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**School of Library and Information Science, Simmons University**

Lucy Davis  
Samantha Mullaly  
Sarah Yasuda  
LIS445 - Metadata  
Professor Pomerantz

# Google Poly Metadata Schema

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## OVERVIEW

This document is a specification of all elements in the Google Poly Metadata Schema, including elements and sub-elements, vocabulary encoding schemes, syntax encoding schemes, and terms from the Poly Genre Vocabulary. The Google Poly Metadata Schema is specifically catered to capture metadata on 3D objects uploaded by creators on the Google Poly platform.

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## INDEX

|                            |  |
|----------------------------|--|
| Terms for Elements         | Titles or Names, Creation, Identifier, Measurements, Materials/Techniques, Subject Matter, Context, Descriptive Note, Current Location, Copyright/Restrictions, Permission to Remix  |
| Terms for Sub-elements     | Title Text, Title Language, Creation Description, Creator Role, Creator Statement, Creation Date, Creation Place, Commissioner, Commissioner Role, Remixed From, Remixed From Title, Remixed From Creator, Dimensions Description, 3D Program, Poly Genre, General Subject Terms, Copyright Statements |
| Vocabulary Encoding Scheme | Poly Genre Vocabulary  |
| Syntax Encoding Scheme     | ISO 639-2, ISO 8601, ISO 3166  |
| Poly Genre Vocabulary      | Tours, Animals & Pets, Architecture, Art, Culture & Humanity, Current Events, Food & Drink, Furniture & Home, History, Nature, Objects, People & Characters, Places & Scenes, Science, Sports & Fitness, Tools & Technology, Transport, Travel & Leisure   |

## ELEMENTS

| Identifier | Label           | Element tag:  | Sub-element of: | Description:   | Data Values: | Implementation : (Required, Optional, Repeatable) |
|------------|-----------------|---------------|-----------------|--|--------------|---|
| 1          | Titles or Names | cdwa:title    |                 | The titles or names given to the 3D object as well as the type of title, and the dates when the title was valid. |              | Required, Not Repeatable                          |
| 1.1        | Title Text      | cdwa:titeText | cdwa:title      | Titles, identifying phrases, or  | Free text    | Required, Not Repeatable                          |

|       |                     |                         |                         |  |           |                          |
|-------|---------------------|-------------------------|-------------------------|--|-----------|--------------------------|
|       |                     |                         |                         | names given to the 3D object.  |           |                          |
| 1.2   | Title Language      | cdwa:titleLanguage      | cdwa:title              | The language of the title or name.   | ISO639-2  | Required, Repeatable     |
| 2     | Creation            | cdwa:creation           |                         | The creation, design, execution, or production of the 3D resource and its components.  |           | Required, Not Repeatable |
| 2.1   | Creator Description | cdwa:creatorDescription | cdwa:creation           | The name, brief biographical information, and roles (if necessary) of the named or anonymous individuals or corporate bodies responsible for the design, production, manufacture, or alteration of the work, presented in a syntax suitable for display to the end-user and including any necessary indications of uncertainty, ambiguity, and nuance. | Free text | Required, Repeatable     |
| 2.1.1 | Creator Role        | cdwa:creatorRole        | cdwa:creatorDescription | The role or activity performed by a creator or maker in the conception, design, or production of a work  | Free text | Optional, Repeatable     |
| 2.1.2 | Creator Statement   | cdwa:creatorStatement   | cdwa:creatorDescription | Opinions offered by the artist or creator of a work that interpret and provide further   | Free text | Optional, Repeatable     |

|       |                      |                         |                   |  |           |                          |
|-------|----------------------|-------------------------|-------------------|--|-----------|--------------------------|
|       |                      |                         |                   | information about the work and the process of its creation.  |           |                          |
| 2.2   | Creation Date        | cdwa:creationDate       | cdwa:creation     | The date when the object was created and published on Google Poly.   | ISO 8601  | Required, Not Repeatable |
| 2.3   | Creation Place       | cdwa:creationPlace      | cdwa:creation     | The location where the creation took place.  | ISO 3166  | Optional, Not Repeatable |
| 2.4   | Commissioner         | cdwa:commissioner       | cdwa:creation     | The name of the individual, organization, association, or group that commissioned the work from its creator. | Free text | Optional, Repeatable     |
| 2.4.1 | Commissioner Role    | cdwa:commissionerRole   | cdwa:commissioner | The name of the individual, organization, association, or group that commissioned the work from its creator. | Free text | Optional, Repeatable     |
| 2.5   | Remixed From         | poly:remixedFrom        | cdwa:creation     | A description of the work that the creator used to create the current work.                                  |           | Optional, Repeatable     |
| 2.5.1 | Remixed From Title   | poly:remixedFromTitle   | poly:remixedFrom  | Title of the work.   | Free text | Optional, Repeatable     |
| 2.5.2 | Remixed From Creator | poly:remixedFromCreator | poly:remixedFrom  | Name of the creator of the work.   | Free text | Optional, Repeatable     |
| 3     | Identifier           | dc:identifier           |                   | An unambiguous reference to the resource within a given context.   | URI       | Optional, Repeatable     |
| 4     | Measurements         | cdwa:measurements       |                   | Information about the size,  |           |                          |

|     |                        |                           |                           |   |           |                          |
|-----|------------------------|---------------------------|---------------------------|---|-----------|--------------------------|
|     |                        |                           |                           | shape, scale, and dimensions of a work of art or architecture.  |           |                          |
| 4.1 | Dimensions Description | cdwa:dimensionDescription | cdwa:measurements         | Information about the dimensions, size, or scale of the work, presented in a syntax suitable for display to the end-user and including any necessary indications of uncertainty, ambiguity, and nuance.   | Free text | Optional, Repeatable     |
| 5   | Materials/Techniques   | cdwa:materials/techniques |                           | The substances or materials used in the creation of a work of art or architecture, as well as any production or manufacturing techniques, processes, or methods incorporated in its fabrication. This information includes a description of both the materials used to create the work and the way in which they were put together. |           |                          |
| 5.1 | 3D Program             | poly:3DProgram            | cdwa:materials/techniques | The program (software, application, etc.) used to create the 3D scenario.   | Free text | Required, Not Repeatable |
| 6   | Subject Matter         | cdwa:subjectMatter        |                           | The subject matter of a work of art   |           |                          |

|     |                       |                          |                    |  |                                |                          |
|-----|-----------------------|--------------------------|--------------------|--|--------------------------------|--------------------------|
|     |                       |                          |                    | (sometimes referred to as its content) is the narrative, iconographic, or non-objective meaning conveyed by an abstract or figurative composition. It is what is depicted in and by a work of art. It also covers the function of an object or architecture that otherwise has no narrative content. |                                |                          |
| 6.1 | Poly Genre            | poly:polyGenre           | cdwa:subjectMatter | The type of XR scenario that best describes the work.  | See Index for Poly Genre terms | Required, Not Repeatable |
| 6.2 | General Subject Terms | cdwa:generalSubjectTerms | cdwa:subjectMatter | Indexing terms that characterize in general terms what the work depicts or what is depicted in it. This subject analysis is the minimum required. It is recommended to also list specific subjects, if possible.   | Free text                      | Optional, Repeatable     |
| 7   | Context               | cdwa:context             |                    | Political, social, economic, or religious events or movements associated with the work of art or architecture at its creation and over time, including competitions. This category is also used to   | Free text                      | Optional, Repeatable     |

|    |                        |                             |  |   |           |                          |
|----|------------------------|-----------------------------|--|---|-----------|--------------------------|
|    |                        |                             |  | record the placement of a work in a particular position within an architectural context and any information about the discovery or excavation of the work.  |           |                          |
| 8  | Descriptive Note       | cdwa:descriptiveNote        |  | A textual description of the work, including a discussion of issues related to it. Important information in this note should be indexed in other appropriate categories.  | Free text | Optional, Repeatable     |
| 9  | Current Location       | cdwa:currentLocation        |  | The name and geographic location of the repository that is currently responsible for the work, or, for monumental works and architecture, the geographic location of the work. If the work is <i>lost, destroyed, has location unknown, or the work is in an anonymous private collection, indicate this.</i> | Free text | Required, Not Repeatable |
| 10 | Copyright/Restrictions | cdwa:copyright/restrictions |  | An identification of the individual or group that holds the rights to use, exhibit, or reproduce a work, along with   |           | Required, Repeatable     |

|      |                     |                         |                             |  |           |                          |
|------|---------------------|-------------------------|-----------------------------|--|-----------|--------------------------|
|      |                     |                         |                             | an indication of any existing restrictions on its reproduction, exhibition, or use. For Google Poly, works may fall under the CC-BY license. |           |                          |
| 10.1 | Copyright Statement | cdwa:copyrightStatement | cdwa:copyright/restrictions | A formal statement of the copyright of a work, and/or any restrictions placed on it, including licensing information.                        | Free text | Optional, Not Repeatable |
| 11   | Permission to Remix | poly:permissionToRemix  |                             | The creator has the capability of making the work remixable or not. To remix means to use this work in a new work.                           | Yes or No | Required, Not Repeatable |

## WEBFORM

Please complete this webform to upload the 3D object and submit the required metadata for the 3D object.

### Share your creation!

Please upload your object files (.obj, .glTF, .glb, .fbx), and .mtl files, and texture files (.png, .jpg) here.

UPLOAD

You can also publish directly from [Blocks](#), [Tilt Brush](#), or [Tour Creator](#).










### Input the metadata for your creation!

Input your metadata in the third column of the table below.

\* Required element



 To add another repeatable element

| Element:   | Description:   | Metadata for your 3D object: |
|--|--|------------------------------|
| Title Text<br><b>*Required</b>   | Titles, identifying phrases, or names given to the 3D object.  |                              |
| Title Language<br><b>*Required</b><br>      | The language of the title or name.<br>Please use the <a href="#">ISO 639-2</a> standard.   |                              |
| Creator Description<br><b>*Required</b><br> | The name, brief biographical information, and roles (if necessary) of the named or anonymous individuals or corporate bodies responsible for the design, production, manufacture, or alteration of the work, presented in a syntax suitable for display to the end-user and including any necessary indications of uncertainty, ambiguity, and nuance. |                              |
| Creator Role<br>                            | The role or activity performed by a creator or maker in the conception, design, or production of a work  |                              |
| Creator Statement<br>                     | Opinions offered by the artist or creator of a work that interpret and provide further information about the work and the process of its creation.   |                              |
| Creation Date<br><b>*Required</b>  | The date when the object was created and published on Google Poly.<br>Please use the <a href="#">ISO 8601</a> standard.  |                              |
| Creation Place   | The location where the creation took place.<br>Please use the <a href="#">ISO 3166</a> standard.   |                              |
| Commissioner<br>                          | The name of the individual, organization, association, or group that commissioned the work from its creator.   |                              |
| Commissioner Role<br>                     | The name of the individual, organization, association, or group that commissioned the work from its creator.   |                              |
| Remixed From<br>                          | A description of the work that the creator used to create the current work.  |                              |
| Remixed From Title<br>                    | Title of the work.   |                              |
| Remixed From Creator<br>                  | Name of the creator of the work.   |                              |

|                               |   |  |
|-------------------------------|---|--|
| Identifier<br>+               | An unambiguous reference to the resource within a given context.  |  |
| Dimensions Description<br>+   | Information about the dimensions, size, or scale of the work, presented in a syntax suitable for display to the end-user and including any necessary indications of uncertainty, ambiguity, and nuance.   |  |
| Materials/Tech niques         | The substances or materials used in the creation of a work of art or architecture, as well as any production or manufacturing techniques, processes, or methods incorporated in its fabrication. This information includes a description of both the materials used to create the work and the way in which they were put together.                           |  |
| 3D program<br>*Required       | The program (software, application, etc.) used to create the 3D scenario.   |  |
| Poly Genre<br>*Required       | The type of XR scenario that best describes the work.   |  |
| General Subject Terms<br>+    | Indexing terms that characterize in general terms what the work depicts or what is depicted in it. This subject analysis is the minimum required. It is recommended to also list specific subjects, if possible.  |  |
| Context<br>+                  | Political, social, economic, or religious events or movements associated with the work of art or architecture at its creation and over time, including competitions. This category is also used to record the placement of a work in a particular position within an architectural context and any information about the discovery or excavation of the work. |  |
| Descriptive Note<br>+         | A textual description of the work, including a discussion of issues related to it. Important information in this note should be indexed in other appropriate categories.  |  |
| Current Location<br>*Required | The name and geographic location of the repository that is currently responsible for the work, or, for monumental works and architecture, the geographic location of the work. If the work is <i>lost</i> , <i>destroyed</i> , has <i>location unknown</i> , or the work is in an anonymous private collection, indicate this.                                |  |
| Copyright Statement           | A formal statement of the copyright of a work, and/or any restrictions placed on it, including  |  |

|                                  |  |  |
|----------------------------------|--|--|
| *Required                        | licensing information.   |  |
| Permission to Remix<br>*Required | The creator has the capability of making the work remixable or not. To remix means to use this work in a new work. |  |

Once you have uploaded all files for your 3D object *and* filled out the metadata form, please click submit.



Need help? Talk to a Google Poly metadata technician at [polyhelpdesk@google.com](mailto:polyhelpdesk@google.com)

## ADVANCED SEARCH FORM

### KEY:

\_\_\_\_\_ represents a Free Text search box

===== represents a drop down menu

Keyword(s) \_\_\_\_\_

Creator \_\_\_\_\_

Title \_\_\_\_\_

Category ===== <- Drop down menu to include Poly Genre Vocabulary list (Tours, Animals & Pets, Architecture, Art, Culture & Humanity, Current Events, Food & Drink, Furniture & Home, History, Nature, Objects, People & Characters, Places & Scenes, Science, Sports & Fitness, Tools & Technology, Transport, Travel & Leisure)

Date ===== to ===== <- Drop down menu displays dates available in the repository in year format (YYYY)

Location \_\_\_\_\_

Remixable ===== <- Drop down menu to include Yes or No options

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## ALGORITHM ERROR-CHECKING FOR USER-CONTRIBUTED METADATA

The webform will incorporate an algorithm to error-check user-contributed metadata with the following guidelines:

- Each submission will be error-checked by making sure all *required* element fields are filled
  - Each element with specific format requirements for the data values will be error-checked to comply with the required ISO standard or controlled vocabulary.
  - If submission includes errors, the user will be directed to an error page with an edited copy of its submission.
  - Error page will include highlighted sections for elements with errors and textual comments on potential solutions (i.e. ISO formats, controlled vocabulary).
  - For further assistance, the webform will include contact information for users to connect with a metadata technician.
- 

## EXAMPLE FRAMEWORK FOR A METADATA RECORD

```
<?xml version="1.0" encoding="UTF-8"?>

<poly: XR scenario>

<cdwa: title>
  <cdwa: titleText>Yellowstone National Park </cdwa: titleText>
  <cdwa: titleLanguage>eng</titleLanguage>
</cdwa: title>

<cdwa: creation>
  <cdwa: creatorDescription> Aivan Byrnes _ Student - SalemMS
  </cdwa: creatorDescription>
  <cdwa: creationDate> 2019-05-28 </cdwa: creationDate>
</cdwa: creation>

<dc: identifier> https://poly.google.com/view/7HRHP4-mw94 </dc:
identifier>

<cdwa: measurements>
  <cdwa: dimensionDescription> 5 panoramic scenes </cdwa:
dimensionDescription>
</cdwa: measurements>
```

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```
<cdwa: materials/techniques>  
  <poly: 3DProgram> Tour Creator </3DProgram>  
</cdwa: materials/techniques>
```

```
<cdwa: subjectMatter>  
  <poly: polyGenre> Tours </poly: polyGenre>  
  <cdwa: generalSubjectTerms> Nature, National Parks, Wildlife,  
Idaho, Montana, Wyoming, Yellowstone </cdwa: generalSubjectTerms>  
</cdwa: subjectMatter>
```

```
<cdwa: descriptiveNote> Yellowstone National Park is an American  
national park located in Wyoming, Montana, and Idaho. It is widely  
known as the first national park and is known for its beautiful  
environment and wildlife. </cdwa: descriptiveNote>
```

```
<cdwa: currentLocation> Google Poly </cdwa: currentLocation>
```

```
<cdwa: copyrightRestrictions> Public </cdwa: copyright/Restrictions>
```

```
<poly: permissionToRemix> Yes </poly: permissionToRemix>
```

```
</poly: XR scenario>
```

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