Comparison of narrative comprehension between players and spectators in a story-driven game

Miki Nørgaard Anthony¹, Byung-Chull Bae², and Yun-Gyung Cheong³

- ¹ IT University of Copenhagen, Copenhagen 2300, Denmark. mnoa@itu.dk,
 ² Sungkyunkwan University, Seoul, South Korea. byuc@skku.edu,
 - ³ Sungkyunkwan University, Suwon, South Korea. ygcheong@gmail.com

Abstract. In this paper we compare how differently players and spectators comprehend narrative in a game, employing a story-driven indie game called Skyld. Our preliminary study results show that the players, compared to the spectators, had a tendency of being goal-oriented, being less willing to interpret and build possible worlds, and having hard time to reconstruct the story time.

Keywords: narrative comprehension in games, situation model

1 Introduction

Researchers in both game and narrative communities have argued for long time if narrative can be successfully combined into games [1]. In this paper we want to explore the following research question.

- How does interactivity in games affect narrative comprehension? More specifically, do games need to be more explicit in their storytelling?

To explore this research question, we chose a story-driven indie game called Skyld, which is developed with an intention of satisfying spectators as well as game players⁴. This paper presents our preliminary interview results that we conducted with Skyld, where interviewers were divided into two groups - players and spectators of Skyld. To have a common ground of analyzing how differently they perceive the narrative both in terms of time and space, we have them describe the narrated situation of which they built when they experienced the story by asking them a set of questions based upon the six elements (that is, space, time, goals, causation, people, and objects) in the situation model illustrated by Zwaan [5], focusing upon storytelling in games based on Abbott's [2] and Nitsche's [4] theories.

In order to understand a story, according to Zwaan, we construct a mental representation of what the text is about, not of the words, sentences or phrases, but of the objects, locations, events and people known as the situation model [5]. We become part of the story and imagine ourselves within the world created,

⁴ A gameplay example of Skyld can be seen here: http://youtu.be/cGxQDIko6G0

a world which David Herman coined as 'storyworld' and Abbott (2008) since adopted [2, p. 165]. For Abbot all narrative represents a storyworld situated in both time and space, in which the characters and readers inhabits [2, p. 164].

The situational awareness is true to games as well. The player needs to know his or her character's situation and position, in order to take action and act upon it, by reading, using, and predicting the game world they are situated in [4, p. 42 - 43]. Nitsche claims that "evocative narrative elements" that give context to the world and its situations are necessary to maintain a narrative structure and avoid misinterpretation [4, p. 44]. This could well be seen in relation to Abbott's "constituent events" [2, p.22] or Chatman's "kernels" [3, p.53], that is, events which progress the story forward. If we consider that player-interactions with narrative elements leads to events, we could argue that each time a player interacts with an evocative narrative element within the game world, it creates a constituent event.

2 Method

To find out how interactivity affects narrative comprehension, we conducted interviews with players and spectators of a story-driven game, that is, Skyld, based upon Zwaan's theory of the situation model. After playing (or watching) the game, the participants are asked to describe the situation from which they experienced the narrative.

Skyld, the testbed game that we have used, is an interactive adventure game. Its underlying intention is about how to cope with the guilt and grief of losing somebody you care about. Skyld is split into two modes - a third person adventure mode and a first person horror mode. The game can be switched between two modes depending on certain events. The testbed game features both modes, but only one switch between them and with the main focus on the adventure mode. In the gameplay of the adventure mode, Silja, the main character, walks around the apartment discovering objects (see Fig. 1 for a screenshot of Skyld). Overall the game is structured as Cut scene - Adventure mode - Cut scene - Horror mode.

The way in which we test people's comprehension of the story is through the situation model. We asked each of them to create the situation from which they experienced the story in, by using a set of questions based upon the six elements described by Zwaan [5, p.15].

- Space: Where are we?
- Time: When is it taking place?
- Goals: What are you trying to do, or figure out?
- Causation: What has happened?
- People: Who are you? And what other characters do you meet?
- Objects: Any important objects or things you noticed?

The interviews were conducted on 8 people (all males in their 20s) from IT University of Copenhagen, Denmark. Four of them (i.e., player group) played the



Fig. 1. A screenshot from Skyld, a story-oriented adventure game.

game before the interview, while the other four (i.e., spectator group) watched a playthrough. Among the participants in the spectator group, two of them watched a recorded playthrough from a previous participant and the other two were present during a playthrough.

3 Results and Discussion

Our preliminary study showed that players and spectators grasped the story in games differently. Players comprehended the story through goals and actions, whilst spectators used the space which the story was situated in. The players saw the world through the eyes of the protagonist, whereas the deictic center of the spectators was relative to the position of the camera.

The goal-oriented approach from the players lead to overlooking and underreading narrative elements which were not interactive. For the player the game was more important than the story. Even if the game was story-driven, they would still find ways to just 'play' the game. On the other hand if the game turned goals and actions into story plots, they would feel the achievement of both story and game. The goal-oriented focus gave the players an excellent memory over anything interactive, from objects to actions. If this was somehow related to the story, the players had no trouble reciting it later on and connecting its implication to the story. And due to the immersion and personal investment, the actions would then also feel to have greater impact both in terms of story and emotion.

Players had trouble when it comes to time, understanding when things occurred. This is properly due to the weird relationship between actual time and story time in games. That time often does not have an impact, unless you can 4

see a timer. But the players are also used to unexplained gaps in games, skipping to the action.

For the spectators time was easy to comprehend. Nobody had trouble getting the time passing from intro to adventure mode. The spectators also viewed the story through the surroundings, interpreting every little detail. They had no trouble in making the storyworld and had a tendency to make a lot of possible worlds as well. They picked up on everything, that could be related to the story, analyzing its implication of what it could mean, which leads to a great amount of overreading and misinterpretations. The opposite could be said about the players, who avoided making too many assumption. The players had a tendency to underread and overlook a lot of the non-interactive story elements. It was like they were already thinking ahead of what they should do next and ignored what was just in front of them in terms of story.

To sum up, the followings, in our humble opinion, are what need to be taken into consideration when creating a story-driven game:

- How the story is told through the environment? How can we use the interactable objects as kernels for the story?
- Translating story elements into actions and interactions, instead of scripted events, making the story more immersive.
- Think in goal-oriented strategies. Why should the player do this story-related thing? What would she gain from it?
- Create believable characters. The protagonist is the most important interactable object in the game, so make it to your advantage. Tell the story through the eyes of the protagonist.

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