The Double Role of Ontologies in Information Science Research

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ABSTRACT

In philosophy, Ontology is the basic description of things in the world. In information science, an ontology refers to an engineering artifact, constituted by a specific vocabulary used to describe a certain reality. Ontologies have been proposed for validating both conceptual models and conceptual schemas. However, these roles are quite dissimilar. In this paper, we will show that ontologies can be better understood if we classify the different uses of the term as it appears in the literature. First we explain *Ontology* (with a capital O) as used in Philosophy. Then, we propose a differentiation between ontologies *of* information systems from ontologies *for* information systems. All three concepts have an important role in information science. We clarify the different meanings and uses of Ontology and ontologies through a comparison of the research by Wand & Weber and by Guarino in ontology-driven information systems. The contributions of this paper are twofold. First, it provides a better understanding of what ontologies are. Second, it explains the double role of ontologies in information science research.

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