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Round Table

Metadata standard for 3D data. Challenges in 3D models documentation

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Description and Motivation:

Research documentation based on 3D content in cultural heritage remains unregulated, akin to the "Wild West." Despite established best practices, such as the London Charter (2009) and Principles of Seville (2017), as well as documentation principles for digital and 3D content (Wilkinson et al., 2016; Blundell et al., 2021; Altenhöner et al., 2022), there is significant variability in approaches to recording metadata and paradata for 3D models. Factors such as unstandardised methods of model creation and the potential blending of reality and fiction further challenge the perception of 3D content as a reliable source of information.

As part of the DFG 3D-Viewer project, we initiated a discourse on metadata schemas for 3D models by organising a series of workshops. During the first session in Mainz (2022), we invited representatives from various German 3D cultural heritage projects to present and map their metadata schemas, aiming to identify common ground for further discussions. The second workshop, held in Munich during UHDL2023, focused on developing a shared core documentation framework for 3D models (Bajena & Kuroczyński, 2023). However, attempts to create a universal schema for 3D cultural heritage faced

significant challenges due to key factors, including the diverse target audiences and the complexity of the projects. Additionally, it became evident that the stage of the digital data lifecycle during which a 3D model is created often limits the information captured, leading to the potential loss of data not recorded early in the process.

In light of these challenges, we aim to continue exploring practical use cases for documentation schemes in 3D cultural heritage. Specifically, we seek to address the following questions:

How can 3D models become trusted sources of information?

What should a core documentation schema for 3D models encompass?

How can 3D data be effectively shared with the public?

How does the digital lifecycle of 3D assets impact documentation needs?

How can we facilitate the deposition of 3D data in repositories for user access?

How should typologies and documentation needs for 3D cultural heritage models be structured?

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Target Audience:

The target audience is all practitioners of 3D models for culture heritage: data creators, curators of repositories and archives, and representatives of the GLAM sector using 3D models in their activities.

Keywords:

metadata , paradata, documentation, 3D models, cultural heritage

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