The Digitally-Literate Historian: A Workshop

Ian Milligan (University of Waterloo)

Static Slides for this Workshop

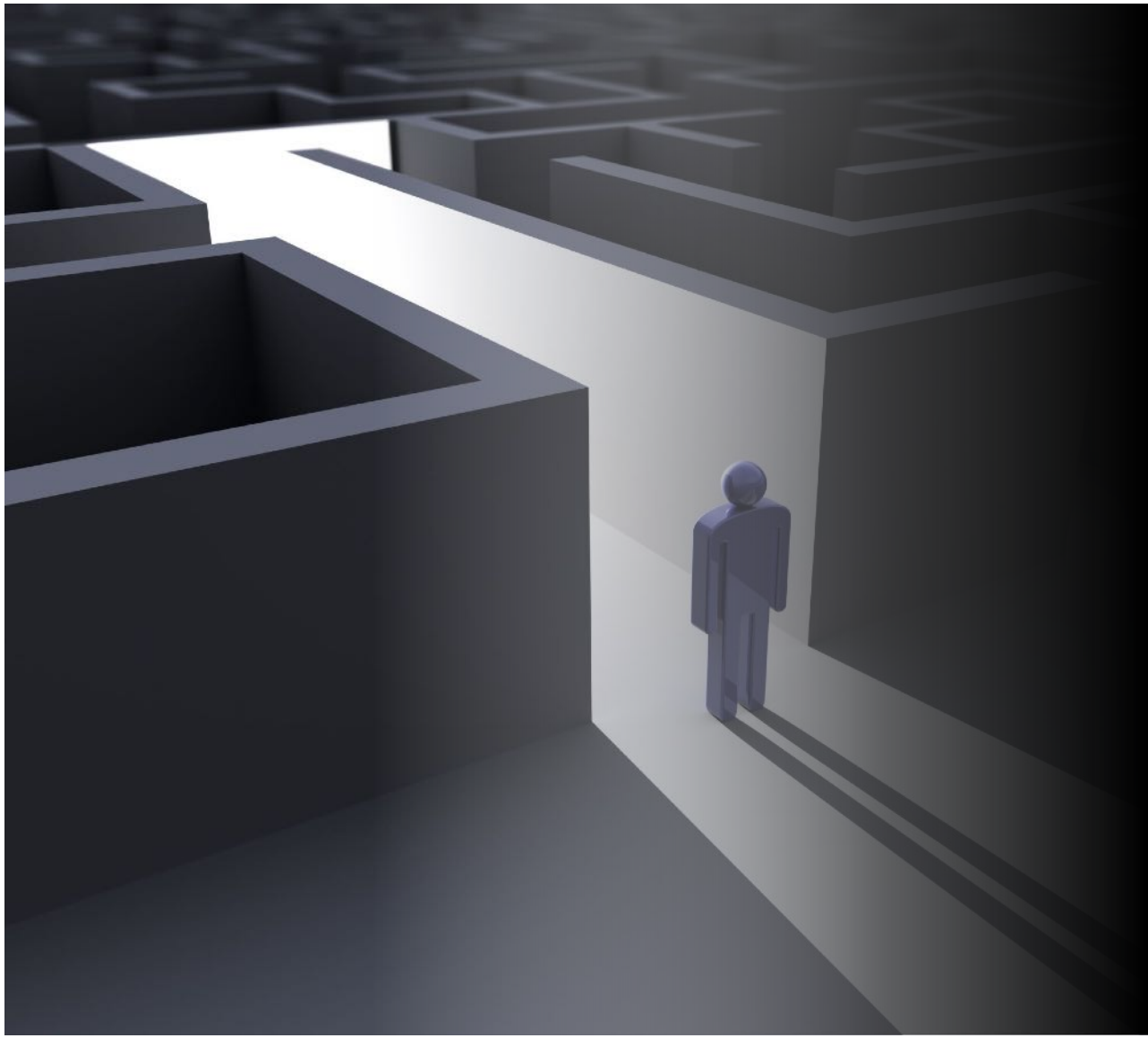
- https://www.ianmilligan.ca/files/queens-workshop2.pdf
- **I will drop them in the chat!**

Who am I?

- BA, Queen's (2006); MA, PhD York (2007; 2012)
- My chronology spans a few different periods
  - Microfilm in the basement of Stauffer Library
  - Archival photography was forbidden during my first visit to Library and Archives Canada as an undergraduate; common by the time I did my PhD
  - From social history to digital methods (and back again!)
- I use infrastructure as a historian but also **build infrastructure.**

Who are you?

- I see lots of familiar faces (note I am speculatively writing this assuming that some of you came back!)
- For the new folks this week!
  - Name, place in the program
  - How many primary sources have you read on the Internet?



Plan for the Workshop

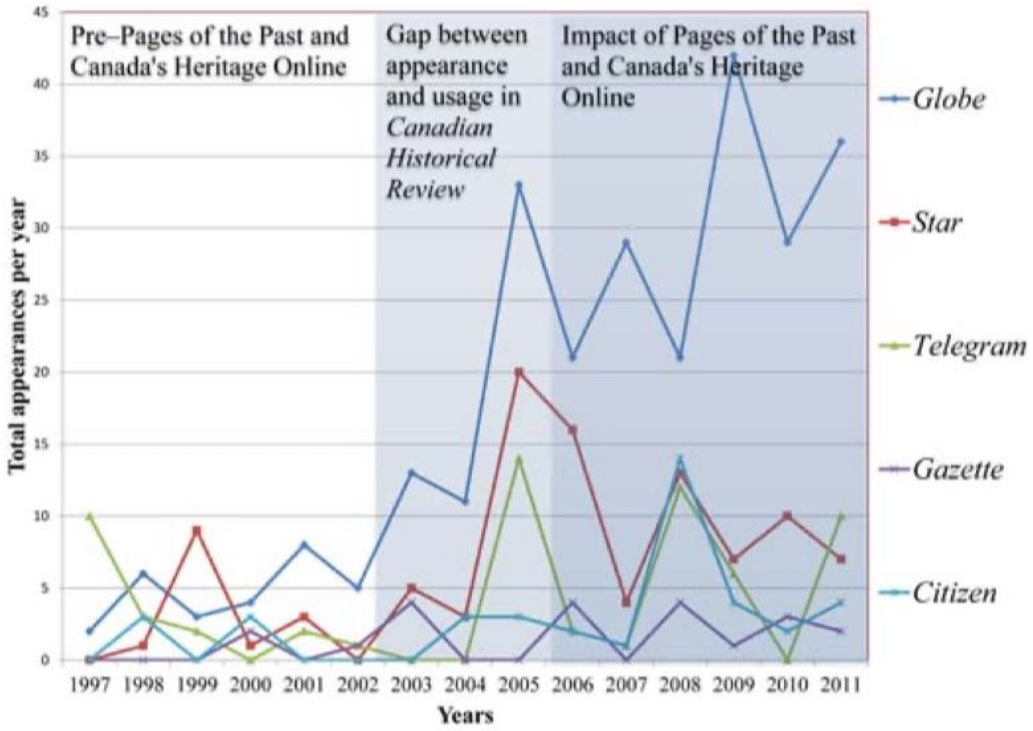
- A series of conversations and exercises to explore the **core question** of “how is historical knowledge mediated and accessed in the digital age?”

Readings

- Tim Hitchcock, “Confronting the Digital: Or How Academic History Writing Lost the Plot,” *Cultural and Social History*, vol. 10, issue 1 (2013): 9-23.
- Lara Putnam, “The Transnational and the Text-Searchable: Digitized Sources and the Shadows They Cast,” *American Historical Review*, vol. 121, issue 2 (April 2016): 377-402.
- Ian Milligan, “We Are All Digital Now: Digital Photography and the Reshaping of Historical Practice,” *Canadian Historical Review*, vol. 101, issue 4 (December 2020): 602-621.

Primary Sources

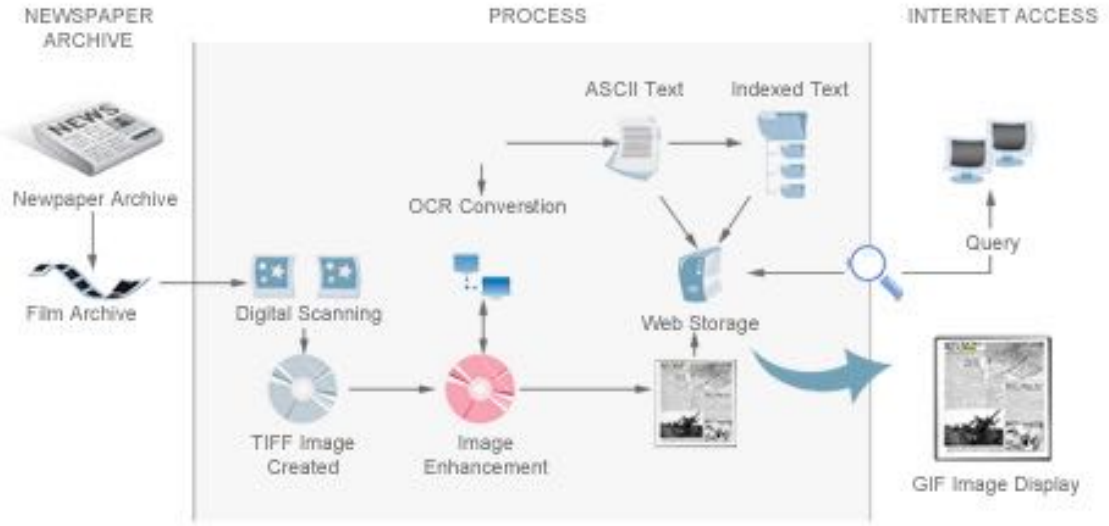
Digitization



- Some of you read my 2013 article “Illusionary Order” in the *Canadian Historical Review*
  - (Wow, I think, my writing style has improved since 2013)
- As things are digitized, and other things aren’t, our citation practices change accordingly.

Anatomy of a Digitized Newspaper: *The Toronto Star*

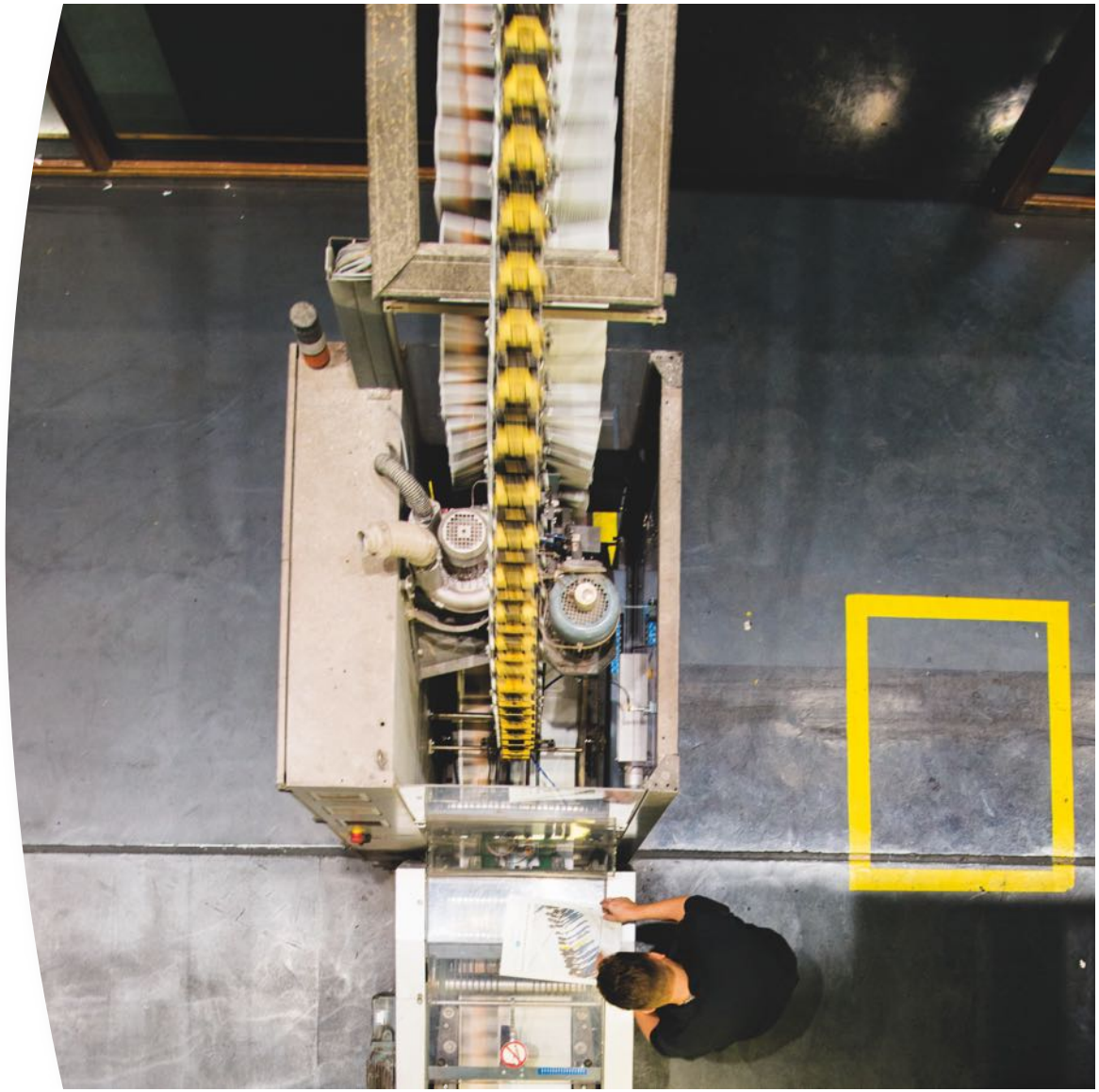
- Digitized by Cold North Wind's "**Paper of Record**" project
  - "Conceived by electronic publishing and web pioneer, R.J. (Bob) Huggins in a local Ottawa, Mexican restaurant in 1999" (their official history)
  - Forward thinking: in 1999 broadband wasn't widespread, but was necessary in an environment to access scanned GIFs



https://paperofrecord.hypernet.ca/default.asp

First movers!

- To the best of my knowledge, the *Toronto Star* is the first newspaper in the world to be digitized in its entirety; the *Globe and Mail* was second and *New York Times* third.



Anatomy of a Digitized Newspaper: *The Toronto Star*

- Paper of Record has troubles
  - ProQuest initially a big investor, then becomes a “Former” investor;
  - Partnership with LAC falls apart in 2003;
  - Google finances them and uses it as launchpad as part of the **Google News archive** (2008-2011)
    - Google gave publishers free access to their scanned files as part of its collapse
- Now accessed via **ProQuest** (which is itself an evolution of University Microforms, and is now sadly neglecting its microfilm collection)

(I couldn’t find an old *Toronto Star* interface screenshot!)

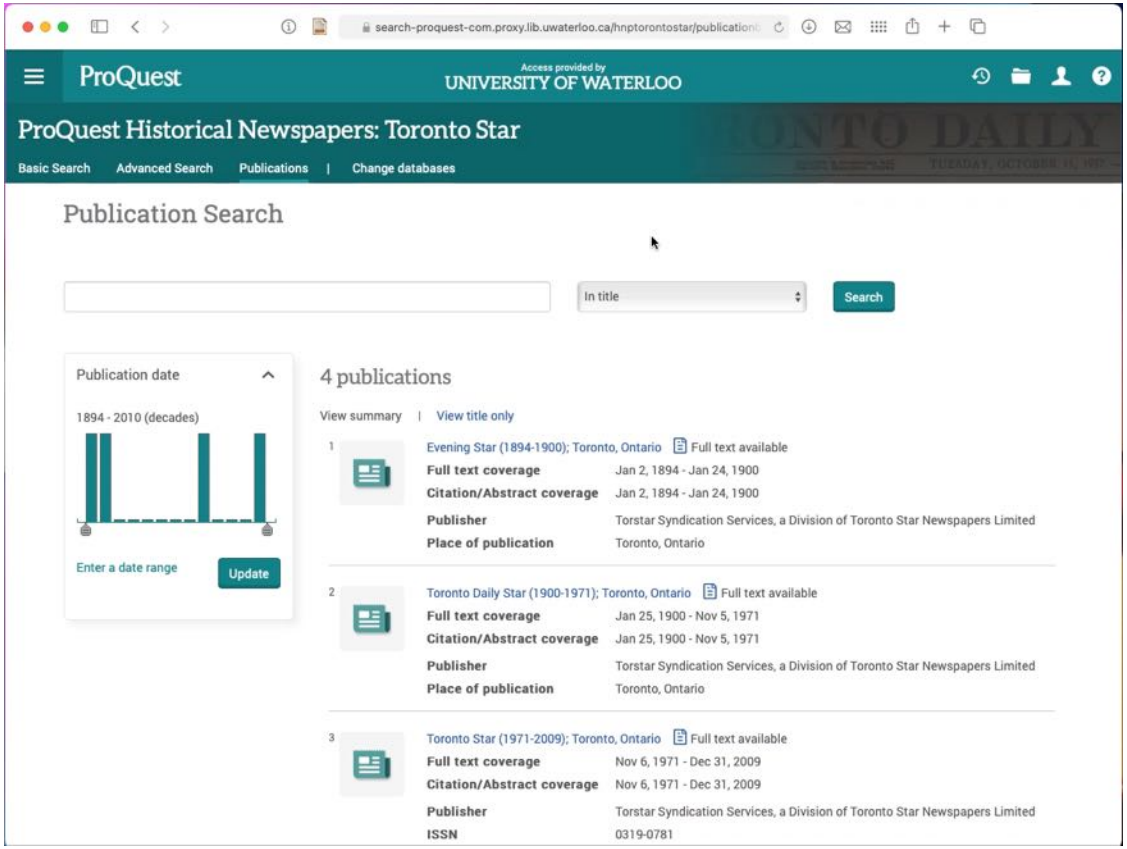
Some initial thoughts

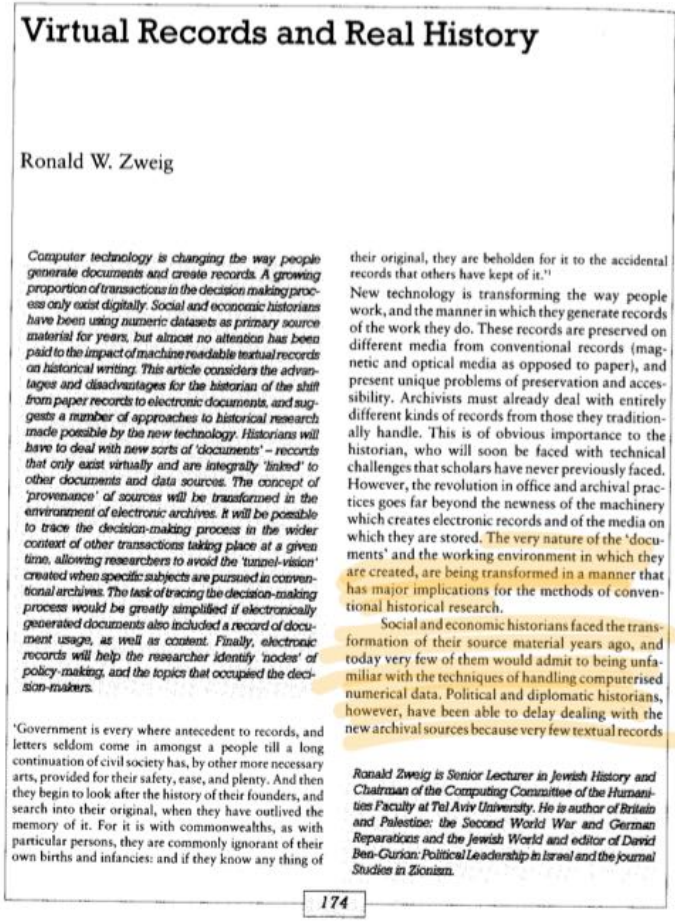
- **OCR**
  - Developed initially for corporate discovery, struggles with newspapers
  - The original *Toronto Star* and *Globe and Mail* digitization was carried out with fairly rudimentary OCR, probably giving an 80-90% accuracy.
  - Even with cutting-edge OCR on pre-1950 documents
    - i.e. if you had 98% character accuracy – sounds great – but suddenly your word accuracy is somewhere between 95-98%.
  - Struggles with line hyphenation

But more importantly...

Changes the relationship of a scholar to the newspaper

- As I showed in the Nugent lecture, skimming is difficult on these interfaces.
- Search + retrieval.
- Proprietary interfaces lock the data away. **In fact, this to me is the saddest consequence of this privatization of our cultural heritage.**





Virtual Records and Real History

Ronald W. Zweig

Computer technology is changing the way people generate documents and create records. A growing proportion of transactions in the decision making process only exist digitally. Social and economic historians have been using numeric datasets as primary source material for years, but almost no attention has been paid to the impact of machine readable textual records on historical writing. This article considers the advantages and disadvantages for the historian of the shift from paper records to electronic documents, and suggests a number of approaches to historical research made possible by the new technology. Historians will have to deal with new sorts of 'documents' – records that only exist virtually and are integrally 'linked' to other documents and data sources. The concept of 'provenance' of sources will be transformed in the environment of electronic archives. It will be possible to trace the decision-making process in the wider context of other transactions taking place at a given time, allowing researchers to avoid the 'tunnel-vision' created when specific subjects are pursued in conventional archives. The task of tracing the decision-making process would be greatly simplified if electronically generated documents also included a record of document usage, as well as content. Finally, electronic records will help the researcher identify 'nodes' of policy-making, and the topics that occupied the decision-makers.

'Government is every where antecedent to records, and letters seldom come in amongst a people till a long continuation of civil society has, by other more necessary arts, provided for their safety, ease, and plenty. And then they begin to look after the history of their founders, and search into their original, when they have outlived the memory of it. For it is with commonwealths, as with particular persons, they are commonly ignorant of their own births and infancies: and if they know any thing of their original, they are beholden for it to the accidental records that others have kept of it.'[1]

New technology is transforming the way people work, and the manner in which they generate records of the work they do. These records are preserved on different media from conventional records (magnetic and optical media as opposed to paper), and present unique problems of preservation and accessibility. Archivists must already deal with entirely different kinds of records from those they traditionally handle. This is of obvious importance to the historian, who will soon be faced with technical challenges that scholars have never previously faced. However, the revolution in office and archival practices goes far beyond the newness of the machinery which creates electronic records and of the media on which they are stored. The very nature of the 'documents' and the working environment in which they are created, are being transformed in a manner that has major implications for the methods of conventional historical research.

Social and economic historians faced the transformation of their source material years ago, and today very few of them would admit to being unfamiliar with the techniques of handling computerised numerical data. Political and diplomatic historians, however, have been able to delay dealing with the new archival sources because very few textual records

Ronald Zweig is Senior Lecturer in Jewish History and Chairman of the Computing Committee of the Humanities Faculty at Tel Aviv University. He is author of Britain and Palestine: the Second World War and German Reparations and the Jewish World and editor of David Ben-Gurion: Political Leadership in Israel and the journal Studies in Zionism.

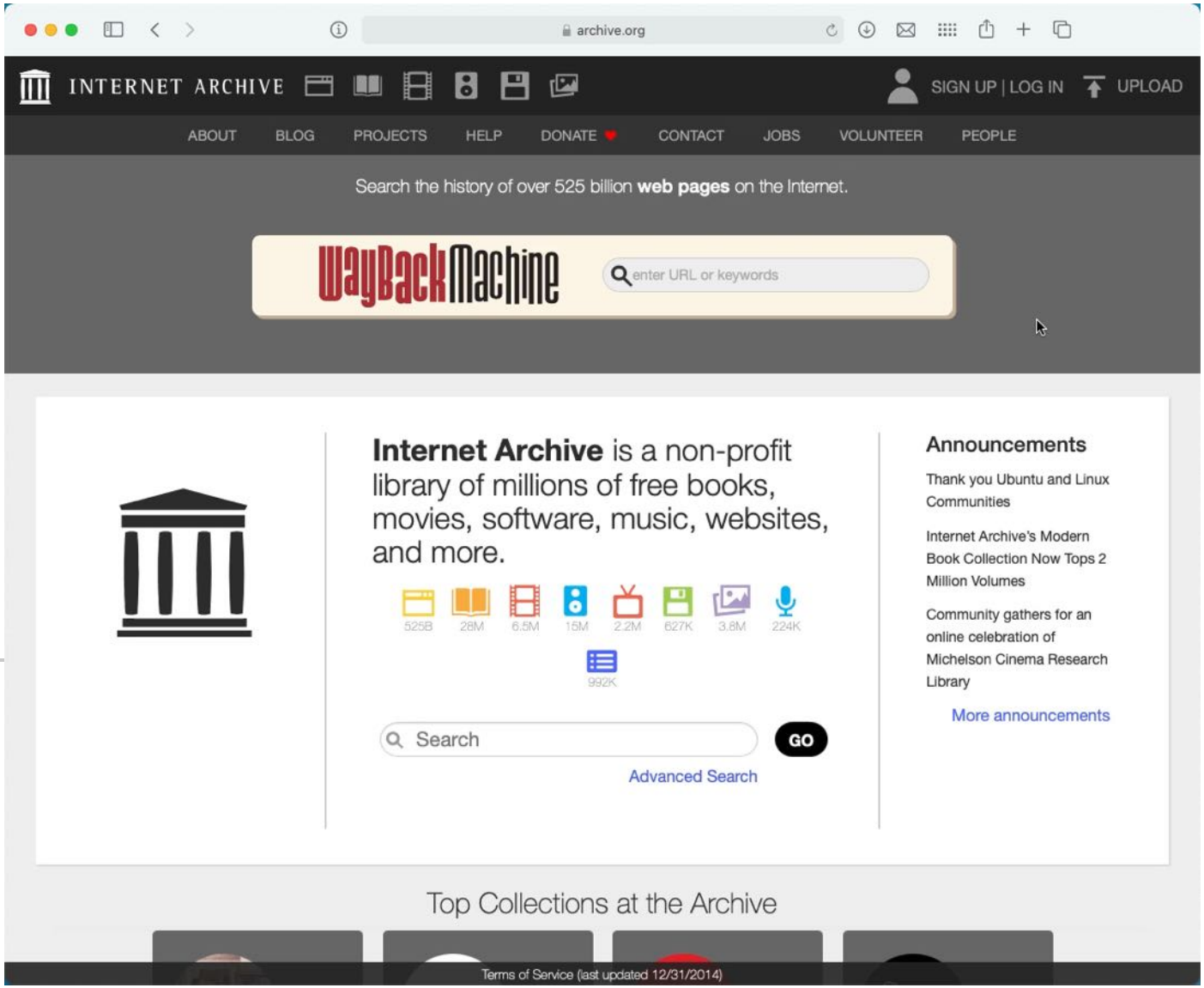
The Transformative Potential of Newspapers Has Been Lost

- *History and Computing*, vol. 4, no. 3 (1992)
- **Ronald W. Zweig, "Virtual Records and Real History"**
  - "This situation is quickly changing as the first machine-readable textual records deposited in archives are being opened to research."
  - Thinking about sophisticated research types: digital text would be good for "sophisticated search and retrieval," and keyword searching might be too overwhelming but "if they are combined with an understanding of linguistic equivalences, proximity and Boolean searches, and other techniques used in text retrieval, it will be possible to control the results of a search and to improve its quality."

So, with this medium shift...

- We now interact primarily through keyword search (i.e. the system forces us more or less to do this)
- We don't fully understand the construction of this database.
- The text is inaccessible to do transformative digital scholarship with.
- **Yet we still cite it all the same: Pages of the Past, ProQuest, Clipping File, Microfilm; yet each system dramatically impacts our work and the way we understand the source**.

Is there a better way?

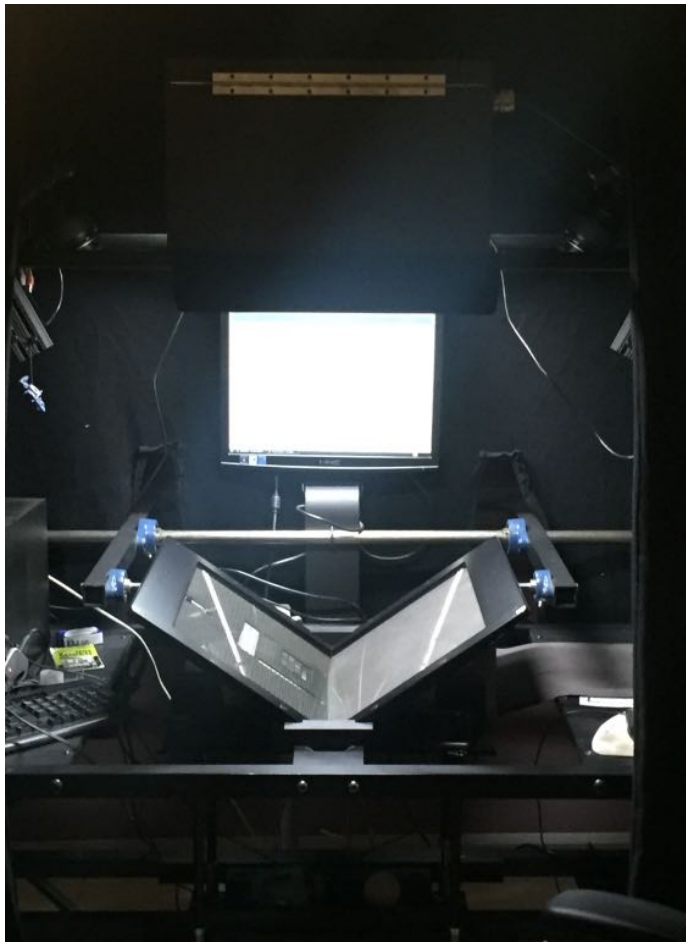

archive.org
INTERNET ARCHIVE
SIGN UP | LOG IN
UPLOAD
ABOUT
BLOG
PROJECTS
HELP
DONATE
CONTACT
JOBS
VOLUNTEER
PEOPLE
Search the history of over 525 billion web pages on the Internet.
WayBackMachine
enter URL or keywords
Internet Archive is a non-profit library of millions of free books, movies, software, music, websites, and more.
525B
28M
6.5M
15M
2.2M
627K
3.8M
224K
992K
Search
GO
Advanced Search
Announcements
Thank you Ubuntu and Linux Communities
Internet Archive's Modern Book Collection Now Tops 2 Million Volumes
Community gathers for an online celebration of Michelson Cinema Research Library
More announcements
Top Collections at the Archive
Terms of Service (last updated 12/31/2014)

What to do with newspapers?

- Use them! But be **conscious.** A checklist:
  - Can you be self-reflective about why you chose the newspaper you did? (If it is because of accessibility, that's good; but say it)
  - Should you cite the way that the source has been mediated?
  - What potential impact might this process have had on what you were looking for? Are there supplemental keywords that you could look for? A version of a document on Archive.org that facilitates skimming? Some sampling or digging deeper?
  - Any holes that may have thrown off your analysis?

What about digitized archives?

Internet Archive Scanning Centre, Robarts Library,
University of Toronto

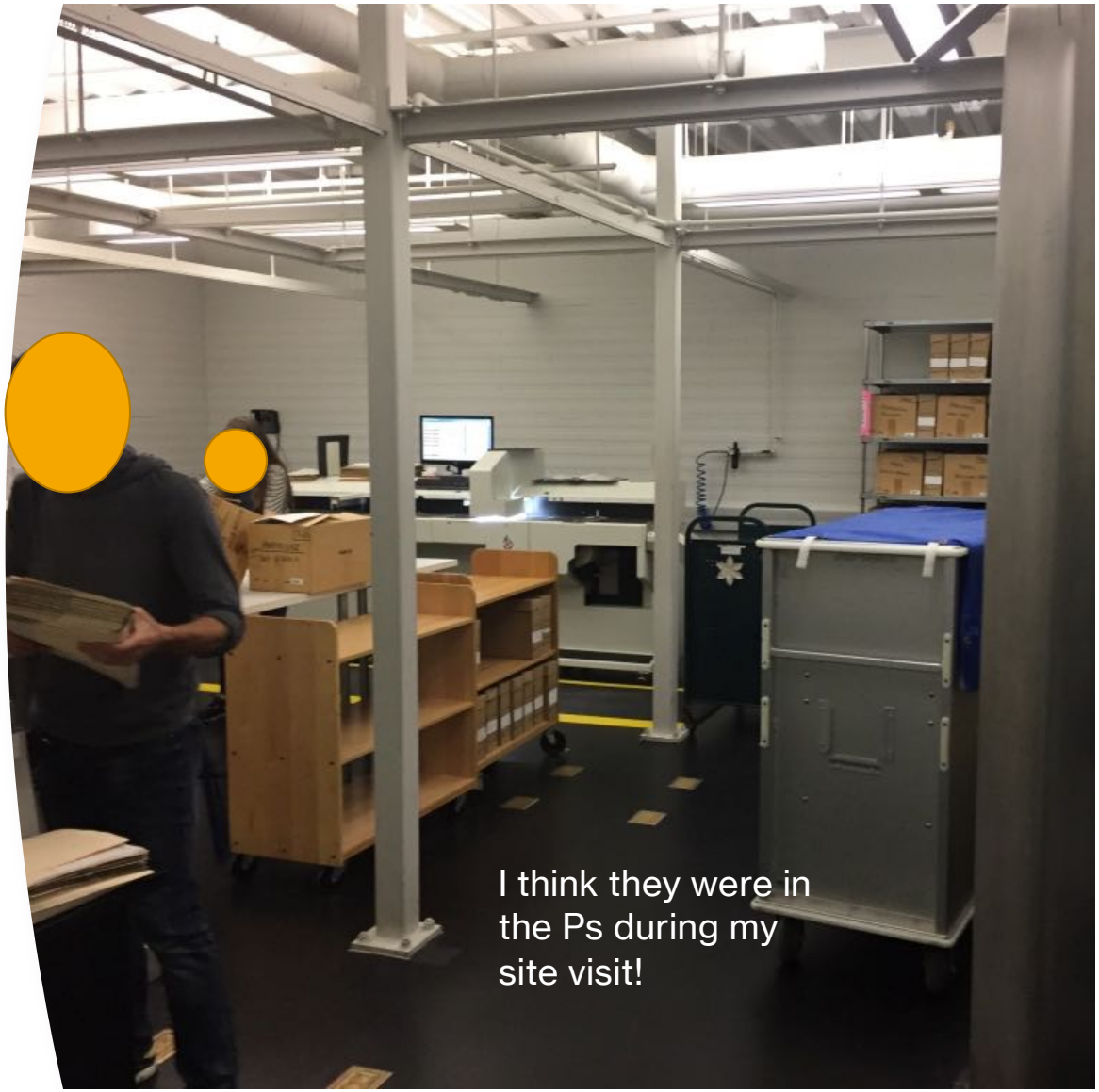


Digitizing is Expensive

- **Several cents per page**. There is a range (all I can say, damn service roles).
- **Metadata is labour intensive**: but if you don't describe the material that you digitize it isn't too useful.
- **Donors may have mixed feelings**: it is one thing to provide access to people in a reading room; but decontextualized access via web search is a different kettle of fish.

So, what gets digitized?

- In some cases, **microfilm** can be more readily digitized (i.e. Library and Archives Canada)
- **Popular collections**
- **Collections with particular synergy around institutional priorities** (i.e. Truth and Reconciliation, EDI, or other strategic institutions; this may or may not sync with researcher demand)
- **Anniversaries** (i.e. WW1 service records; major mega-project at LAC using repurposed cheque scanners)



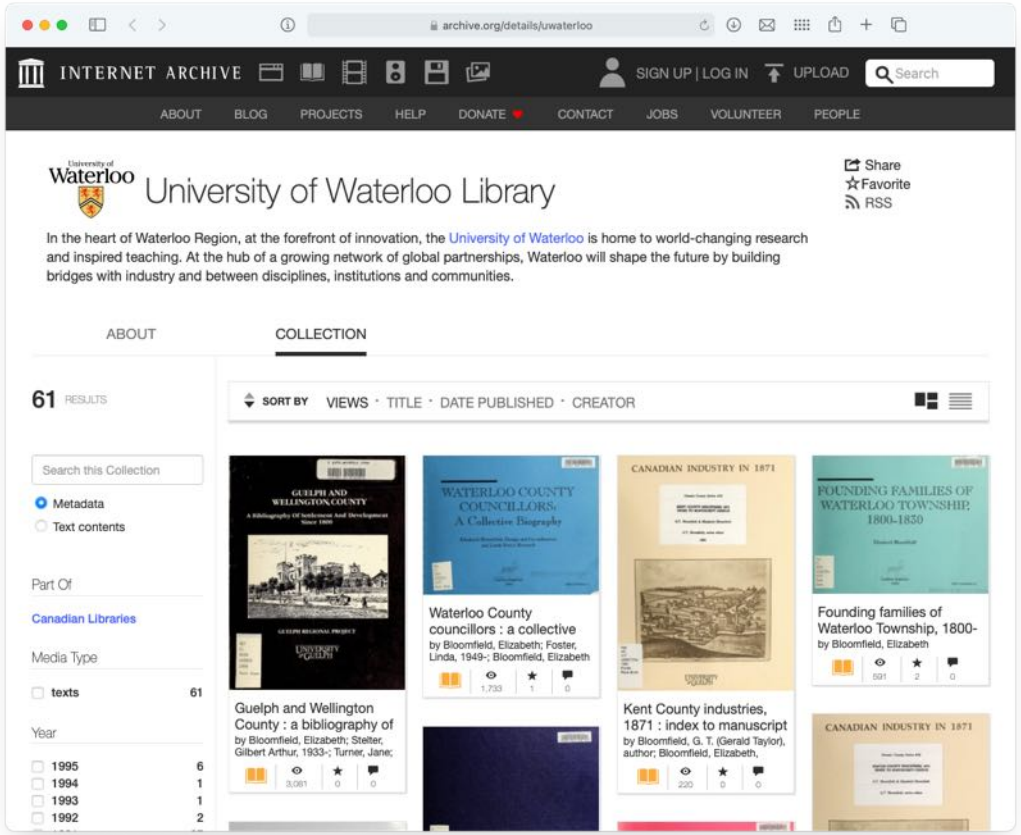
I think they were in the Ps during my site visit!

What gets digitized?

- Pulling our gaze back then from big institutions
  - Geographic unevenness in digitization;
  - Big institutions have the resources + overhead to do this (in most cases);
  - Smaller institutions won't have the resources, training, expertise to do this; OR will do it in an unsustainable manner due to uneven training/national infrastructure

Increasingly being done via partnerships

- **CRKN/Canadiana.ca** (Monographs, Periodicals, Government Documents)
- **Internet Archive** (contacting with institutions; i.e. University of Waterloo)
- Discovery interfaces can often be better at scanning partner than on the original institution.



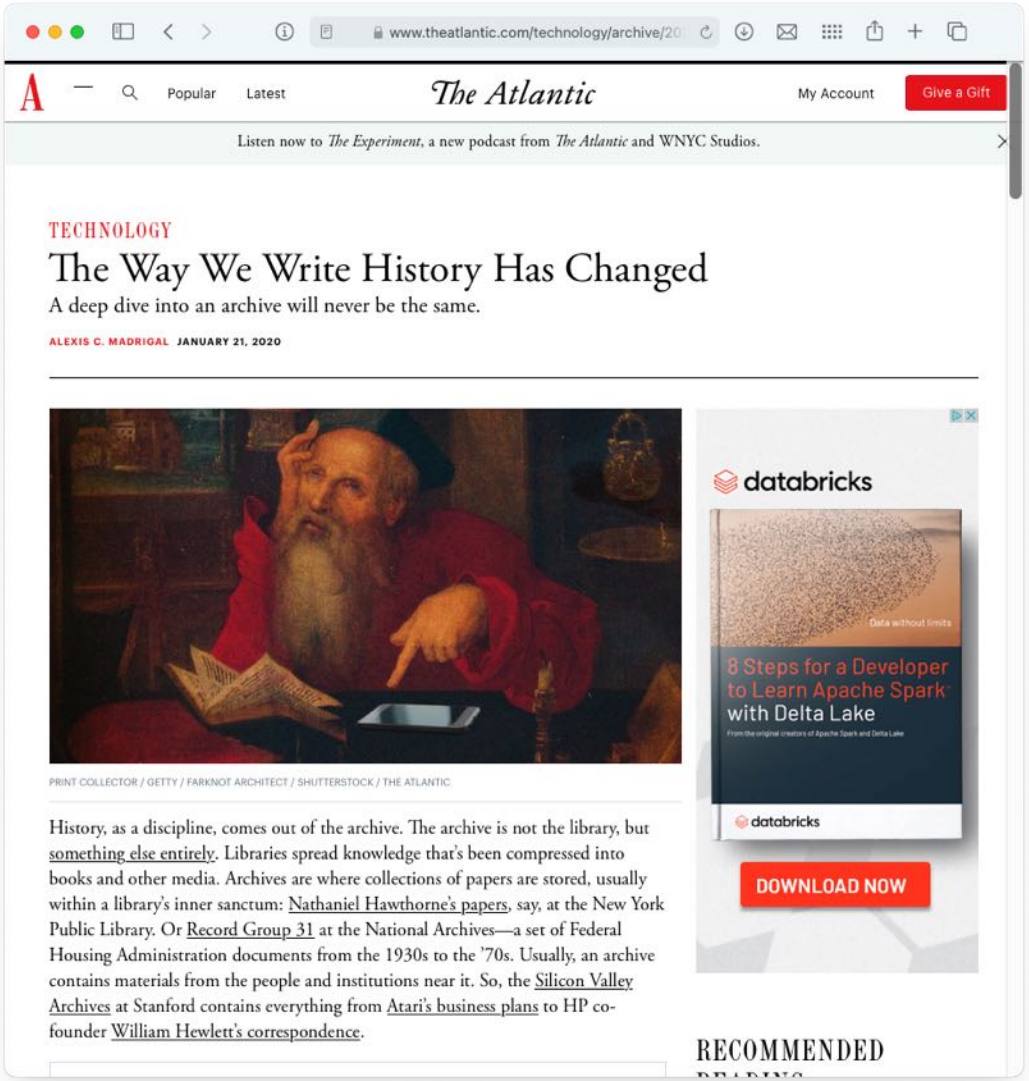
What to do with digitized archives?

- Ask questions
  - Why was this digitized?
  - What wasn't digitized?
  - What biases might this introduce into my work?
- When doing "sideglances" (as Putnam puts it) reflect on what's happening, and how you're looking at the tip of an iceberg – just like somebody from another field would be if they only relied on digitized sources in *your* field.


... and finally,
digital
photography.

Digital Photography in Archives

- You've read the piece, but my topline takeaways are:
  - We all **take** thousands of photographs;
  - It seemed obvious, but went "academic viral" when I wrote about it.
- Different histories will be written because we can't (a) do follow-ups; (b) we select the sources we're going to use at the very moment in our PhD (for example) when we know the least; and (c) we've started thinking about "collecting" and "writing it up/thinking about it" as even more discrete stages.




Every stage of primary source collection has been transformed by the digital.

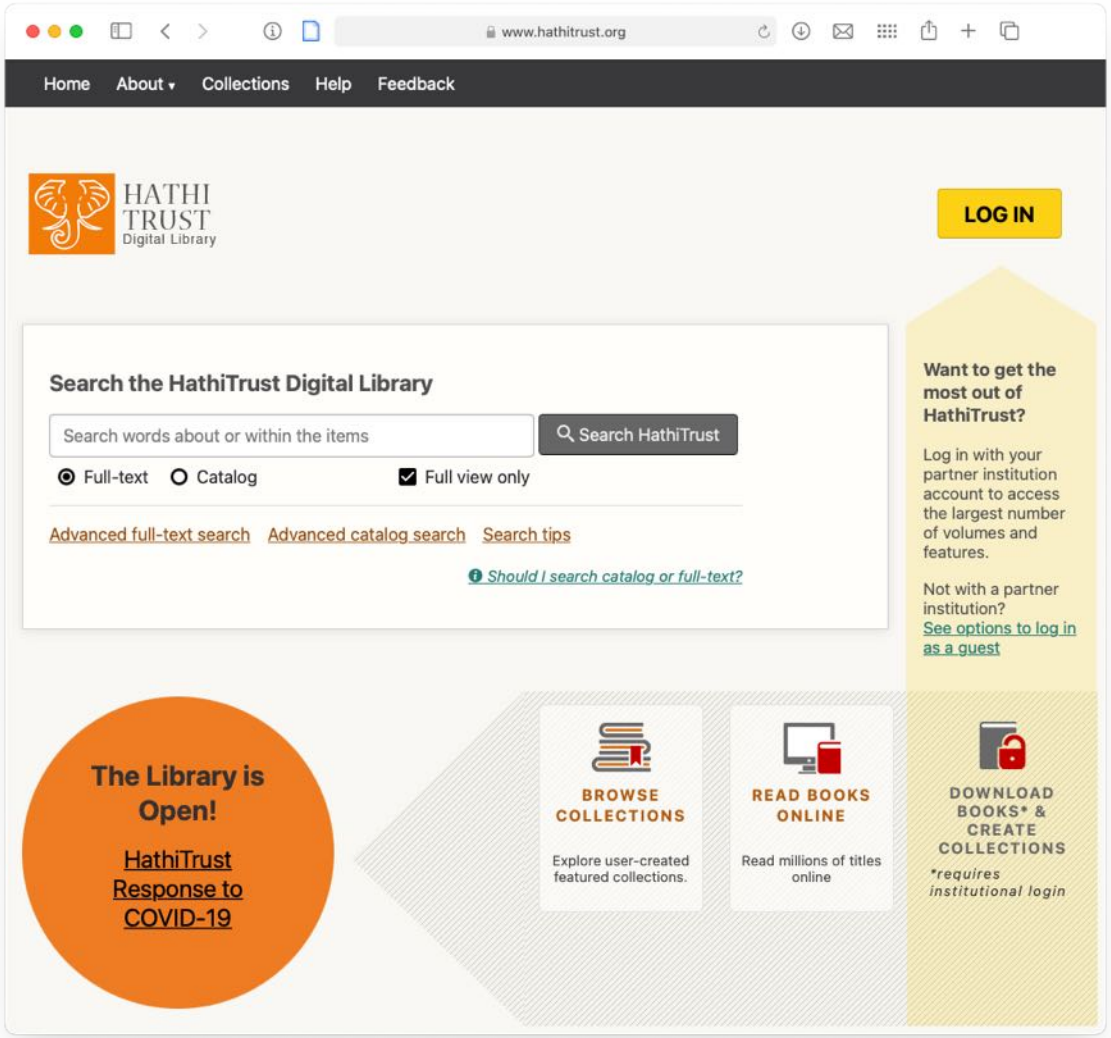
Let’s discuss.

- What do you think we should do when thinking about **the mediating role of technology in databases?**
  - How do you know what’s included? What’s not?
  - What have you found?
- What do you think about the **mediating role of cameras in the archive?**
  - What was your experience?
  - Do you wish you’d taken more photos? Less?
  - What do you wish you knew then that you know now after working with them?
  - Would you share them?

Secondary Sources

Secondary Sources are Mediated Online As Well

- The HathiTrust Emergency Digital Library
  - What books are present?
  - What books in your field aren't?
  - What biases might we see?
- The holdings of Michigan/Illinois as the foundation
- **And, more importantly, copyright begins to rear its head.**

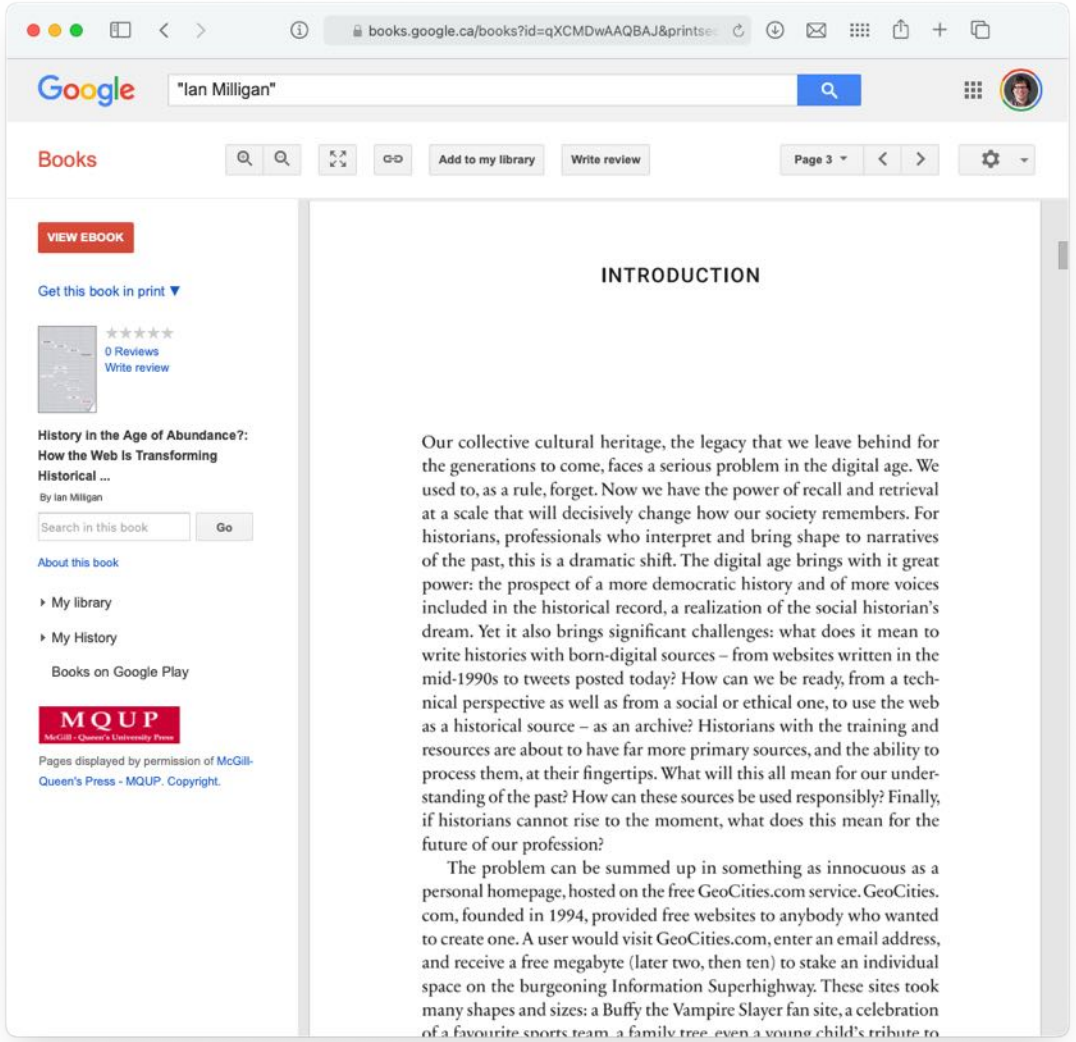


Secondary Sources are Mediated Online

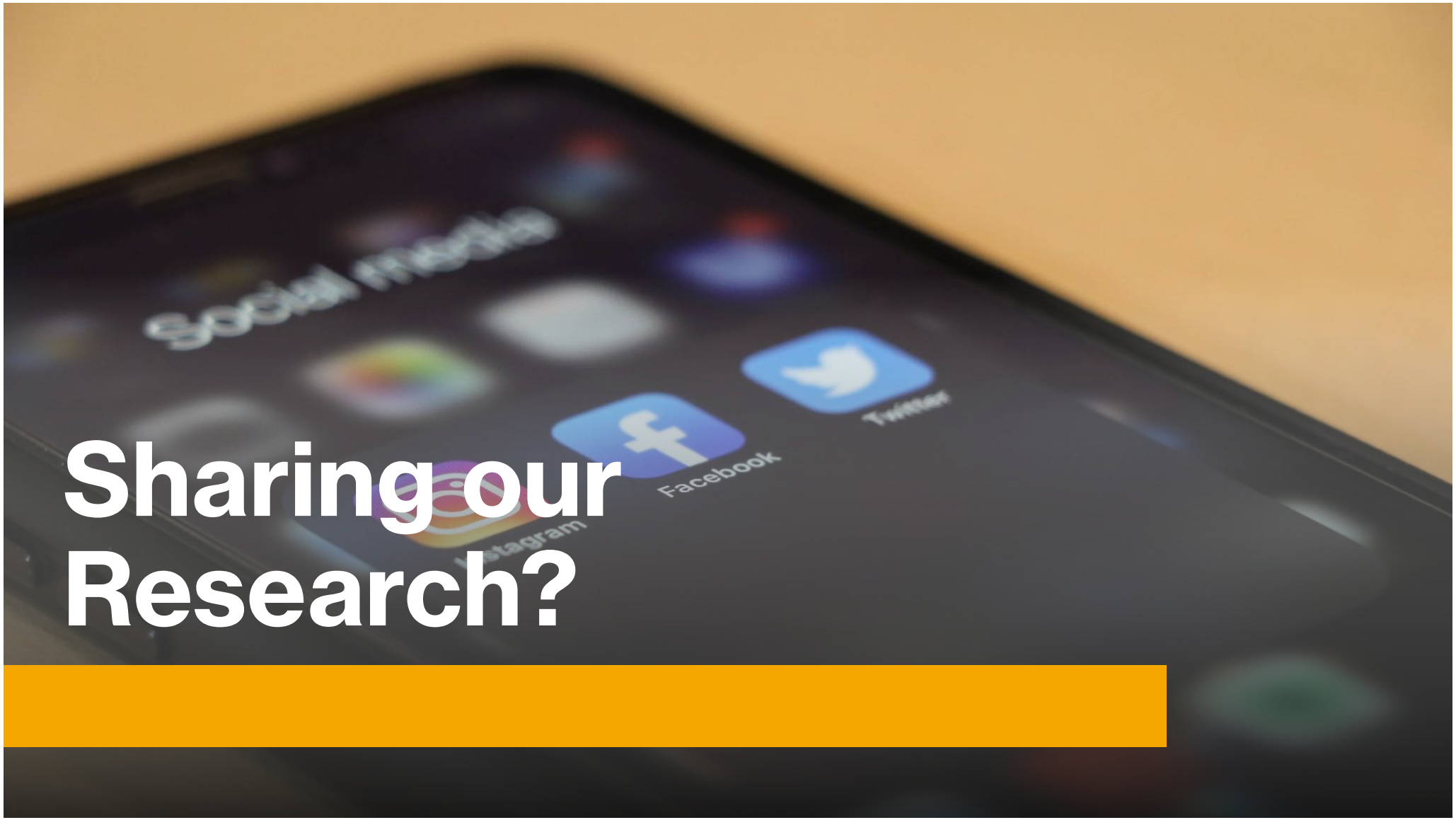
- The **Internet Archive** lends books based on having one copy in its possession; i.e. they have a “physical archive” of old books and periodicals, so you can check out a book under DRM conditions if they own it.
- During COVID-19, they allowed multiple loans without tying allocation to the physical holding, citing an “emergency.” Lawsuit ensued.

Google Snippets Driving Citations?

- If I was a betting person, I would wager that the availability of a book via Amazon LookInside! and Google Books snippet view would have a positive impact on its citation impact – both amongst undergrads but also amongst faculty colleagues
- But we would never confess in a citation that we only read the snippet.



Many of the factors driving online primary sources are also driving secondary ones.



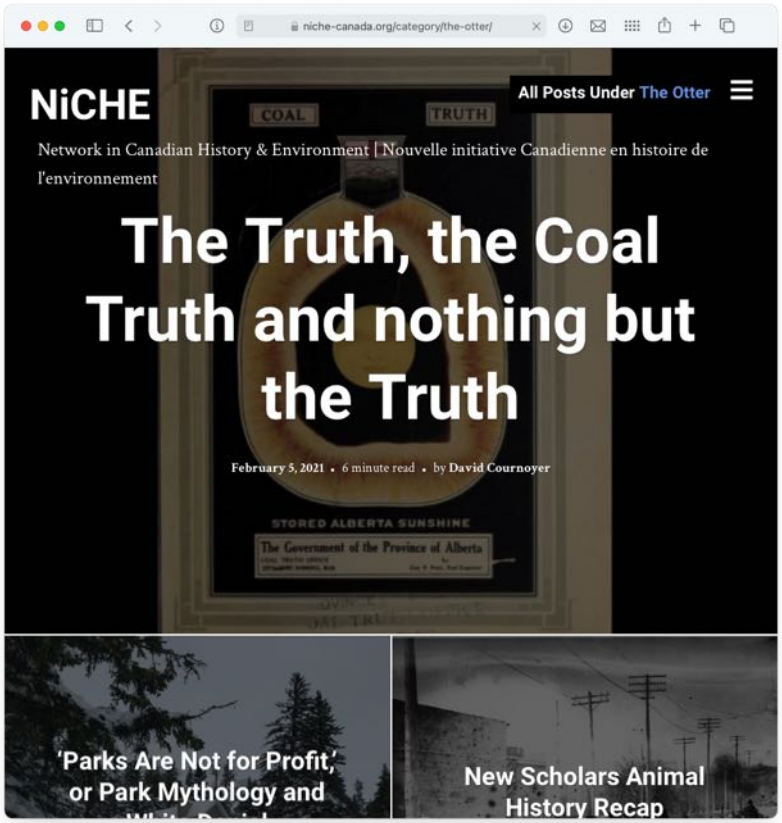
Sharing our Research?

As so much is digital...

- ... so to is the impulse to share.
- From conference presentations
  - **Example of my 2020 AHA Presentation**. A Sunday morning in New York City, after the Saturday night parties, a decently full but small-sized conference room. (don't ask me about my 2018 one where panelists = audience size)
    - Great reception.
    - Decided to share my slide deck.
    - Went viral.
    - *Atlantic* article.

... pros/cons

- Great to have exposure!
- That said, most people in those 183 Quote Tweets and seemingly hundreds of other discussions/replies I would wager did not read the slide deck
  - i.e. I was accused of being hostile to digital technology, not caring about children (when like a key point is “hey, this lets me spend time with my two little kids”), etc. etc. It was fun but lost some respect for click-bait colleagues.



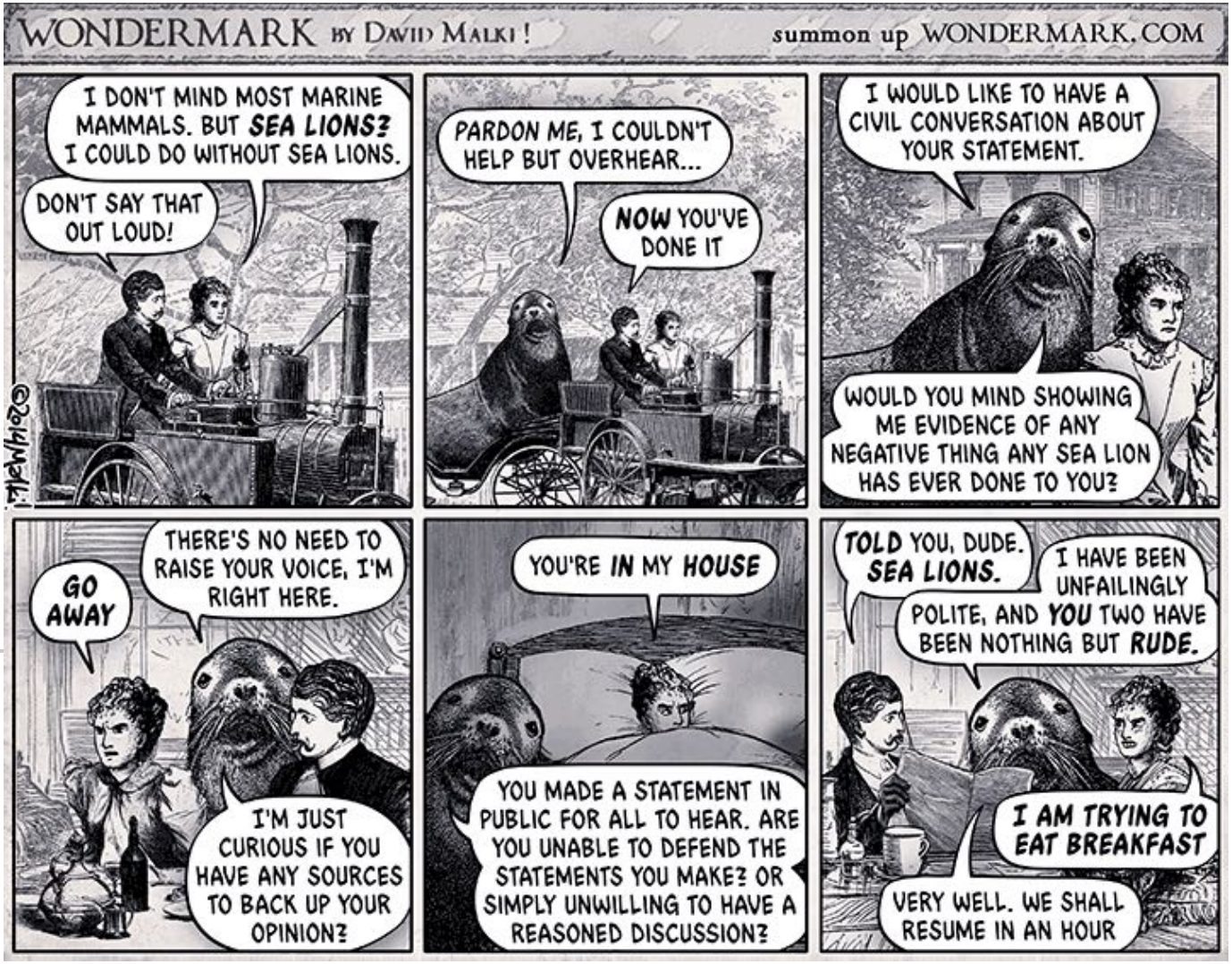
... similarly, with sharing thoughts!

- ActiveHistory, personal blogs, CHA blog, NiCHE/The Otter, etc. all places to reach a larger audience.
    - But as, we discussed last week, there are costs – comment sections, etc.
- In an ideal world, I sometimes tweet -> resonates -> blog post -> resonates -> put together a journal article (both of my *CHR* papers actually came out of that workflow)
- People are meaner today, though, and less charitable. (I had some stupid takes in my grad student days, but I don't think people cared as much)

My own advice, for what it's worth...

- **A personal page is increasingly a necessity**, i.e. for book review editors, etc. to help find you for opportunities.
- **Institutional pages are good,** but they're transient and you might want to build up your own "brand" (yeah yeah)
- Twitter is good, but beware:
  - Don't make fun of people, because I am amazed how many professors "lurk" on Twitter but don't have accounts.
  - Jokes that work within in-groups don't always work within out-groups.

Sea lion


WONDERMARK BY DAVID MALKI !
summon up WONDERMARK.COM
I DON'T MIND MOST MARINE MAMMALS. BUT SEA LIONS? I COULD DO WITHOUT SEA LIONS.
DON'T SAY THAT OUT LOUD!
PARDON ME, I COULDN'T HELP BUT OVERHEAR...
NOW YOU'VE DONE IT
I WOULD LIKE TO HAVE A CIVIL CONVERSATION ABOUT YOUR STATEMENT.
WOULD YOU MIND SHOWING ME EVIDENCE OF ANY NEGATIVE THING ANY SEA LION HAS EVER DONE TO YOU?
GO AWAY
THERE'S NO NEED TO RAISE YOUR VOICE, I'M RIGHT HERE.
I'M JUST CURIOUS IF YOU HAVE ANY SOURCES TO BACK UP YOUR OPINION?
YOU'RE IN MY HOUSE
YOU MADE A STATEMENT IN PUBLIC FOR ALL TO HEAR. ARE YOU UNABLE TO DEFEND THE STATEMENTS YOU MAKE? OR SIMPLY UNWILLING TO HAVE A REASONED DISCUSSION?
TOLD YOU, DUDE. SEA LIONS.
I HAVE BEEN UNFAILINGLY POLITE, AND YOU TWO HAVE BEEN NOTHING BUT RUDE.
I AM TRYING TO EAT BREAKFAST
VERY WELL. WE SHALL RESUME IN AN HOUR
©2014 Malki!

Some discussion

- What have your experiences been engaging online?
- Do you share your research? Why or why not?
- What do we gain from sharing? What do we lose?
- What would you recommend to your peers about things that have worked?
- Things that we should stay away from?

Conclusions

- We are all digital now: in how we do our primary research, our secondary research, and disseminate it all online.
- I sometimes think of:
  - **Digital History (capital D, capital H)** as the subfield we spoke about last week
  - And **digital history (lowercase d, lowercase h)** as the transformation that we are seeing us all.
- It has been such a pleasure to be here with you all, and look forward to staying in touch.

i2millig@uwaterloo.ca

Stay in touch, and thank you again for being such a wonderful group to engage with.