

بهره کوفته تا وین ...
بهره شش بره بر کوه ...

برابره مالند
ابروشان
سیاه و
روشن و لطیف
کرد و اکسر
زه سره بره
ما قطره آب
و غسل در گوش



چکانند در اسکان گرداند و زهره بره سیاه بسیار خالصتی دارد و
منفعت عظیم از آن جمله اگر نفوذ با اسد کس را در و کله سخت باشد
چون زهره بره بر آن طلا کنند ما کن شود **باید بمردم در صفت همیشه**
میش را بجزا گانه خند خالصت است پستان میش با زهره است مرکب

Rare Book Photography

An Introduction

Rare Book Photography: An Introduction

Text by Bryn Savage. Photography by Bill Sacco.
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Libraries' special collections contain a huge variety of materials including printed works (such as books, magazines, posters and ephemera) and manuscripts (such as letters, diaries, drawings and bound manuscript books) as well as three-dimensional artifacts (for example, scientific equipment, sculptures or keepsakes). These items might be new, as in the case of contemporary artists' books, or hundreds of years old (Fig. 1).

This introduction to photographing libraries' special collections addresses the handling of conventional books and other works on paper or parchment (prepared animal skin). There are two competing aims when photographing special collections: 1) getting the best, most complete image and 2) preserving the object.

The Best Image: Special collections materials are unique in that we are not only reproducing the words and pictures they contain, but also trying to capture the essence of the entire work — the color of the pages, the spacing of the letters, the margins as well as the size and the texture of the pages. In this way, they have more in common with museum collections than with other books we photograph (Fig. 2). The basic idea when photographing special collections is to capture and retain as much information at every step as humanly and technologically possible.



Figure 2. Special collections materials are similar to museum artifacts.



Figure 1. Special collections photography is about more than just reproducing text.

Preservation: Photography is an essential tool, but it is also a surprisingly invasive process, which can put serious demands on a book or other fragile item. Special collections objects are often rare, perhaps even the only copy on earth. Sometimes this will not be obvious, when the objects are not very old or do not look ‘special’; nonetheless, we have to use different methods than we do for everyday books (Fig. 3).

The following guidelines are designed to prevent damage to special collections by using the gentlest methods while creating the highest quality images we can.

* * *

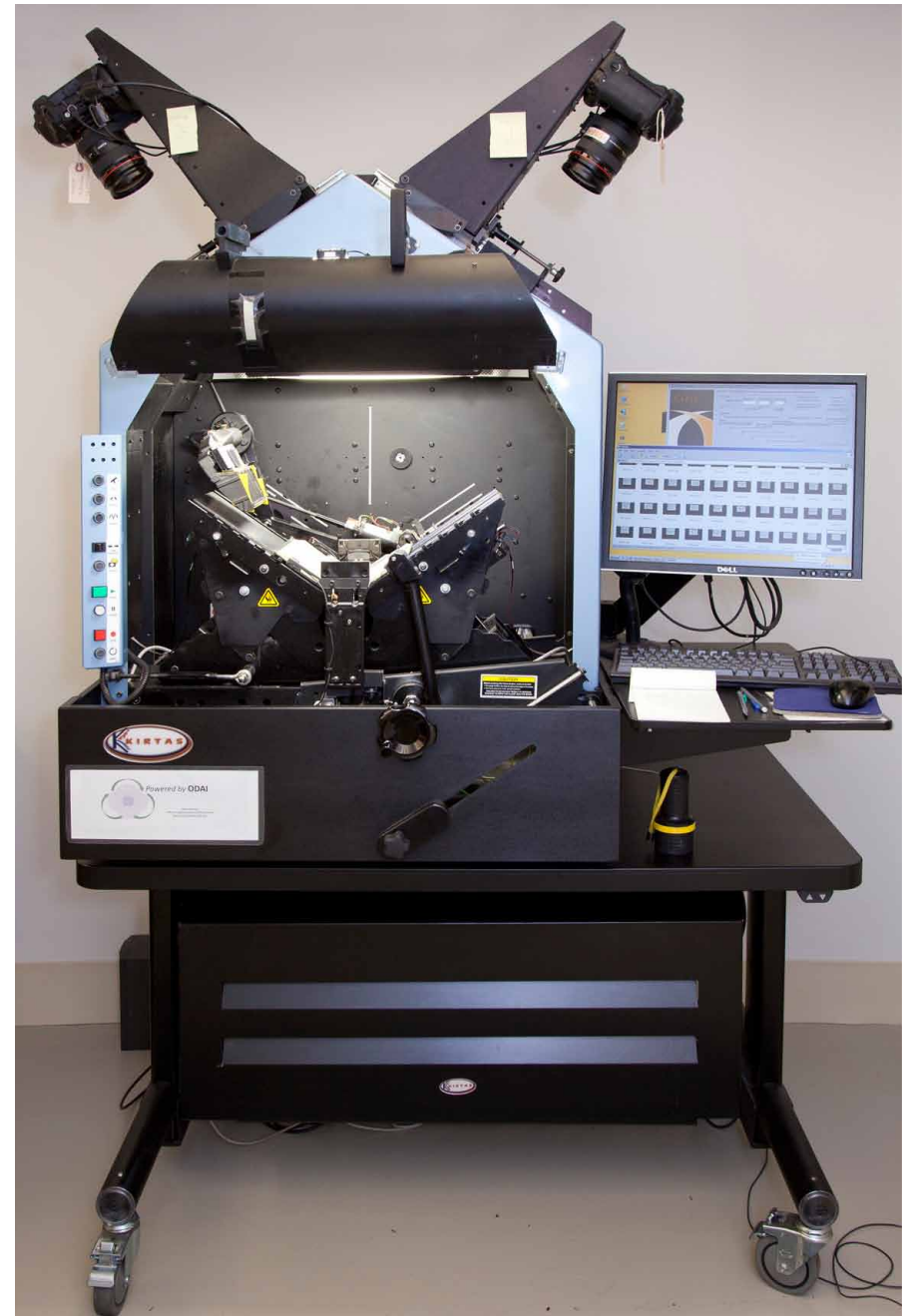


Figure 3. Mechanized image capture can be too strenuous for special collections.

Best Practices: Handling Materials

As photographers, we want to make the best possible image, but the fragility and uniqueness of special collections limit what we can do. These guidelines explain the physical limitations of the materials and how to deal with them.

Gloves or Bare Hands

It seems strange, but usually it is better to touch these works with clean bare hands rather than with gloves. Gloves make a person clumsier and more likely to drop or tear a document. In addition, gloves usually do not get washed as frequently as your hands – that grime adds up and can damage a book, which is only seen years later (Fig. 4). The same goes for grime on hands, so make sure to wash them and avoid hand cream, nail polish and the like when photographing special collections.

Gloves should only be worn if:

1. the gloves are pristine and
2. there is a sweat issue (that is, if you are holding the book in one spot for an hour, then you'll want to put a layer between you and it). Still, do not wear a glove on the hand you are using to turn pages (Figs. 5, 6).



Figure 5. Gloves should not be worn to turn pages.



Figure 4. Notice how much grime has been picked up during normal use by the glove on the right.



Figure 6. Hold a book with a glove, but turn the page with your bare fingers.

3. you must touch especially delicate surfaces such as photographs, negatives, hand coloring or any material applied to the surface of the paper. Do everything you can to avoid touching these surfaces at all, but if you *must* touch them, wear gloves (Figs. 7, 8).



Figure 7. During production, pigments and other materials are applied to the paper or parchment to create images. Since they rest on the surface, images are especially vulnerable to damage.

Turning Pages

Turn the page at the outer corner (Fig. 9). This is least likely to cause a tear. The worst choice is turning from the bottom or top of the page near the gutter or spine binding, which can easily cause a tear (Fig. 10). When you turn a page, support the weight of the page with your hand and slowly turn the page over. Do not use only the corner to support the weight of the turning page. If the paper is brittle, turning incorrectly can break or fracture the pages (Fig. 11).

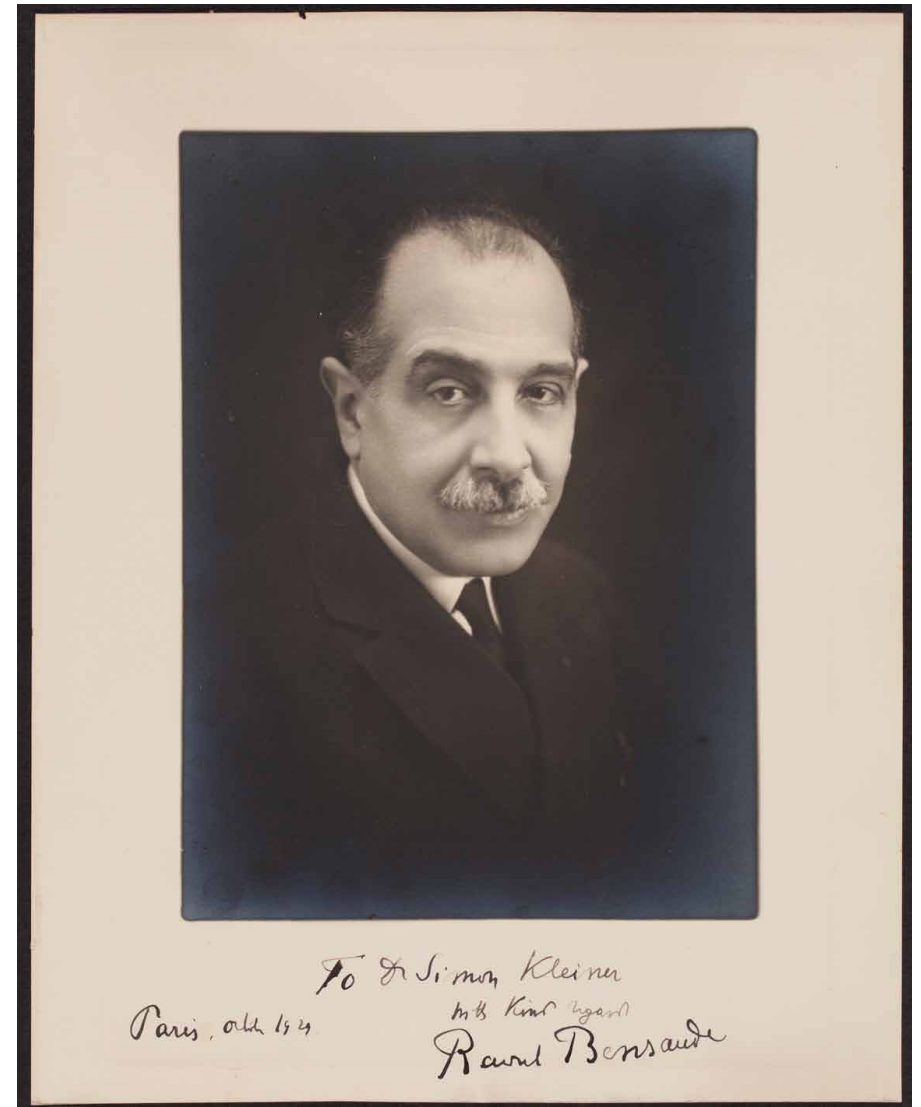


Figure 8.



Figure 9. Correct page turning: hold an outer corner and support the rest of the page if necessary.

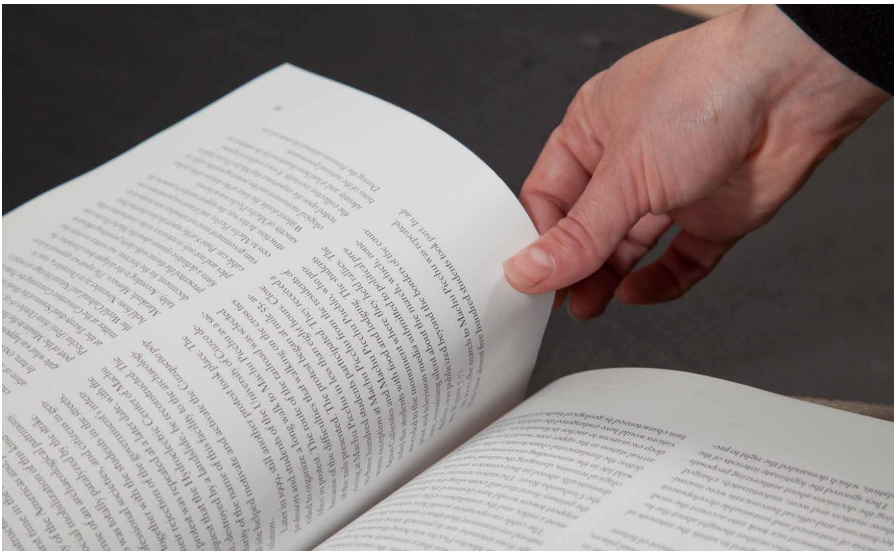


Figure 10. Do not grasp the page near the spine to turn it. This is almost guaranteed to result in damage.

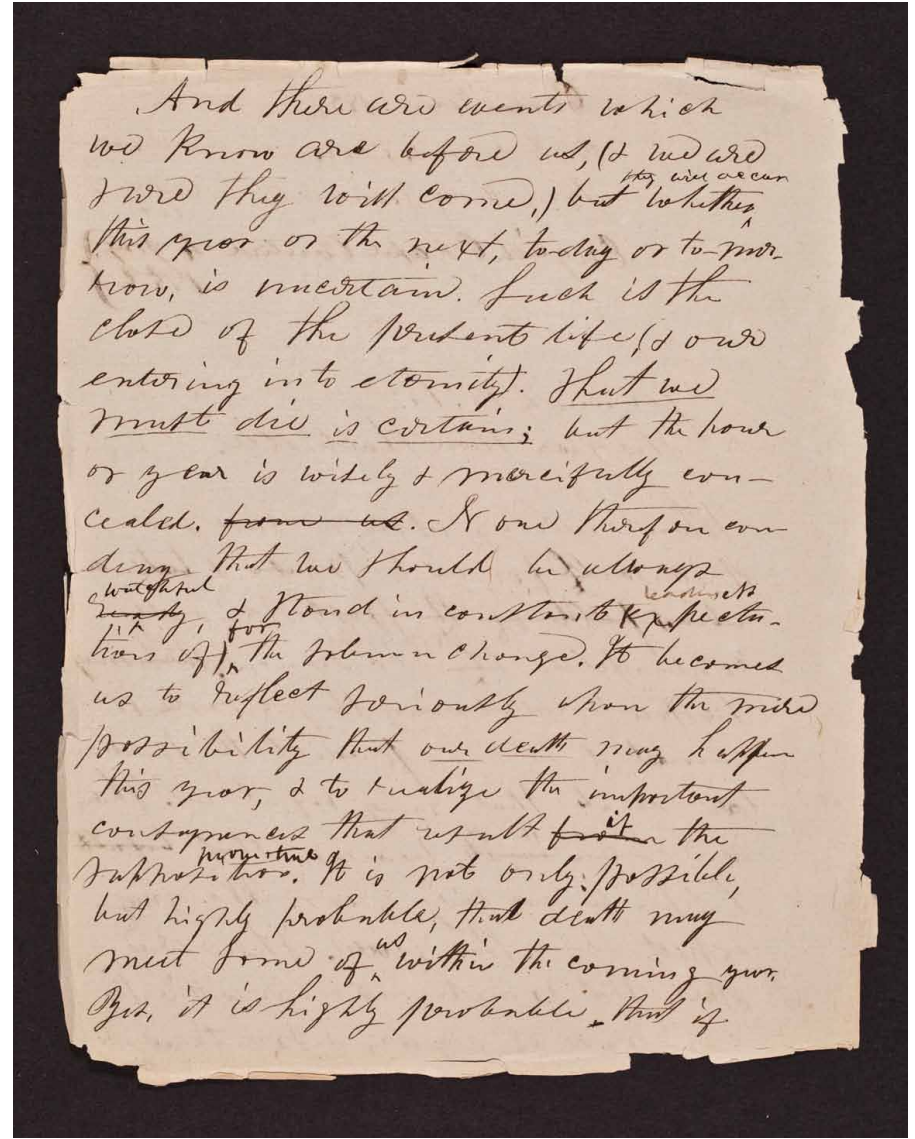


Figure 11. Pages often crack when turned incorrectly, especially if the paper is not acid-free; most paper made during the 19th and 20th centuries is not acid-free.

Supporting the Book

Unbound materials (such as postcards or posters) are simple —place them flat on the copy stand, supporting the entire sheet with your hands as you move it, rather than picking it up at just one point (Fig. 12). If the item is enclosed in a protective Mylar envelope, it is probably for a good reason, so try to shoot through the sleeve rather than removing the object (Fig. 13). This will work in most cases. Do not stand flat paper objects up to shoot.

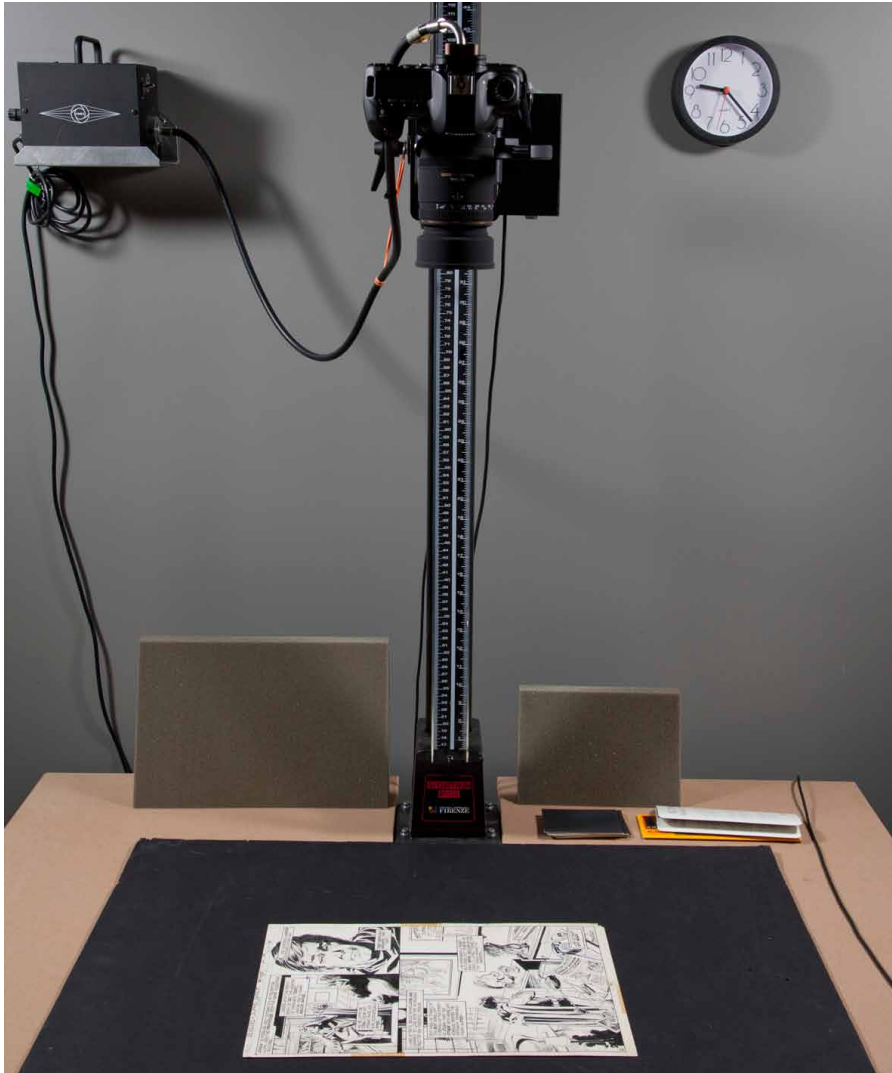


Figure 12. Shooting an unbound flat item on copy stand.

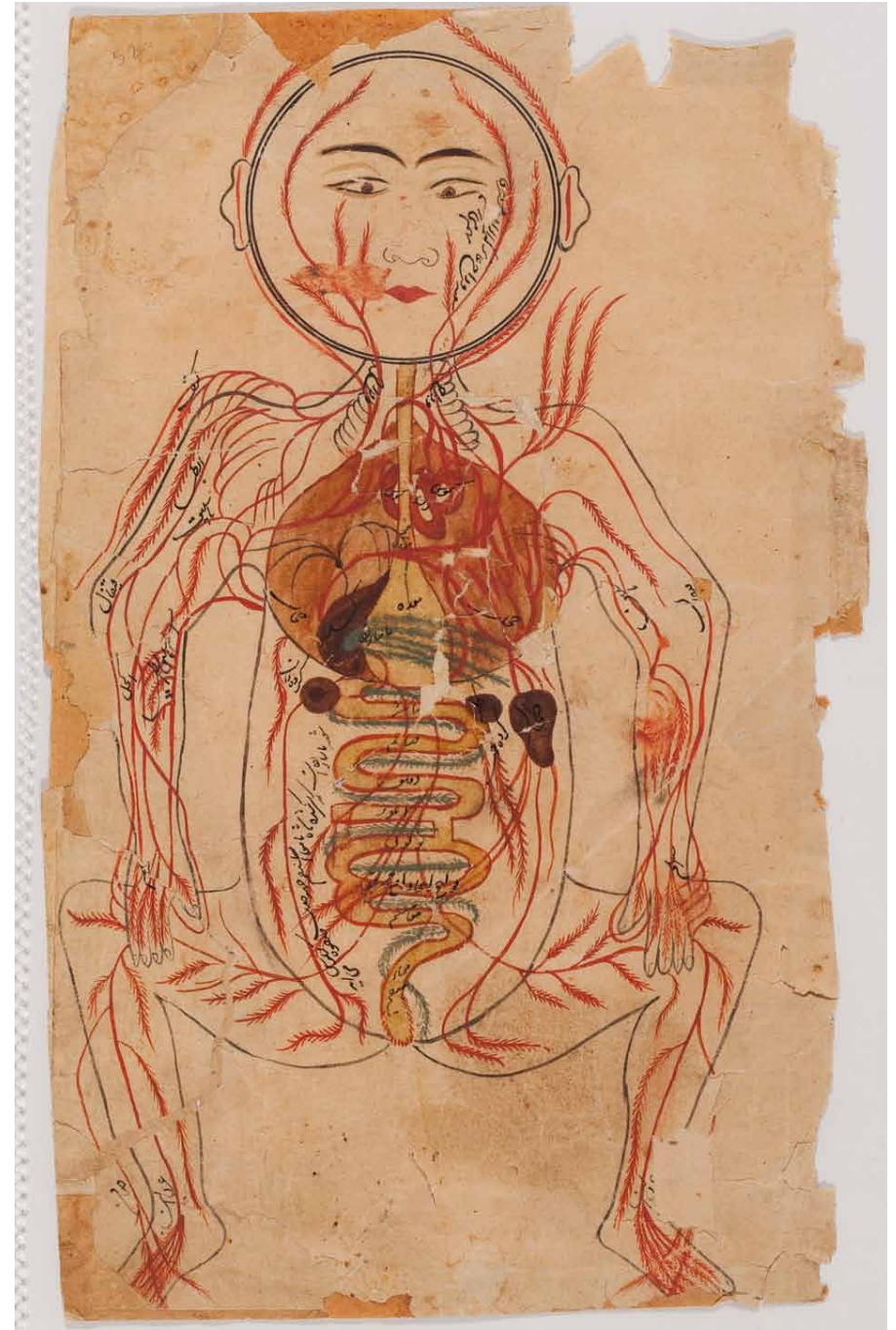


Figure 13. Shooting through Mylar.

Bound materials are more complicated and may require a compromise on image quality, as you are unlikely to get the page to lie truly flat (Figs. 14, 15). When photographing bound objects, it is important to support them well. When a person holds a book in his or her hands, it is impossible to apply even pressure from top to bottom; the pressure is localized around the hands, which causes the binding to weaken or even tear away from the pages (Fig. 16). Instead, we use special supports called *foams* or *book cradles*, like researchers in a rare book reading room (Fig. 17). You will need to adjust the size and angle of book cradles to suit each volume. Foams are important because books are held together by some agent of force, usually a structure of threads sewn through the pages along with glue. Binding structures differ from volume to volume; some volumes are bound tightly and only open a few degrees, while others open without difficulty. Regardless of whether the item is bound or flat, be careful not to drag it across any surface (such as a tabletop) as you move it into position. Instead, lift gently to reposition the item.



Figure 15. Text often curves into the spine of bound objects.



Figure 14. Bound objects like this thick book are more difficult to capture.

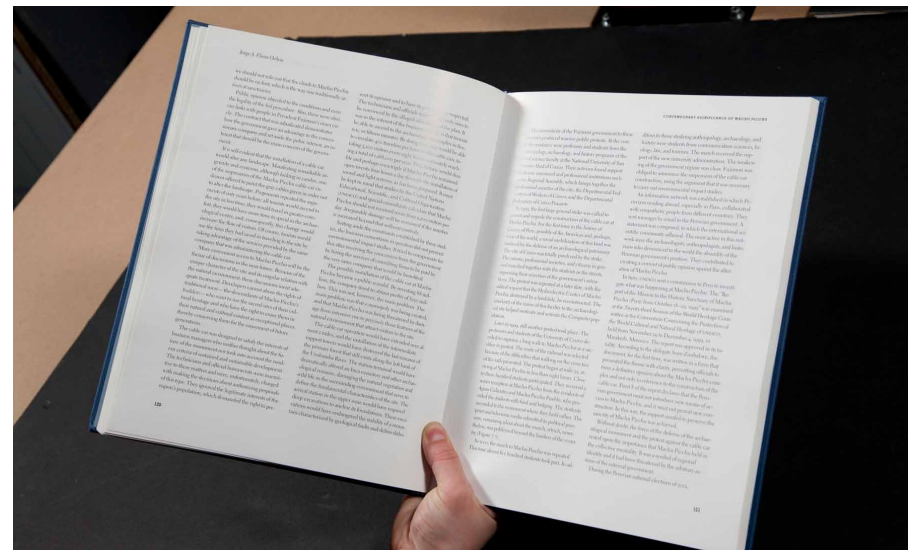


Figure 16. Pressure on the spine is localized around the hands.

Opening the Book

The further you open the book, the more strain you put on the object as a whole, which is why the angle of opening is critical (Fig. 18). Every book will have its own unique safe angle of opening; pushing a book beyond its safe angle can break the binding structure of the spine, literally breaking the book in two (Fig. 19). When you set up a volume for shooting, do not put pressure on the binding or force it open wider than its natural safe angle, just let it stop where it wants and get the best image you can from that. This can be frustrating, as the safe angle of a book is often narrower than what it takes to get a perfect image, particularly when the text runs into the “gutter” of a tightly bound book. If you are having trouble getting the image you need because of a tight binding, talk to the librarian or curator, who can help you decide how to proceed (Fig. 20).

* * *

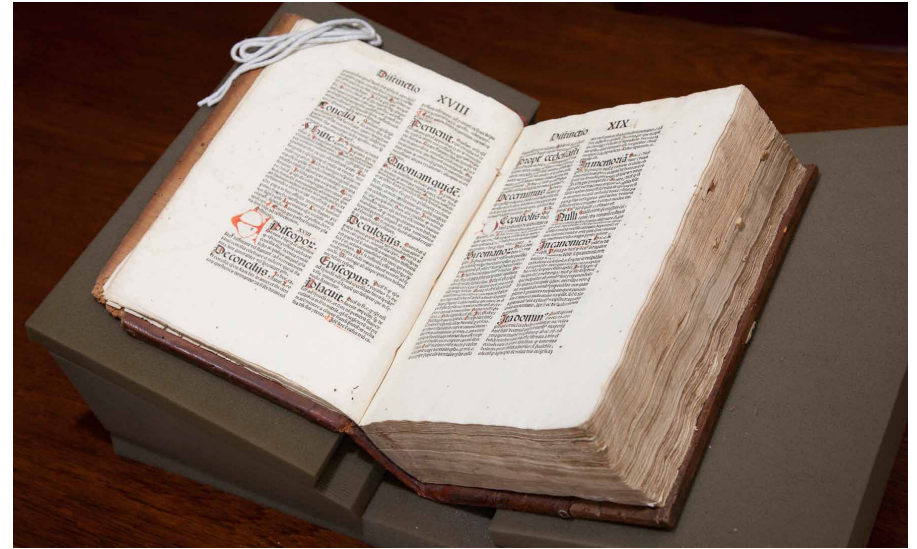


Figure 17. Book cradle (foams).

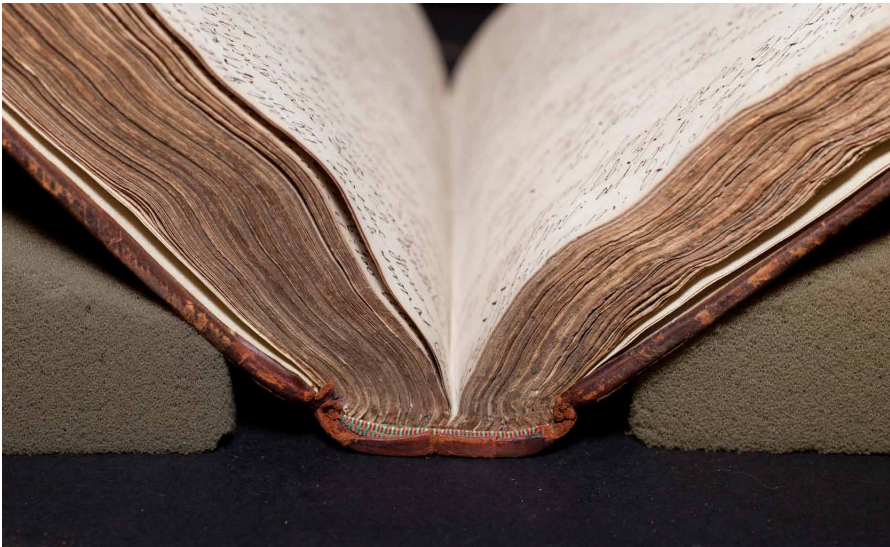


Figure 18. Each volume has a unique natural angle of opening.



Figure 19. This book's spine has been cracked.

Folding and Unfolding Things

Folds are dangerous territory. They are the most fragile element of the object and most likely to tear or shatter off, leaving you in an embarrassing situation (Fig. 21). For that reason, exercise extreme caution! Obviously, never fold anything not already folded. Beyond that, only fold or unfold things in the direction they are meant to go and only as far as designed (e.g. if a book has a flap on its cover, do not fold it back on itself to get it out of the way; look for a workaround, Fig. 22.) Because foldouts usually become larger than the object itself, you should use four-ply mat board to support the foldout when needed (Fig. 23). Dealing with foldouts in a tightly bound book is an extra challenge—you will need both hands to deal with the foldout, so be sure to weigh down the sides of the book before starting (Fig. 24).

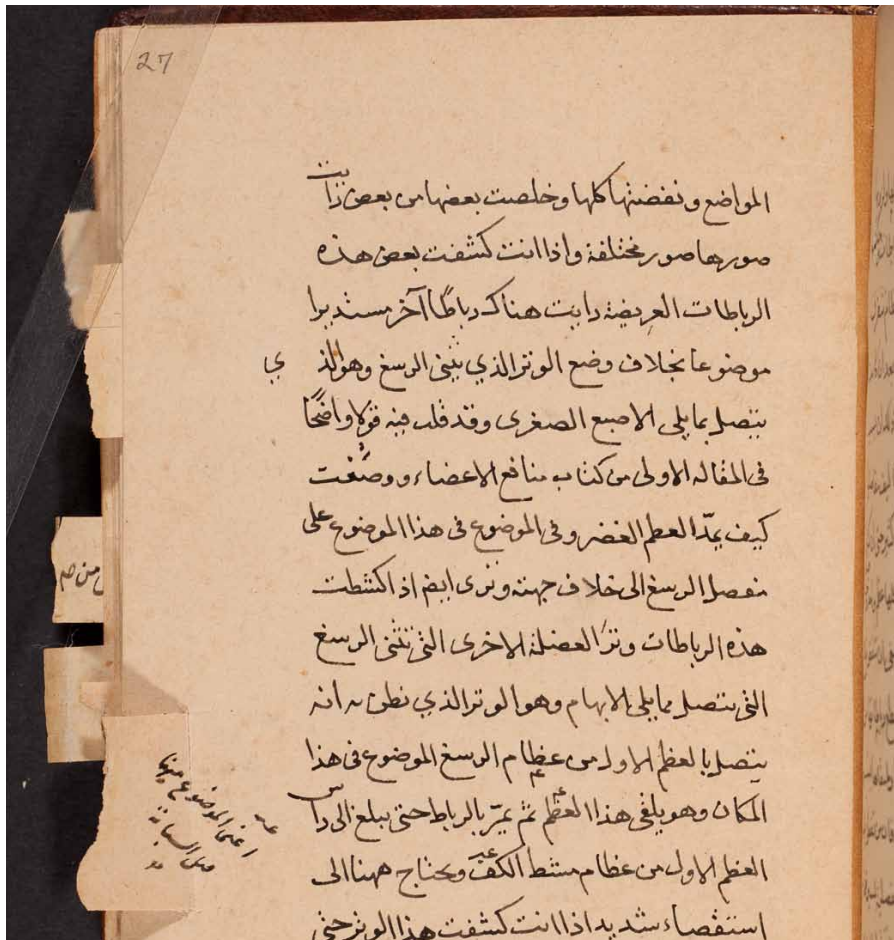


Figure 21. Tabs, a common form of foldout, are hard to handle because they are so small.



Figure 20. Consulting the curator.

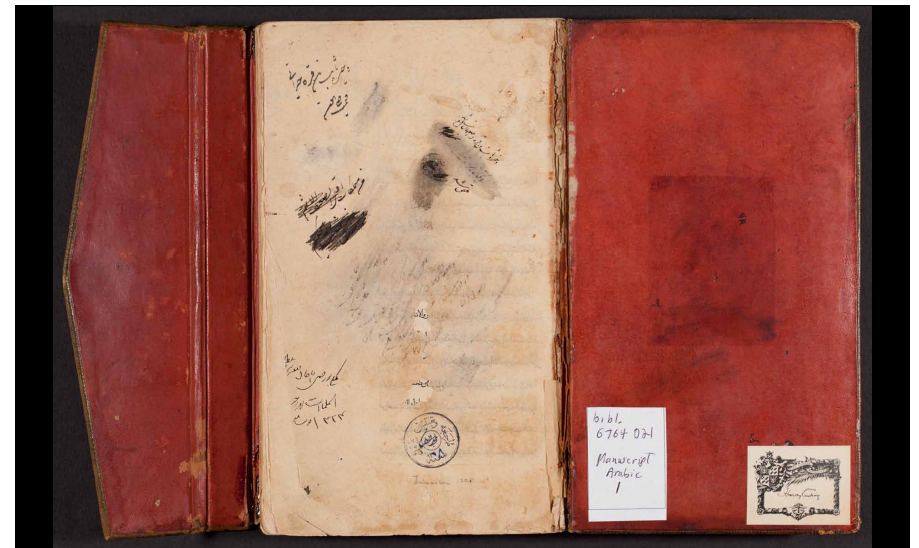


Figure 22. Cover flaps are a type of foldout that complicates any project, as they must be supported for the duration of image capture.

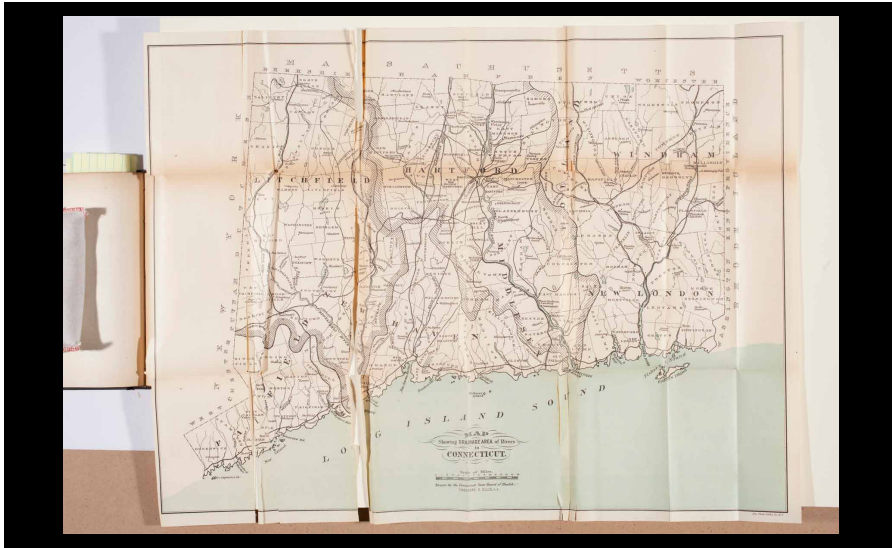


Figure 23. Mat board supports this large foldout map.

Weights

We put many new books under glass on the copy stand, but you should not place a sheet of glass on special collections materials unless you have the explicit permission of the collection curator (Fig. 25). Ask them to give you detailed instructions for that particular item, as the book's surfaces might be damaged by pressure or friction (Fig. 26).

Glass also strains the binding, so instead we use a *book snake*, which is a fabric tube filled with rice or sand, or a strip of conservation tape (trade names: Mylar D & Melinex), which are made of inert plastic (Figs. 27, 28).



Figure 24. Support and secure the book before weighing down the foldout.

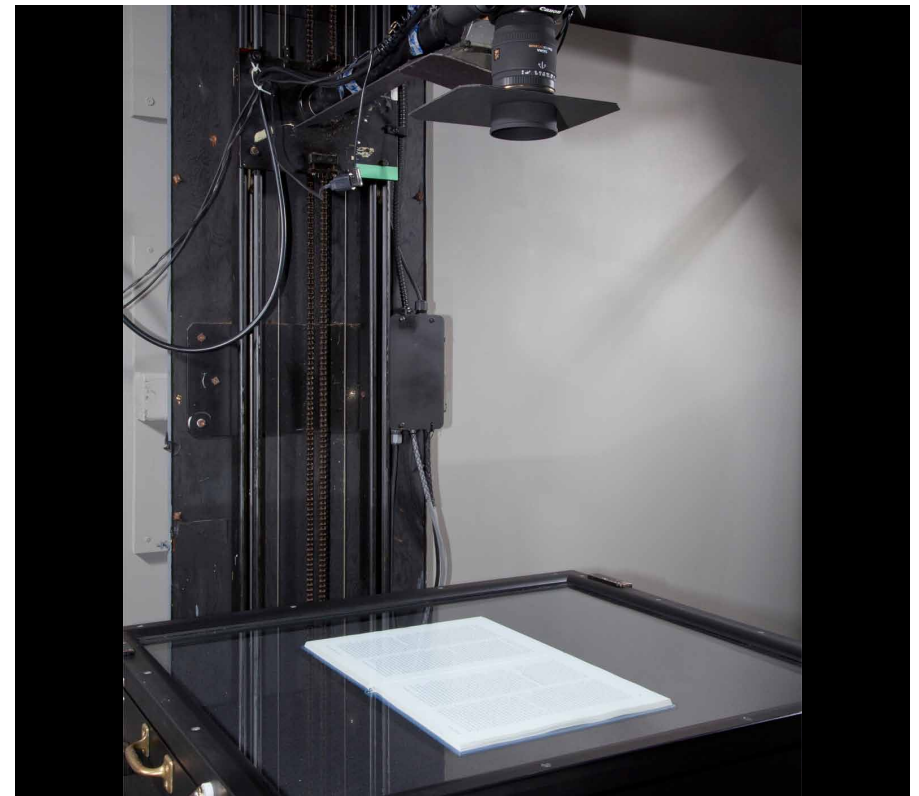


Figure 25. Do not use a glass-topped box with your copy stand for special collections materials.



Figure 26. Pigments rest on the surface of this document.

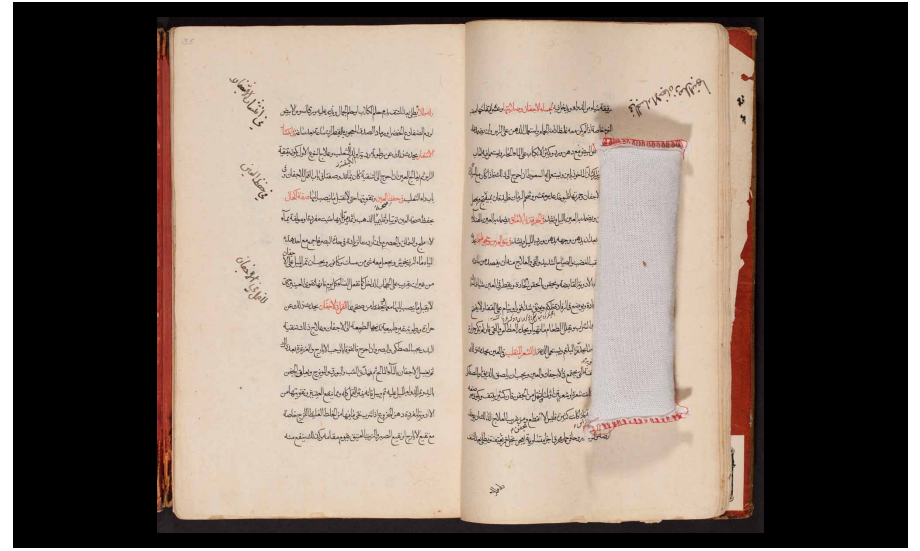


Figure 27. A book snake.

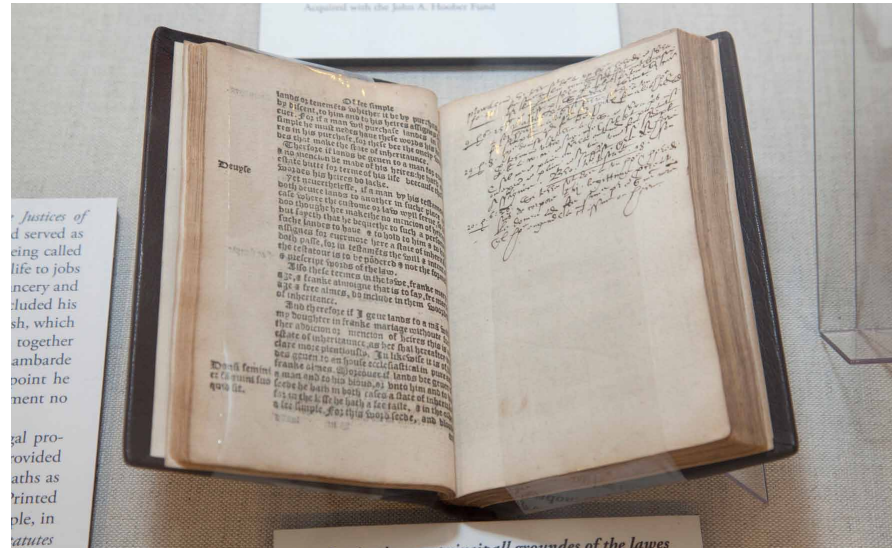


Figure 28. Conservation tape.

Bookmarks

Avoid putting bookmarks in the book if possible; write down the page number or signature mark instead (Fig. 29). If the book does not have page numbers, signatures or other identifiers, as in the case of some manuscripts, use a fresh piece of acid-free archival paper as a bookmark. It is important that the bookmark be acid-free to ensure the long-term preservation of the book (Fig. 30).

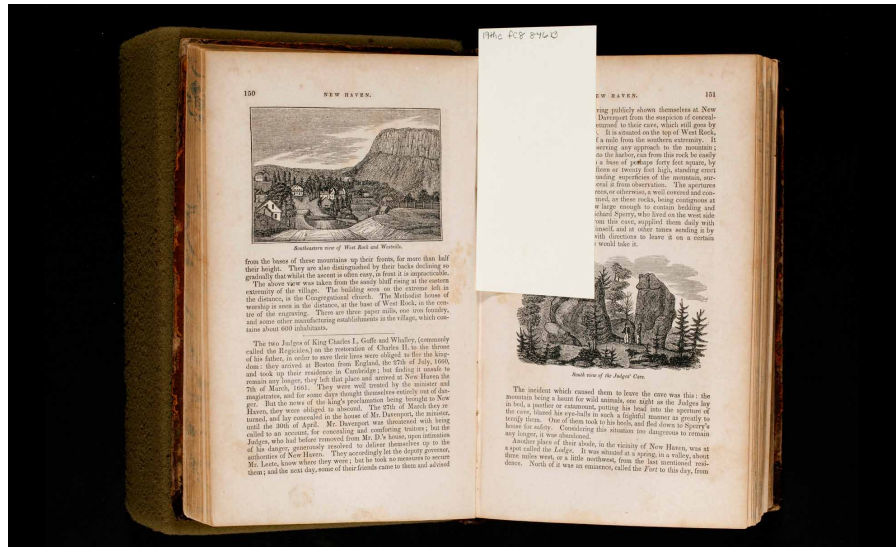


Figure 30. Use only acid-free book marks.

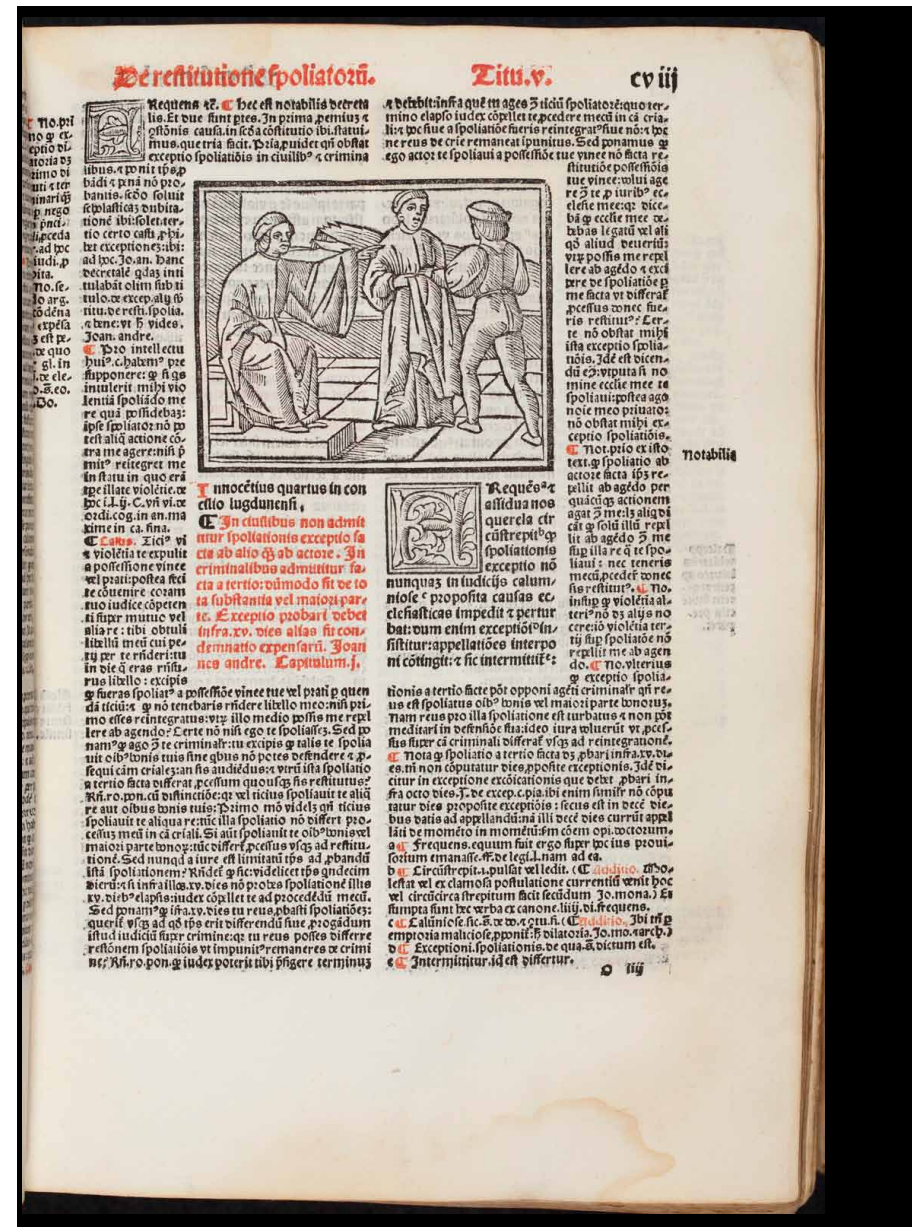


Figure 29. This page has both a page number (top) and signature (bottom).

Ephemera

We often find other objects such as notes, scraps of paper, hair or pressed flowers in these books (Figs. 31, 32). The most important thing to remember is that they are not random junk. Researchers who read the books we digitize need to be able to evaluate these materials just like they read the pages, as they could provide crucial information to specialists in the field (Fig. 33). For example, researchers may want to test hairs to learn more about the people who made or used the book, or to analyze the dust to find out where it has been kept in the past. It is important that if you move these items out of the volume during photography, you return them to the exact same spot. That said, if you find something that appears to be damaging to the book, let the librarian or curator know so that they can decide what to do about it (Fig. 34).

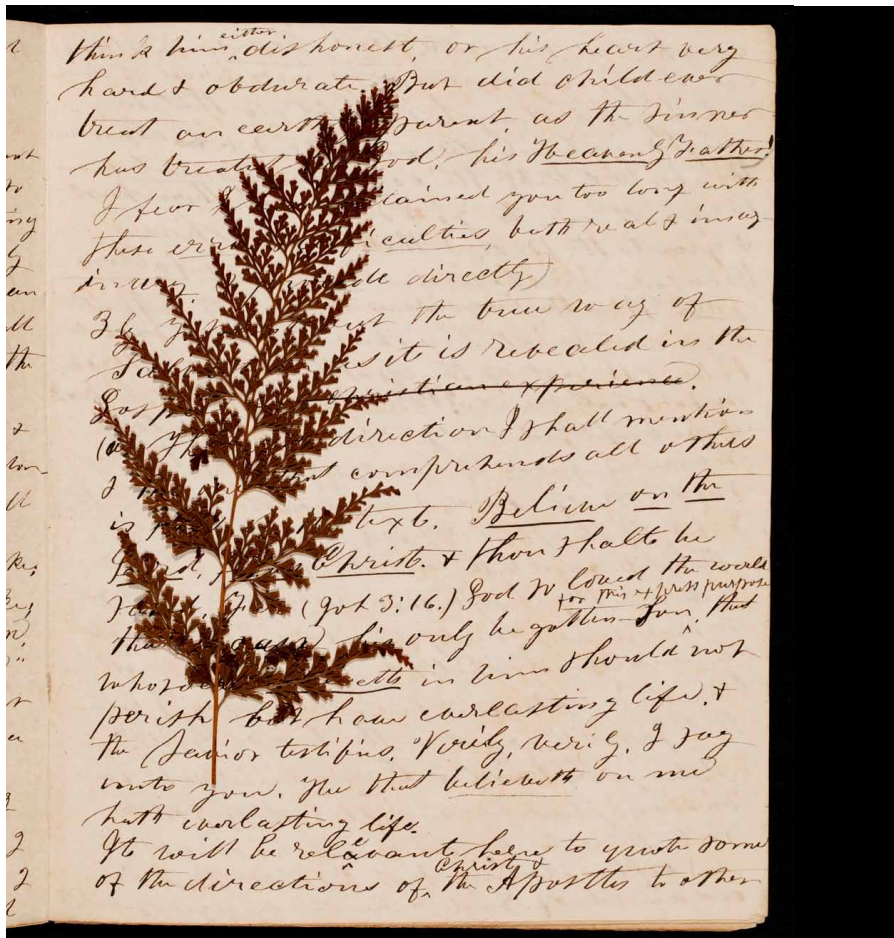


Figure 31. A fern was pressed between the leaves of this notebook.

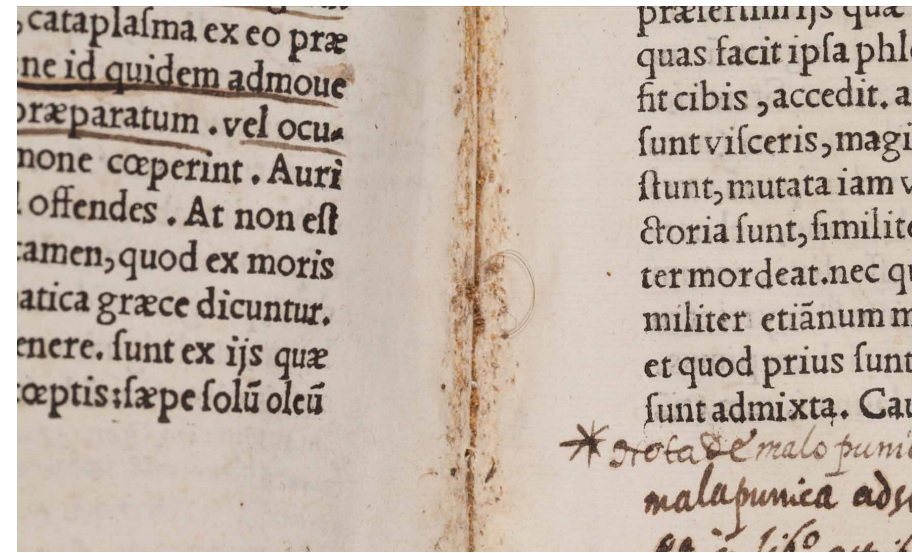


Figure 32. Hair and dust have gathered in the gutter of this volume.



Figure 33. All aspects of the physical book, including ephemera, could be a clue for a researcher.

Breaks

If you take a break during a special collections photography session, let the book take a break, too; remove it from the cradle and put it back on the shelf so that it isn't left open under the lights. This is especially crucial for objects made of parchment, and those with images or ephemera.

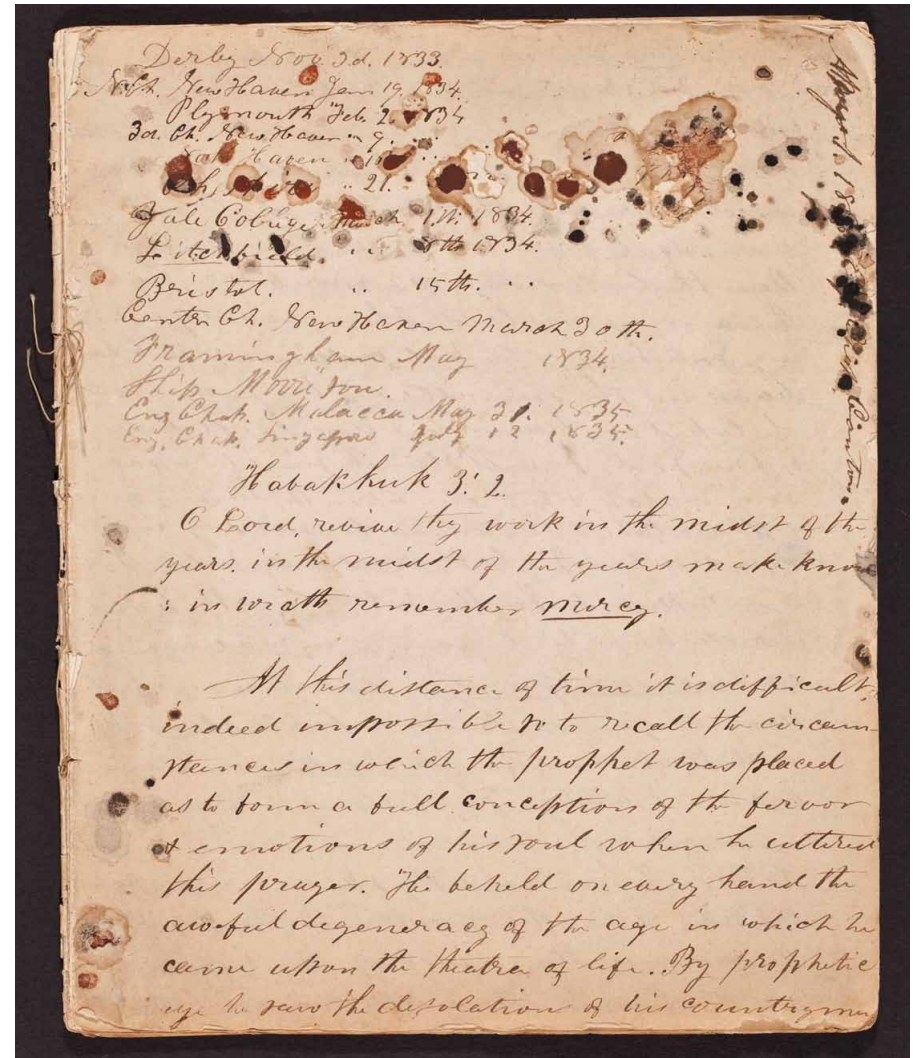


Figure 34. Unusual damage that might require a curator's attention.

Best Practices: Technical Issues

As mentioned in the overview, one of the biggest issues in photographing special collections materials is how to record all the information contained in a book. Information loss can happen in a number of ways—for instance through converting the image to a smaller size or to black and white or by discarding materials found in the book (Figs. 35, 36).

Just as the field of digitization is and has been rapidly evolving over the last fifteen years, best practices for the technology of digitization have been evolving as well. The Digital Coffee Group at Yale has put together an extensive set of best practices for still images, which can be accessed here:

www.yale.edu/digitalcoffee/downloads/DigitalCoffee_SharedPractices_%5Bv1.0%5D.pdf

In the following pages, I will offer just a few basic guidelines.



Figure 35. Detail is lost in conversion to smaller file sizes.

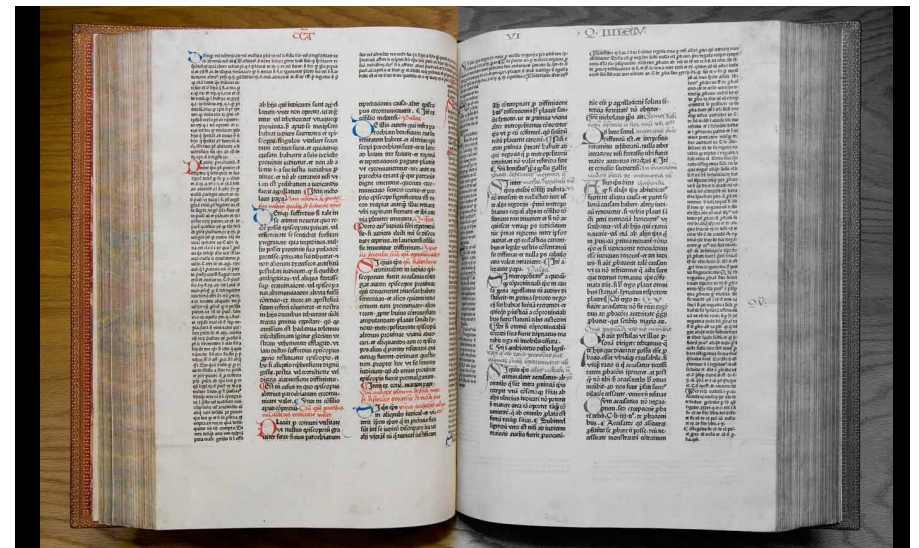


Figure 36. Color can be an important clue to when, where and how an object was made.

Distortion

Use the longest focal length practical to minimize visual distortion of the page (Fig. 37). Be careful to ensure that your camera and the page are perfectly aligned. You will want the camera to be aimed perpendicular to the page being shot. It is also important to keep the distance between the camera and the page constant. You will need to adjust the height of the camera to compensate for the turning of the pages as you move through bound volumes in order to keep the distance between lens and page identical in each shot (Fig. 38).

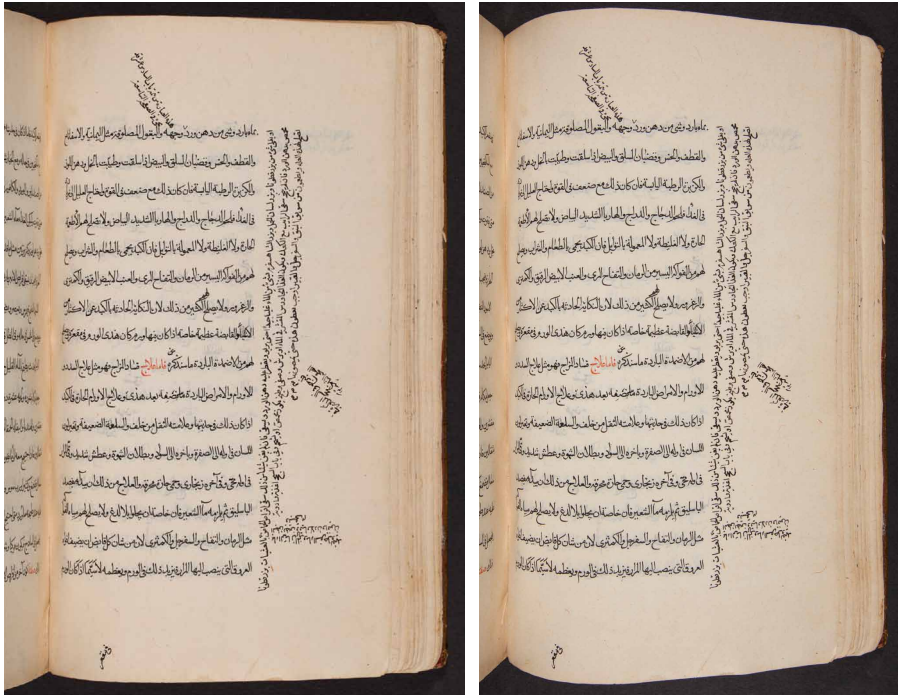


Figure 37. Long focal length (left) vs. short focal length (right).



Figure 38. An adjustable copy stand makes it easier to keep the angle and distance of the camera lens stable in relation to the object.

Color & Cropping

Shoot in color. Get as close to actual color as possible. Color cards and gray scales, although never perfectly accurate, can be a great help (Fig. 39). Make sure to include the edges of the page.

Environmental Conditions

Light can cause irreversible damage to fragile special collections materials, so do not leave them out in bright light, either environmental or studio lights, for longer than necessary. Keep the temperature and humidity stable, especially for parchment objects, which are “hygroscopic,” meaning that they absorb water from the air. This can, in the worst cases, make it impossible to close a book at the end of a session.

Photoshop and Other Editing Tools

Should be used for color correction to the most natural image and to crop the image to level. Although it can be maddening as a photographer to see flaws such as spots on the page, resist the urge to Photoshop them out. The end users of your images are researchers—these are not flaws to them but clues that might reveal something about the book (Fig. 40).

Image Size

In a perfect world, you would always shoot the largest image to avoid subjecting fragile and unique special collections materials to reshoots.



Figure 39. A color card and gray scale.



Figure 40. This stain appears to have been made by a long-ago reader's cup.

Best Practices: Working with the Client

Good photography of special collections requires thinking ahead to future uses.

Communicating Options to the Client

The essence of a successful special collections shoot is good, clear communication with the curator or librarian responsible for the materials (Fig. 41). As that is the case, it's a good idea to tell the client right up front that you will be contacting them if preservation concerns come up during the photography process. If clients understand that it's all about treating the materials correctly, they will be receptive to your questions.

Three topics should be discussed with the client before beginning a project:

Handling

Explain how you will be handling the materials and ask if the client knows of additional difficulties that might come up during handling. For example, you might say, "We usually use foams and weights while we photograph from above. Is there anything unusual about these materials?" Ask especially about flash lighting and support for the materials. Since no two objects are alike, you should not be shy about stopping to discuss options for setting up and shooting difficult ones with the client. It is always better to ask questions than to push an object too far and damage it. The client will appreciate your commitment to doing the job right.



Figure 41. Communication is key.

Image Capture

Clients often are not aware of the options related to photographing their materials or do not know the meaning of terms that are common knowledge in a photography studio. For example, a client might not know the difference between a JPEG and a TIFF (Fig. 42). This could lead to them ordering website-quality JPEGs today and then realizing down the line that they need higher quality images for their digital archive. Since our goal is to avoid damaging special collections materials by shooting them more often than necessary, it is important to explain imaging options to clients and recommend that they choose the largest size available. Smaller versions can always be made from these “masters.”

Metadata

When we digitize special collections, we create content. To make sure that this content can be found and used in the future, metadata must be attached to each file. Imagine that each file is a printed photograph. Now imagine that we put each photo in a numbered envelope. Finally, imagine thousands and thousands, even millions of these envelopes in storage. Creating digital images without metadata is the same as putting pictures into unmarked envelopes in a gigantic warehouse.

Metadata is essential, but often neglected, as it is time consuming to add and requires some knowledge of the materials (Fig. 43). It is unrealistic to expect metadata to be added later, so we need to act as gatekeepers and help the clients plan it into their workflow.

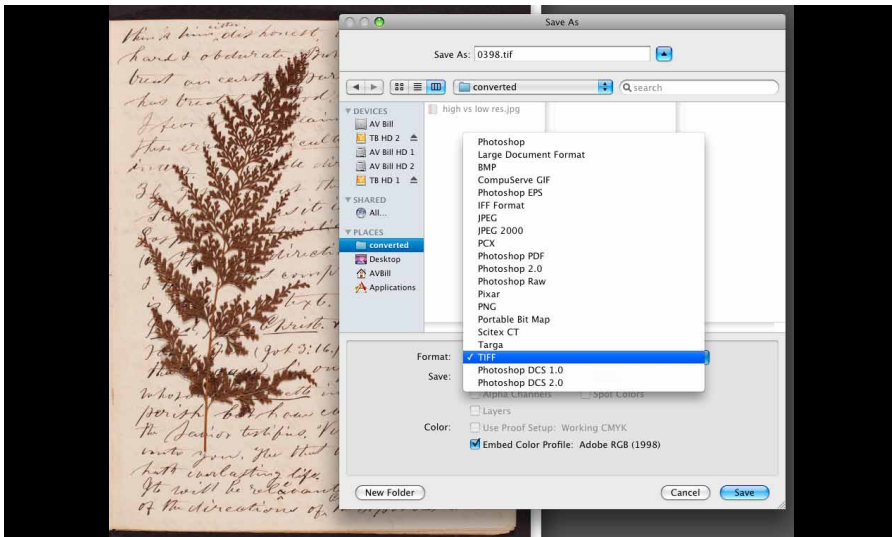


Figure 42. File type choices.

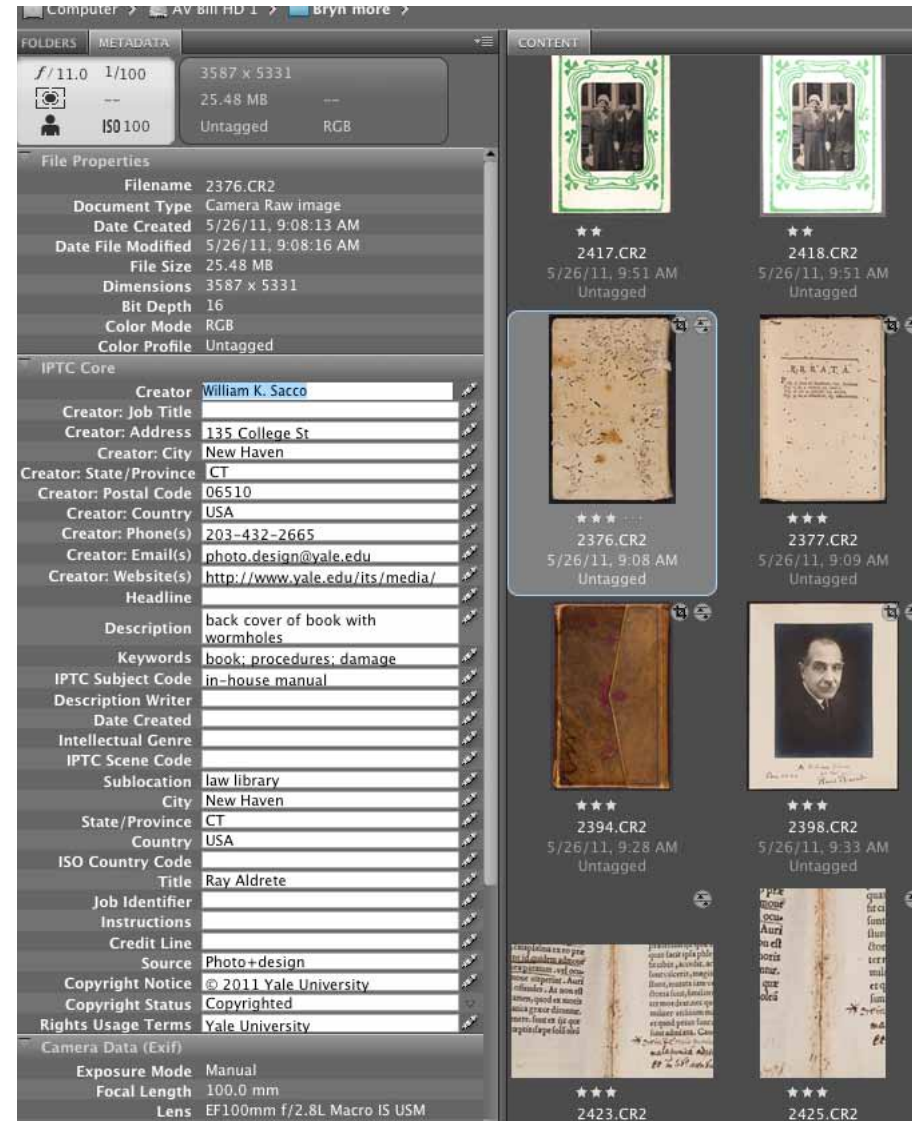


Figure 43. Metadata fields.

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