

Metadata for Phonograph Records: Facilitating New Forms of Use and Access to Analog Sound Recordings

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ABSTRACT

A new metadata schema for analog sound recordings is described.

Categories and Subject Descriptors

H.3.7 [Digital Libraries]: Collection and Standards.

General Terms

Management, Standardization.

Keywords

Digitization, Preservation, Metadata, Analog Sound Recordings.

1. METADATA

Analog sound recordings were distributed commercially in two major analog formats throughout most of the twentieth century: 78-rpm and LPs. In order to preserve and broadly distribute their content, digitization is required. As part of a large digitization management system being developed, a new metadata schema for describing sound recordings has been designed. The comprehensive metadata schema was created to the finest level of granularity possible. The schema includes five types of metadata: description (enable discovery and identification of resources), administration (support management of resource), structure (describe font and layout characteristics of texts), legal rights (protect intellectual property rights), and technical information (record the capture process and technical characteristics of the digital objects).

Traditional standards for cataloging sound recordings exist [1, 2, 3] but are inadequate for digitized representations of music. The standards are generally limited to bibliographic description of relatively few elements; they have weak relationships between fields (e.g., performers or conductors) describing separate works in the same album; and they make no distinctions between publications of the complete work versus parts of the work. The new metadata schema provides for complete auditory, pictorial, and textual content analysis. Characteristics from MARC21, MODS, METS, TEI, MPEG-7, and more were partially incorporated into its design. The basic schema framework was developed using

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JCDL '05, June 7–11, 2005, Denver, Colorado, USA
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Dublin Core, which was expanded and refined to include metadata at multiple and various levels totaling 120 fields.

Metadata at different levels were created to facilitate the management of a wide variety and combinations of objects (e.g., tracks, discs, performers, recording sessions) that comprise sound recordings. Metadata belong to one or more hierarchical classes: Collection, Album, Image, Disc, and Track. For example:

- Collection level: summary, subject, scope and content.
- Album level: title, language of title, acknowledgement.
- Image level: description, date of photo, photographer.
- Disc level: number of tracks, playing speed, matrix numbers.
- Track level: title, duration, performers, recording location.

As in the object-oriented paradigm, elements in a class can be inherited by its subclasses. For example, the element RecordingSessionDate at the Album level can be inherited by the Disc class, if each disc in the album has the same date. On the other hand, if some of the tracks were recorded on different dates, the RecordingSessionDate at the Disc and Album classes will be an aggregate of RecordingSessionDate at their Track subclasses.

As part of the pilot preservation digitization project of David Edelberg's Handel LP collection, a web data-entry form written in PHP was implemented and tested. Preliminary results showed some confusion of data entry due to omission or ambiguities in the definition of metadata. The significance of these results needs to be evaluated and used for future LP digitization projects. Although the data was entered manually, the plan is to automate the metadata extraction process, wherever possible, by developing a specialized document analysis software using Gamera [4].

2. ACKNOWLEDGEMENTS

This research is funded in part by the "Richard M. Tomlinson Digital Library Innovation and Access Award," David Edelberg Foundation, and the FQRSC.

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