

DIGITAL STORYTELLING

SELMA RIZVIĆ

COSCH Case Study that has employed this method: White Bastion

From early mankind people have communicated through storytelling. Throughout history the concept has remained the same, but the tools and methods have changed with time. People started writing down their stories, recording at first the sound of their voices, and finally recording audio and video clips, nowadays called movies. Digital technologies enhanced the ways of presenting stories and digital storytelling was born.

Digital storytelling is narrative entertainment that reaches the audience via digital technology and media. Handler Miller (2008) states that digital storytelling techniques can make a dry or difficult subject more alive and engaging to the viewers. In order to enhance the classic storytelling concept, in which the listener remains passive, Glassner (2004, 8) defined interactive storytelling as a two-way experience, where “the audience member actually affects the story itself.” Manovich (2002, 218) also considered the possibility for the audience to change the story and offered the concept of an interactive narrative as “a sum of multiple trajectories through a database.”

One of the most common concepts of hyperlinked story structures is the hypervideo, first demonstrated by the Interactive Cinema Group at the MIT Media Lab. *Elastic Charles* (Brøndmo and Davenport 1990) was a hypermedia journal developed between 1988 and 1989, in which *micons* (video footnotes) were placed inside a video, indicating links to other content. Following the Storyspace project, a hypertext writing environment, the HyperCafe, an award-winning interactive film, placed the viewer inside a virtual cafe. It is a video environment where stories unfold around the viewer (Sawhney et al. 1996). After these first works, and a rather long period of stagnation, many different methods of hypervideo implementations started to appear with development of the Internet, starting in 2010, most of them for use in advertising and marketing. Nowadays there are

several popular tools using hypervideo. In the RaptMedia cloud-based editor (www.raptmedia.com) the user can create interactive videos and controls implemented in the form of links on the web. The Madvideo tool (www.themadvideo.com) is used to add tags to video files. Interactivity is implemented via manually inserted interactive tags. The tags can be links to websites, images, or other video clips. In the Open Hypervideo project (Jäger 2012) the content is linked using annotation-types, such as Wikipedia articles, locations, videos, and web pages. Video sequences are made out of multiple (cut) video files. In E-Learning-How-Tos (<http://learn.articulate.com>) the learning process via videos is enhanced using elective contextual data inside the videos. Cacophony, the interactive player for HTML 5 and JavaScript (www.cacophonyjs.com/) allows the creation of interactive elements inside videos, such as the story adapting in response to the user input. ClickVID video players (www.clickvid.co.uk) allow the creation of “hotspots,” clickable regions with specific content at designated times. WebM is a video file format made for HTML5 video tagging.

Apart from these fields of application, hyperlinked storytelling is also used in virtual cultural heritage applications. A Human Sanctuary is a project implemented in 2013 by the Cyprus Institute, telling the story of the famous Dead Sea Scrolls; text annotations offer more details about certain notions mentioned in the video (<http://public.cyi.ac.cy/scrollsDemo>). In the Keys to Rome exhibition (Pescarin et al. 2014) the interactive digital storytelling was used to present the reconstructed Roman remains from Rome, Amsterdam, Alexandria, and Sarajevo in combination with physical museum exhibits.

New approaches to digital storytelling increasingly emphasise the role of emotive personalized storytelling (EMOTIVE H2020 Project 2016–19). Technically, branching stories may be implemented within a common hyperstructure placed within interactive virtual environments (Rizvić and Prazina 2015). There is still no method which would satisfy all user categories, from gamers to people without much computer experience. Therefore it remains a hot topic in multimedia communications research.

Key Texts and Resources

- Glassner, A. 2004. *Interactive Storytelling: Techniques for 21st Century Fiction*. Natick, MA: A. K. Peters.
- Handler Miller, C. 2008. *Digital Storytelling: A Creator's Guide to Interactive Entertainment*. Burlington, MA: Focal Press.
- Robin, B. 2016. *The Educational Uses of Digital Storytelling*. Website, University of Houston College of Education. digitalstorytelling.coe.uh.edu.