DH process graphs

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Abstract

In the light of Unsworth's seminal work on scholarly primitives and early initiatives to understand the nature and capture the variety of digital methods and tools in the humanities through classifications(such as the AHDS Taxonomy of Computational Methods and the AHRC ICT Methods Network), the endeavour to understand and explicitly model scholarly processes found its place in the agenda of DARIAH as early as the preparatory phase. The Scholarly Research Activity Model was then formulated, followed by the NeDiMAH Methods Ontology (NeMO) which was developed within the NeDiMAH project and was subsequently adopted and supported by DARIAH VCC2 through the DiMPO WG. NeMO aimed at capturing the scholarly research process through a set of concepts representing the main elements of the humanities research ecosystem, their intrinsic structure, and the relations among them. The explicit representation of relations among concepts enables representations of research processes in the form of semantic networks best suited for associative, exploratory search and inference. Taxonomies, on the other hand, such as those above or TaDiRAH (developed by DARIAH-DE), can be incorporated as hierarchical term dictionaries in NeMO. The development of NeMO was informed by the extensive empirical study of scholarly information practices, needs and attitudes performed by the DiMPO WG across Europe, and was validated in a series of workshops. In subsequent work related to DARIAH-GR, a streamlined process (Research Spotlight) was developed to extract information from research articles, enrich it with relevant information from other Web sources, organize it according to the domain-neutral part of NeMO (appropriately elaborated, called Scholarly Ontology), and republish it in the form of linked data. This enables compiling semantic graph databases capturing who has done what, how, why and with what results. We propose a synergy session in which the WGs involved will jointly explore the recording and analysis of actual and/or prototypical instances of work processes in their respective domains of interest and the compilation of semantic graph databases supporting advanced documentary and analytical work. The Digital Practices for the Study of Urban Heritage and the GeoHumanities WGs will put

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forward different classes of problems, yet all of them calling for heavy use of highly differentiated digital methods and corresponding goals. They will thus present complementary views on all aspects of the research process. For example, drawing on FRBRoo and the IfcOWL ontology, and going beyond previous efforts in linking Building Information Modelling elements with a conservation ontology, the proposed effort to bring together the WGs above will highlight the challenges of using a CIDOC CRM - based modelling approach to structure logically more diverse architectural data (i.e., structure, typology and usage) at a scale larger than a building, e.g., clusters of heritage buildings, forming streets and neighbourhoods of cultural and historical value. The Digital Methods and Practices Observatory WG will offer NeMO and its streamlined application as methodological framework. We expect the session to initiate collaboration among the WGs that will lead to an enriched conceptualization of their own domains, an appreciation of common (and non-common) patterns and, possibly, joint work on developing semantic graph compendium(s) of digital practices.