

Lost and Fo(u)nd map and visual literacy in the archives

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If you were given the opportunity to assist researchers, students, or your local archive/special collections in determining the geographic location of documents, images, or other objects....how would you go about doing it? This presentation, using examples from the York University's Archives and Special collections provides information about how to: (1) geo-locate photos, documents, and other collections (2) tools and resources you can use to geolocate and map your digital collections, and (3) tips and best practices that you can implement in your own geolocation projects. The goal: to improve access to digital collections via a map interface.

What **features/clues do you see on the image**
that can assist in determining the geographic
location of the image?

What **online tools, print and digital resources**
would you use geo-locate this image?

There are several images from the Clara Thomas Archives and Special Collections in this presentation. Closely examine the image and try to answer these two questions: What **features/clues do you see on the image** that can assist in determining the geographic location of the image? What **online tools, print and digital resources** would you use geo-locate this image?

We have over 6000 oblique aerial photos with minimal descriptions!

STARTING OUT IN DEEP WATER

Each new librarian at York University gets to tackle a project at the Clara Thomas Archives and Special Collections at York University. I got a sense of this at my job interview when I was asked how I would determine the geographic location of a large collection of oblique airphotos of Southern Ontario. It seemed simple at the time, but due to the size of the collection and the way it was described, I realized that it was going to be a challenge and I was up for the challenge.

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Title: Baxter [Ontario]. August 8, 1998.

Source: Lou Wise Fond. Clara Thomas Archives and Special Collections.

URI: <http://hdl.handle.net/10315/10439>

This is an example of the a photo from the Lou Wise Fonds. Lou Wise is an amateur pilot who took photos of conservation areas, wetlands and at-risk natural areas in Southern Ontario. The Lou Wise Fond contains over 6000 photos. The staff at Archives and Special collections scanned the photos, entered a metadata record containing the description that Lou Wise provided, and the photos were loaded into our digital library. This is an example of one of the photos we have in our collection. It has a brief description of the approximate location and the date in which it was taken.


What features/clues do they see on the photo that can assist in determining the geographic location of this photo?

Answer: "Baxter" as a place name, River/water body, Woodlots, Roads, Airfield, "long-lots" similar to those in Quebec may indicate that it is in Eastern Ontario.

What tools/resources would you use geolocate this photo? Answer: We did a Google Search for the terms, "Baxter" and "Ontario". One is a hamlet near Barrie, the other is a conservation area. We refined our search in Google Maps and Google Earth, by comparing the features in the photo with the aerial imagery provided by Google. We were able to narrow it to the Baxter Conservation Area on the Rideau River.

Once you are certain of the geographic location, you can easily retrieve the latitude and longitude coordinates of the photo from Google Earth or Google Maps.

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Description
Oblique aerial view of Baxter

In collections
• Lou Wise fonds

Details

Title:	Baxter
Creator:	Lou Wise
Type:	still image
Genre:	Photograph
Subject(s):	Aerial photography Air photos Aerophotos
Collection:	Lou Wise fonds, P0209

Collection description:	http://archives.library.yorku.ca/fonds/CN00370-0000539.htm
Date:	1990-08-08
Date:	1990-08-08T00:00:00Z
Date:	2008-11-19
Date (added):	2013:11:28 12:11:41-05:00
Location:	2008-037 / 001 (B)
Resolution:	3200
Width (px):	4191
Height (px):	2869
Image orientation:	normal*
Colour space:	RGB
Note:	Google Maps: http://maps.google.com/maps?z=12&26cm%26q=loc:45.098211+-75.624853 Open Street Maps: http://www.openstreetmap.org/?map=45.098211&62cm=-75.624853&26cm=15
Note:	Image is situated at 45.098° North (Latitude), 75.625° West (Longitude).
Identifier (local):	ASC20240
Identifier (MD5):	3244056856a578aaa8ad942510582a0f
Identifier (hdl):	http://hdl.handle.net/10313/10438
Identifier (other):	BAWG0005
Municipality:	Ottawa
Region:	Rideau Valley Conservation Authority
Province:	Ontario
Country:	Canada
Continent:	North America
Coordinates:	45.098211, -75.624853
Rights/Usage:	Copyright of images owned by Lou Wise. Geo-spatial data and KML files generated by YUL staff is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License. For further copyright and contact information email: awg@yorku.ca

- **Geolocated the photo first**
- **Used a GIS to do metadata enhancement**
- **Used Google Sheets for Project and Data Management**

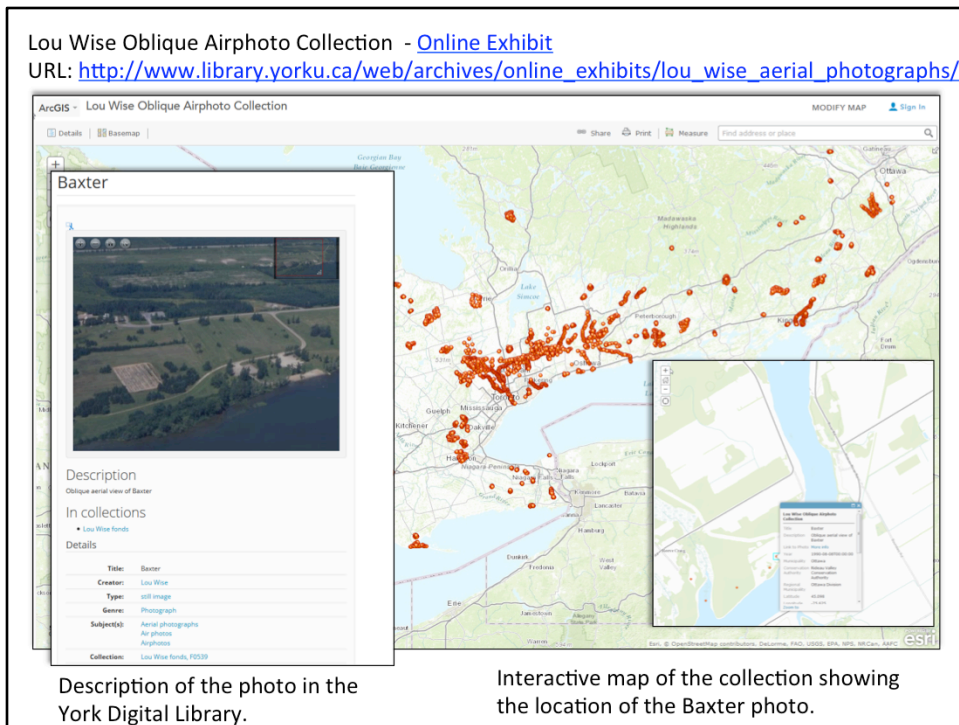
Digital Library Platform:
dSPACE (initially), Islandora (at present)

Metadata Schema: MODS

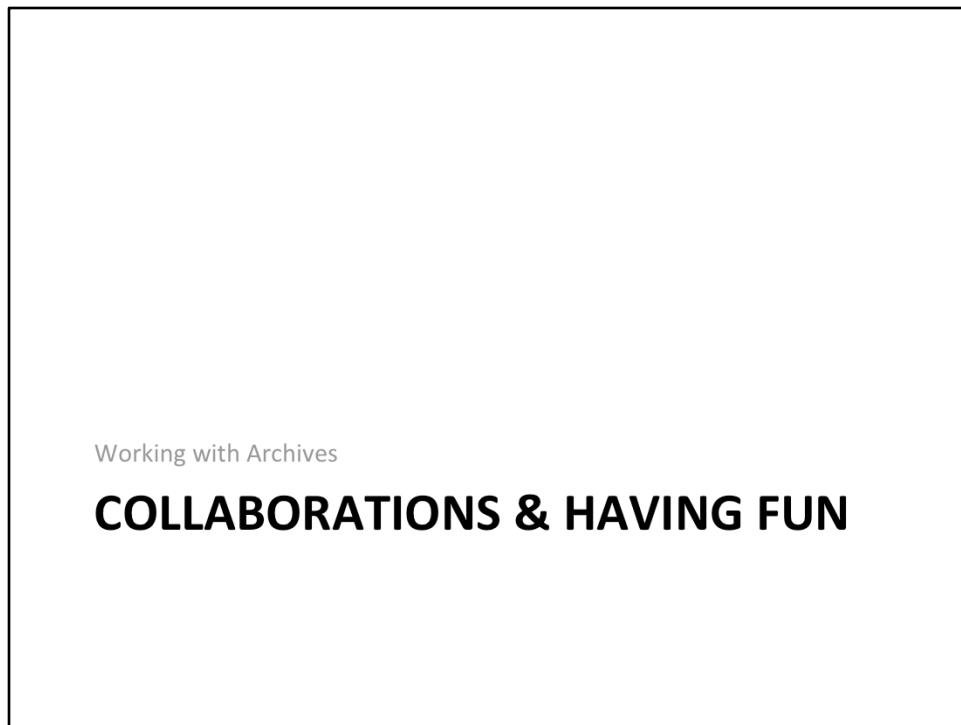
We had our student staff in the Map Library assist us; I trained them how to do airphoto interpretation and try to find corresponding geographical features on a vertical image. When you have the latitude/longitude of a batch of photos, you can enhance the metadata. Using a GIS, we correlated the latitude/long of each photo, with the shapefile layers for the boundaries, and we were able to determine automatically the Conservation Authorities, Regional Municipalities, and Municipalities for each photo. We also determined lat/long urls for Google Maps and Open Street map so that the viewer can see where the photo is located on a map. All of this metadata was entered ingested into our digital library either as batch loads (when possible) or editing of pre-existing metadata records.. At York we used dSPACE, later migrated to Islandora as our digital library platform, and MODS as our metadata schema.

This was a multi-year project and it was the first geolocation project we tackled. Due to the large number of the photos, sparse description of the photos, and minimal staff time and funds to geo-locate the photos, it took over 3 years to geolocate the photos and migrate the photos to the new repository. It was well worth the effort.

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Anna St.Onge (Archivist at York University) and I created an webpage about the collection [http://www.library.yorku.ca/web/archives/online_exhibits/lou_wise_aerial_photographs/]. The webpage provides information about Lou Wise, background information about the collection of airphotos, and different modes of access to the collection: (1) search by place name in the York Digital Library (2) browse by Municipality, Regional Municipality and Conservation Authority in the York Digital Library, and (3) Access the photos via an interactive map. Janet Neate (Map Library) created the interactive map in ArcGIS Online, which allows the user to zoom into a part of Ontario, click on a location, and link to the photo and description in the digital Library.



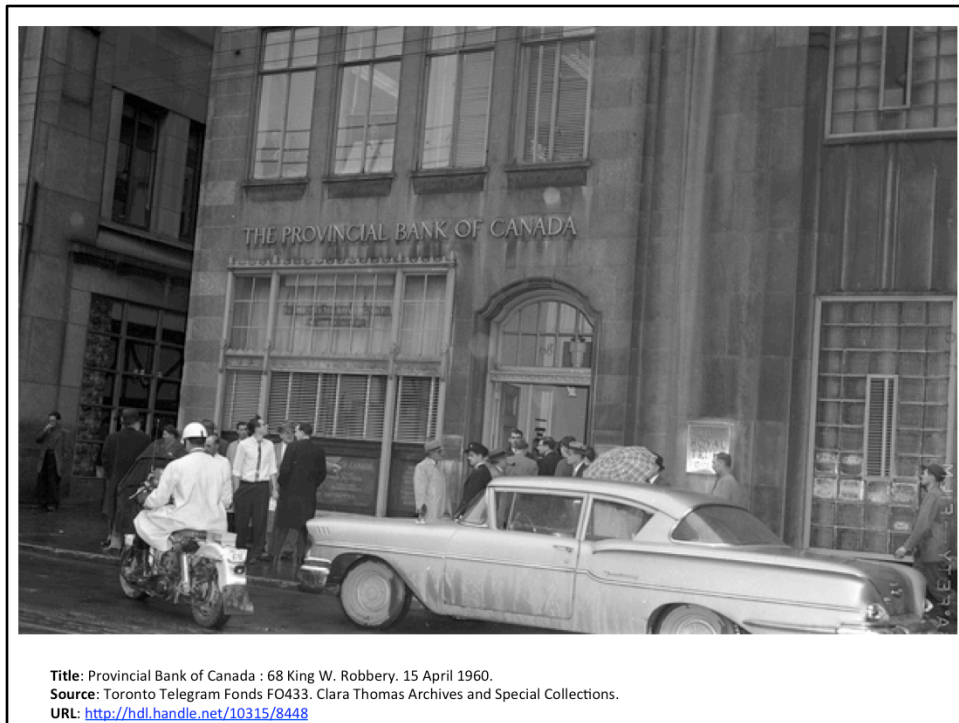
Well into the Lou Wise project, I started working closely with my colleague Anna St-Onge (the Digital Outreach Archivist). She was excited about what we were doing. We decided to explore different tools and methods that archivists and librarians can use to display geo-located photos. Before we started, we had to geo-locate some photos. She suggested that we start with photos that are part of the Toronto Telegram Photo fond.

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the Archives





We started with her favorite photo: “Bad order pix at A. R. Clark Tannery”, depicting four children in swimming suits, walking down a street while holding their noses. 20 minutes later, we were still trying to find out where the photo was exactly taken....

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So we changed our course. We decided on Telegram photos of bank robberies, which there were many! The advantage, the slides/photos were annotated by the Telegram photographers and the notes contained street addresses for many of the bank robbery locations. In this case, the photo has the address 68 over the door, including the bank name, you can “date the photo” by the car and the motorcycle. The photographer provided a brief note about the date and the street name. If you do a search for the street address 68 King Street West, in Google Maps, you will get a match. You can also verify in Google Streetview if the building still exists today.

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Title	Description	Address	Collection	Series	URL	Photo
[Canadian Imperial Bank of Commerce] 199 Yonge Street, Toronto, Ontario	Image of crowd standing outside 199 Yonge Street branch of Canadian Imperial Bank of Commerce	199 Yonge Street, Toronto, Ontario	Clara Thomas Archives and Special Collections	Toronto Telegram Photographs	http://hdl.handle.net/10315/7026	
Royal Bank of Canada Bloor and Lansdowne Bank of Canada	Image of group of men standing inside the Bloor and Lansdowne branch of Royal Bank of Canada	Lansdowne and Bloor, Toronto, Ontario	Clara Thomas Archives and Special Collections	Toronto Telegram Photographs	http://hdl.handle.net/10315/8517	
[Canadian Imperial Bank of Commerce] 2 of women	Image of photograph No. 2 of women					

Spreadsheet with photo metadata and locations in Google Fusion Tables

Provincial Bank of Canada : 68 King W. : Robbery [not used]



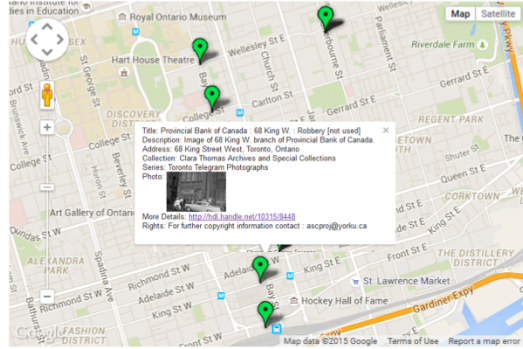
Description
Image of 68 King W. branch of Provincial Bank of Canada.

In collections
Toronto Telegram

Details

Title:	Provincial Bank of Canada : 68 King W. : Robbery [not used]
Alternative Title:	68 King [West]
Photographer:	Cooper
Creator(s):	Toronto Telegram
Publisher(s):	Toronto Telegram
Type:	still image
Genre:	Documentary Photography
Subject(s):	Toronto Telegram Banks Crimes Robberies
Collection:	Toronto Telegram fonds, R5633

Description of the photo in the York Digital Library



Interactive Google Map, showing locations of Bank Robberies

We used Google Fusion to do the “address matching”. Google Fusion (and Google Mapmaker) can generate a point map of locations based off of street addresses, postal codes, and latitude and longitude coordinates. From this table, you can generate an interactive map, as seen in the slide above. Each point represents a bank robbery and you are able to click on the point, and get a brief description of the photo. From there, you can click on the hyperlink which leads you to full description in the York Digital Library.

If the street address wasn’t provided in the photo description, we would do a Google Search for key terms such as the bank name or the street name, if that failed we would do a search in a print Toronto Street Directory for the branch locations of the bank so we can verify the exact location.

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We also wanted to communicate to our colleagues in the archival and library community how easy it was. We presented at the OLA conference in 2013. We also created a website “Geolocating Research Resources for Beginners” that compares several tools and coaches individuals on how to geo-code. We compared Neatline, History Pin, and Google Fusion. Website: <http://ascmap.blog.yorku.ca>

the obsessive compulsive problem

**VANISHING AND OBSCURE
LANDSCAPES**

When you start working with historical photos that are streetscapes and rural landscapes, you have to interpret the image and pay close attention to the metadata for the photos. You may have to go beyond “Google Map” to get a match. You also have to set limits as to how long you will spend on a photo, the best practice we established in our geolocating projects is 10 minutes. if you can’t find it in 10 minutes, go on to another one, and revisit the hard ones later.



A few years ago, the Archives and Special Collections received a donation from a retired Geography professor, John Warkentin. The donation consisted of slide photos of places in the Prairie Provinces (predominately from Manitoba) that he identified as being at risk of disappearing in the 50s and 60s.

The students whom we hired to scan and geolocate the airphotos were not from Manitoba (nor had they visited Manitoba), nor did they have a geography background. Before I started training the students, I immersed myself in the collection to get a “feel” for the collection, I geolocated several photos that were good representatives of the collection. I determined what were the best resources to use. When I got a hang of it, I wrote up guides for the student staff and trained them on how to geolocate the photos.

For this photo, what clues/features are available ?

Answer: The metadata had a clue, Township Range Section address, which is the following: "NE 28-2-7 W". 28 represents the Section. NE indicates that it is the North East corner of the Section. 2 = Township. 7 = Range. W indicates that it is west of the 1st meridian. The notes also indicate that it is near Darlingford (Manitoba). With the “rural” address, it makes it easier to locate the photo.

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Land Parcel Information Search URL: https://www.masc.mb.ca/masc.nsf/land_parcel_info.html

Search by Square Section

Quarter: NE Section: 28 Township: 02 Range: 07 Meridian: W

Search Reset All

ITA = Insurance Test Area

View Land Parcel in Google Maps	Soil & Risk Area	Forage Region	EMIL	Canola Area	Soybean Area	Bean Area	Lentil Area	Sunflower Area	Grain Corn Area	OP Corn Area	Silage Corn Area
NE 28-02-07 W CS	CS	Yes	1	Yes	1	2	2	1	1	2	1

Note: The Land Parcel Information tool is for information purposes only. For insurance programs, an insured shall be bound by the applicable Confirmation of Insurance issued by the Corporation.

Result of the search in the Land Parcel Information Service

Interactive Map in York Digital Library showing the location of the photo

What Resources we used?

For the photo on the preceding slide, we used the Government of Manitoba's, Land Parcel Information Search https://www.masc.mb.ca/masc.nsf/land_parcel_info.html. This service allows the user to enter the Township, Range, Section Quarter Section, and meridian to determine the approximate location of the photo. Similar tools are available for Saskatchewan and Alberta.

Geolocating Resources

- Street Directories
- Historical Society Websites
- Local Archives
- “Local History Books”
- Historical Atlases
- HistoryPin
- Google Earth
- Google Image Search
- Fire Insurance Plans
- Airphotos (for places that no longer exist)
- Property Data Plans
- Township Range Section Locators
- Topographic Maps
- And much more

For landscapes that have vanished, there are a variety of documents and resources you can use to determine the geographic location of images and documents. My personal favourite is the Google Image Search and also using Fire Insurance Plans for buildings that no longer exist. Other resources we have used for areas in Ontario and Manitoba are, historical Street Directories for cities, Historical Society Websites, Local Library websites, Local History books, Archive websites, scanned historical maps, print historical atlases, fire insurance plans, older aerial photos (especially useful for places that no longer exist), property data plans / detailed city maps with building footprints, and historical topographic maps. Google Maps, Google Earth, and websites such as HistoryPin are also very useful.

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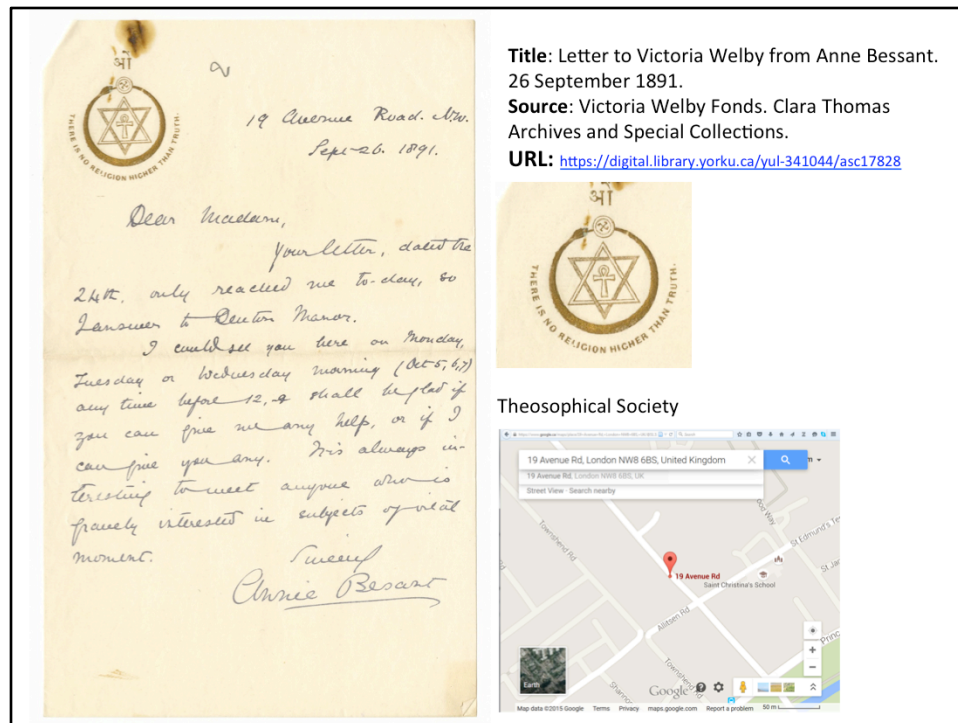
These are two photos of houses on Edmonton street in Winnipeg that no longer exist. Today, these house are replaced by government buildings, office buildings, parking lots, and apartment buildings. For difficult images such as this, we were unable to determine the precise location of the photos. Instead, we apply a default latitude and longitude coordinates for all of the “Edmonton Street” photos, and indicate in our metadata that it is an approximate location. This is how it appears on our interactive map that is part of the York Digital Library (Islandora instance).

working with researchers

DIGITAL HUMANITIES & RESEARCH

The geolocating of research objects isn't isolated to photos, it can also be applied to text based documents. My colleague Anna realized the potential for the digital humanities, and she has applied it to her own research project.

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This letter is part of research project conducted by Anna St-Onge. What clues are in the metadata and the letter? Answer: There is a street address, but it doesn't narrow down what city it is located. The slogan around the logo provides some clues. A quick search of the slogan and an image search of the logo provided confirmation that it was letter head from the Theosophical Society. A website was found that provided a short summary of the the history of the Society. The website indicated that the headquarters in the UK was in London, 19 avenue road. This is a match! To further confirm it, we used Google Maps and Google Streetview (depicted the street address on the building) to determine the precise location of the building.

For Anna's project on the Welby Found, she hired a student to digitize and scan the photos. I taught the student how to geo-locate letters and documents from England and France in 1890s. For this fond we have used extensively the AtoZ book of Victorian London, other London maps and online maps of Paris.

Informally, I have assisted several researchers on campus with the geo-location of their research objects. I am part of an advisory committee on digital projects for researchers at York, so when opportunities arise, I can provide guidance to researchers on how to geo-locate digital objects. To date, I have yet to assist a course in the geo-location of the objects, but it is just a matter of time.

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Now back to the stinky photo.

Any clues???? Answer: The name of the Tannery is the big clue. A quick internet search indicates that the Clark Tannery was at the corner of Eastern and Pape avenue. The Tannery complex has been demolished since the photo has been taken. This photo is tricky because the children may be near the Tannery. The building in the rear of the photo may (or may not) be the Tannery. We searched online for photos of the Tannery building and there were none, but we did find a drawing which shows the form of the building (giving us a positive match). Based on the landmarks, we can say that the photo is situated on Eastern avenue about 2 -3 blocks east of Pape Street in Toronto.

Thank you!
QUESTIONS?

In summary, this presentation has provided information on how to geolocate photos, what resources and tools you can use, and provides a few tips/best practices you can use in your own shop. As map and GIS experts and professionals, we have a unique set of skills and abilities, that can be of help to our colleagues and researchers at our own institutions. I hope this presentation inspires you to adopt a local digital collection or inspires you to assist researchers in geo-locating their digital objects. Most important... have fun!

Questions ?

Any questions?