Chapter 7

The Digital Campfire: An Ontology of Interactive Digital Storytelling

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ABSTRACT

Interactive digital storytelling (IDS) allows a human user to become an active part in a story and to affect how the story unfolds. To understand IDS systems, we need to consider the partakers present in them as well as their roles and interconnections. In this chapter, the authors discern four partaking entities—interactor, author, developer, and storyworld—and describe both their affiliated sub-entities as well as their relationship to one another. Based on both reviewing relevant literature and analyzing existing IDS systems, the ontology presented here provides a cohesive view into the current state of both theoretical and practical research.

DOI: 10.4018/978-1-5225-5715-9.ch007
INTRODUCTION

Counting from Brenda Laurel’s (1986) doctoral dissertation three decades of research have gradually deepened the understanding of the partakers and their interconnections in interactive digital storytelling (IDS). The advances have been brought forward by both theoretical work – such as Brenda Laurel’s *Computers as Theatre* (1991) and Janet Murray’s *Hamlet on the Holodeck* (1997) or the doctoral theses by Michael Mateas (2002), Mark Riedl (2004), Sandy Louchart (2007) and Ernest Adams (2013) – and pioneering IDS systems such as *Façade* (Mateas & Stern, 2005), *Interactive Drama Engine* (Szilas et al., 2007) and *ASAPS* (Koenitz & Chu, 2012). Nevertheless, despite these developments IDS still lacks a clear ontology and a common terminology (Koenitz, 2014).

The traditional division has recognized the roles of an author, characters and interactor (commonly used terms are also ‘user’ or ‘player’). In this triad, the author is usually seen as the “creative force” defining the mechanics and content of the IDS system, and both the interactor and the characters then co-create each individual story instance within the IDS system’s limits. However, this perspective focuses on the flow of the story, cloaking the crafting aspect of the story elements. Behind – or rather mixed with – the author is the developer of the IDS system who is responsible for the design of the software running the system, whereas the author is responsible for the content of the system. The developer and author together (which we jointly refer as ‘providers’) generate a semi-autonomous storyworld, the fourth partaker, where the interactor enters to experience the story instance. This is not unlike, for instance, Roman Jakobson’s (1960, p. 353) notion of the functions of (verbal) communication, in which he emphasises the triad of addressee, message and addressee (i.e., sender, message and receiver) around which all communication is built.

The role of the character – albeit vital for the experience of an IDS system – is a part of a storyworld, which also includes props, scenes and events. One could argue that props are inanimate objects, which can be used in the storyworld, and events cause changes launched by fulfilling some criteria. Characters combine these two properties: they are both objects and agents of change. Scenes are the surroundings which the props and characters inhabit and where the events and characters can affect.

To summarize the ontology of IDS systems has four distinct partakers (see Figure 1):

- Interactor,
- Author,
- Developer, and
- Storyworld.
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