MPEG7 vs Z39.50

- Z39.50
  - Defines protocol (independent of the DB).
  - Information can be seen as a big classic DB table where you select columns and you get registers.
  - Aimed for cataloguing.
- MPEG7
  - Standard for metadata of multimedia contents: aimed for content description.
  - Defines Descriptors (D) and Descriptors Schemes (DSs).
  - Uses XML documents: nested object hierarchy.
  - MPEG7 DB could be interfaced to Z39.50 standard but loosing features.
Table-like structure.

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Date</th>
<th>Editor</th>
<th>Abstract</th>
<th>...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Register 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Register 2</td>
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<tr>
<td>Register 3</td>
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</tr>
</tbody>
</table>

MPEG7 (I): DB

- XML documents DB.
- In our case, a document could be an Opera.
- DB Collections can be used
  - Technical convenience.

MPEG7 DB (XML docs)

Collections:
- Collection 1
- Collection 2
- Collection 3

Documents:
- Turandot
- Tristan und Isolde
- Cosi fan tutte
- Aida
- ...
MPEG7 (II): Document structure

- **Content Structure**
  - Segments (audio, video,...)
  - Decompositions (spatial, temporal, ...)
- **Descriptors**
  - Media Information (media files).
  - **Creation & Production** (author, genre, etc.)
  - Usage Information.
- **Collections**
- **Navigation & Access**
  - Summaries, views, variations.
  - Can be used as navigation interface.

MPEG7 (III): Document structure

- **MPEG7 Document**
- **Navigation & Access**
  - Variation
  - View
  - Summaries
- **Descriptors**
  - Creation
  - Media
  - Usage
- **Classifications**
MPEG7 (III): Queries

- Possibility of hierarchical queries.
- More precise information retrieval (segments).
- Once located the result, we can use the information of the document, collection, etc.
- Links to "related material" inside descriptors.

Query: author, actor, style, etc...

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OD DB → Collection Classicism → Document Così fan tutte

Segment Opera → Segment Scene 6 → Descriptor: Actor: ...