

Digitize Your Photos and Movies

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Assess

- **Gather, preview** to get a sense of what you have.
- **Organize:** Preserve important *groupings* and *order*.
- **Label:**
 - Write to the back of photos: **Who** (or what), when, where.
 - Write near bottom (avoid ink on face in the next photo)
 - Let ink dry
 - Consider Itoya Art Profolio Photo Marker (or use Sharpie Ultra-fine)
 - Label slide boxes and envelopes as you go.
- **ID Numbers.**
 - Short, unique (1972B)
 - Helps you get back to the originals.
 - Include in folder/file names.

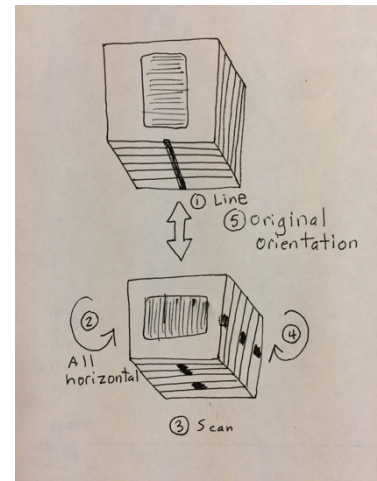
Scan

- **File Format**
 - TIFF (.tif): Larger, lossless, good for initial scan and editing.
 - JPEG (.jpg): Smaller, “lossy” compression, good for using/sharing.
 - Use Level 10 (or 100, if scale of 1-100) compression.
- **Hardware**
 - **Flatbed Scanner**
 - Ideal for prints
 - May take 20-60 seconds.
 - Scan at 600 dpi (dots per inch)
 - Can use 300 dpi for 8x10; or 1200 dpi for tiny, sharp pictures.
 - **Digital Camera**
 - Fast
 - Be careful with focus
 - Use diffuse light to avoid glare spots. What shadows. Avoid flash.
 - What angle to avoid (a) glare and (b) trapezoids.
 - **Cell Phone**
 - Works in a pinch
 - Always with you
 - **Slide Scanner**
 - Ideal for slides and negatives
 - Scan at 2000 dpi
 - Digital “ICE” infra-red dust detection helps.
 - Can treat dust with camel hair brush, blow bulb. (Beware residue from compressed air can).
 - Slide feeder helps for batch jobs.
 - I used Nikon Super Coolscan 5000 ED with SF-210 slide feeder.
 - Many flatbed scanners can scan slides or negatives reasonably well.

- eBay scheme:
 - Buy it, use it, share it, sell it, split the difference.
 - Example: buy good scanner for \$1800; 4 people use it; sell for \$1600; each person spent \$50.
- **Captions**
 - Digital image files have “metadata” that can include captions, dates, places.
 - Can capture captions in separate text file while scanning, but those can get separated from the images, so it’s best to embed captions in the image file itself.
- **Software**
 - VueScan for batch scanning
 - Image Capture included with Mac (free). Good for scanning multiple prints at once.
 - Windows Photo Gallery (free). Good for editing captions.
 - GraphicConverter (Mac). Good for batch renaming, editing captions.

Batch scanning flow

- Organize, label, “thin”, number.
- Draw line on bottom of slides to remember which side was “down”.
- *Rotate vertical slides to be horizontal* (scanner doesn’t handle verticals)
- *Dust if needed*
- Batch scan as TIFF
- *Flip vertical slides back up* (use dots on side)
- Rotate, crop, and/or enhance
- Add metadata (captions) to images
- Rename (to sort and be helpful)
- Move to good folder structure



Digital Photo Archive

- Physical arrangement: How you found the materials
 - Provides hints about the context (when, where, who)
- Logical Arrangement: How you want to think about the materials
 - Grouped/ordered by time, place, event.
- Try to remember important physical arrangement even when making new logical one.

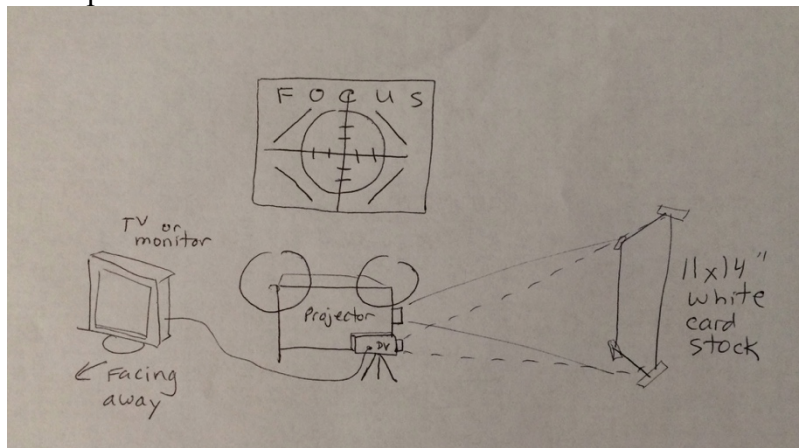
Sharing

- Share copies of your archive
 - Thumb drive
 - Data DVD (degrades)
 - External hard drive
 - Dropbox
- LOCKSS (Lots of Copies Keeps Stuff Safe)
- Share individual photos
 - E-mail, FaceBook, blog...
- Share with relatives via FamilySearch

- Familysearch.org => Memories => Photos
- Upload, tag faces, link to Family Tree.
- Naturally shares with relatives who are interested in the photos.
- Consider sharing stories of the people in the photos, too.
 - Familysearch.org => Memories => Stories

Movies

- Organize physical movies
- View and label
 - Fun to view with family members.
 - Popcorn?
- Capture
 - Variable-speed movie projector (eBay \$50-\$150)
 - Digital camcorder
 - Needs zoom, focus lock.
 - Standard definition (4:3) fine.
 - Example: Canon Elura, \$50 on eBay.
 - 11x17 inch white cardstock
 - Projector screen bumpy, low contrast
 - Reflection box too bright in center, dark on edges.
 - Paper with lines to use for focus.



- Process:
 - Shine projector to fill cardstock. Do zoom and focus.
 - Place camcorder right next to projector at same height (mini tripod or tripod on floor next to table)
 - Plug camcorder into external TV or monitor (facing away from screen to avoid casting light on screen).
 - Adjust zoom and rough focus to capture projected image.
 - Turn off projector, have someone hold picture with lines for precise manual focus of camcorder (looking at monitor to see when it's best).
 - Run projector with camcorder on standby, and adjust variable-speed of projector until the flicker/pulsing is minimized on the monitor.
 - Rewind the movie to the beginning, press record on the camcorder, and capture the movie.

- Transfer the digital movie to your computer and trim if necessary.
- Organize digital version
- Share (DVD, YouTube, etc.)

Digitizing Analog Video (VHS, Hi8, etc.)

- Camcorder with analog-digital passthrough (e.g., Canon Elura, \$50 on eBay)
 - Plug VHS VCR or analog camcorder into DV camcorder's input.
 - Plug DV camcorder to computer (e.g., into a Mac via Firewire)
 - Elura: Menu -> Func -> VCR Setup -> "AV=>DV" -> on.
 - Hit "record" in iMovie, "play" on analog device.

Video Formats

- DV (Digital Video)
 - Great for video editing
 - Big files (12GB per hour)
- MP4 (H.264)
 - Most universal for playback on computer
 - Smaller files (1/5 the size of .DV)
 - More compressed, so not ideal for future editing.
- DVD
 - Convenient for playback on TVs now.
 - Compressed, so not good for video editing.
 - DVDs degrade, so not good for archival.
 - Streaming is becoming more popular than disc playback, so not best long-term format.

Movie Sharing

- Short-term:
 - YouTube
 - FaceBook
 - Stream to TV (AppleTV, etc.)
 - Laptop to TV or projector
- Long-term:
 - Share .DV and MP4 files (e.g., via external hard drive)
 - Migrate to new formats as needed.
 - Keep the original physical film

Digitizing these materials is a lot of work. But if you can preserve and share these things with your extended family, they can bring a lot of joy to a lot of people.