Title

From PowerPoint Presentations to Digital Storytelling: An Educational Approach Based on the "Reviving Karanis in 3D" Project Case Study

Abstract

After nearly two academic years of online teaching and learning experiences during the COVID-19 pandemic, educators have been prompted to rethink how to provide educational content and make it more engaging and exciting to the current student generation, a generation that is growing up with VR and AR digital technologies that are becoming part of their everyday lives, raising their expectations for the medium of education they should be receiving.

In this presentation, we discuss how the traditional curriculum of the history of interior architecture, which mostly includes photographs of archaeological sites, historical buildings, and museum collections, could be transformed into an interactive immersive three-dimensional virtual content that students can walk through and explore, with which they can even interact, so that they can get a sense of its dimensions and proportions and make comparisons, within the virtual space, between building materials and methods and explore architectural styles, decorative elements, and crafts. This should not only include the architectural spaces but also extend to the furniture and other space elements.

The educational experiment discussed in this presentation is part of the History of Interiors course and is based on the "Reviving Karanis in 3D" project, which included the 3D virtual reconstruction of a house from the ancient Greco-Roman town of Karanis (known today as Kom Aushim in Fayum, Egypt). The project incorporates furniture and daily-use objects from the Karanis collection at the Kelsey Museum of Archeology, Ann Arbor, Michigan, in a spatial storytelling scenario to create a sense of place inside the virtual environment. (Elgewely, 2017; Elgewely & Wendrich, 2015a, 2015b; Wendrich et al., 2014)

The study evaluates students' responses to the digital storytelling virtual environment and how those responses may reflect their understanding of the built environment. It also raises questions regarding the challenges educators might face in implementing such an educational approach and creating the digital content, especially considering the multidisciplinary nature of the skills needed.

References

- Elgewely, E. (2017). 3D Reconstruction of Furniture Fragments from the Ancient Town of Karanis. Studies in Digital Heritage, 1(2). https://doi.org/10.14434/sdh.v1i2.23340
- Elgewely, E., & Wendrich, W. (2015a). Reviving Karanis in 4D: Reconstruction of Space through Time.
- Elgewely, E., & Wendrich, W. Z. (2015b). Virtually united in real time: Museum collections and archaeological context explored. 2015 Digital Heritage International Congress, Digital Heritage 2015, 659–662. https://doi.org/10.1109/DigitalHeritage.2015.7419592
- Wendrich, W., Simpson, B., & Elgewely, E. (2014). Karanis in 3D: Recording, Monitoring, Recontextualizing, and the Representation of Knowledge and Conjecture. Near Eastern Archaeology, 77(3), 233. https://doi.org/10.5615/neareastarch.77.3.0233

Bio

Eiman Elgewely, Ph.D.

eelgewely@vt.edu

https://archdesign.caus.vt.edu/faculty/elgewely-ph-d-eiman/

Dr. Eiman Elgewely is an Assistant professor of Interior Design in the School of Architecture + Design at Virginia Tech. Both her Master and Ph.D. from Alexandria University are in the field of Virtual and Cyberspace design. Dr. Elgewely has joined the Experiential Technologies Center, School of Art and Architecture, University of California Los Angeles (UCLA) in 2013 as a Fulbright Postdoctoral fellow. Her research interests are in the field of Digital Cultural Heritage and museum studies. She has worked on several applied projects in Digital Cultural Heritage in Egypt since 2007, including 3D scanning, documentation, and virtual reconstruction of historical sites.