

The archaeological excavation report of Rigny: an example of an interoperable logicist publication

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The logicist programme, which was initiated in the 1970s by J.C. Gardin, aims to clarify the reasoning processes in the field of archeology and to explore new forms of publication, in order to get over the growing imbalance between the flood of publications and our capacities of assimilation. The logicist programme brings out the cognitive structure of archaeological constructs, which establish a bridge between empirical facts, or descriptive propositions, at one end of the argumentation, and interpretative propositions at the other end. This alternative form of publication is designed to highlight the chain of inference and the consultation of evidence on which it stands. Our experiments on the digital publication of the Rigny excavation show that our workflow can provide different levels of access to the content, allowing both speed-reading and in-depth consultation. We can visualize all the chains of inference in diagram structure but also consult the ArSol database containing the field recordings that provide evidence of the initial propositions. We rely on CIDOC CRM entities for ensuring the interoperability of such publication within the semantic web. Inference chains are mapped to CRMinf and ArSol records are mapped to CRM, CRMSci and CRMArcheo. As part of the work carried out by the MASA Consortium, a project is underway to build a logicist publication from a graphical interface that describes the structure of proposals.