Chapter 8

Once Upon a Time:
The Convergence of Interactive Storytelling and Computer Games

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ABSTRACT

Interactive digital storytelling (IDS) aims at generating dramatically compelling stories based on the user's input. During the two decades of research, IDS has promised to change the way computer games tell stories. This chapter reviews the theory behind IDS as well as the current state of IDS research and studies whether – and how – IDS can improve storytelling in computer games.

INTRODUCTION

Whereas traditional stories are narrated by an author, interactive storytelling allows the audience to take an active part in creating and shaping up the story. As pioneer game designer and interactive storytelling system developer Chris Crawford (2005) points out, the idea of interactive storytelling is actually close to the original form of storytelling, where the storyteller – whether sitting by the campfire or tugging children into bed – observes the audience's reactions and responds and adapts the story accordingly (e.g.,

"Once upon a time there was a lion." "Was it a nice lion, dad?" "Yes, it was a nice lion who was looking for a friend." "And he found a teddy bear to be his friend." "One day the lion met a teddy bear, who was unhappy because he was so lonely."). Other forms of non-digital interactive storytelling are (live action) role-playing games, improvisational theatre (e.g., Forum Theatre; see Boal, 1979, pp. 139–142), tour guiding, and teaching.

Interactive digital storytelling (IDS) employs computers in the role of a storyteller, and, thus, IDS applications are "designed for users (interactors) to take part in a concrete interactive experience, structured as a story represented in a computer" (Peinado & Gervás, 2007). We can recognize three distinctive partakers in IDS systems:

1. an author who creates the story-world,
2. characters who inhabit the story-world, and
3. a user who interacts in the story-world.

Whereas 'author' and 'character' are widely accepted terms in the literature, there is no such consensus about the term 'user', who is sometimes called 'player', 'interactor' or 'participant' (Smed & Hakonen, 2008). For the sake of clarity, we will use the term 'user' when we refer to IDS in general and 'player' when we refer to computer games in particular.

The difference between conventional narrative and interactive narrative is illustrated in Figure 1 (Aylett & Louchart, 2007). Conventional narra-tive (e.g., literature, movies and classical theatre) emphasizes the role of an author who constructs the story. Once the story is ready, it is presented to a passive audience, who experiences it subjectively. In an interactive narrative, the author creates a story-world populated by characters and affected by external events. When a user interacts in the story-world, a story is generated based on the characters' actions, events occurring in the story-world, and the user's decisions. Whereas the presented story in a conventional narrative is the same for all spectators, the generated story in an interactive narrative is individual for each user.

To analyse different narrative forms Aylett & Louchart (2003) list four typical features:

- Contingency: How much does the story time and space depend on the real time and space?
- Narrative representation: How is the story presented?
- Presence: How far does the viewer/participant share the story time and space?

Figure 1. In a conventional narrative (left), the author constructs the story, which is then presented to the spectator who experiences it. In an interactive narrative (right), the author creates the characters and external events of the story-world, which is then used to generate the story based on the user's input. (Aylett & Louchart, 2007)
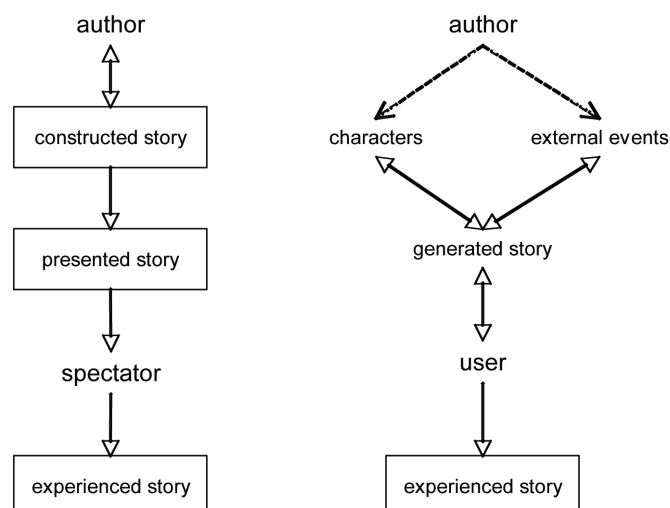
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