

University of Montana

ScholarWorks at University of Montana

Mining the Internet for Metadata

Mansfield Library

3-30-2023

A. Introduction to the Collection

Robert W. Lankston

University of Montana, Missoula

Follow this and additional works at: https://scholarworks.umt.edu/mmp_metadata_research

Let us know how access to this document benefits you.

Recommended Citation

Lankston, Robert W., "A. Introduction to the Collection" (2023). *Mining the Internet for Metadata*. 1.
https://scholarworks.umt.edu/mmp_metadata_research/1

This Book is brought to you for free and open access by the Mansfield Library at ScholarWorks at University of Montana. It has been accepted for inclusion in Mining the Internet for Metadata by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

Mining the Internet for Metadata

Introduction

After I took my retirement benefit from a large company in 2006, my wife, Marian, and I moved from the big city to Missoula, where we had lived during my graduate school days 35 years earlier. Marian took a job at the Maureen and Mike Mansfield Library on the University of Montana (UM) campus where she worked for the next 10 years. During that time, I had consulting work, and I had opportunities to teach at UM for a few semesters.

I connected with the UM Department of Geosciences through my interest in archiving physical documents that related to the 1970 seismic survey of Flathead Lake. The seismic sections, track map, and handwritten notes had survived largely untended in the Department of Geosciences for over 35 years. The K. Ross Toole Archives at the UM library agreed to take custody of the surviving paper documents and to store them appropriately. Prior to delivering the documents to the Archives, I had each item scanned. The scans then became the starting point for a digital archive of the [1970 seismic survey](#) on the ScholarWorks platform at the UM library. This work introduced me to the field of digital archiving.

One of Marian's tasks at the library was cataloging scanned images of photographs in the UM photo collection. The images were being placed into the Montana Memory Project (MMP) digital collection. MMP was renamed as the Montana History Portal ([MHP](#)) in early 2023. The individual stories in this collection and the heart of this narrative were written during the days of the MMP, and I have not attempted to change references to MMP to MHP.

One day in March 2014, Marian sent me a simple request relating to an image that she was processing. "Can you help identify the location of photo umt011117?" Each image in the MMP collection that originated in the UM photo collection has a Local Identifier in the form of umt#####, where ##### is a serial number. If you are interested, you can use the MHP link above and then search for umt011117 to view the scene at the heart of that initial question.

Marian's requests for locations became regular. One request that resulted in a story in this collection was "which Missoula church is this?" Other requests related to dates such as "when was (*Missoula's*) Sentinel High School built", or "based on the cars, what is the approximate date of this photo?" The questions were posed with the hope that, with some research, aspects of the metadata for the respective photos could be improved. I suppose that Marian involved me because she knew that I was largely retired and that I had time on my hands. However, in reality, the library staff itself was too busy just with cataloging to do such research.

While questions such as those above seem straightforward enough, finding the answers in some cases led in unexpected directions. For example, the date for the construction of the high school was found easily enough, but the photo was not of Sentinel High School under construction. The library staff might have been able to find the high school construction date from quick internet searches. However, determining that the subject of the photo was not the high school and determining what the building under construction was took me a considerable amount of time. The church in the case mentioned above was not in Missoula at all, again, a case where a considerable amount of time was involved to rule out Missoula churches and to

find the church in another western Montana town. The stories of the research trails for these two photographs and for a few other cases can be found in the accounts on this site.

Occasional inquiries from Marian in early 2014 grew to a steady stream of inquiries, and I formalized a relationship with the UM library as a volunteer. As I saw the pattern of requests that I was getting, i.e., dates, locations, people, and so forth, I began recognizing metadata issues on my own when I would open an MMP photo as part of my research on some other photo. In such cases, I would note the image's Local Identifier on a tablet on my desk. I would return to study that photo when I had time to do so. By the time that I stopped doing the research in 2020, I had a list on my tablet of 100 or more Local Identifiers of images for which I thought that I could suggest an improvement or an addition to the existing metadata.

I continued as a volunteer until sometime in 2020 when the library staff had shrunk to a point that it no longer had the resources to process my inputs. Marian had retired from her position at the library by then, but she continued as a volunteer herself. She slowly worked through the outstanding backlog of my inputs.

As a volunteer, I did not actually make edits to the archive. I simply provided suggestions for modifying the various fields in the metadata for the respective images. The library staff would determine what from my input to add to the metadata for any one photo. Had I been trained in the philosophies and procedures for making edits to the MMP archive, I might still be reviewing images and, possibly, adding to this collection of stories. During those six or seven years that I was actively studying the photos, though, I provided comments on 300 or more photos, and I looked at, perhaps, twice that many more in the MMP collection. In many cases where elements of my inputs were incorporated, the cataloger would include my input as a "Library Note" in the Description metadata field.

As of this writing, the UM library has loaded more than 7000 scanned photos from its physical collection onto the MMP site. The potential for much more metadata research would seem to exist.

My Sources of Information

As the title of this collection suggests, my main source of information was the internet. An internet search will usually turn up some textual material in Wikipedia. An internet search might be something such as "when was Sentinel High School built?" In researching images of automobiles and train locomotives, I often chose the Images option for the links returned by the search engine. For example, I could search on "1951 Hudson", select Images, and see many photos of 1951 Hudson cars ranging from rusting away hulks to shiny restorations. I often could find a view of an automobile in the online images in which the automobile was oriented in a way that was similar to the orientation of the car in the image on which I was doing research. That helped me in resolving subtle differences in features such as grille, taillights, and so forth that tended to vary from one model year to the next, i.e., an aid to setting the Date field.

I used Google Earth, Google Maps, and Google Street Views for resolving locations. Of course, the Google Street Views were made within the last few years. Sometimes, however, a Street View is clear enough to simulate the view of the historic photo being studied. I call using Google's Street View "driving my Virtual Car". Do you remember the question above about the church in Missoula? I found the location during a drive of my Virtual Car right to the spot where the photographer actually stood across the street from the church in question.

Google Earth views provided my “Virtual Airplane”. I used my Virtual Airplane for flying above city streets and rural roadways, railroads and railroad scars on the land, and rivers. I could often relate modern Google aerial views in cities or towns to building outlines in online Sanborn Fire Maps. The Sanborn Fire Maps are an amazing resource for resolving building locations and street names from the late 19th century until well into the 20th century for even small towns in Montana. The maps show building outlines and general construction style, e.g., frame versus brick. Porches on the buildings, both residential and commercial, are also indicated in the Sanborn maps. I have often used an aerial Google view to look at the roof of a 100+ year old house. Sometimes, I see the exact same roof outline in the modern aerial view, including the porch, as in an old Sanborn hand-drafted map. As fire insurance maps, the Sanborn maps show the locations of fire hydrants. A feature in a photo of the Eddy, Hammond and Co. store in Missoula can be correlated to the location of a fire hydrant in an 1880’s Sanborn map as I note in one of the stories in this collection.

Another map source that is useful is the US Geological Survey (USGS) online collection of historical topographic maps. A map in that collection played a role in the story that evolved from the question “when was Sentinel High School built?” Often useful features on the old USGS topographic maps are the locations of highways before the interstate highway system was built and the locations of now abandoned railroad alignments.

Finally, the Montana Memory Project collection itself was a source of information. Sometimes, a particular photographer took more than one photo of a scene. In responding to a request about one photo, I occasionally came across another one in the photographer’s series of shots, and that other photo might have had a valuable clue. For example, the metadata itself in the other photo might have been more complete, e.g., the exact date was given. The second scene might have been from a slightly different angle such that a recognizable topographic feature, a building, or a piece of machinery was in view in the frame. I illustrate that approach in one of the stories in this collection. Many such MMP searches provided no clarification for a photo under study. Such fruitless MMP searches, however, often identified photos for which I wanted to do additional research, as I mentioned above.

While most of my research was through internet resources, in resolving some locations, I would actually take field trips to study the site for myself and to study viewing angles that Google Street Views did not provide. I traveled all through the neighborhoods around Missoula’s Sentinel High School on my bicycle in trying to find the spot at which the old photograph was taken. Of course, I never found the spot because the photo was not of the school under construction. I ultimately drove my real car to the location where the photo was actually taken. I made road trips to several other places in western Montana trying to resolve a location. These, in general, were locations where Street Views did not exist, i.e., rural areas. I also visited or communicated with docents at county museums and with other local experts, and I am grateful for the help that those people provided.

An important point to reiterate here is that I just did research. I provided input to the UM library faculty and staff, and they sorted out how much of my input was of value for inclusion in the metadata for the respective images. Updates to the metadata were made by the library personnel.

The accounts of my research published on this site attempt to give specific examples of the sources that I used to try to improve the MMP metadata entries. In a few cases, the research that specifically related to metadata of a photograph turned up a sidebar story that I include

here. One such sidebar story relates to a young girl who lived a few miles northwest of Helena in 1890 and who received a free subscription to a children's magazine of the day. She happened to be at the right place at the right time. The place was a railroad junction on the H&N Railroad. A locomotive on the H&N railroad was actually the original target of my research. I discovered the girl's good fortune from hits on an internet search that referenced the railroad junction where the girl lived.

The stories in this collection about my research are not intended to be the final word on the respective photos. Feedback from viewers that could provide additional data is welcome. Such feedback can be directed to me, and the MMP website itself has instructions for how to provide feedback to the professional staff. To be sure, if you find broken links, please contact me, and I will endeavor to repair them. In 2021, the Montana State Library, which controls the Montana Memory Project, completed the migration of the digital collections to a new platform. I have tried to change the original MMP links in the various stories to the new URL's, but I may have missed some. The URL's did not change with the name change from MMP to MHP in 2023.

Each account in this collection includes the link to the image in MMP that is at the heart of the story. The Local Identifier for the respective image in the MMP collection is also given. Other links to MMP, the USGS, university and high school yearbooks, and so forth may also appear. In reading my research accounts, you might find that using a computer with two display screens or a single wide screen monitor is helpful, i.e., one screen or half of a wide screen to display the text of a story and the other screen or other half to display a large version of the subject photo.

In closing, I thank the faculty, staff, and volunteers at the UM Maureen and Mike Mansfield library for complementing my photo research efforts through the 2014 to 2020 time period.

Bob Lankston

March 23, 2023