

Developing & Delivering an Instructional Session

[For History Undergraduates at McMaster University]

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Prompt

"A faculty member in History has asked you to join a class session of their second-year course to introduce students to working with cartographic materials."

Agenda

1. ***Design Approach***
2. ***Sample Lesson Plan***
3. ***Setting the Scene***
4. ***Sample Presentation***
5. ***Questions***

Design Approach

Identify the information needs and capabilities of learners

Identify and fill gaps in my own knowledge in regards to course content



Assumptions

mid-size
class

canadian
history
course

minimal
technical
expertise

Define Session Objectives

SESSION OBJECTIVES

Introduce print and digital cartographic materials for historical scholarship

Introduce digital mapping tools for historical scholarship

Increase familiarity with MUL's print and digital cartographic collection

Promote MUL as a source for research support

Ensure the active learning of defined objectives

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Introduce print and digital cartographic materials for historical scholarship

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KEY TOPICS TO COVER

Prominent print cartographic resources

Prominent digital cartographic resources (spatial data)

Popular cartographic resources used by historians

Introductory explanation of GIS

Popular GIS tools used by historians

Common techniques utilized in historical GIS

MUL's digital and print cartographic collection

How to access this collection

Relevant resources and services offered by the MUL (consultations, online learning, workshops)

How to access them (contact info + links)

**Define
“How”
Session
Objectives
Will be Met**

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Ensure the active learning of defined objectives

Pre-assessment:

Inquire about familiarity with mapping tools & cartographic resources

Participatory learning activities:

Find digitized map in MUL collection & georeference using Map Warper

Post-assessment:

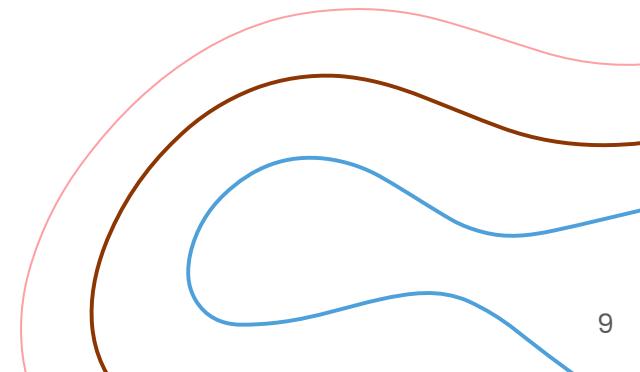
- Polling
- Completion of learning activity
- Follow up with course instructor

Accessibility:

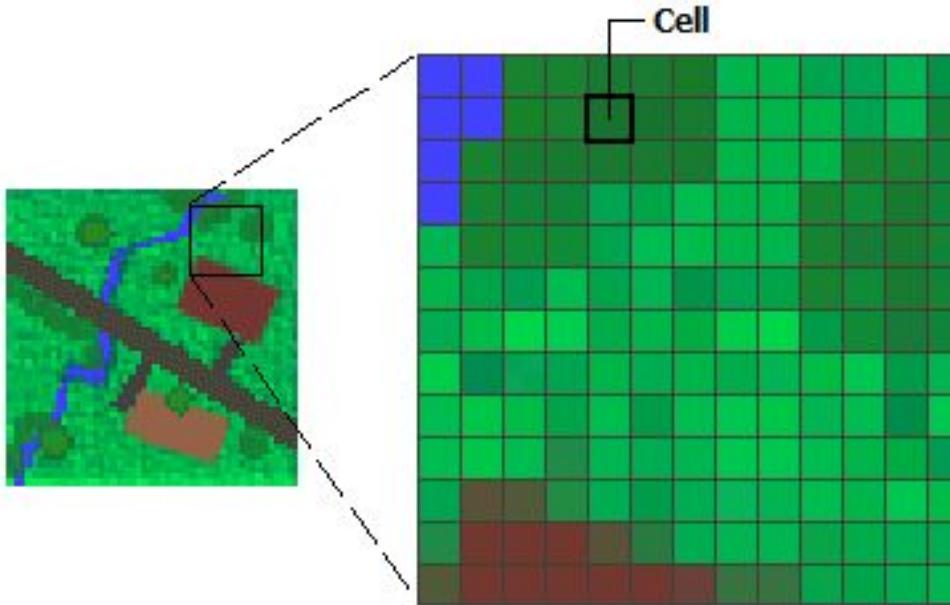
- Learning materials made available in LMS prior to session date
- Minimize the use of technical language

**What would this lesson
plan look like in action?**

In the digital environment, these historical sources are expressed as data.



popular data type: **raster**



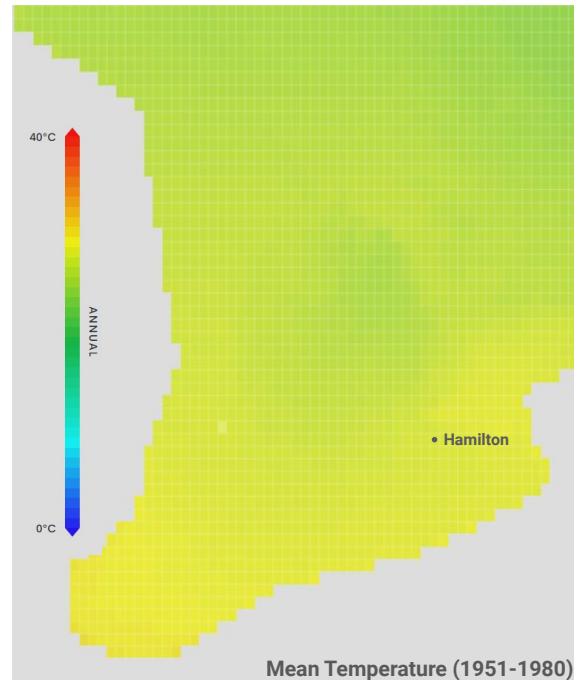
historical data as rasters



digitized fire insurance
plans (x)



digitized historical aerial
imagery (x)

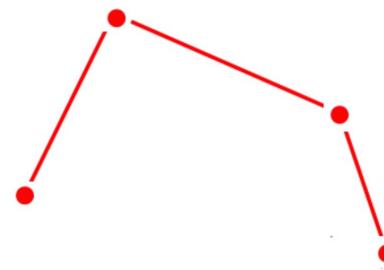


historical climate data (x)

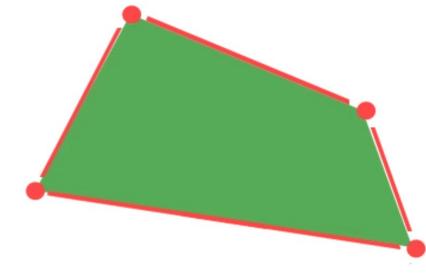
popular data type: **vector**



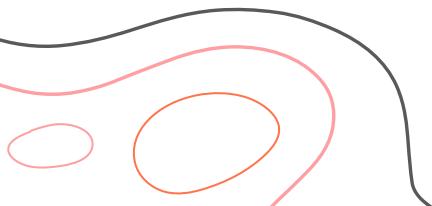
points



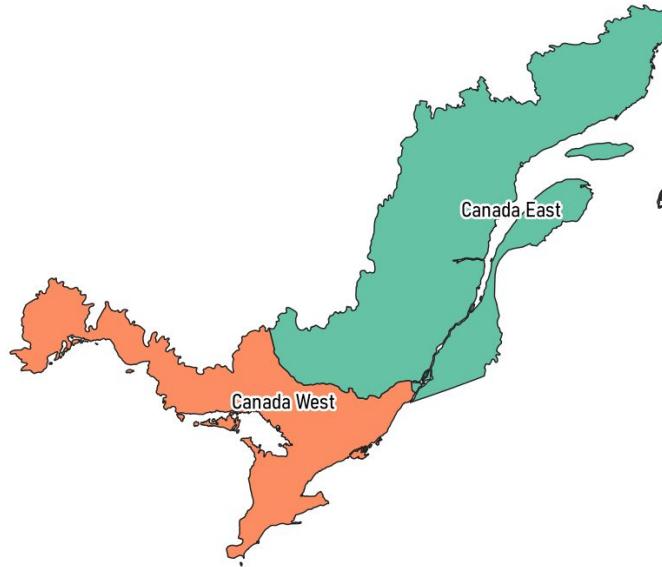
lines



polygons



historical data as vectors

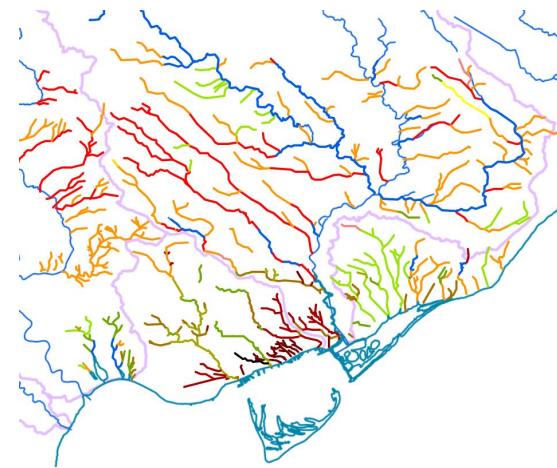


historical political
boundary (x)

historical data as vectors



select residential schools
recorded in ontario (x)

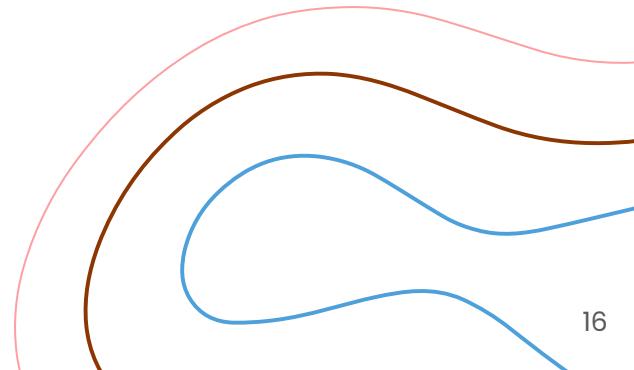


historical rivers of toronto (x)

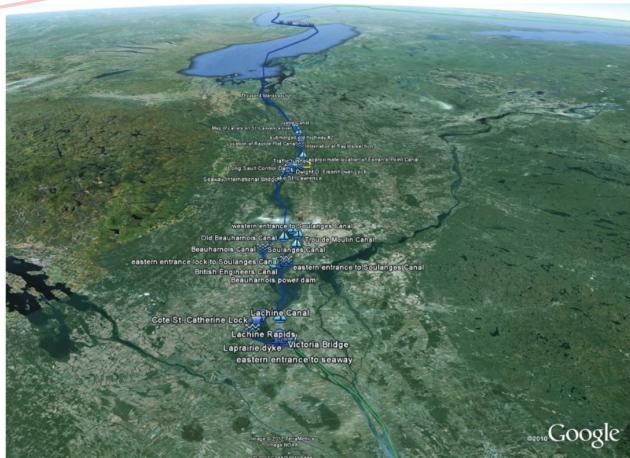
popular data type: **tabular**

Brewery_Name	ID	Date_Est	Date_Closed	Address	Latitude	Longitude
Cosgrave Brewery	1	1863	1963	297 Niagara Street	43.645267	-79.409781
Ontario Brewing & Malting Co.	2	1885	1901	311-337 King St. E.	43.651565	-79.365705
O'Keefe Brewery (formerly Victoria Brewery)	3	1840	1989	11-17 Gould Street	43.657417	-79.380519
Bloor's Brewery (later Castle Frank Brewery)	4	1830	1843	Bloor and Sherbourne Streets	43.672356	-79.379046
Copland Brewing and Malting Co. Ltd.	5	1832	1946	311-337 King St. E.	43.651556	-79.365532
Copland Brewing Co. Ltd.	6	1847	1946	55-65 Parliament St.	43.652295	-79.362177
Dominion Brewery Co. Ltd.	7	1878	1936	470-496 Queen St. E.	43.657052	-79.359928
Queen City Malting Co.	8	1882	1893	228 Front St. E.	43.651278	-79.365073
East End Brewery (Reinhardt Salvador Brewery)	9	1861	1889	2-22 Mark St. (formerly Beech)	43.661115	-79.356342
Walz Brewery / Korman Brewery	10	1857	1944	Duchess (now Richmond) and Sherbourne	43.6531	-79.3684

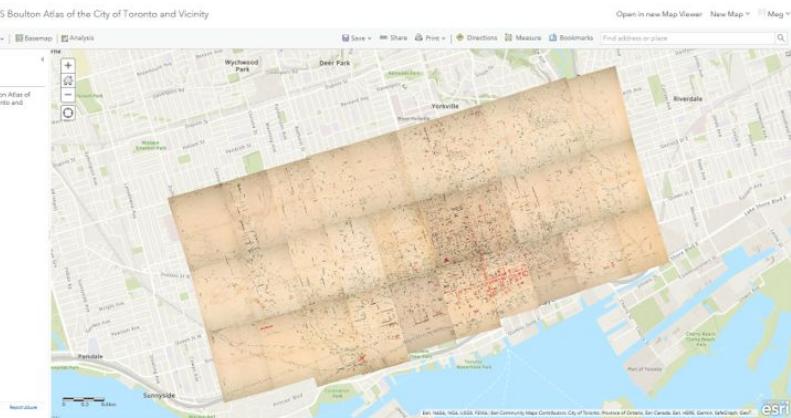
Digital mapping tools (GIS) allow historians to organize, visualize, and analyze historical spatial data.



GIS (Geographic Information System): Any system that's used to analyze, capture, or work with geospatial data



historical points of interest along the St.
Lawrence Seaway visualized in **Google Earth** (x)

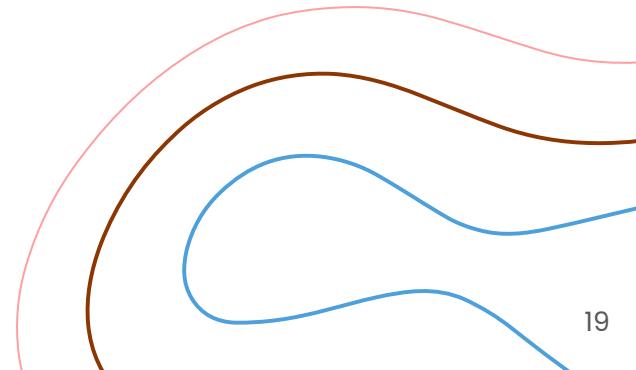


historical map of toronto
visualized within **ArcGIS Online** (x)

In what ways could these digital mapping tools (**GIS**) be useful for historical research?

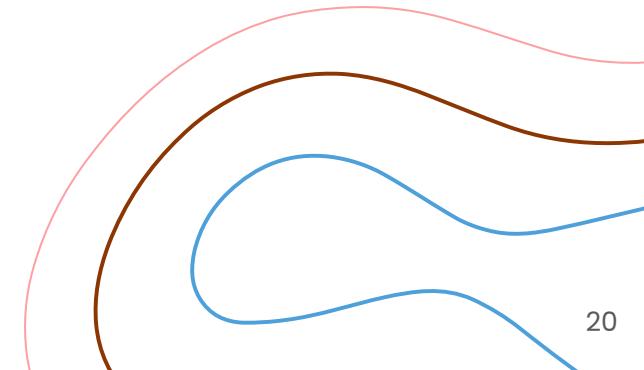
(1) Enable maps from different time periods to be compared systematically

Ex. MUL's Historical Hamilton Portal ([x](#))



(2) Enable historical narratives to be communicated visually

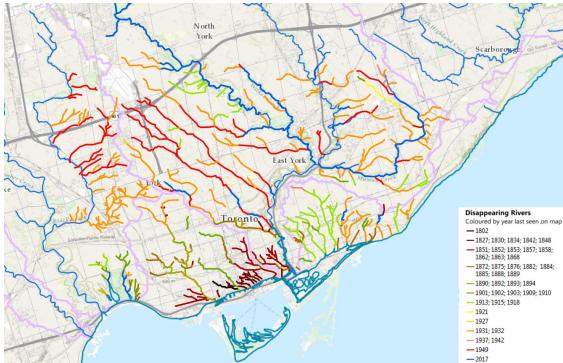
Ex. Historical Village of Waterdown Story Map (x)



(3) Enable the reconstruction of features from the past



chinatown lots in victoria,
british columbia (1891)

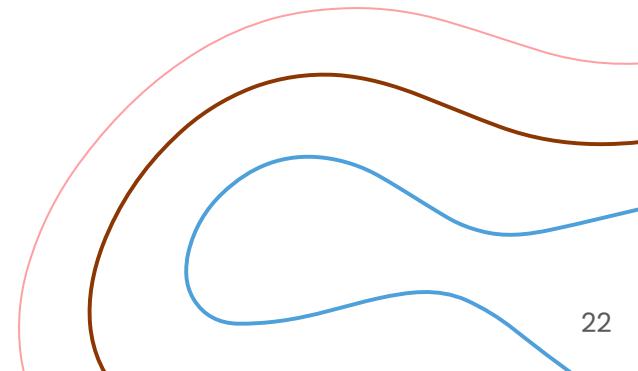


historical rivers of toronto (x)



natives land, canada (x)

(4) Enable geographic patterns
embedded in historical evidence to
be visualized



GENERAL REGISTER OF

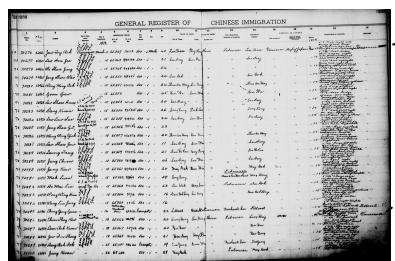
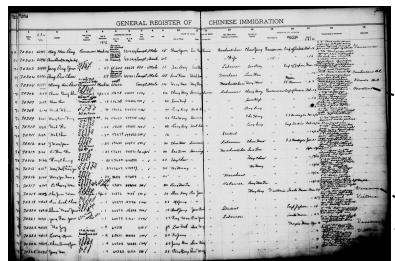
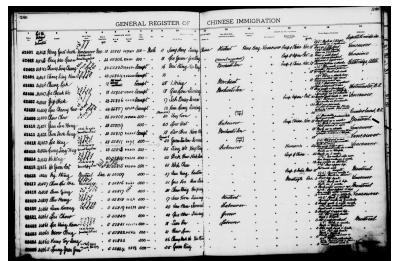
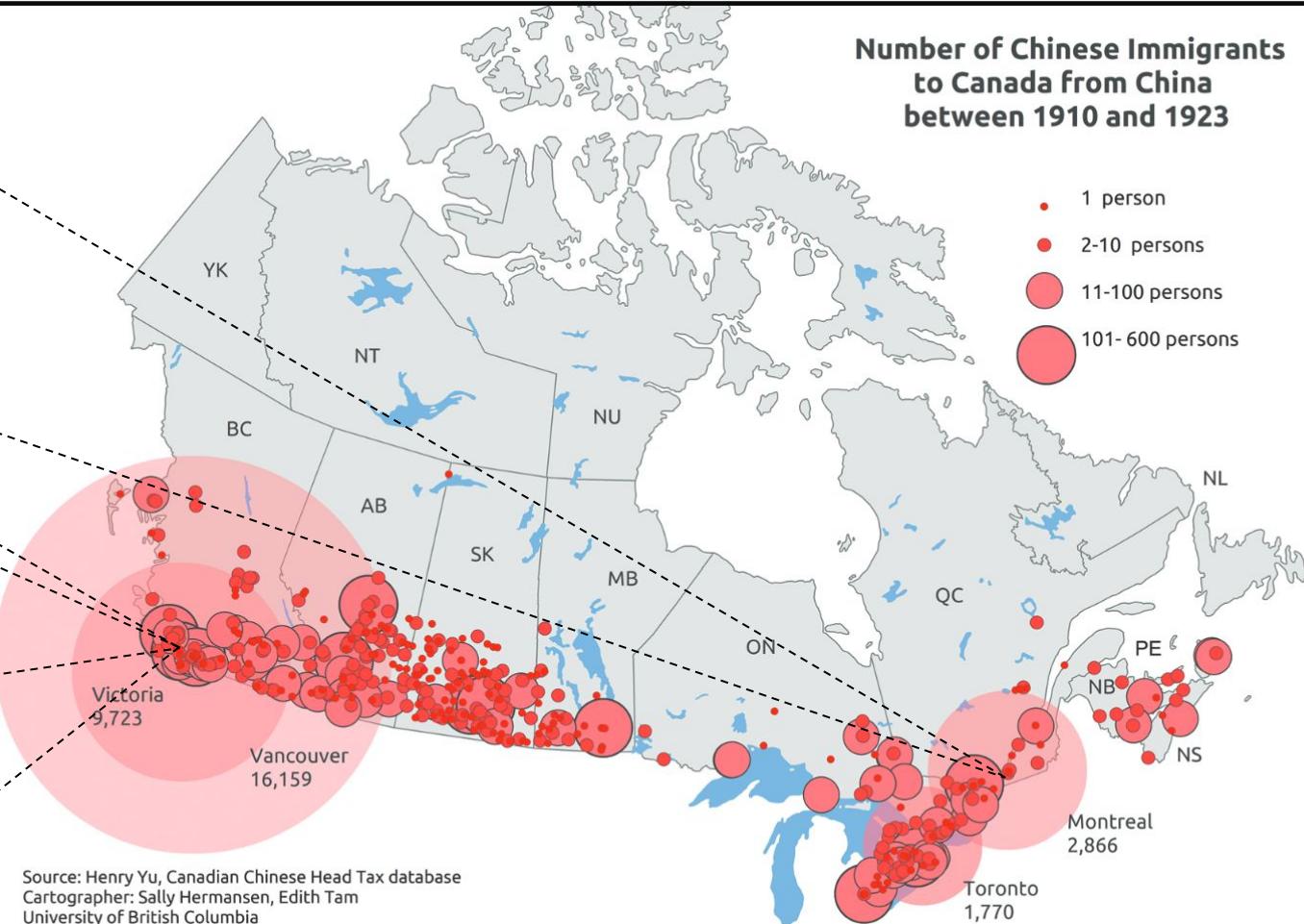
CHINESE IMMIGRATION

1 Recd No. Serial No.	2 Name	3 Port of Birth or Last Residence	4 Date of Birth 9/0	5 CERTIFICATE ISSUED C. I. S. No.	6 C. I. S. No.	7 Fees Paid Amount	8 Sex	9 Age	10 PLACE OF BIRTH City or Village	11 Status
62401 24842 Wong Yuet Jack	Lancaster Nov. 18	55801 10745 300 -	Male	11	Jung Hung Sining	China	Student	Hong Kong	Vancouver	Emp. & China Nov. 18
62402 24843 Wong Wee Quon	Montreal Aug 10	55802 110160 300 -		18	Fee Yuen (Peng Ping)		(Cleaning & is a merchant's son)	Eng. & Japan Oct. 10	Vancouver	Eng. & China Nov. 18
62403 24844 Chung Sing Chung	Montreal Aug 10	55803 109460 300 -	Exempt	16	Bei King Yit Ling		Merchant's Son	Eng. & China Nov. 18	Nanaimo	Setbridge, Alta.
62404 24845 Cheng Sing Nam	Montreal Aug 10	55804 106620 300 -	Exempt	13	"		"	"	Westminster, B.C.	"
62405 24846 Chung Suk	Montreal Aug 10	55805 106620 300 -	Exempt	48	I. Hing		"	"	Vancouver	"
62406 24847 See Cheuk Wo	Montreal Aug 10	55806 120221 300 -	Exempt	18	Quoqon Sining		"	"	Cumberland, B.C.	"
62407 24848 Gip Bak	Montreal Aug 10	55807 10745 300 -	Exempt	17	Sah Duyi Sining		"	"	Montreal	"
62408 24849 Que Cheong Yeo	Montreal Aug 10	55808 10745 300 -	Exempt	18	Kin Hung Sining		"	"	Vancouver	"
62409 24850 Chow Chew	Montreal Aug 10	55809 10745 300 -	Exempt	20	Ung Toon		"	"	Vancouver	"
62410 24851 Yen Son Hung	Montreal Aug 10	55809 500 -		20	Gow Wat		Labourer	Eng. & China Nov. 18	Vancouver	"
62411 24852 Chun Dick Sing	Montreal Aug 10	55810 105145 300 -	Exempt	18	Sia Boo Nam Ho		Merchant's Son	"	Vancouver	"
62412 24853 See Way	Montreal Aug 10	55811 10745 300 -	Exempt	20	Yuen Lin Sining		"	"	Vancouver	"
62413 24854 Fung Sing Tong	Montreal Aug 10	55812 10745 300 -	Exempt	35	Ting Wo Ying Pin		Labourer	"	Vancouver	"
62414 24855 Wo Wing	Montreal Aug 10	55814 10745 300 -	Exempt	25	Bak Boo Hochan		"	"	Vancouver	"
62415 24856 Ho Yuen Fat	Montreal Aug 10	55815 10745 300 -	Exempt	25	Wah Chun		"	"	Montreal	"
62416 24857 Ho Ting	Montreal Dec. 31	55809 300 -		37	Sun King Lantau		"	"	Vancouver	"
62417 24857 Chan Chi Kee	Montreal Dec. 31	55816 10745 300 -		31	Fee Too Hui Lin		"	"	Montreal	"
62418 24858 Sam Ying	Montreal Dec. 31	55817 10745 300 -		28	Chun Hing Hoiping		"	"	Vancouver	"
62419 24859 Chu Hang	Montreal Dec. 31	55818 10745 300 -		17	Yeo Toon Sining		Student	"	Montreal	"
62420 24860 Sam Kwong	Montreal Dec. 31	55819 10745 300 -		20	Van Hau Sining		Labourer	"	Vancouver	"
62421 24861 Lee Chow	Montreal Dec. 31	55820 300 -		48	Fee Hoo Sining		Grocer	"	Montreal	"
62422 24862 See King Nam	Montreal Dec. 31	55821 10745 300 -		18	Sun On		Labourer	"	Vancouver	"
62423 24863 Mo Poong	Montreal Dec. 31	55822 10745 300 -		21	Bow Lun		"	"	Montreal	"
62424 24864 Hung Toy Song	Montreal Dec. 31	55823 300 -		36	Chung Hock Ho Yin Pin		"	"	"	"
62425 24865 Faung Jen Jun	Montreal Dec. 31	55824 10745 300 -		35	Faung Pin		"	"	"	"

city names

Number of Chinese Immigrants to Canada from China between 1910 and 1923

- 1 person
- 2-10 persons
- 11-100 persons
- 101-600 persons



POPULAR HISTORICAL DATA TYPES



RASTER DATA



VECTOR DATA



TABULAR DATA



PRINT CARTOGRAPHIC MATERIAL

Source of historical evidence



DIGITAL MAPPING TOOLS (GIS)

Enable the organization, visualization and analysis of digital historical evidence with spatial elements

How can historians utilize digital mapping tools (GIS)?

01

Systematically compare maps
from different time periods

02

Visualize geographic patterns
embedded in historical
evidence

03

Reconstruct features from the
past

04

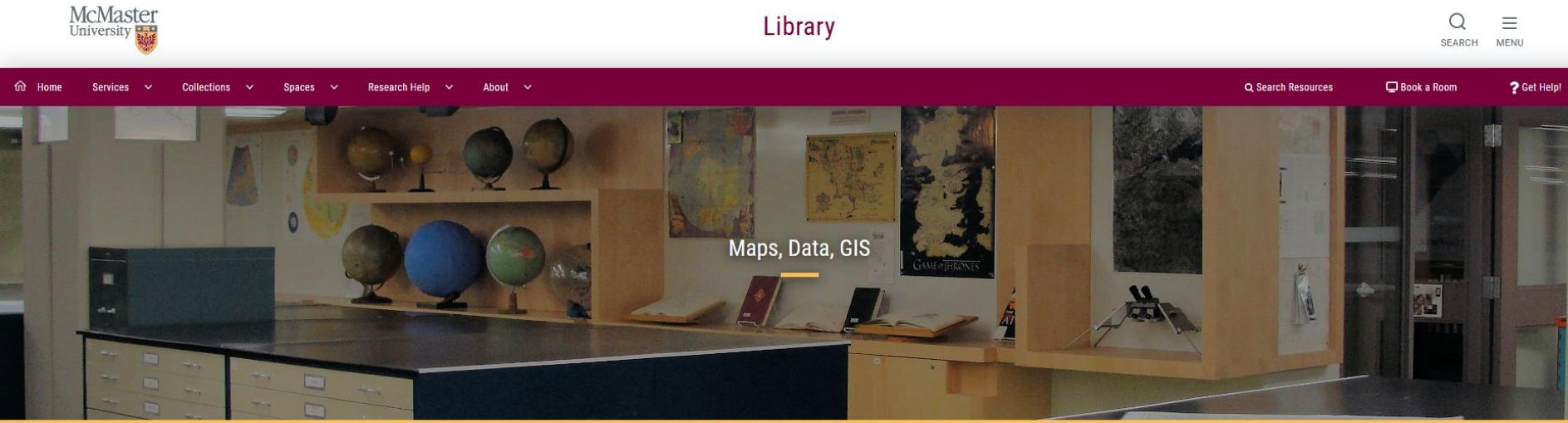
Present historical narratives
visually

How can MUL support me with this stuff?

01 Librarian Support (x)

02 Online Learning (x)

03 Workshops (x)



Maps, Data, GIS

McMaster Library's Maps, Data, GIS Centre supports the geographic, geospatial, statistics, and research data needs of students, staff, and faculty at McMaster University. It provides researchers with access to a wide range of maps, geospatial, statistical and microdata sets, as well as resources and support for managing research data.

[Mills Memorial Library](#)

[Hamilton, Ontario L8S 4L6](#)

[Closed](#)

[905-525-9140 ext. 24745](#)



How can MUL support me with this stuff?

01 Librarian Support ([x](#))

02 Online Learning ([x](#))

03 Workshops ([x](#))

9. StoryMaps

Presented in collaboration with DASH

Synchronous Workshop | March 3, 2022

Link to online module coming soon

Instructor: Christine Homuth

Learn how to make maps tell stories with ArcGIS StoryMaps. This multimedia digital storytelling tool allows you to incorporate maps and apps from your ArcGIS account, as well as text, photos, and videos.

At this workshop, Christine Homuth (Spatial Information Specialist) will provide attendees with an introduction to storytelling through maps using ArcGIS Online and ArcGIS Storymaps. No prior knowledge of GIS is required. This session will be recorded and made available openly.



Activity: Georeference a historical map
in MUL's digital collection using Map
Warper ([x](#))

Thank You

Image Credits

Slide 10: <https://desktop.arcgis.com/en/arcmap/10.3/manage-data/raster-and-images/what-is-raster-data.htm>

Slide 12: <https://gisgeography.com/spatial-data-types-vector-raster/>

Slide 17: https://prism.ucalgary.ca/bitstream/handle/1880/49926/UofCPress_HistoricalGIS_2014_Chapter02.pdf?sequence=4&isAllowed=y

Slide 21: https://prism.ucalgary.ca/bitstream/handle/1880/49926/UofCPress_HistoricalGIS_2014_Chapter01.pdf?sequence=3&isAllowed=y

Slide 24: https://prism.ucalgary.ca/bitstream/handle/1880/49926/UofCPress_HistoricalGIS_2014_Chapter11.pdf?sequence=13&isAllowed=y

Saman Goudarzi

<https://samangoudarzi.github.io/>

March 29 2022

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