Semantic Bridging of Cultural Heritage Disciplines and Tasks

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The Cultural Heritage (CH) domain encloses a wide range of different disciplines, serving preservation of objects, collections and sites and dissemination of knowledge. In this context, stakeholders of different sciences generate, retrieve and share a vast amount of diverse information. Therefore, the information interoperability has been considered as a crucial task, especially in terms of the semantics.

In this direction CIDOC Conceptual Reference Model (CRM) has been widely used for the matching and merging of related to the CH domain ontologies and metadata standards. Additionally, it has been the base for extensions development in order to meet the needs of specialized fields and tasks. Nevertheless, a table or map which could clarify the correlations between the different ontologies and schemas is not yet defined.

Our study includes the review of relevant existed approaches and the proposal of a conceptual layering, considering the CIDOC CRM and its individual models as the centre of the organization. Matching and alignment to this high-level ontology is an elaborate task due to the differentiation of abstraction levels and fields of interest. This work could further clarify the semantic level and focus of the different ontologies and schemas, define the scope and method of their combination according to the separate needs of a domain or task, as well as the identification of semantic lack for the documentation of specialized CH activities and fields. Eventually we will outline the efficient combination of different ontologies and

schemas, aiming to the best possible capturing of information documentation and provenance.

(250 words)

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