UPCYCLING 3D CULTURAL HERITAGE

Anthony Corns: Technology Manager, The Discovery Programme

In 2015, the Discovery Programme successfully completed its participation in the 3D-ICONS project where over 200 archaeological sites, monuments and historical structures where digitally documented in 3D using a range of geospatial technologies and approaches. The resulting datasets where subsequently modelled and visualised for public reuse and utilised Sketchfab platform for display and Europeana for the associated metadata.

Since the project was completed, the data created has been reused by many different individuals who have managed to exploit the digital content across a range of disciplines and industries. These include:

Tourism - Development of a visitor's experience around the Brú na Bóinne World heritage site including the creation of a virtual tour of Knowth and the development of a megalithic art centre with high resolution scan data forming the core of the presentation methods

Art & Creative Sectors – By utilising original 3D data models cultural heritage objects, artists have reimagined these objects using different design methods into new analogue art works

Video Game – The creation and development of efficient retopologised 3D content of cultural heritage objects and places enables the video games creation community to use realistic "game ready" assets within their development pipeline.

Conservation – Through the creation if digital replicas, the monitoring and reproduction of architectural features enables the effective management of our historic buildings.

Film/TV industry – Often providing the locational back drop to many TV and film productions, heritage sites have much to offer to both fantasy and factual productions. By reusing 3D assets within their production process can lead to enhancements in pre and post production.

Digital Past 2020: New technologies in heritage, interpretation and outreach | 12 & 13 February 2020, Aberystwyth Arts Centre, Aberystwyth

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This presentation explores these different reuse cases and highlights the wide raging value cultural heritage data has to offer beyond its original domain.

Biography

Anthony has worked for The Discovery Programme for the past 20 years and is responsible for the management of the applied technology research, including: project management, 3D data capture at a range of levels (aerial lidar, terrestrial scanning, close range scanning, SfM), GIS for cultural heritage, dataset management and archiving, metadata, promotion and dissemination of the use of technology within cultural heritage. Anthony is currently the Discovery Programme Project manager for CHERISH and the ESFRI E-RIHS (European Research Infrastructure for Heritage Science) project.

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