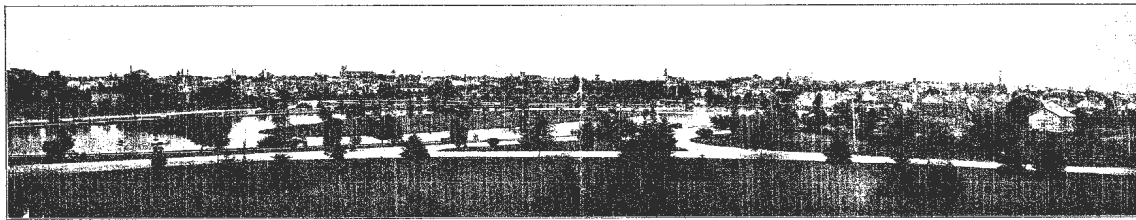


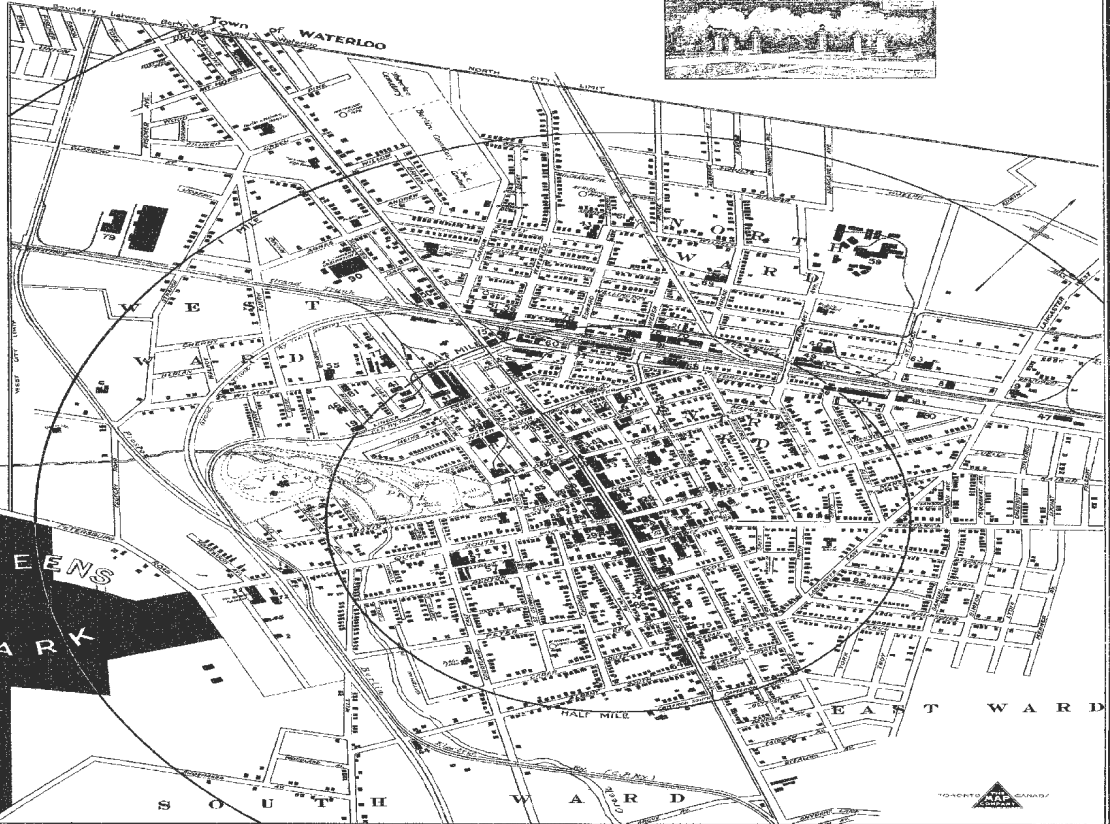
BULLETIN

ASSOCIATION DES CARTOTHÈQUES ET ARCHIVES CARTOGRAPHIQUES DU CANADA



CITY OF BERLIN, ONT. FROM VICTORIA PARK, THE PARK FROM QUEEN'S PARK

- LIST OF PRINCIPAL INDUSTRIES**
1. Machinery, electrical, etc.
 2. Textiles, clothing, etc.
 3. Lumber, wood products, etc.
 4. Printing, publishing, etc.
 5. Food processing, etc.
 6. Chemicals, etc.
 7. Metalworking, etc.
 8. Glass, etc.
 9. Paper, etc.
 10. Brick, etc.
 11. Stone, etc.
 12. Cement, etc.
 13. Coal, etc.
 14. Oil, etc.
 15. Gas, etc.
 16. Electric power, etc.
 17. Telephone, etc.
 18. Radio, etc.
 19. Television, etc.
 20. Motion picture, etc.
 21. Music, etc.
 22. Amusement, etc.
 23. Education, etc.
 24. Health, etc.
 25. Social services, etc.
 26. Public utilities, etc.
 27. Transportation, etc.
 28. Communication, etc.
 29. Finance, etc.
 30. Insurance, etc.
 31. Real estate, etc.
 32. Retail trade, etc.
 33. Wholesale trade, etc.
 34. Services, etc.
 35. Agriculture, etc.
 36. Forestry, etc.
 37. Fishing, etc.
 38. Hunting, etc.
 39. Recreation, etc.
 40. Other, etc.



SOME FACTS ABOUT BERLIN.

Has its own electric public utilities.
 Certified population of Berlin 1911 12,300
 Certified population of Berlin 1912 14,912
 Certified increase during year 2,612
 Estimated population 1918 20,000
 Population of Berlin and Waterloo combined 24,000
 Number of tax factories already existing in 1918 6
 Number of factories in operation 1918 128
 Berlin is the center of the richest farming country in Canada.
 The largest manufacturing center of its size in Canada.

MAP OF
BUSY BERLIN
 SHOWING PROPERTY OF
 M. S. BOEHM & CO., LTD., QUEEN'S PARK, IN RED
 ISSUED BY
M. S. BOEHM & COMPANY, LIMITED
 108 BAY ST. PHONE ADELAIDE 3216 TORONTO, ONT.

SOME FACTS ABOUT BERLIN.

A city of beautiful homes.
 Nature: 27 1/2 per cent of the citizens own their own homes.
 The City is admirably the center of the following industries:
 Printing, Publishing, Music, Radio, Television, Motion Picture, Amusement, Education, Health, Social Services, Public Utilities, Transportation, Communication, Finance, Insurance, Real Estate, Retail Trade, Wholesale Trade, Services, Agriculture, Forestry, Fishing, Hunting, Recreation, and Other.
 It also has a splendid hotel and retail stores for selling, connecting with the following: Printing, Publishing, Music, Radio, Television, Motion Picture, Amusement, Education, Health, Social Services, Public Utilities, Transportation, Communication, Finance, Insurance, Real Estate, Retail Trade, Wholesale Trade, Services, Agriculture, Forestry, Fishing, Hunting, Recreation, and Other.

**ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES /
ASSOCIATION DES CARTOTHÈQUES ET ARCHIVES CARTOGRAPHIQUES DU CANADA**

MEMBERSHIP in the Association of Canadian Map Libraries and Archives is open to both individuals and institutions having an interest in maps and the aims and objectives of the Association. Membership dues are for the calendar year and are as follows:

Full (Canadian map field)... \$45.00
Associate (anyone interested)... \$45.00 (\$35 US)
Institutional... \$65.00 (\$50 US)
Student... \$20.00

Peuvent devenir MEMBRES de l'Association des cartothèques et archives cartographiques du Canada tout individu et toute institutions qui s'intéressent aux cartes ainsi qu'aux objectifs de l'Association. La cotisation annuelle est la suivante:

Membres actifs(cartothécaires canadiens à plein temps)... 45\$
Membres associés (tout les intéressées)... 45,00\$
Institutions... 65,00\$
Étudiant... 20,00\$

Members receive the ACMLA Bulletin, the official journal of the Association, which is published three times a year.

Le Bulletin de l'ACACC sera envoyé aux membres trois fois par année.

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ACMLA Bulletin index available at <http://toby.library.ubc.ca/resources/infopage.cfm?id=187>

Views expressed in the Bulletin are those of the contributors and do not necessarily reflect the view of the Association.

Les opinions exprimées dans le Bulletin sont celles des collaborateurs et ne correspondent pas nécessairement à celles de l'Association.

The Association of Canadian Map Libraries and Archives gratefully acknowledges the financial support given by the Social Sciences and Humanities Research Council of Canada.

L'Association des cartothèques et archives cartographiques du Canada remercie le Conseil de recherches en sciences humaines du Canada pour son appoit financier.

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ON THE COVER...

Map of Busy Berlin [now Kitchener, Ontario]. The Map Company. Toronto, 1912.
Published in 1989 by ACMLA. Reproduction sponsored by the Waterloo Regional
Heritage Foundation. ACML Facsimile Map Series No. 130 (ISSN 0827-8024)

Map of Busy Berlin [aujourd'hui Kitchener, Ontario]. The Map Company. Toronto, 1912.
Publié en 1989 par l'ACACC. Reproduction parrainée par la Waterloo Regional Heritage
Foundation. Série de cartes fac-similes de l'ACC. carte No. 130 (ISSN 0827-8024).

PRESIDENT'S MESSAGE

When left to my own devices to write about something, I find it a huge challenge. What to write about. Many books about how to write suggest starting with something you know or feel strongly about. I was in the middle of this individual “brainstorming session” when I asked myself “how long have I been a member of ACMLA?” – 12 years now. I joined in 2000 when I was co-chair of the Local Arrangements Committee for the CARTO conference in Edmonton. It was at that conference that I met many of the current members. Then I started to think more about the people I’ve met while being involved with ACMLA and then an idea hit me. And it’s something I’ve always believed in all my life. The key to any organization is its people. Thus, I dedicate this issue’s President’s Message to you, the members of ACMLA.

I have been told several times during my career that the organization, or the system, cannot do much for you, but my answer has always been, “But the organization is only as strong as the people who work in it.” And I’ve always felt that ACMLA is strong. It relies on people volunteering their time to ensure successful conferences; publishing a highly regarded journal; working with the larger community to ensure GIS and Map issues are addressed; teaching the larger community to better read, create, and use maps both print and digital; getting involved as partners with some fascinating web projects. Many times, I think, when this work is recognized, people will say it’s simply part of their job. Maybe so, but when it is recognized enjoy the moment. Being recognized for your work and knowledge is something to be treasured. Thank you all for what you do and being members of ACMLA – all of its recognition throughout its history is due to its members – people like you.

Danial Duda

GOOGLE EARTH IN THE LANGUAGES?

Andrew Nicholson

GIS/Data Librarian

Hazel McCallion Academic Learning Centre

University of Toronto Mississauga

Rosa Hong

Department of Language Studies,

University of Toronto Mississauga

Google Earth in the Languages?

A powerful tool which can be easily overlooked by instructors teaching languages is Google Earth. This is a free downloadable program available to anyone with their own PC or Mac and access to the internet. It allows users to make their own maps using existing geographic information as well as anything the user would like to add. Inside Google Earth, is an extensive collection of datasets including recent and historical aerial photography, 3D buildings, terrain, and information links from the United Nations, YouTube, and Wikipedia among many others. While users can work and make maps using these embedded datasets, they can also add and annotate their own images, text, polygon colours, and lines. When complete, users can even save their own Google Map "Mashup" as a customized tour or presentation for sharing with others.

The ability of users to interact with Google Earth and generate their own customized presentations has attracted some instructors in academia to utilize it in their courses. Not surprisingly, geography and archaeology courses have been most adept at using Google Earth to engage students, however even some areas in the Humanities are now utilizing the mapping abilities of Google Earth to help students visualize

the past. One of the best examples of this is the Rome Reborn project <<http://www.romereborn.virginia.edu/>> produced by scholars at Stanford University and the University of Virginia.

Recognizing that the visual and interactive capabilities of Google Earth might lend themselves to a Language Learning course, Rosa Hong from the Department of Language Studies and GIS/Data Librarian Andrew Nicholson collaborated on a creation of a project using Google Earth in an intermediate level French as a Second Language course.

Pedagogical approaches

Google Earth use in a French as a Second Language course idea is primarily based on Communicative Language Teaching approach, especially that of Task-Based Language Teaching. In *Designing Tasks for the Communicative Classroom*, David Nunan defines task as "a piece of classroom work which involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is principally focused on meaning rather than form."¹ Nunan's idea adheres to Communicative Language Teaching and Learning approaches adopted by other researchers such as Richards and Rodgers who advocate in-class activities that allow the second language learners to be focused on the actual communication in the

1

David Nunan, *Designing Tasks for the Communicative Classroom*, New York, Cambridge University Press, 1989, p.10

target language. According to Richards and Rodgers, “activities that involve real communication are essential for language learner. Also, activities in which language is used for carrying out meaningful tasks promote learning as well as support learning process.”² By creating such engaging tasks that assimilate real communication, Google Earth in the French project promotes a naturalistic and intuitive language acquisition for students enrolled in FSL courses in 200 series.

The project was organized in two different yet complementary tasks: first, a ‘Scavenger Hunt’ activity that aimed to introduce Google Earth program to students. The second task was given in form of a group oral presentation using Google Earth on a chosen Francophone country.

Scavenger Hunt

The purpose of the Scavenger Hunt exercise was to engage students with a hands-on task, with a focus on language learning and research. It also gave students an opportunity to practice with the Google Earth set of tools, prior to using them for a group presentation in which they would be graded.

The outcomes for the students included:

1. Utilizing the Google Earth tools in French (the first step in the scavenger hunt is converting the English interface of the program to French)
2. Research using Library and internet resources
3. Practice with the tools, prior to the group presentation

The outcome for the Professor and Librarian was a departmental-library collaboration to promote student engagement.

Before the Scavenger Hunt exercise was delivered in class, students were asked to do a vocabulary exercise to determine if they are familiar with following terms used in the French version of Google Earth. The vocabulary exercise included : Fichier (File), Enregistrer (To save), Dossier (Folder), Repère (Placemark), Imprimer (To print), Trajet (Path), Afficher (To post), Effacer (To delete), Modifier (To change), Annuler (To cancel), Données géographiques (Geographic Layers), Aide (To help), and Itinéraires (Directions).

In the class, the GIS Librarian led the students through the exercise, beginning with the switching of the Google Earth language settings from English to French.

Once done, students then needed to restart the program for the new settings to take effect. Upon restarting Google Earth, the students needed to locate the University of Toronto Mississauga (UTM) campus and then map the route from UTM to the Hotel Château Frontenac in Quebec City. Google Earth plots the route and then provided the distance between the two locations in kilometers. Zooming in on Quebec City, we then learn more about Quebec City including the year of the city’s founding in 1608 and the 2006 population by consulting the French version of Wikipedia which is found within the Google Earth program. (Figure 1)

This was followed up by a visit to the Quebec Citadelle and the use of the measuring tool in Google Earth to determine the distance from the Citadelle to the nearest restaurant and hotels. The exercise then had students go into the “Galerie” portion of Google Earth to bring up old maps of Quebec City found in the Rumsey Historical Map collection. (Figure 2).

²

Jack Richards and Theodore Rodgers, *Approaches and Methods in Language Teaching*, New York, Cambridge University Press, 2001, p. 223



Figure 1. Quebec in Wikipedia



Figure 2. Map of Quebec from Rumsey Historical Map Collection in Google Earth

Students then were asked to go online and find their own map images and photos of Quebec to be added to Google Earth to create their own mash up. These gave students practice on how to use the rotate and resizing tools.

The last part of the exercise had students looking up a recipe for poutine online and locating identifying a poutine restaurant in Quebec City. They then created a path from the restaurant back to the Chateau Frontenac. This was then saved as a “Tour” which allowed it to be saved and shared with others who can then play it back.

After the exercise, a questionnaire was then passed out to the students in which they needed to answer task-related questions. Some examples of questions are the following:

1. Quelle est la distance entre UTM et l’Hôtel Château Frontenac?
2. En quelle année a été fondée la ville de Québec?
3. Quelle est la population de Québec en 2006?
4. Quels sont le restaurant et l’hôtel les plus proches de la Citadelle?

While focusing on the Scavenger Hunt activity, students learned to manipulate Google Earth program for their presentation use, acquired and communicated in a specific type of vocabulary different from what they learn in textbook-based French courses, and gained knowledge in map use and other cartographic symbols.

Group presentation

The Department of Language Studies’ mission states its goals as preparing “students to succeed in further study and gives its graduates an important advantage as they pursue careers in an increasingly competitive global environment.”³ Departmental curricular identifies learning outcome of the FSL 200 level series as understanding diverse Francophone

cultures in the world. In addition to the departmental objective, the Google Earth in the French project seeks to achieve the following learning goals:

1. developing and perfecting four fundamental aspects in language acquisition – listening, speaking, reading and writing – in a Communicative Language Learning environment.
2. enhancing students’ French learning experience and understanding Francophone culture and history in its global context.
3. learning to master a set of transferable skills such as public speaking skills, collaboration, problem solving, and use of Google Earth as a presentation tool.

FSL 200 series course uses *En bonne forme* for its main textbook. This textbook presents diverse literary reading materials written by authors from various Francophone countries. Some countries are well-known for their Francophone culture while some others surprise students. These countries are dispersed in different continents and present rich and complex view on politics, economy, all types of arts, language and people related to France and the French language. For the group presentation assignment, countries including Vietnam, Romania, Lithuania, Mauritius, Senegal, Ivory Coast, Haiti, Belgium, Monaco were selected. Instead of a country, one group chose the Canadian province of New Brunswick. The majority of the students were not familiar with these countries’ Francophone culture and history however while reading and studying literary passages from the textbook, they acquired general understanding on each region.

To prepare the group presentation, which constituted 10% of the final mark and one third of the oral evaluations component of the course, students first formed a group of two or three

³

participants. Each group then picked a Francophone country and prepared a role-play situation pretending to be delegates from the country attending an international Francophone conference. Their main role was to present the country's Francophone history, culture, people and other interesting facts related to French language to promote tourism. Groups submitted a signed document indicating the country, presentation components, distribution of task and meeting schedule.

Students selected interesting aspects on their own and collectively built an in-class presentation. All research, preparation and delivery of the activity were conducted in French and as a group. Even though all groups were given freedom to choose information for the presentation, they also needed to incorporate all of following points:

1. presentations must use Google Earth program and start at the UTM campus and travel to the country's capital in order to show the actual geographical and time distance between two cities. It also needed to show the continent, neighbouring countries and other geographical information related to the country.
2. they had to discuss historical, political and cultural backgrounds of the French language in the country.
3. a good number of audiovisual aids such as photographs, maps, sound files and videos had to be incorporated in order to demonstrate current events or cultures such as regional language, food, fun facts, French festivals, famous people and others that continue to witness French influence.
4. presentations had to use place-marks and description to pinpoint famous touristic sites.
5. presentations had to feature information and street view of the Canadian Embassy, basic information

on international trade and relation between their country and Canada.

All written components in the presentation and transcript were first evaluated by the instructor two weeks prior to the presentations. Groups later corrected and submitted the written revised transcript before their presentation. This report represented 5% of the final mark. A blog was created on in the course portal in Blackboard to save all presentation files. This blog allowed easy communication among members of the group during preparation and guaranteed a quick access to the file before and during presentations. Each student was allotted with 4-5 minutes of talking time and was strongly discouraged from reading the transcript.

During all presentations, the rest of the class actively participated by asking questions and writing reports on other groups' presentation. Students had to comment on what they learned from their peers' performance, friendly yet critical comments, language components such as new words and expressions that they acquired. Their reports were part of their own participation mark as well as presenters' evaluation. Being able to interest the audience and to inspire pertinent questions was part of overall presentation marking.

Evaluation of presentation was mainly on the mastery of French. Pronunciation, prosody, fluency, grammar use, spontaneous oral production, good aural comprehension, originality and interest in the materials, accuracy in information, interaction with audience, group collaboration and overall performance were the principal categories of the evaluation process. Use of Google Earth program as a presentation tool only constituted 10% of the presentation mark since main learning outcomes of the oral presentation were focused on French acquisition rather than mastery of Google Earth program technology.

Student survey

After the Scavenger Hunt exercise and the group presentation, students were invited to participate in a survey on their experience in Google Earth program use. 31 students responded to the survey. 100% of students answered that they had never used Google Earth program before in other courses. Majority of the respondents expressed their liking of the Google Earth as a new presentation tool especially students who were taking courses in History, Geography, Communication, Culture and Technology, Environment, Earth Science and other language field such as Italian. Some students expressed difficulties in familiarization with the technology and preference for other more traditional types of assignment such as essays and in-class tests, however they all commented that with some practices, technical difficulties were easily overcome.

Some of negative comments were related to time management issues on having to overcome initial difficulties in use of a new tool and preparation of an assignment in French language. A few students expressed that learning about a new technology was somewhat unexpected and counterproductive since their major program was in Humanities such as English. Some students also commented that since their other courses in Humanities only give out essays and tests, they did not think that they would use the Google Earth program again as a study tool. Despite of these comments, all of them responded positively in regard to the usefulness of such exercise in acquiring new and different type of French vocabulary and expressions.

Some examples of student comments are:

- 1.<It was hard to figure out but I loved seeing how you could go from one place to another.>
- 2.<It was helpful because I was able to create tours which would run independently while I was presenting. So I didn't have to control anything.>
- 3.<The format was in French which was terrific! I now know a whole new list of vocabulary.>

4.<I love how dynamic it was. I liked the "real time" aspect of it. Will be useful to plan a trip to a foreign country. >

5.<It was a really good idea. There were lots of details that helped and made my presentation stand-out.>

6.<It was very stressful to learn a new skill as well as doing a major project but I did make it more interesting.>

7.<I learned how diverse the planet is and it will give me contextual insight for projects involving international relations or a foreign setting.>

Conclusion and updates

Based on student comments and project experience, some of suggestions to future Google Earth use in other courses including second language courses are:

1. setting very clear learning goals and communicating them with students since it is very easy to be distracted by new technology and interesting tools. Students have to understand that Google Earth program is a supplementary tool that aims to support, expand and enhance their learning experience.
2. maximizing collaboration possibilities and communication opportunities among students, student-instructor and various departments which foster more interactive and experiential learning for students and allow to incorporate various transferable skills
3. setting in advance a transparent and logical set of evaluation scheme and communicating it with students

Further research to more accurately measure the success of the Google Earth in the languages project would be beneficial to further enrich the project. The project has recently won the Provost's Instructional Technology Innovation Funding to advance teaching and learning opportunities utilizing Google Earth program in second language and literature courses.

ACMLA ACMLA Bibliographic Control Committee (BCC)

David Jones, Co-Chair

As you may, or may not, know the ACMLA Bibliographic Control Committee (BCC) is undergoing regeneration, somewhat akin to the process that takes place in 'Dr. Who' when one Doctor is replaced with another actor. In this case, 2011 saw many of the BCC members move to other activities through retirements, work assignment changes etc. In the fall I took on the role of Co-Chair (still waiting for another co-chair) and the committee was repopulated with some continuing and some new members. Continuing members are Donna Porter and Kristin Wylie (both from LAC) while new members are Janina Mueller (U of T), Sherri Sunstrum (Carleton) and myself (U of Alberta). The normal fall meeting was delayed until early January when we could all gather in Ottawa at LAC to approve projects of the previous committee and start assessing the ongoing priorities of the BCC and receive the annual update from LAC.

The major document on best practices in citation of cartographic materials, prepared by Alberta Wood was adopted and is in process of being approved by the ACMLA Board and being published on the website. Once it publicly available we will distribute the URL through listserves to make it accessible to the larger map library community.

Eileen Lim (LAC) joined us and presented her report on the submission of cartographic records to the Union Catalogue. She also shared LAC's movement toward RDA cataloguing and confirmed that LAC is focussing on the translation of RDA into French and that while LAC is providing training only for its own staff, training materials are being made available at: <http://rdaincanada.wikispaces.com/>

Donna Porter, ACMLA rep on the Canadian Cataloguing Committee, reported on their activities, in particular reviewing proposals for changes to the RDA. She also monitors the website of the Joint Steering Committee (<http://www.dra-jsc.org/111out.html>) for matters relevant to our interests. The section 'First RDA Vocabularies Published' [<http://www.rda-jsc.org/rdavoc.html>] contains the section RDA Layout of Cartographic Images [<http://metadataregistry.org/vocabulary/show/id/97.html>]

She also reported that the major players (LC, BL, LAC, etc.) confirmed that they will implement RDA, but not before 2013.

The BCC recognizes that it lacks expertise in some areas, in particular metadata and NAP. We would greatly welcome someone with strengths in the area to step forward to join the Committee. Please contact David (david.jones@ualberta.ca).

CARTO 2012 - The BCC will be hosting an open session at the conference (check the conference program for details) to share provide more info and to hear from you. Please plan come.

David Jones, Co-Chair.

March 2012

CARTO 2012 CONFERENCE DRAFT AGENDA

A Journey Through a Changing Landscape

**Ryerson University & University of Toronto
Toronto, Ontario
June 12-15, 2012**

The Association of Canadian Map Libraries and Archives (ACMLA), Ryerson University, and the University of Toronto are pleased to invite you to the 46th Annual Conference of the ACMLA in Toronto. The CARTO 2012 conference and pre-conference workshops will be held from June 12 to 15, 2012, at the Ted Rogers School of Management on the Ryerson University campus and the University of Toronto Map and Data Library respectively.

Please check the conference website for updates and additional information about registration, accommodations, special events and the final conference program.

<http://www.ryerson.ca/library/carto2012/>

Tuesday, June 12

8:00 - 9:30	Registration
9:30 - 12:30	Workshop 1 - TBA
11:00 - 11:30	Health break
12:30 - 13:30	Lunch and ACMLA executive board meeting
13:30 - 16:30	Workshop 2 -TBA
15:00 - 15:30	Health break
17:00 - 20:00	Icebreaker: City of Toronto Archives, speaker Joan Winearls

Wednesday, June 13

8:30 - 9:15	Registration
9:15 - 9:30	Opening remarks
9:30 - 10:30	Keynote speaker
10:30 - 11:00	The Data Mobile Project: Ryerson University Library and Archives (RULA) Mile / Dan Jakubek, Graham McCarthy
11:00 - 12:00	Title TBA / Andrew Lyszkiewicz, City of Toronto
12:00 - 13:00	Lunch
13:00 - 13:30	War of 1812 in Maps / Colleen Beard
13:30 - 14:00	What came first, concrete sidewalks or concrete roads? / Daniel Brendle-Moczuk
14:00 - 14:30	Waterloo County Historical Street Project / Eva Dodsworth, Jonathan Morgan

14:30 - 15:00	Health Break
15:00 - 15:30	Making historical Canadian maps more accessible: a study of indexing using Google Fusion Tables / Francine Berish, Sarah Simpkin
15:30 - 16:00	Map4Lib / Marcel Fortin
16:00 - 16:30	Géoindex / Stefano Biondo

Thursday, June 14

8:00 - 9:00	Registration
9:00 - 9:45	Lidar Mapping / Gerald Romme
9:45 - 10:30	Discussion Session / David Jones
10:30 - 11:00	Health break
11:00 - 11:30	Collaborate with Geomatics Department to create Custom Library Tools for ArcMap / Joel Rivard
11:30 - 12:00	The Art of Narrative, Moving Beyond Spatial Literacy / Larry Laliberte
12:00 - 14:00	Lunch and AGM
14:00 - 15:00	Panel Discussion: Education in GIS and Map Librarianship
15:00 - 15:30	Health break
15:30 - 16:00	When a map is no longer beautiful / Rosa Orlandini
16:00 - 16:30	Scholars GeoPortal: It's finally here! / Leanne Hindmarch, Jennifer Marvin
18:00 - 23:00	Banquet

Friday, June 15

9:00 - 9:30	GIS Application Programming Interfaces for the Limited Library Budget / Matthew Barabash
9:30 - 10:00	TBA
10:00 - 10:45	Health Break and Cartographic information Literacy Activity / Dana Craig
10:45 - 11:15	An Evaluation of the GeoConnections Discovery Portal for Accessing Arctic Resources / Cynthia Dietz
11:15 - 11:45	A major milestone in Canadian mapping: completion of the 1/50,000 scale topographic coverage of Canada / Sylvain Lemay
11:45 - 12:00	Closing Remarks

Afternoon "Guided walking tour of Cabbagetown, which will include features such as Victorian architecture, famous people who lived here, social history, beautiful cemeteries and the resting place of many remarkable Canadians.

Guided by members of the Cabbagetown Preservation Association.

ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES

ANNUAL GENERAL MEETING

Université Laval
Quebec City, Quebec
June 9, 2011

1.0 Establishment of Quorum; Call to Order

The meeting was called to order at 12:10pm.

2.0 Opening Remarks

ACMLA President Andrew Nicholson opened the meeting and thanked Stefano Biondo and the Université Laval, the Program Committee and Local Arrangements Committee members for organizing the conference. The Program Committee consisted of Nancy Lemay, Marcel Fortin, Dan Jakubek and Jennifer Marvin. The Local Arrangements Committee included Stefano Biondo, Joë Bouchard, Lucie Gendron and Gaston Quirion. In particular he thanked Silvie Delorme, Chief Librarian, Bibliothèque de l'Université Laval, for supporting the conference.

3.0 Approval of Agenda

The agenda was approved. (Marc Cockburn, Barb Znamirovski) CARRIED

4.0 Minutes of Previous Annual General Meeting

The minutes of the previous Annual General Meeting held June 14, 2010 at the University of Guelph were approved as posted on the ACMLA website: http://www.acmla.org/AGM_2010.pdf (Marcel Fortin, Barb Cloutier) CARRIED

Business Arising

a) Member at Large Proposal

This was brought up at last year's AGM; the Executive has decided not to go forward with the position.

b) ACMLA Membership Survey Followup

Notes on the Fireside Chat at the Icebreaker will be distributed to the membership.

5.0 President's Report (Andrew Nicholson)

a) Geospatial Data Access Committee

Andrew thanked chair Richard Pinnell and the other committee members.

6.0 First Vice President's Report (Andrew Nicholson reporting for Ann Smith)

a) Future Conferences

2012: information coming soon

2013: possibly Whitehorse, Yukon with CAG

b) Membership

Andrew thanked Erin Forward who is stepping down as Membership chair. A new chair is needed. Erin made some recommendations for changes including using PayPal.

c) Awards Committee

There was no ACMLA Paper Award this year. The Student Paper Award was given to Ryan Slipetz of McMaster University for his paper entitled "A picture is worth a thousand words: A historical look at the New France maps of Nicolas Sanson". He was not able to attend the conference to present the paper.

7.0 Second Vice President's Report (Dan Duda)

a) Publications Officer

Dan thanked Heather Tompkins who will continue in the role until Natalie LeBlond returns.

b) Historical Maps

He thanked Gord Beck and Cheryl Woods for their committee work.

c) Web Committee

He thanked Siobhan Hanratty (webmaster), Colleen Beard and Sue McKee for their committee work.

d) Bulletin

Dan announced that Bulletin Editor Cathy Moulder was stepping down, and Eva Dodsworth would be taking over in September 2011. Cathy will assist with the transition.

The Bulletin has now been digitized (up to number 133) and is available on the Memorial University Digital Archives website: <http://collections.mun.ca/index.php> under Newsletters. Dan asked members to look for missing issue #12 in their collections. Dan urged all members to use the site and submit comments via CARTA. The question on digitizing the latest issues is under discussion. Dan would like to recognize Memorial University staff for their role in Bulletin digitization. He also thanked the ACMLA for financial assistance.

The ACMLA would like to acknowledge Cathy Moulder's important role as ACMLA Bulletin Editor since 1998 (number 103).

8.0 Treasurer's Report (Susan Greaves)

a) Proposed Budget

Susan presented the 2011-2012 Proposed Budget and 2010 Financial Report. There were a few questions about publications and conferences. The ACMLA receives revenue for map and monograph publications; we are considering digitizing other ACMLA publications.

Expenditures for publications include Bulletin printing and mailing. ACMLA provides seed money for, and sometimes receives revenue from conferences.

It was moved that the Proposed Budget and Financial Report be approved.

(Suzette Giles, Stefano Biondo) CARRIED

9.0 Past President's Report (Colleen Beard)

a) SSHRC Committee

Colleen reported that once again the ACMLA was awarded \$3990 from SSHRC for travel purposes. All applicants received some funding for conference travel. Applicants should submit claims to the Treasurer for reimbursement. Colleen went over some of the criteria for funding:

- Applicants must seek other sources of funding first
- Travel claims should be the most cost efficient route
- Provide an estimate of costs with the application
- Applicants must submit receipts to the Treasurer within 45 days

The Travel Policy is posted on the ACMLA website. The policy will be reviewed over the next year.

10.0 Other Business

a) Paper Award (Colleen Beard)

Motion: It was moved that in recognition of Cathy Moulder's long time service as Bulletin Editor, that the ACMLA Paper Award be renamed the Cathy Moulder Paper Award.

(Colleen Beard, Stefano Biondo) CARRIED

An official letter will be sent to Cathy soon.

b) Teaching and Learning Advisory

Committee Proposal (Andrew Nicholson)

Andrew discussed the proposed committee and terms of reference. He would like to be incoming chair.

Motion to accept the proposal: Nicholson, Beard

There was discussion on the proposal. Committee outcomes would focus on competencies in geospatial literacy, researching workshop topics for conferences, and developing a list of GIS guides. Members commented that while teaching and education is a good idea, there may not be a need for a new committee. Could the same tasks be carried out by other committees, including conference organizers. Some other organizations have similar committees, such as the WAML Continuing Education Committee and the DLI Education Committee.

Motion: Establish an advisory committee to look at ongoing education for ACMLA members. The title and terms of reference to be determined by members of the committee and approved by the Executive.

(Gail Curry, Suzette Giles) CARRIED (Approved 23, Opposed 5, Abstentions: 3)

Motion: Establish a task force, set up by the Executive, to look at ACMLA committee structure and make recommendations to the next AGM. (Daniel Brendle-Moczuk, Marcel Fortin) CARRIED

c) ACMLA Membership Survey and Fireside Chat (Andrew Nicholson and membership) Notes on the Fireside Chat will be distributed to members soon.

Motion: Hold a membership vote within the next few months on changing the ACMLA name. If the membership is in favour, establish a task force to change the name, with ACMLA as one of the choices.

(Marcel Fortin, Quin Shirk-Luckett) CARRIED

11.0 Nominations Report (Colleen Beard)

Colleen thanked Executive members who are stepping down: Colleen Beard, Susan Greaves, Susan McKee and Ann Smith. Only one nomination was received for each Executive position, so no voting was required. The

2011/2012 ACMLA Executive Board members are:

President: Dan Duda

First Vice President: Rosa Orlandini

Second Vice President: Wenonah Van Heyst

Treasurer: Deena Yanofsky

Secretary: Jasmine Hoover

Past President: Andrew Nicholson

It was moved that the new Executive Board be adopted.

(Marcel Fortin, Barb Cloutier) CARRIED

12.0 Adjournment

It was moved that the 2011 Annual General Meeting be adjourned.

(Marcel Fortin, Gail Curry) CARRIED

The meeting was adjourned at 1:35pm.

Welcome! New ACMLA Members

Virginia Pow
Map Librarian
University of Alberta
I-64 Cameron Library
Edmonton AB T6G 2J8
virginia.pow@ualberta.ca
Membership status: Full

Andreas N Korsos
Cartographer & Geographic Information Analyst
Arcturus Consulting Ltd.
Edmonton AB
ankorsos@northwestvoyageur.com
www.arcturusconsulting.net
Membership status: Full

LE PROJET SEPTENTRIONALIUM À LA BIBLIOTHÈQUE DE L'UNIVERSITÉ LAVAL : ACQUISITION, CONSERVATION ET MISE EN VALEUR D'UNE CARTE FONDATRICE DE LA NORDICITÉ

Stéfano Biondo

Cartothécaire, Centre GéoStat, Bibliothèque de l'Université Laval

Joë Bouchard

Bibliothécaire, Centre GéoStat, Bibliothèque de l'Université Laval

INTRODUCTION

Certains documents précieux occupent une place significative dans les collections d'une bibliothèque universitaire. Cela peut être relié à leur rareté, à la richesse de leur contenu, à l'histoire de leur acquisition, ou encore à leur valeur monétaire. Certains de ces trésors détiennent même une valeur symbolique pour l'institution qui en est la gardienne, parce qu'ils sont à la source d'un savoir qui la distingue.

L'ensemble de ces éléments s'appliquent à la carte de Gérard Mercator *Septentrionalium Terrarum descriptio*, acquise en 2010 par la Bibliothèque de l'Université Laval. Le caractère particulier de la carte pour notre institution a permis de développer un ambitieux projet dont il est question dans le présent article, le projet *Septentrionalium*. Celui-ci comprend notamment des opérations pour assurer la préservation de la carte de manière optimale, la réalisation d'un livre faisant ressortir ses fascinantes caractéristiques et la conception d'une carte interactive novatrice.

MISE EN CONTEXTE

La carte polaire de Gérard Mercator constitue une pierre d'assise pour le développement d'une

collection de cartes géographiques dans un domaine qui est cher à l'Université Laval, celui des études nordiques.

La recherche scientifique sur le Nord à l'Université Laval

L'intérêt de l'Université Laval pour les études nordiques s'est affirmé dès la création du Centre d'études nordiques (C.E.N.), en 1951. Depuis, différents centres et plusieurs chaires de recherches liés au domaine ont vu le jour à l'université. Nommons, entre autres, le Centre interuniversitaire d'études et de recherches autochtones (CIÉRA), le réseau de centres d'excellence ArcticNet, la Chaire de recherche en géographie historique du Nord et la Chaire d'excellence en recherche sur la télédétection de la nouvelle frontière arctique du Canada.

Les archives et les livres rares en nordicité

Différents types de ressources documentaires patrimoniales sont mis à la disposition des étudiants, professeurs et chercheurs en études nordiques. Les fonds individuels d'archives d'universitaires et d'artistes « nordistes » regroupent de riches documents textuels, photographies et enregistrements sonores provenant de voyages, d'études scientifiques et

de créations artistiques.¹ De plus, la bibliothèque possède une collection de plus de 2400 livres rares portant sur la nordicité, dont plusieurs éditions originales de récits d'expéditions menées dans les contrées septentrionales aux XVIII^e, XIX^e et XX^e siècles.

Le développement de la collection de cartes géographiques anciennes

Si la richesse des collections d'archives et de livres rares témoigne de l'intérêt de l'Université pour les études nordiques, force est de constater qu'il en était autrement pour la collection de cartes anciennes. Afin de pallier cette lacune, nous avons établi qu'un des deux principaux pôles de développement de cette collection allait être lié aux territoires nordiques et à l'Arctique.² L'acquisition d'un exemplaire original de la carte polaire de Mercator de 1595 constituait un incontournable pour lancer le développement de cette collection.

***Septentrionalium Terrarum descriptio*, une carte phare**

Nos recherches initiales au sujet de la carte de 1595 *Septentrionalium Terrarum descriptio*³ nous ont permis d'établir qu'il s'agissait de la première carte imprimée représentant l'hémisphère nord à partir du 60^e degré de

latitude. Mercator y présente, à partir d'une perspective circumnordique, plus de trois cents noms de lieux, de cours d'eau, de montagnes et de peuples. Afin d'obtenir un avis extérieur sur la pertinence de cette importante acquisition pour la bibliothèque, nous avons consulté Monsieur Louis-Edmond Hamelin, professeur émérite de géographie à l'Université Laval, premier directeur du C.E.N. et fondateur du concept de nordicité dans les années 1960. Il en est ressorti que Monsieur Hamelin reconnaissait non seulement la carte de Mercator comme un document fondateur pour la nordicité mondiale, mais qu'il avait travaillé à l'élaboration d'une étude de la carte encore jamais publiée. L'acquisition réalisée par la Bibliothèque devenait une superbe occasion pour publier ce livre. (Image 1)

Gérard Mercator, homme de sciences hors norme

Le Flamand Gérard Mercator (1512-1594) ne fut pas seulement un des plus grands cartographes du XVI^e siècle il fit également ses marques en tant que géographe et mathématicien. Il est le concepteur de la fameuse projection de Mercator, véritable révolution dans l'histoire de la cartographie et dans l'art de la navigation.⁴

¹ Mentionnons à ce chapitre les fonds d'archives du géographe Louis-Edmond Hamelin, premier directeur et cofondateur du C.E.N., du biologiste et ethnologue Jacques Rousseau et du cinéaste et poète Pierre Perrault.

On peut lire au sujet des sources patrimoniales nordiques disponibles à l'Université Laval l'article de James Lambert, «L'Université Laval et l'exploration scientifique du Nord canadien : les sources patrimoniales», *Archives au présent. Le magazine en ligne des archivistes du Québec*. http://www.archivistes.qc.ca/spip.php?page=article-22&id_article=249 (consultée le 3 février 2012).

² L'autre pôle de développement principal étant celui de la région de Québec et la vallée du St-Laurent.

³ MERCATOR, Gérard, *Septentrionalium Terrarum descriptio* [document cartographique], dans: *Atlas sive cosmographicae meditationes de fabrica mundi et fabricati figura*, [Duisbourg], Dvisbvr̄gi Clivorvm, [1595], [carte 6].

⁴ Adaptée, cette projection cylindrique est toujours utilisée aujourd'hui. Au Canada, la projection Transverse universelle de Mercator (Universal Transverse Mercator, UTM en anglais) sert à la production des cartes topographiques aux échelles 1:50 000 et 1: 250 000. Au Québec, la projection Transverse Modifiée de Mercator (Modified Transverse Mercator, MTM en anglais) est mise à profit pour la production de cartes topographiques à l'échelle 1: 20 000.

Il a produit une œuvre riche et variée, qui fait encore l'objet d'études de nos jours: globes terrestre et céleste, traité d'écriture italique, recueil de cartes actualisées de Ptolémée, cartes du monde, atlas, etc. Il était un homme de sciences résolument catholique, avec ce que cela peut impliquer de contradictions, qui réfléchissait profondément aux liens entre la religion et la science. Le respect qu'il vouait aux récits bibliques ne l'empêcha pas d'être soupçonné d'hérésie à deux reprises par les autorités religieuses. Cartographe de cabinet, il était en constante recherche d'informations pour représenter le plus fidèlement possible un monde dont plusieurs régions demeuraient *Terra incognita*. Il entretenait une volumineuse correspondance avec des savants intéressés, tout comme lui, aux plus récents progrès des grandes explorations. *L'Atlas sive cosmographicae meditationes de fabrica mundi et fabrica figura*⁵ constitue une merveilleuse démonstration de son génie, de son savoir et de son audace. Cet atlas mondial fut publié en trois volumes (1585, 1590 et 1595). C'est dans le dernier volume, publié un an après sa mort par son fils Rumold, que paraîtra la carte *Septentrionalium Terrarum descriptio*. (Image 2)

ACQUISITION ET CONSERVATION

Enfin convaincus de la grande pertinence de cette acquisition pour le rayonnement de nos collections, nous avons commencé certaines recherches pour mettre la main sur le document. Le but était de faire l'achat d'un exemplaire du premier état de la carte, afin de détenir sa version originale.⁶ L'atteinte de cet objectif s'est trouvée confortée par le fait que l'analyse produite par M. Hamelin se référait à cet état et non aux éditions subséquentes.

Différentes vérifications infructueuses auprès de marchands de cartes anciennes réputés nous ont d'abord fait douter de la disponibilité du document, et dans une plus forte mesure de la possibilité d'acquérir son premier état. Nous avons alors choisi de diffuser notre demande de manière exhaustive, en envoyant un courriel à plus de 180 marchands à travers le monde.

Plus de trois semaines d'attente ont été nécessaires avant de recevoir une réponse positive. Étonnamment, celle-ci provenait d'un marchand de chez nous, à Montréal! C'est pratiquement au même moment qu'un second commerçant, situé celui-là à Prague, en République Tchèque (l'antiquaire Karel Křenek), nous a informés qu'il détenait aussi le premier état tant recherché. Nous avons finalement opté pour l'exemplaire provenant d'Europe, en raison des couleurs appliquées sur la carte et du prix demandé. C'est avec grand enthousiasme que nous avons reçu, quelques semaines plus tard, le colis contenant cet extraordinaire achat.

Numérisation, restauration et analyse

Une des premières opérations qui suivit la réception de la carte fut de la faire numériser chez un photographe professionnel. Disposée à la verticale, la carte était maintenue en place par aspiration sur une grille. L'appareil photographique utilisé était doté d'une résolution de 39 Mégapixels. La numérisation nous a permis d'obtenir une image à haute résolution, à partir de laquelle allait être élaborée la carte interactive. Elle nous a également permis de produire des facsimilés de très bonne qualité, que nous rendons disponibles à nos usagers. Nous réduisons ainsi au minimum les risques d'altération de l'exemplaire original.

⁵ Gérard Mercator, *Atlas sive cosmographicae meditationes de fabrica mundi et fabricati figura*, [Duisbourg], Dvisbvrgr Clivorum, [1595], [107 cartes].

⁶ Plusieurs éditions de l'atlas de Mercator ont été produites, et différents états de la planche arctique comportant des modifications ont vu le jour. Pour plus de détails, voir BURDEN, Philip D., *The Mapping of North America: A list of printed maps, 1511-1670*, Rickmansworth, Raleigh Publications, 1996, p. 113-114, ainsi que RAEMDONCK, Jean van, Gérard Mercator, sa vie et ses œuvres, St. Nicolas, E. Dalschaert-Praet, 1869, p. 255-269.

Une légère déchirure dans le bas de la carte et un questionnement lié aux teintes employées pour sa coloration nous ont poussés à demander l'avis du Centre de conservation de Québec (CCQ), spécialisé dans la restauration et l'analyse d'œuvres patrimoniales et muséales.

Les conclusions du CCQ ont indiqué que les couleurs de la carte existaient en 1595.⁷ De plus, différentes cartes réalisées par Mercator et présentant des couleurs vives similaires nous permettent de croire que les couleurs appliquées sur notre exemplaire le furent peu après son impression. L'analyse a également confirmé que la carte était dans un état remarquable compte tenu de son âge, et que ses couleurs étaient solubles. Il était par conséquent recommandé de procéder à un encadrement de type muséal à la suite de son nettoyage et de sa réparation. (Images 3 & 4)

Encadrement

Afin de maximiser la préservation de la carte, et en ayant en tête que le document serait fréquemment présenté aux étudiants et usagers intéressés par les études nordiques, nous avons suivi les recommandations du CCQ et demandé à un spécialiste reconnu dans le domaine de procéder à un encadrement de type muséal. (Image 5)

MISE EN VALEUR

L'achat et la conservation d'une carte précieuse comme la *Septentrionalium Terrarum descriptio* ne prennent leur sens, dans un contexte universitaire comme le nôtre, que si les étudiants, professeurs, chercheurs et usagers externes peuvent véritablement en tirer profit. C'est donc dans une optique de mise en valeur d'un des bijoux de nos collections que la publication d'un livre et la mise en ligne d'une carte interactive ont été réalisées.

Publication d'un livre

Il est difficile d'imaginer une opération de mise en valeur plus efficace que la publication d'un livre destiné à faire ressortir le caractère extraordinaire d'un document précieux – et même de son acquisition –. Ce type d'initiative n'est-il pas des plus pertinents à l'heure où nous tentons de rejoindre les usagers efficacement et nous efforçons d'augmenter l'utilisation de nos collections? C'est dans ce contexte qu'a été acceptée la proposition de Louis-Edmond Hamelin de travailler à la réalisation du livre *L'Apparition du Nord selon Gérard Mercator*.

Le travail qui a conduit à la publication du livre a été résolument collaboratif. Les forces de chacun ont été mises à contribution afin de produire une étude fouillée mais accessible, un livre savant et attrayant, qui pourra autant intéresser le spécialiste de l'histoire de la cartographie que lecteur néophyte, simplement curieux de questions liées à la nordicité. Plus de 30 rencontres entre les trois collaborateurs ont été nécessaires pour produire le manuscrit, dont la première version totalisait 80 pages. Le manuscrit définitif remis à l'éditeur a plutôt totalisé 185 pages, qui incluaient notamment plusieurs photos, des extraits de cartes et de documents anciens et des nouvelles cartes géographiques. Les photos, sélectionnées dans le fonds d'archives de Louis-Edmond Hamelin qui en compte plusieurs milliers, montrent des régions cartographiées par Mercator à partir de superbes points de vue. Les extraits de cartes et de documents anciens permettent, d'une part, de bien visualiser sur la carte les toponymes, hydronymes ou inscriptions analysées et, d'autre part, de fournir des exemples de documents qui ont pu alimenter Mercator dans son travail.

⁷L'analyse des couleurs a été réalisée par l'Institut de conservation canadien (ICC) basé à Ottawa. L'orangé, couleur pour laquelle nous nous questionnions, est issue d'aquarelle composée de minium, de massicot et de blanc de plomb. Le brun foncé est un mélange d'azurite, de noir d'os, de dolomite et de quartz. La carte est exempte d'encre ferrogalique, élément pouvant altérer le document.

Enfin, la réalisation de nouvelles cartes générées à partir de systèmes d'information géographique, permet des comparaisons avec des extraits de la *Septentrionalium Terrarum descriptio*. Cela démontre l'habileté du Flamand à représenter des régions encore peu connues et des faits géographiques découverts officiellement bien plus tard. Notons que de nombreuses recherches ont permis de produire une riche bibliographie qui concerne Mercator, la cartographie à l'ère des grandes explorations et la découverte du monde polaire. (Image 6)

Réalisation d'une carte interactive

C'est à l'aide d'un système de gestion de contenu libre et ouvert qu'une seconde opération de mise en valeur de la *Septentrionalium Terrarum descriptio* a été menée : la mise en ligne d'une carte interactive. Cette ressource propose une lecture nouvelle de la planche de Mercator en facilitant son exploration et son analyse à l'aide d'une excellente résolution. C'est un outil interactif et collaboratif, puisque l'internaute peut s'y déplacer, zoomer, accéder à des extraits d'analyse du livre, observer des photographies, visionner des vidéos, lire et émettre des commentaires sur des points d'analyse dans le cadre d'un forum. La carte interactive comporte, de manière plus précise, trois rubriques :

Accueil et onglet Thèmes

La page d'accueil permet de naviguer à travers différents thèmes traités dans le livre. À l'aide de la barre de navigation, l'utilisateur peut aisément se déplacer sur la carte, passer d'un thème à l'autre ou consulter l'information qui se trouve sur son verso. Chaque thème est associé à un texte descriptif, à des images ou à un court vidéo, ainsi qu'à une zone de commentaires pour les internautes.

Onglet Termes

Plus de 300 termes sont présents sur la carte de Mercator: termes de lieux, de cours d'eau,

de montagnes, de peuples, etc. Sous cet onglet, un moteur de recherche permet de localiser précisément les termes sur le document. À l'aide de trois filtres, il est possible de raffiner la recherche par région, par quadrant (division de la carte en 4 sections égales) et par type de terme (hydronyme, toponyme, description).

Onglet 1595-2010

Issu du chapitre consacré à des comparaisons cartographiques 1595-2010, cet onglet donne accès à une représentation fascinante et unique de la superposition du monde nordique tel que cartographié aujourd'hui sur celui dessiné par Mercator. Louis-Edmond Hamelin s'est d'ailleurs montré bouleversé lorsqu'il a pris connaissance de cette synthèse cartographique rendue possible par les « nouvelles technologies ».

L'infrastructure de la carte interactive a été développée par Martin Ouellet, géomaticien au Centre GéoStat et membre de l'équipe informatique de la bibliothèque, à l'aide du logiciel Drupal et de son module OpenLayers. Drupal est un système de gestion de contenu (SGC) libre et ouvert pouvant se déployer rapidement. Très flexible et convivial, il permet de personnaliser les formulaires de saisies et de type de contenu. L'ajout de son module OpenLayer rend possible la visualisation de cartes géoréférencées à l'intérieur même du SGC. (Image7)

CONCLUSION

Le projet *Septentrionalium* a demandé un investissement considérable en temps et énergie. Nous l'avons réalisé dans un bel esprit de collaboration avec Monsieur Louis-Edmond Hamelin, en bénéficiant de l'aide de quelques collègues de la Bibliothèque, sans laisser de côté nos responsabilités premières de bibliothécaires. Nous avons toujours été convaincus du caractère exceptionnel du document à mettre en valeur, ainsi que de la richesse du projet d'un point de vue professionnel.

Une carte fascinante

Enfin, l'évocation de quelques éléments de l'analyse développée dans *L'Apparition du Nord* peut laisser entrevoir le caractère exceptionnel de la *Septentrionalium Terrarum descriptio*. La richesse du document ne réside pas simplement dans le fait qu'il s'agit d'une très habile représentation circumnordique réalisée par un des grands maîtres de la cartographie. La planche expose également une fascinante cohabitation d'informations tirées de l'Antiquité, du Moyen Âge et des plus récentes découvertes. Qui plus est, elle rapporte et met en relief des faits géographiques avant même leurs découvertes officielles, et les positionne de façon précise pour l'époque. Elle étonne également par les quatre grandes étendues centrales qu'elle contient, que nous proposons de considérer non pas comme de la terre ferme, mais plutôt comme de la glace flottante⁸.

C'est ainsi qu'un rocher noir fixé en plein Pôle Nord attire les eaux du globe, amenées par quatre grands bras évacuateurs qui sectionnent la banquise. C'est également ainsi que la région du bassin du Mackenzie est dessinée avec une précision frappante : elle comprend trois cours d'eau qui évoquent les rivières Peel et Arctic Red, ainsi que le fleuve Mackenzie. De plus, la moitié Ouest du Grand lac des Esclaves est esquissée, et localisée très judicieusement en termes de latitudes. Enfin, les limites des quatre grandes étendues centrales peuvent correspondre à une représentation de la banquise polaire au Moyen Âge – peut-être pendant l'Optimum climatique médiéval – et laisser ainsi entrevoir qu'il était alors possible de naviguer entre les passages du Nord-Est et du Nord-Ouest⁹.

Un projet professionnellement emballant

Le projet *Septentrionalium* est très stimulant et intégrateur puisqu'il embrasse différents éléments de la bibliothéconomie : certains plutôt traditionnels (acquisition, restauration et conservation) et d'autres davantage liés aux nouvelles technologies (numérisation et mise en ligne d'une carte interactive). Toutes ces dimensions ont été explorées de manière approfondie.

La publication d'un livre est certainement un projet signifiant pour le bibliothécaire universitaire. Elle permet l'appropriation intellectuelle des collections dont il est responsable. Elle s'inscrit dans un processus complexe, parfois fastidieux, mais dont le résultat profite tant à l'auteur qu'à l'utilisateur en quête d'information.

La réalisation d'un ouvrage et d'un média interactif liée à l'acquisition d'un document comme la carte de Mercator assure un rayonnement à la bibliothèque dépassant les frontières universitaires. Lecteurs et internautes sont ainsi invités à profiter pleinement des trésors qui composent ses collections.

⁸Ces éléments ne représentent que quelques points de l'analyse développée dans le livre *L'Apparition du Nord* et synthétisée sur la carte interactive, disponible à l'adresse suivante : www.bibl.ulaval.ca/geostat/mercator.

⁹Étonnamment, la comparaison par géoréférencement des limites de la banquise dessinée par Mercator à celles prévues pour les prochaines décennies par les modèles de l'Arctic Climate Impact Assessment (ACIA) montre peu de différences. La carte de 1595 serait-elle annonciatrice d'un futur proche?

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Canadian Historical Topographic Maps Project : Targeted Series

In the last edition of the ACMLA Bulletin, Number 139, Barb Cloutier described the **Canadian Historical Topographic Maps Project**. She had listed the target series, however the full list was not published. The entire targeted series includes:

- * Sectional Maps of Western Canada
- * 3-Mile (old and new styles)
- * 6-Mile
- * Chief Geographer's Series/Standard Topographic Maps
- * 1:250 000 (1904-1908)
- * 1:500 000 (1905-1948)
- * Early One Inch to One Mile Series, 1:63,360 (1905-1931)
- * Early Two Mile to One Inch Series, 1:126 720 (1908-1932)
- * National Topographic System (NTS)
- * 1:25 000 (1958-1978)
- * 1:63 360 (1926-1953)
- * 1:50 000 (1949?-)
- * 1:126 720 (1927-1974)
- * 1:125 000 (1960-1979)
- * 1:253 440 (1926-1957)
- * 1:250 000 (1948-)
- * 1:506 880 (1929-1960)
- * 1:500 000 (1957-?)
- * Photomap Series A001 (colour)
- * Photomap Series A002 (b&w)
- * Photomap Supplement Series A003 (no contours)
- * International Map of the World 1:1,000,000-Canadian sector (1928-1988?)



**THE SEPTENTRIONALIUM PROJECT AT THE UNIVERSITÉ LAVAL
LIBRARY :
ACQUISITION, PRESERVATION AND ENHANCEMENT OF A MAP PRESAGING
THE NOTION OF NORDICITY**

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INTRODUCTION

Some documents hold a special place within the collections of an academic library. This can be explained by their rarity, the richness of their content, the story behind their acquisition or their monetary value. Some of these treasures also have a symbolic value for the institution preserving them because they are the keepers of a distinctive type of knowledge.

All of these characteristics pertain to Gerhard Mercator's *Septentrionalium Terrarum descriptio*, a map acquired by the Université Laval Library in 2010. The unique link between this map and our institution is at the source of an ambitious project which will be described in these pages, the *Septentrionalium* Project. This project encompasses state-of-the-art preservation of *Septentrionalium Terrarum descriptio*, publication of a monograph highlighting the fascinating attributes of the document and conception of an innovative online interactive map.

BACKGROUND

The acquisition of Gerhard Mercator's *Septentrionalium Terrarum descriptio* stands as a cornerstone in the development of a collection of maps related to Northern Studies, a field of high interest for Université Laval.

Northern Studies at Université Laval

Northern Studies have been an area of expertise at Université Laval since the creation of the Centre for Northern Studies in 1951. Over the years, numerous research chairs and other centres were established at the university. The Interuniversity Centre for Aboriginal Studies and Research, ArcticNet, the Canada Research Chair in Historical Geography of the North and the Canada Excellence Research Chair in Remote Sensing of Canada's New Arctic Frontier are among them.

Archives and rare books pertaining to nordicity

Various types of patrimonial documentary resources are accessible to Northern Studies professors, researchers and students at Université Laval.

Archival fonds from artists, researchers and institutions contain textual accounts, photographs and sound recordings originating from trips, scientific research and artistic creations¹. The Université Laval Library also owns a collection of more than 2400 rare books pertaining to nordicity, including a large number of 18th-, 19th- and 20th-century travel narratives based on polar expeditions.

The development of the historical maps collection

The richness of the archival fonds and rare books collection are contrasted with the meagreness of the historical maps collection. To alleviate this situation, it was decided that the Arctic and northern regions would be one of the two main areas of collection development.² The acquisition of an original 1595 Mercator map became an imperative.

***Septentrionalium Terrarum descriptio*, a seminal map**

The first phases of our research regarding the 1595 *Septentrionalium Terrarum descriptio*³ allowed us to establish it was the first printed map representing the Northern Hemisphere from the 60th parallel.

The map, drawn according to a circumpolar perspective, records more than 300 geographical names, watercourses, hills and peoples. We consulted Mr. Louis-Edmond Hamelin, emeritus professor of geography at Université Laval, first director of the Centre for Northern Studies and father of the term “nordicity,” to get his opinion on the potential acquisition of Mercator’s map by the Université Laval Library. Not only did Mr. Hamelin think *Septentrionalium Terrarum descriptio* was of capital importance to nordicity, he drafted years ago a study of the map that had never been published. The acquisition of the map by the Université Laval Library would be an ideal occasion to publish this study. (Image 1)

Gerhard Mercator, a singular scientific mind

Flemish cartographer Gerhard Mercator (1512-1594) wasn’t only one of the most famous mapmakers of his time, he was also a well-known geographer and a mathematician. He is remembered for the projection named after him, the Mercator projection, a major breakthrough in the history of cartography and navigation.⁴ His production, rich and varied, is still studied today: terrestrial and celestial globes, a writing treaty, a compendium of revised maps originally by Ptolemy, world maps, atlases, etc.

¹These include geographer Louis-Edmond Hamelin’s fonds, biologist and ethnologist Jacques Rousseau’s fonds and filmmaker and poet Pierre Perrault’s fonds.

To find out more about patrimonial documentary resources pertaining to nordicity at Université Laval, one can read the article written by James Lambert, «L’Université Laval et l’exploration scientifique du Nord canadien : les sources patrimoniales», Archives au présent. Le magazine en ligne des archivistes du Québec. http://www.archivistes.qc.ca/spip.php?page=article-22&id_article=249 (Accessed on 3 February 2012).

²The other one is the Quebec region and the St. Lawrence River Valley.

³MERCATOR, Gerhard, *Septentrionalium Terrarum descriptio [map]*, in: *Atlas sive cosmographicae meditationes de fabrica mundi et fabricati figura*, [Duisbourg], Dvisbvrge Clivorum, [1595], [map number 6].

⁴Adapted, this cylindrical projection is still in use today. In Canada, the Universal Transverse Mercator (UTM) projection is used to produce scale 1:50 000 and 1: 250 000 topographical maps. In the Province of Québec, the Modified Transverse Mercator (MTM) projection is used to produce scale 1: 20 000 topographical maps.

He was both a scientist and an ardent catholic, sensible to this situation, and would ponder on the relation between religion and science. Despite his respect for the Biblical texts, Mercator was charged with heresy twice by religious authorities. As a “cabinet cartographer,” he constantly sought new evidence and information in order to represent as faithfully as possible a world that was still largely *Terra incognita*. He corresponded frequently with other scientists interested, as he was, in the latest developments of intercontinental explorations. The *Atlas sive cosmographicae meditationes de fabrica mundi et fabrica figura*⁵ stands as a remarkable demonstration of his knowledge, audacity and genius. This world atlas was published in three volumes (1585, 1590 and 1595). It is in the last volume, published a year after Mercator’s death by his son Rumold, that *Septentrionalium Terrarum descriptio* appears. (Image 2)

ACQUISITION AND PRESERVATION

Now perfectly aware of the importance of this map for our collections, we began our quest to acquire the document. Our goal was to find a copy of the first printing of the map, in order to own its original version.⁶ This intention was reinforced by the fact that Mr. Hamelin’s study referred only to the 1595 map and not to subsequent versions.

Several demands sent to reputable rare maps dealers were infructuous, making us concerned about the availability of the document, particularly in its first version.

We therefore decided to disseminate our request through emails, contacting more than 180 dealers around the world.

More than three weeks passed before we received a positive answer. Surprisingly, the dealer was located in Montreal! Virtually at the same moment, we heard from a second merchant, this one based in Prague, Czech Republic. Antique books and maps dealer Karel Křenek informed us that he owed the much sought-after first printing of the map. We opted for this copy since it was coloured and reasonably priced. A few weeks later, we received the package containing our extraordinary purchase.

Digitization, restoration and analysis

One of the first operations following the reception of the map was its digitization by a professional photographer. The map was maintained by suction on a vertical perforated plate. The camera had a 39 Megapixel resolution. Through this digitization process, we obtained a high-resolution image with which we could work to create an online interactive map. Digitization also allowed us to produce high-quality facsimiles. We make them available to library users and we therefore reduce the risks of damage to the original map.

A small tear at the bottom of the map and the colours used to enhance it made us seek advice from the Centre de conservation de Québec (CCQ), an institution specializing in the restoration and analysis of artifacts.

⁵Gerhard Mercator, *Atlas sive cosmographicae meditationes de fabrica mundi et fabricati figura*, [Duisbourg], Dvisbvrgr Clivorvm, [1595], [107 maps].

⁶Numerous editions of Mercator’s atlas have been published and different versions of the polar map, with various modifications, exist. For more information, see BURDEN, Philip D., *The Mapping of North America: A list of printed maps, 1511-1670*, Rickmansworth, Raleigh Publications, 1996, p. 113-114, and RAEMDONCK, Jean van, Gérard Mercator, sa vie et ses œuvres, St. Nicolas, E. Dalschaert-Praet, 1869, p. 255-269.

It was concluded that the colours used on the map existed in 1595.⁷ Moreover, many of Mercator's maps display similarly vivid hues, which could mean our *Septentrionalium Terrarum descriptio* was coloured soon after its printing. Because the colours are soluble, it was recommended that the map was framed after its cleaning and repair. The analysis also confirmed the map was in a remarkable state of preservation considering its age. (Images 3&4)

Framing

In order to better preserve the map, and considering the document would need to be consulted frequently by Northern Studies experts and students, we abided by the CCQ's recommendation and asked a specialist to frame it. (Image 5)

Enhancement

Purchasing and preserving a rare document such as *Septentrionalium Terrarum descriptio* only makes sense, in an academic setting like ours, if professors, researchers, students and other users can benefit from it. This is why we decided to make this treasure known through a publication and to create an interactive online version of the map.

Publication of a monograph

It is hard to think of a better way to further the appreciation of an extraordinary document (and of its equally uncommon story) than publishing a book about it. We consider this initiative particularly relevant in a context where academic librarians try to reach out to their clientele and increase the use of the collection. This is why we accepted Mr. Louis-Edmond Hamelin's proposition and agreed to co-write the book *L'Apparition du Nord selon Gérard Mercator*.

This is why we accepted Mr. Louis-Edmond Hamelin's proposition and agreed to co-write the book *L'Apparition du Nord selon Gérard Mercator*.

The publication of this book was made possible through collaboration. Each of the party's strengths were put to use in order to produce a well-researched but accessible study, a book both engaging and erudite that will appeal to specialists in the history of cartography and to curious laypeople. More than 30 working sessions among the three authors were needed to complete the first draft. This preliminary version of the text totalled 80 pages. The one that was sent to the editor was 185 pages, including pictures, details of maps and documents. Mr. Hamelin's archival fonds, which contains several thousand iconographic documents, was perused to select photographs for the book. The chosen pictures depict the regions mapped by Mercator from stunning viewpoints. Details of maps and other historical documents allow the reader to better identify the toponyms, hydronyms and inscriptions subsequently analysed and provide access to materials that may have been instrumental in Mercator's work. New maps, produced with modern GIS, are used to draw comparisons with *Septentrionalium Terrarum descriptio*. These comparisons demonstrate Mercator's talent in representing little known lands and other geographic features that were discovered only centuries later. Through our research, we also compiled voluminous bibliographies regarding Mercator, cartography at the Age of Discovery and exploration of Polar Regions. (Image 6)

An online interactive map

The conception of an interactive online map,

⁷Colour analysis was performed at the Canadian Conservation Institute (CCI) in Ottawa. The bright orange is a watercolor that was obtained by blending minium, massicot and white lead. The dark brown is a mix of azurite, bone-black, dolomite, and quartz. The absence of iron gall ink was confirmed, which is good news because this type of ink tends to oxidize and deteriorate paper.

using an open source content management system, was another way of enhancing *Septentrionalium Terrarum descriptio*. This virtual representation of the map allows another type of consultation and makes its examination and analysis easier because of the high-resolution image. It is an interactive and collaborative online tool: the user can move across the map, zoom in and out, access excerpts from the book, consult photographs, watch videos, read and post comments on a forum. The interface of the interactive map offers three browsing options:

Home page and “Themes” tab

The home page allows users to browse the themes developed in the book and compiled here. By using the navigation bar, one can move across the map, switch from a theme to another or flip the map around to read the information printed on the verso. Each theme is associated with a descriptive text, images or short videos and a comment box for visitors to leave their observations.

“Terminology” tab

More than 300 names appear on Mercator’s map: places, watercourses, hills, peoples, etc. Under this tab, a search engine allows users to precisely locate an inscription on the map. It is possible to narrow a search by using filters: region, quadrant (the four sections of the map) or type of word (hydronym, toponym, description).

“1595-2010” tab

The content of this section was inspired by one of the chapters of the book, where comparisons are drawn between *Septentrionalium Terrarum descriptio* and recent maps. Here, users can see Mercator’s map overlap with a modern cartographic representation of the Pole. Louis-Edmond Hamelin himself was amazed by this “technological cartographic symbiosis.”

The infrastructure behind the interactive map was developed by Martin Ouellet, geomatician at Université Laval’s GéoStat Centre and computer specialist, using Drupal and its OpenLayers module. Drupal is an open source content management system (CMS). It can be set up quickly, is flexible, user-friendly and highly customizable (we were able to customize the input forms and the types of contents). Adding OpenLayer to this CMS made it possible to visualize georeferenced maps. (Image 7)

CONCLUSION

The *Septentrionalium* Project required time and energy. Throughout the process, we had to make an effort not to neglect our daily duties as subject librarians. We brought the project to a successful conclusion in collaboration with Mr. Louis-Edmond Hamelin and with the help of our colleagues. We were convinced from the start that this map was of an exceptional value, that it should be acquired, preserved and put forward, and that this project was a unique opportunity in terms of professional development.

A fascinating map

Before we conclude, let us present here a few of the elements discussed in the book *L’Apparition du Nord* to demonstrate the exceptional nature of *Septentrionalium Terrarum descriptio*. The significance of the document does not reside only in its skillful representation of the Pole by one of the most prominent 16th-century cartographer: the map is also the result of the combination of various information sources, from Antiquity to most recent discoveries. What’s more, it represents geographical features even before they were discovered and locates them rather precisely. The map intrigues with its depiction, at the centre, of four zones forming the Pole, which we think should not be seen as firm ground but as floating ice.⁸

⁸Those elements represent only a few of the arguments developed in *L’Apparition du Nord* and summarized on the online interactive map, accessible on: www.bibl.ulaval.ca/geostat/mercator.

A black rock at centre of the Pole attracts the water upwards. The water is brought up by four great inlets sectioning the ice. The other depicted watercourses seem to contribute to the irrigation of the Pole, but their representation coincides more closely with reality. The Mackenzie Basin is drawn with great precision: it is comprised of three rivers that can be related to the Peel River, the Arctic Red River and the Mackenzie River. The western half of the Great Slave Lake is outlined rather accurately in term of latitude. The four central zones could represent the contours of the Arctic ice coverage during the Middle Ages – potentially during the Second Climatic Optimum – and could imply that it was possible at the time to navigate using the North-East and North-West channels.⁹

A stimulating professional development opportunity

The *Septentrionalium* Project was inspiring and wide-ranging as it integrated various aspects of librarianship: some more traditional (acquisition, restoration, preservation) and some related to new technologies (digitization and development of online resources). Through our experience, all of these dimensions were explored.

Publishing a book is definitely a significant endeavour for an academic librarian. It allows him to assimilate the content of the materials he's responsible of. It is a challenging process, but the result benefits both the author and the information seeking clientele.

This editorial enterprise and the production of the interactive online tool increase the notoriety of the Library beyond the limits of the university. Readers and internet users are invited to discover the treasures we have in our collections..

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⁹Interestingly, a comparison between Mercator's map and Arctic Climate Impact Assessment (ACIA) models regarding the limits of the Arctic ice coverage shows great similarities. Would this 1595 map predict the future?

Image 1. *Septentrionalium Terrarum descriptio*



Reproduction de l'exemplaire du premier état de la carte *Septentrionalium Terrarum descriptio* de Mercator, imprimée en 1595 et conservée à la Bibliothèque de l'Université Laval.

Reproduction of Mercator's *Septentrionalium Terrarum descriptio*, printed in 1595 and kept at the Université Laval Library.



Image 2. Gérard Mercator

Portrait de Mercator dessiné en 1574 par Frans Hogenberg. L'Amérique du Nord et les régions polaires sont représentées sur le globe que tient le cartographe.

Mercator's portrait by Frans Hogenberg (1574). North America and Polar Regions are shown on the terrestrial globe held by the cartographer.

Image 3. Numérisation / Digitization



Derniers ajustements des paramètres photographiques avant la numérisation de la carte. Au premier plan, le photographe professionnel avec son appareil numérique rattaché à un imposant trépied cylindrique. Au second plan, la carte de Mercator maintenue par aspiration sur la grille.

Last adjustments before the digitization of the map takes place. In the foreground, we can see the professional photographer and his camera, attached to a voluminous cylindrical tripod. At the back, Mercator's map is maintained by suction on a vertical perforated plate.

Image 4. Restauration / Restoration

Analyse des fibres du papier et de l'état général de la carte menée par microscope par une technicienne du Centre de conservation de Québec (CCQ).

Analysis (paper fibers and general state of preservation of the map) performed by a technician using a powerful microscope at the Centre de conservation de Québec (CCQ).



Image 5. Montage muséologique à vue recto-verso / Recto verso museum-quality framing



L'encadrement est caractérisé par une moulure italienne en bois avec placage véritable, une feuilure du cadre isolée, un passe-partout 4 et 8 plis sans acide (recto-verso), des charnières de papier japonais, un recouvrement transparent d'acrylique de type musée OPTIUM (recto-verso) avec filtre U.V., anti éraflure et antistatique, ainsi qu'un dos fermé à l'aide de baguettes vissées

Framing specifications: wooden Italian molding, rabbet, recto verso acid-free mat, Japanese paper hinges, Optium Museum Acrylic® with UV protection, back attached with wooden rods.

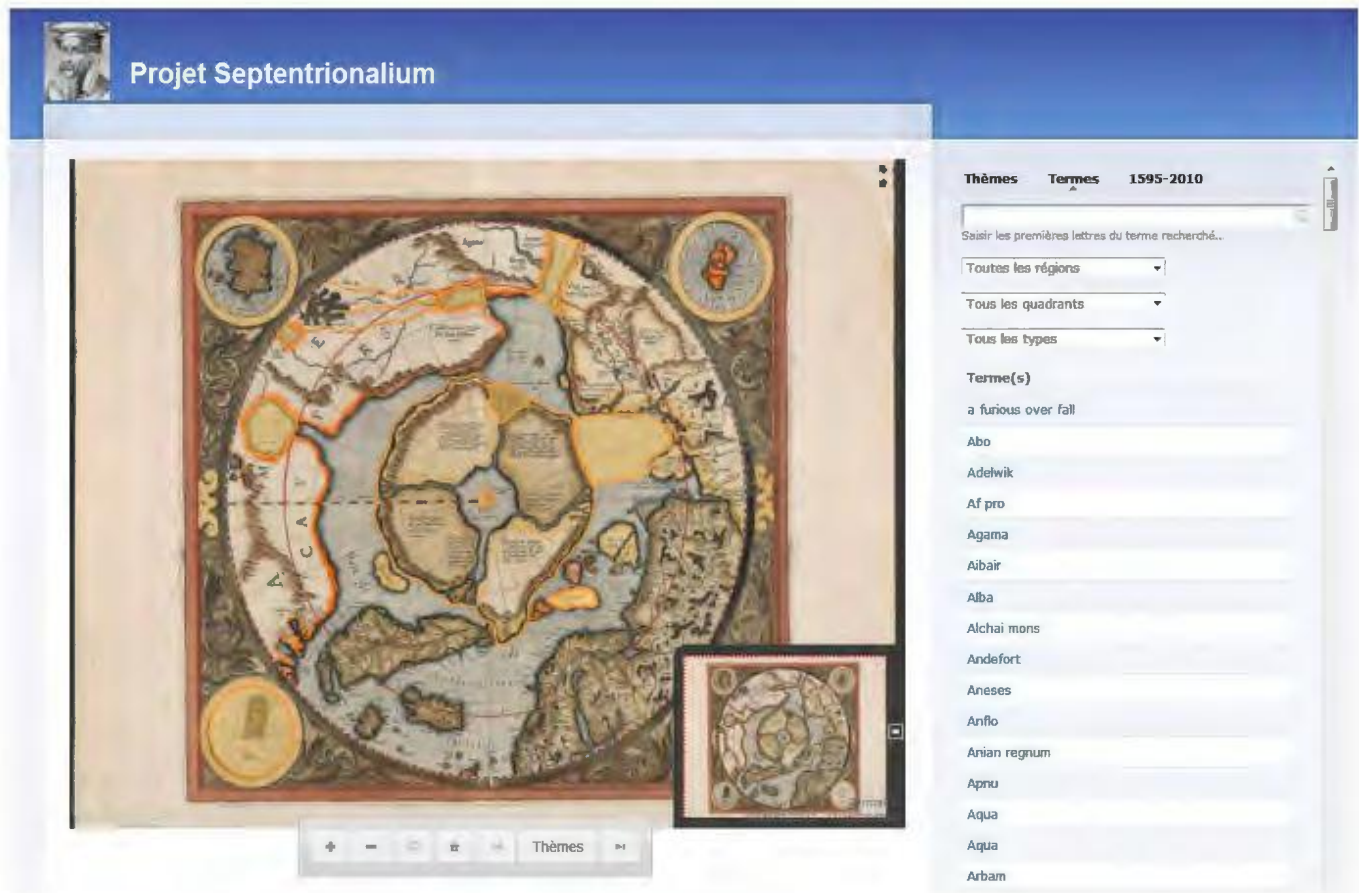


Image 6. Session de travail des trois collaborateurs / Working session

Une des 34 rencontres réunissant, dans l'ordre, Stéfano Biondo, Louis Edmond-Hamelin et Joë Bouchard

One of the 34 working sessions. From left to right: Stéfano Biondo, Louis Edmond-Hamelin, Joë Bouchard

Image 7. Onglet termes de la carte interactive / The interactive map with the "Terminology" tab open.



Page Web de l'onglet termes de la carte interactive. Il est possible de sélectionner les termes dans une liste alphabétique ou de les saisir directement dans un moteur de recherche. Un zoom est ensuite effectué sur la région où se situe le terme.

Under the "Terminology" tab, users can select an expression appearing on the map from a list or directly type it in the search engine box. The interactive map then zooms in on the zone where the term is written.



Using Google Earth Technologies to Enhance Digital Map Collections: Visualizing the Historic Welland Canals

Colleen Beard

(Paper presented at CARTO 2011, Quebec City)

Abstract

Google Earth is used to bring together historical resources, such as: air photos, maps and plans, photographs, and audio interviews to create an interactive visualization tool that documents the historic Welland Canals in St. Catharines, Niagara. As the main economic thrust for the area in the early 1800's, the three old Welland Canal routes traversed through the Niagara area leaving significant remnants - many that have gone unnoticed or are buried. This paper discusses the advantages of using these historical documents in a Google Earth environment to rediscover these features. Also discussed will be the technical challenges and benefits of using new Google Earth Pro technologies that significantly enhance the project. As an advocate of Google Earth for teaching and research, this application is being developed to increase awareness of local history.

Introduction

Rideau, Lachine, Trent-Severn, and Sault Ste. Marie canals all boast of their national historic site designation. The Welland Canal remains the only significant historic canal in Canada that does not, but people of Niagara want to change this. As the Niagara Region prepares to apply to Parks Canada for historic designation, I decided to initiate a visualization project that would help raise the awareness of canal history to the general public and government authorities, as well as exploit the rich local collections of canal history.

This project utilizes new Google Earth Pro technologies, such as the super overlay feature, to create high resolution displays of digital collections. Hundreds of historic air photos, maps, plans, photographs, and audio interviews

held at Brock University and other local collections have been digitized and embedded into the Google Earth framework to provide a geographic reference for exploring the many features of the three historic Welland Canals that traversed St. Catharines, Ontario and beyond. These Google Earth tools are described in detail as I illustrate how images reveal the many hidden gems of canal history.

Canal History

As a major route for ships to navigate between Lake Ontario and Lake Erie to circumvent Niagara Falls, an elevation of 327 feet, the canal first opened in 1829 by local businessmen to stimulate local and regional trade. Although, it soon became apparent by the government of Upper Canada that it was a crucial artery for the economy of British North American trade. Over the next hundred years the canal would transform from 35 wooden locks of the first canal to 27 and 26 stone block locks of the second (1855), and third canals (1881), that facilitated the ships ascent up the escarpment at Thorold. The fourth and current canal (1932) is constructed of 8 concrete locks. Port Dalhousie was the entrance to all three historic canals (Figure 1). The first and second took a similar meandering route through the City of St. Catharines. The third canal took a more direct route diagonally across the city.

The St. Catharines, Port Dalhousie, and Thorold communities exist today due to the thriving business that was generated by the Welland Canal. Many of the historic buildings and lock remnants have been ignored, demolished or buried. This project aims to bring this history back to life.

Project overview

Building on the Niagara Region's GIS data of canal routes and points of interest, Google Earth is used to display an inventory of digital images relating to the historic canals.¹ Offering a continuous global framework of imagery, each placemark (Figure 2) represents the location of a canal lock or feature of significance, as well as several points of interest such as historic buildings or landscapes. Colour coding of placemarks is used to distinguish features from the first, second and third canals. Over 150 historic and current photographs were scanned and added to these placemarks providing geographical identification. Hundreds of scanned air photos and maps have been transformed to overlay onto the Google Earth imagery. Audio interviews were embedded to provide recounts of canal life. Unlike the numerous books that have been published, navigating the pictures and maps in Google Earth provides a virtual tour of the historic canals placing features and events in a geographic context.

Google Earth Pro Technology

Although the free version of Google Earth can be used to view the project, Google Earth Pro provides the advanced technology required to prepare the digital tour of the canal enhanced. The ability to create, display, and overlay different information in a geographic framework of current imagery can be, for the creator, easily generated.²

Photographs can be a powerful resource for illustrating history. Adding these to Google Earth is a simple process.

¹The Google Earth project is available from the Brock University Map Library website. [www.brocku.ca/library/collections/maplibrary] The kml files can be saved and opened in Google Earth.

²A Google Earth Pro site license is available free to educational institutions. Brock University Library currently has a 50 seat license.



Figure 1. Map of the historic Welland Canal routes through Niagara. [Google Earth Pro 6.0.1]



Figure 2. A sample of the project placemarks within Google Earth framework. [Google Earth Pro 6.0.1]

Once a placemark is created, basic html code that points to the image's network address is entered in the placemark's properties description box (Figure 3). When the placemark is selected in Google Earth, a window will open displaying the image. The real challenge, however, is accurately identifying the geographic location of where the photograph took place, especially if it illustrates a historic landscape or building that no longer exists. This "geotagging" process is not always a simple one. Various resources including canal plans, maps, books, and air photos were used to determine the precise geographic location and orientation of photographs. Figure 4 compares a current view of downtown St. Catharines to a historic view of the same location where the first canal was situated. The historic view replicates the experience of standing at this location in 1871. Using photographs in this manner is an effective method of comparing the "then and now".

With the release of Google Earth Pro 6.0.3 in December 2010, a new feature was introduced called the "super overlay"—an improved method of the "image overlay" offered in previous versions. A super overlay of a map, plan, or air photo is generated from a geotiff – a georeferenced image that preserves the resolution of a tiff at half the size. The basic image overlay process only allows importing a jpeg image of lossy file compression that requires a time consuming "rubber-sheeting" process to produce a georeferenced image. The caveat here is creating a geotiff image!

The super overlay process

Many of our historical map images were either scanned in-house from print or microfiche, or purchased as digital files from Library and Archives Canada. In-house scanning was done on an 11x17 inch scanner at 600 dpi and saved as tiff files. Avenza Geographic Imager (a purchased extension program of Adobe PhotoShop) was used to georeference and convert the image to

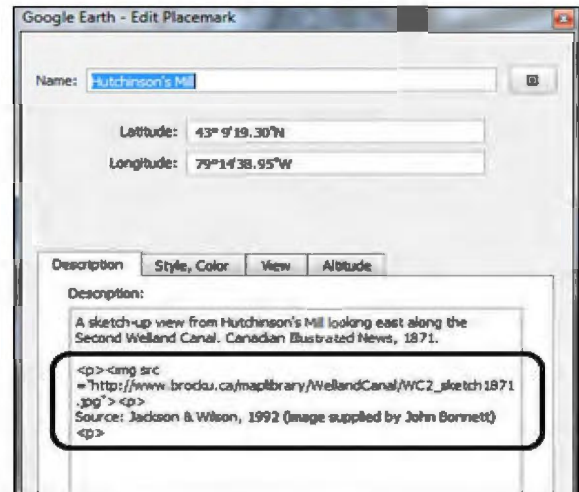


Figure 3. Placemark description box illustrating the html code for inserting links to photographs. [Google Earth Pro 6.0.1]

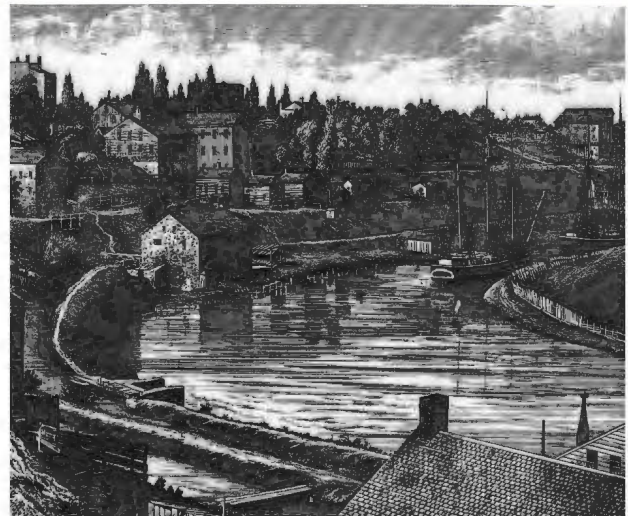


Figure 4. Top: A current view of the area once occupied by the second canal, downtown St. Catharines. December 2011. [Photo: Brock University Map Library]; Bottom: a view of the area in 1871 showing the second canal and surrounding landscape. [Photo: Canadian Illustrated News]

geotiff format. The geotiff was then imported into Google Earth Pro 6.0.3 (or higher) where a super overlay was automatically generated. The file structure of a super overlay is the same as that of an image processed using Zoomify software.³ A pyramidal structure offers scaled viewing of high resolution images. Within the Google Earth framework, zoom, pan and transparency tools can be used for an enhanced experience. To share super overlay images with the public, all associated files are transferred to an Internet server. A kmz file, generated using Google Earth, acts as the 'link' from the Internet to the user's local Google Earth viewer. The size of a super overlay is about half that of the original tiff, but preserves the resolution of a tiff. The results are indeed superior to that of the image overlay process (Figure 5), in accuracy and image quality, albeit a tad more procedural.⁴

Although ArcGIS also offers geotiff creation and other georeferenced file outputs, we have yet to produce a similar file that is acceptable for the super overlay process. Map Library staff continue to experiment with other options that may refine the super overlay process.

Due to the accuracy and quality display of the image super overlays, they are an extremely useful method for locating historic features and comparing changes in the landscape over time. Google Earth provides a tool that displays an overlay at gradual transparency levels. As the top layer becomes transparent, it reveals the underlying current imagery. The differences in landscape can be stunning. A few examples are described on the following pages.



Figure 5. Left: Example of a jpeg "image overlay"; Right: Example of a geotiff "super overlay".

³Beard, C. and Janzen, S. Niagara Zoomified: Using Zoomify Software to Create Quality Web Images, *Association of Canadian Map Libraries and Archives Bulletin*, 129 (Spring/Summer 2007):6-10.

⁴The procedure for creating super overlays is credited to Sharon Janzen, Brock University Map Library. A written procedure is available from the Map Library website [www.brocku.ca/library/collections/maplibrary]

Discovering Old Lock One in Port Dalhousie

Many area residents are unaware that the north access to the first canal, 1829, at Lake Ontario cut a path through what is now the popular Lakeside Park in Port Dalhousie. The 1855 Welland Canal survey and 1934 air photo (Figure 6) reveals the position of the canal entrance piers that extend into Lake Ontario. Although buried beneath the lake bottom, the shadows are clearly visible in the 1934 air photo and also in the Google Earth imagery.

This same canal survey plan was a critical document used to determine the precise location to excavate the buried old Lock one of the first canal in Lakeside Park (Jouppien, 2008).⁵ It was an exciting day in October 2008. As backhoe operators delicately removed earth in the Lock one area to explore the condition of its wooden structure, the locks were eventually exposed - but only for a mere eight hours. They were reported to be in very good condition. The Google Earth project includes photos of this excavation.

A key advantage of the Google Earth technology is applying the transparency function with the historical map super overlay to compare significant changes in landscapes. Figure 6 illustrates the dramatic difference in the shoreline of Lakeside Park in 1855 with the underlying Google Earth imagery revealing the current landscape. Lakeside Park is a result of fill from dredging the entrance to the second and third canals that was built slightly east of the first. Images that illustrate Lakeside Park in its heyday can also be viewed in the project.

The historic canals have left behind many imprints in the current landscape that are no longer visible from the ground due to urban development.

Another unknown piece of history among local residents is the route of the third canal.



Figure 6. Top: Welland Canal Survey map, 1855, showing the location of the piers and Lock one of the first canal shown slightly transparent overlaid in Google Earth. [Digital image: Brock University Archives, St. Lawrence Seaway Authority (Canada) Fonds, Second Welland Canal Survey Map 1, c.1855; reproduced in Google Earth Pro 6.0.1]; Bottom: 1934 air photo showing the submerged shadows of the piers. [Digital image created from Canada, Energy Mines and Resources, air photo 1934, A4700#34]

⁵Jouppien, J. K. The Location of the North entrance Channel of the 1st Welland Canal, 1824-1829 and a Stage 1-3. Archaeological Assessment of Select Areas at Lakeside Park, city of St. Catharines, Regional Municipality of Niagara, AhGt-20 CIF/PIF #P119-001-2008. Niagara Falls, ON: J.K. Jouppien Heritage Resource Consultant Inc., 2008.

Although its northern entrance was Port Dalhousie, its route cut a straight path across St. Catharines with a remaining scar in the landscape that is only noticed from aerial photography (Figure 7). When viewed in Google Earth with the transparency function, remnants of canal locks can be located on the current landscape as well as significant changes. The third canal was constructed with 26 stone locks, some of which are still beautifully intact and visible where it intersects with the current fourth canal to its east extent. A hike from locks 13 to 19 provides stunning landscape views and canal architecture where one can appreciate its engineering marvel.

Historical air photos are of immense importance to unraveling stories of local history, from sighting shipwrecks to discovering tunnel entrances.⁶ Thousands of photos from the Map Library collection have been scanned, georeferenced, and converted to super overlays for viewing in Google Earth. The 1934 air photo series of the Niagara Region is currently available for download from the Map Library website but has been donated to Google as content for their Google Earth database.

The Talking Map

Muir Bros Drydock Company in Port Dalhousie was a significant industry during the period of the second and third canals. I was fortunate to obtain an audio interview between Alex Bennett, a past employee of Muir in the 1930's, and a local historian and author, Christine Robertson. The interview was originally captured in analog format on cassette. It was converted to digital using Roxio Creator software. Originally an hour-long interview, the Roxio Sound Editor was used to splice together segments of integral parts of

the interview where Alex recounts his migration from Scotland with \$20 in his pocket; his experiences working at Muir Bros as a pipefitter; and detailed descriptions of the historic building and ships that no longer exist. These interviews are gems among the historic canal records,⁷ not to mention entertaining. The condensed audio can be heard within the Google Earth project by selecting the Muir Bros placemark on the second canal. A network link to the audio is embedded in the placemark description box, similar to the procedure described above for making links to photographs. Listening to the audio clip from a mobile device, while exploring historic sites on a walking tour, provides the ultimate "talking map" experience.

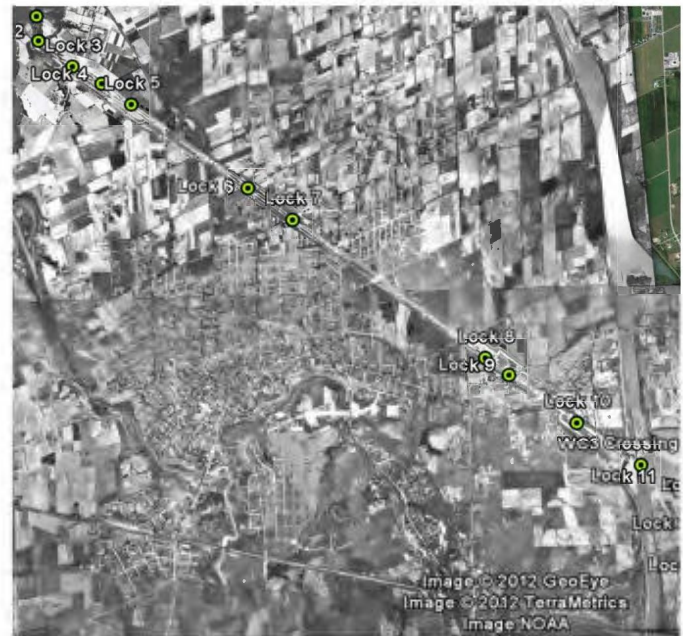


Figure 7. A 1934 air photo super overlay showing the route of the third canal through St. Catharines, from top left to bottom right.

⁶These and other stories are to be published in: Beard, Colleen. Using Google Earth to Visualize the Historic Welland Canals, in *Historical GIS in Canada*. ed J. Bonnell and M. Fortin. (Calgary: University of Calgary Press) [2012]

⁷Plans to convert Christine's collection of interviews to digital are currently being discussed.

Although a plaque commemorates the location of the late Muir Bros Drydocks, current uses of this locale are far from the activities of ships, sailors, and tow paths. The old canal route through Martindale Pond is now home of the Royal Canadian Henley Regatta rowing course and a few kayak and canoe enthusiasts. In late January when the pond freezes over, the annual Chicken Chuckin' tournament is held to raise money for local charities. An activity that emulates shuffleboard or curling, a "must see" video is included in the Google Earth project. Possible potential for a future episode of Rick Mercer!

Conclusion

Brock's Map Library staff embarked on their first digitization project a few years ago by digitizing several hundred 1934 air photos. The enhancements were remarkable: detail could be seen that wasn't apparent from the printed photos. Since then, digitizing our air photo and local historical map collections has become a priority. Google Earth provides a virtual stage to showcase these collections and to make them more widely accessible. Google Earth Pro provides advanced technology to make these collections more useful in many ways. This project has generated interest from the Region of Niagara, as they continue to pursue a heritage designation for the canals. Teachers have expressed interest in using the project as a learning tool for their local history curriculum. Map Library staff continue to explore the options to refine these technological processes and to enhance the project. One idea is to partner with Digital Humanities to incorporate augmented reality - create 3D views of reconstructed historic buildings and landscapes.

By connecting historical documents with geographic locations in the present, it provides a sense of "place" with which we can describe and unveil our history - something that books and

other printed materials cannot alone achieve. Let us not underestimate the value that such a display reveals. It is time for librarians and archivists to dust off their historical collections and bring them back to life. Freely accessible and easily mastered, Google Earth is a good place to start.

Acknowledgements

The Google Earth project is a collaboration of many who have contributed over the last three years, Sharon Janzen for the technical expertise with Google Earth Pro; Geography internship students and Map Library staff who assisted with digitizing collections, designing placemarks, creating super overlays, and editing; Staff in Brock Communications Dept. who assisted with editing audio recordings; and the contributions from other local collections.



ACMLA Bulletin Content Review

How are we doing?

Are there columns that are not of interest to you? Do you have suggestions for new columns or features? Contact any of the editorial staff with your ideas and suggestions to make the ACMLA Bulletin what you want it to be!

REVIEWS

A Century of Parks Canada

by Deena Yanofsky

Campbell, Claire E. (ed.) *A Century of Parks Canada, 1911-2011*. Calgary: University of Calgary Press, 2011. 458p. \$34.95 CAD. ISBN 978-1-55238-526-5.

Last year marked the 100th anniversary of Canada's National Park service. In 1911, the Dominion Parks Branch - precursor to today's Parks Canada - became the world's first national agency devoted to managing its nationwide parks. The anniversary has occasioned a variety of celebrations, including a new collection of essays that explore the evolution of Canada's national park system and its place in the meaning and making of Canadian nationhood. Bringing together the work of environmental historians from universities across Canada and within Parks Canada itself, the authors of this engaging work aim at transforming our understanding of national parks from natural sanctuaries to human creations. The result is not only an important contribution to the history of national parks in Canada, but also a history of the people who encounter, use and value these environments.

In her introductory essay, Claire Elizabeth Campbell points out that histories relating to Canada's parks system have traditionally been sparse and mostly celebratory in style and purpose. The fourteen essays in this collection attempt to correct and demythologize this history by revealing the myriad actors and competing interests involved in the creation of the Canadian national parks system. In his contribution to the volume, Alan MacEachern demonstrates that the early development of Canada's national parks was the product of a cultivated, loyal staff that included Mabel (M.B.) Williams, a figure who has largely been

left out of the story. As the chief author parks system's series of promotional guidebooks, Williams was instrumental in linking parks to tourism, helping parks commissioner James B. Harkin justify the protection of parks and spending on them, an approach to park management that would remain in place throughout the twentieth century. In his essay, John Sandlos argues that the contradictory purpose and origin of the early parks system, twinning preservation with a particularly strong emphasis on the parks as vacation destinations and roadside attractions, has been actively ignored by contemporary histories and conservation activists who "fear that acknowledging the utilitarian focus of the early national parks will justify the ongoing attempts of tourism operators to promote development within the parks".

The contributions of Olivier Craig-Dupont, Ronald Rudin, David Neufeld, and Brad Martin describe the complicated and generally confrontational paths that led to the establishment of new national parks during the second half of the twentieth century. In contrast to official park histories that depict parks as places where visitors can find great unspoiled nature and true wilderness, these authors critically document the social and political conflicts that shaped local territorial characteristics in accordance with Parks Canada's wilderness ideal. The creation of national parks in Canada often resulted in the removal of indigenous and other local peoples from lands they traditionally used and occupied. The stories of La Mauricie, Kouchibouguac, Kluane, and Ivvavik all provide powerful examples of community resistance, the politics of land appropriation, and competing cultural understandings of nature.

Throughout the collection, the reader encounters a certain number of repetitions, as the essays

examine the conflicting aims of the national parks system in various contexts. Though the repetition is tedious, and might have been eliminated with better editing, it does demonstrate a clear and agreed historical lens through which to understand the evolution of Canada's national parks.

In spite of this minor criticism, this collection is an extremely informative work that nicely relates the modern history of national parks in both cultural and environmental contexts. In conclusion, the volume is a much welcomed contribution to the current debate about our national parks and their place in Canada's nationhood.

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Web GIS: Principles and Applications

by Sara Simpkin

Fu, Pinde and Sun, Jiulin. *Web GIS: Principles and Applications*. Redlands, CA: ESRI Press, 2010. 296p. \$55.95 US. ISBN 978-1-58948-245-6.

Web mapping tools and services have hit the mainstream. Now more than ever, users are turning to the Internet to visualize, analyze, retrieve, and contribute spatial information. Pinde Fu, project lead and senior GIS application developer at ESRI, and Jiulin Sun, Academician of the Chinese Academy of Engineering, present a well-written overview of Web GIS technologies as they have evolved over the past twenty years.

Written for a broad audience, this novice-friendly textbook is divided into ten chapters. Readers are introduced to the origins and technical foundations of Web GIS as well as its

applications within geospatial web services, mash-ups, mobile implementations, geoportals, and the National Spatial Data Infrastructure (NSDI). The book then explores Web GIS uses in e-Business and e-Government before concluding with some predictions about the future of these technologies. An extensive list of abbreviations (necessary for a book introducing industry-specific terms) and detailed index round out the text.

Readers expecting a how-to guide with explicit instructions may not find it with this volume. Rather, its strength lies in providing context for the numerous web mapping tools and services we've seen develop in recent years, referencing current (if US-centric) legislation and Web GIS initiatives. The book is peppered with attractive, full-colour illustrations and screen captures showcasing these tools in action.

At this juncture, it is worth mentioning that the book, a product of ESRI Press, focuses heavily on ESRI's own software offerings. While the authors do make an effort to generalize the text to incorporate a broader range of tools from additional companies, the examples are still largely weighted in favour of ESRI's current product line. Readers interested in free or low-cost alternatives to these tools may be disappointed by this decision.

Finally, while the book does detail numerous Web GIS applications for business and government, this reviewer would have liked to see additional references to the value of these tools for casual users, educators, and those working in the cultural heritage sector.

All things considered, however, this book would be a valuable addition to any library serving geography, GIS, environmental science, business, planning, and computer science students. It represents an accessible, attractive and well-written overview of the history and current state

Web GIS applications and services.

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Strange Maps: An Atlas of Cartographic Curiosities

by Eva Dodsworth

Jacobs, Frank. *Strange Maps: An Atlas of Cartographic Curiosities*. Studio (Penguin Group): New York, 2009. 244p, 138 maps. \$30.00 US. ISBN 9780142005255.

Strange Maps: An Atlas of Cartographic Curiosities is the print version of a selection of maps collected by Frank Jacobs and posted on his Strange Maps blog: <http://bigthink.com/blogs/strange-maps>. The blog has approximately 500 maps with corresponding descriptions and comments, of which 138 have been selected and published in the atlas.

Unlike traditional geographic and thematic atlases, Strange Maps is comprised of unordinary, remarkable, and eccentric maps that span several centuries, continents, and themes. Accompanying every map is a carefully written description of not only the map itself, but a thorough discussion of the map's purpose, the atlas author's interpretation, and his remarks on any historical, political, literary and/or geographical influences and contributions that the map may have had in its creation. It is clear that the author has researched many aspects of the maps, providing between one to two pages of insightful descriptions for each of the "cartographic curiosities".

The author describes his anthology of maps as an "anti-atlas", where the maps are clearly not to be used for navigational purposes. It quickly

becomes obvious that this atlas is a collection of rare maps that fall under their own category of "light-hearted and strange"; it is filled with cartographic misconceptions, fictitious creations, artistic renditions, humorous works, propaganda and bias.

The atlas is divided into eighteen thematic sections: Cartographic Misconceptions, Literary Creations, Artography, Zoomorphic Maps, (Political) Parody, Maps as Propaganda, Obscure Proposals, Ephemeral States, Strange Borders, Exclaves and Enclaves, A Matter of Perspective, Iconic Manhattan, Linguistic Cartography, Based on the Underground, Fantastic Maps, Cartographs and other Data Maps, Maps from Outer Space, and Watchamacallit. There are between four to eleven maps for each category, almost all available in colour. Essentially every second page features a map, with its description available either on the same or the opposite page, depending on the map size. Examples of some of the types of maps found in this atlas include:

Literary Creations

Many literary works include maps of fictitious places and settings. Frank Jacobs included a few of these maps; for instance, Thomas More's fictional island of Utopia, situated in the Americas, and The Land of Oz from L. Frank Baum's *The Wonderful Wizard of Oz*. Frank Jacobs' descriptions of the literary maps include a summary of the story, description of the details seen on the maps, and a discussion of why the cartographer/artist may have drawn things the way he or she did.

Artography

Looking at maps from an artistic point of view and not a cartographic one, the author included a selection of maps that are both visually appealing and graphical in nature. One example is "Drawn from Memory: United Shapes of America", by the artist Kim Dingle. This is a compilation of maps

of the USA drawn by children. Every map is different, and when compiled together, the canvas looks like a herd of abstract cows. Another unique one is “Now this is World Music: Harmonious World Beat”, a map of the world’s continents created solely with notes, ties, bars and staves of that continent’s traditional sheet music. This map can actually be played.

Ephemeral States

Frank Jacobs was able to locate maps of countries that existed at some point in time, but are no longer present. One particular map shows Carpatho-Ukraine which existed for only 24 hours before being seized by Hungary. The day earlier it had been part of Czechoslovakia.

Iconic Manhattan

A selection of maps of New York clearly shows it as the centre of the universe. One interesting work is a word map, using poetry to create the neighbourhoods of Manhattan. The actual text corresponds to the localities it describes, including in all over 100 places on Manhattan Island. There are of course many other maps displayed in the atlas, including coincidental geographic boundaries created with food or clouds, upside down maps, plans for states that never left the drawing board, cartograms, maps of outer space, and much more. Since many of these maps have been created to tell a story, Frank Jacobs’ interpretation of the maps, based on researched facts and supplemented by trivia and at times humour, helps the reader discover the cartographic and thematic value in an otherwise questionable composition.

The atlas is comprised mainly of European, American and world-level geographic areas. It appears as though the maps selected for the atlas were not picked to represent any specific region of the world, but rather chosen for their interesting and unique themes. That being said, however, there are dozens of American maps included, making it the country with the largest

representation in the atlas.

The map designs and styles vary quite a bit from one map to another, with some composed of simple sketches and scribbles, and others being carefully illustrated with icons, images, and photographs. Some maps were printed as large as the atlas pages, about 12 inches in height and width, whereas others were smaller than 4.5 inches.

The size of some of the maps is perhaps one area of weakness in this atlas. Because it is an atlas (even if it is an anti-atlas), one might expect the maps should be given more coverage than the text describing it. There are several maps that look like thumbnails compared to the amount of writing that surrounds them. Perhaps the selection criterion for the atlas should have included map size. The placement of the maps on the pages could have been better thought out as well. Several maps were printed right into the binding edge at the center of the page spread, making it difficult to read, appreciate and comprehend.

Although this atlas really isn’t about cartography, but rather the underlying themes of the maps, many purchasers of this atlas will in fact be cartographers, map collectors, artists and the like. Readers interested in learning more about these maps that are not published in any other atlas may, therefore, be a bit disappointed to discover that the author has left out a few valuable details in the maps’ descriptions. How large are the maps in reality? What are their dimensions? Are they really the size of thumbnails, or are some of them the scope of murals? Physical map details add an important element to map appreciation, and, for this atlas, transfers something illusory into a physical reality. These maps actually exist.

Along the lines of the map’s existence, another essential detail that is missing in the map

descriptions, quite ironically, is the map's location. With few exceptions, the author does not reveal where the maps have been published, and where they may be found. With so many extraordinary maps, such as those painted on canvas, one may well question where the originals are, and whether prints have been made. Is the collection of "strange" maps also a collection of "rare" maps? Are the maps available as single sheet paper prints, or only in electronic format? Were they self-published by unknown cartographers who have the only copy on their computer drive? Are they available in books of poetry, such as the Manhattan word map? Are they valuable, famous, out of print? Answers to these questions would help bring the maps to life.

One of the risks of creating a publication from material that is freely available online is that readers may opt for the freely accessible online version. As mentioned earlier, the contents of the atlas are also available on Frank Jacobs' blog, and in fact he has hundreds of additional maps comparably "strange". The blog, however, serves the beneficial purpose of giving a taste of the type of maps that can be expected in this unique atlas. In today's digital age, very little isn't available online, and if it wasn't for the creation of the blog and the contributions from the blog's followers, this atlas certainly wouldn't contain the carefully selected maps that it does. Frank Jacobs' atlas of cartographic curiosities is one of the more unique atlases available.

With topics that span a broad theme base, the atlas is certainly much more than a cartographic compilation. The themes selected for the atlas blend geography and society, creating a collection of cartographic works that have been merged with history, art, music, politics, literature, science fiction, and much else besides. What readers will discover is that the atlas demonstrates society's love for maps and geography and the realization that a map really

can be created by anybody, and about anything, as long as it tells a story. *Strange Maps*, simply put, is a compilation of stories.

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Maphead: Charting the Wide, Weird World of Geography Wonks

by Rosa Orlandini

Jennings, Ken. *Maphead: Charting the Wide, Weird World of Geography Wonks*. New York: Scribner, 2011. 276p. \$25.00 US. ISBN 9781439167175.

Ken Jennings, best known as the all-time Jeopardy! Champion, is also a self-professed "geography wonk". His recent book *Maphead* is not a trivial matter. Jennings describes his own obsession with maps and relates it to the culture, science and history of maps in a witty and engaging exploration. Written for a general audience, this book introduces concepts including geography as a discipline, geographic education, map reading, spatial cognition, and critical thinking about maps. He weaves these concepts into chapters covering map collecting, place names, the impact of Google on cartography, history of road maps, the National Geographic Bee, and much more.

In the chapter entitled *Benchmarks*, he tours the Geography and Map Division of the Library of Congress, describing the collection, the librarians and the patrons. In the same chapter he also discusses the geopolitics of borders, territorial claims, and controversial place names.

Another highlight is the chapter about Global Positioning Systems (GPS) and geocaching.com, a hide and seek game that involves using a GPS. He relates a story about his first geocache outing

with his six year old son, when they discovered a BMX jump ramp steps from their house and were rewarded with a plastic sheriff's badge. Jennings is convinced that geocaching can assist children and adults to explore new places and to develop mathematical and spatial literacy skills.

Jennings' fluid, humorous and journalistic writing style lends itself to an enjoyable read for people who are "map geeks". It is a good introduction for undergraduates and others who are curious about maps and geography. I would recommend this book for the map professional's personal bookshelf, public libraries, teachers, and the "popular reading" bookshelf in academic libraries.

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Map Use: Reading, Analysis, Interpretation

by Peter Peller

Kimerling, A. Jon, Buckley, Aileen R., Muehrcke, Phillip C., & Muehrcke, Juliana O. *Map Use: Reading, Analysis, Interpretation, Seventh Edition*. Redlands, CA: ESRI Press Academic, 2011. 581p. \$99.95 US. ISBN 9781589482791.

This text has definitely stood the test of time. It was first published in 1978 and was just recently released in 2011 in its seventh edition. The original authors were Dr. Phillip C. Muehrcke, a professor of geography at the University of Wisconsin in Madison, and his wife Juliana O. Muehrcke, a freelance writer. The fourth edition added a new author, Dr. A. Jon Kimerling, a professor of geography at the University of Oregon. He brought expertise in the area of computer mapping to the book at a time when information technology and the Internet were dramatically transforming the way maps were

being created and used. ESRI Press bought the publication rights to the book and published the sixth edition with "Interpretation" dropped from the title. The sixth edition also saw the inclusion of another new author, Dr. Aileen R. Buckley, an ESRI research cartographer, who had been a graduate student of Dr. Kimerling's and who had also taught at the University of Oregon. Both Dr. Kimerling and Dr. Muehrcke are now professor emeriti at their respective institutions. The big change from the sixth to the current seventh edition was the re-introduction of "Interpretation" to the title to correspond to a new section in the book with four new chapters; however, looking back at the pre-sixth editions, one can see that the roots of the current Interpretation section were already there. The rest of the book remains basically unchanged from the sixth edition.

This book is a fairly easy to read introduction to understanding maps, which serves equally well as a text for first year undergraduate students taking an introductory geospatial methods, map reading or cartography course, and as a reference for specialized and general map users. It is an excellent overview of what goes into making a map, and how one reads and understands maps. It doesn't cover how to design or create a map, or how to do very specific tasks with maps. Although the book does discuss GIS, it isn't really an introduction to that topic either. As a book though, whose goal it is to turn you into an informed and critical reader of maps, it succeeds very well. In fact, it has for several decades carved out a niche for itself. Cartographic, GIS and other specialized mapping books cover elements and usually in greater detail, but very few have the breadth and scope of this book while maintaining a balance between popular and technical.

The book is organized very logically and each chapter and section builds on the knowledge of the previous ones. The first section on map

reading goes through such topics as datums, coordinate systems, scales, projections, digital elevation data, imagery, and thematic maps. This section provides the fundamental theory behind maps. The second section on map analysis examines how one describes or calculates direction, distance, area, volume, and terrain measurements (slope, gradient, aspect, profiles, viewshed). This section also includes a good introduction to GPS and the simplified theory behind spatial pattern analysis and spatial association. The third section on map interpretation brings a lot of what has already been discussed into the context of specific environments such as geomorphology, geology, climate, vegetation, habitat, land use, demographics, socioeconomics, and epidemiology. It reminds us that maps only symbolize real world features and to truly interpret them we need to also understand the environments in which they occur. This is particularly emphasized by the chapter on "Maps and Reality". Although most of the examples are from the US, there are a couple of Canadian ones: Dominion Land Survey (Land Partitioning chapter) and an isochrone map of Edmonton (Distance Finding chapter).

The mathematics in this book is kept to a minimum and can be understood by anyone who has taken algebra and trigonometry. The complicated mathematics underlying projections has been completely omitted. The chapter on scales uses detailed examples to illustrate with simple math how to convert and calculate scales in a variety of circumstances. In the analysis section examples and formulas are provided for distance, directional, terrain and spatial statistics calculations. There are also detailed examples of how to work with UTM coordinates, spherical coordinates and how to construct topographic profiles.

The book also includes three appendices, a glossary, an index and lists of selected readings. The three appendices include a useful discussion

of raster and vector data along with some sources, selected navigation and GPS abbreviations and acronyms, and the following tables: metric/imperial conversions, variation in the length of a degree of latitude and longitude, and the area of quadrilaterals of 1° extent. The glossary is comprehensive and the index was helpful. Both the data sources and glossary were found to be fairly US focused. Each chapter ends with a list of related, non annotated selected readings. The lists provide a good cross section of the published literature; however, there are no websites included, which would have been useful. Apparently, there is a resource DVD (for instructors) that accompanies this text, but it did not come with the review copy so there was no opportunity to examine it.

The book contains over 600 maps, photos, graphs and illustrations both in colour and black and white. These graphics are very useful and relate well to the text in explaining concepts and providing examples. They tend to be US focused, particularly Oregon-based, but that is not surprising given the affiliation of two of the authors. This geographic focus, however, is not an issue at all. The durability of the paper binding of the copy examined was poor; the pages separated from the spine after just a few openings. For libraries, this is a book that should be bought only in hard cover format to stand up to the heavy use that it will no doubt see.

Map Use accomplishes what it sets out to do: provide the reader with the necessary knowledge to fully appreciate and understand maps. It is very well organized, written, illustrated and completely accurate. It has become the standard text in the field of map reading. I highly recommend this book for all libraries and interested users of maps.

Peter Peller
Head, Spatial and Numeric Data Services
Libraries and Cultural Resources
University of Calgary, Calgary, Alberta

Remote Sensing of Protected Lands

by Ryan Nayler

Wang, Yeqiao. *Remote Sensing of Protected Lands*. Boca Raton: CRC Press, 2012. \$139.95 US. 582p. (xxi). ISBN 978-1-4398-4187-7.

Remote Sensing of Protected Lands is an anthology of scientific papers on the topic of mapping technologies deployed in conservation initiatives. Each academic paper presents a case study of a well-known conservation site (eg. Yosemite National Park, the Albertine Rift, the Xi'an Province of China) or species-monitoring project (eg. the Tree Kangaroo, flying squirrel, Northern Goshawk). Each case study discusses the potential advantages and limitations of various mapping technologies, and how they are used to inform policy decisions relating to conservation. For example, the authors highlight the fact that modern GIS technologies have made it possible to compare the same region over time and isolate potential catalysts of change, such as insect infestations, introduction of foreign species, or environmental disasters. The contributors state that being able to identify key agents of change is crucial to making informed conservation decisions.

Overall, the anthology provides a comprehensive overview of remote sensing mapping technologies. New technologies are discussed, such as a GPS collar system (Lotek WildCell) used to track wildlife, which allows GPS data to be downloaded without retrieving the collar. Oceanic imaging technologies are also examined, such as Synthetic Aperture Radar, which uses microwaves to map the ocean's surface, and sound-emission mapping such as Sonar. Specialized products such as LANDFIRE, a mapping program used to assess the damage caused by forest fires, are also examined. The contributors offer suggestions as to how data gathered through remote sensing technology may be used to guide conservation and recovery

projects. For example, one chapter focuses on the restoration of the Amur Leopard (one of the most critically-endangered species in the world) to various potential habitats, which map analyses indicate would be suitable.

The intended audience of this work appears to be environmental professionals (eg. ecologists, conservationists, land surveyors), map and data librarians, and perhaps even policy-makers. The scientific language and data used throughout renders the book more accessible to an academic than a lay audience. Since most of the contributors assume that readers bring an existing knowledge of GIS and mapping technologies, the anthology is better suited to the expert than the beginner. Readers seeking an overview of remote sensing technology may be better served by *Remote Sensing and Image Interpretation* by Thomas M. Lillesand (Wiley). *Remote Sensing of Protected Lands* is definitely a valuable purchase for any academic library which supports geography, earth sciences, or conservation programs.

The editor of the anthology, Dr. Yeqiao Wang, is a qualified expert, possessing an MS in remote sensing and mapping and a PhD in Natural Resources Management. He has taught courses in GIS and remote mapping at the University of Illinois and is currently a professor at the Department of Natural Resource Science at the University of Rhode Island. He has published widely on the topic, and edited the 2009 book *Remote Sensing of Coastal Environments* (CRC Press). The contributors are reputable authorities on the subject, as they present rigorous methodologies and acknowledge grants received by agencies such as NASA and the Canadian Space Agency.

Ryan Nayler

Reproductions Assistant

John M. Kelly Library (Special Collections & Archives)

Toronto, Ontario

From the Reviews Editor:

Thanks to those who submitted book reviews and to all who have expressed interest in reviewing! I'll continue to request review copies from publishers - but please let me know if you have read a book of interest to the ACMLA and would like to submit a review, and if you have any suggestions for titles/sources. Here are the review guidelines:

ACMLA Bulletin Book Review Guidelines

Review Format

1. Bibliographic Citation

This should include: author, title, edition, place of publication, publisher, date, number of pages, price (if known) and ISBN. Example:

Bussey, Ben and Spudis, Paul D. *The Clementine Atlas of the Moon*. Cambridge: Cambridge University Press, 2004. 316p. \$80.00 US. ISBN 0-521-81528-2.

2. Content

The review should describe and critically evaluate the work. Typical review elements include: scope, purpose and content of the work; intended audience; writing style; background and authority of the author; how the work compares with other titles on the same subject; its usefulness as a research tool; any unique features; and its suitability for library collections.

The length of the review is at the reviewer's discretion, but should normally reflect the importance of the work. A typical review is about 500 words.

3. Your name, title, institutional affiliation, city and province/state

Editorial Policy

Opinions expressed in reviews are those of the reviewer, not of the ACMLA. The Reviews Editor may make minor edits, without communicating with the reviewer. Should the Editor determine that a major revision is required, she will contact the reviewer for discussion.

Susan McKee
Reviews Editor

FRENCH TRANSLATOR REQUIRED

The ACMLA Bulletin is looking for assistance with translating reviews and other documents from English to French. Please consider this valuable contribution to the Bulletin, and contact the Editor with your expressions of interest.

NEW BOOKS AND ATLASES

Compiled by Peter Genzinger

- Aalen, F.H.A. (ed.). 2011. Atlas of the Irish rural landscape. 2nd ed. Toronto: University of Toronto Press. 422 p. \$75.00 CAN. ISBN 9781442642911.
- Albert, Donald P. (ed.). 2012. Geospatial technologies and advancing geographic decision making: issues and trends. Hershey, PA: IGI Global. 329 p. \$194.50 CAN. ISBN 9781466602588.
- Bodlore-Penlaez, Mikael (ed.). 2011. Atlas of stateless nations in Europe: minority peoples in search of recognition. Talybont, Wales: Y LOLFA. 160 P. \$25.95 CAN. ISBN 9781847713797.
- Broecke van den, M.P.R. 2011. Ortelius atlas maps: an illustrated guide. 2nd rev. ed. Houten: Hes & De Graaf Publishers. 708 p. \$103.21 CAN. ISBN 9789061943808.
- Brunn, Stanley (ed.). 2011. Atlas of the 2008 elections. Lanham: Rowman & Littlefield. 320 p. \$86.95 CAN. ISBN 9780742567962.
- Bruckner, Martin (ed.). 2011. Early American cartographies. Chapel Hill: University of North Carolina Press. 485 p. \$59.92 CAN. ISBN 9780807834695.
- Caquard, Sebastien (ed.). 2011. Mapping environmental issues in the city: arts and cartography cross perspectives. Berlin: Springer. 273 P. \$141.95 CAN. ISBN 9783642224409.
- Carpenter, Richard C. 2011. Railroad atlas of the United States in 1946; v. 4: Illinois, Wisconsin, and Upper Michigan. Baltimore: Johns Hopkins University Press. 307 p. \$70.00 USD. ISBN 9781421401461.
- Dodge, Martin, Rob. Kitchin, and Chris Perkins. 2011. Rethinking maps: new frontiers in cartographic theory. London: Routledge. 272 p. \$170.95 CAN. ISBN 9780415461528.
- Dodsworth, Eva. 2011. Getting started with GIS: a LITA guide. New York: Neal-Schuman. 200 p. \$84.00 CAN. ISBN 9781555707750.
- Dow, Kristin. 2011. Atlas of climate change: mapping the world's greatest challenge. 3rd ed. Berkeley: University of California Press. 128 p. \$17.48 CAN. ISBN 9780520268234.
- Dym, Jordana and Karl Offen (eds.). 2011. Mapping Latin America: a cartographic reader. Chicago: University of Chicago Press. 338 p. \$38.95 CAN. ISBN 9780226618210.
- Fleet, Christophe. 2011. Scotland: mapping the nation. Edinburgh: Birlinn 318 p. \$50.00 CAN. ISBN 9781841589695.
- Foxell, Simon. 2011. Mapping London: making sense of the city. London: Black Dog Publishing. 288 p. \$39.95 CAN. ISBN 9781906155452.
- Gilbert, Martin. 2012. Routledge atlas of the Arab-Israeli conflict. London: Routledge. 240 p. \$30.50 CAN. ISBN 9780415699761.
- Haywood, John. 2011. New atlas of world history: global events at a glance. Princeton: Princeton University Press. 252 p. \$53.50. ISBN 9780691152691.
- Holdener, Anthony T. HTML5 geolocation. Sebastopol: O'Reilly Media. 114 p. \$22.99. ISBN 9781449304720.

Kimerling, A. Jon. 2011. *Map use: reading, analysis, interpretation*. 7th ed. Redlands, CA: ESRI Press. 581 p. \$91.96 CAN. ISBN 9781589482791.

Krogt van der, Peter and Elger Heere (eds.). 2012. *Guides to Dutch atlas maps: the British Isles, Volume 1: England*. New Castle: Oak Knoll. 256 p. \$116.95 CAN. ISBN 9781584563006.

Lin, Hui (ed.). 2011. *Virtual geographic environments*. Redlands, CA: ESRI Press. 350 p. \$57.95 CAN. ISBN 9781589483187.

McEvedy, Colin. 2011. *Cities of the classical world: an atlas and gazetteer of 120 centres of ancient civilization*. London: Allen Lane. 300 p. \$39.00 CAN. ISBN 9781846144271.

Murayama, Yuji and Rajesh Thapa (eds.). 2011. *Spatial analysis and modeling in geographical transformation process: GIS-based applications*. Dordrecht: Springer. 300 p. \$141.95 CAN. ISBN 9789400706705.

Peters, Dave. 2012. *Building a GIS: system architecture design strategies for managers*. 2nd ed. Redlands, CA: ESRI Press. 355 p. \$68.95 CAN. ISBN 9781589483071.

Phillips, A.D.M. 2011. *Historical atlas of Staffordshire*. Manchester: Manchester University Press. 192 p. \$70.00 CAN. ISBN 9780719077067.

Scott, Anne M., Alfred H. Scott, Claire McIlroy, and Christopher Wortham (eds.). 2012. *European perceptions of Terra Australis*. Farnham, UK: Ashgate. 275 p. \$124.78 CAN. ISBN 9781409426059.

Shen, Zhenjiang. 2011. *Geospatial techniques in urban planning*. Berlin: Springer. 406 p. \$193.50 CAN. ISBN 9783642135583.

Sinha, A. Krishna, David Arctur, Ian Jackson, and Linda Gundersen (eds.). 2011. *Societal challenges and geoinformatics*. Boulder, CO: Geological Society of America. 191 p. \$90.00 USD. ISBN 9780813724829.

Smith, Mike J. 2011. *Geomorphological mapping: methods and applications*. London: Elsevier. 612 p. \$217.50 CAN. ISBN 9780444534460.

Tyszczyk, Renata. 2012. *Atlas: geography, architecture and change in an interdependent world*. London: Black Dog. 175 p. \$29.95 CAN. ISBN 9781907317392.

Unwin, David, Nicholas Tate, Kenneth Foote, and David DiBiase (eds.). 2012. *Teaching geographic information science and technology in higher education*. Chichester: John Wiley. 496 p. \$142.95 CAN. ISBN 9780470748565.



NEW MAPS

Compiled by Cheryl Woods

Borneo Travel Map (Kalimantan, Sarawak, Sabah)

Scale: 1:1,200,000
Publisher: Reise Know-How
Year of Publication: 2011

Lesser Sunda Islands Travel Map

Scale: 1:800,000
Publisher: Reise Know-How
Year of Publication: 2011

Rwanda Travel Map

Scale: 1:300,000.
Publisher: Tourist Maps Kenya, Ltd
Year of Publication: 2010

Ecuador and Galapagos

Scale: 1:750,000
Publisher: National Geographic Society
Year of Publication: 2011

Pyrenees and Andorra

Scale: 1:275,000
Publisher: National Geographic Society
Year of Publication: 2011

Slovenia

Scale: 1:205,000
Publisher: National Geographic Society
Year of Publication: 2011

Sardinia

Scale: 1:220,000
Publisher: National Geographic Society
Year of Publication: 2011

Egypt

Scale: 1:1,250,000
Publisher: National Geographic Society
Year of Publication: 2011

Puerto Rico

Scale: 1:125,000
Publisher: National Geographic Society
Year of Publication: 2011

Patagonia Sur, Tierra Del Fuego, Costa a Costa

Scale: 1:1,800,000
Publisher: JLM Mapas
Year of Publication: [2011]

Sudan and South Sudan

Scale: 1:2,500,000
Publisher: Gizi Map
Year of Publication: 2011

Russia and neighbouring countries

Scale: 1:8,000,000 and 1:2,000,000
Publisher: Jana Seta
Year of Publication: 2011

Submarine Cable Map

Scale: NA
Publisher: TeleGeography
Year of Publication: 2012

Asia-Pacific Telecommunications Map

Scale: NA
Publisher: TeleGeography
Year of Publication: 2012

Belarus Travel Map

Scale: 1:700,000
Publisher: Freytag & Berndt
Year of Publication: 2011

Caribbean Travel Map

Scale: 1:2,500,000
Publisher: Freytag & Berndt
Year of Publication: 2011

Costa Rica Travel Map

Scale: NA
Publisher: Toucan
Year of Publication: 2011

Kosovo Travel Map

Scale: 1:150,000
Publisher: Freytag & Berndt
Year of Publication: 2011

Thailand Travel Map

Scale: 1:900,000
Publisher: Freytag & Berndt
Year of Publication: 2011

World Environment Map

Scale: NA
Publisher: Global Mapping
Year of Publication: [2011]

Ottawa

Scale: 1:25,000
Publisher: Canadian Cartographics Corporation
Year of Publication: 2012

Beijing

Scale: NA
Publisher: Geological Publishing House
Year of Publication: 2012

World Heritage 2011-2012

Scale: 1:43,720,000
Publisher: UNESCO
Year of Publication: 2011

Haiti

Scale: [1:180,000]
Publisher: Maps.com
Year of Publication: 2010

Brazil

Scale: 1:4,200,000
Publisher: National Geographic Society
Year of Publication: 2011

Chile

Scale: 1:1,750,000
Publisher: National Geographic Society
Year of Publication: 2011

Peru

Scale: 1:1,650,000
Publisher: National Geographic Society
Year of Publication: 2011

Eastern Australia

Scale: 1:1,970,000
Publisher: National Geographic Society
Year of Publication: 2011

South Vietnam

Scale: 1:600,000
Publisher: National Geographic Society
Year of Publication: 2011

North Vietnam

Scale: 1:600,000
Publisher: National Geographic Society
Year of Publication: 2011

Morocco

Scale: 1:1,000,000 & 1:2,750,000
Publisher: National Geographic Society
Year of Publication: 2011

Eastern China

Scale: 1:2,950,000
Publisher: National Geographic Society
Year of Publication: 2011

Western China

Scale: 1:2,950,000
Publisher: National Geographic Society
Year of Publication: 2011

Bali, Lombok and Komodo, Indonesia

Scale: 1:150,000
Publisher: National Geographic Society
Year of Publication: 2011

GEOSPATIAL DATA AND SOFTWARE REVIEWS

LandScan Global Population Database

Reviewed by Cheryl Woods

Citation

Dataset Originator/Creator: Oak Ridge National Laboratory (ORNL)

Dataset Title: LandScan

Dataset Series Name: LandScan

Dataset Release Place: Oak Ridge, TN

Dataset Publisher: Oak Ridge National Laboratory (ORNL)

Data Presentation Form: GIS Map

Developed by the Department of Energy's Oak Ridge National Laboratory in Tennessee.

The US Government awarded East View exclusive rights to distribute this product to all entities outside of the US Government.

New versions are released every September 1. Presently dated 2010, 11th version.

For a free 10-day trial contact LandScan@eastview.com or go to <http://online.eastview.com/freetrial/index.jsp>

Price for annual access ranges from \$995 USD to \$6000 USD for LandScan Global 2010 Suite and depends upon the size and location of your institution. LandScan data licenses are in effect for a 12-month period.

Description

The description below is from a combination of information provided via East View's website, hard copy advertising, webinar, free trial, video demonstration and audio discussion.

The LandScan Global Population Databases, represent the finest resolution global population distribution databases available. Offering the most accurate and reliable, geographically based, population distribution model, LandScan is a useful application in research, educational, humanitarian and corporate settings.

LandScan is a global population database that shows geographical distribution of population at one-kilometer resolution over an average 24 hour period. In a humanitarian setting, relief workers use population distribution maps easily and quickly to determine the locations of potential victims who would otherwise be cut off from communication.

The LandScan algorithm uses spatial data and imagery analysis technologies and the most up-to-date census data within an administrative boundary. Accurate administrative boundaries are an integral part of the LandScan population distribution modeling process. These population distribution models are tailored to match the data conditions and geographical nature of each individual country and region.

Most national censuses count populations by measuring where people sleep (or reside) rather than where they work or travel. LandScan integrates daytime movements and collective travel habits into a single measure to produce a better representation of where people are located during an average day.

With improvements added this year, high-resolution imagery sources were used extensively for validation to refine urban areas, land cover data, and thousands of smaller villages and populated places.

Utility of LandScan

- Allows quick and easy assessment, estimation, and visualization of population at risk.
- Demographic (age, race, sex) and socioeconomic characteristics are integrated with population data to allow integration with risk and impact assessment models.
- Critical component of Emergency planning and management, Rapid risk assessment, Evacuation planning, Consequence assessment, Mitigation Planning and implementation.

Research using LandScan may include: Insurance applications (risk analysis), Telecommunications network planning (population count assessment), Spatial data analysis (raster – land cover, elevation, slope), Cultural data studies (urban density), Market growth (retail expansion), Sustainable development and environmental protection (assess human impact on the environment) and Humanitarian aid and relief support (expedite assistance to catastrophic areas).

It includes global data as well as sets by world regions and individual countries (256 countries).

Technical Specs

LandScan is available in three access methods offering 24/7 access and unlimited simultaneous users. The data can be delivered electronically via FTP or mailed on a DVD. GIS users may connect to the data via Web Mapping Service and Web Coverage Service with any GIS software. Non-GIS users may view and analyze the data via Web Application accessible to anyone with a web browser (Mozilla Firefox or Google Chrome preferred).

Esri grid and binary format are available. The archive contains grids for the world and each of the six continents, excluding Antarctica. Each of the archive files contains two folders, an ArcInfo GRID folder and an INFO folder. Both folders must be extracted from the archive file into one new folder. The archive contains raster binary data for the world and a rich text formatted file that describes the binary format. The binary raster file format is a simple format that can be used to transfer raster data among various applications. Almost any programming language can read this file directly. For both formats, downloaded files need to be uncompressed using a standard Zip utility (e.g., WinZip, PKZIP, etc.) before they can be imported to GIS or other software. Users should expect a substantial increase in the size of downloaded data after uncompression.

The dataset includes four layers:

1. country level demographic data
2. 1st level admin demographic data (state or province level)
3. pixel (1km x 1km) level population data
4. an area calculation layer

The country and 1st level admin level data include demographic data such as age, gender and age by

gender population breakdowns. The pixel level data contains a total ambient population value for each cell. All data is georeferenced in the geographic projection WGS 1984. Included with the data is a toolbox for use with Esri's spatial analyst extension (helpful but not necessary) as well as pre-symbolized layer files to use for symbolizing the data.

They do not recommend converting the GRID data into a shapefile containing polygons because "people" are lost during the conversion. If users must convert the data from grid format to feature format, we recommend converting to a point file. This way each point represents the cell total as maintained in the GRID format.

Its tool bar is easy to use and provides 7 clear options to choose from depending on the amount of detail you want. The zoom, click and drag features and adjustable transparency level allows you to see layers or hovering over a category to see details. The base maps are: streetmap, satellite, OpenStreetMap or topographic.

Metadata

The data sources include: US and International Census Data, Demographic Information and High-resolution satellite images.

Included with the data is ORNL produced metadata and various readme files which explain the data and updates. Datasets used in the development of the LandScan Global Population Dataset are not available.

Oak Ridge National Laboratory, the producer of LandScan, does not release previous versions of the datasets because the data should not be used as a change detection or migration tool.

The dataset values are people per cell. The "Value" field in the database table contains the number of people per cell. This is a population count per cell, not a population density. The "Count" field in the database table contains the number of cells that have the same population count as the cell of interest.

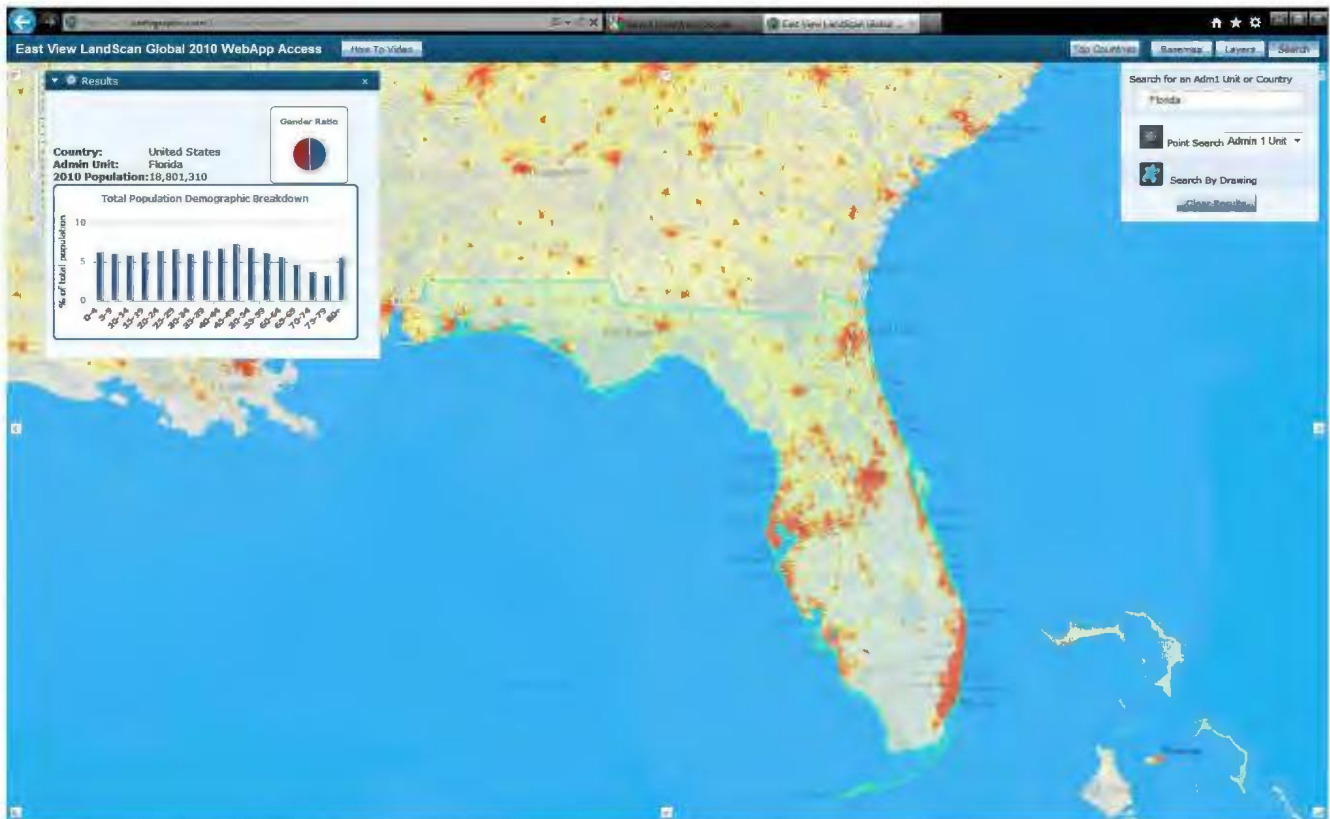
Conclusion

LandScan offers well displayed population information for non-GIS users through any web browser, as well as, to those wanting to use GIS software. It is questionable if this data might be free from other sources. When this reviewer searched a core intersection of London, it provided the total population of that area, and the daytime demographic breakdown by gender and age group. There is a greater capability and potential for analysis/export if used with GIS software. The OCUL Map Group discussed this product at a December 2011 meeting and encouragement was given to the ACMLA 2012 conference program planning committee that they may wish to look into a presentation of this to a wider audience in June. Although it is impressive in functionality and depiction, it is felt that the cost of this product does not warrant its purchase, at this time.

*Cheryl Woods
Map and Data Centre
Western University
London, ON*



Part of Southwestern Ontario population map



Population data for Florida

REGIONAL NEWS / NOUVELLES REGIONALES

Compiled by Tom Anderson

Alberta

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Greetings again from Edmonton, where spring, or a pre-view of it, is melting away the little snow that accumulated through the winter. At the William C Wonders Map Collection we are busy on a number of fronts. Our big news, is that we have a new Map Librarian, Virginia Pow. Virginia, who has a Geography degree from UNBC and MLIS from Dalhousie, arrived in early February returning from maternity leave and leaving her role in our Humanities and Social Sciences Library to take over responsibility for the Map Collection and liaison with our Human Geography folks in the Department of Earth & Atmospheric Sciences. I am continuing on a ½ time basis as Map Cataloguer. Virginia brings great experience and new perspectives to the collection. Virginia and I are taking this opportunity to review many of the policies, procedures and practices of the operation during the transition.

Also exciting us is the recruitment of Larry Laliberte, who many of us know from his work at Univ. of Manitoba. Larry joined us in March in a newly created position of GIS Librarian. Together, this new team will add greatly to the cartographic and GIS expertise available to our students and researchers.

New Brunswick

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The Government Documents, Data, and Maps

department of the UNB Libraries system underwent a few changes in the last year. By far, the most significant of these was the retirement of Elizabeth Hamilton, who worked at UNB for more than 30 years, and whose daily presence is sorely missed. Upon Elizabeth's retirement, a new position was created in the department: Data/GIS Librarian. I am pleased to report that I was the successful candidate.

Physically our Map Room was also subject to considerable change in 2011, when we lost a good deal of floor space. As a result we were unable to keep several large tables and two drafting/light tables. We were required to reorganize our map cabinets, which meant that we were forced to give up the large buffer we had always maintained between facing cabinets.

Having made these changes, however, we were finally able to integrate the rest of the war topos our Military Studies program had procured for the university several years ago. Although our listing is rather crude <<http://www.lib.unb.ca/gddm/maps/DND/>>, we receive a good number of requests for scans of these maps, particularly from international patrons.

Newfoundland

Memorial University
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The highlight for Newfoundland News will be the Macpherson Neighborhood Map which hangs proudly in our library. It was created in 2005 by Grades 1 and 2 students from Macpherson Elementary School. The project leader was local artist, Rhonda Buckley. She led the students on a fieldtrip where they gathered their data by taking photographs of the major buildings in their neighborhood – home, school, stores,

church, and other important landmarks. The kids then made a pencil sketch buildings and landmarks identified. Then the artist helped each child reproduce a fabric rendering of their sketch which was then placed on the map. The final product measures 3.5 m².

Unfortunately, Macpherson Elementary was chosen to be closed for good with major education restructuring here in Eastern Newfoundland. Since her son was one of the creators of this map when he was in grade 2, my colleague in the Map Room, Joanne Costello, approached me to see if I'd be interested in having the map in our collection. I immediately answered yes and the school principal was very happy that it found a home where it will be appreciated. Even Memorial's Geography Department made it a news feature on its home page for awhile.

I also have more news regarding Joanne. She has been working towards a nine-month leave starting in August where she will be producing art for an upcoming art show. The theme she is pursuing is sites visited by a well know Newfoundland geologist in the 19th century – James P. Howley. Joanne was granted a Newfoundland and Labrador Arts Council travel grant to visit seven of Howley's sites and paint them. Though we'll miss her in the Map Room while she's gone for those nine months, we wish her all the best in her endeavors and look forward to her show when she's finished.

Two major projects that David Mercer, my GIS assistant, and I are working on are the Newfoundland Electoral Boundary Project and a WWI project. With the 100th anniversary of the beginning of the war just around the corner, many projects related to WWI are springing up. As for other outreach events, I gave a talk for the Coffee and Culture sessions at The Rooms (provincial archives). My talk was about Maps and Genealogy. The session coordinator is happy to have 25-30 people attend these talks, but it's amazing how the word "map" can attract people – 60 interested souls attended. Then a week after that, I was interviewed on a local talk radio show about maps. On top of the regular grind, it's been

a busy term here at Memorial.

Ontario

University of Ottawa
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The Geographic, Statistical and Government Information Centre of the University of Ottawa would like to congratulate Grace Welch, retired uOttawa Associate University Librarian (Access) and previously head of the uOttawa Map Library, for being inducted as a fellow to the Royal Canadian Geographical Society, an honour that has rarely been bestowed on a map librarian. The Fellows elect the Officers and Governors of the Society as well as approve reports submitted by Society Officers and auditors. Grace has also been confirmed for another three year term as the Vice-Chair of the Ontario Geographical Names Board, on which she has sat since September 2007. The Board is responsible for managing and defining the treatment of 220,000 geographical names of places and geographical features in Ontario and provides recommendations to the Ontario Minister of Natural Resources in the addition, revision or deletion of official geographic names in English, French and Native languages.

Western University
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The University of Western Ontario has been rebranded to Western University. This new identity involves many changes <<http://communications.uwo.ca/brandnew/>> that will be phased in over the next several months. The physical relocation of this Centre to the Weldon Library will likely occur in late 2012/early 2013. A total of 225 boxes of USGS 1:24,000 maps have been sent to off-site storage. Another 100 boxes of archival non-Canadian material will be packaged throughout the summer.

The migration of the map catalogue from InMagic (presently used) to Innovative (Western Libraries') continues with the inputting of historical Canadian map records into InMagic. A test run of 500 records (sheet maps, topographic maps and atlases) will be completed in the spring. This will allow for the examination of potential issues to be resolved before loading the full catalogue.

Cheryl and Vince gave a presentation – Learn about the Geoportal to Western Libraries' librarians in December. This was to introduce them to Scholars GeoPortal <<http://geo.scholarsportal.info/>> which was officially launched March 1. As part of our new service model, we are trying to provide information to those students and researchers wanting access to cartographic and data resources that we offer.

Two library science students employed in the Map and Data Centre used Google Fusion Table to create an interactive, web-based index for a collection of 17 historic maps of Ontario and Eastern Canada. This project will be expanded to include more original maps held in the collection. It will be added to the unit's website <<http://www.lib.uwo.ca/madgic>> soon. Sarah and Francine will be discussing this project at the ACMLA 2012 in Toronto.

York University
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The York University Map Library has seen some major changes in the past 18 months. In January 2011, Trudy Bodak took a sabbatical year, and retired January 1st, 2012. Rosa Orlandini was hired as the new Map and GIS Librarian in January 2011.

Trudy started at York University in 1971. She first worked as cataloguer, head of Cataloguing starting in 1980, and the Head of the Map Library by the late 1980s. Under Trudy's leadership, the Map Library greatly evolved with the introduction of geospatial data services, the enhancement in collection access, and outreach

to colleagues and across York faculties. On behalf of current and previous staff at the York University Map Library, we would like to extend good wishes to Trudy in her retirement.

Rosa Orlandini previously worked as the Geographic Information Manager at McGill University, and more recently as a Reference and Instruction librarian at Concordia University. She has a MLIS (McGill University), a BSc. in Geography (University of Winnipeg), and a post-graduate diploma in GIS (Université du Québec à Montréal).

Dana Craig, our GIS Assistant received her MIST degree. As of September 2010, she became our new Environmental Studies Librarian, she also served as acting head of the Map Library in December 2010. During this period of transition, we were fortunate to have our colleague Vito Ciraco work as an interim GIS Assistant. We are very pleased to welcome Janet Howarth, our new GIS Assistant; she also has a cross-appointment with the Steacie Science and Engineering Library. Janet recently worked as a mapping technician in Calgary and has a BSc. Honours in Geography, and post-graduate certificate in Geomatics.

Throughout this period of change and transition, Mary McDowell, our Map Library Coordinator provided great support and guidance to all.

Quebec

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La Cartothèque de l'Université du Québec à Montréal aimerait souligner l'arrivée d'une nouvelle cartothécaire dans le poste anciennement occupé par Josée Lambert. Depuis août 2011, Sylvie St-Pierre, diplômée de bibliothéconomie de l'Université McGill en 2009, est la nouvelle responsable de la Cartothèque de l'UQAM. C'est avec grand plaisir qu'elle souhaite rencontrer les membres de l'association lors de la conférence annuelle à Toronto.

GIS TRENDS

ON THE MAP : THE MAP TREND LOCATOR

Courtney Lundrigan

CITIZEN MAPPING

Open Street Map

<http://www.openstreetmap.org/>

About Open Street Map

Created with the goal of making geospatial data freely available, Open Street Map was built with the end user in mind. The user is essentially the cartographer and reinforces the concept of the neogeographer – “everyone is a cartographer.” Widely known for its ‘Wikipedia-like’ approach to online mapping, Open Street Map is user friendly and a great introductory tool for those not familiar with mapping.

Pros

Contributing to the open data movement:

All data on Open Street Map is shared through a Creative Commons Share-Alike license

Features:

Search box, map key, blog, help centre, and user diaries

Customization:

Users are able to create accounts and organize their contributions to Open Street Map

Cons

Export feature:

Open Street Map can export in XML and embeddable HTML formats. While these features are great, it would be nice to have more options for exporting and would enable a user to do more with the data

Accuracy:

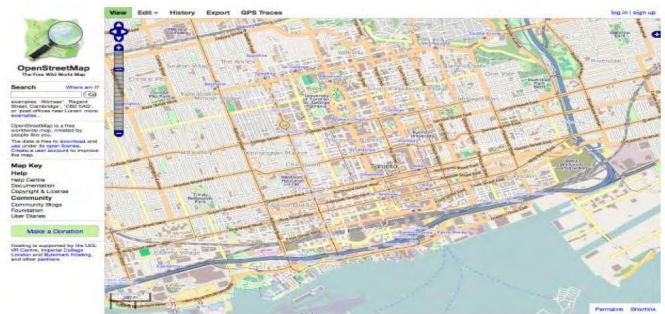
Because anyone can contribute content and save it on a live map, it is difficult to monitor the data being entered. The integrity and accuracy of the data can be questioned at any given time.

Use for the Library Community

Users just getting started with online mapping will find Open Street Map to meet their needs, but would have to exercise caution in trusting the integrity of the data. Canadian data has been taken from various government sources, including Statistics Canada, GeoGratis, GeoBase, and other resources from Natural Resources Canada, so is available elsewhere. While Open Street Map can be seen as a step in the right direction of making geospatial data freely available, it may not be the most appropriate tool for research and academic purposes.

Would I recommend it?

With hesitancy. To the new user who just wants to play with web-based mapping and learn the ropes? Yes. To a student needing to map reliable data for a school project? Probably not.



Open Street Map Interface

HistoryPin

<http://www.historypin.com/>

About History Pin

HistoryPin is a partnership between Google and a not-for-profit organization called We Are What We Do. It is essentially the intersection of citizen mapping and social media. Users sign up and pin photos on a map with the ultimate goal of 'mapping their history.' HistoryPin's collection has developed extensively over the last year and provides a medium for users to interact with maps on a personal level.

Pros

User-centred:

The end user contributes the content and engages with the product

User engagement:

Also seen as a social media outlet, HistoryPin engages users through tools like Twitter, Facebook, YouTube, Google+, a blog, and more

Customization:

Users create accounts to manage their photos and contributions to the collection

Cons

To the beginning user, it may seem like the webpage is crowded with too much going on

Use for the Library Community

Public, academic, and special libraries alike will find HistoryPin to be useful. Genealogists are becoming fascinated with it, the everyday user is engaging with it, and academic libraries (especially Archives and Special Collections) can use it as a way of getting their collections out there. With Google as the map provider, the interface is familiar and allows users to explore. The use of themed collections has research potential across the whole library community and will serve as an excellent resource for beginners who want to engage with online

mapping in a non-traditional way. It also provides map librarians an opportunity to engage with the library community and may be an ideal tool to introduce library staff to the social media aspect of online mapping.

Would I recommend it?

Yes, without hesitancy. Like any other resource, the content must be evaluated to ensure accuracy and relevancy. Overall, it is an invaluable tool that allows us to assert our value to the broader library community.



History Pin Interface

Courtney Lundrigan is the Communications & Liaison Librarian at Ryerson University in Toronto.

Have a resource or theme you would like to see in /On the Map/? Feedback about the column is also welcome. Drop me a line at clundrig@ryerson.ca.

