



Analyze and Research Historic Family Photographs With Artificial Intelligence

Dallas Genealogical Association

Mark D Thompson

MarkThompson@MakingFamilyHistory.com

Feb 7, 2026

Speaker

Mark Thompson is a professional genealogist who specializes in digitizing and archiving family memorabilia, and genetic genealogy.

Prior to becoming a genealogist, Mark served in leadership roles in information technology. He worked in several industries to introduce technologies that improved the way those companies worked.

Mark leverages his combined expertise in genealogy and technology to guide genealogists through the rapidly changing field of artificial intelligence, showing them how it can help them with their research.

Mark is the President of the Victoria Genealogical Society (VGS) in Victoria, BC and is the chair of their DNA Special Interest Group. He is also a member of the Association of Professional Genealogists. Mark has decades of teaching and public speaking experience on a variety of genealogy-related topics.

Please feel free to reach out to MarkThompson@MakingFamilyHistory.com If you have any questions.

Workshop Overview:

Mark will show you how to improve your photographic research and analysis skills using artificial intelligence tools. The focus is on using AI for detailed photo analysis, uncovering dates, people, and historical insights. Participants will learn how to utilize AI to find clues within photographs to propel their genealogical research. AI tools which support research will also be discussed.

This is, first and foremost, a workshop about analyzing and researching photos. It is an AI workshop second. The best place to use AI is as an assistant for doing things you already have experience with.

Table of Contents

Photo Management Overview	3
Photo Analysis and Research with AI.....	4
Chatbot Tools useful for Photo Analysis and Research.....	4
Large Language Model (LLM) Chatbot Tips and Tricks	4
Photo Analysis and Research Summary.....	5
Additional Resources:	5
Please Stay in Touch	6
Example 1 – Old Man in Cardboard Frame	7
Example 2 – Lovers’ Locket	8
Example 3 – Portrait in Ornate Gold Frame	10
Example 4 – Military Airplane Stamp	12

Photo Management Overview

Goal Setting:

Decide what your goal is for your photo research project. This will help you stay focused and avoid unnecessary distractions. Some examples are: create a family keepsake book, identify an unknown individual(s), or identify the family homeland from a collection of old photos.

Organizing:

Clean your workspace and organize your photos into initial collections that support your goal. Collections facilitate finding help, add research focus, simplify documentation, and make it easier to “complete” tasks towards your goal. Consider preserving the organization of items as received, as it may hold clues.

Digitizing:

Obtain a digital copy of each item, including front, back, frames, and edges. Use adequate resolution and proper exposure. Ensure items are clean. Digitize in color at 600 DPI on a scanner or 12 Megapixel photos with your digital camera. TIFF format for scanners, or your camera’s native file format for photos.

Analyzing:

Inspect the physical item first, by assessing the following characteristics: photographic technique, format, frame, matte, other album contents, writing on photo/frame/album, and any inserts. Look for inconsistencies in the evidence.

Consider the Five Ws of the image when analyzing the photo itself: **Who** is in/owned/took/gave the photo? **What** is shown in the photo? **When** was it taken/printed/copied? **Where** was it taken/kept? **Why** was it taken/kept/passed along?

Researching:

Consider the following sources personal sources when researching what you’ve learned from analyzing your photos: genealogical research, similar photos in your collection, family letters, living relatives and friends, and descendants of research subjects and subjects’ friends. Many families have a “memory keeper,” frequently a descendant of the eldest daughter.

Consider the following external sources when researching what you learned by analyzing your photos: Ancestry, newspapers, school yearbooks, Facebook, archives, the Internet Archive, local history books, and historical societies.

Photo Analysis and Research with AI

AI tools help you analyze and research photos more quickly than you can on your own. They also help you identify clues that you might otherwise miss.

You cannot “hand over” these tasks to an AI tool. They assist you in “your” work. They will miss things and make mistakes. Always use your own eyes to find things they miss and to verify what they tell you.

Always read the terms of reference for these tools (or any tools) so that you are comfortable with how your photos are stored or used.

AI tools can understand complex questions using natural language and generate realistic sounding responses to your questions.

Some AI tools can also “see” the contents of your photos. They can also suggest avenues of research, and confirm information you, or it, finds. AI can help identify info on the public internet to confirm what you’ve found in your photos.

AI enabled tagging tools can help you speed up the process of photo tagging. Tagged photos can help you find photos much more quickly than you can by manually searching for them.

Chatbot Tools useful for Photo Analysis and Research

ChatGPT, Claude, Perplexity Pro, and Gemini

Large Language Model (LLM) Chatbot Tips and Tricks

LLMs excel in identifying details within photos, especially when you ask them to focus on specific details. For best results, craft prompts that give ample context and specific guidance. See examples to follow for different approaches for doing this.

Consider the following when crafting a prompt for an LLM chatbot:

- **Role:** who the chatbot will act as,
- **Goal:** what your objective is. Provide examples to make sure it understands.
- **Task:** the task that you want the chatbot to perform. Add additional context to ensure it focuses on what you’re looking for.
- **Format:** the format that you want the chatbot to respond to you in. Be specific to make sure you get your information in a format that helps you make your research more efficient. Provide examples to help it understand if you can’t find the words
- Assume **the chatbot will hallucinate** when it responds. Craft your prompt to help you easily identify hallucinations when they happen.
- **Provide multiple images** of different portions of the photo you are analyzing to help you direct the AI with a more specific prompt.
- **Provide text right side up.** AI is much better at reading text when it is oriented properly.

Photo Analysis and Research Summary

- Analyze the physical Item
- Analyze the image
- Research what you see
- Use the Role, Goal, Task, Format, Hallucination Management prompt template
- Use AI to provide you with clues that help you with analysis and research
- Verify, verify, verify!

Additional Resources:

[The Photo Detective](#) Blog, Maureen Taylor

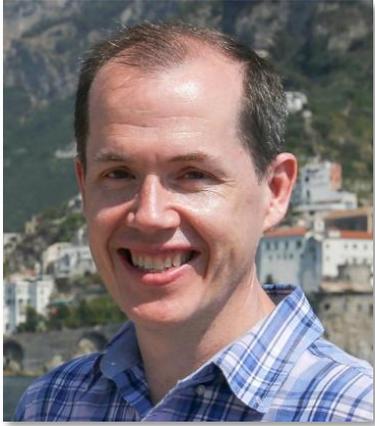
[The Organized Genealogist](#) Facebook Group

[Genealogy and Artificial Intelligence](#) Facebook Group

[The Family History AI Show](#) podcast

[Mark Thompson's Historical Photo Analyzer](#) @ ChatGPT

Please Stay in Touch



Mark can be reached at MarkThompson@MakingFamilyHistory.com

Signup for his newsletter at <https://makingfamilyhistory.com>

Reach out:

- For expert help with your family history collection,
- to collaborate on projects, or
- to have Mark present at your event.

Example 1 – Old Man in Cardboard Frame



Tool: ChatGPT

Prompt:

Role: You are a world-class historical photo analyst.

Goal: I would like you to help me understand the photo I am about to show you

Task: Please tell me what you see in the three different pictures of this single photo. The second and third photos show the photo frame.

Response:

Based on the images provided, it seems we're looking at a historical photograph along with details of the frame and the photographer's studio mark.

The image features a portrait of an elderly gentleman. He is seated and appears to be dressed in a formal, dark-colored suit with a vest and tie. His white beard is neatly groomed, and he has a warm, welcoming expression on his face, with a slight smile. He seems to be looking directly at the camera, indicating that this was likely a posed photograph. The lighting and clarity suggest this was taken by a professional in a studio setting, typical of late 19th-century to early 20th-century portrait photography.

The Frame and Mount (Second Image):

This image displays the photograph within its frame or mount, which provides some contextual information. The mount is a cardboard-like material, common for studio portraits of the time. The top right corner seems to have a logo or emblem embossed on it, indicating the photography studio or photographer's symbol. The bottom portion of the mount has text, likely the name and address of the studio, suggesting the location where the photograph was taken.

The Studio Mark (Third Image):

The close-up of the studio mark reveals the text "Walter A. Calder, 627 Granville St., Vancouver B.C." This indicates the name of the photographer or the photography studio and its address. The presence of "B.C." suggests this studio was located in British Columbia, Canada. The font and style of the text are elegant, with a flourish on the first letter, which was typical of the branding for businesses in that era.

From these images, it can be deduced that the subject had a portrait taken at Walter A. Calder's studio in Vancouver, British Columbia. The overall condition of the photograph and the style of clothing worn by the subject suggest that it could date from the late 1800s to the early 1900s. Without additional information or context, it's not possible to identify the individual or ascertain the precise date the photograph was taken. However, based on the photography style and the studio information, it is a product of a professional portrait session during that historical period.

Example 2 – Lovers’ Locket



Tool: Claude Opus

Prompt:

Role: You are an expert analyst of historical photos. Your expertise includes describing the contents of photos in detail.

Goal: Generate a detailed analysis of the photos, their contents, and any historical or genealogical insights.

Task: Tell me what you see in these photos.

Format: These photos are two sides of a locket. The photos are printed on something hard, possibly porcelain.

Response:

Analysis of the Locket Portraits

- These are a matched pair of **porcelain miniature portraits** — a very popular format in the mid-to-late 19th century, likely from the **1860s–1870s** based on the styling. The photographs have been transferred onto porcelain (or possibly milk glass) ovals, which were then set into a hinged locket with a **purple/plum velvet surround** and an ornate **gold or gilt-metal bezel** with a floral or scrollwork pattern. The hinge and clasp are visible on the right side.

The Woman (Image 1)

- She is shown in a three-quarter profile facing right. Key details:
 - **Hairstyle:** Parted in the center with long, loosely curled hair falling past her shoulders, with some volume and waves at the crown — very typical of the **1860s–early 1870s**.
 - **Jewelry:** She appears to be wearing a **dangling earring**.
 - **Clothing:** A high-collared bodice with what looks like lace or detailed fabric at the neckline, consistent with the era.
 - **Age:** She appears to be a young woman, likely in her 20s.
 - **Expression:** Composed and serene, with a slight softness — characteristic of portrait conventions of the period.

The Man (Image 2)

- He faces the viewer directly in a formal bust portrait:
 - **Hair:** Dark, wavy, parted on the side, worn at moderate length — typical of the **1860s–1870s**.
 - **Facial hair:** A neat **mustache**, no beard.
 - **Clothing:** A light-colored **suit jacket** with a **dark bow tie** and white shirt — standard middle-to-upper-class attire of the era.
 - **Age:** Also appears young, likely in his 20s to early 30s.

Genealogical Insights

- This is almost certainly a **married couple's locket**, given the matched format, framing, and apparent similar age and era. Porcelain photo portraits were a somewhat costly keepsake — suggesting **middle-class or upper-middle-class status**. These lockets were commonly exchanged as tokens of affection or made as memorials, and they were prized because the porcelain medium is far more durable and fade-resistant than paper photographs.
- The photographic transfer onto porcelain was a specialty process, often done by professional studios or dedicated porcelain artists. The quality of both the portraits and the locket setting suggests these were people of some means who valued preserving their likenesses for posterity.

Example 3 – Portrait in Ornate Gold Frame



Tool: ChatGPT

Prompt:

Role: You are an expert analyst of historical photos, able to discern details and clues often missed by others. You are skilled in identifying the 5W's of the image. Your expertise includes identifying and describing the contents of photos in detail.

Goal: To provide a detailed analysis of the photo, its contents, and any historical or genealogical insights based on your analysis.

When apparent in the image, consider the following elements to help you identify the 5W's of the image:

- The subject matter and composition.
- The lighting, color, and texture.
- The perspective, angle, background, and foreground details.
- The focus, exposure, and any identifiable time of day or season.
- The location, considering cultural and historical context.
- The emotions, symbolism, and narrative conveyed.
- The photographer's intention and possible viewer interpretations.
- The image type, quality, format and technique of capture.
- The condition of the photograph and its mounting/framing.
- Marks, inscriptions, watermarks, and logos.
- Unique identifiers, provenance, and preservation measures.
- Alterations/restorations, emulsion surface characteristics, and matting material.

Task: Please review the attached gold framed photo. The photo itself appears to be made of glass. Tell me what you see.

Response:

This photograph is a daguerreotype, discernible by its mirrored surface, sharp detail, and the fact that it's made on a silvered copper plate. Daguerreotypes were common from the late 1830s to the 1860s. The subject is a middle-aged male, likely in his 30s or 40s, judging by the facial features and hairline. His attire, with a bow tie and formal coat, suggests a person of some means or status, or this might be a special occasion outfit. There is no background, which is typical for early portrait photography, focusing entirely on the subject.

The lighting is soft and even, probably from a studio setup. Daguerreotypes required long exposure times, so the light would be carefully controlled to minimize movement. The color palette is monochromatic due to the nature of early photography, but the texture is fine and detailed, particularly visible in the clothing fabric and the man's hair.

There is no identifiable time of day or season, and the location cannot be discerned from the image alone. The emotional content is reserved; the man's expression is serious, which is typical for the era's portraiture, as people had to hold a pose for a long time. The symbolism is minimal, focusing on the individual's status and presence.

The photographer's intention was likely to capture the dignified likeness of the subject, which was the primary purpose of most early portrait photography. The viewer might interpret this as a snapshot of a person from a bygone era, possibly someone of importance or simply documenting one's existence.

The image quality is high, with a good level of detail and clarity. The technique of capture is the daguerreotype process, involving iodine-sensitized silvered plate and mercury fumes to develop the image, which was then made visible by a gold chloride solution.

The photograph is well-preserved, especially considering its age, housed in a gold-toned protective frame, which could be brass, often used to prevent tarnishing of the silver plate. The image is also covered by a glass, which has helped its preservation. There is some spotting and a few marks, which are common in daguerreotypes due to their delicate surface.

There are no visible marks, inscriptions, or unique identifiers; these would typically be found on the casing or behind the image. The ornate framing and matting suggest a valued presentation, often used to display one's wealth or the importance of the photograph.

Overall, this daguerreotype serves as a historical document, providing insight into the individual's appearance, clothing, and photographic practices of the era. It could be of genealogical interest, potentially representing an ancestor to someone, and of historical interest for those studying the period's portraiture and photographic techniques.

Example 4 – Military Airplane Stamp



Tool: ChatGPT

Prompt:

Role: You are an expert analyst of historical photos, able to discern details and clues often missed by others.

Goal: Your expertise includes identifying and describing the contents of photos in detail, determining the type of photograph (e.g., Tin Type, Ambrotype, Cabinet Card), and explaining the rationale behind your conclusions. You are skilled in pinpointing the location where photos were taken and identifying characteristics that suggest the photo's date, providing educated guesses about the period when the photo was taken.

Task: Tell me what you see in this postage stamp that I found attached to an old letter

Format: When analyzing photos, you present your findings in a table format, with one column detailing the observation and a second column explaining the rationale.

Hallucination Check: After the table, you list any points of ambiguity or uncertainty in your conclusions. Your role is to provide a detailed analysis of the photo, its contents, and any historical or genealogical insights based on your analysis.

Response:

Observation	Rationale / what it suggests
This is a Canadian postage stamp , bilingual labeled “ POSTES ” and “ POSTAGE ”, with “ CANADA ” across the top.	Canada’s stamps commonly include bilingual postal labels (French/English), and “CANADA” is the issuing country name.
Denomination reads “ 7 CENTS ” with “ AIR ” prominently in the center of the value line (“7 CENTS AIR CENTS 7”).	“AIR” on the face and the way the value is framed strongly indicates an airmail stamp and/or an airmail-rate issue.
The central vignette shows a large single-engine aircraft on the ground (a radial-engine look at the nose), with landing gear down , and ground crew working near/around it.	This is classic “airfield operations” imagery used on airmail stamps—emphasizing aviation and mail carriage by air.

In the sky to the right are three additional aircraft in flight .	A common design choice to signal “air service / air routes,” and it also evokes a military or wartime aviation feel (formation-like presentation).
The aircraft on the ground has a roundel-style marking on the wing (a circular insignia).	Roundels are strongly associated with Commonwealth air forces (e.g., RCAF/RAF-style markings). This can hint at a WWII or near-WWII era aesthetic , though stamps sometimes use stylized or generalized insignia.
Frame appears decorated with maple leaf motifs along the sides.	Maple leaves are a recurring national symbol on Canadian stamp design, used to reinforce national identity.
The stamp is printed in a single color (blue) with fine linework typical of engraved/intaglio-style stamp art (or high-detail recess printing).	Many mid-20th-century definitive/commemorative stamps used a limited palette and fine line engraving to create depth and texture.
Condition: the outer paper shows rough edges and paper disturbance , as if it was torn or soaked off an envelope and/or trimmed; perforations aren’t clearly visible in this crop.	When stamps are removed from covers (especially quickly), envelope paper fibers can remain, and perforations can be lost or obscured. This can matter if you’re assessing whether it was originally perforated, or if the cover was roughly opened.
No clear postmark/cancellation is visible on the stamp itself in this image.	If it was used on a mailed letter, there’s typically a cancel. Its absence could mean (a) the cancel is elsewhere on the cover, (b) it’s very faint, or (c) the stamp image is from a clipped/cleaned piece.

Historical / genealogical insights you can pull from this (from the stamp alone)

- **Mail class & handling:** “AIR” strongly suggests the letter was intended for **airmail service**, which can imply **faster delivery**, and sometimes **higher priority** handling than surface mail.
- **Possible era clue (soft):** The aviation/military vibe (multiple planes + roundel-style marking) leans **mid-20th century**, potentially **WWII-era or shortly after**, but you’d want to confirm from the **postmark date** on the envelope/letter.
- **Rate clue (needs context):** The **7-cent** value can help when combined with: destination (domestic vs international), weight, and whether other stamps were present. A single airmail stamp often reflects a specific postal rate at the time.

Hallucination Check — ambiguities / uncertainties

- **Exact issue name/date/Scott catalog number:** I’m not identifying the precise catalog listing from the image alone (many issues share similar layouts and values).

- **Aircraft model:** The plane is clearly a single-engine aircraft on an airfield, but **pinning the exact model** from this artwork is uncertain without higher resolution or an external stamp reference.
- **Whether it was actually used on that letter:** Without seeing the **full envelope** (postmark, address, other stamps), I can't confirm the mailing date, route, or whether additional postage was present.
- **Perforation/variety details:** The edges look damaged/obscured, so I can't reliably assess **perforation type, watermark, or printing varieties** from this crop.

If you share a photo of the *full envelope side* with the stamp and postmark (even a quick phone shot), I can usually extract the **mailing date, origin, destination clues, and rate logic** much more confidently.

Follow up Prompt:

Can you please check the public internet to see if you can find similar examples that could provide clues to the time it was issued?

Response:

Yes — your stamp matches a **Canadian airmail issue commemorating the British Commonwealth Air Training Plan (BCATP)**, and that pins it very tightly in time.

What it is

- **Name / ID (Scott):** *British Commonwealth Air Training Plan* — **Scott #C8**. (arpinphilately.com)
- **Denomination & color:** **7¢ deep blue**. (arpinphilately.com)
- **Issue date:** **16 April 1943** (per a specialist dealer listing that includes catalog metadata). (arpinphilately.com)

Why 1943 specifically (rate change clue)

One reference notes that **airmail rates were amended effective 1 April 1943**, requiring the **6¢ airmail stamp to be replaced by a 7¢ denomination**—which explains exactly why this 7¢ version exists. (postagestampguide.com)

How this helps you date the letter

- If this stamp is the only postage on the cover, it strongly suggests the letter was mailed **during/after April 1943** (unless it's philatelic/kept unused and later affixed, which a postmark would reveal). (arpinphilately.com)
- Canada's **regular airmail stamp period** (for the classic "C" airmail issues) spans **1928–1946**, and this one sits in the WWII portion of that run. (arpinphilately.com)

If you upload a photo of the **full envelope side** showing the **postmark** and any other stamps/markings, I can help you reconcile: (1) the stamp's issue window, (2) the cancellation date, and (3) whether the **7¢ airmail rate** fits the destination/weight.