

Introduction to Digitization

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Center for Art & Historic Artifacts

*With sincere thanks and gratitude to Maggie Downing, my former colleague, who
put most of this content together!*



The Conservation Center for Art & Historic Artifacts (CCAHA)



- Paper Conservation Lab with lots of other functions:
 - Housing, framing, and digital imaging
 - Preservation Services Office Outreach





Topics for Today ...

Prioritization of Collections

Equipment Selection

File Storage for Digitization

File Specifications for Digitization

Moriz Jung, *Variety Act 10: Man or Reptile or Razor?*, 1907. Metropolitan Museum of Art.

Why Prioritize?

- Establish goals and scope for your project
- Make project more manageable
- Maintain momentum
- Help secure funding
- Help advocate for resources



Why Prioritize?

Steps that follow will help you rank various collections depending on their:

- Value to institution and stakeholders
- Limiting factors such as copyright and intellectual control
- Physical condition





Look at What You Have

- Ask questions about your goals and audience
 - What do you want to digitize?
 - Look to your mission for guidance.
 - How much material do you want to digitize?
 - Where will the images be made available?
 - Who is it for?

Moriz Jung, *Variety Act 12: One for All, All for One or a Glimpse through the Keyhole*, 1907. Metropolitan Museum of Art.

Look at What You Have

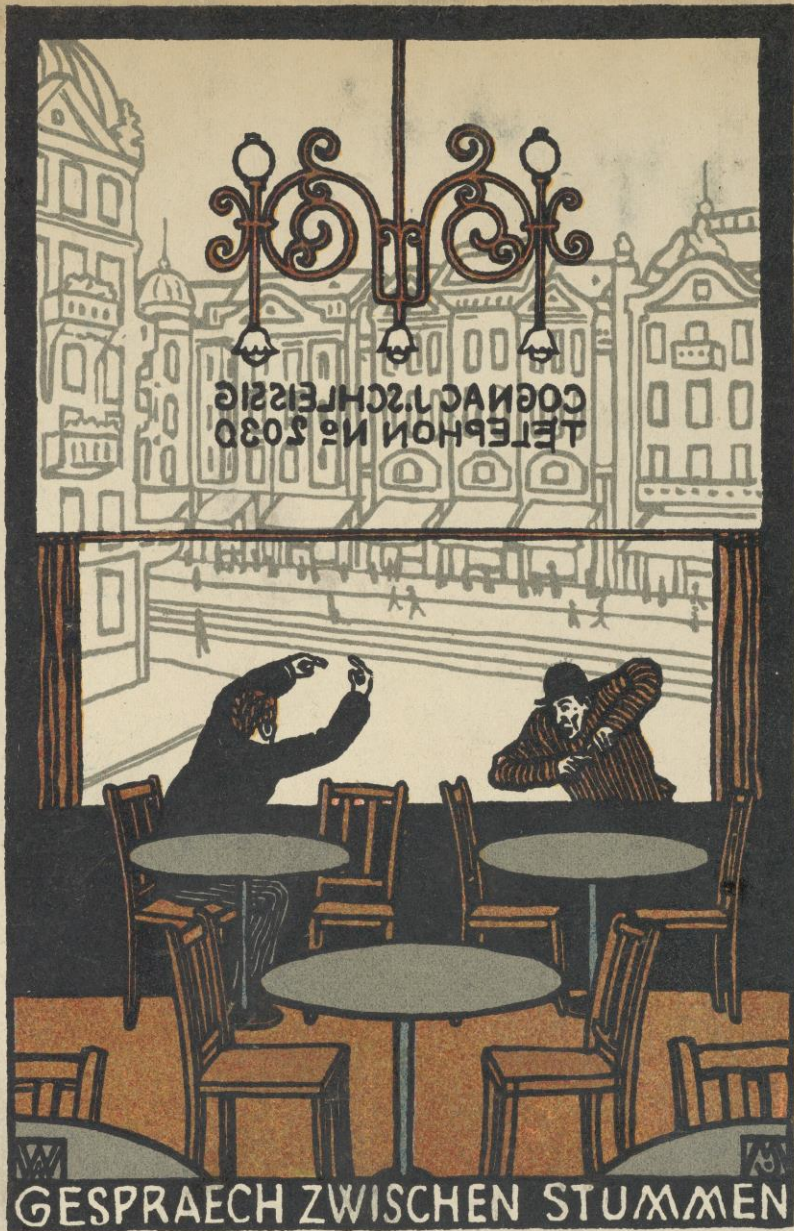
- Review any materials that have already been digitized.
 - Why were these materials selected?
 - Who uses the digital files, and how?
 - How were these collections digitized? Did they do a good job?
 - How were prior digitization projects funded?
 - Where are digitized collections stored?



Moriz Jung, *Variety Act 12: One for All, All for One or a Glimpse through the Keyhole*, 1907. Metropolitan Museum of Art.

Invite Input from Stakeholders

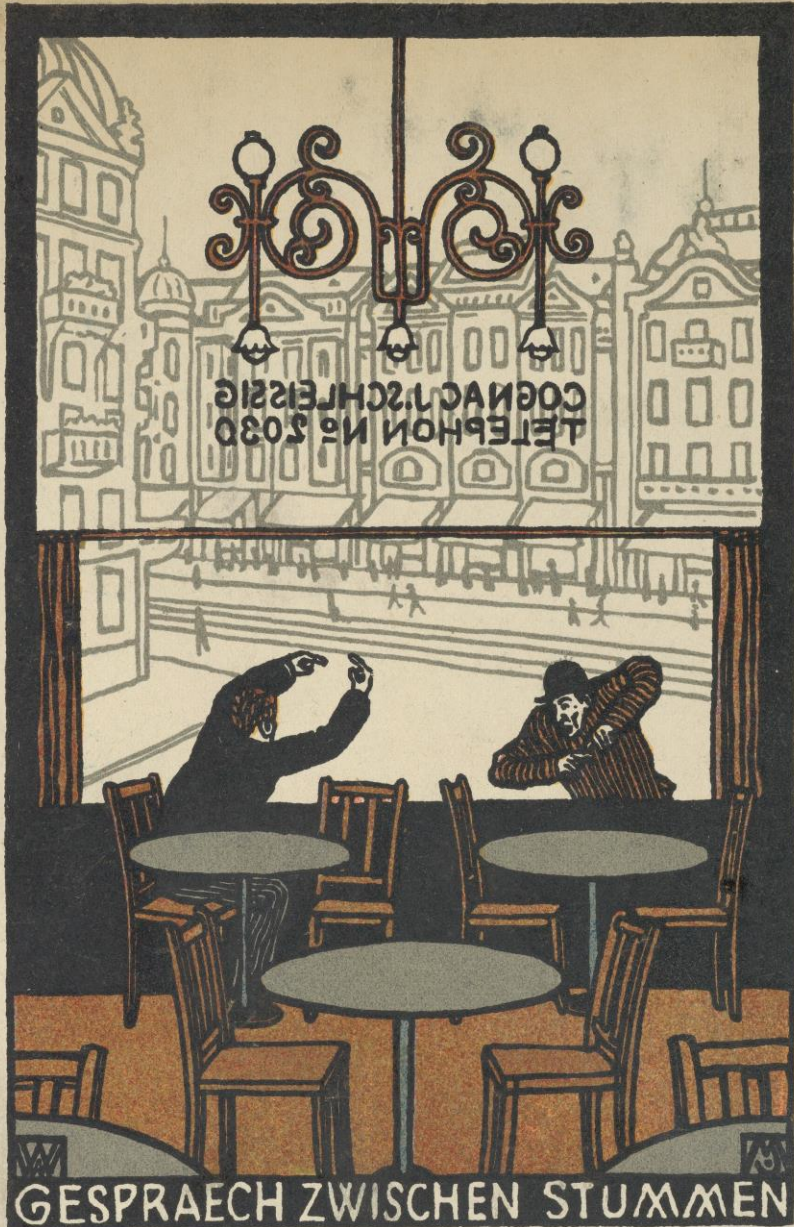
- Non-collection staff and upper administration
- Researchers or scholars
- General public
- Have an agenda and a plan



Moriz Jung, *Conversation between Mutes*, 1907. Metropolitan Museum of Art.

Invite Input from Stakeholders

- What materials or collections:
 - Are considered the most valuable to the institution?
 - Are most popular with visitors or users?
 - Hold the highest scholarly value?
 - Have the highest monetary value?
 - Have grant or fundraising appeal?
 - Have visual appeal?



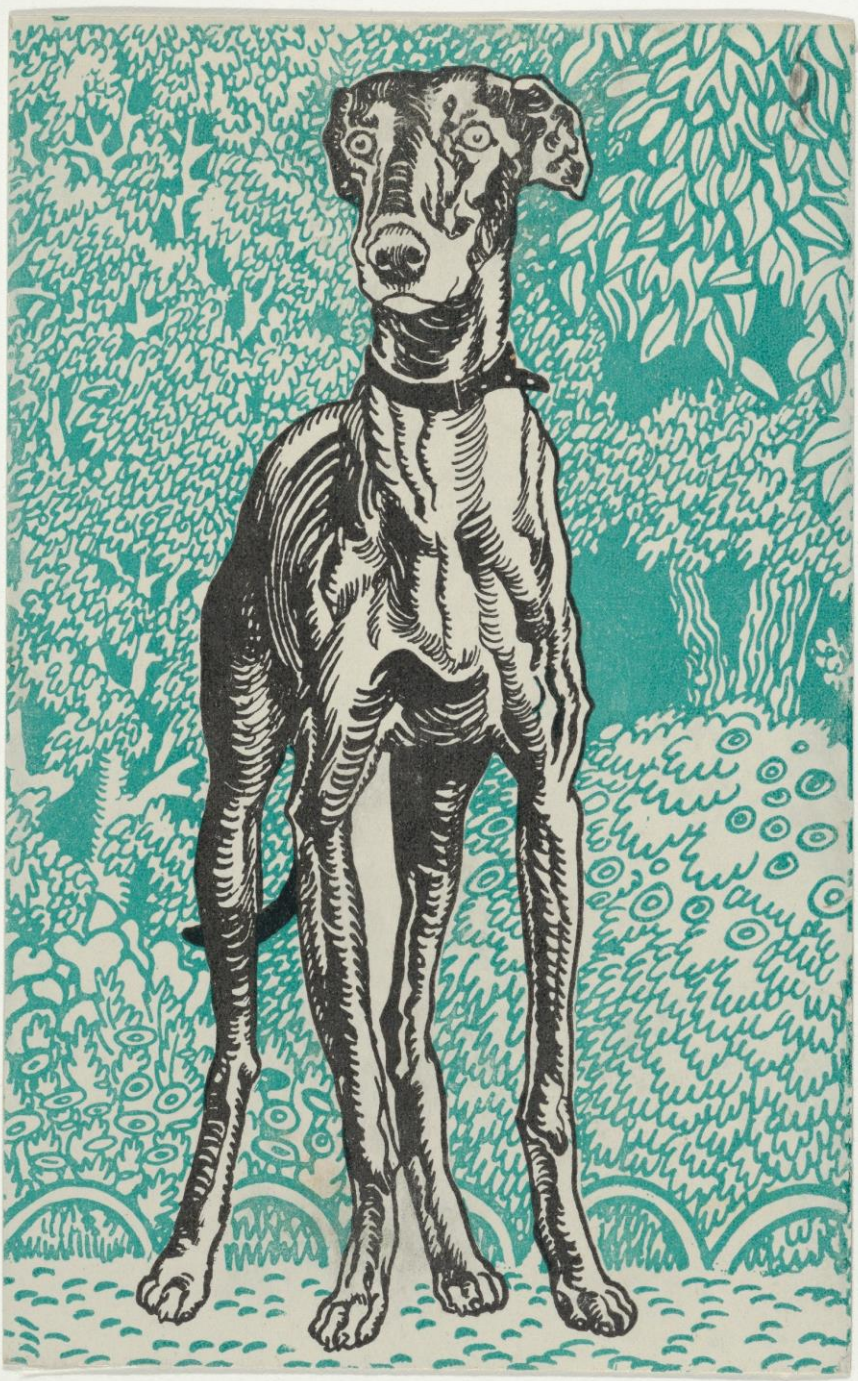
Moriz Jung, *Conversation between Mutes*, 1907. Metropolitan Museum of Art.

Determine Limiting Factors

- Which parts of the collection have been accessioned / processed / inventoried?
- Do any materials have copyright issues?
- Do any materials contain personally identifying information, medical information, or culturally sensitive information?
- How unique are the materials? Are any materials in digital format elsewhere?
- How uniform are your collections?



Moriz Jung, *Variety Act 9: Also Mario Brasso, "Leap of Death" Artist*, 1907. Metropolitan Museum of Art.



Ask Questions About Condition

- Where is your physical material stored? Are any collections difficult to access?
- Do materials require special handling, such as book cradles, weights, supports, or just extra care?
- Do materials require intervention by an archivist such as removing fasteners or encapsulation?
- Are any collections actively deteriorating? These could include film negatives, brittle newspapers, etc.
- Do any collections require conservation treatment before they're safe to handle?

Moriz Jung, *Greyhound*, 1912. Metropolitan Museum of Art.

Weed Out Materials

Collection Name	Under Copyright	Contains Sensitive Information	Unprocessed	Digitize?
Smith Family Papers	No	No	Yes	Wait
Church Records	No	No	No	Proceed
Town Records	Maybe	Maybe	No	Evaluate further

Prioritize Further

Collection Name	Scholarly Value	Grant Appeal	Collection Uniformity	Total
Early photography collection	5	5	2	12
Church Records	5	5	4	14
Correspondence	3	3	5	11

Record Your Decisions

- Record decisions in writing
- Incorporate into Selection Policy or create a new policy
- Continue to update



Moriz Jung, *Bulldog*, 1912. Metropolitan Museum of Art.

Examples

Dartmouth College Library - Selection Policy for Digitization

<https://www.dartmouth.edu/~library/digital/about/policies/selection.html>

Georgetown University Library - Digital Collections Development Policy

<https://www.library.georgetown.edu/digital-project-policy>

Amherst College – Digital Collection Development Policy

<https://www.amherst.edu/library/services/digital/digitalcollectiondev>





What We'll Discuss

- Types of Equipment
 - Flatbed scanners
 - Camera and copystand
 - Specialty scanners
- Software
- Targets and calibration



Flatbed Scanners

Pros	Cons
Small, can fit on a desk in a small space	Scan time can be slow
Enclosed environment	Not ideal for bound material
Affordable	Not ideal for friable media
Easy to learn	Limited to size of scan bed
Good for collections of small, unbound, flat material, with stable surfaces	
Good for photographic negatives and transparencies	

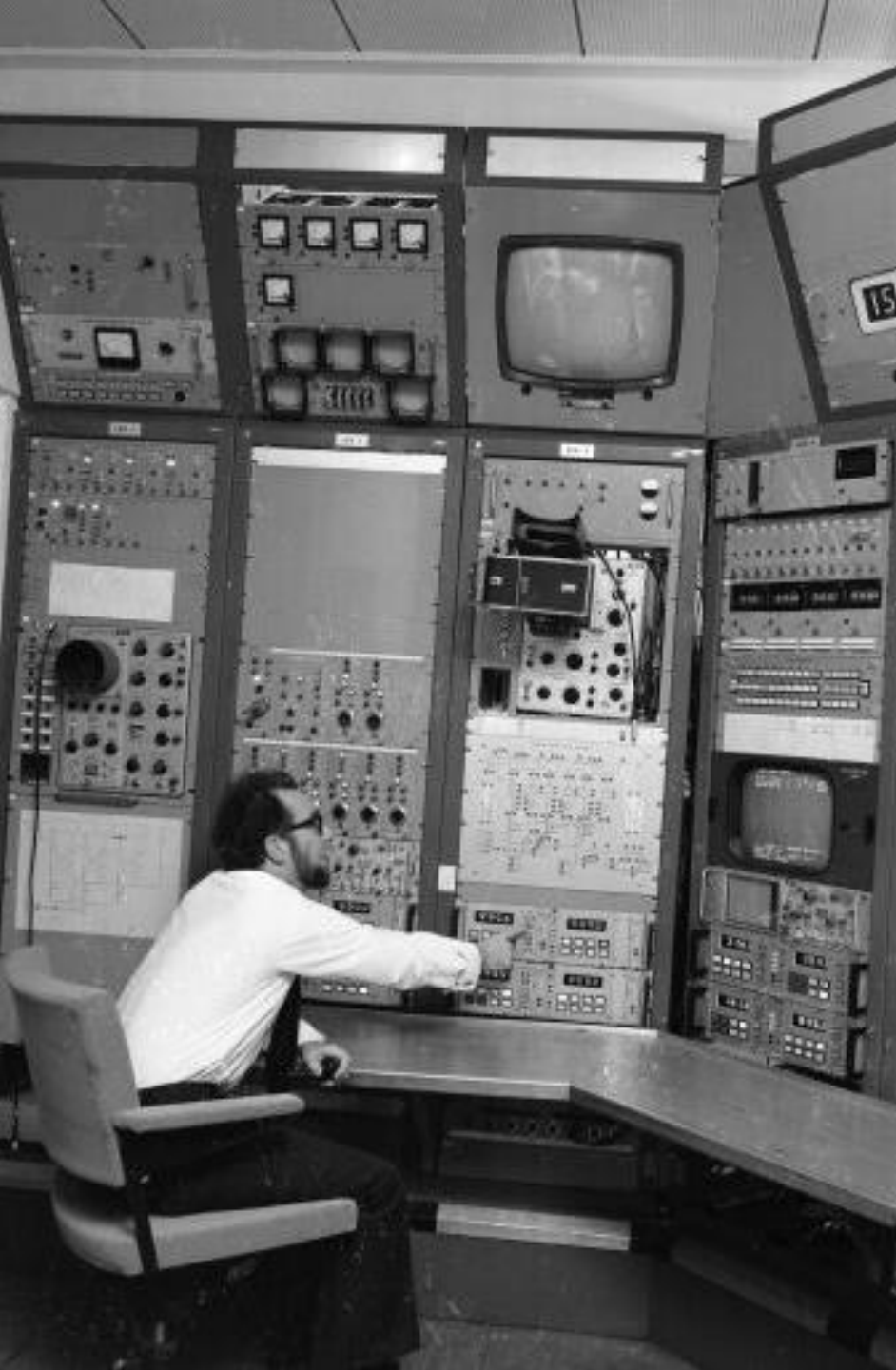


Scanning Software

- Third-party scanning software such as Silverfast or Vuescan
 - Provides customization in scanning options
 - Comes with built-in calibration software
- Image editing and processing software
 - Creative Cloud applications – Lightroom, Bridge, Photoshop
- Optical Character Recognition (OCR)
 - Adobe Acrobat Pro or Abbyy FineReader

Discounted rates for non-profits through TechSoup:

<https://www.techsoup.org/>



What to Look For in a Scanner

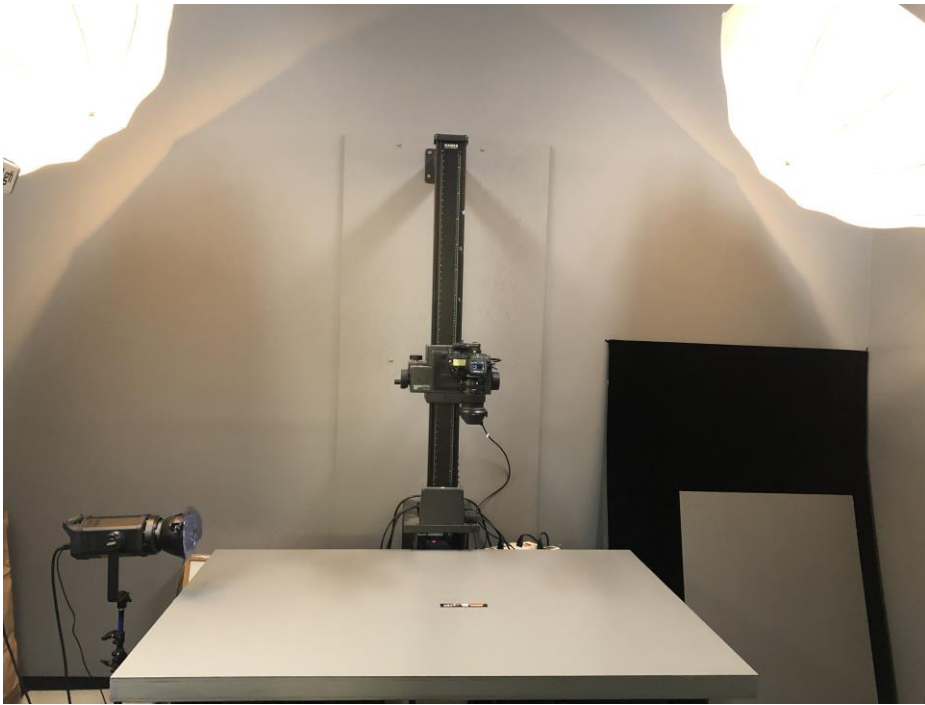
- Size of scan bed
- Resolution
- Bit depth and color space options
- Ability to scan transparencies
- Compatible with third-party scanning software
- Return policy
 - Test out scanner with a range of materials

Library of Congress Tip Sheet: What to Look for in a Scanner

- <https://www.loc.gov/rr/print/tp/LookForAScanner.pdf>

Camera / Copystand

- Components
 - 2 lights
 - Camera wired to a computer
 - Copystand
 - Table surface
 - Book cradle or easel



CCAHA Studio 1



Linhof Book Copying Easel



DT V Cradle



Camera / Copystand

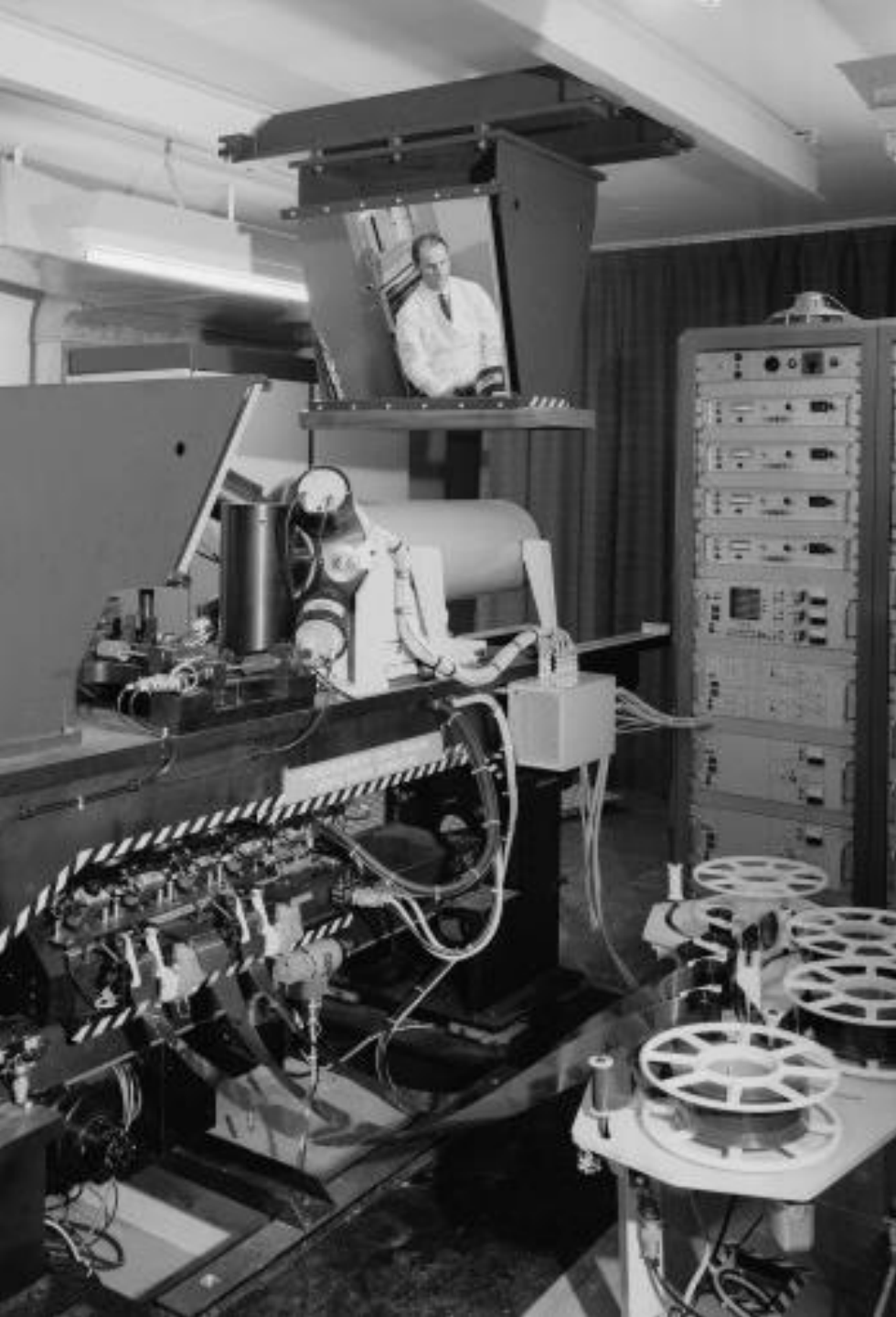
Pros	Cons
Very versatile	Expensive
Speedy capture	Higher learning curve
Modular setup	More variables that affect image quality
No contact with artifact, good for fragile items	
Good for bound materials and objects	
Can be adapted easily to capture negatives or objects	

CCAHA Photographer imaging a parchment document



Supporting Software

- RAW processing software
 - Can apply adjustments to images in batches, crop, add metadata
- Adobe Creative Cloud
 - Photoshop, Lightroom, Bridge, and Acrobat Reader and more



What to Look For in Equipment

- Camera
 - Camera body – High resolution – Look at pixel dimensions
 - Lens –sharp and even in exposure
 - Ability to test camera and lens, in your own studio if possible
 - Check for even focus and exposure
 - Check for digital artifacts
- Copystand
 - Secure and sturdy, motorized if possible
- Lighting
 - Can either be continuous illumination or strobe
 - Well-balanced and even



Cruse table scanner



BookEye book scanner



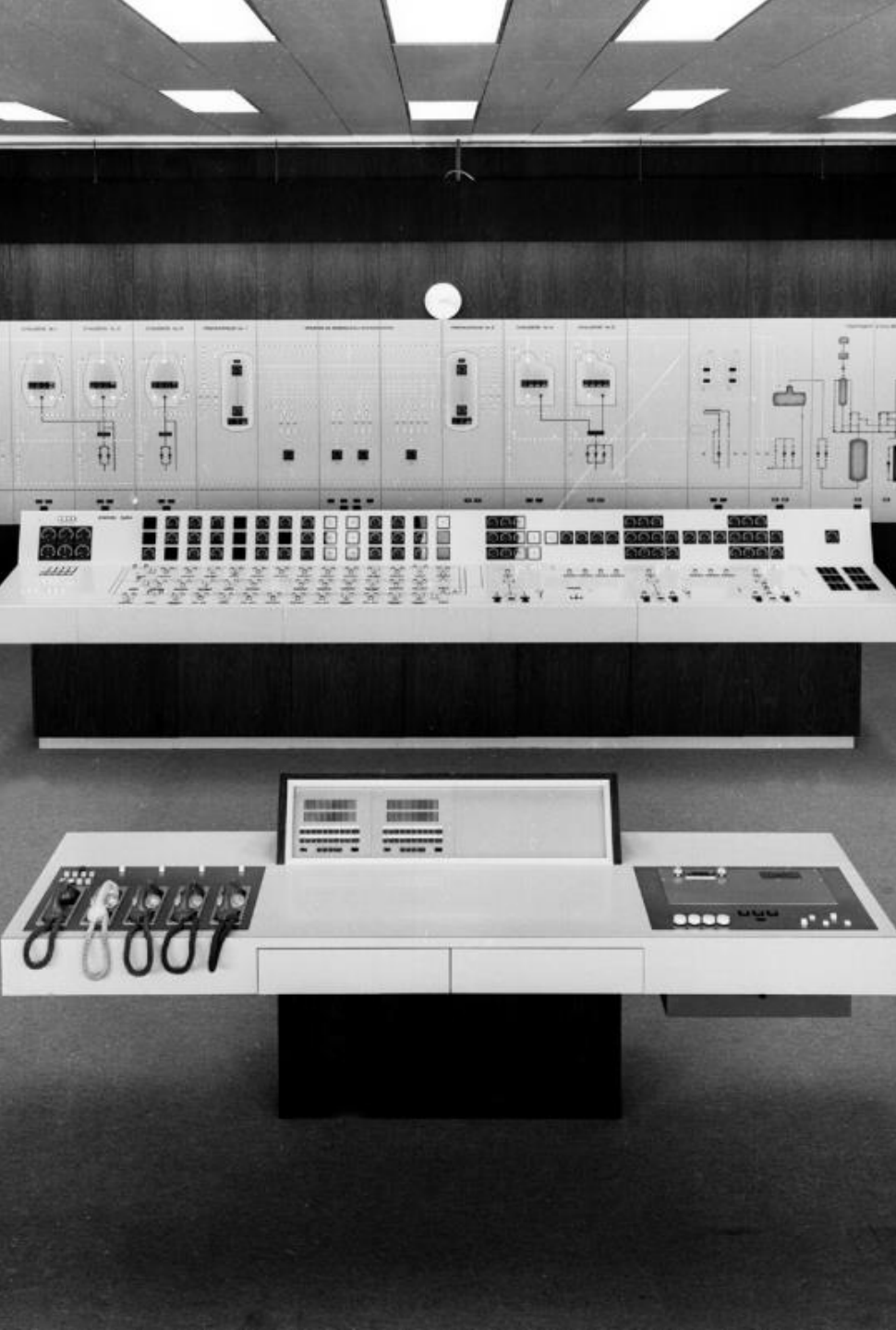
Plustek film scanner

Specialty Scanners

- Oversize scanners
 - Materials pass under scanning element on large table

- Book scanners
 - Overhead scanners
 - Good for large book collections or libraries

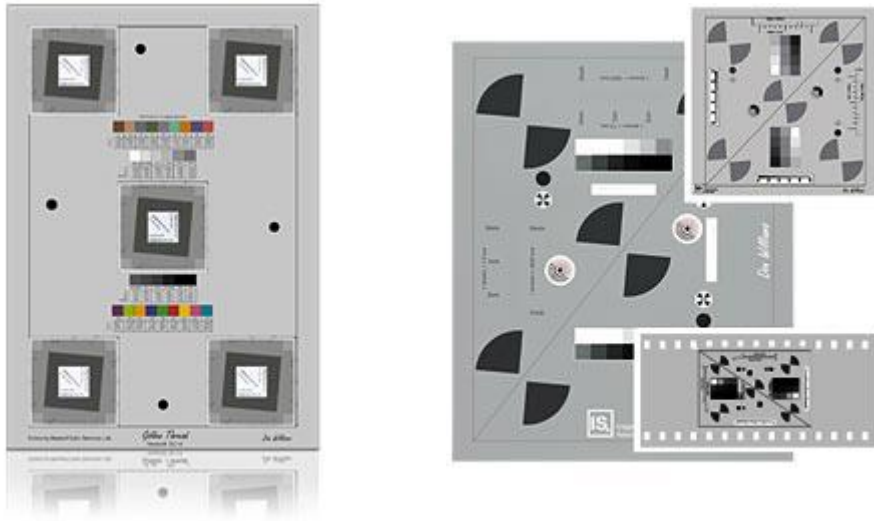
- Film Scanners
 - High quality scans, can be faster than flatbed scanners



FADGI Metrics

- Federal Agencies Digitization Guidelines Initiative (FADGI) Guidelines have specific metrics for equipment calibration
- Metrics designed to ensure that digital surrogates are scanned at a certain proven level, important for government agencies
 - Tone Response
 - White Balance
 - Illuminance Uniformity
 - Color Accuracy
 - Contrast
 - Scale Accuracy
 - Sharpening

DICE Targets and Software



Targets from Image Science Associates

- Specially designed targets for assessment
- Software tools analyze the targets
 - Open DICE – free and open source, developed by Library of Congress <http://www.digitizationguidelines.gov/guidelines/digitize-OpenDice.html>
 - Golden Thread – proprietary, sold by Image Science Associates <http://www.imagescienceassociates.com/>

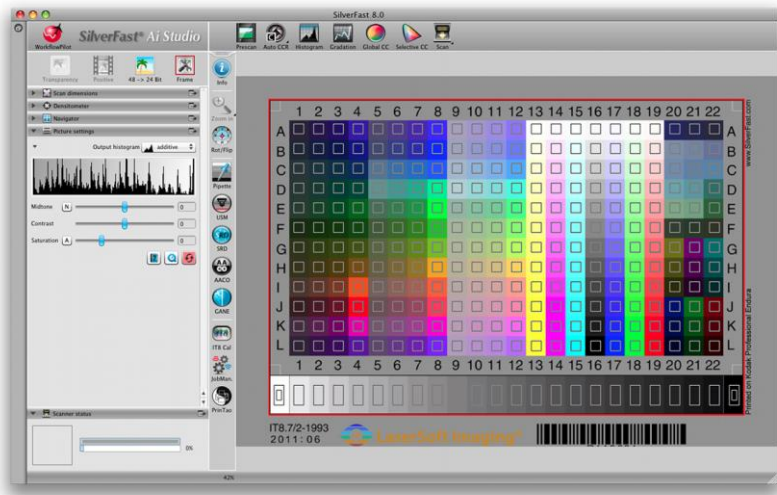
Image Access resource on Quality Controlled Scanning
https://support.imageaccess.de/downloads/product_manuals/FAQ/FAQ-Quality-Controlled-Scanning.pdf



X-Rite ColorChecker

Color Calibration

- Color calibration target
 - Assigned values for each color
- Can create custom profiles automatically
- Adjust in image editing programs by adjusting white balance and exposure
- Best to calibrate equipment as much as possible before making digital adjustments

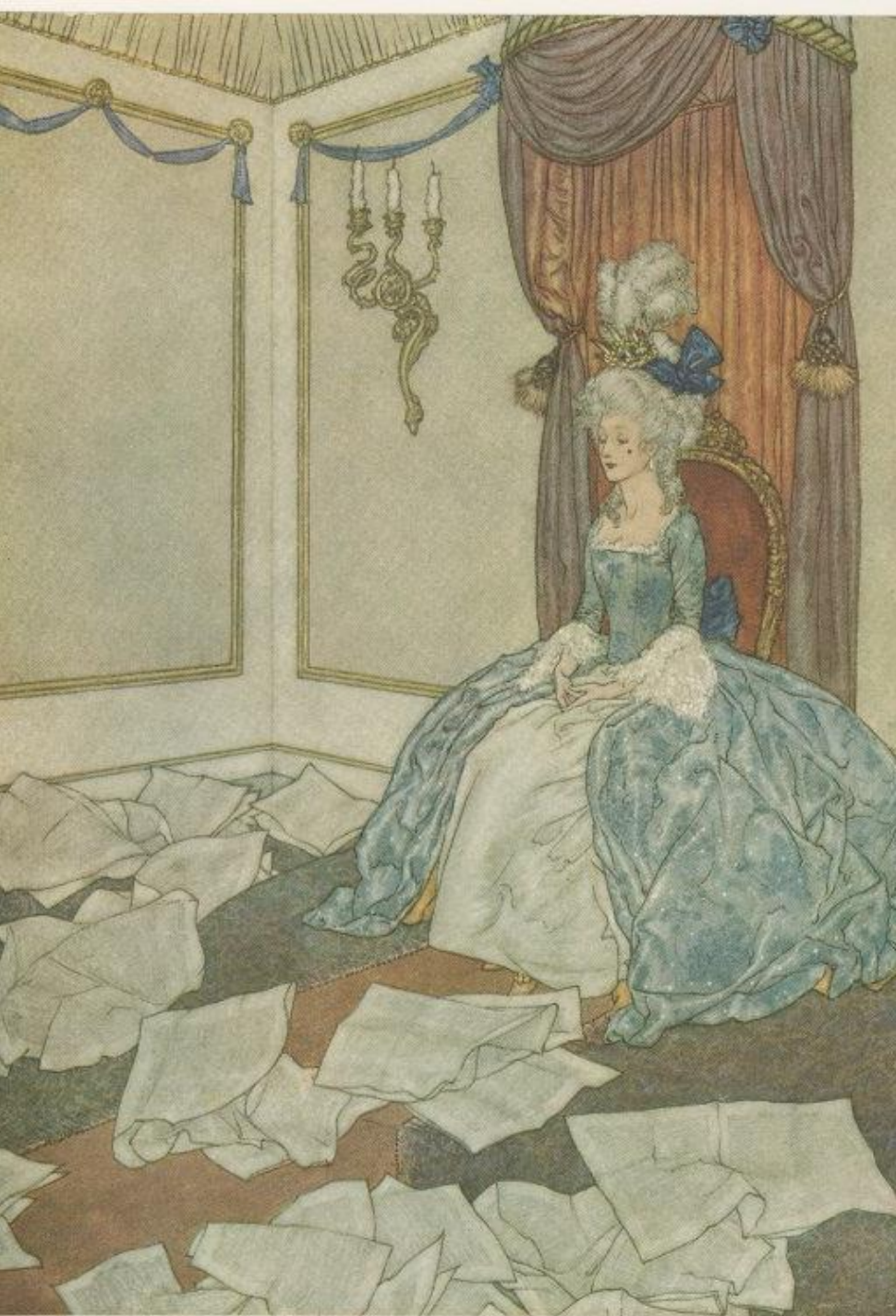


IT8 color calibration in Silverfast



Successful Digitization

- FADGI compliance not easy to achieve
 - Specialized targets and software
 - Top of the line equipment
- Don't be discouraged from digitization
- Things you can do to ensure a successful digitization program:
 - Color calibration
 - Visual assessment
 - Checking for correct file specifications
 - Metadata and cataloging
 - Quality control program
 - Ongoing digital collection management



File Storage Considerations

- Protect your investment!
- Management software programs
- Types of file storage
- Redundancy and backups
- Calculating storage space needs



Collection Management System (CMS)

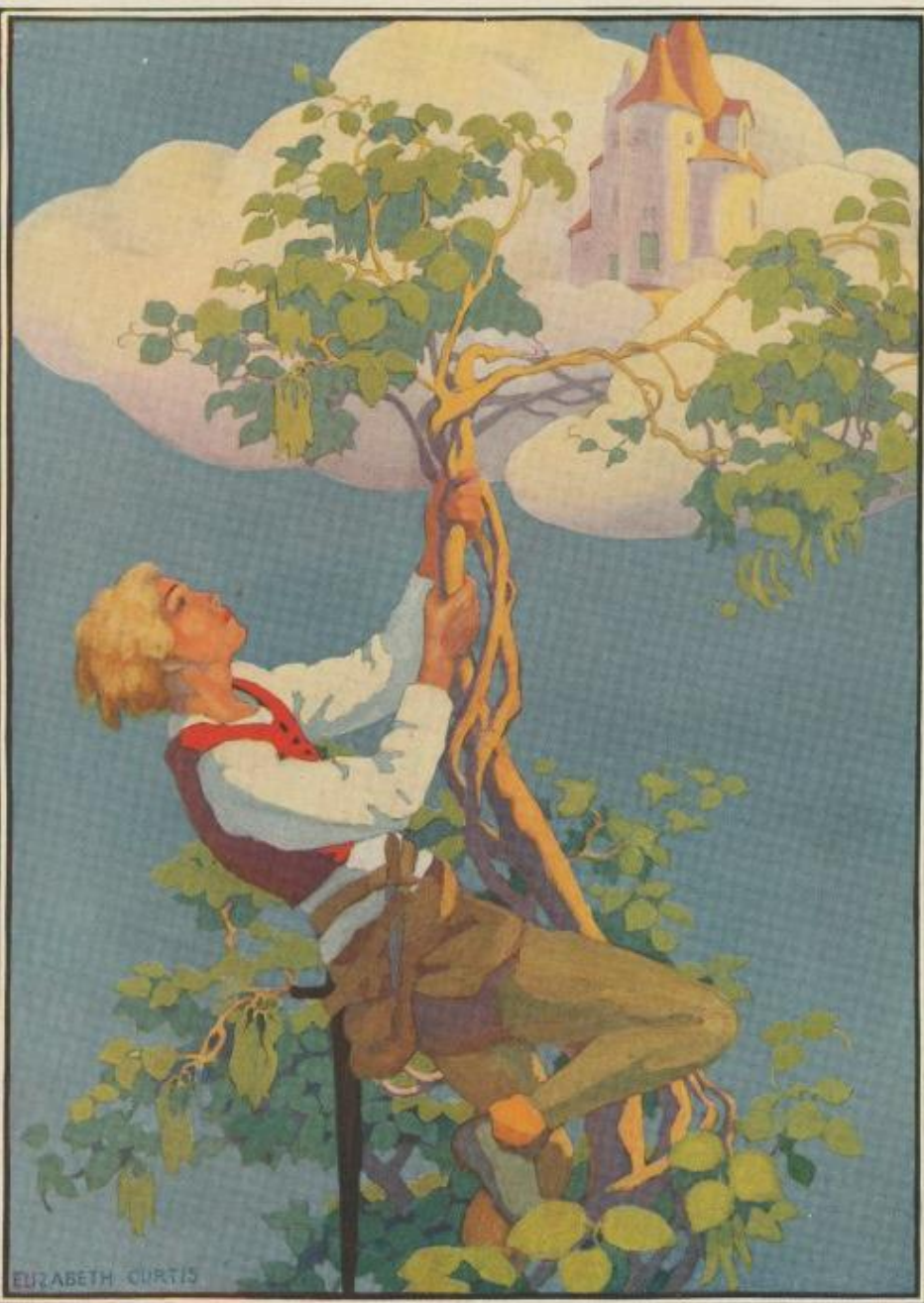
- Stores information about your collection items, and can include:
 - Donor information
 - Physical description, location, and condition
 - Loan information
 - Can store images
 - Can link to a web platform to make collections searchable online
- Locally stored or cloud-based
- Proprietary or open source
- Examples: PastPerfect, Embark, and Collective Access

E. Boyd Smith, illustration from *The Queen of Hearts*, 1919. Picture Collection, The New York Public Library.



Digital Asset Management System (DAMS)

- Manages the organization and distribution of the files themselves
- Some programs are suitable as both a CMS and a DAMS
 - Such as DSpace, The Museum System (TMS), and ContentDM

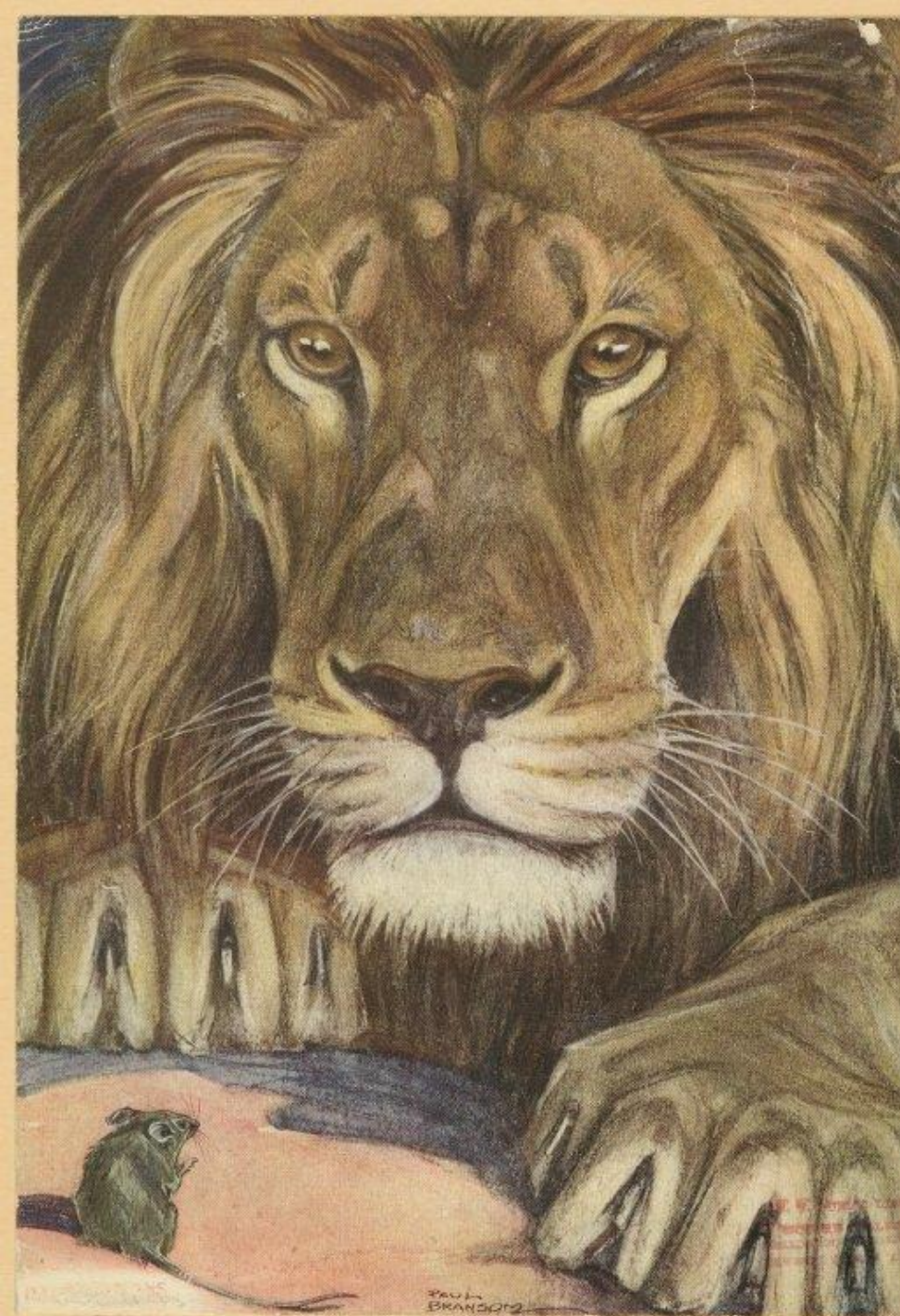


"HE SET OUT AT ONCE TO CLIMB THE BEANSTALK."
#19, 992 (©192?)

Types of File Storage

- Network Attached Servers (NAS)
- Cloud Storage
 - Amazon Web Services (AWS)
 - Microsoft Azure
 - Costs vary based on amount of storage and level of access
- Hosted Storage
 - Preservica
 - DuraCloud
- Removable Media
 - Optical disks, hard drives, flash drives

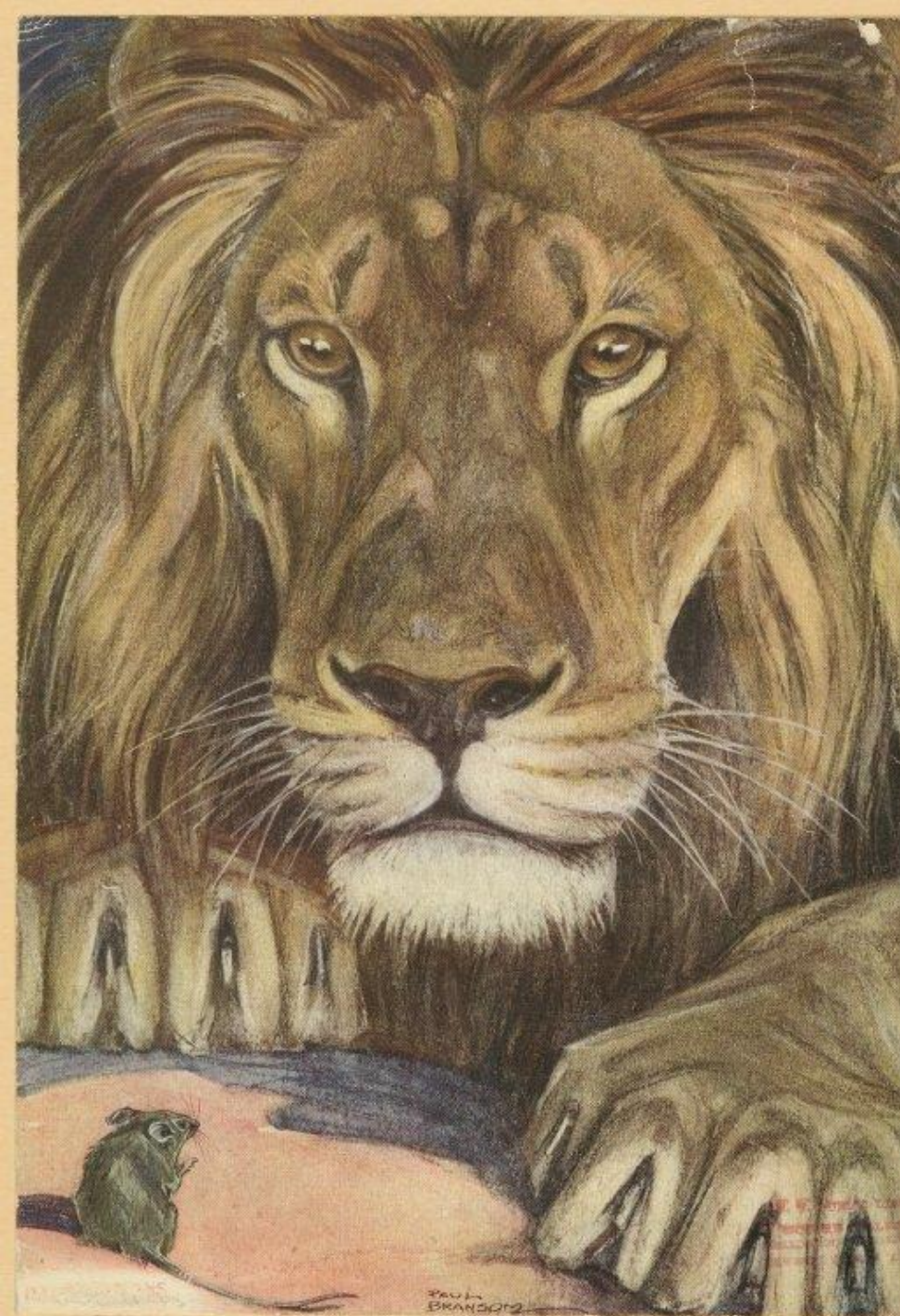
Elizabeth Curtis, illustration from *Jack and the Beanstalk*, 1917. Picture Collection, The New York Public Library.



Keep Your Files Safe

- Threats to digital files
 - Obsolescence, accidental deletion, viruses, hacking
- LOCKSS – Lots Of Copies Keeps Stuff Safe
- 3-2-1 Principle for backups
 - 3 copies of your files
 - 2 media types
 - 1 in another geographic location

Paul Bransom, illustration from *The Lion and the Mouse*, 1921. Picture Collection, The New York Public Library.



Keep Your Files Safe

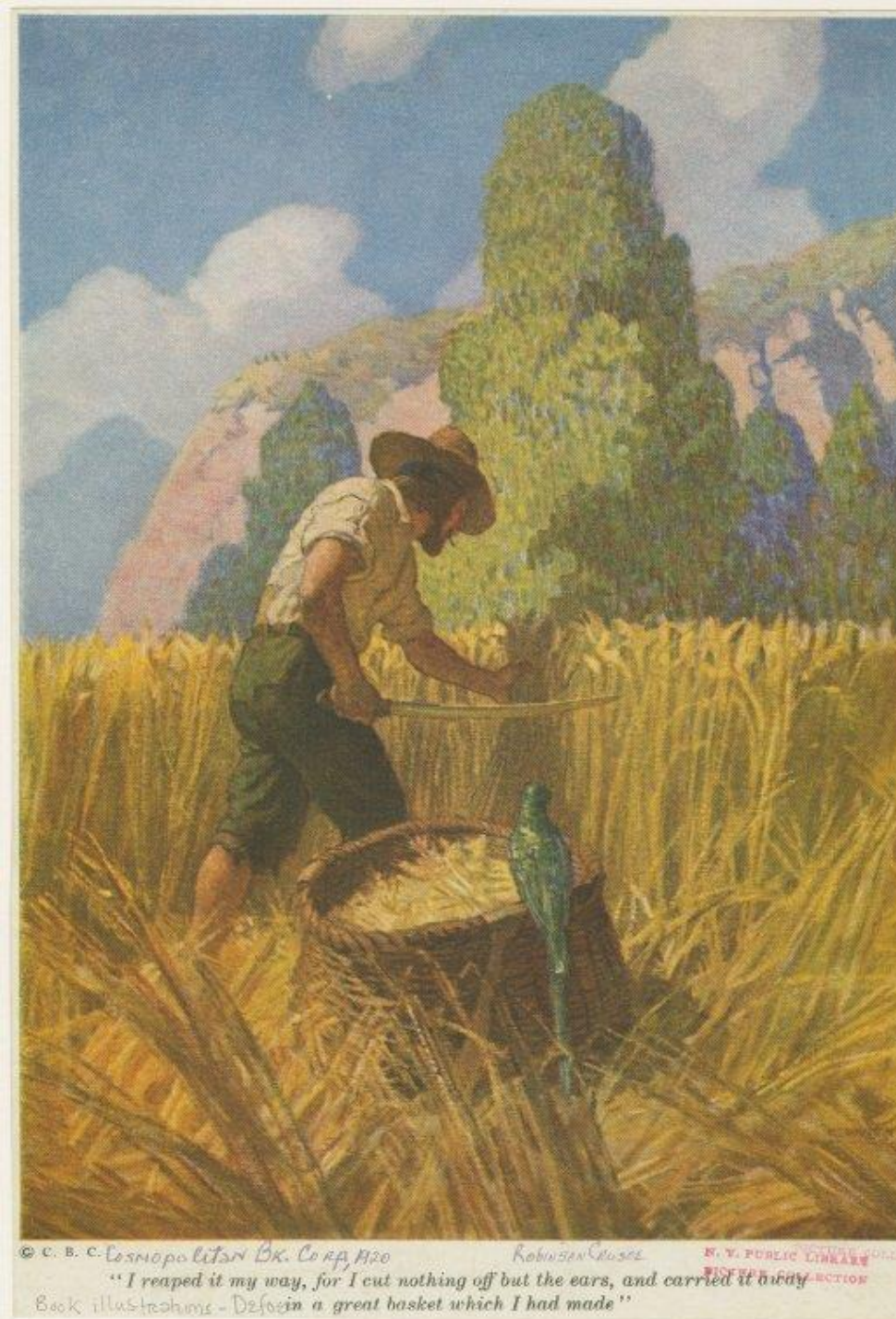
- Generate a checksum for your files
 - Digital fingerprint
 - Changes in the bitstream of the file changes
 - Digital Preservation Coalition Handbook section on Fixity and Checksums:

<https://www.dpconline.org/handbook/technical-solutions-and-tools/fixity-and-checksums>

Paul Bransom, illustration from *The Lion and the Mouse*, 1921. Picture Collection, The New York Public Library.

How Much Storage Do You Need?

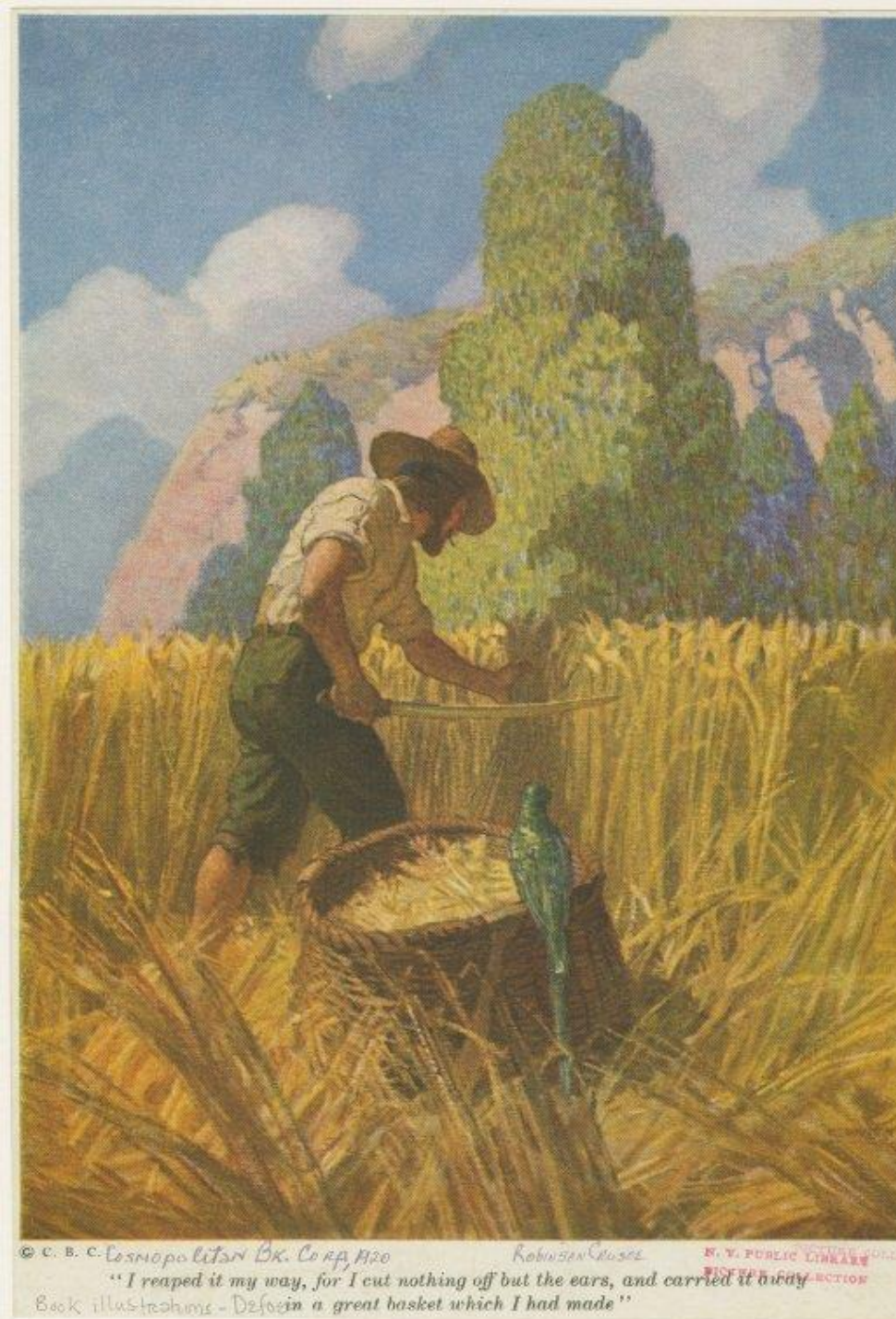
- How many items you want to digitize?
- What file size will you get from scanning at the resolution you need?
- Will you be scanning negatives and then making additional positive files?



N.C. Wyeth, illustration from *Robinson Crusoe*, 1920. Picture Collection, The New York Public Library.

How Much Storage Do You Need?

- Don't forget the derivative files you want to addition to master copies.
- Are you incorporating video or sound collections that you want to digitize?
- Plan for the future! Select a storage option that you can add onto incrementally.

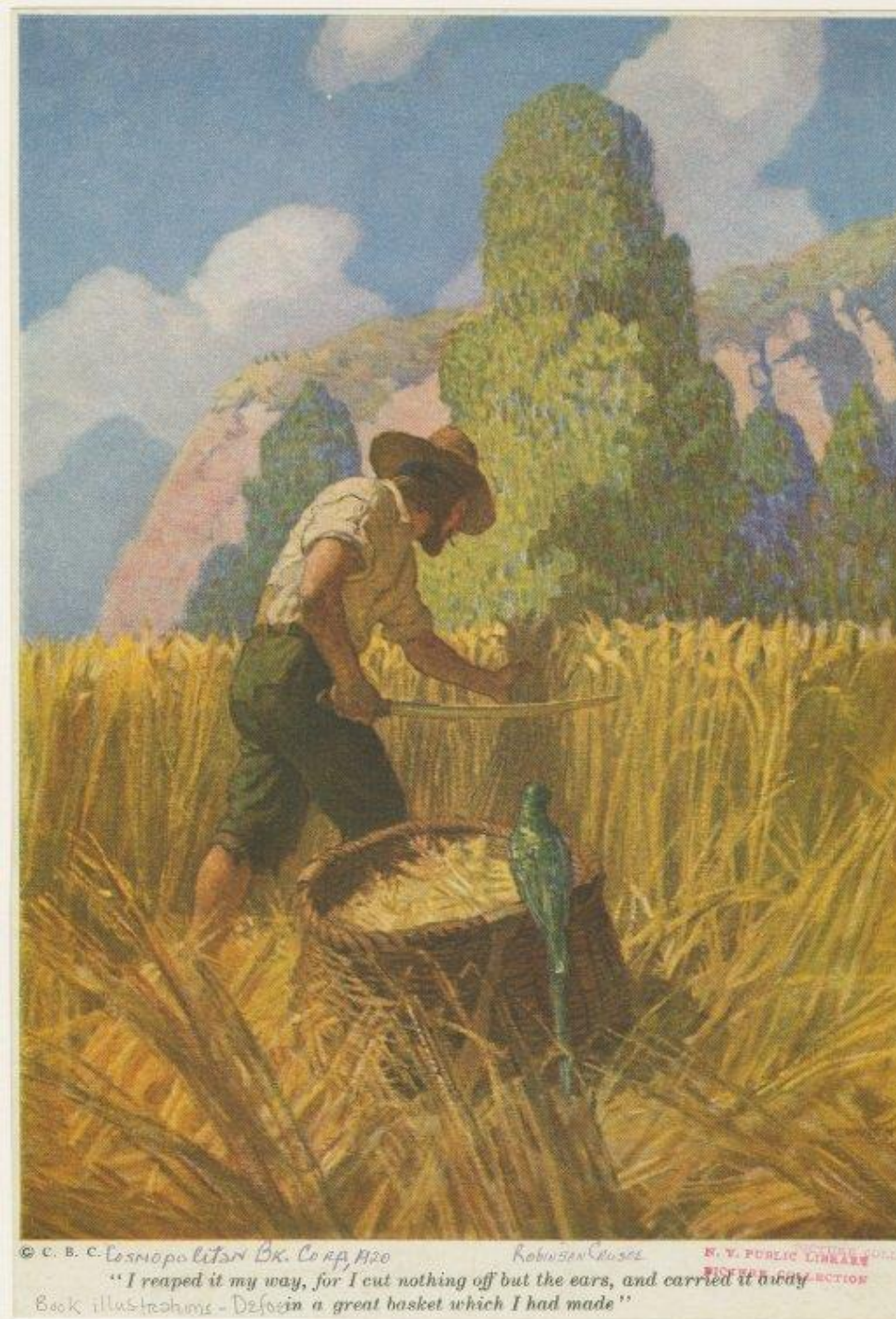


N.C. Wyeth, illustration from *Robinson Crusoe*, 1920. Picture Collection, The New York Public Library.

How Much Storage Do You Need?

Example:

- 8x10 print – 16-bit, color, 400 dpi TIFF
 - Produces a file size of about 75 MB
 - A JPEG derivative copy will add about 7MB
 - 1,000 prints = at least 82 GB for one set of files



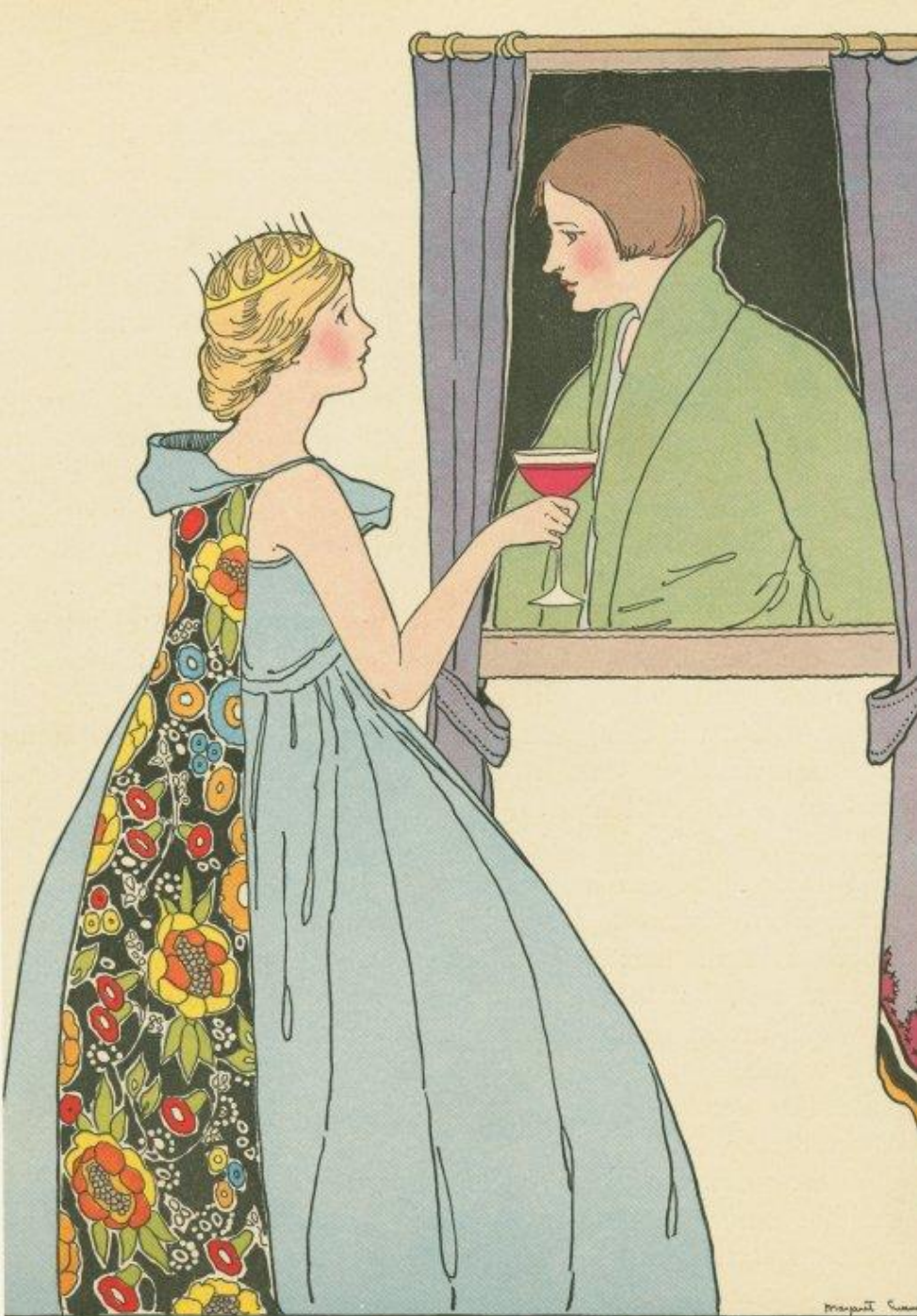
N.C. Wyeth, illustration from *Robinson Crusoe*, 1920. Picture Collection, The New York Public Library.



[I2I] #14,778 (n.d.)
Illus. by Edmund Dulac

Manage Your Files

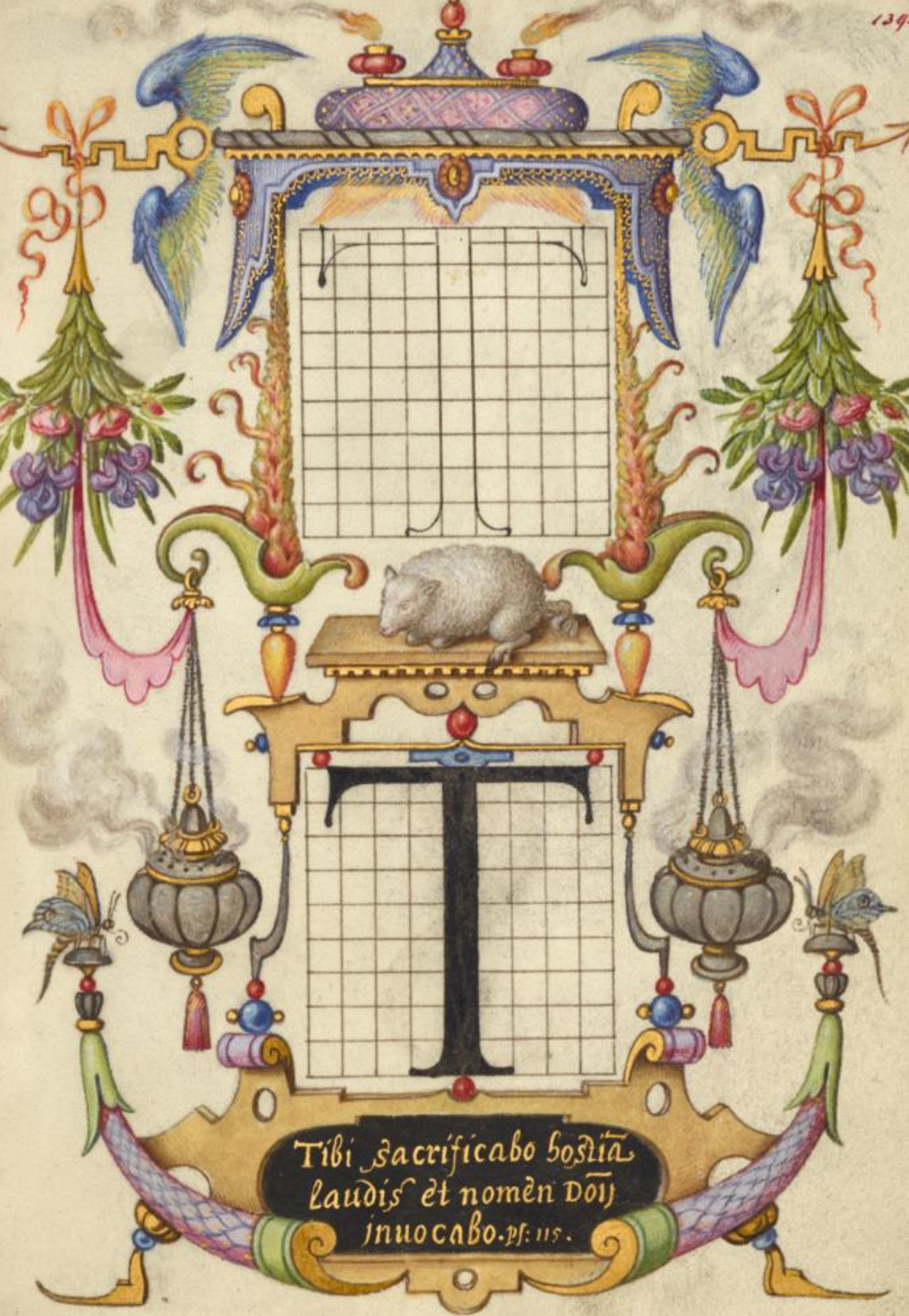
- Monitor files
 - Fixity checks
- Maintain technical infrastructure:
 - Maintain hardware, software, facilities, supplies
- Migrate files
 - Convert data to latest file formats or relocate to new storage media
 - Consider a migration schedule every 5-10 years



Resources

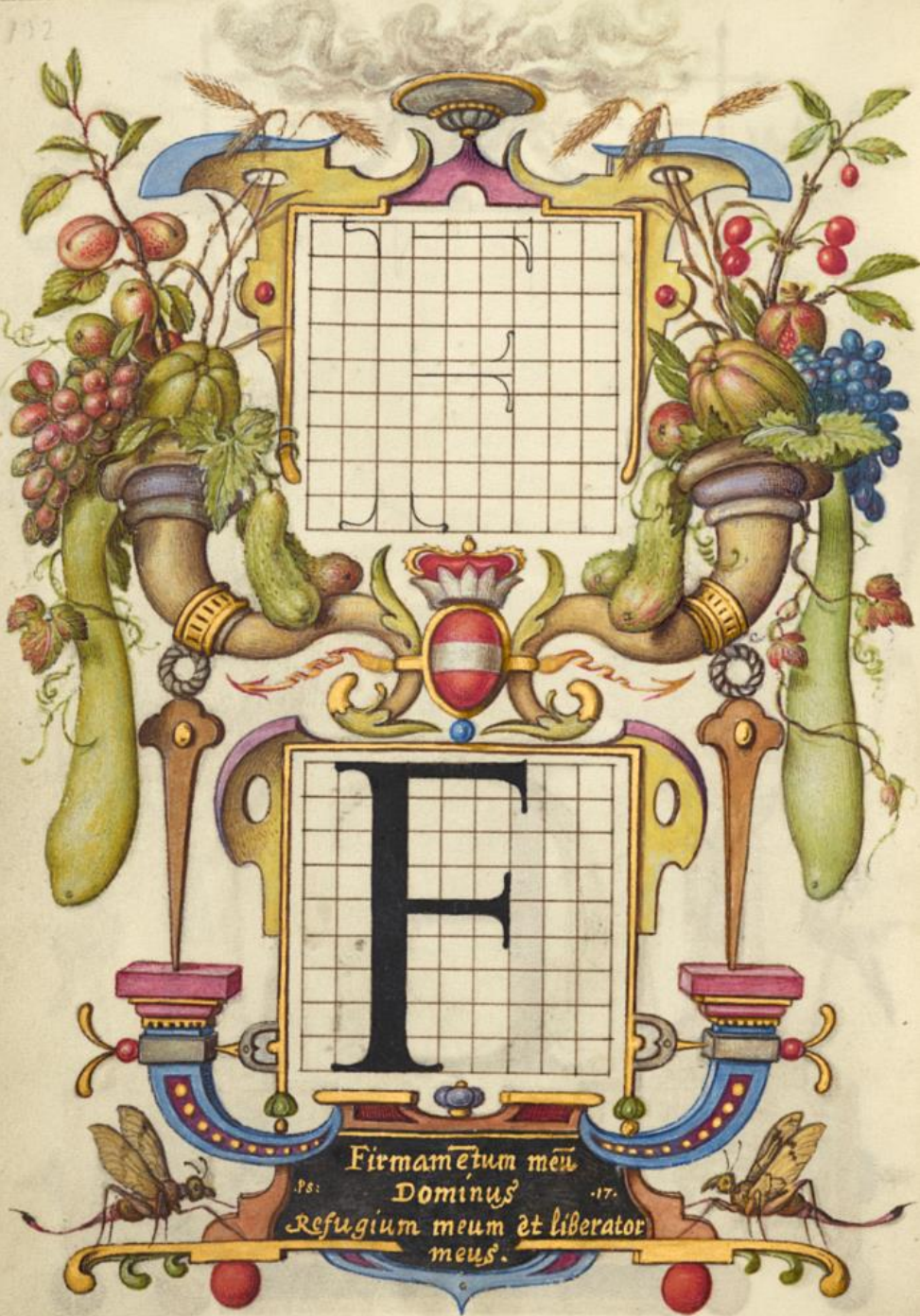
- DHPSNY webinar "Managing Your Digital Collections": <https://www.youtube.com/watch?v=PHD92p2cUjo&feature=youtu.be>
- Additional DHPSNY & CCAHA webinars: <https://dhpsny.org/webinars> / caha.org/events
- Digital Preservation Coalition: <https://www.dpconline.org/>
- Digital POWRR: digitalpowrr.niu.edu/

Margaret Evans Price, illustration from *The Twelve Dancing Princesses*, 1921. Picture Collection, The New York Public Library.



Terminology

- File Format
- Resolution
- Color
- Bit Depth
- Color Space
- Cropping
- File Naming



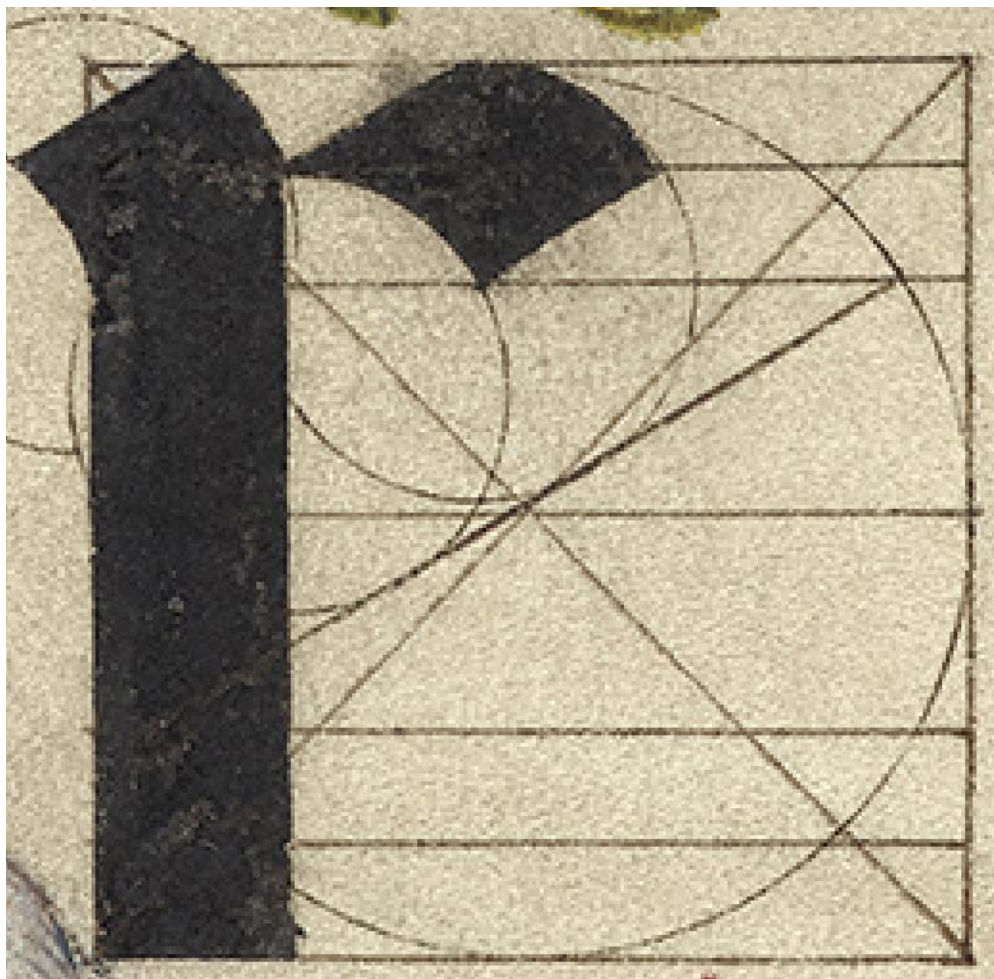
File Format

- Convention for encoding data into human-readable form

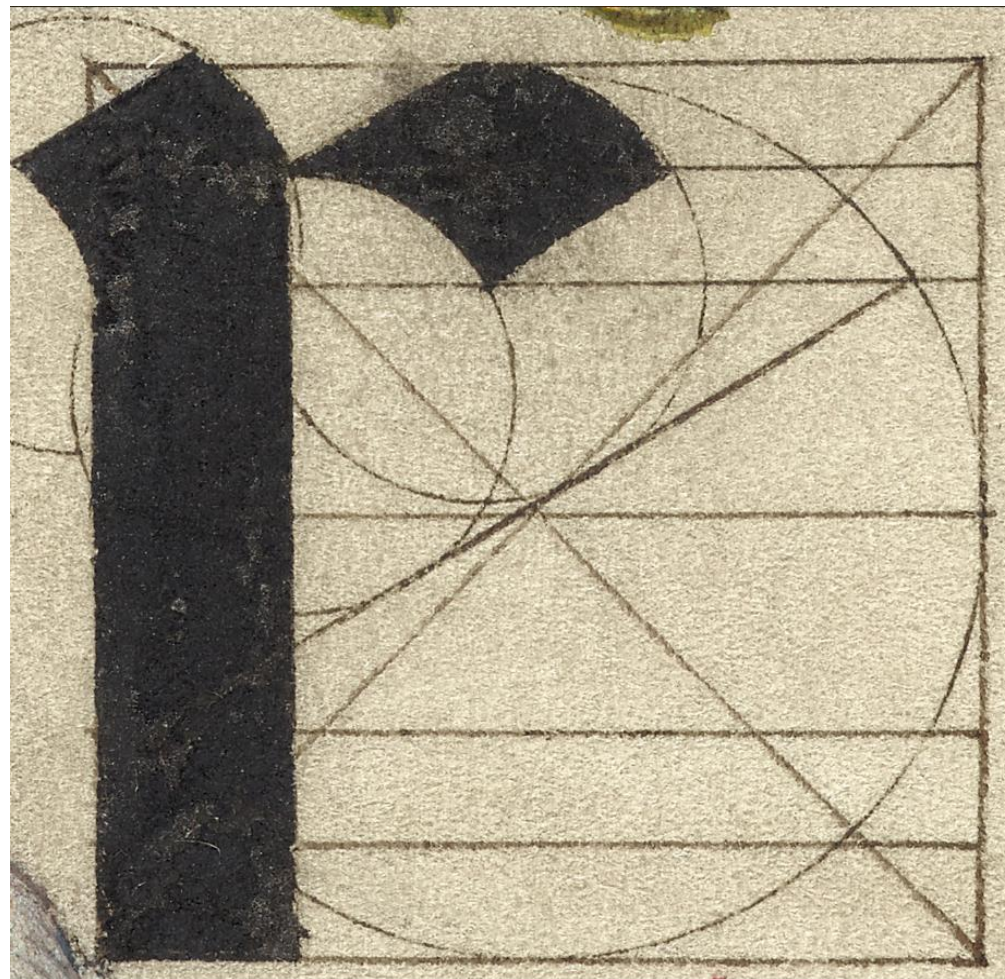


Resolution

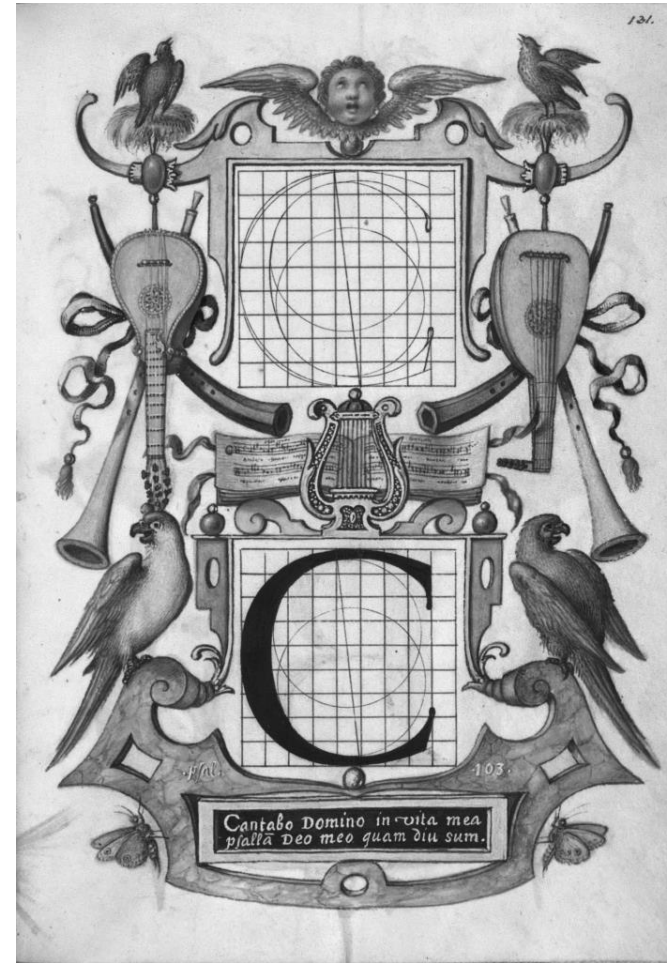
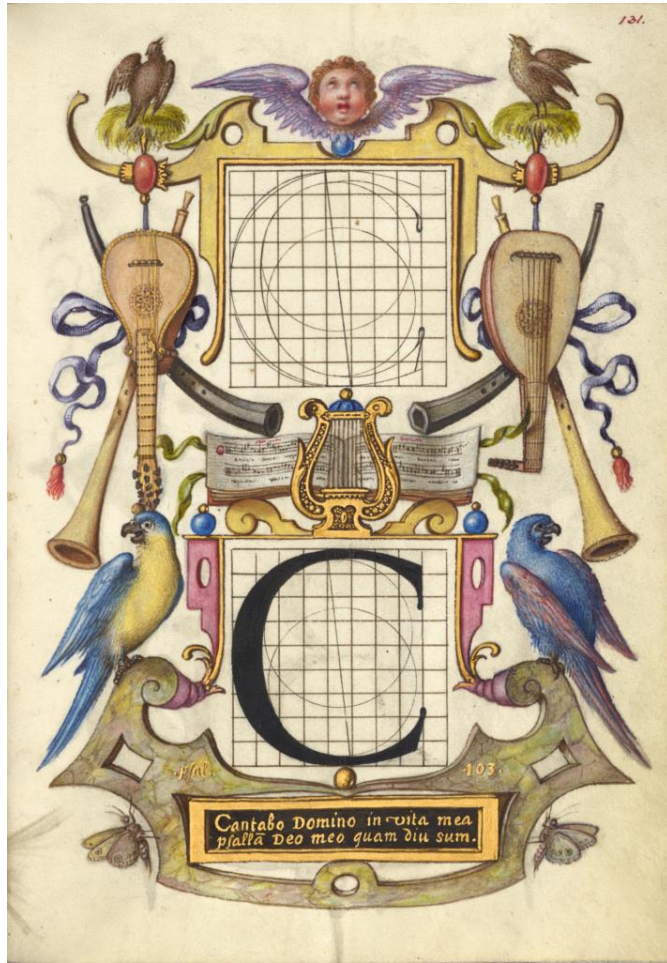
150 ppi



800 ppi



Color



Joris Hoefnagel, *Guide for Constructing the Letter C*, 1591–1596. J. Paul Getty Museum.

Bit Depth

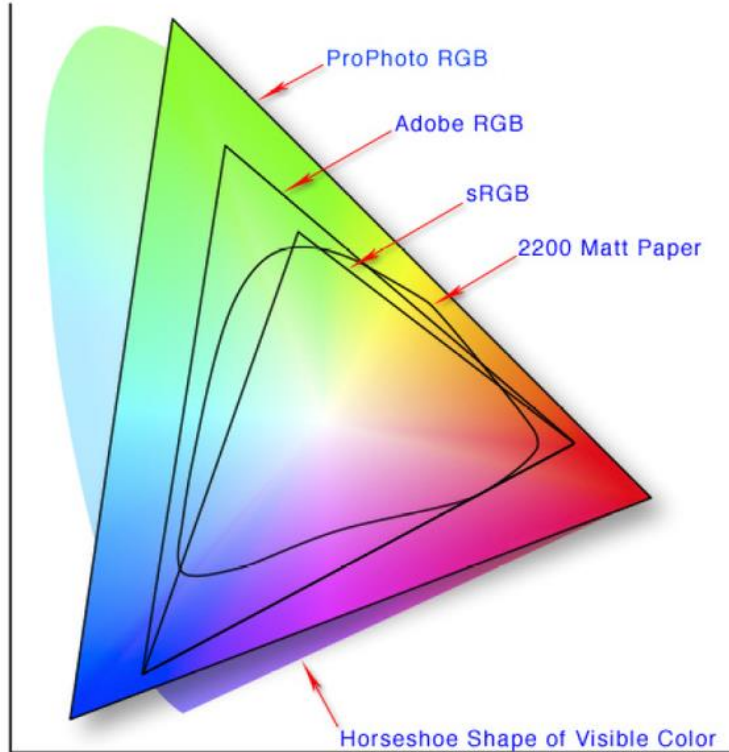
1-bit (2 tones available per pixel)



8-bits (256 tones available per pixel)



Color Space / Color Profile



Defines the range and tones available in the file.

Examples of common color spaces:

- **sRGB** – low range of color, common in web publication
- **Adobe RGB 1998** – medium range of color, widely adopted
- **ProPhoto RGB** – huge range of color, newer

Color tutorial: Understanding Color Spaces

<https://www.youtube.com/watch?v=KKX08oOTMkk>

Cropping



Albrecht Dürer, *Stag Beetle*, 1505. J. Paul Getty Museum.



File Naming

- Structure for naming files

Name

- StOlaf_RML_Felland_023_P
- StOlaf_RML_Felland_053_P
- StOlaf_RML_Felland_062_P
- StOlaf_RML_Felland_117_P
- StOlaf_RML_Felland_228_P
- StOlaf_RML_Felland_234_P
- StOlaf_RML_Felland_271_P
- StOlaf_RML_Felland_335_P
- StOlaf_RML_Felland_348_P
- StOlaf_RML_Felland_360_P
- StOlaf_RML_Felland_381_P
- StOlaf_RML_Felland_410_P
- StOlaf_RML_Felland_420_P



Standards and Recommendations

American Library Association (ALA): Minimum Digitization Capture Recommendations

<http://www.ala.org/alcts/resources/preserv/minimum-digitization-capture-recommendations>

National Archives and Records Administration (NARA): Technical Guidelines for Digitizing Archival Materials

<https://www.archives.gov/files/preservation/technical/guidelines.pdf>

Federal Agencies Digitization Guidelines Initiative (FADGI): Technical Guidelines for Digitizing Cultural Heritage Materials

http://www.digitizationguidelines.gov/guidelines/FADGI%20Federal%20%20Agencies%20Digital%20Guidelines%20Initiative-2016%20Final_rev1.pdf



FADGI Guidelines

- Bound Volumes
- Documents
- Oversize Items: Maps, Posters and Other Materials
- Newspapers
- Prints and Photographs
- Photographic Transparencies of various sizes
- Paintings
- X-Ray Film
- Microfilm

Example of Performance Levels Table

Prints and Photographs

Performance Level:

	1 Star	2 Star	3 Star	4 Star
Master File Format	TIFF	TIFF	TIFF	TIFF
Access File Formats	All	All	All	All
Resolution	100 ppi	200 ppi	400 ppi	600 ppi ¹
Bit Depth	8	8	8 or 16	16
Color Space	Grey Gamma 2.2 SRGB Adobe 1998 ProPhoto ECIRGBv2	Grey Gamma 2.2 SRGB Adobe 1998 ProPhoto ECIRGBv2	Adobe 1998 ProPhoto, ECIRGBv2	Adobe 1998 ProPhoto, ECIRGBv2
Color	Grayscale or Color	Grayscale or Color	Color	Color

FADGI Guidelines

- Quality-Level Ratings – 1-star through 4-star
 - Focus on 3- or 4-star levels for digital surrogates
- Performance Levels
 - File format
 - Resolution
 - Bit Depth
 - Color Space
 - Color



File Format

Prints and Photographs

Performance Level:

	1 Star	2 Star	3 Star	4 Star
Master File Format	TIFF	TIFF	TIFF	TIFF
Access File Formats	All	All	All	All

Master files – TIFF

- Widely adopted
- Accommodates variety of color spaces
- High-bit compatible, suitable for large file sizes

Derivative files

- PDF – Great for multi-page objects
- JPEG—Smaller files, good for email and websites



Resolution

Prints and Photographs

Performance Level:

	1 Star	2 Star	3 Star	4 Star
Master File Format	TIFF	TIFF	TIFF	TIFF
Access File Formats	All	All	All	All
Resolution	100 ppi	200 ppi	400 ppi	600 ppi ¹

Examples:

- Newspapers – 300 ppi or 400 ppi
- Prints and Photographs – 400 ppi or 600 ppi
- 4x5" photographic transparency – 1,500 ppi or 2,000 ppi
- 35mm photographic transparency – 3,000 ppi or 4,000 ppi



Bit Depth

Prints and Photographs

Performance Level:

	1 Star	2 Star	3 Star	4 Star
Master File Format	TIFF	TIFF	TIFF	TIFF
Access File Formats	All	All	All	All
Resolution	100 ppi	200 ppi	400 ppi	600 ppi ¹
Bit Depth	8	8	8 or 16	16

- Lower bit depth – 8-bit
 - Documents, newspapers, microfilm, e.g.
- Higher bit depth – 16-bit
 - Fine art, prints, and photographic negatives, e.g.



Color Space

Color Space	Grey Gamma 2.2 SRGB Adobe 1998 ProPhoto ECIRGBv2	Grey Gamma 2.2 SRGB Adobe 1998 ProPhoto ECIRGBv2	Adobe 1998 ProPhoto, ECIRGBv2	Adobe 1998 ProPhoto, ECIRGBv2

- FADGI Recommendations
 - Grey Gamma 2.2 - black and white
 - sRGB – low color range, common in web publication
 - Adobe 1998 – medium color range, widely adopted
 - ProPhoto – wide color range, newer



Color

Prints and Photographs

Performance Level:

	1 Star	2 Star	3 Star	4 Star
Master File Format	TIFF	TIFF	TIFF	TIFF
Access File Formats	All	All	All	All
Resolution	100 ppi	200 ppi	400 ppi	600 ppi ¹
Bit Depth	8	8	8 or 16	16
Color Space	Grey Gamma 2.2 SRGB Adobe 1998 ProPhoto ECIRGBv2	Grey Gamma 2.2 SRGB Adobe 1998 ProPhoto ECIRGBv2	Adobe 1998 ProPhoto, ECIRGBv2	Adobe 1998 ProPhoto, ECIRGBv2
Color	Grayscale or Color	Grayscale or Color	Color	Color

- Will you scan in color or in black and white?
- Black and white files are about 1/3 the size of color files.



Cropping

- Master file – Show all edges of object
- Derivative file – Can be cropped



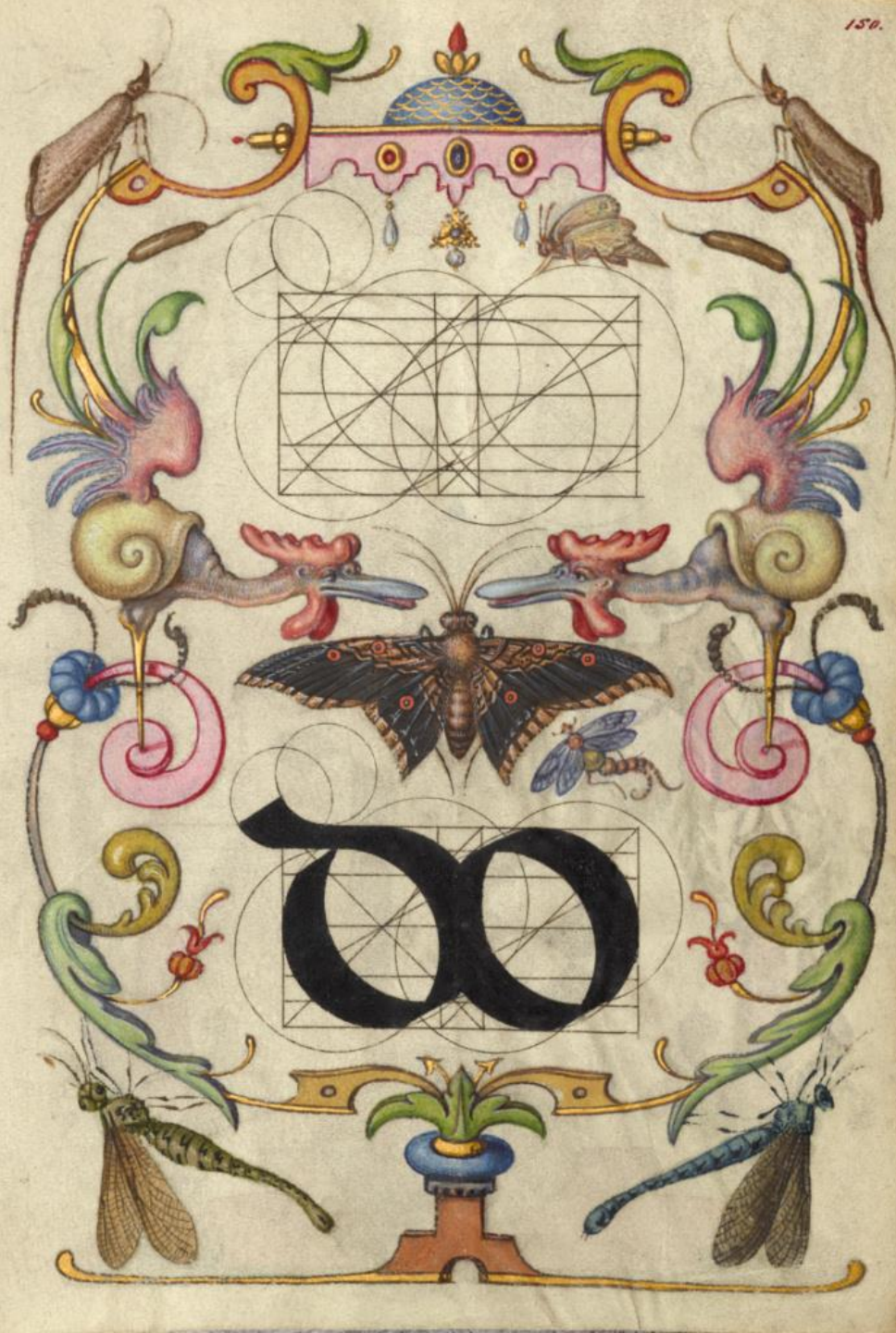
O.G. Felland, *Valborg Feeding Doll*, 1899. St. Olaf College Rolvaag Memorial Library.



File Naming

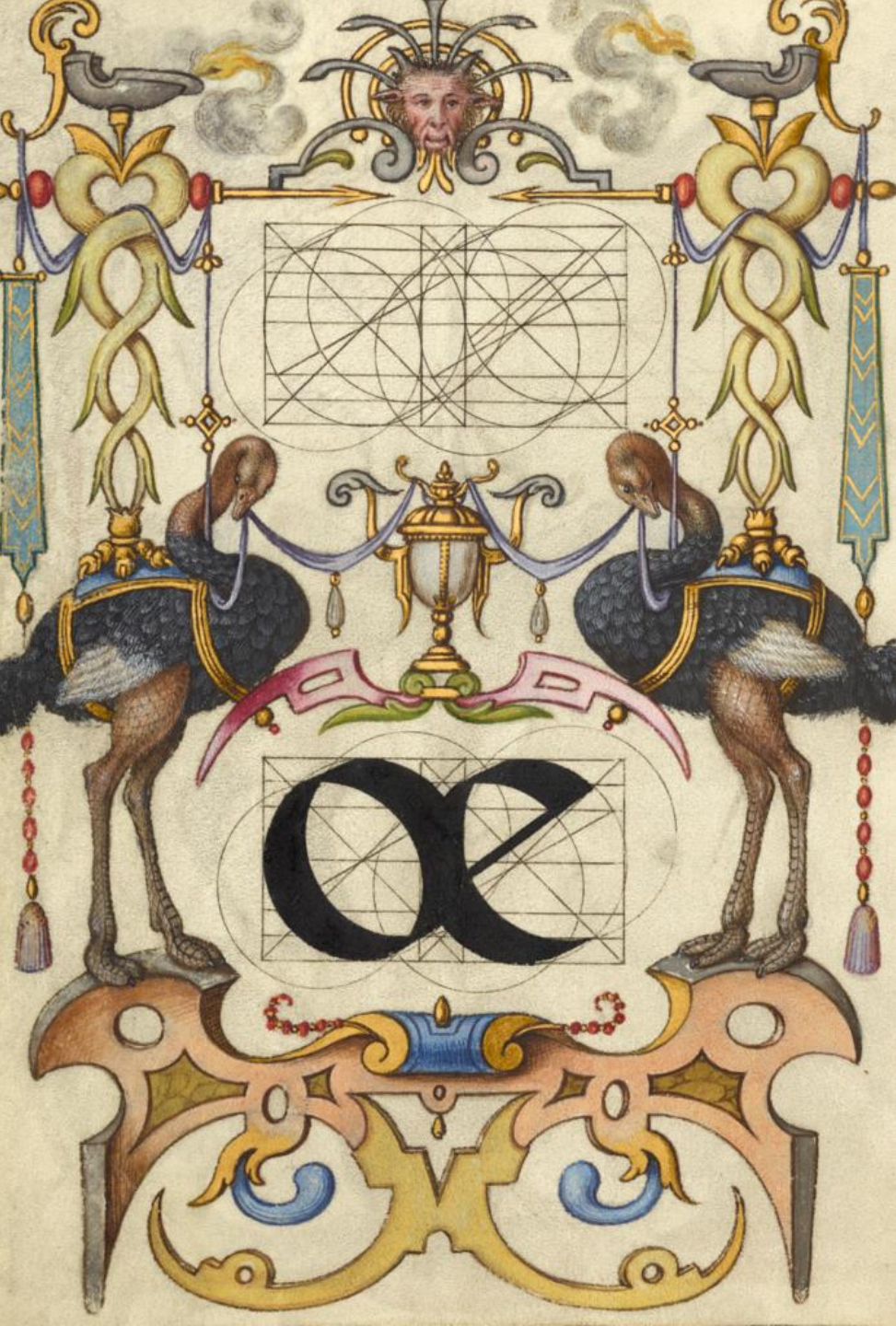
- Unique and consistently structured
- Should have some level of description
 - Example: **StOlaf_RML_Felland_0001.tif** vs. **0001.tif**
- Use leading zeros when you are numbering items or pages
 - 0001, 0002, ... 1023, etc.
- Do not include shelf numbers or locations in file names
- ALA Minimum Digitization Capture Recommendations

<http://www.ala.org/alcts/resources/preserv/minimum-digitization-capture-recommendations>



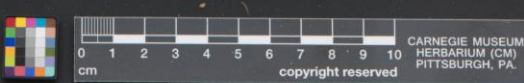
Record Your Decisions

- Consult guidelines to select your file specifications
 - FADGI, NARA, ALA
 - Colleagues at other institutions
- Record in a digitization plan for your institution
- Will help you to digitize consistently over the life of the project
- Can be referred to by people picking up the project later



Resources

- Examples of institution digitization guides
 - Digital North Carolina: <http://www.digitalnc.org/policies/digitization-guidelines/>
 - Columbia University Libraries Imaging Standards & Procedures: <https://library.columbia.edu/bts/imaging.html>
- FADGI Audio Visual Working Group resources:
 - <http://www.digitizationguidelines.gov/audio-visual/>



CARNEGIE MUSEUM
HERBARIUM (CM)
PITTSBURGH, PA.

Nº 483816



BARRENS HABITAT SURVEY

BALSAMINACEAE

Impatiens pallida Nutt.
Det: B.L. Isaac 1998

U.S.A.: PENNSYLVANIA: Huntingdon County: 2.9 km ESE of
Alexandria, Neff Barrens. 40-32-39N, 78-04-04W. Alt.
275 m. Roadside.

Flowers yellow.

Bonnie L. Isaac 9827
and Joseph A. Isaac

7 August 1997

HERBARIUM, CARNEGIE MUSEUM (CM), PITTSBURGH, PA.

Metadata

This session will discuss:

- Definition and importance of metadata & controlled vocabularies
- Creating internal procedures for metadata creation
- Associating metadata with your files
- Collection Management System selection

Definition of Metadata:

Metadata is structured information that describes, explains, locates, or otherwise makes it easier to retrieve, use, or manage an information resource.

- from the National Information Standards Organization (NISO)

Impatiens pallida. Carnegie Museum of Natural History Herbarium.

Metadata Types

Some metadata mirrors what is created for physical records

- Descriptive – Describes the item, including title, date, subject, etc.
- Administrative – Copyright and access restrictions

Some metadata is just for digital records

- Technical – Scanner/camera, date created, pixel dimensions, etc.
- Structural – File's relation to other files
- Preservation – Checksums, history of data corruption or recovery

Impatiens pallida. Illinois Natural History Survey.



Importance of Metadata

Metadata supports:

- Discovery of the resources through the ability to search
- Provides insight into your collections
- Facilitates sharing resources across institutions
- Helps maintain control over access and restrictions
- Helps manage digital records for the future



Margaret Armstrong, *Lilac Clematis (Atragene occidentalis)*, 1909. Metropolitan Museum of Art.

Metadata Schema

Metadata standards help to ensure that metadata is applied consistently within an institution and across institutions.

Examples:

- Dublin Core Metadata Initiative (DCMI)
- Machine-Readable Encoding (MARC)
- Encoded Archival Description (EAD)

University of Texas Libraries: Metadata Basics

<https://guides.lib.utexas.edu/metadata-basics/intro>





Names from Getty ULAN

Muybridge, Eadweard (preferred)

Eadweard Muybridge

Helios

Muggeridge, Edward James

Muybridge Eadweard J.

Muybridge, E. J.

Muybridge, Eadweard J.

Eadweard J. Muybridge

Controlled Vocabularies

Metadata schema are supported by controlled vocabularies.

- Standardized and organized arrangements of words and phrases that provide a consistent way to describe data.

Examples:

- Library of Congress Name Authority File (LCNAF)
- Library of Congress Subject Headings (LCSH)
- Getty Union List of Artist Names (ULAN)
- Getty Art & Architecture Thesaurus (AAT)



Wild
Sweet Pea

Lathyrus
graminifolius

Create a Data Dictionary

- Data dictionaries document:
 - Element names and definitions
 - Obligation (required or optional)
 - Guidance on use
- When drafting metadata procedures, consider:
 - What metadata do you currently use?
 - Who is your audience, and what terminologies will they understand?
 - What resources are available to create the metadata?
 - What tools do you have?
 - What skills do your staff and/or volunteers have?
 - Who will you share your metadata with?

Metadata Field Element Chart

Field Name	Map to Dublin Core Schema	Mandatory for Upload	Best Practice	Controlled Vocabulary
1. Title	Title	Yes	Yes	None
2. Description	Description		Yes	None
3. Creator	Creator		Yes	LCNAF; ULAN; VIAF
4. Subject	Subject		Yes	LCSH; LCNAF; AAT; TGM; MeSH; VIAF
5. Location	Coverage-Spatial		No	LCSH; TGN
6. Contributors	Contributor		No	LCNAF; ULAN; VIAF
7. Publisher of Original	Publisher		No	LCNAF
8. Date of Original	None		Yes	None
9. Hidden Date	Date		Yes	ISO 8601 W3CDT
10. Physical Format	Format		Yes	NY Heritage List
11. Physical Description	Source		Yes	None
12. Local Location	None		No	None
13. Relation	Relation		No	None
14. Type	Type		Yes	NY Heritage List (DCMI)
15. Language	Language		No	ISO 639-2

Data Dictionary

Digital Public Library of America (DPLA)

- Review metadata guidelines for your state or regional hub

Example: New York Heritage Data Dictionary, 2019

<https://nyheritage.org/sites/default/files/pages/NYH-MetadataDictionary-V5.pdf>

“How to Create a Descriptive Metadata Plan.” Sustainable Heritage Network. March 16, 2018.

http://sustainableheritagenetwork.org/system/files/atoms/file/How_to_Create_a_Descriptive_Metadata_Plan.pdf

Associating Metadata

Accession Number SHIN.213.65 **Temp ID** 123 InActive
Display Title Rooster Hen & Hydrangea Confidential
Display Artist Ito Jakuchu **Artist Code** I-894 Web Access?
Object Status Cataloging:Needs Cataloging, Conservation:Excellent Condition, Imaging:Resize for the Ir
Keywords Eccentric, Hydrangea, Middle Edo, Rooster
Location Green St. Warehouse : 2nd Floor : Storeroom 1 (moved 7/6/1998)

Page 1 | Page 2 | Page 3 | Notes & Histories | Edited | Surrogate | User Defined Fields | Surrogate List

Accession Number	SHIN.213.65	Temp ID	123
Display Title	Rooster Hen & Hydrangea	Artist Code	I-894
Display Artist	Ito Jakuchu	Attribution	
Artist Sort Name	Jakuchu, Ito	Multiple Artists?	<input type="radio"/> Yes <input checked="" type="radio"/> No
No. of Components	1	Whole?	<input checked="" type="radio"/> Yes <input type="radio"/> No
State	original	Edited?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Creation Date	1756	Century	18th Century
Update Range:	1756 . 1756	Period	Edo Middle
Alt. Date Type	n/a	Alt. Date	n/a
Technique	Painting	Color	
Medium	Color	Medium 2	
Support	Silk	Support 2	
Media & Support	Color on Silk		

- Collection management system
 - The Museum System (TMS), Embark, PastPerfect, or ContentDM
- Excel or Access table for smaller-scale projects



Associating Metadata

- Metadata can be embedded into the file itself
 - Technical metadata is embedded automatically
 - Additional metadata can be embedded within the file
 - At the time of capture using scanner or photo processing software
 - Or on the final files using tools such as Adobe Bridge
- Not a requirement if metadata is recorded elsewhere and corresponds with file names
- Added layer of security

Selecting a CMS

- Lots on the market
- Vary in cost, functionality, and level of required staff expertise
- Important things to consider:
 - Open-source or proprietary software
 - Hosting files locally or online
 - Cost and ease of use
 - Ease of integration with current data management system
 - Ease of importing and exporting metadata



Indian
Paint Brush
Castilleja miniata

Selecting a CMS

- American Association for State and Local History (AASLH) Technical Leaflet on Choosing a Collection Management Software
https://d221a1e908576484595f-1f424f9e28cc684c8a6264aa2ad33a9d.ssl.cf2.rackcdn.com/aaslh_a28f1bb1d5ab7592af01b9bbac64dc95.pdf
- Ashley Blewer's "Collection Management System Collection"
<https://bits.ashleyblewer.com/blog/2017/08/09/collection-management-system-collection>





Document Metadata Decisions

- Data dictionary and metadata plan for your institution
- Procedures for metadata entry
- Include or reference in your digitization plan

Resources

- Sustainable Heritage Network Resources

<http://sustainableheritagenetwork.org/digital-heritage>

- Riley, Jenn. "Understanding Metadata: What is Metadata, and What is it For?" National Information Standards Organization, 2017.

https://groups.niso.org/apps/group_public/download.php/17446/Understanding%20Metadata.pdf



Margaret Armstrong, *Lilac Clematis (Atragene occidentalis)*, 1909. Metropolitan Museum of Art.



Questions and Wrap-Up

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