Semantic Representation and Provenance of Cultural Heritage Information: the National Gallery

Collection in London.

Author(s): Kalliopi Kontiza, Joseph Padfield

Affiliation(s): The National Gallery

Contact information: The National Gallery, Scientific Department, Trafalgar Square, London

WC2N 5DN, Kalliopi.Kontiza@ng-london.org.uk, Joseph Padfield@ng-london.org.uk

Abstract (192/250 words): This paper describes a working example of mapping cultural heritage

information and data from the National Gallery collection in London. The paper discusses the

process of semantically representing and enriching the available cultural heritage data, and

reveals the challenges of semantically expressing interrelations and groupings among the

physical items, the venue and the available digital resources. The paper also highlights the

challenges in the creation of the conceptual model of the National Gallery as a Venue, which

aims to i) describe and understand the correlation between the parts of a building and the whole;

ii) to record and express the semantic relationships among the building components with the

building as a whole; and iii) to be able to record the accurate location of objects within space and

capture their provenance in terms of changes of location. The outcome of this investigation is the

proposed fully CIDOC-CRM compliant structure, that has been developed during the CrossCult

project, the CrossCult Venue Ontology, which attempts to model the spatial arrangements of the

different venues that participate as demonstrators in the project: an indoor gallery, a small

museum, four open air archaeological sites and two cities.

Keywords: Ontology-based representation, CIDOC-CRM, Cultural Heritage Venues, Spatial

arrangements