

Computer-based Visualisation of Architectural Cultural Heritage in Education – Defining standards, methodology and implementation of courses in higher education sector

Chairs: Piotr Kuroczyński | Germany, Fabrizio Ivan Apollonio | Italy, Federico Fallavollita | Italy, Krzysztof Koszewski | Poland

Today architects, art historians and archaeologists use so-called Virtual 3D Reconstructions to study and represent the past. The large production of these studies and models has encouraged an international debate about the scientific reliability of these (re-)constructions. Two important theoretical guidelines have been drawn up in this regard, the London Charter (2006, 2012) and the Seville Principles (2013). These documents have fixed general guidelines on the scientific nature of Computer-based Visualisation of Architectural Cultural Heritage models. However, despite several studies which were dedicated to similar subjects, so far there are no shared standards or applied methods on this specific topic, and furthermore there is no common approach of teaching this kind of research methodology and tools in the higher education sector.

The main objective of the ongoing EU project Computer-based Visualization of Architectural Cultural Heritage (CoVHer) is to define applicable guidelines and operational methodologies aimed at the study, as well as the visualization and evaluation of the 3D models, in accordance with the UNESCO Charter on the Preservation of Digital Heritage (2009) and the FAIR principles (2016).

For those reasons we would like to discuss in the round table further crucial issues, beside the above-mentioned definition of methodology and documentation. In particular we will address following questions:

- Can we agree on common groundwork in the reconstruction process, supporting the scientific value of the outcome?
- Can we define a kind of a master, exemplary, critical digital, scientific reference model to serve the standardisation?
- How should we teach CoVHer in a way, that the outcome can be used as an instrument for scientific dissemination as well as a three-dimensional reference document for scholars of Cultural Heritage?
- How can CoVHer be anchored in the curriculum of architecture, art history and archeology studies in the higher education sector?
- How should the courses and lesson plan look like to accomplish the objectives?
- How can we stimulate innovative learning and teaching practices?

References:

- Beacham, R., H. Denard and Niccolucci, F. (2006). An Introduction to the London Charter', in Ioannides, M. et al. (eds), The e-volution of Information Communication Technology in Cultural Heritage: where hi-tech touches the past: risks and challenges for the 21st century, Short papers from the joint event CIPA/VAST/EG/EuroMed, Budapest: Archaeolingua, <https://www.londoncharter.org/>.
- Bendicho, V.M.L.M. (2013). International Guidelines for Virtual Archaeology: The Seville Principles. In: Corsi, C., Slapšak, B., Vermeulen, F. (eds) Good Practice in Archaeological Diagnostics. Natural Science in Archaeology. Springer, Cham. https://doi.org/10.1007/9783-319-01784-6_16.
- Denard, H. (2012). A New Introduction to the London Charter. In: Bentkowska-Kafel, A., Baker, D., Denard, H. (eds.) Paradata and Transparency in Virtual Heritage Digital Research in the Arts and Humanities Series, Ashgate, 57-71.
- Charter on the Preservation of the Digital Heritage (2009), <https://unesdoc.unesco.org/ark:/48223/pf0000179529> (visited on 12.04.2022).
- Wilkinson M. D., Dumontier M., Aalbersberg I., et al. (15 March 2016). "The FAIR Guiding Principles for scientific data management and stewardship". Scientific Data. 3 (1): 160018. <https://doi.org/10.1038/sdata.2016.18>

#(hypothetical, sourced-based) digital 3D reconstruction #methodology #standardisation #education #(online)courses