Friday 19 July

9.00-10.30

Music ontologies and databases

Presented by the Forum of Sections

Chair: Jürgen Diet (Bayerische Staatsbibliothek, Munich)

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Assessing music ontologies for the development of a complex database

The increasing volume and diversity of musical information has been creating a challenge for the uniform creation, reuse and sharing of this kind of information. As part of addressing this challenge there has been a growing interest in musical ontologies, as a technique to support the sharing of heterogeneous musical information, both for commercial and cultural dissemination purposes. Motivated by a specific objective, in the context of the development of an information system on musicians and respective artistic production and professional career, existing ontologies for the music domain, in general, were surveyed. The purpose of this study is to support the hypothesis that this approach can not only support the specific requirement of that objective, but also facilitate the interoperability with other existing systems, with databases and catalogs built with multiple technical solutions.

So far, three ontologies that were found closer to the study object of the project were analyzed, reflecting three different models:

- (1) The Musical Ontology framework, developed by the Center for Digital Music of Queen Mary University, London, under the direction of Prof Mark Sandler, within the scope of the projects OMRAS Online music recognition and searching (NSF / JISC Digital Libraries Initiative, 1999-2002) and OMRAS2 A Distributed Research Environment for Music Informatics and Computational Musicology (EPSRC grant EP / E017614 / 1, 2007-2010), and that uses the FRBR model as a reference;
- (2) the DOREMUS ontology, which resulted from the DOREMUS project, funded in 2014 by the Agence Nationale de la Recherche, France and that brought together three major cultural institutions: the National Library of France, the Philharmonie de Paris and Radio France, and that is based on the FRBRoo model; and
- (3) the Performed Music Ontology, an extension of the BIBFRAME ontology, first released in April 2017, as a result of a project funded by the Andrew W. Mellon Foundation for Linked Data for Production (LD4P), led by the Stanford University Libraries, in collaboration with five other libraries: Columbia, Cornell, Harvard, Princeton and the Library of Congress.

This paper presents the purpose of the motivating project for the research, aggregation and consolidation of information on musicians and respective artistic production and professional career, and the assessment of these three significant music ontologies as relevant sources of inspiration for the design of the knowledge base for that project.