Descriptive Metadata Alignment and Interoperability in IIIF

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Semantic alignment

Ensuring consistency of meaning

- Vocabulary and ontology choice
- Metadata mapping
- Linking
Reuse is king.

Vocabulary and ontology choice
JSON-LD Context

{
    "@context": {
        "sc": "http://iiif.io/api/presentation/2#",
        "iiif": "http://iiif.io/api/image/2#",
        "exif": "http://www.w3.org/2003/12/exif/ns#",
        "oa": "http://www.w3.org/ns/oa#",
        "cnt": "http://www.w3.org/2011/content#",
        "dc": "http://purl.org/dc/elements/1.1/#",
        "dcterms": "http://purl.org/dc/terms/#",
        "dctypes": "http://purl.org/dc/dcmitype/#",
        "doap": "http://usefulinc.com/ns/doap#",
        "foaf": "http://xmlns.com/foaf/0.1/#",
        "rdf": "http://www.w3.org/1999/02/22-rdf-syntax-ns#",
        "rdfs": "http://www.w3.org/2000/01/rdf-schema#",
        "xsd": "http://www.w3.org/2001/XMLSchema#",
        "svcs": "http://rdfs.org/sioc/services#",
        "as": "http://www.w3.org/ns/activitystreams#",
...}
\[ X \Rightarrow y \]

Metadata mapping
## IIIF Presentation API metadata requirements

<table>
<thead>
<tr>
<th>Field</th>
<th>Meaning</th>
<th>label</th>
<th>metadata</th>
<th>description</th>
<th>thumbnail</th>
<th>attribution</th>
<th>license</th>
<th>logo</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>Required</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<td>⬤</td>
<td>Not Allowed</td>
<td>☐</td>
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</tbody>
</table>

*Problem?*
No.

Consider the scope of the IIIF Presentation API.
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<td>✓</td>
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<td>⊗</td>
<td>Recommended</td>
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</tr>
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</table>
The metadata property

- Represent key/value pairs, intended for human presentation, e.g. in a viewer
- **NO SEMANTICS**

```
"metadata": [
  {
    "label": "Author", "value": "Anne Author"},
  {
    "label": "Published", "value": [
      {
        "@value": "Paris, circa 1400", "@language": "en"},
      {
        "@value": "Paris, environ 1400", "@language": "fr"
      }
    ]},
  {
    "label": "Notes", "value": ["Text of note 1", "Text of note 2"]},
  {
    "label": "Source", "value": "<span>From: <a href="http://example.org/db/1.html">Some Collection</a></span>"
  }
]
```

The navDate property

- Used for navigation only; expressed as `xsd:dateTime`
- Use case: timeline or calendar-based presentations
- Actually considered a `presentation` property
Mapping your data to the metadata property

- What information is necessary to present in the context of a IIIF viewer? (This is not a technical question, this is a user experience question!)
- Recommendation: develop one or more profiles from the content standards or schemas that you use, and document them heavily.
Linking

Because pointing is better than nothing
Linking directions

- IIIF resources to other resources
- Other resources to IIIF resources
Example IIIF linking properties

The license property

- External resource (URIs only)
- Potential sources: Creative Commons licenses, RightsStatements.org vocabulary, links to human readable pages

The related property

- Intended to refer to other resources for display or download
- E.g. an IIIF viewer; PDF download, etc

The seeAlso property

- Used point to machine-readable metadata related to an object (XML, RDF, etc.)
- Please use this!
From your descriptive metadata to IIIF resources

- Lots of use cases!
- Great idea, but more patterns need to emerge
- Considerable work in this regard from Europeana, DPLA, IIIF eds
- Consider difference in linking to collection, manifest, etc. vs. image vs. viewer resources
- Current info/related issues:
  https://github.com/IIIF/iiif.io/issues/558
  https://github.com/IIIF/iiif.io/issues/600

Image credit: Glen Robson
Thanks!

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