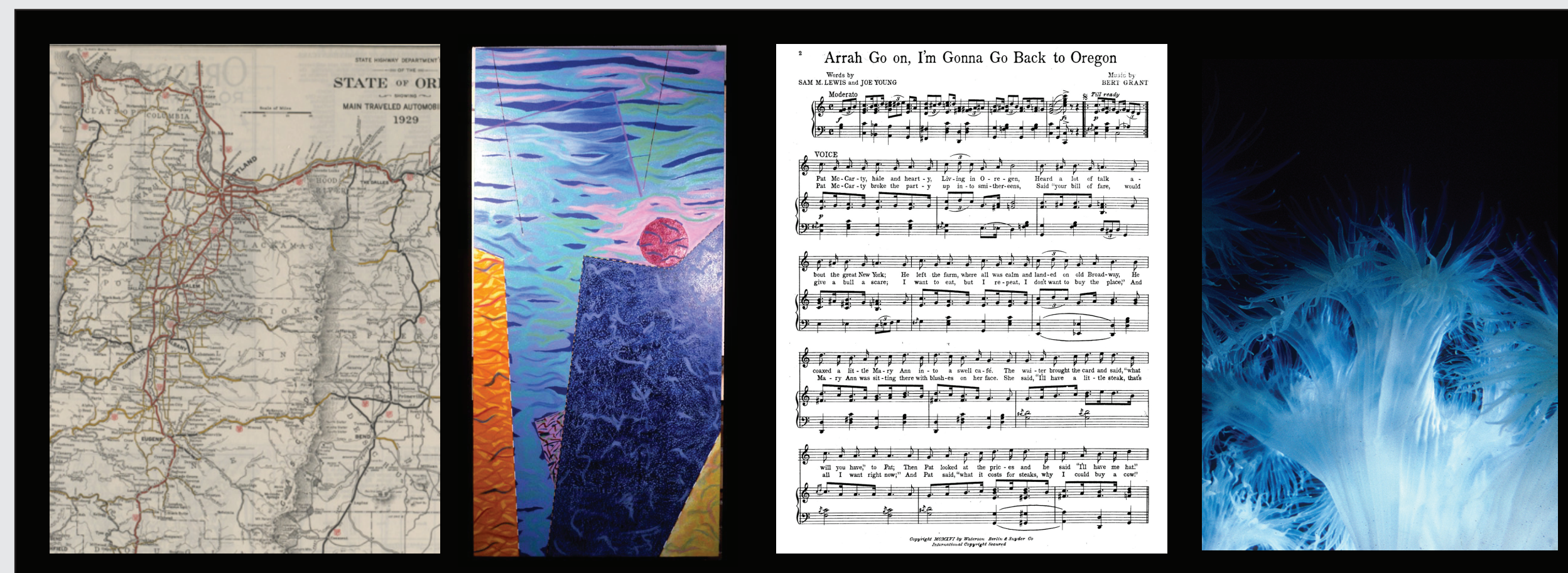# Link It or Don't Use It:
Transitioning Metadata to Linked Data in Hydra
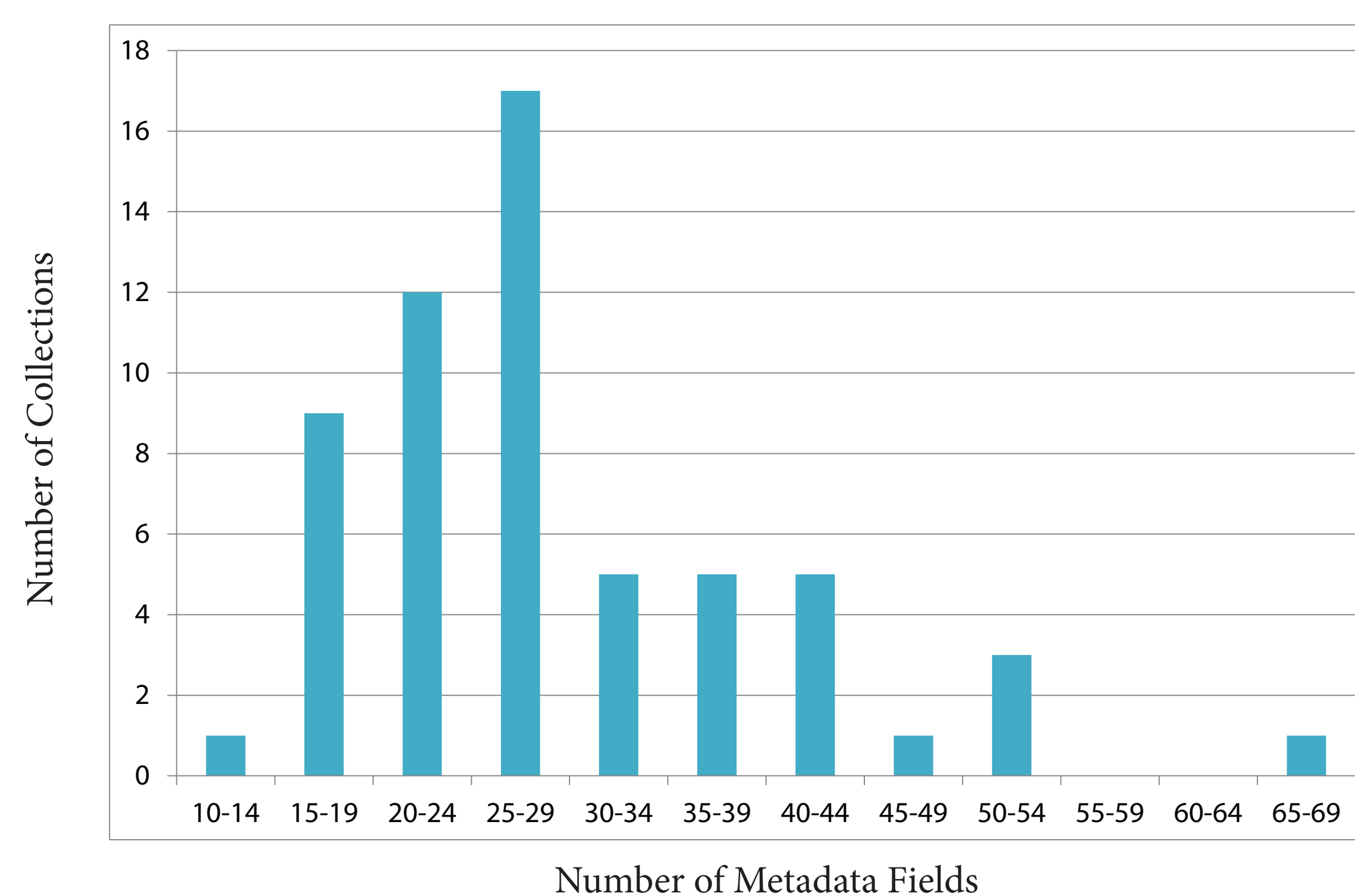
Abstract

The University of Oregon Libraries and Oregon State University Libraries have been successfully collaborating on a digital asset management system for four years, OregonDigital.org. OregonDigital.org holds diverse collections of digital archival materials from art slides to faculty research to traditional digitized and born-digital archival collections. In addition, we host unique collections from local government, historical societies, and museums. In preparation for a migration to a new platform, based on Hydra, we are re-evaluating the metadata schemas used in these collections and transitioning to an open interoperable framework. A key element in the transition to Hydra is a major metadata transformation from locally customized Qualified Dublin, VRA Core 4.0, and MODS to Linked Data vocabularies with formal specifications using RDFS, SKOS, and OWL.

This poster presents our use of the property hierarchies included in RDF vocabularies to build interoperability into our Hydra metadata. Our implementation includes automated cross-schema indexing and intelligent display and navigation of properties unknown to the software. This large undertaking involves re-thinking metadata schemas created over fifteen years by multiple institutions, as well as incorporating new elements, such as those from the DataCite schema. By utilizing existing linked data vocabularies and creating linked properties for additional elements, we are attempting one schema across content types and collections, yet is flexible enough to continue to evolve with our needs.
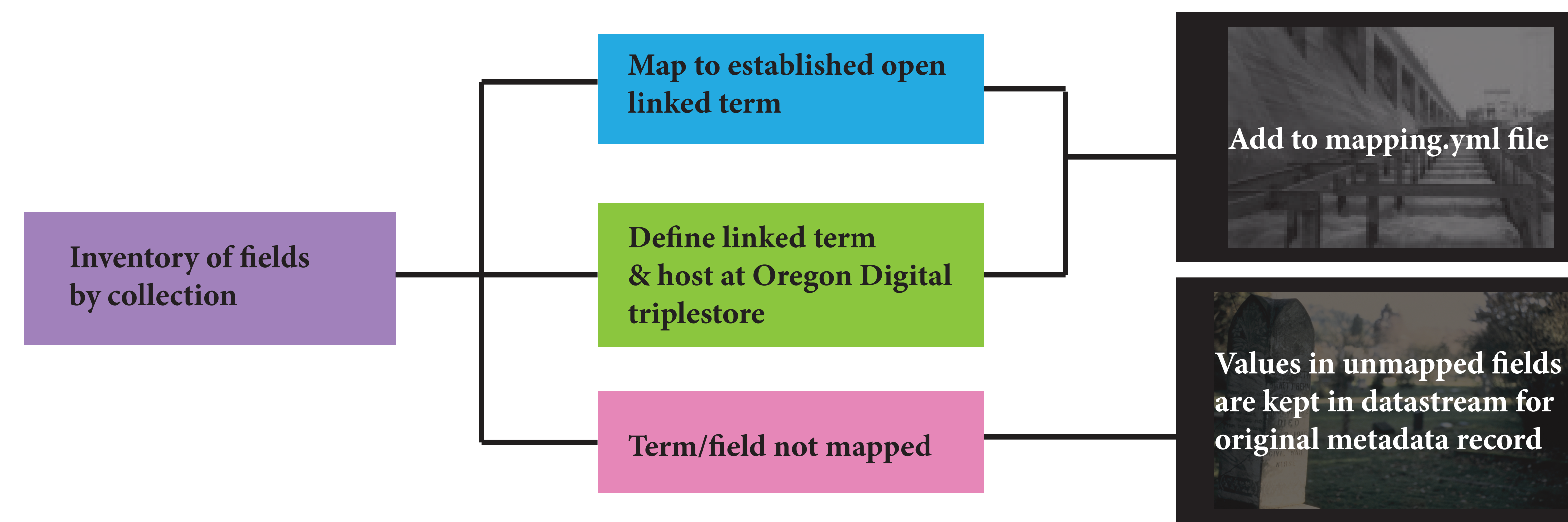
Pre-Existing Metadata Fields

Over **300** different metadata fields across **60** digital collections.

Mapping Metadata Fields

- Inventory of fields by collection
  - Map to established open linked term → Add to mapping.yml file
  - Define linked term & host at Oregon Digital triplestore
  - Term/field not mapped → Values in unmapped fields are kept in datastream for original metadata record

Example Mappings

image_title: dct:title
digital_collection_title: dct:isPartOf
photographer: marcrel:pht
date: dct:date
date_created: dct:created
date_modified: dct:modified
description_notes: dct:description
subject: dct:subject
object_type: dct:type
original_format: mads:physicalDescription
original_collection: mads:Collection
item_number: dct:identifier
other_formats: dct:hasFormat
geographic_subject: dct:spatial
restrictions: dct:rights
transmission_data: oregon:conversionSpecifications
item_url: dct:replaces
full_resolution_: oregon:full
file_name: premis:originalName

title: dct:title
caption_title: dct:alternative
other_title: dct:alternative
composer: marcrel:cmp
lyricist: marcrel:lyr
arranger: marcrel:arr
original_place_of_publication: marcrel:pup
original_publisher: dct_publisher
original_copyright_holder: marcrel:cpc
physical_description: modsrdf:physicalExtent
physical_medium: dct:description
notes: dct:description
topic: dct:subject
genre: modsrdf:genre
cover_description: dct:description
illustrator_artist: oregon:coverArtist
lithographer_printer_engraver: marcrel:prm
first_line: oregon:sheetmusic/firstLine
first_line_of_chorus: oregon:sheetmusic/firsLineChorus
larger_work: oregon:sheetmusic/largerWork
repository: modsrdf:locationPhysical
repository_collection: mads:Collection
accession_or_call_number: modsrdf:locationShelfLocator
type: dct:type
rights: dct:rights
format: dct:format
date_of_publication: dct:date
digitization_specficiations: oregon:conversionSpecifications
date_of_digitization: oregon:dateDigitized
digital_collection: oregon:set
contentdm_file_path: oregon:full

Sample Vocabularies / Terms Used

Available with URIs		Available no URIs	Oregon Specific Terms
Dublin Core	MODS	Sheet Music	Set
DataCite	Premis	Mountain West DL	Full Resolution
MARC Relators		Western Waters DL	Associated Course
Darwin Core		Getty (in development)	
VRA Core 4.0			

Sample Record

```
<http://oregondigital.org/resource/oregondigital:22> <http://purl.org/dc/terms/subject>
    "Agricultural laborers--Housing--Oregon" .
...<http://purl.org/dc/terms/subject> "Agricultural laborers--Mexican--Oregon" .
...<http://www.loc.gov/mads/rdf/v1#physicalDescription> "Silver gelatin prints" .
...<http://purl.org/dc/terms/rights> "Permission to use must be obtained from OSU Archives." .
...<http://purl.org/dc/terms/modified> "2011-12-19" .
...<http://multimedialab.elis.ugent.be/users/samcoppe/ontologies/Premis/premis.owl#original
    Name> "P020_0791" .
...<http://purl.org/dc/terms/identifier> "P20:791" .
...<http://purl.org/dc/terms/isPartOf> "Extension Bulletin Illustrations Photograph Collection
    (P20)" .
...<http://data.library.oregonstate.edu/ns/set> "oregondigital:braceros" .
...<http://purl.org/dc/terms/date> "ca. 1942-1947" .
...<http://purl.org/dc/terms/title> "Farm workers at their camp" .
....<http://purl.org/dc/terms/type> "Image" .
....<http://purl.org/dc/terms/hasFormat> "Copy negative" .
...<http://purl.org/dc/terms/created> "2004-03-17" .
....<http://data.oregondigital.org/conversionSpecifications> "Master scanned with Epson
    1640XL scanner at 600 or 800 dpi.  Image manipulated with Adobe Photoshop ver. 7.0." .
...<http://purl.org/dc/terms/spatial> "Hood River County (Ore.)" .
...<http://purl.org/dc/terms/description> "Mexican farm workers pose in camp, Hood River." .
```

Prototype View

Farm workers at their camp

Date: ca. 1942-1947
Description / N...: Mexican farm workers pose in camp, Hood River.
Subject: Agricultural laborers--Housing--Oregon, Agricultural laborers--Mexican--Oregon
Geographic Su...: Hood River County (Ore.)
Object Type: Image
Item Number: P20:791
Restrictions: Permission to use must be obtained from OSU Archives
Downloadable: download

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