

Workshop: Linked Data and Music Encodings

Proposal

We propose a one-day workshop on interlinking music encodings and external music datasets through the use of linked data (RDF) and MEI. During the session, we will provide a high-level overview of linked data and semantic web technologies, briefly covering their history and purpose, some terminology, and their application to digital musicology. We will take a closer look at some real-life examples, and get hands-on experience with exercises in interlinking, querying, and annotating various datasets (e.g., RISM, SLICKMEM, DOREMUS). The course is aimed at beginners, with no previous knowledge of semantic web technologies required.

Duration

The proposed tutorial runs for the full pre-conference workshop day at MEC 2019.

Motivation

Through its header section, the MEI schema provides for the encoding of metadata descriptions of bibliographic facets, work descriptions, and encoding provenance. This association of description and musical encoding within a single source file is often convenient; however, it also poses certain limitations, for instance when such descriptions accumulate over time, must express mutually-inconsistent interpretations (as in cases of scholarly dispute), or describe atypical information facets that provide an uncomfortable fit for the existing header fields.

Using the Resource Description Framework (RDF), we can lift such descriptions out of the encoding structure, separating them into semantic layers of linked data. Descriptions within these layers remain anchored to the music encoding by reference to (identified elements of) the MEI structure, but can also refer to any other relevant information on the Web, enabling the interlinking of score encodings, multimodal musical resources, and extra-musical information. RDF descriptions adhere to an “open-world assumption”, meaning that they are allowed, indeed expected, to accumulate over time; they can be published in decentralised fashion by different authors with full provenance, enabling differing viewpoints to be expressed; and, they exhibit a mutable schema capable of incorporating atypical information facets without technical conflicts. Together, these qualities greatly increase the flexibility and expressiveness of music encoding metadata.

Learning outcomes

We expect to impart a basic awareness of semantic web technologies and their affordances in digital musicology research. Although time constraints restrict the depth of detail we will be able

to explore, attendees will leave with a better idea of how semantic web approaches might fit into their research, and will be equipped with sufficient vocabulary and understanding as well as an overview of existing tools, literature, and training events to independently pursue further knowledge on this topic.

Logistical requirements

Seating should be arranged such that all students are able to comfortably follow the tutorial presentation, as well as working together in small groups of 4-6 people. Tutors should be able to walk around and behind participants' work areas such that individual one-on-one assistance is possible. Large (A3) pieces of paper, or a flipchart, along with coloured pens should be made available to each group. Participant numbers should be limited to no more than 25 attendees.

Technical requirements

Reliable internet access is crucial for presenters and attendees, as the examples and exercises will be web-based. Tutorial presenters will require a working audio-visual presentation system with standard connectors (HDMI, mini displayport, VGA). Each attendee is required to bring a laptop. No specialised software will be required, beyond a standard web browser.