

Enhancing the Quality of the Game with Art: A Case Study of the Game Wildfrost

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Abstract: In the modern era where video games are booming, the art of games has evolved through generations and there are many artistic aspects of games that are worthy of study. Some games have a lot to offer in terms of art, so they can be used as practical examples to help improve the game's art. Wildfrost, released on 12 April 2023, is an example of a game where the various character designs are featured, and the overall art level is remarkable among all card games. The purpose of this article is to research and learn specific aspects of the art in Wildfrost in order to help more games with their art. Such a study is beneficial to the development of game art, allowing more game makers to have a deeper insight into the game art and provide some help to the development of the game. The art in Wildfrost is divided into three directions by article: art style, UI design, and juicy design, and studied separately. By separating and simplifying the art in the game, this approach makes the study more accessible and more specific. After studying them, the article concludes each direction's merits and design features and further elaborates and investigates why they are suitable and designed in the subsequent discussion section.

Keywords: Game Art; Art Style; User Interface; Juicy Game Design.

1. Introduction

Video games have evolved from simple pixelated graphics to immersive virtual worlds that captivate players across the globe. They are a popular form of entertainment which can offer players unique and immersive experiences. As a major part of today's entertainment, video games have come a long way in history, from the world's first video game, Spacewars (1962), which technically had the basic characteristics of today's games, to Pac-Man (1980), which became a worldwide hit, to the present day, when a wide variety of games are available, video games have changed from generation to generation. As the gaming industry continues to grow, developers are constantly seeking innovative ways to enhance the quality and appeal of their games. Between the now extremely large variety of games, the quality of a game is determined by several factors, including gameplay, mechanism, art, and so on. Art, in particular, can greatly influence the player experience by immersing them in a vivid and fascinating game world. Art in video games serves a purpose far beyond mere aesthetic appeal; it plays a vital role in creating a captivating and memorable experience for players. Visual aesthetics have the power to enhance immersion by crafting visually stunning worlds, captivating character designs, and breathtaking environments. Artistic storytelling techniques, such as well-crafted narratives, compelling dialogue, and impactful cutscenes, can evoke emotions, forge connections with the game's storyline, and leave a lasting impact on players. Furthermore, artistic consistency and coherence ensure that the game's visual and narrative elements align seamlessly, providing a cohesive and immersive experience that draws players deeper into the game world. There are already many games on the market with excellent artwork, such as "Inside" or "Darkest Dungeon," which are key factors that add to the quality of the game. This, in turn, helps them to win various gaming awards. In the following sections, we will delve into the importance of art in video games, provide an overview of Wildfrost, a tactical

roguelike deckbuilder game which has a good art style and animated interactions and a user interface (UI) design that suits the interface. The game was developed by Deadpan Games, with artwork by Gaziter, the lead artist on another well-known indie game "Forager", and released on steam through Chucklefish on 12 April 2023. The art style and design of the game, in particular, was one of the more positive aspects of the game, and the fact that players liked the art style is one of the reasons why this game was chosen as an example for the study. The setting is simple, as you take on the role of a human tribe leader in a world engulfed by snow, forming your own team and defeating monsters along the way to reach the final location, the Temple of the Sun, to dispel the endless winter. The game has a fresh, bright and lovely style of painting, with a variety of different followers and monsters with different appearances and traits in a cartoon style, and each character has its own characteristics, which is very interesting. The user experience is quite good, as a card game, few games can have such an excellent user experience and good painting style, which also provides more reasons to choose this game as a research sample. To find out how to achieve great art in this game to give players a good experience, a close examination was conducted about the various artistic aspects of the game and the introduction of concepts that help to better illustrate the unique expressions and excellence of the art in the game, gaining lessons from the game that can be applied to the industry as a whole. The findings of this case study will contribute to the growing body of knowledge surrounding the integration of art in video games, providing valuable insights for game developers, artists, and researchers in the field of game design. Ultimately, this research emphasizes the importance of artistic elements in creating high-quality games that captivate and engage players.

2. Literature Review

To mention art in the game industry, then first of all the concept of game aesthetics is essential, Simon Niedenthal has mentioned that game aesthetics contains three main concepts [1], 1. the sensory phenomena that players encounter in games. 2. those aspects of digital games that are shared with other art forms. 3. the pleasurable, emotional, social, and formal expressions of the gaming experience. This shows that the aesthetics in games are multi-faceted. If we want to study the art in the game industry, then we can start from many angles, and with the premise of the game Wildfrost as an example, there are several angles that are worth exploring in terms of the artistic level it has done. Their related studies are given below. In their article Chuyang Wang, Samuel Mondier and Dr. Prakash Duraisamy explain the importance of art style for games [2], it was found that more artistic games were more likely to be successful and that players rated more artistic games higher, and specifically for the various artistic styles, Mary Keo gave an overall explanation of the artistic styles of different games, including the history of the development of unique artistic styles and some of the technological influences associated with the artistic styles and their development [3]. Tuuli Sainio, on the other hand, examines in more depth the possible influence of regions in art styles and gives examples of different games [4], such as the distinctive styles developed by each of the Eastern and Western games, while Leena Hölttä examines the influence that art styles bring to game narratives [5]. She discovered that better art styles help the game narrative and immerse the player more in the game. The differences in the various art styles also influenced the differences in the various styles of the game's user interface (UI). Speaking of UI-related research in games, at the beginning of 2000 Paul McInerney and Rick Sobiesiak proposed guidelines for UI design, which mentioned the way of managing UI design and various specifications for it, providing valuable experience for subsequent UI design [6]. Meanwhile, Dedy Prasety Kristiadi et al. demonstrated in their paper that enhancing UI has a great impact on enhancing players' interest in games [7], proving to a certain extent that the artistic height of a game is inseparable from its UI design. There is a lot of knowledge in UI design, Ewa Lux et al. mentioned that the color of UI design could impact people's perception [8], and different colors of UI can affect people's trust in this UI. While Kristine Jørgensen and Stein C. Llanos investigated whether integrated UI is more popular among players, evaluating the respective advantages and disadvantages between the integrated UI model and the traditional one [9]. These UI-related studies increase the player experience in order to make the game more convenient for the players to enjoy, and the player experience-related part is the key to the success of a game because it is the players who evaluate the quality of a game, and Katherine Isbister et al. mention the parts that affect the player experience-related part in their article, which overviews the various electronic devices and player interaction concepts [10]. An important concept that has been mentioned in the article on the impact of visual embellishments on player experience studied by Kieran Hicks and Kathrin Gerling et al: juicy design, is an extremely important direction in determining the player experience [11], and the concept of juicy design has been illustrated again by Dominic Kao in the example of an action game [12]. Many scholars have studied the topic of art in games, but very few of them have proposed ways to improve

the quality of art in games in a specific context. As an important component of the game, the role of game art in improving the quality of the game is very significant and worth investigating. The study focuses on improving the artistic level of the game so that the artistic quality of more games can be enhanced, thus providing more high-quality game products to the market and contributing more excellent works to the artistic output. By studying the art style, UI design and juicy game design of Wildfrost, we can tell the game industry producers the direction of improvement of the game.

3. Methodology

This paper adopts an observation approach to research, using various examples from Wildfrost as a basis, and focuses on three aspects of the game: art style, UI design, and juicy design. The art style is the basis of the entire game art, and many parts are based on the art style. The study observes the art style of the game and explains the wisdom of choosing the stylized style. The UI design is an important way to promote immersion and enhance the player experience, and this study observes and evaluates the design merits of the UI. The juicy design of the game can make players more pleasant and enhance their experience during the game, and this study observes the juicy design of various parts of the game.

3.1. Result

The art style of the game Wildfrost is relatively outstanding; for example, the stylized graphics make the player feel comfortable and improve immersion. The UI design of the game Wildfrost is unique and in line with its artistic style; for example, the UI in the game is well-placed, and the type is in line with the game's artistic style. Wildfrost's juicy design is effective; for example, the game has various dynamic designs and player feedback to enhance the player experience.

3.2. Discussion

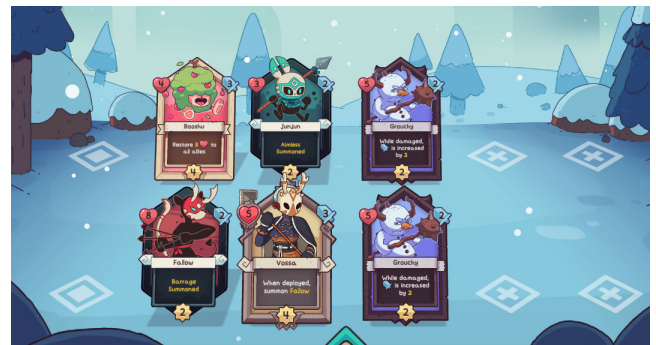


Fig 1. Some examples of the character card art style in Wildfrost

The most common taxonomy of art styles in today's games can be divided into three categories: abstract, stylized and realistic, Wildfrost has a stylized art style, and it is more appropriate with the game itself, so the effect presented is better. The features of the characters in this style are more exaggerated and more abstract, the true appearance of an object is expressed without sufficient experimentation and accurate performance. This includes simplification in shapes, lines, colors, patterns, surface details, functions and relationships with other objects in the scene. Compared to the realistic art style, such a style does not have to strictly follow the rules of reality, allowing artists more freedom to make the game flexible and expressive in its own way. Since stylized

art style is more convenient to express, there are many games that need more diversified artistic expression to adopt this style, take two shooting games for comparison, Valorant and CSGO belong to stylized and realistic styles respectively, while in Valorant, there are more differentiated and fully designed special effects and visual elements, and the relatively simplified depiction of various objects allows more space for special effects and differentiated design, which is one of the relative advantages of stylized style. This is also reflected in Wildfrost, where the artistic expression needs to be adapted to the fantasy background design, the stylized style makes it easier for artists to create their own personal style. In a fantasy background setting, the stylized style allows artists to create creatures and objects with their own personal style, which is one of the reasons why the game can have a variety of characters in different forms. For the stylized style in Wildfrost, there are some points that can be discussed. The hand-drawn-like design and high saturation and reasonable combination of various colors constitute a light and bright style of the overall game graphics, which makes the player's visual experience during the game in a relaxed state and therefore gives the players some nice play experience. This is related to the game's choice of a stylized style based on the background to facilitate performance and to do it well.



Fig 2. Comparison between realistic style in CSGO and stylized style in Valorant



Fig 3. UI design and UI hierarchy in Wildfrost

UI design needs to be based on the art style of the game, and the UI of different games will have their different styles. The UI design of Wildfrost is closely related to its choice of stylized style; similar to the features of stylized, the UI in Wildfrost is usually straightforward, composed of various polygons that simplify the composition of the entire UI, leaving only a few critical features for the player to identify, the game's cartoonish art style also helps to streamline the details of its UI. In the game, the artists composed simple polygons into separate UI and made each polygon a slightly different shade, thus reducing the total amount of work and creating a unique cartoon style. By completing the UI with larger blocks of color and shapes, the benefit of this design is that it reduces the variety of elements that would draw extra unwanted attention to the player, helping the player focus on what the creator needs them to focus on and making the entire screen more concise. It also makes it easier for players to get the information they want quickly. The UI design in Wildfrost is hierarchical, cleverly accommodating pages that require more UI instructions on a separate page, and using a relatively simple UI on the main page that players use most often to structure the main entrance, so that players can play the game without being bothered by too much information, and at the same time, when players need to get more information, they can enter the page through the UI button of the entrance. This design is often found in games with a small amount of information, and it is convenient for the whole game to realize the data and functions that need to be displayed through the hierarchy of UI.



Fig 4. Example of juicy design in Wildfrost (Cracks in the ice after clicking)

UI design is also linked to the concept of juicy design, which is excellent in Wildfrost. Juicy design refers to a way to provide players with enough feedback to enhance the player experience in a game, which can be visual or audio. The visual feedback of many UI and various elements in the game are smooth and fluid, they have excellent animation curves when giving feedback to the player, with moderate exaggeration to enhance the performance based on realistic physics. They also provide enough feedback to the player to make the player have a pleasant feeling and thus enhance the player's sense of getting feedback, similar to the fruit ninja where the fruit turns into pieces and splashes the juice all over the screen after cutted, providing the player with sufficient visual feedback. Wildfrost in this point is very well reflected, for example, UI buttons change color and rebound once clicked, and various characters shake slightly when selected, these detailed adjustments make the whole game more vivid, and the player experience comes from this visual feedback, which creates the feeling that the player is interacting with the game adequately to give the player a sense of satisfaction. To

achieve excellent juicy design, the frequency of feedback and the degree of feedback given to the player by the game must be carefully considered. The frequency of feedback is essential when the content of the feedback is the same; concise feedback or trivial feedback will both have negative impacts on the player. Different elements and expression needs require designers to design the feedback frequency differently; for example, the feedback frequencies of rapid alarm and slow fall of buildings are entirely different, but they both have their feedback effects to achieve the purpose of juicy design. The degree of feedback in the game determines the player's experience from this feedback; a tower should have a lot of feedback generated when it falls, such as the shaking of the screen, the generation of dust particles, the destruction of objects, etc. At the same time, some small movements do not need a lot of feedback. Otherwise, it will add a lot of unnecessary work. Wildfrost's juicy design is well balanced in terms of the effect, frequency and degree of feedback, including clean and crisp feedback when switching pages, continuous feedback when breaking crystals for clicking and strong feedback when the crystals finally explode, and because so much feedback exists in Wildfrost, its juicy design is worth learning for many game practitioners.

4. Conclusion

This article takes Wildfrost as a case study and examines the reasons for their relative excellence in three aspects of game art: art style, UI and juicy design. Learning their design ideas and methods so these findings can help game makers enhance specific aspects of their games' art. Ultimately, the aim is to make their games achieve a higher level of artistic excellence. However, each game has a different art style, and this article will have some limitations and inaccuracies due to the study of art for only one specific game, and more similar studies are needed to enrich the whole system.

In terms of art style, this article first analyzes the stylized style among art styles, presenting the characteristics of the stylized style and the types of games it is suitable for, and then further reviews the stylized style in Wildfrost, explaining why it chose such a style and the reasons for its excellent performance in the game. These reasons and design ideas are used to provide game creators who also use the stylized style with a light and bright example of the art style. This will help them in their own creative endeavors.

In terms of UI, Wildfrost's relatively simple UI style is noteworthy. Under the premise of choosing a stylized style, it can simplify the UI in terms of shapes and details to reduce the workload of the UI while creating a unique cartoon style. The simplification of UI elements and the consistency of the color palette make it convenient for players to access the information they need in the game interface. It does not cause the mistake of attracting players' unnecessary attention with large areas of different colors and complex UI composition. The hierarchical system of UI can process the data and all kinds of information presented to the players so that they can be shown to the players on different pages in turn. Compared with throwing all the information to players, this approach not only reduces the workload but also improves the visual experience of players.

In terms of juicy design, Wildfrost has done a particularly impressive job. The reason for Wildfrost's excellent juicy design is explained: almost all the elements in the game that will interact with the player have their own animation and feedback, and such design greatly enhances the player experience. The article then suggests that a good juicy design needs to grasp the frequency and degree of feedback, it was concluded that the result of combining the two is relatively complete and reasonable. Fortunately, feedback in games is diverse, and game makers can find all kinds of feedback in games to gain experience. And this is one of the reasons why Wildfrost's juicy design is worth studying.

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