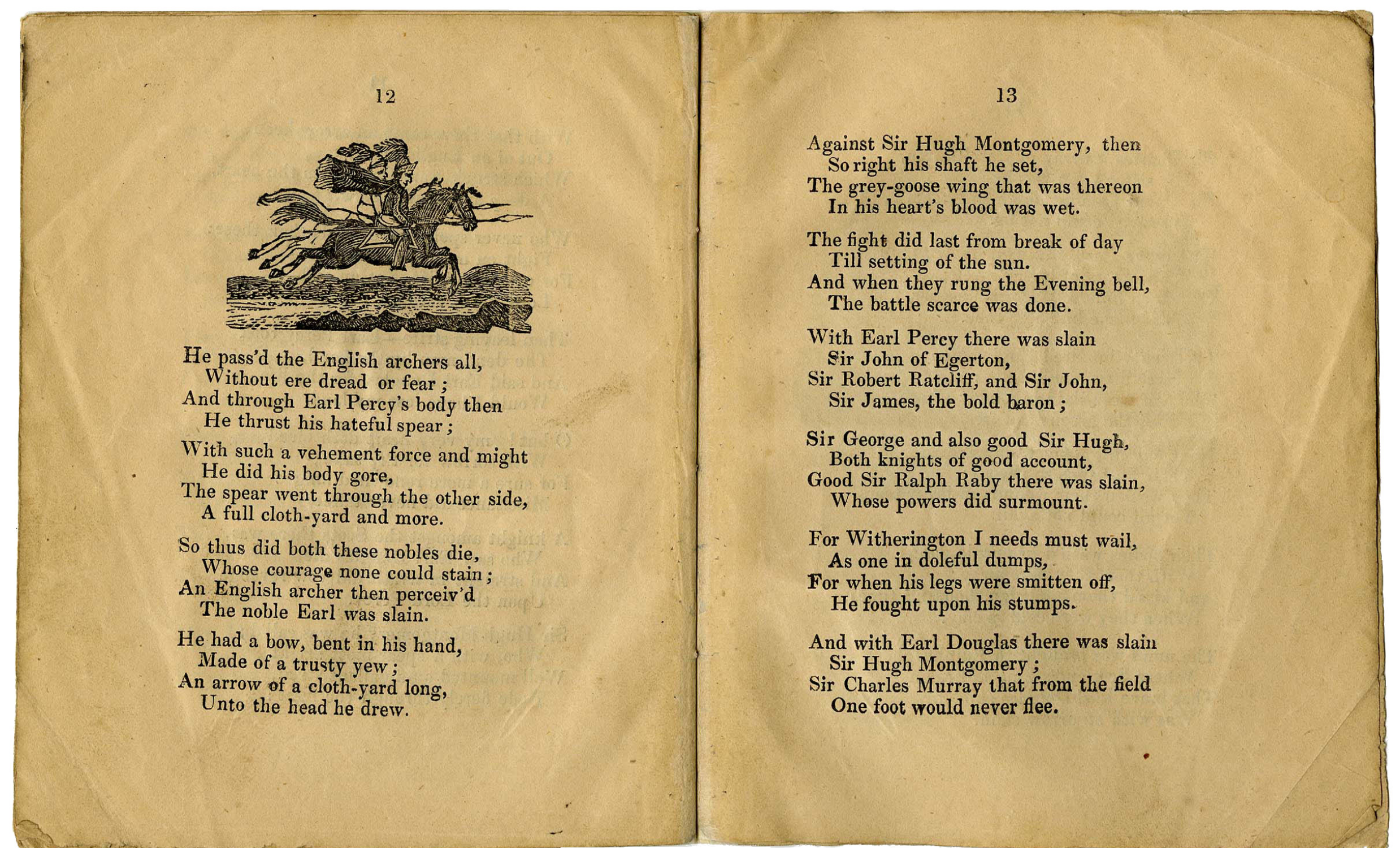


Linked Data for Physical and Digital Collections at the University of Washington

Project Description

This capstone project culminated in the creation of a dataset describing Historical Children's Literature (HCL) volumes from the University of Washington Libraries Special Collections. The dataset adheres to the Resource Description Framework (RDF) data model, and describes both physical items and digital surrogates accessible via UW's CONTENTdm digital collections platform. The project scope includes volumes digitized and made accessible for the first time by a 2017 MLIS capstone group, with the shared goal of providing greater exposure to HCL and other collections at the University of Washington.

The publishing of bibliographic datasets using RDF has the potential to bring such exposure to library collections as the structured data they contain can be queried across institutional and subject-area boundaries, connecting users to content in new ways.



Methodology

The project participant worked under the supervision of Theo Gerontakos, a Metadata and Cataloging Librarian in the University of Washington Libraries Cataloging and Metadata Services unit.

Work on the RDF dataset included:

- Foundational reading on the conceptual framework and syntactical conventions for the Resource Description Framework (RDF) as well as specific RDF serializations such as Turtle and RDF/XML
- Drafting an RDF file describing a selected item, to be used as a template for additional items
- Creating an XSL transform file to convert XML-format metadata exported from CONTENTdm into RDF/XML serialization
- Manual work and enrichment of an RDF/XML dataset describing selected items

Additional project work included:

- Meetings with the project sponsor throughout the project lifecycle to determine and adjust the scope of work and receive feedback on drafted RDF files, XSL transform code, and other project documentation
- Background reading on the overall outlook for creating and using RDF data in academic library and other environments
- Work with a wide variety of stakeholders to make significant improvements to the presentation of digital surrogates in the Libraries' CONTENTdm digital collections platform; restructuring of overall presentation as well as volume- and page-level metadata using the CONTENTdm project client and administrative web interface

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
3     xmlns:dcterms="http://purl.org/dc/terms/"
4     xmlns:dc="http://purl.org/dc/elements/1.1/">
5 <rdf:Description rdf:about="https://doi.org/10.70027/uwlib.55.A.2.1#2717sr">
6 <rdf:type rdf:resource="http://purl.org/dc/terms/BibliographicResource"/>
7 <rdf:type rdf:resource="http://dp.la/about/map/SourceResource"/>
8 <dcterms:title> "Histories of William Tell and Mazeppa"@en </dcterms:title>
9 <dcterms:creator>Friedrich Schiller, 1759-1805</dcterms:creator>
10 <dcterms:publisher>Turner and Fisher</dcterms:publisher>
11 <dc:date>circa 1841-1849</dc:date>
12 </rdf:Description>
13 <rdf:Description rdf:about="https://doi.org/10.70027/uwlib.55.A.2.1#2718sr">
14 <rdf:type rdf:resource="http://purl.org/dc/terms/BibliographicResource"/>
15 <rdf:type rdf:resource="http://dp.la/about/map/SourceResource"/>
16 <dcterms:title> "The hunting of Chevy Chase : a bloody battle fought by the Earl
17     fourteen hundred Scotsmen, and near two thousand Englishmen were slain in one da
18 <dcterms:alternate>
19     "Chevy Chase (Ballad)"@en
20 </dcterms:alternate>
21 <dcterms:publisher>J. Weatherly</dcterms:publisher>
22 <dc:date>1838</dc:date>
23 </rdf:Description>
```

Outcomes

Project deliverables include the following:

- An RDF/XML dataset describing Historical Children's Literature items from the University of Washington Libraries Special Collections
- An XSL transform for converting custom XML metadata exported from CONTENTdm into RDF/XML serialization; related documentation of export settings and XSL development and use
- Documentation detailing the mapping of CONTENTdm metadata fields to RDF properties
- Documentation detailing the process of converting individual page items in CONTENTdm to compound documents (CPDs), including the mapping of metadata fields to the CPD- and/or page- level

Impact and Next Steps

The dataset resulting from this project is an early-stage effort to describe collections at the University of Washington using linked data techniques. A number of next steps may be applicable:

- Improve upon and reuse the created XSL transform and metadata mappings to convert additional descriptive material from to RDF/XML and other RDF serializations, expanding the coverage of linked data descriptions published by the University of Washington Libraries
- Further enrich existing and new RDF datasets; most importantly, by creating additional links to resources described in RDF by other institutions and organizations
- Continue to develop the presentation and exposure of digital surrogates in CONTENTdm and other digital asset management platforms used by the University of Washington Libraries

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