How to exchange Cultural Heritage 3D objects and knowledge in Digital Libraries?

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An exchange of 3D Cultural Heritage objects and information has been investigated by many projects (i.e. EPOCH, 3D-COFORM, FOCUS K3D, CARARE). Looking at a current state at the one hand many highly elaborated theoretical approaches, principles and guidelines as far as data schemes and infrastructures (i.e. London and Seville Charter, UNESCO ICOMOS Charter, CIDOC-CRM, CityGML) are proposed to foster quality, compatibility and sustainability of 3D Cultural Heritage objects. At the other hand in practice 3D reconstruction projects often base on unique and prototypic semantics, workflows, infrastructures and are customised for a specific purpose.

Related to those issues, the workshop addresses three challenges.
First challenge is to determine a scope of cultural heritage objects, including not only tangible objects but also intangible and complex issues like cultural traditions, or dynamic entities like mechanical systems.

The **second** challenge is to reveal strategies, practices and principles currently used to ensure compatibility, reusability and sustainability of cultural heritage objects within a 3D reconstruction work process on a day to day work basis. Beside the described scope of objects, a wide and heterogeneous range of technical and organisational settings in addition to a variety of intended purposes and approaches from several domains like BIM, GIS or VR have to be considered.

Up from a scope of objects and related grounded practices a **third** challenge is to aggregate recommendations for the exchange, publishing and use of 3D objects and for inherit knowledge about data, workflows and semantic structures. This includes not only approaches for widely useable technical formats for an exchange, archiving and managing of 3D models and paradata but also for a documentation of resulting objects and creation processes as well as to link 3D objects to other forms of information and make them findable and accessible on a multimedia level.

Proposed outcome of the workshop is to gain an overview about daily practices, innovative approaches as well as theoretical aspects to determine a scope of topics for further investigation. Consequently, the workshop will be concluded by a panel discussion on future research work and developments.