The Schoenberg Institute for Manuscript Studies
University of Pennsylvania Libraries

VISCOLL

University of Toronto

Visualizing the physical structure of medieval manuscripts

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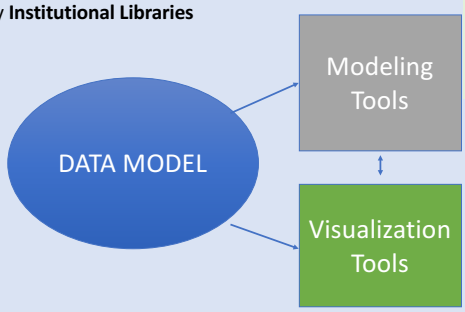
What is VisColl?

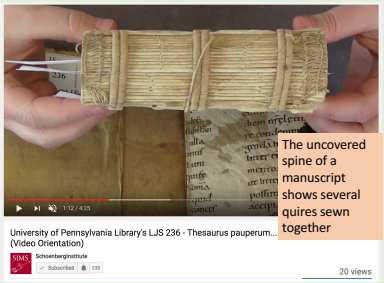
VisColl is a system for building models of the physical collation of manuscripts, and then visualizing them in various ways.

VisColl is designed for use by **Individual Scholars** and by **Institutional Libraries**



Using the Data Model as a guide, projects can develop tools for **building models** and for **visualizing models**, and know that the tools using the mode will create models that can be shared between tools.

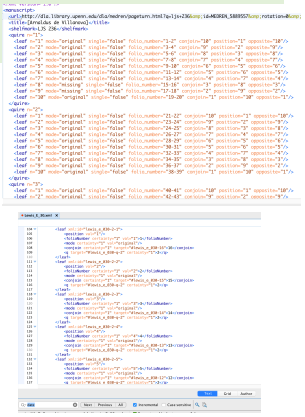
The **Data Model** is central to VisColl and describes each individual **leaf** in the textblock, how the **leaves** are ordered, and most importantly which leaves are physically connected – which leaves form two halves of a sheet, in other words which ones are **conjoined**



The uncovered spine of a manuscript shows several quires sewn together

Physical Collation

Medieval manuscripts are made of **Sheets** of parchment or paper that are **Stacked** and **Folded** into booklets called **Quires**. Quires are stitched together to form the **Textblock**
VisColl models the **textblock**



Data Model 1.0: **Leaves** are grouped into **Quires** and have a few simple descriptors

Data Model 2.0: **Leaves** are described individually, and **Quire ID** is an attribute of leaf. This allows for **uncertainty** that is unavailable in DM 1.0. Additionally, DM 2.0 enables the configuration of **taxonomies** that can be **mapped** onto leaves or groups of leaves.

VisColl currently has two implementations

VisColl Web Application @ University of Toronto

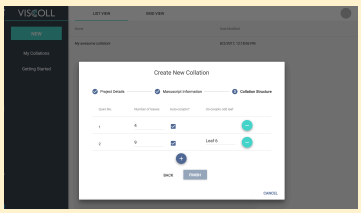
The University of Toronto, through a Mellon-funded project entitled Digital Tools for Manuscript Study, is developing a robust VisColl web application which implements the Data Model 2.0, and allows users to visually manipulate and present diagrams and metadata in real time.

With the VisColl application scholars will be able to:

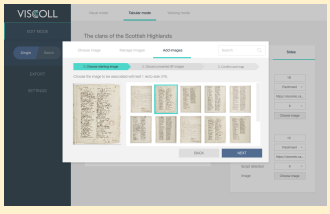
- create basic collation diagrams
- add sub-quires and booklets
- include metadata at the leaf level
- batch edit diagrams
- add manuscript images
- share visualizations
- export diagrams as image files for use in publications

In addition, for better web compatibility, we hope to integrate the application with popular data standards such as IIIF

Build a visualization

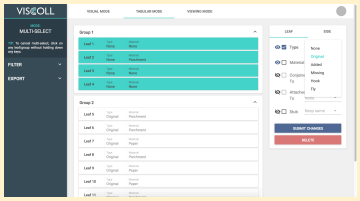


Attach images



Visualize attributes (ex. stub)

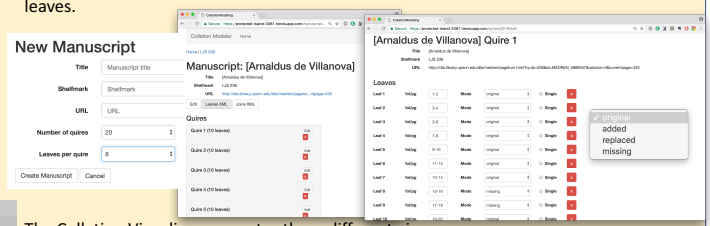
Bulk edit metadata (ex. material)



VisColl Collation Modeler & Collation Visualizer @ University of Pennsylvania

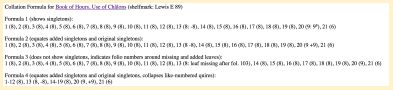
The Schoenberg Institute for Manuscript Studies @ the University of Pennsylvania has developed a Collation Modeler and Collation Visualizer, currently using the Data Model 1.0, that provide a very simple interface for creating models and visualizing them. SIMS is currently using these tools to generate models for the CLIR-funded *Bibliotheca Philadelphiensis* project.

The Collation Modeler provides a tabular interface for creating quires and describing leaves.



The Collation Visualizer generates three different views:

1. **Collation formula**: Multiple variants are possible



3. **Bifolia view:** showing images arranged as conjoined leaves rather than facing pages

2. Diagrams