

A Taxonomy of the Informational Content of Virtual Heritage Serious Games

Authors : Laurence C. Hanes, Robert J. Stone

Abstract : Video games have reached a point of huge commercial success as well as wide familiarity with audiences both young and old. Much attention and research have also been directed towards serious games and their potential learning affordances. It is little surprise that the field of virtual heritage has taken a keen interest in using serious games to present cultural heritage information to users, with applications ranging from museums and cultural heritage institutions, to academia and research, to schools and education. Many researchers have already documented their efforts to develop and distribute virtual heritage serious games. Although attempts have been made to create classifications of the different types of virtual heritage games (somewhat akin to the idea of game genres), no formal taxonomy has yet been produced to define the different types of cultural heritage and historical information that can be presented through these games at a content level, and how the information can be manifested within the game. This study proposes such a taxonomy. First the informational content is categorized as heritage or historical, then further divided into tangible, intangible, natural, and analytical. Next, the characteristics of the manifestation within the game are covered. The means of manifestation, level of demonstration, tone, and focus are all defined and explained. Finally, the potential learning outcomes of the content are discussed. A demonstration of the taxonomy is then given by describing the informational content and corresponding manifestations within several examples of virtual heritage serious games as well as commercial games. It is anticipated that this taxonomy will help designers of virtual heritage serious games to think about and clearly define the information they are presenting through their games, and how they are presenting it. Another result of the taxonomy is that it will enable us to frame cultural heritage and historical information presented in commercial games with a critical lens, especially where there may not be explicit learning objectives. Finally, the results will also enable us to identify shared informational content and learning objectives between any virtual heritage serious and/or commercial games.

Keywords : informational content, serious games, taxonomy, virtual heritage

Conference Title : ICDH 2017 : International Conference on Digital Heritage

Conference Location : Miami, United States

Conference Dates : March 09-10, 2017