Introduction to the Special Issue on “Culture Games”

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1 INTRODUCTION

Industries, stakeholders, and the public approach culture (both tangible and intangible) for a variety of purposes, and digital games can channel each of these purposes in different ways. In the context of a cultural experience, people may want to learn (with serious games) but also to have fun (with simple entertainment games), spend their free time (with casual games), socialize (with social or multiplayer games), or be creative (with collaborative creation games). Similarly, cultural institutions not only want to teach but also attract more visitors (promotional games or advergames). In the last decade, there have been significant developments in game technologies used for cultural heritage purposes. Technologies such as crowdsourcing and human computation have become increasingly sophisticated. New game-oriented (but not only) media such as mixed-reality, virtual reality, and natural interaction (e.g., motion-based gameplay) have become more prevalent.

This special issue has two objectives: first, to broaden the scope and explore gaming in cultural heritage across several genres used in real-life, and second, to incorporate and present the latest gaming technologies in the field of culture.

2 CONTENT OF THIS ISSUE

The articles included in this special issue cover a wide range of topics, but some common themes also emerge. Below we discuss the general trends and specific topics of the articles included.

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Augmented reality (AR) is of great importance for cultural heritage applications, especially if the games are to be played in situ at the cultural heritage site. Krzywinska et al. [5] elaborate on the “Augmented Telegrapher” project at the Porthcurno Telegraph Museum, which uses AR devices to simulate a telegraphy training exercise from World War II, re-designed as a social escape room experience. The work of Fazio and Turner [4] uses AR in a similar way to breathe new life into the Old Government House in Brisbane, Australia. Inspired by a theatrical tour of the house, the AR game attempted to capture and convey the experiential aspects of the tour and included virtual characters with their own narrative, suggesting which paths to follow and which virtual characters to see or trust. Similar to [4], Lehto et al. [6] used virtual 3D characters to engage visitors at eight historical sites in Finland and Estonia. The stories told by the virtual characters, which included noblemen and legendary figures as well as maidservants and swineherds, illustrated how domestic and foreign powers and political intrigues have shaped the history of these countries. In terms of gameplay, players are tasked with finding a missing item that is closely related to actual historical events or folklore of each site, by scanning cartoon board triggers around the heritage sites and encountering characters that pose specific challenges. It is obvious that in all three contributions to this special issue, technology is intended to augment the historical objects available on site and motivate the player to explore the surroundings. Departing from AR applications played within the bounds of a cultural heritage site, Pescarin et al. [8] describe a virtual reality application named “A Night in the Forum,” which brings the players into a virtual rendition of the Museo dei Fori Imperiali in Rome. The article highlights how challenges in the creation and optimization of reality-based 3D scenarios were tackled in this project, elaborating on the design and production workflow and the tools used to bring the game to the Sony PlayStation VR store.

In a similar context, Champion [2] discusses how digital games can help to create a sense of cultural presence, that is, “a feeling in a virtual environment that people with a different cultural perspective occupy a place” [1]. While the previously mentioned articles attempt to use AR to enhance the situated cultural presence within the existing built environment of a cultural site, in [2], the author explores how four digital single-player games can function as specific cultural learning experiences. On the other hand, Del-Moral and Rodríguez González [3] review 10 commercial digital games revolving around war to assess the edu-communicative potential of war video games. The instrument presented in this article considers the dimensions that define the ability of war games to promote critical thinking and, thus, their edu-communicative potential.

The two remaining articles in this special issue focus on digital games developed specifically for educational purposes. Malegiannaki et al. [7] describe the development of the interactive fictional adventure game “Tracers of the Past” and report—among other things—about the learning gains in groups of teenagers and adults who tested a narrative about the political situation in Athens after the Battle of Chaeronea (338 B.C.). Finally, Plecher et al. [9] describe the first-person digital game “HieroQuest,” in which the player must escape from an old temple structure in Ancient Egypt; this is done by learning the uniliterals of the Ancient Egyptian language through different kinds of riddles.

3 CONCLUSIONS

The wide variety of topics covered in this special issue illustrates the broad potential of games used in cultural heritage sites or on home computers. It is shown that games motivate people to explore the built environment, breathe new life into cultural sites, and stimulate both learning and reflection. There is also much untapped potential in the use of commercial games as well, and we hope that there will be more cooperation between cultural heritage experts and game designers in the future. The articles in this issue already show how game design can be used to serve the goals, needs, and constraints of heritage experts, cultural assets, and sites.

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