagonist and a group of friends have made an appointment to meet and meet on an island. It reveals a bit of the island's history and strange places, "I want to know the story about the island" and the upcoming "friends" characters can effectively arouse players' curiosity. This is why Oxenfree (2016) has a better sense of immersion in this dimension.

Table 3: Participants' comments in the interview

Participant	Quote
3	"In the beginning, this game confused me a lot because I didn't know what I was going to do."
7	"I don't know some roads require me to shoot the button by the gun, so I was stuck for a long time."
11	"This game did not attract me at first, but later when I got used to its operation method, I found it quite interesting."

In addition, the personal preferences of the participants also have an impact on immersion. In Table 1, it can be seen that the participants spent longer time on their preferred games. Table 4 lists the participants' evaluations of game preferences.

Table 4: Participants' comments in the interview

Participant	Quote (positive)
4	"I really like this story, I even want to buy this game."
8	"I feel that this game is hard to stop when it starts. I always want to know what will happen afterwards."
10	"It's a sense of accomplishment to fight monsters in this game and I like the animation during the fight."
12	"This game makes me feel like I'm watching a movie."
	Quote (negative)
10	"I can't understand what the story is saying, and I don't want to watch so many conversations. I feel it's just boring."

After clarifying the specific categories that can enhance the player's immersion, this research will deeply study the role of visual elements in it. The concept of game narration and the visual elements that can express narrative have been explained above. In order to clarify how the game narrative is conveyed through visual elements, this research has set up questions about visual elements in both the questionnaire and the open interview. These questions are mainly scattered in the "Concentration" and "Comprehension" sections.

In the Hyper Light Drifter (2016) questionnaire, visual elements such as maps, characters and props are used as the main narrative objects of concern. In this game, the map is not only the main body of the narrative space which plays a guiding role when the player explores the virtual world, but also a part of the game mechanics, because the player will die by crossing the map boundary or triggering a trap in the map. The 8th question of the questionnaire is "I paid attention to the map design while playing this game". Most of the participants chose a high-scoring agreement, as shown in Figure 5-5. It is worth mentioning that in the notes that record the performance of the participants, more than half of the participants' main cause of death in this game is due to the map.

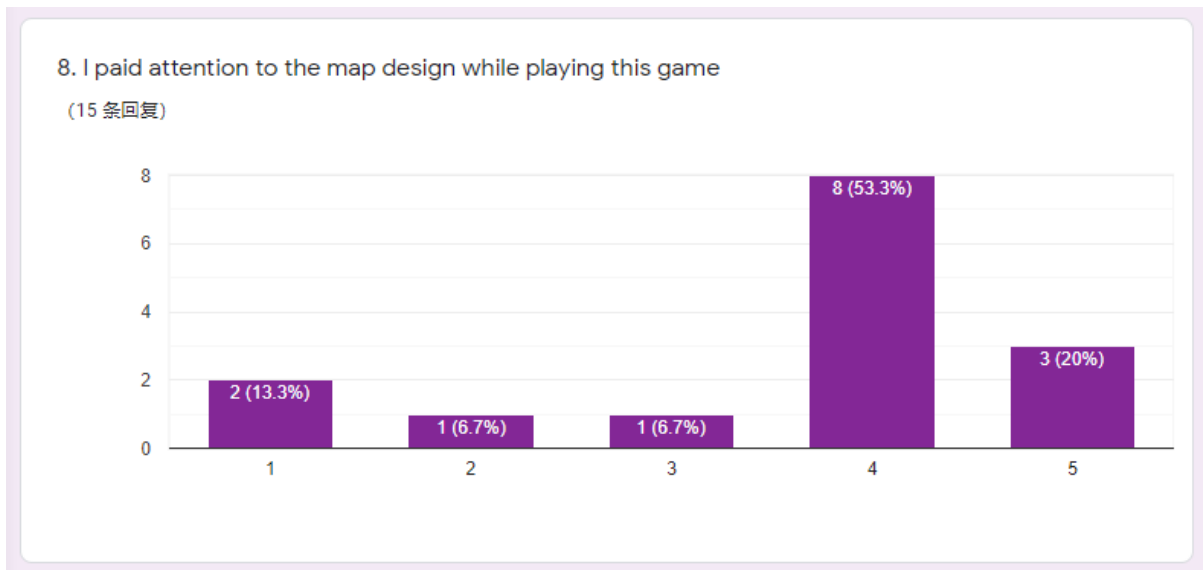


Figure 5-5: The 8th questions of the questionnaire

It is worth mentioning that in the notes that record the performance of the contestants, the main cause of death of more than half of the contestants in this game was caused by the map. Unlike the cause of death caused by fights with monsters and bosses, the number of deaths caused by the map of the participants is similar to the former, but the frequency is lower, and it will happen in any scene. Because of the save mechanism of this game, if the player is completely dead (the energy value is cleared), the player can continue to challenge the monsters and bosses in the same place. During this time, their characters will die very frequently, but only during the battle. Most of the time the participants are in a state of exploring in the map, so their attention to the map will be higher than other narrative elements.

he part of the interview about Hyper Light Drifter (2016) also involved the issue of map design, which is "Can the appearance of map be your guide?", the collected answers are still positive and negative, as shown in the following table 5.

Table 5: Participants' comments in the interview

Interview: Can the appearance of map be your guide?	
Participant	Quote (positive)
6	"I like the appearance of the map very much. Its design is very technological, but it also feels like a place re-wrapped by nature after being abandoned... I noticed the shining spots on the map. They helped me find the hidden path in the plants."
11	"The map near the boss often adds items that can provide bullet supplements. I don't often open the map to guide but I can know from the scene changes on the map that monsters will appear next."
	Quote (negative)

8	"I think there are too many useless furnishings on the map. I attack them but nothing will happen, but they still look like things with some functions."
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In addition, the questions corresponding to the characters and the props are the 9th and 10th questions in the questionnaire. The results are shown in the figure 5-6 below:

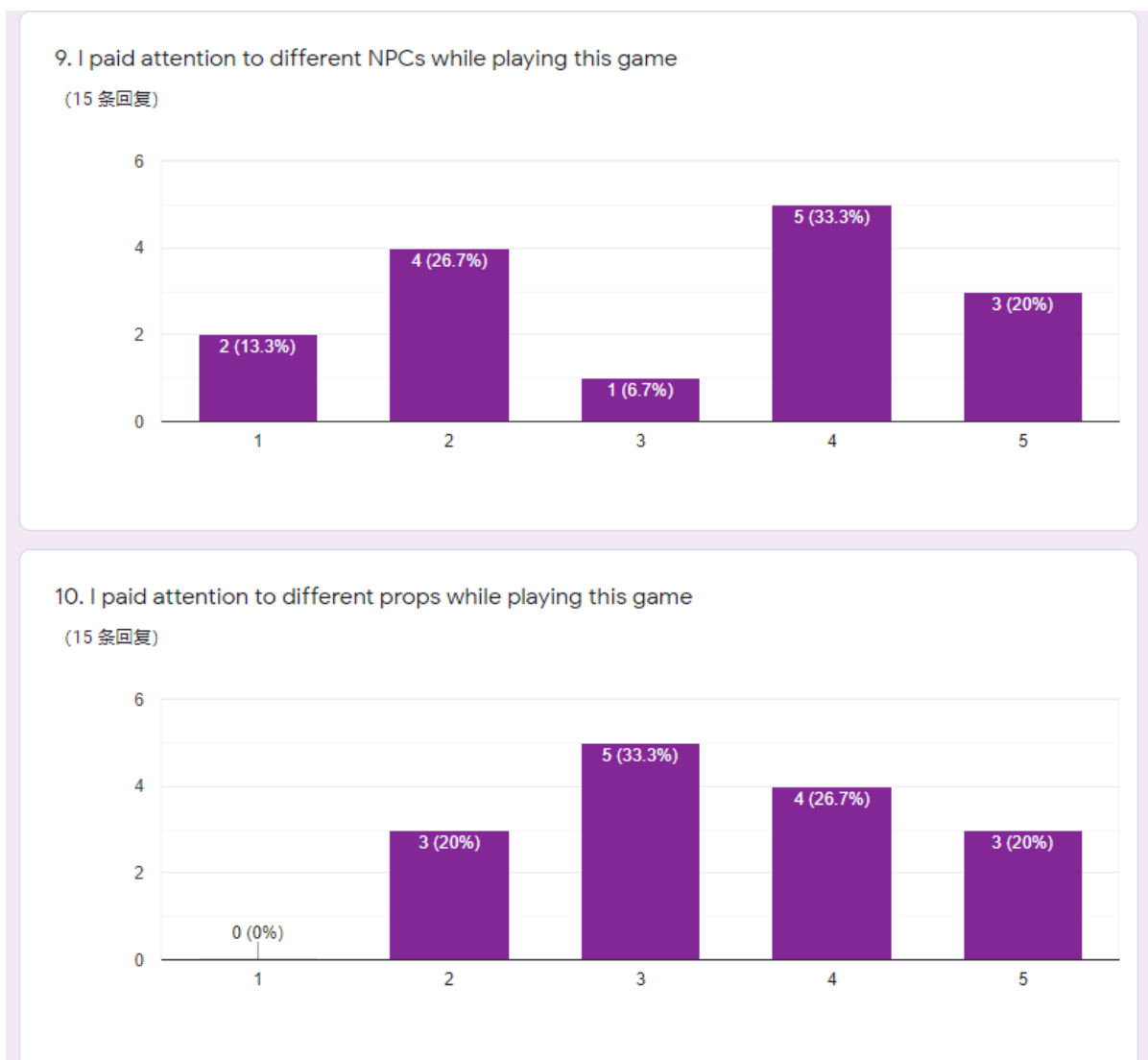


Figure 5-6: The 9th and 10th questions of the questionnaire

From the point of view of scores, participants paid the least attention to NPCs. In *Hyper Light Drifter* (2016), NPCs are mainly used in the store to guide players to upgrade weapons and provide fragmented information in the map to supplement the background story. Regardless of whether there are them, the game can be played. They played very little role that participants often ignored them or deliberately skipped communicating with them. Participants paid the most attention to props, and this score even surpassed the map. The main props in this game are the battery that replenishes life and the gun as a weapon, both of them are closely related to the gameplay, because they are the motivation part of the game mechanics. Players need the gun to unlock part of the map sometimes, and the battery is a key item for replenishing lives at any time which randomly hidden in the game world. While these

visual elements convey information in the narrative space, they also play a role in guiding the player's behavior.

In the game Oxenfree(2016), maps and characters are the main visual elements that convey the narrative. Although it is a video game that relies heavily on stories, it is undeniable that its visual narrative elements are equally important. In this game, it is also analyzed from the perspective of maps, characters and props.

From the results of the questionnaire, it is the character that gets the highest score among the three main visual narrative elements. Question 9 of the questionnaire is "I paid attention to dialogues between characters while playing this game". On this question, no participant chose the option of disagreement or partial disagreement, as shown in Figure 5-7. It can be seen that the way of integrating text narrative into video games through dialogue can arouse players' sense of immersion. Players' attention to the story in the game will shift to the characters who tell the story. In Oxenfree(2016), in addition to the dialog box for the protagonist to choose which contains text content, the rest of the dialog appears in the form of subtitles at the bottom of the screen, but it is worth noting that in the interaction between the characters, the characters will follow players' different choices to give feedback in the form of a bubble box containing the avatar of the designated character. This form is a way to assist and enrich the character narrative or dialogue narrative.

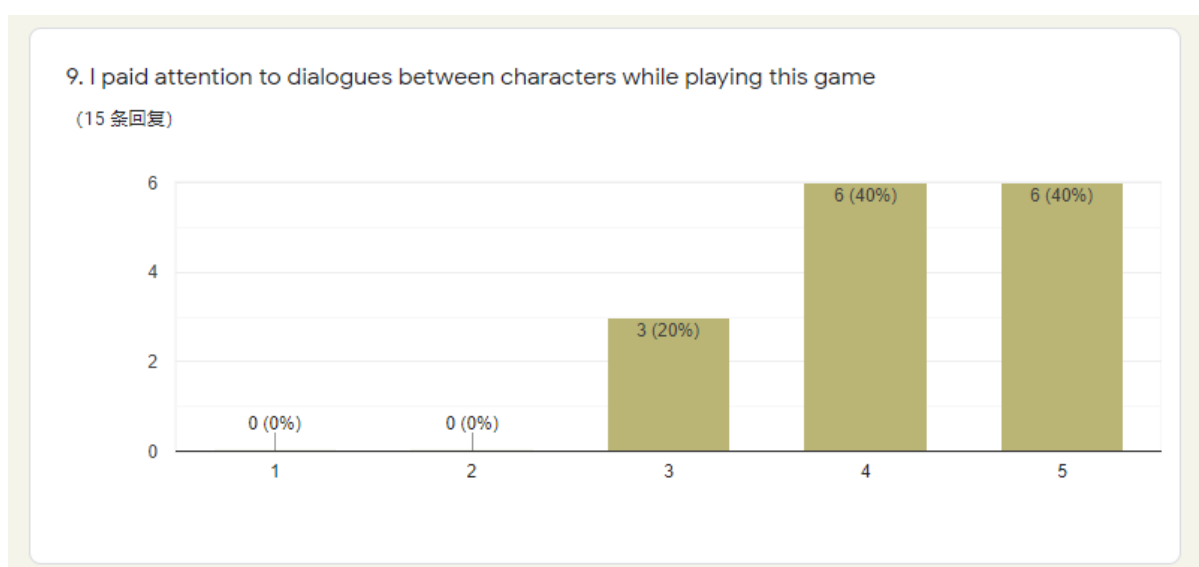


Figure 5-7: The 9th and 10th questions of the questionnaire

The other two narrative elements are ranked in the order of map and props. Similar to Hyper Light Drifter (2016), the map of Oxenfree(2016) is also to help build a narrative environment and integrate into the game mechanics. Different interactive props will appear in different scenes to provide players with more clues. Sometimes they are related to the main plot, sometimes just to enrich the background story. The environment and props play the role of branch plot in this game. If the player interacts with them during the dialogue, a new or independent dialogue/plot may appear.

The extended discussion here is the immersive impact on players of this type of game narrative. Appropriate side narrative helps to make the story more complete and rich, thereby enhancing the credibility of the narrative world, and the player's immersion will increase

accordingly. On the contrary, if the content of the branch is too much or too trivial, sometimes it will destroy the narrative of the main story. Players receiving different information from different places will increase their load of processing information, and once the appropriate amount is exceeded, it will be counterproductive. Judging from the results of this research, it is fortunate that the nonlinear narrative and branch narrative in Oxenfree(2016) did not have a negative influence on the participants. Figures 5-8 below are questions 14 and 15 in the questionnaire. As a result of the question, the data shows that participants can understand the relationship between characters and events in this game well, which is helpful for them to experience the game narrative better.

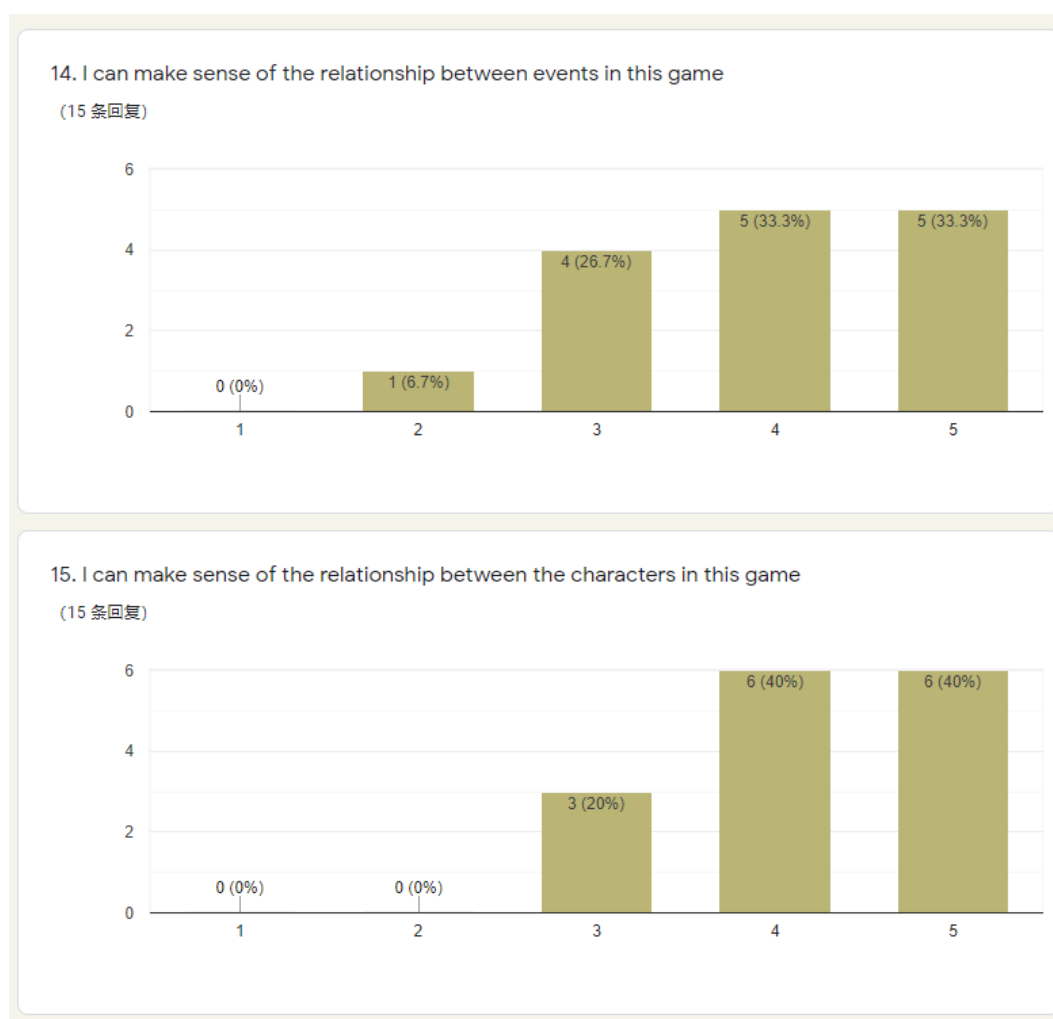


Figure 5-8: The 14th and 15th questions of the questionnaire

In this part of the related interviews, participants will mention visual elements when describing their feelings about the story and dialogue. As shown in Table 6. The related dynamic questions in this interview can also be seen in Appendix C, such as "Do you like games based on stories and dialogue?", "Which event do you like best?" etc.

Table 6: Participants' comments in the interview

Participant	Quote
4	"Sometimes the dialog box disappears too fast. I may not have time to react... but it doesn't affect my reading of the story. When I miss some dialogues, I will know what the characters are currently focusing on whom based on the character bubbles above them."
7	"I really like the scenes in this game, it feels like an interactive movie."
11	"When I set the game quality to the highest level, the whole picture makes me feel very comfortable... I like to walk around and see if there is anything interesting around me while reading the dialogue."
14	"The scene when I first entered the mysterious cave and met with my partner shocked me. It was really beautiful... and I quickly noticed the abnormal things inside. I knew something strange might happen next."

In summary, by comparing the scores of different categories in a single game, the "Control" score of Hyper Light Drifter (2016) is the highest, and the score of "Empathy" is the lowest, which is related to the game narrative mainly through the narrative environment and gameplay. The most important visual element of its narrative is the map; the "Control" score of Oxenfree(2016) is also the highest, and the "Challenge" score is the lowest. This is because it uses specific stories as the main game narrative and adopts a non-linear structure. The visual elements of its narrative are characters. By comparing the categories of these two games, their scores in "Challenge" are the closest, and the scores in "Curious" are the most different. Judging from the final result, Oxenfree(2016) brings participants a higher sense of immersion than Hyper Light Drifter (2016), and its scores in each category are all higher than those in Hyper Light Drifter (2016).

7 Discussion

Generally speaking, the research in this paper is progressing smoothly. The data from the 15 participants are all valid and helpful to the research question.

From the results of the research, it can be concluded that the main visual elements that convey narrative in different types of video games are also different. In video games that highlight gameplay, the narrative is often transmitted through maps and interfaces which as part of the visual elements that build the narrative world, and sometimes it is also reflected in the game mechanics. In video games that emphasize the story, in addition to the main story, the narrative can also be expanded through character behavior, dialogue, and interactive scenes or objects. This method can supplement the information through a branch narrative technique, increase the reading and operation of the players, so that they can be more involved in the story and strengthen the sense of immersion. For game developers or game art designers, using the rules and characteristics of game narratives can effectively increase the fun and attractiveness of video games. In addition, the quality of the game narrative can affect the player's immersion. Therefore, the game narrative should be considered as a key factor in the design of game mechanics and game art. From the perspective of the type of game, video games that use specific stories as the main game narrative can increase the players' sense of immersion more.

The limitation of the research in this paper is that the entire experiment process is conducted online, so the participants stay in their own place. This cannot be ruled out that the participants' sense of immersion is affected by the environment while playing the game. For example, the participant's network is delayed, and there are other people around the participant who may disturb them, etc., which all appeared in this study. In addition, there are people whose native language is not English among the participants in this study, which causes them to be unaccustomed to the English system, and they cannot smoothly receive the prompts in the game. Although the researcher will help them translate at this time, this will damage the integrity of the game's immersion. Besides, this research is not very rigorous in the selection of game samples, because strictly speaking, they are not all 2D games. The narrative environment of Oxenfree (2016) is 2D, but the characters are 3D. The inconsistency of the game narrative may cause differences in immersion. Hyper Light Drifter (2016) is a relatively special category of 2D games. Its pixel-style graphics and color scheme are very unique. When used as a game sample, its characteristics will reduce a part of versatility. Some participants mentioned this in interviews. , As shown in Table 7.

Table 7: Participants' comments in the interview

Participant	Quote
8	"The pixel style is nice but it affected my judgment. Sometimes I can't distinguish the paths and decorations in the map."
14	"I don't understand what they are, so I often do meaningless slashing movements."

The research in this paper only focuses on narratives related to visual elements. However, during the interview, several participants mentioned the elements of music and sound effects. Their evaluations were either positive or negative, as listed in Table 8 The original evaluation

of these participants. It can be seen that sound also has an impact on the player's immersion, but this factor was not ruled out in this experiment. If these shortcomings are improved, the results of the research may be different or become more precise.

Table 8: Participants' comments in the interview

Participant	Quote (positive)
4	"First off, it had great music! I didn't come very far this time, but the few story segments I've seen were intriguing, and the intro sequence with the story and the music combines was really great."
8	"I think the music is very nice, I like the feeling of accompaniment when reading texts."
	Quote (negative)
12	"This music sometimes becomes scary, which scares me a bit."
13	"I want to turn down the music but I didn't find it in the game options... The music is too loud and I can't focus on the character dialogue."

In future work, if this research wants to continue to dig deeper into the impact of game narratives conveyed through visual elements in video games on players, the criteria for selecting participants can be expanded, such as adding more participation from different countries, or expand more age groups of participants, to see if this will bring different experimental results. The choice of games can be more diversified, such as whether the narrative in the 3D game environment will change and other issues can continue to be discussed. In addition, the researcher believes that the result of this learning is helpful for games other than video games. The content about increasing the immersive experience of players is also involved in the development of some serious games, which is considered to help stimulate and promote the results of learning or exercise (Dickey, 2006). The potential research direction of this research is to improve the game experience of players and increase the value of computer games through game narrative and visual element design.

8 Conclusions

The main purpose of this thesis is to clarify the concept of game narrative and discuss how it is conveyed through visual elements in video games and how it affects the player's immersive experience.

After comparing with traditional narratives, the conclusion of this thesis is that the main characteristics of game narratives are interaction and non-linear structure. Game narrative is not only concerned with the story in the video game, it also needs to focus on the way and form of how to convey the story to the players. Therefore, the players of game narrative are also different from the receivers of traditional narrative media. They are part of the construction and experience of the game narrative, and sometimes their decisions will affect the development direction and results of the game narrative. The non-linear structure makes the game narrative more advanced and complex. It lets video games become more interesting and open, thus providing players with more possibilities and desire to explore. The narrative visual elements listed in this thesis are cut scene, environment, characters, interface and micro-narrative.

This thesis uses two different types of games that have won excellent visual design awards at the Independent Game Festival as samples, and takes a combination of questionnaire and open interview to study the influence between narrative conveyed through visual elements in video games and player's immersion. The research results show that the game narrative of video games with stronger operability and playability is mainly reflected by constructing a narrative environment, and the visual elements which convey the narrative are mainly maps and props. It mainly increases the player's immersion in the dimensions of "Control" and "Challenge"; At the same time, the game narrative of video games with stronger storytelling mainly uses background stories and events, and the visual elements that convey the narrative are mainly characters and dialogue. Mainly increase the player's immersion in the "Control" and "Curiosity" dimensions.

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Appendix A - Player game experience questionnaire- “Hyper Light Drifter”

This questionnaire is about the visual elements and narrative in the game "Hyper Light Drifter". This questionnaire is private and anonymous. The results will be only used for my master's thesis research in "Serious Games" at University of Skövde. Hope you can answer the following questions objectively in combination with the game

Normal questions:

Please answer the following questions according to your actual situation

1. Please select your age range

- Under20
- 20~25
- 26~30
- 31~35
- 36~40
- 41~45
- 45+

2. What is your gender?

- male
- female

3. How often do you play video games?

- almost everyday
- 3 ~ 5 times a week
- once a week
- 3 ~ 5 times in a month
- more than once every month

4. Normally, how long do you play a video game at a time?

- Less than half an hour
- 1 ~ 2 hours
- 2 ~ 3 hours
- more than 3 hours

5. What type of game screen do you like?

- 2D
- 3D
- Combination of 2D and 3D
- It doesn't matter

Related questions:

Please indicate how you felt while playing this game for each of the items, on the following scale:

not at all slightly moderately fairly extremely
1 2 3 4 5

(Curiosity)

1. I like the art style of this game
2. I like the story background of this game
3. I like the main character in this game
4. This game can quickly attract my attention
5. When I was playing this game, I wanted to know what would happen afterwards

(Concentration)

6. I spent a long time playing this game
7. I was not easily disturbed by the outside world in the process of playing this game
8. I paid attention to the map design while playing this game
9. I paid attention to different NPCs while playing this game
10. I paid attention to different props while playing this game

(Comprehension)

11. I can understand how to play this game
12. I know what I should do in this game
13. The main character (player) can be located in the interface (map) easily
14. I can understand the events which happened in this game
15. I know my next goal while finishing each level

(Control)

16. I can operate this game well
17. I can control the interface of this game well
18. I can find and use the props I need in this game
19. I can defeat most of opponents (npc) in this game
20. I can arrange the main character to do the task which I want to do in this game

(Challenge)

21. Overall this game is difficult for me
22. I feel excited while playing this game
23. I like the feeling of solving difficulties and conflicts in this game
24. I like the unexpected events in this game
25. I want to keep exploring while playing the game

(Empathy)

26. My mood is affected by the progress of this game
27. I can bring in the main character's identity while playing this game
28. I need some time to come back to reality when I finish playing this game
29. I spend some time thinking about it when I finish playing this game
30. I want to play this game again after I finish the testing this time

Appendix B - Player game experience questionnaire- “Oxenfree”

This questionnaire is about the visual elements and narrative in the game "Oxenfree". This questionnaire is private and anonymous. The results will be only used for my master's thesis research in "Serious Games" at University of Skövde. Hope you can answer the following questions objectively in combination with the game

Normal questions:

Please answer the following questions according to your actual situation

1. Please select your age range

- Under 20
- 20~25
- 26~30
- 31~35
- 36~40
- 41~45
- 45+

2. What is your gender?

- male
- female

3. How often do you play video games?

- almost everyday
- 3 ~ 5 times a week
- once a week
- 3 ~ 5 times in a month
- more than once every month

3. Normally, how long do you play a video game at a time?

- Less than half an hour
- 1 ~ 2 hours
- 2 ~ 3 hours
- more than 3 hours

4. What type of game screen do you like?

- 2D
- 3D
- Combination of 2D and 3D
- It doesn't matter

Related questions:

Please indicate how you felt while playing this game for each of the items, on the following scale:

not at all slightly moderately fairly extremely
1 2 3 4 5

(Curiosity)

1. I like the art style of this game
2. I like the story background of this game
3. I like the main character in this game
4. This game can quickly attract my attention
5. When I was playing this game, I wanted to know what would happen afterwards

(Concentration)

6. I spent a long time playing this game
7. I was not easily disturbed by the outside world in the process of playing this game
8. I paid attention to the map design while playing this game
9. I paid attention to dialogues between characters while playing this game
10. I paid attention to different props while playing this game

(Comprehension)

11. I can understand how to play this game
12. I know what I should do in this game
13. The main character (player) can be located in the interface (map) easily
14. I can make sense of the relationship between events in this game
15. I can make sense of the relationship between the characters in this game

(Control)

16. I can operate this game well
17. I can control the interface of this game well
18. I can find and use the props I need in this game
19. I felt parts of the story are formed by me in the course of playing this game
20. I felt I can control the progress of the game story

(Challenge)

21. Overall this game is difficult for me
22. I feel excited while playing this game
23. I like the feeling of solving difficulties and conflicts in this game
24. I like the unexpected events in this game
25. I want to keep exploring while playing the game

(Empathy)

26. My mood is affected by the progress of this game
27. I can bring in the main character's identity while playing this game
28. I need some time to come back to reality when I finish playing this game
29. I spend some time thinking about it when I finish playing this game
30. I want to play this game again after I finish the testing this time

Appendix C - Interview guidance

Fixed questions for both 《Hyper Light Drifter》 and 《Oxenfree》	
1	In general, did the questionnaire include all your feelings? (If not, any more comments?)
2	Do you have any confusion during these two games?
3	Do you like this type of game?
4	Does the style of the game affect your gaming experience? Positive or negative?
5	Which game do you prefer, 《Hyper Light Drifter》 or 《Oxenfree》 ?
Dynamic questions for 《Hyper Light Drifter》	
1	Do you like pixel style games?
2	Why did you choose (give up) this path to explore?
3	Which monster you find most difficult/excited to fight with?
4	Which scene impressed you the most?
5	Can the appearance of map be your guide?
6	Can NPCs be your guide?
7	Is there any signal/information that confuses you in the game?
8	Can you get used to the gameplay?
	...
Dynamic questions for 《Oxenfree》	
1	Do you like the story of this game?
2	Can you understand the general content of the story?
3	Do you like games based on stories and dialogue?
4	Which character do you like best?
5	Which scene do you like best?
6	Which event do you like best?
7	Which character' background do you want to know the most?
8	Which plot is most interesting/curious to you?

	...
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