Aligning the Academy with the Cultural Heritage Sector through the CIDOC CRM and Semantic Web technology.

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CLAROS[1] is a research initiative led by the University of Oxford's e-Research Centre, and funded by a small grant from Oxford's Fell Fund, that demonstrates the aggregation of nine European datasets, largely relating to Greek and Roman antiquity, by building a semantic web implementation based on use of the CIDOC CRM ontology. The aim of CLAROS was to provide a platform for experimentation with interfaces for world art, innovative searching techniques such as shape analysis, and testing RDF databases.

The *ResearchSpace[2]* project is based at the British Museum, London and is funded by the Andrew W. Mellon Foundation. Its aim is to create a shared infrastructure and service that supports collaborative research. This includes the development of communication and research tools, access to digital methods, and the harmonisation of data to create a knowledge environment akin to a modern day *Digital Wunderkammer*, transforming individual institutional knowledge into a network of connections and meanings that extend the questions that we can ask and the research directions that are available. Much of this data is likely to be available for general reuse as Linked Open Data.

The *CLAROS* project established the credentials of the CIDOC CRM standard as a semantic framework that can harmonise data from many different institutions while providing a richer environment (when compared to its digital sources) in which to explore and research cultural heritage data. Together with the *ResearchSpace* project this initial work is set to expand to include broader and denser datasets and crucially provide greater interactivity to support sophisticated research methods. With improvements in semantic database technology, greater cooperation between the academy and the cultural heritage sector and the maturity of the CIDOC CRM ontology, a more effective realisation of the research paradigm can be established. This can align discovery, argument and belief generated by research projects with the information systems of cultural heritage institutions for the benefit of future research, improved institutional knowledge resources and a radical improvement of engagement with the public using rich contextual information. This dynamic improves the relevancy of both Hhumanities research and the cultural heritage sector as a whole.

The software already developed in the CLAROS and the ResearchSpace initiatives can be used as demonstrators of the potential of the CIDOC CRM and provide important reference points for engaging both academic research and cultural heritage communities. By showing how the boundaries of computer interpretation and data modelling are being pushed by semantic technology and intelligent ontology, a cross disciplinary dialogue can be established with a range of experts including archaeologists, anthropologists and art historians, to generate new ideas for the collaborative exploitation of this technology.

[1] http://www.clarosnet.org
[2] http://www.researchspace.org/