

Digital Humanities and Semantic Web. "The New Frontiers of Transdisciplinary Knowledge"

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Abstract

The Digital Humanities is a field of study, research, and teaching, that arises from the union of humanities and digital disciplines. It includes research, analysis and dissemination of knowledge through computer media. In addition to having a solid humanistic background, the researchers of Digital Humanities must be able handle cultural content with the appropriate information technology tools.

Digital Humanities is a diverse and still emerging field that encompasses the practice of humanities research through information technology, and the exploration of how the humanities may evolve through integration with technology, media, and computational methods.

Through this research we will analyze the way in which computers process the Digital Humanities datasets so that they can be exchanged on the internet. In this paper, we will illustrate the strengths of their representation in terms of quantitative data through the semantic web.

The technologies semantic web used are RDF, Linked data, SPARQL, SKOS and OWL, which offer excellent opportunities to represent Digital Humanities in quantitative (digital) data.

From the point of view of scientific research, the semantic web assemble heterogeneous data, such as texts, images, sounds, videos, etc., aggregating them thus favoring their cataloging.

Shifting focus, from data publication, to data analysis, leads scientific research to face new challenges, such as the knowledge extraction, the aggregated visualization of data, machine learning and the knowledge discovery.

Finally, a model will be created to provide added value to society of knowledge.

Keywords: Digital Humanities, Semantic Web, RDF, Linked data, SPARQL, SKOS, OWL