Developing a CIDOC-CRM Based Archive Information System in a German GLAM Institution*

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Abstract. Standardized archival description has long played a central role in ensuring the widest possible access to archival material. This is even truer in the digital age: for archival data to become part of the semantic web, they must be machine-readable. This paper reports on an experiment to provide the Historisches Archiv of the Germanisches Nationalmuseum with a semantic archive information system.

Whereas archives in museums normally tend to stress what makes archival collections different from museum "core" collections, our archive went the opposite way. In an effort to maximize the potential for integrating knowledge of museum artefacts with archival documentation, the archive adopted the parent institution's chosen technology and conceptual reference model. The resulting system applies the software WissKI, which enhances the open source CMS Drupal for handling ontologies and semantic data, using an OWL-DL implementation of the CIDOC CRM with archive-specific extensions. We named our archive WissKI "ais:ha".

The paper goes on to explore to what extent ais:ha supports compliance with the description standards of the International Council on Archives. Preliminary findings include a divergence from ICA's data modelling regarding the critical distinction between record set and record, as outlined in the ICA's new standard Records in Contexts (RiC). This divergence is not due to the CIDOC CRM, however. Rather, it appears to be rooted in technological and cultural constraints that are specific to our setting. Firstly, when attempting to deploy „record set" as a pervasive entity, the usability issues we encountered during data entry proved formidable. Were ais:ha just a platform for presenting data, this obstacle to RiC compliance would disappear, but ais:ha's projected use spectrum is as a system for creating, managing *and* presenting semantically interoperable archival data. Secondly, the historical archive's legacy data are not or not yet in a shape where the distinction between record set and record can be fruitfully applied, testifying to the enduring difficulties which Central European recordkeeping traditions have with the concept of record.

It will be interesting to reevaluate the situation a year from now, armed with more insight into WissKI's capabilities and options, a better understanding of RiC's mereology, and quite possibly with a test system implementing the RiC ontology, RiC-O.

- **Keywords:** Linked Data, Archival Description, CIDOC CRM, Records in Contexts, WissKI