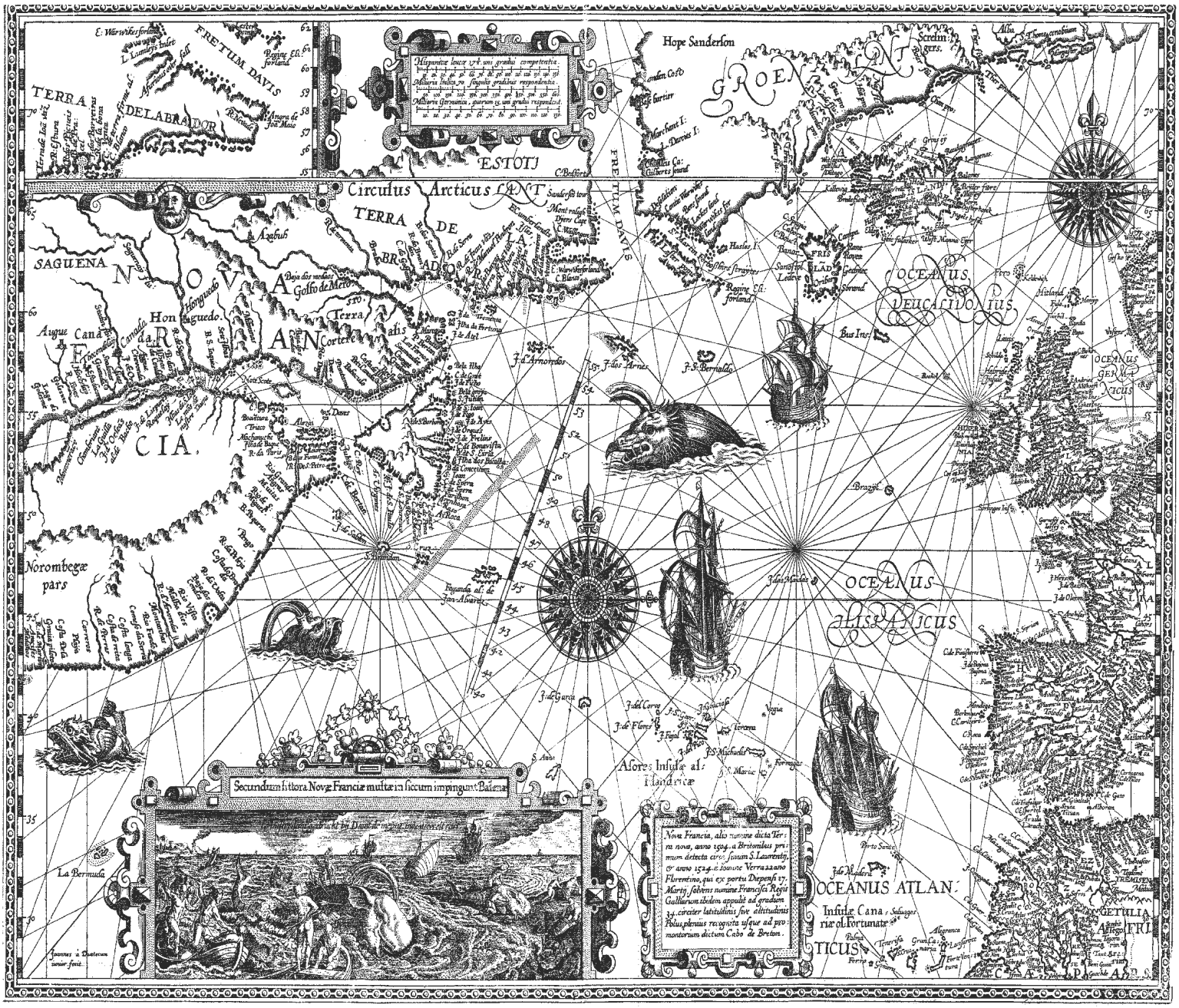
ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES

BULLETIN

ASSOCIATION DES CARTOTHÈQUES ET ARCHIVES CARTOGRAPHIQUES DU CANADA



NUMBER 141 / SPRING/SUMMER 2012

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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

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

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$

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President / Président
Dan Duda
Map Librarian
Queen Elizabeth II Library
Memorial University of Newfoundland
St. John's, Newfoundland A1B 3Y1
tel: (709) 737-3198
president@acmla.org

1st Vice President / 1er Vice-Président
Rosa Orlandini
Librarian and Head
Map Library
102 Scott Library
York University
Toronto, Ontario
vice.president1@acmla.org

2nd Vice President / 2e Vice-Président
Wenonah Van Heyst
Dept. of Geography
Brandon University
Brandon, Manitoba R7A 6A9
tel: (204) 727-7466
fraserw@brandon.ca

Past President / Président sortant
Andrew Nicholson
GIS/Data Librarian, Library
University of Toronto at Mississauga
Mississauga, Ontario L5L 1C6
tel: (905) 828-3886
fax: (905) 569-4320
andrew.nicholson@utoronto.ca

Secretary / Secrétaire
Jasmine Hoover
GIS Librarian
Data and GIS Library Services
Murray Library
University of Saskatchewan
Saskatoon, Saskatchewan S7N 5A4
tel: (306) 966-7265
secretary@acmla.org

Treasurer / Trésorier
Deena Yanofsky
Co-ordinator, Walter Hitschfield Geographic Information Centre
McGIll University
Montreal, Quebec H3A 2K6
tel: (514) 398-6052
treasurer@acmla.org

ACMLA MAILING ADDRESS / ACACC ADRESSE D'AFFAIRES

Association of Canadian Map Libraries and Archives /
Association des cartothèques et archives cartographiques du Canada

PO Box 60095
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Les opinions exprimées dans le Bullein sont celles des collaborateurs et ne correspondent pas nécessairement à celles de l'Association.

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ACMLA BULLETIN
NUMBER 141 SPRING/SUMMER 2012

BULLETIN DE L'ACACC
NUMERO 141 PRINTEMP/ÉTÉ 2012

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ON THE COVER...

Nova Francia [Cornelis Claesz] and Jan van Deutecum. Amsterdam [Circa 1594].

Published in 1988 by ACMLA. Reproduction sponsored by the Map Collection, Department of Rare Books and Special Collections, McGill University Libraries. ACML Facsimile Map Series No. 127 (ISSN 0827-8024)

Publié en 1988 par l'ACACC. Reproduction parrainé par la collection de cartes, Département des livres rares et collections spéciales, Bibliothèques de l'Université McGill. Série de cartes fac-similes de l'ACC. carte No. 127 (ISSN 0827-8024)

PRESIDENT'S MESSAGE

Dear members,

I want to take this time to once again thank everyone who made the CARTO 2012 conference in Toronto successful! Dan Jakubek and the Organizing Committee team, Noel Damba, Marcel Fortin, Leanne Hindmarch, Courtney Lundrigan, and Rosa Orlandini, did a great job in hosting the conference. The Program Committee did a fantastic job in bringing together interesting topics and issues and I want to thank Dana Craig, Janina Mueller, Colleen Beard, Wenonah Fraser Van Heys, and Alberta Auringer Wood for their work on the program. And of course, all of the speakers and members who attended…thank you…sharing ideas and discussing issues is always an energizing endeavor for me.

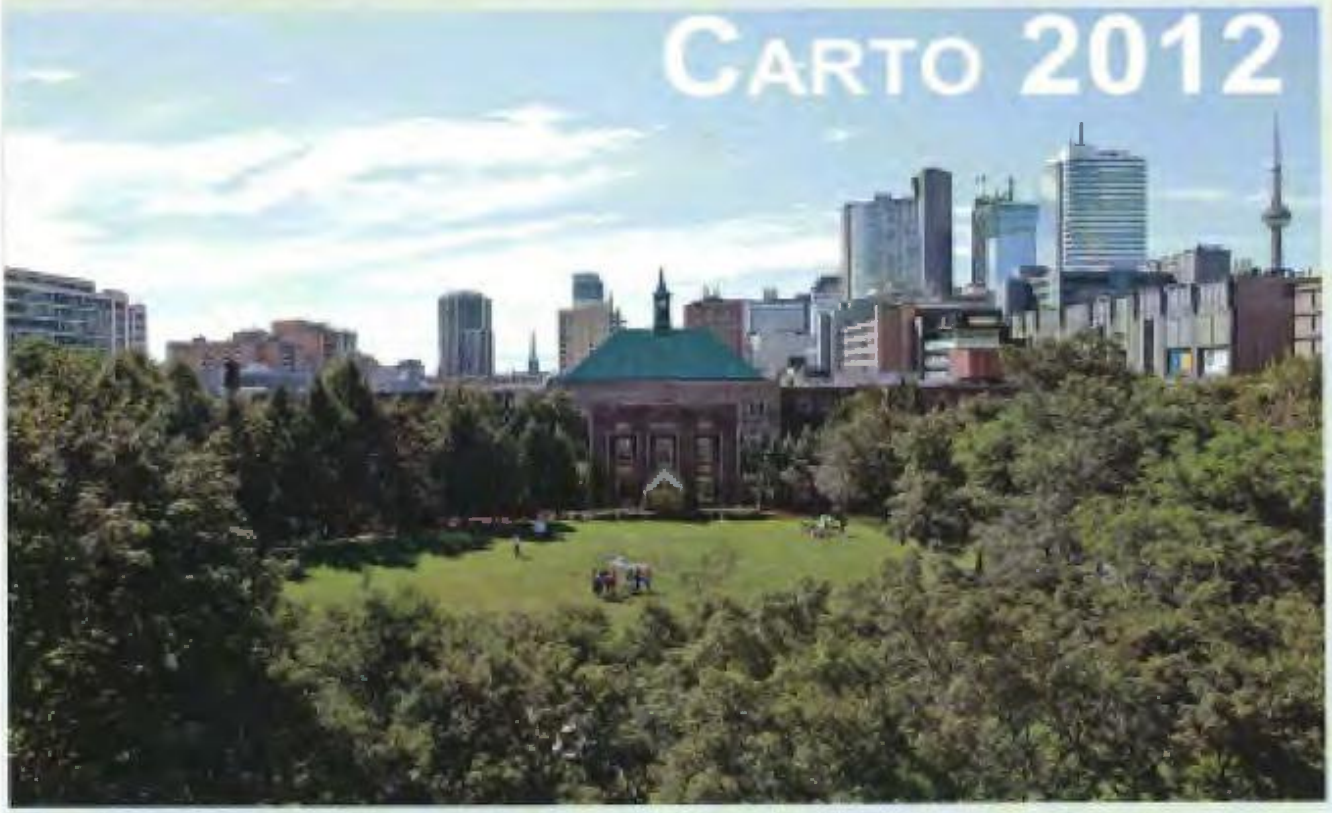
At the Annual General Meeting a motion was passed to strike a Task Force to look at the future of ACMLA. Besides concerns from some members about our future, the Canadian Government has changed the Act that our incorporated status falls under and we have until October 2014 to make any changes necessary before the boundaries of the new Act settles in. The Task Force will keep the membership apprised of its work and a vote will hopefully take place, if needed, for the changes that will keep ACMLA going strong into its future.

Finally, I want to thank Larry Laliberté and Virginia Pow from the University of Alberta for volunteering to host next year's conference in Edmonton at the University of Alberta. The Canadian Cartographic Association has accepted our invitation to join us in Edmonton next year, probably in early June. As more information becomes available, it will be shared with you.

I hope everyone can enjoy the rest of your summer…till later from sunny Newfoundland,

Dan Duda

PROGRAM
PROGRAMME



A Journey Through a Changing Landscape
Un voyage à travers un paysage en evolution

46th Annual Conference of the Association of Canadian Map Libraries and Archives (ACMLA)
#Carto12

46e Congrés annuel de l'Association des cartothéques et archives cartographiques du Canada (ACACC)

June 12 - June 15
Juin 12 - Juin 15

Ryerson University Library and Archives
350 Victoria St
Toronto Ontario
M5B 2K3

RULA
Ryerson University Library & Archives

ACMLA CARTO 2012 CONFERENCE REPORT

June 12th - June 15th, 2012

Tuesday June 12th : Pre Conference Workshops

FME SAFE: CONVERT, TRANSFORM AND INTEGRATE DATA IN FME

Laura Kerssens, Production Support Specialist
Safe Software Inc.

This introductory workshop instructed by Laura Kerssens of Safe Software was designed with the intent of equipping attendees with the basic knowledge and skills to begin tackling data interoperability challenges using FME, the company's data transformation technology. The hands-on workshop consisted of both theory and exercises covering two main topics: data translation and data transformation using FME Desktop.

To lay a basis for the rest of the workshop, the lecture began with an explanation of data interoperability as it applies to the everyday use of data, and the barriers to achieving it: disparate data types and formats. FME's technology was then introduced as a solution to these challenges with a description of the different capabilities and features of the product, and the various versions that are available. A hands-on guided tour of FME Workbench and Universal Viewer, the two applications inside FME Desktop, was given to become familiar with working in the FME environment in preparation for the exercises later on.

Two introductory topics were covered, the first being the basics of data translation between formats which FME handles nicely. The limitations of straight data translation were described as the discussion moved to the topic of the more complex subject of data transformation, the concept around which FME was designed. Two types of transformation were discussed: structural and content; the first applying to the channeling of data from source to destination in any number of arrangements (merging, dividing, reordering), the second to the altering of the substance of the dataset (manipulation of feature geometry or attributes). Transformers - the FME tools used to execute these manipulations - were introduced and attendees were instructed on how to use several of them through in-class exercises. Also discussed was the concept of coordinate system transformation.

Attendees walked away with a basic understanding of interoperability concepts and enough skill to begin using FME Desktop to execute a variety of useful transformation tasks.

LEVERAGING ESRI TECHNOLOGY FOR TEACHING & LEARNING, AND RESEARCH INITIATIVES

Caroline Tiegs and Iain Greensmith
Esri Canada

This year's pre-conference workshop showed how attendees could leverage GIS and analytical tools to support teaching, learning and academic research. Through hands-on activities and discussion, attendees were exposed to Esri tools that have the potential to help them be more effective in the support they provide at their institutions.

Attendees used a combination of ArcGIS for Desktop software and ArcGIS Online to complete their activities. They were also given a sneak peak at new capabilities in ArcGIS for Desktop 10.1 as well as new cloud based products ArcGIS Online Subscription and Community Analyst Online that will be available to them.

Wednesday June 13th: Conference Presentations

Keynote Address

LIFE BEFORE SAM: AN EXPLORATION OF TIME AND PLACE @ YONGE & GOULD

Bob Jackson
Projects and Facilities Manager
Ryerson University Library and Archives (RULA) OCUL's Geospatial Portal Project

For several years, Bob Jackson managed Ryerson Library's Besse Information Commons and was also responsible for coordinating IT-related activities in the Library. Over the past few years, the Ryerson Library has been documenting the history of the Student Learning Centre (SLC) building site at the intersection of Yonge & Gould Streets: 341 through 355 Yonge Street. Though Sam the Record Man was an iconic presence at this location for over 40 years, the site has a rich history which can be traced back to the end of the 18th century.

Given Bob's current involvement in the development of Ryerson's Student Learning Centre, his presentation began with a look into the future as he described the detailed plans for the new building. The storyline shifted to an exploration of the history of human activity on the site from the late 19th century onwards. Several themes emerged related to 'Life Before Sam,' illustrated largely through archival photographs and ads from Toronto newspapers.

THE DATA MOBILE PROJECT: RYERSON UNIVERSITY LIBRARY AND ARCHIVES (RULA) MILE

Dan Jakubek and Graham McCarthy (Ryerson University)

This presentation outlined the development of an unexpected collaboration between the Ryerson University Library & Archives (RULA) and the School of Architecture that resulted in a mobile application to store historical data, photos, and architecturally relevant information about buildings in Toronto. Content collected and added to the system by Architecture students as part of their coursework supported the original application while the library cemented its reputation as an innovator on campus with development of the DataMob mobile application.

The presentation included an outline of collaborative projects that led to the development of the RULA Mile pilot project which was originally created as a Google MyMap. In this phase, all libraries and related facilities were identified and plotted within One-Mile of the future location of the Ryerson University Student Learning Centre. Following the development of DataMob, content collected for the original RULA Mile was inputted into the DataMob framework with the goal of fostering relationships with other libraries and organizations within Toronto while strengthening the Ryerson University Library reputation.

The second half of the presentation featured a live demonstration of the DataMob application, including useful information such as the mobile devices supported and downloads required to run the application.

Dan Jakubek and Graham McCarthy

Photo: Dan Jakubek

GIS – A CATALYST FOR MUNICIPAL SERVICE DELIVERY

Andrew Lyszkiewicz (City of Toronto)

Every municipality needs to meet a challenge of more effective and efficient service delivery to its citizens. Toronto public service is achieving this by adopting citizen-centric approach, opening up the boundaries of government, collaboration, and new and improved business processes. City of Toronto is transforming itself and its Information & Technology Division, Geospatial Competency Centre has a vision to be a catalyst for this transformation. Our initiatives call for innovation, implementation of new technologies, tracking of new concepts and sharing experiences. GIS is helping us to achieve this vision and grow strategic to the City of Toronto.

Geospatial Competency Centre (GCC) provides enterprise geospatial framework (including mapping), data, technology solutions, and consulting for geospatial enabled business applications. By doing this GCC:

1. Serve as first point of contact for geospatial services
2. Provide consulting services
3. Provide centre of excellence leadership, consulting and skill-set competency in the delivery of enterprise geospatial solution
4. Lead or consult on application solution preparation
5. Develop/acquire or consult on geospatial data acquisition
6. Execute solution-specific activities that may include scoping, modeling, requirements, design, and development
7. Promote and share experience with partners developing divisional geospatial application solutions and data products
8. Research and deploy innovative geospatial data acquisition, interpretation and application technologies
9. Manage access to City geospatial data holdings. Working in collaboration with other units develops and maintains geospatial data, and business specific geospatial applications and/or data products
10. Play an active role in initiating and supporting Information and Technology Community of Practice in the geospatial realm.

Andrew Lyszkiewicz *Photo: Dan Jakubek*

WAR OF 1812 IN MAPS

http://www.brocku.ca/maplibrary/digital/War1812/WarOf1812.php
Colleen Beard (Brock University)

To acknowledge the War of 1812 bicentennial, a map web application was recently developed by Map Library staff to better envision the significant battles in Niagara during 1812 – 1814. (The Google Earth plug-in and its JavaScript API let you embed the full power of Google Earth and its 3D rendering capabilities into any webpage.) Several historical maps from this era were scanned and georeferenced to overlay in a Google Earth display. Colleen began with the Vavasour map of Queenston Heights, 1818, and narrated the story of General Isaac Brock's last stand during this battle of October 13, 1812. His last words, "push on..." were adopted as Brock University's motto. Using Google Earth 3D technology and the historical map overlays, she illustrated the locations of batteries and the movement of troops; explained the strategic importance of terrain; the place where Brock fell and what it looks like today. In keeping with the theme of the conference, the transparency slider was used to compare the changing landscapes of these historic battlefields and notice was taken at the weak attempt to preserve them. However, the reconstruction of Fort York, George, Erie, and Niagara are much admired and respected. The heroic trek of Laura Secord to warn the British of an American attack was described through the Francis-Hall map of the Niagara Frontier 1818, while the audience was treated to her chocolates. This cartographic gem is one example that represents the detailed landscape and features of wartime. Although the Google Earth 3D plug-in is required to view this display, it's worth the download!

Colleen Beard photo: Dan Jakubek

WHAT CAME FIRST: CONCRETE SIDEWALKS OR CONCRETE ROADS?

Daniel Brendle-Moczuk (University of Victoria)

As with the proverbial conundrum of the chicken and the egg, the question of concrete sidewalks or concrete roads requires a detailed investigation and perhaps cannot even be answered. However, the city of Vancouver's concrete sidewalks had their date of construction pressed into the fresh concrete for us to observe today. By collecting approx. 800 geo-referenced concrete date stamped sidewalk marks, some as early as 1906, and with extensive use of Vancouver Archives, a pattern of the geographic and historical distribution of Vancouver's sidewalks and the city's growth can be established. The session described the methodology and techniques employed to answer many questions regarding Vancouver's concrete sidewalk date stamps using GIS, historic photos and maps and Google Earth.

Alberta Auringer Wood (moderator) and Daniel Brendle-Moczuk

Photo: Dan Jakubek

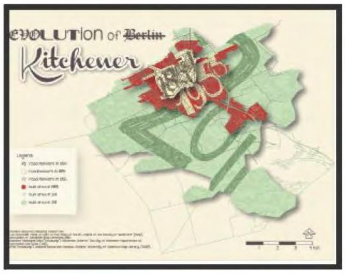
WATERLOO COUNTY HISTORICAL STREET PROJECT

Eva Dodsworth and Jonathan Morgran (University of Waterloo)

Created as a pilot project, the University of Waterloo Map Library staff created a digital historical street map of the Region of Waterloo, allowing users to explore changes in city boundaries, urban growth, and the street network as far back as 1955. The historical street map is the second phase of the Map Library's digital initiative which commenced in 2008 with the digitization and georeferencing of over 2,000 historical air photos of the Region of Waterloo. The street map data files were created using GIS, analyzing the street network visible in 1955 air photos that the Library had previously digitized and georeferenced. Additionally, staff have also analyzed street name changes and have incorporated this into the GIS files. The historical street data are made freely available in digital map format as Esri Shapefiles and KML files, allowing scholars, historians and community residents to study and analyze past and present street patterns. Comparison of past and present has lead to the discovery of some interesting finds with respect to changes to city boundaries, urban growth, and street names. Drawing the attention of such local publications as the KW Record, NewHamburg Independent and the Daily Bulletin, community response has been very positive with almost daily inquiries from the public.

Eva Dodsworth, Jon Morgan and Alberta Auringer Wood

Photo: Dan Jakubek



MAKING HISTORICAL CANADIAN MAPS MORE ACCESSIBLE: A STUDY OF INDEXING USING GOOGLE FUSION TABLES

Francine Berish and Sarah Simpkin

The research value of a map collection is not determined by its size or its rarity, but rather by its accessibility. The Map and Data Centre at the University of Western Ontario houses an extraordinary collection of rare historic maps of North America that are featured in display frames. Though beautifully exhibited, these maps were not catalogued and therefore impossible to find in an online search of the library's catalogue. In the context of this project, the first step was selecting a sample of maps and scanning them as jpeg 400dpi image files. The maps were then catalogued by Francine and Sarah, with help from Joan Winearls' prolific book "*Mapping Upper Canada, 1780-1867: An Annotated Bibliography of Manuscript and Printed Maps*". Instead of actually layering the historic maps over the modern base map, it was decided to create a map index, with bounding boxes labelling the extent of each map made using the coordinates from the corners of each map. Google Fusion Tables is a tool that facilitates collaboration by providing a forum to contribute, store, organize and visualize data remotely. In the context of this project, Google Fusion Tables was used as the working environment, housing bibliographic information, coordinates, the graphical user interface to browse the index, and references to the map scans themselves (hosted on Western's server). When the project was ready to launch, the privacy settings were changed to make it publicly accessible–afforded by the fact the maps are out of copyright.

Sarah Simpkin and Francine Berish

Photo: Dan Jakubek

CARTO attendees

Photo: Dan Jakubek

Peter Genzinger (moderator)

Photo: Dan Jakubek

GÉOINDEX

Stéfano Biondo (Université Laval)

Cumulant des collections de plus en plus importantes de données géospatiales, plusieurs défis se posent dans les bibliothèques universitaires afin de faciliter leur découverte et leurs accès pour l'enseignement et la recherche, notamment en raison de leur complexité intrinsèque, de leur restriction d'accès, de leur quantité croissante, ainsi que de l'espace disque volumineux qu'elles requièrent.

Cette communication vise à présenter la nouvelle plateforme Géoindex+ développée par la Bibliothèque de l'Université Laval pour améliorer la gestion et la diffusion des données géospatiales du Centre d'information géographique et statistique (Centre GéoStat). GéoIndex+ est une plateforme de découverte, de consultation et d'extraction de données géospatiales combinant de façon unique et optimale la recherche spatiale et textuelle en utilisant des technologies récentes principalement Open Source. Les divers choix technologiques retenus pour la mise en place de GéoIndex+ (dont GeoNetwork, SOLR, OpenLayers, Mapserver) seront également présentés au cours de la séance.

Academic libraries develop collections of geospatial data that are increasingly large. Considering the inherent complexity of geospatial data and their ever-enhanced quality, the need for controlled access, and the voluminous hard-drive space they require, challenges in terms of discovery and availability for teaching and research purposes are experienced.

This presentation introduced the GéoIndex+ platform, developed by the Université Laval Library to facilitate the management and dissemination of geospatial data. GéoIndex+ allows the discovery, consultation and extraction of geospatial data. It combines spatial and text-based search in a unique and highly-effective way. It relies on recent technologies, many of which are Open Source. The technological choices made in order to deploy GéoIndex+ (including GeoNetwork, SOLR, OpenLayers, Mapserver) were also addressed.

Jenny Marvin (moderator), and Stéfano Biondo
Photos: Dan Jakubek

Thursday June 14th: Conference Presentations

MAP4LIB : - A POSSIBLE VISION FOR THE FUTURE OF THE ACMLA

Marcel Fortin (University of Toronto)

Marcel Fortin *Photo: Dan Jakubek*

It is generally agreed that the ACMLA has been the most important and significant development in map librarianship in Canada since its inception in 1967. Despite its significance and importance, however, the association is feeling the strains of its format and organization; both of which are remnants of the original foundation of the association in 1967. This presentation was intended as a way to bring forward my concerns and fears about these problems with the association in a logical and practical method, and to consolidate sentiments starting to manifest themselves within the association, before it is too late.

I have in the past made recommendations and put forward motions to change the association's name, as I saw the name as being a bit antiquated and not terribly reflective of the modern map and GIS librarianship profession. While thinking about the association in the past year, I realized that the name change was possibly the least of the association's problems, and that the entire anxiety that I and other members have felt over the past few years has really been indicative of a symptom of other issues, rather than the actual problem.

By examining the name change issue over the past few years, however, it does demonstrate well the main issues surrounding the association. Almost ten years ago I put forward the first motion in the ACMLA Bulletin and at the AGM in Winnipeg (2003-2004) to open up initial discussions and a vote to change the association's name. The motion read:

> "Be it resolved, that the name of the Association of Canadian Map Libraries and Archives be changed to reflect the current nature of the work performed by a large number of our members that now includes the use of digital spatial data and Geographic Information Systems (GIS)."

At the Winnipeg AGM in 2004, a majority of attendees voted in favour of the motion. Following the meeting and the vote, a small task force was formed and several names put forward by the membership to vote on. In the mail-in vote, only 27 members actually cast a vote. While the name, "The Canadian Association of Geographic Information Specialists" won, it did so by having only 9 votes attached to it. Having such a low number of total votes cast, the idea of a name change was abandoned. The issue arose again in 2011 in Quebec City where again a motion was passed to look into the name of the association. The motion read: "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." Unfortunately, the process never got underway for a variety of reasons and the issue was never dealt with.

The lesson, in examining these 9 years since the first name change motion, is that the ACMLA seems to be stuck in an old format and structure for an organization that has wethered 45 years and generations of members. Things get decided upon and acted upon only very slowly, as though we were still in 1967 in many ways.

During my presentation, I dissected my perception of how the ACMLA works. I basically tried to demonstrate

that the ACMLA is by far based on the benevolence of its membership, but that maybe that benevolence is somewhat missplaced. The ACMLA seems to put more emphasis on the inner workings and participation in committee and executive work, rather than on expressions of opinions on issues as they arise and as they gain in importance in the field of GIS and Map Librarianship.

I also argued that really, the important work of the association was truly reflected in the output of the membership at large through various other tools outside the executive and committees such as the CARTO Conference, the Bulletin and other publications, and through lobbying governments. I also tried to demonstrate that association membership creativity and flexibility were hindered by the associaton bylaws and rules of procedure that total about 30 pages in length.

I then elaborated on a few of the major issues that these bylaws obscure about the association, and how they slow us down as a group. First off, the bylaws actually prevent us from attracting new members, since they actually stipulate that all full members must actually work in map libraries and reside in Canada. As well, I argued that the tiered system of membership prevents any members who do not work in map libraries from voting and participating fully in committee work (chairing for instance). The situation is quite ironic considering we are always, as an association, discussing how we could attract members. How can we attract members if as new members they would not, for the most part, actually be able to vote on issues or perform other duties ruled out through our bylaws.

The issue of committees is also an important one that I also felt needed to be brought forward. In total, the association currently counts thirteen committees. A number much too large to be sustained when one considers that such a small minority of ACMLA members actually participate in committees, and that the size of the association membership is usually lower than 100 members.

If one examines the survey of the membership done in 2010, it is clear that ACMLA members simply do not want to participate in these committees. The ACMLA executive conducted this survey to find out how to respond to the needs and challenges of its members and to make the association attractive to new members.

Many of the survey results were very telling. They showed that the ACMLA was still very important to members, but that the important aspects of it were mostly surrounding education, keeping up to date, and networking. The Bulletin was also seen as one of the most important aspects of the association. In my interpretation, committees and the executive matters are very secondary to membership and that a different emphasis and structure should be examined for the association to remain relevant.

In examining what do seem to be the needs of our membership, through reading the survey results, one can actually see that the association key initial tenets remain the same. The ACMLA was founded with the idea of developing the cooperation and the education of map librarians. In other words, it was created to develop a community of like-minded librarians and archivists with common issues, with the idea of cooperating with each other to solve common problems.

While the original ideas behind the establishment of the association are still relevant, it is clear to me, that the method the workings of the association are not and that a new model for the association workings need to be developed. The association, in my mind, should not be bound by bylaws and committees, but instead on common needs and interests. We need to be flexible in order to move with the times quickly and swiftly. If something is no longer relevant, we should be able to simply abandon them and move on. We need to concentrate on the Bulletin, the annual conference, and communicating between each other.

An example of an association I feel resembles somewhat what we are trying to accomplish with the ACMLA would be Code4Lib (hence the name of the presentation). Code4lib is a loose organization that focuses its attention around the sharing of ideas and solutions for libraries, museums, and archives. The focus of code4lib is mostly surrounding computer programming applications. Code4Lib has no executive and no committees; it simply exists through collaborative efforts and conference volunteers.

Finally, it is important to know that the federal government has recently changed the Canada Not-for-profit Act and this change has huge implications for the ACMLA. The association will be required to file documents before October 2014 for the transition to the new act. Changes to the bylaws can be made during this time without any fees being attached. This is a golden opportunity for the association to examine what it feels is important and to move forward with the design of the new ACMLA.

It is important to note that a great discussion followed the presentation and that a vote was held at the AGM on moving forward with revamping and changing the structure of the association. A task force was formed and changes will be brought forward to the membership before next spring.

DISCUSSION SESSION ON ACMLA'S BIBLIOGRAPHIC CONTROL COMMITTEE

Moderator: David Jones (University of Alberta)

The BCC held a plenary discussion session at CARTO 2012. This event served as the formal launch of the 'ACMLA RECOMMENDED BEST PRACTICES IN CITATION OF CARTOGRAPHIC MATERIALS'. This is a major work, compiled primarily by Alberta Auringer Wood (Map Librarian (Ret), Memorial University of Newfoundland) with assistance from other former members of the BCC. It covers 27 different basic forms with 3 - 5 examples of each form. It will be a valuable tool and resource for map and spatial database users. It is on the ACMLA website at http://www.acmla.org/docs/ACMLA_BestPracticesCitations.pdf and has been pubicized on many lists.

David Jones Photo: Dan Jakubek

The other focus of the session was a discussion of the evolution and regeneration of the BCC. The issues relating to metadata/bibliographic control of spatial data files, maps and other cartographic materials have not gone away - actually they have morphed and changed but still present major challenges in the form of RDA implementation and the North American Profile (NAP). What has gone away, or is going away, is the long term expertise of many of the members of the BCC.

David commented on the need for a forum to address these RDA and metadata issues and for concerned individuals to come together.

A more detailed report of the session is available on page 23.

Wenonah van Heyst (moderator) and David Jones Photo: Dan Jakubek

COLLABORATE WITH GEOMATICS DEPARTMENT TO CREATE CUSTOM LIBRARY TOOLS FOR ARCMAP

Joel Rivard (Carlton University)

GIS services in the Library have been a client of the 4th year Geomatics course, Applications in Geographic Information Systems, for several years. A big component of the course is the applications project, which is a group project (3 to 4 students) that requires students to research a topic and develop tools (scripts and/or extensions). The projects deal with real world requests to develop and extend GIS functionality within a work environment.

Joel Rivard Photo: Dan Jakubek

In the course, students are introduced to object-oriented programming principles using ModelBuilder (from ArcGIS) and the Python Programming language. Existing python scripts and ArcGIS extensions are analyzed in order to understand how they can be used to perform tasks. Example of tools that have been created are Batch Project, Batch Clip, Batch Mosaic Tool, LiDAR Quick Viewer and Simplify 3D Buildings.

This collaboration has been cemented for years and brings about many advantages. In addition to receiving custom tools at no cost, it's a great opportunity to build and strengthen relationships with faculty and students in the department as well as external clients to the group projects. It is definitely worth exploring these types of collaborations with various courses on your respective campuses.

ART OF NARRATIVE, MOVING BEYOND SPATIAL LITERACY

Larry Laliberté (University of Alberta)

Combining elements of data design and deep mapping while treating the campus quad as a canvas, the presentation illustrated one example of shifting from the reciting of the core concepts of spatial literacy (abc's of the xyz's) to arranging them within the context of a spatial narrative (storytelling) that highlights various issues associated with campus sustainability.

Daniel Brendle-Moczuk (Moderator) and Larry Laliberté
Photo: Dan Jakubek

PANEL DISCUSSION: EDUCATION IN GIS AND MAP LIBRARIANSHIP

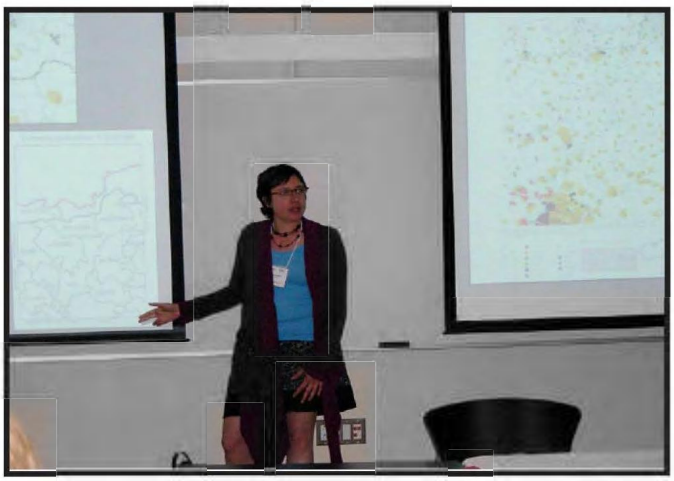
Panelists: Joan Winearls, Marcel Fortin, Eva Dodsworth, Sarah Simpkin
Moderator: Janina Mueller (University of Toronto)

The panelists provided a lively discussion on the topic of education in GIS and map librarianship. From early map librarianship to current GIS librarianship, panelists shared their experiences of teaching and learning in the classroom. Summaries of course curriculums were shared, as well as overall opinions on the state of GIS education in Masters of Library and Information Science programs. Panellists agreed that map and GIS fluencies are important skills for new librarians. However, it was noted that courses devoted strictly to these subject areas did not attract large numbers of library school students. Panellists discussed reasons why this might be the case (courses perceived as "too difficult", pressure for students to enrol in certain courses over others, etc.) and proposed ways of including map and GIS content into other parts of the MLIS curriculum (for instance, government information/data classes, reference, cataloguing/metadata, etc.). It was unanimously concluded that map and GIS education is critical for incoming librarians to develop the spatial literacy skills required to meet the needs of library users. Collaboration with library school administrators is essential to make Map/GIS librarianship and GIS in general, visible, and valued by the schools and by the students.

WHEN A MAP IS NO LONGER BEAUTIFUL

Rosa Orlandini (York University)

Some maps are more dangerous than others. In 1942, an Austrian cartographer named Wilfried Krallert and his team produced a series of detailed ethnolinguistic maps (Volkstumskarte) of Romania, Yugoslavia, Hungary, and Slovakia. Few holocaust and ethno-linguistic researchers know of the existence of these maps and only a handful of libraries, including McGill University and University of Alberta, have copies. This presentation introduced several aspects of these maps including: biographical information about the creator, cartographic representation of 1930s census data, original use of the maps, and how universities received copies after World War II. Also discussed were future plans for online access to these maps.



Rosa Orlandini *Photo: Alberta Wood*

SCHOLAR'S GEOPORTAL: IT'S FINALLY HERE

Leanne Hindmarch (Scholars Portal) and Jenny Marvin (University of Guelph)

OCUL is excited to announce that Scholars GeoPortal (http://geo.scholarsportal.info) was launched on March 1, 2012. The newest service of the Ontario Council of University Libraries (OCUL) allows students, staff, and faculty at Ontario universities to discover, manipulate, and download a wide range of geospatial datasets. The result of a collaborative project involving participants from libraries across the province, the GeoPortal presents consortially licensed data collections to the academic community using exiting new tools that offer state-of-the-art web mapping features.

In this presentation, Leanne and Jenny shared the project progress and provided a tour of the new tools offered by Scholars GeoPortal. They focussed on the ways the tool supports sharing, collaboration, and how it offers unique teaching opportunities for courses where the use of desktop GIS software is not necessarily feasible or appropriate.

Leanne and Jenny wrapped up by assessing their experiences over the last three years of hard work on this project, and considered future directions.

Gail Curry (Modertaor), Leanne Hindmarch and Jenny Marvin Photo: Alberta Wood

Break Time Photo: Alberta Wood

CARTO attendees Photo: Dan Jakubek

Friday June 15th: Conference Presentations

GIS APPLICATION PROGRAMMING INTERFACES FOR THE LIMITED LIBRARY BUDGET

Matthew Barabash (MLIS candidate, Western University (UWO), FIMS)

Matthew discussed internet map mashups and application programming interfaces (APIs) for the library with limited staffing and budgetary resources. Providing users with access to library map material is an ongoing challenge; however Web 2.0 technology and APIs such as those provided by Google Maps allow librarians to integrate cartographic material within a searchable interface armed with only basic technical knowledge and cartographic expertise. Two staff friendly and cost effective applications of APIs were examined. The first application is the map overlay, where maps are scanned and added as mashup data with APIs to create visual representations for users. The second application includes geocoding OPAC information and MARC records to allow users to create a searchable interface for the library catalogue. Examples of API applications include the David Rumsey Historical Map collection, The University of Minnesota MapHappy mashup application and the Kingston Frontenac Public Library API application. Problems of APIs were discussed such as multiple map tags with similar geospatial information, problems with OPAC and MARC geospatial conversion, and the limitations of integrating maps of northern and arctic Canada on a Mercator projection such as Google Maps, Nokia Maps or Bing Maps.

THE IMPERFECT TRIANGLE: AFRICA IN THE NINETEENTH-CENTURY AMERICAN FAMILY ATLAS

Joelle Reiniger (University of Alberta)

Lingering western perceptions of Africa as marginal and culturally unimportant are deeply rooted in popular nineteenth-century ideas related to social Darwinism and the aftermath of the transatlantic slave trade. This presentation explored the agency of geography in reinforcing notions of racial hierarchy and African backwardness. It relies mainly on primary source research from nineteenth-century American home atlases, especially those produced by the Cram's, Colton's and Rand McNally companies between 1859 and 1899. In surveying these sources, Joelle argued that cartographic inattention to detail and sensational descriptions played an important role in supplying the American geographical imagination with images of African primitivism, exoticism and marginality. This effect was shown to be all the more acute in light of the publishers' commitment to presenting a narrative of American progress.

Joelle Reiniger is the award recipient of the ACMLA Student Paper Award. Her paper is printed on page 24.

Joel Reiniger
Photo: Dan Jakubek

CARTOGRAPHIC INFORMATION LITERACY ACTIVITY

Dana Craig (York University)

The hands-on activity dealt with information literacy in the world of cartography. The activity involved a short presentation about some of the challenges of cartographic literacy in the academic library and the challenges that appear inside and outside a typical University Map Library. Some of these challenges involve a diverse user group with different degrees of geographic awareness and diverse needs. The idea of promoting cartographic information was also presented and questions about how individual institutions deal with advocacy were asked. Four scenarios involving different, real-life questions were presented to the audience and many individuals posted their answers on flip charts. The scenarios involved questions asked by patrons belonging to the institution and some were asked by members of the larger community (different licence agreements allow for different usage of digital cartographic materials), and they involved different technology abilities and preferences. Each case asked for the creation of a final cartographic product (some print, some digital). Many conference participants wrote down their answers to these scenarios which proved that different institutions deal differently with the same question, using different resources. Some indicated that they will help patrons by actually creating a map using GIS, Google Earth and other technologies; others indicated that they will teach patrons how to do it; where others said they do not have the resources to spend much time with non-geographers to produce their final maps. Through this collaboration, a "best practices guide" can be created.

AN EVALUATION OF THE GEOCONNECTIONS DISCOVERY PORTAL FOR ACCESSING ARCTIC RESOURCES

Cynthia Dietz (University of Manitoba)

GeoConnections Discovery Portal (GDP) is a portal of a renewed program led by Natural Resources Canada (NRCan) to develop the Canadian Geospatial Data Infrastructure (CGDI). Given recent potential threats to the Arctic, it is timely to evaluate whether the GDP is well equipped to serve users attempting to access Arctic resources with regard to those threats with effectiveness, efficiency and satisfaction. This presentation addressed these user needs and evaluated whether the stated GeoConnections program priorities will ensure that the GDP's infrastructure and content will serve those user needs now and in the near future.

GeoConnections in concert with Environics evaluated user needs as they pertained to the environment and sustainable development in 2007. Separately, it evaluated user needs with respect to marine resources with leaders of the Marine Geospatial Data Infrastructure (MGDI) in 2001.

A SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis conducted as part of this research indicates that GDP faces serious weaknesses and threats regarding its service to users thought to need and/or wanting to contribute Arctic resources. Questions asked included whether the content was appropriate and useful, and whether the portal's infrastructure and usability features meet user expectations in terms of navigation, display, speed, help guides and tutorials.

This research indicates that GDP has substantial strengths which offer significant opportunities for development, but that those may be insufficient to retain Arctic resource users and to keep partnerships and collaborations strong.

A MAJOR MILESTONE IN CANADIAN MAPPING: COMPLETION OF THE 1:50,000 SCALE TOPOGRAPHIC COVERAGE OF CANADA

Sylvain Lemay (Natural Resources Canada)

This presentation focused on describing the accomplishments of the Mapping Information Branch (MIB) with respect to Canadian topographic mapping in the last 3 years, giving insights into future activities.

In 2012, the last 1:50 000 maps of the country will be produced. Back in 2009 MIB was given the mandate to produce the remaining 1600 1:50 000 quadrangles to finally cover the Canadian landmass. To be able to produce such a large number of maps, the Branch developed a semi-automatic system called the Map Generator that greatly increased the rate of map production. A number of challenges were addressed, namely a complete redesign of the map surround and specifications and the operational challenge of producing over 1600 new maps in three years, including 38 maps North of 80 degrees latitude using Radarsat 2 data, a world first in topographic series mapping.

With the advent of location based devices and developments in Web-based mapping, MIB is turning its attention to Internet-based services and how to provide these services including a revamp of the GeoGratis offerings into which will be merged GeoPub and Mirage.

MIB will endeavor to address the needs of the Canadian geomatics community in the context of a knowledge-based economy that depends on easy and quick access to digital information. Our main objective will consist in providing integration and access to geospatial data that addresses the needs of government, academia, professional organizations and individual users.

Dana Craig
Photo: Alberta Wood

David Jones (Moderator) and Cynthia Dietz
Photo: Dan Jakubek

Sylvain Lemay *Photo: Dan Jakubek*

SOCIAL EVENTS

ICEBREAKER
Tuesday June 12th, 2012
The City of Toronto Archives

Marcel Fortin and Joan Winearls *Photo: Dan Jakubek*

Photo: Dan Jakubek

Photo: Marcel Fortin

Photo: Alberta Wood

Photo: Alberta Wood

BANQUET
Thursday June 14th
Archeo Restaurant; Toronto's Historic Distillery District

Photo: Alberta Wood

Photo: Alberta Wood

Photo: Marcel Fortin

Photo: Marcel Fortin

GUIDED WALKING TOUR OF CABBAGETOWN
Friday June 15th, 2012

Photo: Dan Jakubek

Photo: Dan Jakubek

BIBLIOGRAPHIC CONTROL COMMITTEE POST-CONFERENCE UPDATE

David Jones, Co-chair
ACMLA Bibliographic Control Committee

The BCC held a plenary discussion session at CARTO 2012. This event served as the formal launch of the 'ACMLA RECOMMENDED BEST PRACTICES IN CITATION OF CARTOGRAPHIC MATERIALS'. This is a major work, compiled primarily by Alberta Auringer Wood (Map Librarian (Ret), Memorial University of Newfoundland) with assistance from other former members of the BCC. It covers 27 different basic forms with 3 - 5 examples of each form. It will be a valuable tool and resource for map and spatial database users. It is on the ACMLA website at [http://www.acmla.org/docs/ACMLA_BestPracticesCitations.pdf]and has been pubicized on many lists.

The other focus of the session was a discussion of the evolution and regeneration of the BCC. The issues relating to metadata/bibliographic control of spatial data files, maps and other cartographic materials have not gone away - actually they have morphed and changed but still present major challenges in the form of RDA implementation and the North American Profile (NAP). What has gone away, or is going away, is the long term expertise of many of the members of the BCC.

Those who were at CARTO 2012 and attended the BCC Discussion Session will know that our stalwart members - Grace Welch, Alberta Wood, Trudy Bodak, Frank Williams, Christine Alexander and Stefano Biondo retired from the Committee last year and that Donna Porter will this year. Also, more recent members, myself and Kristen Wylie will be stepping down before year-end.

However, RDA and metadata issues (e.g. developing a template and guide for geospatial core elements based on the North American Profile [NAP]) continue to be of concern. (I notice the MARC RDA fields 336-338 are already showing up in some records)

At the conference the role and structure of committees in general was discussed. We seem to recognize that, regardless of the formal structure we evolve, groups focussed on particular issues will continue to be required and form a key component of ACMLA.

At the 'Discussion' we reviewed the 'Membership' section of the terms of reference of the BCC and recognized that they no longer fit the current situation. They specify particular LAC involvement and participation which no longer exists as well as representation from the archival side. Also, they specify an ACMLA member representative to the Canadian Committee on Cataloguing (CCC). In the past this has been one of our members from LAC, but now we have no members from LAC. The CCC [http://www.collectionscanada.gc.ca/cataloguing-standards/040006-3000-e.html] is a key body and it is very important that we fill our seat on this committee. Donna Porter has been our rep. I wish to thank her for the work she has done and urge anyone willing to take on this activity to contact me.

In general, this message, as well as reporting on our meeting, is seeking to identify members who share these interests and concerns with Metadata and Cataloguing issues and encourage them to contact me so that we can continue to make progress in these areas.

I look forward to hearing from you.

David Jones, Co-chair

ACMLA Bibliographic Control Committee

STUDENT PAPER AWARD WINNER

THE IMPERFECT TRIANGLE: AFRICA IN THE NINETEENTH-CENTURY AMERCAN FAMILY ATLAS

Joelle Reiniger
Third-Year History Major
University of Alberta

As the Encyclopedia Britannica markets its final print edition, we are reminded of the epochal change in how we satisfy our curiosity about the world. Boolean logic is at our service, ready to deliver more web pages about a foreign continent than we have the time or desire to view. During the nineteenth century, armchair adventurers found an outlet in the home atlas. It goes without saying that the money and time required for overseas travel prohibited the average American from seeing the world. Maps and geographical descriptions were not the vacation planning aids that they are today but a vehicle for a well-travelled imagination – a diversion that invited curious minds into lands they would have no realistic hope of seeing with their own eyes. At the same time, they served as an important reference point for viewing American culture in the context of a wider world.

On the pages about Africa, these atlases guided the American imagination to a Dark Continent, where the fodder for fantasy comprised impressions of backwardness and obscurity. Cartographically, the continent's geography is usually distilled to a single map, which is almost always found in the last five pages of the book. Most major home atlases also contain descriptions of the continent, which reinforce notions of racial hierarchy privilege those regions nearest Europe. The portrayal of Africa as unimportant and its inhabitants inferior surely impacted public perceptions of the continent – particularly during the second half of the nineteenth century when atlases became readily available. Drawing from popular American family atlases of this period, I will explore the geographical marginalization of Africa through this medium.

To what extent the home atlas contributed to public perceptions of the world in general and Africa in particular is admittedly difficult to quantify. However, the general appetite for geography is evident in the success of the American volume Geography Made Easy. Popular from 1784 through the 1820s, its sales trailed only the Bible and dictionary.[1] At that time, atlases were a luxury item. Due to the exorbitant cost of image reproduction, they did not make their way into the average American home until the second half of the 19th century.[2] As publishing technology made atlases accessible, the American civil war and its aftermath contributed to their popularity. In some ways, they are nation-building narratives, capitalizing on a post-war interest in American identity and its full geographical domain.[3] A critical review of A.J. Johnson's 1865 family atlas remarks that the quality of the atlas's American geographical information exceeds that of its world geography. However, the reviewer seems to believe that the shortcomings of the atlas's international material

[1]Susan Schulten, The Geographical Imagination in America, 1880-1950 (Chicago: University of Chicago Press, 2001) 19.
[2]Ibid., 21.
[3]Ibid., 17.

are redeemed by its ability to satisfy American families' desire to "track the progress of our arms" with the most current cartographic and statistical information.[4] Following the war, the family atlas became a tool for national identity and unity. Therefore, depictions of Africa as backward and unimportant should be viewed in the context of another atlas motif – American progress. By glorifying the American "race", atlas publishers proffered a sense of national identity, which included only those of European descent.

Within the family atlas, maps are but one mode of geographical education. They also contain historical timelines, pages of statistics and detailed descriptions of the physical environment. In this way, the atlases occupy an encyclopedic niche. Sections that pertain to the United States are rich in tabular and general reference data. If the reader of Colton's (1862) Illustrated Cabinet Atlas and Geography wondered how many private school teachers there were in Delaware, she would find a precise answer on page 89. (There were 94.)[5] The company's 1863 edition provided a comprehensive 26-page list of every city, town and post office.[6] For the education of its audience, Cram's 1882 family atlas provided portraits and brief biographical sketches of each American president up to the publication date.[7]

With such a pronounced local emphasis, the title "world atlas" is arguably a misnomer. To illustrate, one such publication devotes 77 per cent of its pages to the United States, leaving the remaining 23 perent for the rest of the globe.[8] The typical arrangement features the United States first, followed by the rest of the Western Hemisphere, Europe, Asia, Africa and Oceania, in that order – a sequence shared by the Library of Congress's classification system. In virtually every atlas, Africa could scarcely be further removed from the United States. This polarization also exists in the level of cartographic detail. To generalize, a typical family atlas might map every American state, every European country, every large Asian country, two to three groups of Oceanic islands, and Africa as a single entity. Based on this descending order of detail, it would not be difficult for an intelligent reader to misconstrue Africa as a mere country.

There is also a qualitative change in the text pertaining to the world outside North America as we see a subtle transition from atlas as reference book to atlas as storybook. While descriptions of foreign locales offer some reference information, such as climate and export data, these descriptions, coupled with rich illustrations, are designed to capture the imagination. Accuracy appears to be a secondary consideration. Cram's atlas, perhaps the best illustrated of the books surveyed here, features a picturesque image of Africans leading a covered wagon train through the mythical Mountains of the Moon.[9] (Figure One). More so than its competitors, the Cram's brand evokes a sense of exoticism. Its pages were meant to be enjoyed. In his essay "George F. Cram and the American Perception of Space," Gerald Danzer uses a common opening illustration to point to the literary function of these atlases. He suggests that the scene of a family gathered around the atlas, flanked by images of classical ruins and a docked ship, connotes exploration and the transmission of culture. According to Danzer, "Everything evokes an atmosphere of confident adventure."[10]

[4]Review of "Johnson's New Illustrated (Steel Plate) Family Atlas, with Physical Geography, and with Descriptions Geographical, Statistical, and Historical, including the Latest Federal Census, a Geographical Index, and a Chronological History of the Civil War in America," in The North American Review (Cedar Falls: University of Iowa, 1885) 625-626.
[5]G. W. Colton and Richard Swainson Fisher, *Colton's Illustrated Cabinet Atlas and Geography* (New York: J.H. Colton, 1862) 89.
[6]Alvin Jewett Johnson, *Johnson's New Illustrated (Steel Plate) Family Atlas: With Physical Geography, and with Descriptions Geographical, Statistical, and Historical, Including the Latest Federal Census, a Geographical Index, and a Chronological History of the Civil War in America* (New York: Johnson and Ward, 1863) 23-49.
[7]Cram, George F, *Cram's Illustrated Family Atlas of the World* (Chicago: George F. Cram, 1882) 203-205.
[8]Schulten, 29.
[9]Cram, 321.
[10]Gerald A. Danzer, "George F. Cram and the American Perception of Space," in *Chicago Mapmakers: Essays on the Rise of the City's Map Trade,* ed. Michael P. Conzen (Chicago: Chicago Historical Society for Chicago Map Society, 1984) 44.

Egypt is probably the most romanticized African nation, reflecting a widespread fascination with the ancient world. An 1896 Rand McNally atlas states, "The place of Egypt in history, together with its wonderful monuments, retaining still the earliest records of civilization, entitles the country to a consideration far other and deeper than that due to any other portion of Africa."[11] While African countries do not generally occupy maps of their own, Egypt is an exception. Along with the descriptive elevation of Egypt above the rest of Africa, pagination decisions might have served to sever Egypt from the rest of the continent in the reader's imagination. It is normal for a map of Egypt to be located next to a map of Africa, but it is also normal for it to be dropped into another section of the book. For example, an 1887 Cram's atlas sandwiches Egypt between China and Central Asia, which includes Turkistan, Afghanistan, Beluchistan and northwest India.[12] An atlas by a different publisher locates its map of Egypt between China and Australia.[13] Notwithstanding public interest in the ancient world, Egypt's unique representation represents a north-to-south hierarchy in the attention given to African societies.

The vague treatment of Africa as a whole is effectively captured in a common atlas description of its form as an imperfect or irregular triangle with its base in the Mediterranean and its apex to the south. If Africa can be called triangularly shaped, this is a very rough approximation. Geometry dictates that if a triangle has a base, it is the draftsperson who designates it. The image of an imperfect triangle pointing south, as trivial it may seem, could not better reveal the arbitrary nature of mapping and describing Africa. Even the language outlining Africa's basic physical composition is loaded. This is well illustrated by an 1899 Rand McNally description of the continent. After using the Mediterranean-anchored, irregular-triangle analogy, it underestimates the continent's size by about one-third. It then points out that while Africa is triple the size of Europe, it's coastline "scarcely exceeds" 15,000 miles compared with Europe's 19,000 and it is "destitute" of islands.[14] Clearly, apparently neutral features of Africa's physical geography may be presented Eurocentrically. This extends to the topic of climate in Colton's 1859 atlas. The entire Gold Coast, it states, is particularly unhealthy. Here, "In the midst of the most beautiful scenery, where trees, and rocks ... give assurance of an earthly paradise, the angel of death lurks unseen, and strikes down his victims without warning."[15] No doubt the heat was harsh, but the description of this climate is strikingly dire compared with that of the Canadian Arctic, where activities of the "angel of death" are not reported, even in an account of the disastrous Franklin Expedition.[16]

This bias continues to accrue as geographical descriptions turn from the land to its inhabitants. In pages on world geography, the home atlas follows discussions of climate with those of vegetation, animal life, and finally humans, who are sometimes included under the heading of physical geography. This format is also found in nineteenth-century school geography textbooks. Historian Susan Schulten suggests that it evokes a human-progress narrative, which frames so-called cultural advancement as an outgrowth of the physical environment.[17] One nineteenth-century geography textbook expands on this view to include ideas of genetic superiority:

[17]Schulten, 113-115.
[11]Rand McNally and Company, *New Pictorial Atlas of the World: Containing Colored Maps of Every Country and Civil Division Upon the Face of the Globe, With Marginal Index, Together With Historical, Descriptive, and Statistical Matter Pertaining to Each, With City Maps and Colored Statistical Diagrams, Also a Concise Review, Richly Illustrated by Engravings, of the World's Peoples* (Chicago: Rand, McNally & Co., 1896) 210.
[12]George F. Cram, *Cram's Unrivaled Family Atlas of the World* (Cincinnati, Ohio: M.A. Harris, 1887) 119.
[13]Fort Deerborn Publishing Co., *The National Standard Family and Business Atlas of the World: Specially Adapted for Commercial and Library Reference ...; With All Populations According to the 1890 Census* (Chicago: Fort Deerborn Publishing Co. 1896) 282.
[14]Rand McNally and Company, *Rand-McNally Encyclopaedia, and, Atlas of the World: Eighty Full-Page Colored Maps, Illustrated with Nearly Two Thousand Engravings. 2 vols.* (Chicago: Rand, McNally & Co., 1899) 19.
[15]G.W. Colton and Richard Swainson Fisher. Colton's Illustrated Cabinet Atlas and Descriptive Geography (New York: J.H. Colton, 1859) 348.
[16]Ibid., 30-31.

> *As the environment of the desert has given rise to the nomad, and the ease of life in the tropical forest to the degenerate savage, so the environment in the United States has given rise to a race noted for its energy and enterprise. This race has been made possible, however, largely by reason of the fact that it comes from a mixture of peoples already gifted. That resources alone will not make an energetic people and a great nation is well illustrated in China, where nature favors, but racial characteristics and customs are opposed to, development.*[18]

A similar text found in the National Standard family atlas, and echoed in others, is congruent with this racial-locational portrait of progress. In the following order, it states that human societies evolved separately in different regions of the globe, categorizes races with mention of their physical environments, and lists the developmental stages that gave birth to "civilized" societies, noting that nearly all of these are Caucasian.[19]

More often than not, such introductions to human geography feature ethnographic charts, which come in two varieties. The more common style has the face of a Caucasian man in the centre, surrounded by faces representing four other races. These charts seem to distribute racial stereotypes quite equitably, not, in and of themselves, singling out Africans. An ethnographic chart from an 1896 Rand McNally atlas employs a more linear model. (Figure Two). This graphic features two rows of three faces, and on the top row, an orangutan and bare-chested black man face each other. This man, described as Malayan, not African, is situated left of an "Ethiopian" face, which is facing the other direction – the same direction the three remaining faces are looking. From left to right on the bottom row, we see faces of an indigenous American, an East Asian and Caucasian. Everyone, even the orangutan, is looking forward. Only the first black man is looking back. [20] While this man is not classified as African, the typical reader might be conditioned to generalize, still associating his appearance with other images of Africans in the book. Ethnographic charts, while blatantly racist, are somewhat ambiguous in their specific portrayal of Africans. If anything, the previous example sets up indigenous Oceanic people as the most maligned race, a possibility supported by accompanying text. The Colton's and Johnson's atlases are among those that appear to rank races in the following order: Iranian or Caucasian, Turanian or Mongolian and Malay, (indigenous) American, African Negro, Hottentot Negro and Oceanic Negro[21] Again, the Oceanic Negro appears last, but it is uncertain whether the American reader would have paid close attention to this distinction. I should note that the paragraph preceding this list does not purport to rank the races, but to generally classify them. However, this list directly follows a statement about wide racial variation in stages of development. It also lists the Caucasian race first, after several pages that imply European superiority.

This type of information is always found in a general introduction to geography near the beginning of the atlas. Descriptions relating specifically to Africa are often included immediately before the maps themselves. This text and its accompanying illustrations offer the best insights into the perceived role of Africa and Africans in the world. Though inaccuracies and abstractions are common, there is great variation in the number of pages devoted to describing Africa and its people. Sometimes, the maps appear alone, leaving much up to the reader's imagination. In other cases, African regions are described in relative detail. Rand McNally's 1896 pictorial atlas is among the most detailed, devoting eight pages to different regions of the continent.[22]

[18]Ralph S. Tarr and Frank McMurry, quoted in Schulten, 115-116.
[19]Fort Deerborn Publishing Co., 8.
[20]Rand McNally and Company, 1896, 165.
[21]Colton and Fisher, 1862, 26.
[22]Rand McNally and Company, 1896, 210-218.

Most of its illustrations are portraits representing various cultural groups. While the images outline diversity between ethnicities, the text suggests homogeneity within ethnicities. After describing a particular group's location and power structure, the typical entry lists a set of personality traits said to characterize the group. Egyptians are "apathetic" and "stolid" but "not without liveliness" during festivals.[23] The Madeiran people are "sober, industrious and civil," implicitly due to Arabian racial roots.[24] Meanwhile, the indigenous people of South Africa are called savages with "almost nothing to redeem the baseness of the general type."[25] As the descriptions move farther south and into the interior, assumptions of savagery prevail. Similarly revealing comments include a statement complimenting Algiers as one of Africa's few interesting cities[26] and an assertion that colonists saved the southern Hottentot and Kaffir populations from utterly decimating each other.[27]

An edition of Colton's atlas published 40 years earlier is much more detailed and less prone to ethnic character evaluations. It is unquestionably less prejudicial than the Rand McNally atlas, indicating that the publishing company, more so than the passage of time, accounts for differing portrayals in American atlases of this period. This is not to say that Colton's atlas portrays Africa objectively. Like the Rand McNally company, it reserves its kindest adjectives for societies that resemble Europe or the United States, and for people with lighter skin. Its illustrations emphasize scenery more often than portraiture; however, one drawing of a Congolese man departs from this trend, substantially distorting his facial features.[28] (Figure Three) His country is described briefly as having "luxuriant" plant life but inhabitants that are "the least favoured of the race" and "low on the scale of civilization."[29] It shares Rand McNally's north-to-south and exterior-to-interior regression in the detail and dignity attributed to African societies. The Eurocentric elements discussed so far promote a conceptual separation between Africa and (white) America through popular notions of social Darwinism. In this regard, the atlases' racial and geographical caricatures are not unique to the United States. However, the treatment of Liberia brings to light an overt Americentric bias. Colton's 1959 atlas, after a dispassionate description of British colonies along the Gold Coast, adorns the text on its own colony with a range of neutral to grandiose adjectives. The climate is hot and humid but "never oppressive" and its landscape is covered with a "verdure that never fails." "In no other part of the world" is the vegetation more bountiful; prized crops, such as cotton, indigo and sugar cane are said to grow spontaneously.[30] The description of an apparent agricultural and pastoral paradise continues in the claim that cattle and fowl "thrive without care."[31] After this preamble, the reader learns that Liberia "owes its origin to the efforts of the American Colonization Society."[32]

While presented in different ways, the notion of a gulf in human progress between African and American societies appears in virtually every nineteenth-century family atlas. Each constructs a dichotomy between notions of Western advancement and Eastern backwardness. At the same time, descriptions of Africa echo a Eurocentric bias. In the atlases examined here, Americentrism is most obvious in the placement and number of maps. Finally, though every paragraph and picture provides valuable insight into historic views of the continent, what is absent is as important as what is present. The Africans conceived by nineteenth-century atlases lack history, complexity and collective achievements. It is easy to imagine how, by viewing the continent through this lens, the armchair adventurer just might see an imperfect triangle.

[23]Ibid., 211.
[24]Ibid., 213.
[25]Ibid., 218.
[26]Ibid., 212.
[27]Ibid., 218.
[28]Colton and Swainson, 1859, 371.
[29]Ibid.

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Cram, George F. *Cram's Unrivalled Family Atlas of the World*. Cincinnati, Ohio: M.A. Harris, 1887.

Cram, George F. *Cram's Universal Atlas, Geographical, Astronomical, and Historical: Containing a Complete Series of Maps of Modern Geography, Exhibiting the World and its Various Political Divisions as They are Today, Also an Elaborate Series of Authentic Historical Maps.* New York: George F. Cram, 1897.

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Home Knowledge Association. *The Home Knowledge Atlas: Geographical, Astronomical, Historical ... Containing a Complete Gazetteer Showing all the Cities, Towns, Villages and Post Offices in the Dominion of Canada and the United States;* Fully Indexed. Toronto: Home Knowledge Association, 1891.

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Johnson, Alvin Jewett. *Johnson's New Illustrated (Steel Plate) Family Atlas: With Physical Geography, and with Descriptions Geographical, Statistical, and Historical, Including the Latest Federal Census, a Geographical Index, and a Chronological History of the Civil War in America.* New York: Johnson and Ward, 1864.

Lucas, Fielding Jr. *A General Atlas Containing Distinct Maps of all the Known Countries in the World.* No. 138, Market Street: Fielding Lucas, Jr., 1823.

Rand McNally and Company. *New Pictorial Atlas of the World: Containing Colored Maps of Every Country and Civil Division Upon the Face of the Globe, With Marginal Index, Together With Historical, Descriptive, and Statistical Matter Pertaining to Each, With City Maps and Colored Statistical Diagrams, Also a Concise Review, Richly Illustrated by Engravings, of the World's Peoples.* Chicago: Rand, McNally & Co., 1896.

Rand McNally and Company. *Rand-McNally Encyclopaedia, and, Atlas of the World: Eighty Full-Page Colored Maps, Illustrated with Nearly Two Thousand Engravings*. 2 vols. Chicago: Rand, McNally & Co., 1899.

Review of "Johnson's New Illustrated (Steel Plate) Family Atlas, with Physical Geography, and with Descriptions Geographical, Statistical, and Historical, including the Latest Federal Census, a Geographical Index, and a Chronological History of the Civil War in America." In *The North American Review.* Cedar Falls: University of Northern Iowa, 1885.

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Bridges, R.C. "Maps of East Africa in the Nineteenth Century." In *Maps and Africa: Proceedings of a Colloquium at the University of Aberdeen,* edited by Jeffrey C. Stone. Aberdeen: Aberdeen University African Studies Group, 1994.

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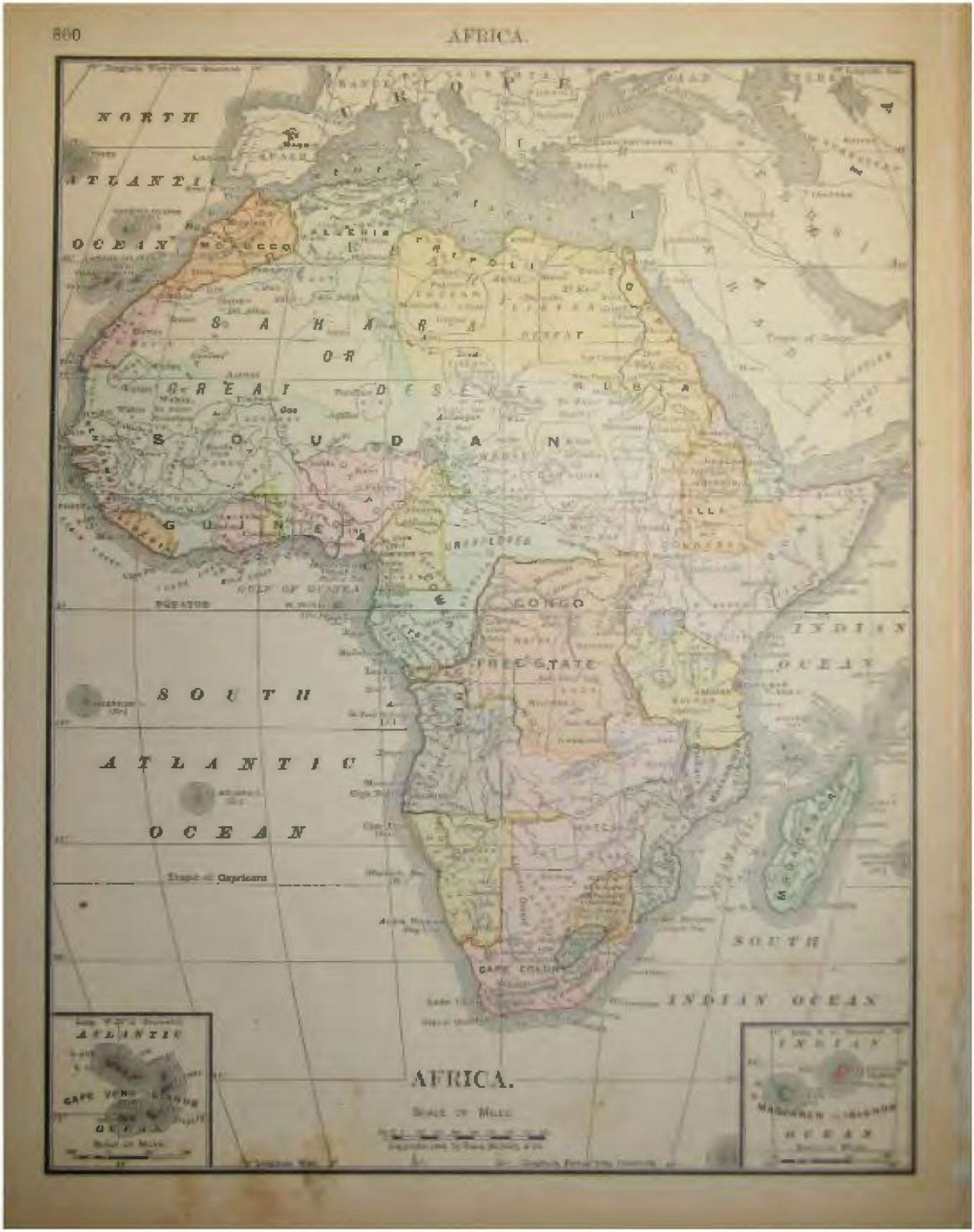
Schulten, Susan. *The Geographical Imagination in America,* 1880-1950. Chicago: University of Chicago Press, 2001.



Map of Africa, photographed from: Rand-McNally Encyclopaedia, and, Atlas of the World: Eighty Full-Page Colored Maps, Illustrated with Nearly Two Thousand Engravings, 1899. (Page 800)

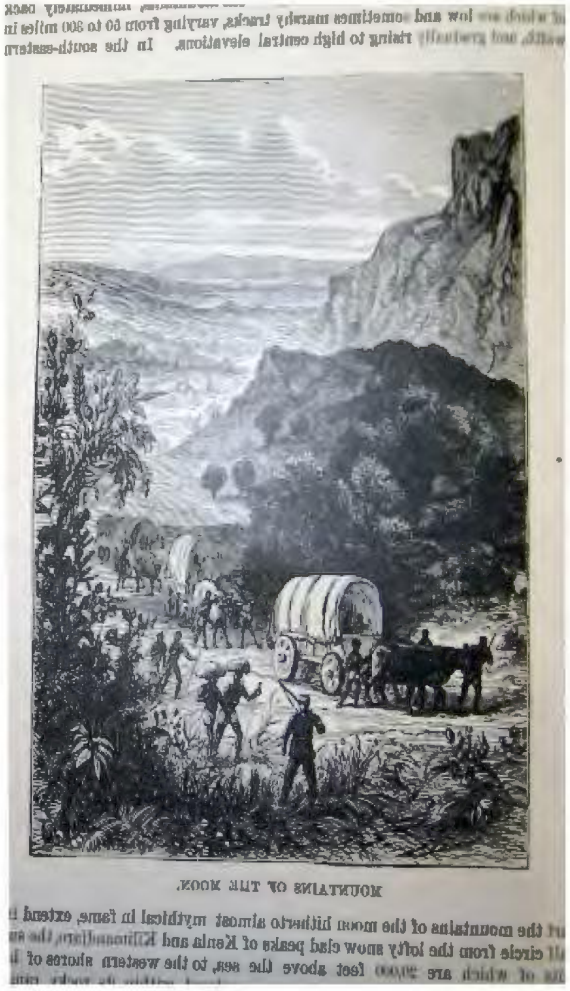
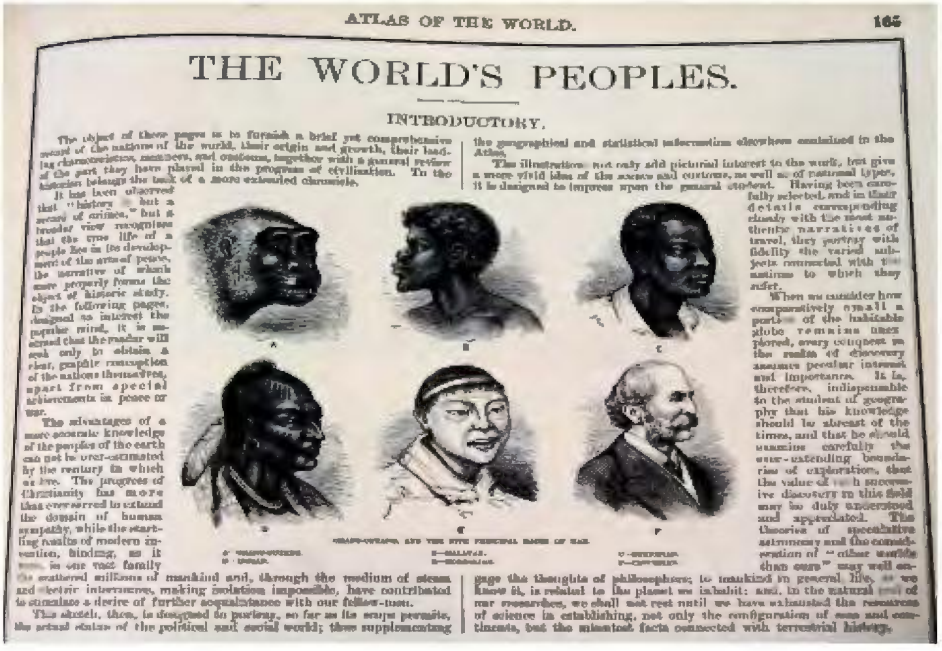


Figure 1 - Mountains of the Moon, photographed from: *Cram's Illustrated Family Atlas of the World,* 1882. (Page 321)

Figure 3 - "Negro of Congo," photographed from: *Colton's Illustrated Cabinet Atlas and Descriptive Geography,*1859. (Page 371)

Figure 2 - Ethnographic chart, photographed from: *New Pictorial Atlas of the World: Containing Colored Maps of Every Country and Civil Division Upon the Face of the Globe, With Marginal Index, Together With Historical, Descriptive, and Statistical Matter Pertaining to Each, With City Maps and Colored Statistical Diagrams, Also a Concise Review, Richly Illustrated by Engravings, of the World's Peoples,* 1896. (Page 165)



AIR PHOTO INDEX MAP MAKES DISCOVERY SIMPLER

Jonathan Morgan
Library Associate
University of Waterloo Library

Introduction

At the University of Waterloo Library we are always looking for ways to enhance our services to our clients. Clients have traditionally always needed to come to the Map Library (now the Geospatial Centre) to retrieve/ view our collections, but we try to convey as much information as possible to our clients on our web-site so they're prepared with the knowledge they need to retrieve that information from the collection. Our air-photo collection is no exception.

The Geospatial Centre has over 50,000 air-photos, covering various parts of South-western Ontario but the largest part of the collection covers our local area, the Region of Waterloo. Like most Map Libraries, users obtain general information from the library's website about our air-photo collection, which includes extent, scale and source. Armed with this information, clients visit the Centre to view our air-photo indexes, and then go to our collection to retrieve the air-photos.

To show our clients the Map Library's air-photo collection, traditionally our website had a description of the resource and also a separate page with over 120 static images showing the general area and dates covered (Figure One).

This traditional method for conveying air-photo coverage to our clients had several inadequacies. For our clients to visually inspect over 120 static indexes is time consuming for them and not providing the best customer service from us. Also, the blue graphics are "roughly drawn" and are only meant to give

Date of Coverage: *1964 (August)*
Geographical Area Covered:
Sauble Beach, Wiarton,
Lake Charles, Owen Sound
Scale: *1:30,000*
Publisher*: NAPL*

Figure One : Static image showing general air photo coverage

clients a general overview/ representation of area covered, therefore pinpoint accuracy was lacking. This also meant our clients would still be required to visit the Centre and visually look at the air-photo indexes to verify the coverage/ date in the collection.

These issues prompted us to ask: "How can we do a better job using our web-site to show our air-photo collection?" We wanted to give our clients as much information as possible prior to visiting the library. To achieve this we wanted one interactive map to show coverage instead of more than 120 static maps and the interactive map had to precisely show air-photo coverage. To make this happen, we wanted to utilize modern on-line tools that are freely available.

Taking into account all of our requirements, our finished product was an interactive map displaying paper coverage from 1930s to 1990s, allowing clients to easily see the air-photo dates and coverage in the Centre's collection (Figure Two).

http://www.lib.uwaterloo.ca/locations/umd/photos/airphoto_index.html

Figure Two : Interactive map displays air photo coverage

Methodology

Critical to the development of this project, the Centre hired two contract GIS specialists with a strong knowledge base of Java Script Decoding. In addition to giving scheduled GIS reference, as an added benefit our contract workers were also given special projects to do while off the reference desk. Under the supervision of full time staff, Qian started the project in the fall of 2010 and Daniel completed it in the winter term of 2011. This project wouldn't have been possible without the hard work done by both.

After searching for freely available mapping programs, "Google Hybrid Map" was chosen. This program has several advantages in network security and also the flexibility to change the "base map" from various vendors. Main features of this program include: (1) LBS (Location Base Service) is employed as a "basic map" (2) Air-photo cover areas are added to the map as KML polygons, (3) Year of coverage is provided as different layers . The next step was to create KML files showing air-photo coverage. This was done in a 3 part process using a digital camera, ArcGIS and Quantum GIS. First the camera was used to take a picture of each paper air-photo index (over 50). The resulting raster images were then geo-referenced in ArcGIS. Next, Quantum GIS was used to extract image boundaries (in vector format) from the image boundaries. The resulting vector files were then converted to KML by using the conversion utility in ArcGIS.

It's important to note that before the vector boundary files are converted to KML format, the attribute information in the vector files must be populated with the relevant information for display when selecting individual polygons on the interactive map. Critical information for display was date, source, publisher and area cover.

For the map layout, we also had to take into consideration what time period should be represented at any given time. With over 100 different air-photo indexes and many multiple years of air-photos available, it's not possible to represent all polygons all years on a single map. Hence we decided that each time period (as dictated by the display pull down menu) should be around 10 years. The data update of imagery is different in regions. In general, the library has for Waterloo a higher frequency of imagery updates than for the rest of Southern Ontario. Therefore, a balance between the number of layers and extent change must be found. Based on experience, we found a 10-year interval appropriate. Coverage within 10 years tends not to change greatly and a polygon represents multiple year images, all years were listed in the field of "Notes".

Another critical part in the development (and ongoing maintenance) of our interactive map involved adding java code when adding new polygons and editing the pull down date menu. It's was therefore critical that our GIS specialist(s) were knowledgeable in Java Script coding. Before their contract(s) ended, they left detailed procedural instructions to staff for the ongoing maintenance of this site.

Conclusions

There were few drawbacks associated with this project. From start to finish, the project took about 6 months to implement and along the way there was some tweaking of the java code required.

This project yielded many benefits to the Library. The most important is the benefit to our clients. As more clients became aware of our interactive map, feedback has been very positive. Reference interviews are much quicker now, without spending a lot of time showing clients how to navigate through several webpages and over one hundred map indexes. Aside from helping our clients, the project also helped keep the Library's webpages fresh and, and sparked our staff to be innovative by finding new ways to integrate the newest web mapping applications on the Library's website.

The Library is always looking for new ways of interacting with students and faculty. Not only do we want to provide students and faculty with the best resources and knowledgeable staff, but we serve our clients better by learning about their current research, the types of resources needed or will need in the future. This project gave us the opportunity to learn from the graduate students we hired. In addition to new technologies learned, we had the opportunity to learn a little about the type of research they were currently doing in their studies.

For the future, the Geospatial Centre will continue looking for new and innovative ways to reach out to our clients. By utilizing skilled, knowledgeable staff and new technologies, we'll be adaptive to the needs of an adverse and expanding clientele.

Figure Three : Attribute of air photo

ACMLA RECOMMENDED BEST PRACTICES IN CITATION OF CARTOGRAPHIC MATERIALS

Compiled by Alberta Auringer Wood
Bibliographic Control Committee of the Association of Canadian Map Libraries and Archives (ACMLA)

Map on a single sheet
Map in a topographic series
Map in a series (others)
Map series as a whole
Map in a book
Map in a periodical article
Facsimile or reproduction map
Profile or cross-section, diagram or view
Inset or ancillary map
Early and modern manuscript maps
Map in a thesis or dissertation
Atlas
Map or plate in an atlas
Relief model
Globe
Monographic aerial photographs and photographs in a flight series
Aerial photographic flight series as a whole
Satellite imagery or data
Software for manipulating spatial data
Spatial database
Map produced using GIS software
Map from an electronic atlas
Map on the web (static)
Dynamically generated map, image or table
Real-time map from a website
Shapefile generated from a GIS dataset
Data extracted from local electronic database

Basic Form	Examples
Map on a single sheet	
Author. *Title*. Edition. Scale. Place of publication: Publisher, Date.	Brock University Department of Geography Cartography Office. *Sub-appellations of the Niagara Peninsula Wine Region.* Scale 1:60,000. St. Catharines, ON: Brock University Department of Geography, 2005. Canada Center for Remote Sensing. *Canada*. Scale 1:4,000,000. Ottawa: Natural Resources Canada, GeoAccess Division, 2001. City of Kingston Planning Department. *New "City of Kingston" 1998*. Scale 1:40,000. Kingston, ON: City of Kingston, 1997. Great Britain. Directorate of Overseas Surveys. *Tourist Map of Mount Kenya National Park and Environs.* 2nd edition. Scale 1:125,000. Nairobi: Survey of Kenya, 1989. Manitoba Natural Resources, Surveys and Mapping Branch. *Manitoba: Municipalities Local Government Districts 1988*. 3rd edition. Scale 1:1,000,000. [Winnipeg]: Manitoba Natural Resources, Surveys and Mapping Branch, 1967. U.S. Central Intelligence Agency. *India [Physical]*. Scale [ca. 1:16,666,666]. [Washington, DC: Central Intelligence Agency, 1996].

Basic Form	Examples
Map in a topographic series	
Author. *Sheet title from the series.* Edition. Scale. Series, sheet number. Place of publication: Publisher, Date.	Canada Dept. of Energy, Mines and Resources, Canada Centre for Mapping. *Brantford, Ontario.* Edition 7. Scale 1:50,000. Canada 1:50,000, sheet 40P/1. Ottawa: Canada Centre for Mapping, 1994. Centre for Topographic Mapping. *Niagara.* Edition 7. Scale 1:50,000. Canada 1:50,000, 30M/3 & 30M/6. Ottawa: Natural Resources Canada, 1996. Natural Resources Canada. *Ottawa, Ontario-Quebec.* Edition 11. Scale 1:50,000. Canada 1:50,000, 31 G/5. Ottawa: Center for Topographic Information, 1998. Ontario Ministry of Natural Resources. *Sheet 10 18 5200 49850.* Scale 1:10, 000. Ontario Base Maps, Sheet 10 18 5200 49850. Toronto: Ministry of Natural Resources, 1992. U.S. Geological Survey. *Puzzle Mountain, Maine.* 1:24,000. 7.5 Minute Series (Topographic). Reston, VA: USGS, 1977.
Map in a series (not topographic)	
Author. *Sheet title.* Edition. Scale. Series title and/or number. Place of publication: Publisher, Date.	Ontario Institute of Pedology. *Soils of West Lincoln, Regional Municipality of Niagara, Ontario.* Scale 1:25,000. Soils of the Regional Municipality of Niagara, Ontario, Sheet 1. Guelph, ON: The Institute, 1989. Sado, E. V. and B. F. Carswell. *Surficial Geology of Northern Ontario.* Scale 1:1,200,000. Ontario Geological Survey Map 2518. Toronto: Ontario Geological Survey, 1987. Soil Research Institute (Canada). *Ottawa, Quebec-Ontario.* Scale 1:250,000. Canada Land Inventory, Land Capability for Forestry, 31G. Ottawa: Lands Directorate, 1973. Toronto (Ont.) Land Information Services. *Photomap sheet 98-47Q.* Scale 1:5,000. Toronto: Land Information Services, 1998. Underwriters' Survey Bureau Ltd. [*Union Station*]. July 1954, partially rev. Jan. 1964. Scale [1:1,200]. 100 feet to 1 inch. Insurance plan of the city of Toronto, [plate] 4. Toronto: Underwriters' Survey Bureau Ltd., 1964.
Map series as a whole	
Author. *Series title*. Number of sheets within the series. Scale, if not included in title. Place of publication: Publisher, Date.	Canada Center for Mapping. National Atlas Information Service. *The National Atlas of Canada.* 93 sheets. Scale 1:7,500,000. Ottawa: Energy, Mines and Resources Canada, 1992.. Goad, Charles E. (Charles Edward). [*Insurance plan of the city of Vancouver, British Columbia*]. 61 sheets. Scale 1:600 and 1:1,200. Montreal: Chas. E. Goad, 1903. Underwriters' Survey Bureau. *Insurance plan of the city of Sarnia, Ont.* 100 sheets. Scale 1:1,200 and 1:2,400. Toronto: Underwriter's Survey Bureau, 1958.
Map in a book	
Map author. *Map title.* Scale. In: Book author. *Book title.* Edition. Place of publication: Publisher, Date, page.	Hulbert, Archer Butler. *Map of French Forts in America, 1750-60.* Scale not given. In: Archer Butler Hulbert. *History of the Niagara River.* Harrison, N.Y.: Harbor Hill Books, 1978, p. 165. First Base Solutions Inc. [*York University*]. Scale 1:10,000. In: First Base Solutions Inc. City of Toronto: *Ortho map book.* Markham, ON: First Solutions, 2002, p. AMO8. Ministry of Agriculture and Food, Ministry of Municipal Affairs and Housing, and Ministry of Natural Resources. *Schedule 1: Greenbelt Plan Area.* Scale [ca. 1:66,500]. In: Ministry of Municipal Affairs and Housing. *Greenbelt Plan.* Toronto, ON: Ministry of Municipal Affairs and Housing, 2005. *Ontario.* Scale [ca. 1:21,500,000]. Montreal. Ulysses Travel Publications, 1998. In: Couture, Pascale. *Ottawa.* Montréal: Ulysses Travel Publications, 1998, p. 33.

Basic Form	Examples
Map in periodical article	
Map Author. *Map title.* Scale. In: Article author. "Article title," *Journal title*, Volume (Date): page.	*The Distribution of Canadian Multinational Headquarters in Ontario, 1992.* Scale 3.5 cm = 50 km. In: Stephen P. Meyer. "Canadian Multinational Headquarters: The Importance of Toronto's Inner City, "*The Great Lakes Geographer,* Volume 3, no. 1 (1996): p. 7. Jefferson, Louise. *Africa: A Friendship Map.* Scale not given. In: Creason, Glen. "A Smile of Understanding," *Mercator's World*, Volume 4, no. 5 (September/October 1999): p. 13. *Figure 3. Static map of proportion of population age 65 and older in Toronto by FSA.* Scale [ca. 1:400,000]. In: Cinnamon, Jonathan et al. "Online Map Design for Public-Health Decision Makers," *Cartographica*, Volume 44, no. 4 (Winter 2009): p. 296.
Facsimile or reproduction	
Author. *Title.* Scale. Original place of publication: Original publisher, Original date of publication. As reproduced by, Place of publication: Publisher, Date.	Delisle, Guillaume. *Carte du Canada ou de la Nouvelle France et des découvertes qui y ont été faites.* Scale [ca. 1:8,875,000]. Paris: Guillaume Delisle, 1703. As reproduced by, Ottawa: Association of Canadian Map Libraries, 1981. Reichard, C. G. *Nord-America, 1818.* Scale [ca 1:21,000,000]. Gotha: Justus Perthes, 1831. As reproduced by, Ottawa: Association of Canadian Map Libraries and Archives, 1992. Swan, Fudger & Co. *Kamloops, B.C., June 1887: [fire insurance plan].* Scale [ca. 1:768]. Montreal: Swan, Fudger & Co., 1887. As reproduced by, [Vancouver?: Map Society of British Columbia], 1986. (Victoria, B.C.: Morriss Printing Co.). *Two hundred and fifty years of map-making in the County of Surrey: a collection of printed maps published between the years 1579-1823.* Scale varies. As reproduced by, Lympne, Kent: Harry Margary, 1974.
Profile or cross-section	
Author. Title. Horizontal scale; Vertical scale. Place of publication: Publisher, Date.	Cenozoic Stata Sequence. Scales not given. In: Richards, Lawrence W. Geologic History at a Glance. [Stanford, Calif.]: Stanford University Press, 1934. Newfoundland. Dept. of Highways. Plan & profile, St. John's Harbour Arterial Road, T.C.H. to Pearl Town Road (4.35 miles) / surveyed by C.G., drawn by H.J., traced by H.J. Horizontal scale [1:1 200]. 1 in. = 100 ft. Vertical scale [1:120]. 1 in. = 10 ft. St. John's, Nfld.: Province of Newfoundland and Labrador, Dept. of Highways, 1970. Baldwin, George Rumford, 1798-1888. Profile of the Lorette line of aqueduct, and extensions in the city. Vertical scale [1:960 approx.]. [Quebec]: Quebec Water Works, 1847 (Boston, Mass.: Lith. of E.W. Bouvé).
Diagram	
Author. *Title.* Scale(s). Place of publication: Publisher, Date.	McConnell, Richard George. *Diagram showing the geology of Texada Island, British Columbia.* Scale [ca 1:126,720]. [Ottawa]: Geological Survey of Canada, [1912?]. Monahan, David. *Relief diagram of the continental margin of eastern North America: Florida Keys to Flemish Cap.* Scale not given. Ottawa: Canadian Hydrographic Service, 1971. Tau Rho Alpha, James G. Moore, and David R. Jones. *Sequential Physiographic Diagrams of Mount St. Helens, Washington, 1979-1980.* Horizontal scale 1" = 1/2 mi.; Vertical Scale 1" = 1300 ft. USGS Open File Report, OFR 80-792. [Reston, VA.]: USGS, 1980.

Basic Form	Examples
Bird's eye view	
Author. *Title*. Scale. Place of publication: Publisher, Date.	Brosius, H. *Bird's eye view of the city of Ottawa, Province, Ontario, Canada, 1876*. Scale not given. [Chicago: Chas. Shober & Co./Chicago Litho. Co.], 1876. Gross, Peter Alfred. *Birds-eye view of Toronto, 1876*. Scale not given. Toronto: Gross, [1876]. Penthouse Studios Inc. *Montreal in 3D : a balloon's eye view of North America's most exciting city, Montreal = Montréal en 3D : la ville la plus excitante d'Amérique du Nord, vue d'un ballon, Montréal.* Scale [ca. 1:3,750]. [Quebec?]: Penthouse Studios Inc., [1966?]. Ruger, A. *Panoramic view of St. John's, Newfoundland,* 1879. Scale not given. [s.l.]: Ruger, [1879].
Inset or ancillary map	
Inset or ancillary map author. *Inset or ancillary map title.* Scale. On: Map author. *Map title.* Edition. Scale. Series title and/or number. Place of publication: Publisher, Date.	*Geological map coverage of Newfoundland.* Scale not given. On: Baird, David McCurdy. *Geological map of Newfoundland*. Scale 1:760,320. [St. John's: Newfoundland Dept. of Mines and Resources, Mines Branch, Geological Survey], 1954. *Map of Newfoundland [area map].* Scale [ca. 1:6,000,000]. On: *Map of Newfoundland: [railways and steamship lines*]. [Newfoundland?: s.n., between 1925-1931]. *Routes d'accès.* Scale 1:500,000. On: Le Service des communications et le Bureau de tourisme et des congrès de la ville de Hull. *Ville de Hull.* Scale 1:12,500. Hull: Le Service des communications et le Bureau de tourisme et des congrès de la ville de Hull, 1991.
Early and modern manuscript maps	
Author. "Title". Scale. Date. Collection, records or papers to which manuscript belongs. Name of repository, Location. Library reference designation.	Brown. S. H. "Sketch of the Battle Field of Fredericksburg". Scale 1:44,000. 13 Dec. 1862. Civil War Map #550. Geography and Map Division, Library of Congress. G3884 .F7 s5 1862 .B7 Vault. Durnford, Elias Walker. "Plan of the Ground Story of Barracks proposed to be built at Signal Hill, St. John's Newfoundland. For the officers of Royal Engineers and Corps of Royal military artificers". Scale [ca. 1:120]. 1809. WO 78/1657A. National Archives, Kew, Great Britain. MR 926 (5). Fitzgerald, James W. "Plan of the township of Patterson" / surveyed by J.W. Fitzgerald, 1876. Scale [1:31,680]. 40 chains to 1 in. 1890. Library and Archives Canada/ Bibliothèque et Archives Canada, Ottawa, ON G3463 .P37:3P3 1876 .F52. Canada. Civil Aviation Division. Edmonton District. "Reconnaissance plan, north fork bench, Dawson, Y.T." / drawn by A.E.G[roombridge]. Scale [ca. 1:3,600]. 1"=300. 1946 June 30. Library and Archives Canada/Bibliothèque et Archives Canada, Ottawa, ON G3524 .D3:2D3 1946 .C33. Morin, P. L. "[Plan des délimitations des seigneuries de Chambly et de Longueuil]". Scale [ca 1:12 500]. 1867 December 6. Library and Archives Canada/Bibliothèque et Archives Canada, Ottawa, ON G3453 .C5F7 1867 .M67. St. John's (Nfld.). Engineering Department. "Part plan of Bowring Park". Scale [1:600]. 1" = 50'. 1947. City Archives, St. John's, NL. MAP. H. 201.
Map in a thesis or dissertation	
Map Author if different from thesis or dissertation author. *Map Title.* Scale. In: Author. "Thesis or dissertation title." Type of paper, Name of University, Date of issuance, page or map number if applicable.	*Geology of the Hermitage Peninsula, southern Newfoundland.* Scale 1:50,000. In: O'Driscoll, Cyril F. "Geology, petrology and geochemistry of the Hermitage Peninsula, southern Newfoundland." M.Sc. thesis, Memorial University of Newfoundland, 1977, Fig. 1.2. *Carte de localisation de la région à l'étude.* Scale 1:2,500,000. In: Rocheleau, Martine. "Sédimentologie des paléoplages de la plaine d'Old Crow, territoire du Yukon, Canada." Masters thesis, University of Ottawa, 1997, p. 6, Fig. 1.1 *Preliminary map of bedrock topography, [Kawartha Lakes].* Scale [ca. 1:63,360]. In: Tate, Donald M. "The drainage evolution of the Kawartha Lakes district, Ontario." MA thesis, University of Western Ontario, 1968, map #4.

Basic Form	Examples
Atlas	
Author. *Title*. Edition. Place of publication: Publisher, Date.	Canada. Department of Energy, Mines and Resources. Surveys and Mapping Branch. *Atlas and gazetteer of Canada.* Ottawa: The Queen's Printer, 1969. Canada. Dept. of the Interior. *Atlas of Canada.* Rev. and enl. ed. [Ottawa]: Dept. of the Interior, 1915. Dobson, Hugh F. H. *Atlas de chimie de l'eau du lac Ontario.* Burlington, ON: Environnement Canada, 1985. Goode, J. Paul. *Goode's World Atlas.* 21st ed. [Skokie, Ill.]: Rand McNally, 2005. Saint-Yves, Maurice. *Atlas de géographie historique du Canada.* 1ère èd. Boucherville, Québec: Editions françaises, c1982.
Map or plate in an atlas	
Map author. *Map or Plate title*. Scale. In: Atlas author. *Atlas title*. Edition. Place of publication: Publisher, Date, page.	Canada. Department of Energy, Mines and Resources, Surveys and Mapping Branch. *Relief.* Scale 1:2,000,000. In: Canada. Surveys and Mapping Branch. *The National Atlas of Canada*. 4th edition. Toronto: Macmillan Co. of Canada; Ottawa: Dept. of Energy, Mines and Resources: Information Canada, 1974, pp. 1-2. *Canada Population.* Scale 1: 45,000,000. In: Oxford University Press. *Canadian Oxford World Atlas*. 4th Edition. Toronto: Oxford University Press, 1998, p. 26. Küchler, A. W. *Natural Vegetation.* Scale 1:75,000,000. In: *Goode's World Atlas.* 21st ed. [Skokie, Ill.]: Rand McNally, 2005, p. 18. *Military Service.* Scale not given. In: Joni Seager and Ann Olson. *Women in the World: An International Atlas.* London: Pluto Press Ltd., 1986, plate 32.
Relief model	
Author. *Title*. Edition. Horizontal scale; Vertical scale. Place of publication: Publisher, Date.	Hubbard Scientific Company. *Rand McNally geo-physical world.* Scale [ca. 1:40,000,000]. [Chicago, Ill.]: Rand McNally & Co., [1969, c1972]. Landmælingar Íslands. *Ísland.* Scale 1:1,000,000; vertical scale 4 times the horizontal. [Reykjavík]: 1971. Porter, J. K. *Shaded-relief digital elevation model, Fort Fraser, British Columbia.* Scale 1:250,000. [Ottawa]: Geological Survey of Canada, 2000. United States. Army Map Service. *Mare Nectaris and Vicinity - Lunar Plastic Relief Map.* Horizontal scale 1:5,000,000; Vertical scale 1:1,000,000. Washington, D.C.: Army Map Service, 1961.
Globe	
Author. *Title.* Edition. Scale. Place of publication: Publisher, Date	George F. Cram & Co. *7 inch terrestrial globe.* Scale 1:71,723,520. "1 in. equals 1132 statute miles." Indianapolis, Ind.: George F. Cram, [ca. 1934]. *Odyssey, The world's First Atlasphere*. Scale 1:41,800,000. Santa Clara: Explore Technologies, 1997. *Replogle lunar globe.* Scale 180 mi. per inch. Broadview, Ill.: Replogle Globes, [1999?]. Tolman, LeRoy M. *Replogle 12 inch diameter globe world classic series.* Scale 1:41,849,600. [Chicago]: Replogle Globes, Inc., [1993?].

Basic Form	Examples
Monographic aerial photographs and photographs in a flight series	
Author. *Title or frame number(s).* Scale. Flight title (if part of flight). Line/roll number. Photo number. Place of publication: Publisher, Date of image collection (NOT date of reproduction).	National Air Photo Library. *A17179, photo 54-58.* Scale 1:30,000. Ottawa: Department of Energy, Mines and Resources, 1960. National Air Photo Library. [*Niagara*]. Scale 1:30,000. B83-30 168-8. Photo 137. Ottawa: Department of Energy, Mines and Resources, 1983. Energy, Mines and Resources Canada. *Central Experiment Farm (A17150-9).* Scale 1:16,350. Ottawa: NAPL Reproduction Center, 1961. Ontario. Ministry of Natural Resources. *54-4335-22-93.* Scale 1:10,000. Toronto: 1954.
Aerial photographic flight series as a whole	
Author. *Flight title.* Scale. Place of publication: Publisher, Date of image collection (NOT date of reproduction).	Energy, Mines and Resources Canada. *A9547-20-55.* Scale 1:17,000. Ottawa: Energy, Mines and Resources Canada, 1945.
Satellite imagery	
Author, *Title or Scene ID*, Satellite and sensor name (as appropriate). Scale. Place of publication: Publisher, Date of image collection (NOT date of reproduction).	*Georgian Bay/Muskoka and Lake Simcoe from space*, Landsat 5. Scale [ca 1:169 000]. Missaussauga, ON: WorldSat International, July 21, 1986. *Landsat-4 thematic mapper image of Santa Barbara, California and Channel Islands, November 19, 1983: spectral bands .48um, .57um, .66um.* Scale not given. [Santa Barbara, Calif.]: EOSAT Santa Barbara Research Center, between 1983]. Manitoba. Surveys and Mapping Branch. *Manitoba Landsat-1 mosaic.* Scale 1:000,000. Manitoba: Surveys and Mapping Branch, 1973-1974. U.S. National Aeronautics and Space Administration. [*Santa Barbara Region, California] E-2429-17512-4, 5, 7*, Landsat 2. Scale 1: 500,000. Sioux Falls, S. Dak.: EROS Data Center, 1976.
Software for manipulating spatial data	
Author. *Title.* Edition or Version. Place of production: Producer, Date of copyright or production.	Environmental Systems Research Institute. *ArcGIS.* Version 8.3. Redlands, CA: Environmental Systems Research Institute, Inc., 2002.
Spatial database	
Author. *Title.* Edition. Place of production: Producer, Date of copyright or production.	United States. Bureau of the Census. *TIGER/Line Precensus Files, 1990: New England.* Washington, D.C.: Bureau of the Census, 1990.
Map produced using GIS software	
Author. *Map title.* Scale. Computer database title. Edition. Place of production: Producer, Date of copyright or production. (May be followed by) Using: Author. *Computer software title.* Edition. Place of production: Producer, Date of copyright or production.	*Ottawa-Hull Urban Area, Highest Level of Education: University Degree.* Scale 1 cm = 1 kilometer approx. Census of Canada 1996, Ottawa-Hull CMA Census Tracts Digital Boundary File (g96ct505.exe) and E-Stat, Census of Canada 1996. Ottawa: University of Ottawa, Map Library, 1998. Using: *ArcView GIS.* Version 3.1. Redlands, CA: Environmental Systems Research Institute, Inc., 1992-1998. *Population Density in the Municipalities of Niagara.* Scale 1:300,000. Statistics Canada Census Subdivision Digital Boundary File gcsd000a06a.zip and Profile of Labour Force Activity Catalogue No. 95F0490XCB01002-ontario.ivt. St. Catharines, ON: John Doe, March 2008. Using *ArcView GIS.* Version 9.2. Redlands, CA: Environmental Systems Research Institute, Inc, 1992-2006. *Wetlands and Floodplain in GRCA.* Scale 1:10,000. GRCA GIS Data. Cambridge, ON: Grand River Conservation Authority, 2001. St. Catharines, ON: John Doe, March 2008. Using: *ArcView GIS.* Version 3.2. Redlands, CA: Environmental Systems Research Institute, Inc., 1992-1999.

Basic Form	Examples
Map from an electronic atlas	
Map Title. Scale, if known. Atlas Name. Place of publication: Publisher, date. Available: Local access information (accessed date).	*Map of Prussia in 1791.* In: Centennia. Version 1995.5. Chicago: Clockwork Software Inc., 1995. *Earth by Night.* Scale not given. Encarta Premium 2007. Redmond, WA: Microsoft Corporation, 2007. Available: Brock University Map Library Controlled Access G 1021 M53 2007 (March 1, 2008).
Map on the web (static)	
Author. *Map title.* Scale. "Title of the complete document or site." Information date. <URL, including the path and any directories necessary to access the document>. (The date viewed).	*Afghanistan.* Visual Scale. "The World Factbook 2: Afghanistan". <http://www.odci.gov/cia/publications/factbook/geos/af.html>. (September 5, 2001). H. Belden & Co. *Map of Ashfield Township.* "In Search of Your Canadian Past: The Canadian County Atlas Digital Project." 1879. <http://digital.library.mcgill.ca/Countyatlas/images/maps/townshipmaps/hur-m-Ashfield.jpg>. (January 11, 2011).
Dynamically generated map, image or table	
Data Producer. Name of database or source. *Title of map, image or table.* Person who generated map or table; Software package used to generate map or table; <URL of main or first site page>. (Date map or table was generated).	*Earth Observation Imagery Landsat 7 Orthorectified Imagery over Canada.* Ottawa, ON: Government of Canada Natural Resources Canada, 2003. Available: GeoGratis <http://geogratis.cgdi.gc.ca/geogratis/en/product/search.do?id=1583> (March 3, 2008). North Carolina. Dept. of Transportation. *Current Wake County Traffic Conditions.* 03/10/04, 15:07:20. Scale not given. "North Carolina Department of Transportation". <http://apps.dot.state.nc.us/tims/> (10 March 2004). Statistics Canada. 2001 Census of Population. *Less than grade 9, population 20 years and over by highest level of schooling as % of Total Population...Hamilton [172 areas].* Generated by Cathy Moulder; using E-Stat; <http://estat.statcan.ca/>. (July 20, 2004).
Real-time map from website	
Author. *Map title.* Date produced and time if known. Scale or resolution. "Title of complete document or site". <URL>	The Weather Channel. *Interactive Weather Map: [North America].* January 19, 2011, 15:40. Scale not given. "The Weather Channel: Maps". <http://www.weather.com/weather/map/interactive/> The Weather Network. *Lightning.* January 19, 2011, 13:30. Scale not given. "Lightning Maps: North America". <http://www.theweathernetwork.com/lightning/> *New Zealand Satellite Cloud Map.* January 20, 2011, 05:30 NZDT. Scale not given. "Weatherzone. JMA MT-SAT." <http://www.weatherzone.co.nz/satellite/>
Shapefile generated from a GIS dataset	
Data Producer. Name of database or source. *Title of subset.* Person who generated file; Software package used to generate file; Methodology used to generate file. (Date subset was generated).	Statistics Canada. 2006 Census. Census subdivisions (cartographic boundary file gcsd000b06a_e). *Indian Reserves in Canada.* Created by McMaster University Library Lloyd Reeds Map Collection, using ArcView 3.2, as a subset of the original dataset with csdtype = IRI. (March 12, 2008). Great Britain. Ordnance Survey. EDINA Digimap Ordnance Survey Service. *OS Code-Point with Polygons [Shapefile geospatial data] Aberdeen District. Updated May 2008.* <http://edina.ac.uk/digimap> (June 2009).
Data extracted from a local electronic database	
Database Title. Place of publication: Publisher, date. Available: Local access information (accessed date).	*CanMap Streetfiles 2007_3.* Markham, ON: DMTI Spatial, 2007. Available: Brock University Map Library Controlled Access DATA PC E:\DATA\DMTI\CanMap\v2007_3\ (March 3, 2008). *City of Toronto Digital Orthophotos.* Toronto: Land Information Toronto, 1997. Available: University of Waterloo Map Library (July 12, 2006). *Grand River Watershed Data.* Cambridge, ON: Grand River Conservation Authority, 2003. Available: University of Waterloo Map Library (July 12, 2006).

These formats and examples are based upon the guides referenced in "Cartographic Citations" by the same compiler, as well as on the principles adhered to by the Bibliographic Control Committee. Of most use, of course, was *Cartographic Citations: A Style Guide* by Christine Kollen, Wangyal Shawa and Mary Larsgaard, 2d ed., issued in 2010.

Two guides that led to numerous additional examples of more specific digital geospatial resources are: Brock University - http://www.brocku.ca/maplibrary/howtoref.htm - "How to Reference Maps, Atlases, Air photos and Digital Resources" and Ryerson University - "Citation Format Examples for Geospatial Map and Data Centre Resources" - http://www.ryerson.ca/madar/geospatial/citations.html.

20 January 2012

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Association of Canadian Map Libraries and Archives

MERCATOR CELEBRATIONS - BELGIUM, SPRING 2012

David Jones

Gerhard Mercator was born in Rumpemonde in what is now Northern Belgium in 1512. This year is the 500th anniversary and his birth and the focus for much celebration and review of his life and work across the area, and for that matter across Europe. A major conference, Mercator Revisited, sponsored/ coordinated by the University of Ghent and the Stedlijke Musea Sint-Niklass (STEM Sint-Niklaas) was held in Sint Niklaas (about 10 km from Rumpemonde, 50 km from Brussels) April 25-28 in conjunction with exhibits at the STEM (http://musea.sint-niklaas.be/stem) and the adjacent Mercator Museum (http://musea.sint-niklaas.be/mercator)

Also the Royal Library in Brussels (Bibliotheque Royale de Belgique/Koninklijke Bibliotheek Van Belge) mounted a major exhibit 'Une source royale pour Mercator: L'atlas de Christian Sgrooten' highlighting maps from Christian Sgrooten's recently restored 'Atlas Bruxellensis'. Also, in September the International Map Collectors, Society (IMCOS) is featuring sessions on Mercator at the 39th International IMCOS Symposium in Vienna.

Mercator Revisited

www.mercatorconference2012.be/

Attended by about 80 scholars and enthusiasts from 16 countries, Mercator Revisited was held in Sint Niklaas at the STEM Sint Niklaas.

The 3 days of scholarly presentations by 26 speakers, from as far as New Zealand, and the U.S., and visits to exhibits at the STEM and the adjacent Mercator Museum exemplified the wide influence of Mercator on cartography since the 16th Century. There were four keynote presentation and over 20 more specialized papers.

After an opening ceremony Georg Gartner (Technischen Universitat, Wien and ICA) gave the first of the four keynote presentations. Speaking on Mercator as a Hero of Cartography focussing on how he evolved into a cartographer from his humble personal background and his interest in bringing order into the field of geography. To a society that was generally spatially blind he brought an awareness of space. His humanist education and his technical skills (as an instrument maker) brought a level of precision and technology to map and globe making. While not as prolific as some of his contemporaries his maps were always well designed of the highest precision for the time.

Jeremy Brottan's Keynote paper was read by Soetkin Vervust and focussed on the Mercator Projection and its evolution from the navigators' need for a better maps and charts for presenting rhumb lines and loxodromes. The key advantage of this projection was that it maintained the relation between the meridians and the parallels and the angle of intersection of the loxodromes. At the time distortion was recognized but since most navigation was not near the poles, the projection worked well for its intended purpose and the distortion ot the northern and southern extremes was not considered an issue.

The third Keynote, by Thomas Horst, Universitat der Bundeswehr, Munchen, focussed on Mercators globes of 1541 and 1551 of which there were examples in the accompanying exhibit. That exhibit also includes large screen (approx 5 x 8 m) digital model displays of the globes. The 1541 terrestrial globe is composed of 12 gores printed from a single copperplate. These were used as astronomical instruments. Harvard claims to have the only pair in North America (http://hcl.harvard.edu/collections/digital_collections/mercator.cfm) although it is thought that around 100 were actually made and about 22 pairs are still known.

Mark Monmonier, Syracuse, University, was the fourth keynote speaker. He spoke about Mercator's 1569 World Map which introduced the Mercator projection. He explained that the mathematical formula was not distributed and the significance of the projection for navigation was not immediately exploited but only became more commonly used in the 17th century. Mark also spoke about some of the various projections developed and their strengths and weakness.

Between these keynote presentations were a series of shorter, focussed presentations on topics such as " Gerhard Mercator and Wolfgang Lazius - a comparative analysis " (Petra Svatek); "Geographical names on Mercator's maps of Croatian Historical Regions' (Lena Mirosevic); 'Sale of atlases by the Antwerp Plantin Press' (Dirk Imhof); "Reframing Mercator's Orbis Imago: the double cordiform world map of 1538" (Ruth Watson); and "Maps as Metaphor" (Inge Panneels) The complete program can be found at:
(http://www.mercatorconference2012.be/programme/)

Three of the papers were published in the Conference Proceedings - Mercator Revisited: Cartography in the age of discovery [ISBN 978-94-6197036-7 www.universitypress.be] along with abstracts of 21 papers of which four will be published in full in a forthcoming issue of The Cartographic Journal.

Accompanying exhibits at the STEM Sint Niklaas & Mercatormuseum included the pair of globes (Terrestrial, 1541; Celestial, 1551), large video presentations about the globes, a selection of original maps and instruments and a collection of books reflecting the holdings of Mercator's private library. One or two of these books being the actual copies that belonged to Mercator, the others similar editions to those that he owned.

Une source royale pour Mercator: L'atlas de Christian Sgrooten

This special exhibit in the LIbrarium at the Bibliotheque royale de Belgique (Koninklijke Bibliotheek van Belgie) commemorates the 500th anniversary of the birth of Gerard Mercator with displays of maps from Mercator's Atlas (1595) and similar maps by contemporary cartographers, especially Jacques de Deventer and Christian Sgrooten (ca 1525 - 1603). The exhibit reflects a systematic comparison of the representation of territories by the cartographers. The Library has one of the two copies of the manuscript atlas Atlas Bruxellensis (1573) by Sgrooten which is considered to have been an important source for Mercator. This atlas was prepared for King Philip II of Spain by Sgrooten who was appointed Geographer Royal in 1557 and commissioned to draw maps of the provinces, regions and cities belonging to the King. The curators' (Wouter Bracke and Mathias Debroux) research compared and contrasted the presentation of hydrographic features, forests, toponomy, topography and other features and the side-by-side presentation highlights the incorporation of content from one to another through the compilation of various sources into a new map.

An exhibit catalogue is available in both French and Dutch;

French edition: Une source royale pour Mercator: L'atlas de Christian Sgrooten (ms. 21,596). Wouter Bracke and Mathais Debroux. Bibliotheque royale de Belgique. 2012

ISBN 978-2-87093-171-4 cost:: 10 Euro

Two sources of further information about this exhibit are:

http://belgica.kbr.be/fr/coll/cp/cp21596_fr.html
and
http://blogdurmblf.blogspot.ca/2012/05/exposition-une-source-royale-pour.html.

REVIEWS

Compiled by Susan McKee

Atlas of the Irish Rural Landscape

Reviewed by Iris Morgan

Aalen, F.H.A., Whelan, Kevin and Stout, Matthew (eds.). *Atlas of the Irish Rural Landscape,* Rev. and exp. 2nd ed. Toronto: University of Toronto Press, 2011. 422p. $75.00 Cdn. ISBN 978-1-4426- 4291-1.

Having no in-depth knowledge of Ireland, I became awestruck when glancing through this atlas and was easily lost within the first 100 pages on the images alone. However, my romantic notions of the Emerald Isle were rapidly dissipated after delving into this remarkable book. Published by Cork University Press, with North American rights held by the University of Toronto Press, the editors expertly guide 25 contributors in presenting a unified work that showcases Ireland's rural landscape, arguing that it is a crucial element of the national heritage. By including the effects of the immense development pressures of the last fifteen years, nicknamed the Celtic Tiger, this second edition atlas is rendered all the more important and timely. By providing in-depth and well illustrated coverage of every facet of the Irish rural landscape, it is a gold mine for academic study, while providing an accessible portal for the casual reader.

A rich archaeological history going back 9,000 years is described in the first section on the making of the Irish landscape. Prehistoric cultural and landscape synthesis, from megalithic tombs to ring forts, are described with plentiful and elegant maps that show distribution through time. The cartography employs a consistent style and scale, providing an overall island perspective, while a small index map gives a quick geographic reference. Succinct, clear descriptions, accompanied by numerous photographs, historic images and diagrams encourage readers to ponder the extent of history and change.

The authors point out that the island's social history is one of trying to distance itself from its impoverished and oppressed past. I was reminded that farmers are not romantics. Over the last four centuries the Irish have been subjected to such cultural changes as subjugation, colonization and acquisitive Protestantism, contributing to the island becoming a stepping stone on the Atlantic from the European Union to America. While these events have left their mark, it is the economically driven changes of the last decade that are bringing about the greatest change to the Irish rural landscape. Much of the romanticism of a pastoral Ireland has been devoured by the voracious appetite of the Celtic Tiger, which has fostered a developers feeding frenzy. Spreading over the rural landscape as suburban encroachment, ghost estates and seasonal holiday villages, this global trend has been accelerated in Ireland. Oddly, these challenges of the future are described in the middle section of the atlas, with dire descriptions predominant. Nevertheless, with the recent economic stall I became hopeful reading through the next section that describes the components of the Irish landscape and provides a real appreciation of a complex asset that needs to be better managed.

The claim that the island is an ideal "laboratory for the studying of landscape history" is validated by examples where cultural history is intertwined with the countryside, showing that the rural landscape is far from natural and subject to continuous alteration by its inhabitants. Important landscape components such as Ireland's three types of peat bogs, which cover one sixth of the island, with their historic, in-

dustrial and ecological role, are followed by themes on forests, fields and houses. Included are homes with altered landscapes such as demesnes, or manor estates, with their paradoxical landscape parks emulating the "natural".

The section on Tory Island, county Donegal, one of five new regional case studies, describes arable land allocation resulting in a unique Irish farm pattern and vernacular architecture that is repeated throughout rural Ireland. Numerous photographs show the remnants of archaic structures such as white-washed long houses, which fuel the romantic image and feed tourist publicity. Yet, protecting the landscape has been a low priority, resulting in accelerated environmental impact by roads, waterways, power demands and quarrying, with wind turbines and reservoirs for hydro power proliferating to meet urban demand.

Other regional case studies encompass the Wicklow Uplands, the Aughris Headland, Inistioge and the Nore Valley ending with Point Lance, an Irish settlement in Newfoundland; each encapsulating rural Irishness. Final pages list the top fifty books on Irish rural landscape and Landscape-on-line resources for those who are not yet completely overwhelmed by this remarkable work.

This atlas sets a new standard for landscape appreciation and should be required reading for any planning or environmental history course as well as for land use policy makers. Awareness and understanding of the value of landscapes as "cultural, ecological and economic assets" that contribute to society's well-being is beautifully and astutely exemplified. The challenge for the Irish will be to counter weak conservation policies, emaciated planning and "brutal acts of spoliation" in order to better manage rapidly expanding economic expectations. This atlas clearly shows that the Irish rural landscape is embodied in its rich inherited past, which serves as the source of the Irish spirit.

Iris Morgan
Spatial and Numeric Data Services
Libraries and Cultural Resources
University of Calgary
Calgary, Alberta

Mapping Latin America: A Cartographic Reader

Reviewed by Peter Peller

Dym, Jordana & Offen, Karl. *Mapping Latin America: A Cartographic Reader.* Chicago, IL: University of Chicago Press, 2011. 338p. $39.00 US. ISBN 13-978-0-226-61822-7.

"Maps also tell stories about the people and places they show." This statement from the book, Mapping Latin America, aptly summarizes one of the main goals of this anthology - to analyze a broad selection of historical and contemporary Latin American cartographic images and share their corresponding stories with the reader. The other main goal of the book is to educate the reader in "cartographic literacy" - the process of map reading and interpretation, mostly from a cultural context. These parallel goals make the book a hybrid publication combining a historical atlas with a historical reader and mixing in some geography for good measure.

Mapping Latin America is divided chronologically into three major sections: "The Colonial Period," "The Nineteenth Century," and "The Twentieth Century." There are a total of 57 short chapters each focussing on one or two unique cartographic images. The first and last sections contain about the same number of chapters, but the section on the nineteenth century contains significantly less material. This may be due to the paucity of maps produced during the revolutionary period of that century. Each major section is organized into smaller thematic groupings of chapters covering similar ground such as ethnic groups, environment and urban planning.

The editors are Latin American specialists in their respective disciplines. Jordan Dym is an associate professor of history at Skidmore College and Karl Offen is an associate professor of geography at the University of Oklahoma. The chapters are written by a diverse group of 54 contributors of whom most, like the editors, have backgrounds in geography and history; however the remainder are from a variety

of disciplines such as art history, architecture, anthropology, archaeology, business, cartography, Spanish, and urban studies. The contributors are described in detail in an "About the Authors" section at the back of the book.

There are approximately 100 cartographic illustrations in the book, most in colour. With the exception of a Mayan palace wall mural dated 400 AD, all the other cartographic images are from the past 500 years. The majority of these images are traditional maps; however, there are a number of other cartographic materials also represented such as an aerial image of a Cuban missile site, a Mexican revolution board game, cartoons, cross sectional drawings, paintings, sketch maps, tapestries, and town plans. Of the over 100 images, 67 are unique, with the remainder displaying detailed views of smaller parts of the image. Unfortunately, due to the size of some of the original images, it is very difficult to discern details on them when they are reduced to page size. To offset this difficulty, the authors provide links to online versions of these maps (if available) at the book's website or other websites where one can zoom in to see the details. This reviewer took a less high tech approach and simply used a magnifying glass to examine details pointed out by the authors.

Besides being governed by the chronology and organization of the book, the selection of maps covers a very wide variety of topics and seems to be somewhat proportional to land mass. A similar amount of space is devoted to both Mexico and Central America with South America's coverage about the same as the previous two areas together. The Caribbean region is sparsely covered with only five maps, three of those related to Cuban topics. The topical coverage of the maps includes navigation, exploration, colonization, indigenous populations, town plans, estates and plantations (agrarian capitalism), colonial power conflicts, strategic ports, revolutions, wars, canals, resources, contested boundaries, railroads, nationalism, land disputes, subways, geographic education, nationalism, hydrology, environmental issues, ethnicity, remittances by emigrants, tourism, trade, the Cold War, urbanization and even myths. Overall the selection is excellent and covers many significant events in Latin American history. Not only do the chapters each tell a separate story, but when read in its totality, the book provides an interesting historical overview of Latin America as well as its cartography.

The introduction to the book is excellent and essential reading, especially for non cartographic types. It describes briefly what a map is, its elements such as cartouches, legends, scales, orientation, coordinate systems, projections, etc. More importantly, it introduces the reader to the process of looking beyond the physical geographic information and analysing a map more fully by asking critical questions such as the following: Who created the map? When was it created? What area does it cover? What is included and what is left out? Who is the intended audience? Why was it made? What events are the reference points for the map? It is this latter method that the contributors bring to light as they analyze the individual maps through the action of answering these questions.

The book does a terrific job in showing the reader that as a cultural construct, maps can be highly subjective. Their contents are sometimes part false as in the case of Lionel Gisborne's "Atlantic and Pacific Junction" and sometimes part fantasy as in the case of Walter Raleigh's map of Guiana. The authors show that maps highlight what their creators want the user to see, but that sometimes the truly fascinating part of the story is often hidden in what is left off. Even simple tourist maps are shown to have an agenda. Readers of this book will never look at a map the same way.

The writing throughout all the chapters is of a consistently high quality. Each chapter is 4-6 pages in length and accompanied by footnotes and a list of additional readings related to that chapter. At the back of the book there is a very useful "Additional Resources" section which provides valuable information on broader cartographic infor-

mation as well as resources for background research on Latin American maps. As previously mentioned, the book's website (www.press.uchicago.edu/books/mappinglatinamerica) provides links to some of the maps analyzed in the book, but it also provides links to many of the resources listed in the "Additional Resources" section as well as a few additional geographic and cartographic sites.

Mapping Latin America is a truly impressive and enlightening work. It not only tells the fascinating stories behind the selected maps, but by example instructs readers on how to extract stories from maps themselves. Although intended for an academic audience, *Mapping Latin America* would be valuable reading for anyone interested in maps or Latin America.

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

Spatiotemporal Data Analysis

Reviewed by Thomas Stieve

Eshel, Gidon. *Spatiotemporal Data Analysis.* Princeton: Princeton University Press, 2012. 338p. $85.00 US. ISBN: 9780691128917.

Spatiotemporal Data Analysis focuses on analyzing multidimensional data sets. The author, Gidon Eshel, the Bard Center Fellow at Bard College, received his Ph.D. in physical oceanography from Columbia University. The book is taken from his lectures to students in the physical sciences, such as astronomy, meteorology, oceanography, neuroscience, etc.

Gidon's work covers techniques that concentrate on data sets that are vector time series. These data sets mainly have time points in groups of values, which are arranged as columns. The book contains and describes advanced mathematics for spatiotemporal data analysis. The first part of the book reviews mathematical priming, especially linear algebra which is the foundation of most of his analyses. The second part deals with those data analyses, such as regression, autocorrelation, and empirical orthogonal functions.

He uses Matlab and Octave for the software applications of the discussed procedures, and it is assumed that the reader has some knowledge of this software. As the book states, it is intended for readers with a more sophisticated knowledge of the subject, e.g. senior undergraduates and graduate students. While the author gives very thorough and in-depth explanations of these mathematical procedures, there are not many detailed examples of their real world applications.

In terms of library collections, this book would complement the more advanced mathematical section of spatiotemporal data analysis for the physical sciences. It is best suited for those that have a good grasp of the subject, and wish to further their understanding. However, it would not be advised for more introductory needs or applications.

Thomas Stieve
Senior GIS Analyst
Tufts University
Somerville, MA

Surveyors of Empire: Samuel Holland, JFW Des Barres., and the Making of The Atlantic Neptune

Reviewed by Iain Taylor

Hornsby, Stephen, *Surveyors of Empire: Samuel Holland, JFW Des Barres., and the Making of The Atlantic Neptune.* Carleton Library Series 221, McGill-Queen's Press, Montreal and Kingston, 2011. 269p. $39.95 Cdn. ISBN 9780773538153.

An almost chance meeting in August 1770, at a merchant's house in Liverpool, NS produced a meeting of surveyors' minds which resulted in the eventual production of one of the world's greatest atlases, 'The Atlantic Neptune'.

Often and incorrectly attributed entirely to Joseph Frederick Wallet Des Barres (a Huguenot-born, British-trained, nautical survey officer) this assemblage of charts and coastal surveys is rightly viewed as one of the great triumphs of eighteenth century nautical surveying. However, it was more than the work of one man or even one team of surveyors as the other officer in Liverpool that day was the land surveyor Samuel Holland, the man behind the great survey of Quebec (1760-63) under James Murray (later to become Governor of that province). The plan which was born was nothing less than to work up the surveys underway into a complete and coordinated whole - a series of maps and charts covering all of the newly won territories of New France from Montreal to Labrador, Newfoundland, Nova Scotia and down the coast to meet with another survey in progress from Florida north to the Chesapeake Bay.

This project and the immense investment involved was according to Hornsby "probably the most ambitious and sophisticated mapping operation on the world at the time". This book charts the tortuous and sometimes rocky passage through the shoals of competing British government departments which led up to and saw to an almost complete conclusion during more than twenty years of difficult surveying and charting by teams of naval and engineering officers and men, including such notables as Cook, Lane and others.

Hornsby's work describes in easy flowing and non-technical language the role of this project within the 18th century enlightenment and although cast in general as a readable narrative, it eschews the postmodernistic jargon - even disagreeing with Brian Harley over the lasting significance of toponymic naming, at least as it applied to Des Barres' and Holland's hierarchical British place names.

"These surveys laid the foundations for much of the systematic surveying of Britain's colonial possessions and thus a significant part of the modern world."

The book easily covers a vast space and long time span, ranging from the surveys and surveyors, descriptions of the plans, surveyors as landed planters, to the production and marketing of the Atlantic Neptune. It is a must read for anyone interested in how the world became ruled on paper.

It is also a handsome, beautifully produced volume with clear and elegant typeface and tasteful layout. The book is lavishly illustrated by 78 clear colour plates and two tables. Carleton University Press are to be congratulated on the final product, it's a joy to behold and to peruse.

Iain Taylor
Halifax, NS

ACMLA would like to extend a welcome to **Virginia Pow,** who has volunteered to be this year's

ACMLA Publications Officer

Virginia is a Map Librarian in the William C. Wonders Map Collection at the University of Alberta in Edmonton.

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

Beiglbock, Kristof. 2011. Programming GPS and OpenStreetMap applications with java: the real object application framework. Boca Raton, FL: CRC Press. 238 p. $61.14 CAN. ISBN: 9781466507180.

Bucher, Benedicte and Florence Le Ber (eds.). 2012. Innovative software development in GIS. London: Wiley-ISTE. 331 p. $147.87 CAN. ISBN: 9781848213647.

Chen, C.H. (ed.). 2012. Signal and image processing for remote sensing. 2nd ed. Boca Raton, FL: CRC Press. 567 p. $166.45 CAN. ISBN: 9781439855966.

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NEW MAPS

Compiled by Cheryl Woods

Middle East Telecommunications Map
Scale: NA
Publisher: TeleGeography
Year of Publication: 2012

China
Scale: 1:4,375,000
Publisher: National Geographic Society
Year of Publication: 2011

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

India
Scale: 1:3,150,000
Publisher: National Geographic Society
Year of Publication: 2011

Northeast India
Scale: 1:1,400,000
Publisher: National Geographic Society
Year of Publication: 2011

Northwest India
Scale: 1:1,400,000
Publisher: National Geographic Society
Year of Publication: 2011

Southern India
Scale: 1:1,400,000
Publisher: National Geographic Society
Year of Publication: 2011

Mexico
Scale: 1:2,425,000
Publisher: National Geographic Society
Year of Publication: 2011

Nicaragua, Honduras and El Salvador
Scale: 1:710,000
Publisher: National Geographic Society
Year of Publication: 2011

Cape Town, South Africa and the South African Peninsula
Scale: 1:55,000
Publisher: National Geographic Society
Year of Publication: 2011

South Africa
Scale: 1:1,550,000
Publisher: National Geographic Society
Year of Publication: 2011

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

Ireland
Scale: 1:385,000
Publisher: National Geographic Society
Year of Publication: 2011

Iceland
Scale: 1:465,000
Publisher: National Geographic Society
Year of Publication: 2011

Finland and Northern Scandinavia
Scale: 1:975,000
Publisher: National Geographic Society
Year of Publication: 2011

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

Northern Spain
Scale: 1:380,000
Publisher: National Geographic Society
Year of Publication: 2011

Argentina
Scale: 1:2,300,000
Publisher: National Geographic Society
Year of Publication: 2011

France
Scale: 1:1,100,000
Publisher: National Geographic Society
Year of Publication: 2011

Greece Road Map
Scale: 1:600,000
Publisher: Orama Editions
Year of Publication: 2011

Macedonia Road Map
Scale: 1:250,000
Publisher: Orama Editions
Year of Publication: 2011

Mykonos Island Road Map
Scale: 1:35,000
Publisher: Orama Editions
Year of Publication: 2011

Santorini Island Road Map
Scale: 1:35,000
Publisher: Orama Editions
Year of Publication: 2011

Corfu Island Road Map
Scale: 1:100,000
Publisher: Orama Editions
Year of Publication: 2011

Rhodes Island Road Map
Scale: 1:100,000
Publisher: Orama Editions
Year of Publication: 2011

Hawaiian Islands
Scale: 1:200,000 & 1:400,000
Publisher: Borch Map
Year of Publication: 2012

Bilingual Road Map of Thailand, 9th Edition
Scale: 1:1,200,000
Publisher: Thinknet Map & Guide
Year of Publication: 2011

Thailand - Map of 5 Provinces : Chiang Mai, Chiang Rai, Mae Hong Son, Lampang, Lamphun, 6th Edition
Publisher: Thinknet Map & Guide
Scale: 1:550,000
Year of Publication: 2012

Southern Norway and Sweden
Scale: 1:975,000
Publisher: National Geographic Society
Year of Publication: 2011

New Zealand
Scale: 1:1,100,000
Publisher: National Geographic Society
Year of Publication: 2011

Corsica, France
Scale: 1:135,000
Publisher: National Geographic Society
Year of Publication: 2011

Spain and Portugal
Scale: 1:1,000,000
Publisher: National Geographic Society
Year of Publication: 2011

Australia
Scale: 1:4,250,000
Publisher: National Geographic Society
Year of Publication: 2011

Sicily, Italy
Scale: 1:225,000
Publisher: National Geographic Society
Year of Publication: 2011

Southern France
Scale: 1:425,000
Publisher: National Geographic Society
Year of Publication: 2011

GEOSPATIAL DATA AND SOFTWARE REVIEWS

Open Data Ottawa

http://www.ottawa.ca/online_services/opendata/index_en.html

Reviewed by Joel Rivard

Through the Open Data program, the City of Ottawa is providing public access to its datasets. The program is still in beta and the city is continually improving its site by updating the datasets and adding features.

A first look at the data catalogue on the Open Data website sees a good range of framework and thematic layers. The framework layers consist of boundaries, roads, railways, cycling networks, rivers, water, buildings and contours. The boundaries include the current municipal boundary of the city as well as former municipal boundaries, former township boundaries, original township lots (last updated in 1860), current municipal wards and Business Improvement Areas. The rivers and water layers show all of the surface water within the boundaries of the city while the railways, roads (updated in April 2012) and the cycling networks show polylines of the current transportation network within the city. Also included with the cycling networks are proposed routes from both the City of Ottawa and the National Capital Commission. The buildings layer shows users the footprint of all large buildings in Ottawa but doesn't include attribute information on the buildings themselves. Smaller buildings such individual residential homes are not included in this file. The contours layer is the largest layer in the data catalogue. The contours were created from 40m Digital Elevation Model and breaklines from the 2005 aerial imagery (scale of 1:15,000) and are area available for download as tiled sections.

The thematic data are point layers that show the locations for the following: Ball Diamonds, Basketball Courts, Beaches, Community Gardens, Lawn Bowling, Murals, Museums, Outdoor Pools, Outdoor Rinks, Parks, Skateboard Parks, Sledding Hills, Splash pads, Sports fields, Tennis courts, Tree inventory, Volleyball courts, Voting places - Ottawa 2012 and Wading Pools. Included in most of these is the name of each particular feature, along with the address and contact information.

Also available in the data catalogue are layers that are available only in csv/xls or xml. Some of these include traffic web cams, city parking lots, public access defibrillators, recreational events calendar, transit schedule, library locations and election results to name a few. Even though these are only available in csv/xls or xml, they can still be converted to a GIS format since most of these have some sort of location characteristic in the data. For example, the traffic camera layer, city parking lots and OC Transpo Schedules all have a latitude and longitude included in the data. The OC Transpo Schedule in particular is extremely valuable since it gives users the exact location of each bus stop, along with the particular times of specific bus routes. This is the same data that is provided to Google Maps for its public transit routing and directions.

Searching for data on the Open Data website is pretty basic. Users don't have the option of using a dedicated search box and they can't search for a specific category. The datasets are organized alphabetically on the data catalogue webpage, with the format of the dataset quickly defined next to it in a table format.

When a user clicks on the name of the dataset, additional information such as description, data owner, data currency, accuracy, attributes and download formats is available. This gives a nice overview of the data before it is downloaded by the user and allows them to contact the data owner if there are issues with the dataset. No other information or metadata is included.

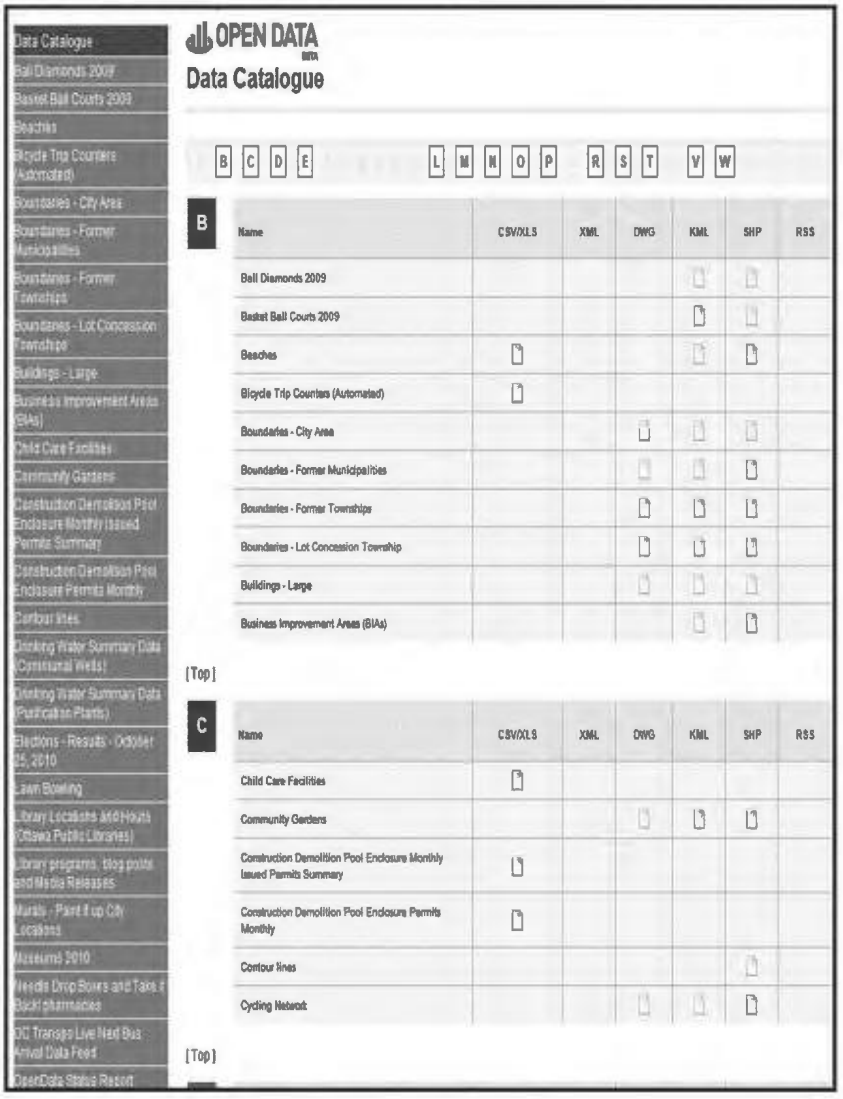


Figure 1. Open Data Catalogue

Most of the geospatial datasets come in a variety of formats for users to download. Users can download the data in Esri Shapefile, AutoCAD dwg and/or KML. The coordinate system used in the datasets for the Esri Shapefile and the AutoCAD DWG formats is the local Modified Transverse Mercator, zone 9, while all of the data available through KML are in WGS 84. It should be noted that users that don't know how to use any of the three formats mentioned above can still view the datasets through the city of Ottawa e-maps application. There is no link to the Ottawa e-maps website (apps104.ottawa.ca/emap/). The website is best viewed with Firefox or Internet Explorer with the Autodesk Mapguide plugin installed.

As described above, the Open Data website has many layers that are worth exploring. A look at the terms of use confirms that the data are open as the city allows people to use the data in a royalty-free, non-exclusive licence to use, modify, and distribute the datasets. The Open Data website also provides an easy way for users to recommend datasets of interests and to give feedback on the datasets used. This can be done by contacting specific authors of the dataset or through the online feedback form. In addition, users are encouraged to sign up to twitter or subscribe to either the OpenData mailing list or the RSS feed to keep up-to-date with future data releases. With all of these features, the OpenData Ottawa website is a great place to discover and download data of Ottawa.

Joel Rivard
Carleton University

GIS TRENDS

ON THE MAP : THE MAP TREND LOCATOR

Courtney Lundrigan

SPOTLIGHT ON HISTORICAL GIS

Old Maps Online

http://www.oldmapsonline.org

About

Old Maps Online is a portal containing historical maps from around the world. Content is contributed by various libraries worldwide, and is searchable in the portal. It is a collaborative effort between the Great Britain Historical GIS Project and Klokan Technologies GmbH, Switzerland.

Scope

The portal's content ranges from 1000 to 2010 AD. Many contributors are British, so there is more European content than North American content. The portal is powered by Google sites and has content contributed from prominent collections, such as the New York Public Library Map Division and the David Rumsey Historical Map Collection.

Pros

-Allows users to access multiple digital map collections in a single search.

-The portal is a collaborative effort and is still looking for contributors, so it presents a good opportunity for institutions to make its digital map collection more accessible.

-Host institutions maintain copyright and intellectual property rights for contributed content.

Limitations

-The quality of the content and metadata may not always be consistent because it depends on the extent of the host institution's coverage.

-In the same vein, the user's ability to manipulate the maps will depend on how the host institution has made the content available.

Features

-Searchable interface with summary of results and thumbnail images appearing on the right

-There is a date slider so users can narrow results by date

-Suggested search terms lets users see what geographic locations are indexed as they search

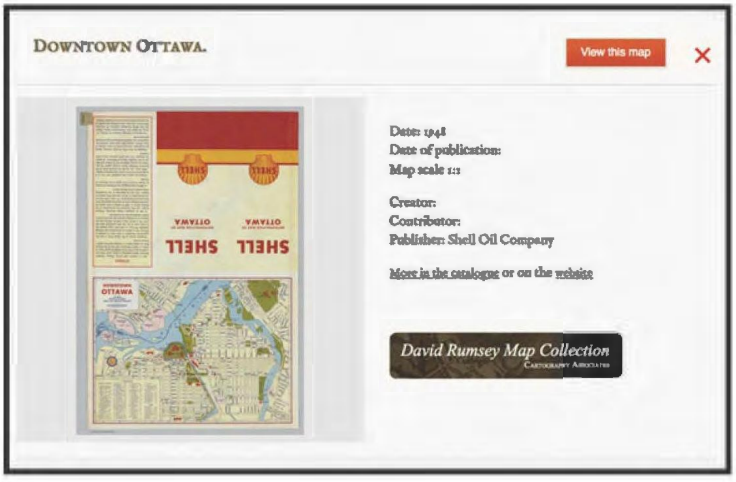
-Search results redirect to the host institution

Connected?

Yes. The portal has a blog within the website that is updated regularly with news about the portal and its contributors. Old Maps Online is also using Facebook, Twitter, and Google+ to communicate with users and stakeholders.

Recommended for Users

Yes. Users will find a vast collection of digital historical maps available at Old Maps Online. Although North American content is not as robust as European content, it allows users to further explore the contributors' collections. Old Maps Online is an excellent resource for finding historical maps.



ACMLA MEMBRES 2012 MEMBERS

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Honorary Members / Membres Honoraires

Betty Kidd
82 First Avenue
P.O. Box 370
Russell, ON K4R 1E2
bkiddca@yahoo.ca

Serge Sauer
73 Biscay Road
London, ON N6H 3K8

Grace Welch
235 Castlegarth Cres.
Ottawa, ON K2J 5N6
gwelch@uottawa.ca

Joan Winearls
273 Erskine Ave.
Toronto, ON M4P 1Z6
joan.winearls@utoronto.ca

Full Members / Membres à par entières

Tom Anderson
Archivist
Provincial Archives of Alberta
tom.anderson@gov.ab.ca

Marilyn Andrews
Geography Liaison Librarian
Dr. John Archer Library (LY107.23)
University of Regina
3737 Wascana Parkway
Regina, SK S4S 0A2
Marilyn.Andrews@uregina.ca

* Jo Ashley
OCUL Scholars Portal
University of Toronto Libraries
130 St. George Street
Toronto, ON M5S 1A5
jo@scholarsportal.info

Mary-Ellen Badeau
Archivist – Cartographic Records
Provincial Archives of New Brunswick
P.O. Box 6000
Fredericton, NB E3B 5H1
mary-ellen.badeau@gnb.ca

Colleen Beard
University Map Library
Brock University
St. Catharines, ON L2S 3A1
cbeard@brocku.ca

Gordon Beck
Library Assistant
Lloyd Reeds Map Collection
McMaster University
1280 Main St. W.
Hamilton , ON L8S 4L6
beckg@mcmaster.ca

* Stephanie Benger
Library & Information Services Administrator
Golder Associated, Edmonton
#300 10525-170 Street
Edmonton, AB T5P 4W2

Stéfano Biondo
Bibliothèque de l'Université Laval
Pavillon Jean-Charles Bonenfant
2345, allée des Bibliothèques Local 4120
Québec, QC G1V 0A6
Stefano.Biondo@bibl.ulaval.ca

Trudy Bodak
22 Clarissa Drive,
Suite 1513
Richmond Hill, ON L4C9R6
tbodak@yorku.ca

Kristin Bogdan
kristin.bogdan@gmail.com

Daniel Brendle-Moczuk
Geography/Maps Librarian
UVic Libraries
P.O. Box 1800 STN CSC
Victoria, BC V8W 3H5
danielbm@uvic.ca

Thomas J. Brittnacher
GIS Librarian
Walter C. Koerner Library
University of British Colombia
1958 Main Mall
Vancouver, BC V6T 1Z2
Tom.brittnacher@ubc.ca

* Robert Brown
University of Toronto Mississauga - HMALC Library
3359 Mississauga Road North
Mississauga, ON L5L 1C6
robert.brown@utoronto.ca

P. Louise Buck
plouisebuck@gmail.com

Barb Cloutier
NRCan Library (Earth Sciences)
615 Booth Street, Rm 121
Ottawa, ON K1A 0E9
Barb.Cloutier@NRCan-RNCan.gc.ca

Dana Craig
203C Scott Library
York University
4700 Keele Street
Toronto, ON M3J 1P3
dcraig@yorku.ca

Gail Curry
Geoffrey R. Weller Library
University of Northern British Columbia
3333 University Way
Prince George, BC V2N 4Z9
curryg@unbc.ca

Edward H. Dahl
720, chemin Fogarty
Val-des-Monts, QC J8N 7S9
ed.dahl@sympatico.ca

* Noel Damba
Ryerson University
350 Victoria Street
Toronto, ON M5B 2K3
n2damba@ryerson.ca

* Cynthia Dietz
GIS Environmental Studies Librarian
University of Manitoba
30 Pheasant Street
Winnipeg, MB R3T 1V8
dietzcg@ad.umanitoba.ca

Eva Dodsworth
Geospatial Centre
University of Waterloo Library
Waterloo, ON N2L 3G1
edodswor@uwaterloo.ca

Danial Duda
Map Library
Memorial University of Newfoundland
Queen Elizabeth II Library
St. John's, NL A1B 3Y1
dduda@mun.ca

Monica Ferguson
Maps, Data & Government Information Centre
Carleton University Library
1125 Colonel By Drive
Ottawa, ON K1S 5B6
monica_ferguson@carleton.ca

Marcel Fortin
GIS/Map Librarian
University of Toronto
130 St. George St.
Toronto, ON M5S 1A5
marcel.fortin@utoronto.ca

Erin Forward
GSG Information Centre
University of Ottawa
65, University
Ottawa, ON K1N 6N5
eforward@uottawa.ca

Wenonah Fraser van Heyst
Department of Geography
Brandon University
270-18th Street
Brandon, MB R7A 6A9
fraserw@brandonu.ca

Bonnie Gallinger
William C. Wonders Map Collection, 1-26 Cameron Library
University of Alberta
Edmonton, AB T6G 2J8
bonnie.gallinger@ualberta.ca

Lucie Gendron
Université de Sherbrooke
2500, boulevard Université
Sherbrooke, QC J1K 2R1
Lucie.gendron@usherbrooke.ca

Peter Genzinger
Librarian
Wilfred Laurier University Library
75 University Ave. West
Waterloo, ON N2L 3C5
pgenzinger@wlu.ca

Suzette P. Giles
sgiles@ryerson.ca

Louise Goodwin
160 Willow Street
Amherst, NS B4H 3W5
lgoodwin@nsgc.gov.ns.ca

Claire Gosson
38 Ridgeburn Gate
Ottawa, ON K1B 4C3
claire.gosson@rogers.com

Susan Greaves
GIS / Map Librarian
Joseph S. Stauffer Library
Queen's University
Kingston, ON K7L 5C4
greaves@queensu.ca

* Anne Hakier
Université de Montréal - Cartothèque
C.P. 6128 Succursale Centre-Ville
Montréal, QC H3C 3J7
anne.hakier@umontreal.ca

Siobhan Hanratty
Library Assistant - Map Room
UNB Libraries - Harriet Irving Library
P.O. Box 7500
Fredericton, NB E3B 5H5
hanratty@unb.ca

Leanne Hindmarch
Data and Geospatial Librarian
Scholar's Portal (OCUL)
University of Toronto
Robarts Library, 7th Floor
130 St. George Street
Toronto, ON M5S 1A5
l.hindmarch@utoronto.ca

Christine Hoeppner
Head of Resource Analysis & Service Assessment
University of Winnipeg Library
515 Portage Ave.
Winnipeg, MB R3B 2E9
c.hoeppner@uwinnipeg.ca

Jasmine Hoover
GIS Librarian
University of Saskatechwan
3 Campus Drive
Saskatoon, SK S7N 5A4
Jasmine.hoover@usask.ca

Dan Jakubek
Ryerson University Library
350 Victoria St.
Toronto, ON M5B 2K3
djakubek@ryerson.ca

* Sharon Janzen
Brock University
500 Glenridge Avenue
St. Catharines, ON L2S 3A1
sjanzen@brocku.ca

David Jones
Map Librarian (Ret) / Map Cataloguer
1-55 Cameron Library
University of Alberta
Edmonton, AB T6G 2J8
david.jones@ualberta.ca

* Andreas N Korsos
Cartographer & Geographic Information Analyst
5616-141 Ave
Edmonton, AB T5A 1H6
ankorsos@northwestvoyageur.com

Diane Lacasse
Ressources naturelles Canada
615 rue Booth, pièce 650
Ottawa, ON K1A OE9
lacasse@nrcan.gc.ca

Sylvie Lafortune
J.N. Desmarais Library
Laurentian University
Sudbury, ON P3E 2C6
slafortune@laurentian.ca

Larry Laliberté
llaliber@ualberta.ca

* Amber Leahey
Metadata Librarian
Scholars Portal, Ontario Council of University Libraries
130 St. George Street, 7th Floor
Toronto, ON M5S 1A5
amber.leahey@utoronto.ca

* Sylvain Lemay
Natural Resources Canada
615 Booth Street, Room 715
Ottawa, ON K1A 0E9
slemay@nrcan.gc.ca

* Paula Martin
University of Guelph
McLaughlin Library, 50 Stone Rd. E.
Guelph, ON N1G 2W1
paulam@uoguelph.ca

Lori Martin
Cartographic Applications Officer
Ontario Ministry of Transportation
301 St. Paul Street
St. Catharines, ON L2R 7R4
lori.martin@ontario.ca

Jennifer Marvin
GIS Librarian
University of Guelph
jmarvin@uoguelph.ca

Susan McKee
University of Calgary
TFDL 460B
2500 University Drive NW
Calgary, AB T2N 1N4
smckee@ucalgary.ca

David J. Mercer
Map Room - Queen Elizabeth II Library
Memorial University of Newfoundland
St. Johns, NL A1B 3Y1
djmercer@mun.ca

Linda Mitchell
Government Documents Librarian
Lakehead University
Thunder Bay, ON P7B 5E1
linda.mitchell@lakeheadu.ca

* Jonathan Morgan
Geospatial Centre
University of Waterloo Library
jsmorgan@uwaterloo.ca

Iris Morgan
Spatial and Numeric Data Services
TFDL 460
2500 University Dr., NW
Calgary, AB T2N 1N4
ilmorgan@ucalgary.ca

Cathy Moulder
9 Woodend Dr.
Carlisle, ON L0R 1H2
moulder@mcmaster.ca

* Janina Mueller
Original Cataloguer & Reference Specialist
University of Toronto
255 Glenlake Avenue, Apt. 2214
Toronto, ON M6P 1G2
Janina.mueller@utoronto.ca

Andrew Nicholson
2300 Parkhaven Blvd.
#304
Oakville, ON L6H 6V9
Andrew.nicholson@utoronto.ca

Jean-François Olivier
Le groupe Système Forêt Inc.
255 route du Pont, Suite 200
Saint-Nicolas, QC G7A 2V1
jfo@gsf.gc.ca

Rosa Orlandini
rorlan@yorku.ca

* Jean-François Palomino
Bibliothèque et Archives nationales du Québec
2275, rue Holt
Montréal, QC H2G 3H1
jeanfrancois.palomino@banq.qc.ca

* Sara Perkins
University of Waterloo
7 Melville Street South
Cambridge, ON N1S 2H4
sperkins@uwaterloo.ca

Micheline Picard
Library Technician
6215, 10e Avenue
Montréal, QC H1Y 2H7
picard.micheline@uqam.ca

Susan Pinard
Cartographic Specialist
Maps, Data and Government Information Centre
Carleton University Library
1125 Colonel By Drive
Ottawa, ON K1S 5B6
Susan_pinard@carleton.ca

Richard Hugh Pinnell
640 Cedargrove Pl
Waterloo, ON N2L 4Y9
richpinell@rogers.com

* Virginia Pow
Map Librarian
University of Alberta
I-64 Cameron Library
Edmonton, AB T6G 2J8
virginia.pow@ualberta.ca

Joel Rivard
Maps, Data & Government Information Centre
Carleton University Library
1125 Colonel By Drive
Ottawa, ON K1S 5B6
joel_rivard@carleton.ca

Grace Romanow
Public Service Assistant
University of Alberta Libraries
1-61 B Cameron Library
University of Alberta
Edmonton, AB T6G 2J8
Grace.romanow@ualberta.ca

Tim Ross
Map Section, Koerner Library
University of British Columbia
1958 Main Mall
Vancouver, BC V6T 1Z2
timross@interchange.ubc.ca

Joseph T. Sas
Library and Archives Canada
550 de la Cité Blvd
Gatineau, QC K1A 0N4
joseph.sas@bac-lac.gc.ca

Ann Smith
31 Cooperage Lane
P.O. Box 354
Port Williams, NS B0P 1T0
ann.smith@acadiau.ca

* Sylvie St-Pierre
Librarian/bibliothécaire
Université du Québec à Montréal
C.P. 8889, succursale Centre-ville
Montréal, QC H3C 3P3
St-pierre.sylvie@uqam.ca

Sherri Sunstrum
Map Specialist
Carleton University Library
1125 Colonel By Dr.
Ottawa, ON K1S 5B6
Sherri_sunstrum@carleton.ca

Maxine Tedesco
The University of Lethbridge Library
4401 University Drive
Lethbridge, AB T1K 3M4
maxine.tedesco@uleth.ca

Rudolf Traichel
Map Cataloguer
UBC
401-6395 Hawthorne Lane
Vancouver, BC V6T 1Z4
Rudi.traichel@shaw.ca; rudi.traichel@ubc.ca

Allison Tremblay
Library Assistant, Data & GIS Specialist
JND Library
Laurentian University
935 Ramsey Lake Rd.
Sudbury, ON P3E 2C6
atremblay@laurentian.ca

Roger Wheate
Geography
University of Northern British Columbia
3333 University Way
Prince George, BC V2N 4Z9
wheate@unbc.ca

Philip Wolfart
842 Holly Avenue
Winnipeg, MB R3T 1W4
pwolfart@shaw.ca

Alberta Auringer Wood
66 Meredith Dr.
P.O. Box 225
Ilderton, ON N0M 2A0
awood@mun.ca

Cheryl Woods
Serge A. Sauer Map Library
Western Libraries
1151 Richmond St. N.
London, ON N6A 5C2
cawoods@uwo.ca

Deena Yanofsky
Coordinator
Walter Hitschfeld Geographic Information Centre
McGill University
809 Sherbrooke Street West, rm. 205
Montreal, QC H3A 2K6
Deena.yanofsky@mcgill.ca

Barbara Znamirowski
Maps, Data & Government Information Centre
Thomas J. Bata Library
Trent University
Peterborough, ON K9J 7B8
bznamirowski@trentu.ca

Associate Members / Membres associes

Paige Andrew
Maps Cataloging Librarian
Pennsylvania State University
126 Paterno Library
University Park, PA 16802-1805 U.S.A.
pga2@psu.edu

Terence Brennan
4523 King Edward Avenue
Montréal, QC H4B 2H6

Dr. Andrew S. Cook
4 West Road
Newport-on-Tay
Fife, DD6 8HG Scotland
dalrymple.research@yahoo.co.uk

Judith Fox
Map Librarian
University of Reading Library
Whiteknights
PO Box 223
Reading, RG6 6AE England
j.a.fox@reading.ac.uk

Philip Hoehn
51 Levant Street
San Francisco, CA 94114-1409 U.S.A.
philhoehn@juno.com

Ingrid Kessel-Taylor
PSEP Canada
2044 Quincy Ave
Ottawa, ON K1J 6B3
acquis@smtp.gc.ca

Rebecca Lowery
Map and Data Services Librarian
University of Illinois at Chicago
801 S. Morgan, Rm. 3-454
Daley Library MC 234
Chicago, IL 60607 U.S.A
rplowery@uic.edu

* Courtney Lundrigan
Ryerson University
350 Victoria Street
Toronto, ON M5B 2K3
clundrig@ryerson.ca

David Malaher
2-2001 Nordic Pl.
Whistler, BC V0N 1B2
david@malaher.org, davidmcq@sc.edu

* Cameron Metcalf
University of Ottawa
65 University Private
Ottawa, ON K1N 6N5
cmetcalf@uottawa.ca

Anita Oser
P.O. Box 2834
Cullowhee, NC 28723 U.S.A.
oanitak@yahoo.com

Gerald Penney
Gerald Penney Associate Ltd.
Box 428
St. John's, NL A1C 5K4
gpaltd@NL.ROGERS.COM

Daniel T. Seldin
800 N. Smith Road Apt. 5-S
Bloomington, IN 47408 U.S.A.
seldin@indiana.edu

Petra Thoms
World of Maps
1235 Wellington Street
Ottawa, ON K1Y 3A3

Kathleen Wyman
40 Robert Street
Weston, ON M9N 2J7

Chan Tsang Priscilla Kwok Yu
Map Librarian
Dept. of Geography
University of Hong Kong
Pokfulam Road
Hong Kong, China
hragtky@hku.hk

Student Members / Membres étudiant(e)s

Francine Berish
318 Fern Avenue
Richmond Hill, ON L4C 8P4
francine.berish@gmail.com

* Joelle Reiniger
University of Alberta
501-9825 103 Street
Edmonton, AB T5K 2M3
joelle.reiniger@gmail.com

Sarah Simpkin
75 Ellen St., Suite 901
Barrie, ON L4N 7R6
sarahsimpkin@gmail.com

* Carrie So
University of Toronto
1525-500 Doris Avenue
Toronto, ON M2N 0C1
carrielynn.so@gmail.com

Institutional Members / Établissement membres

Alexander Turnbull Library
invoice #128464
P.O. Box 1467
Wellington, 6140 New Zealand

Archives nationales du Québec
Bibliothèque
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Sainte-Foy, QC G1V 4N1

Librarian
Archives NZ
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TE ARO
Wellington , 6144 New Zealand

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3700 Willingdon Ave.
Burnaby, BC V5G 3H2

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Montréal, QC H2G 3H1

Acquisitions Services, C&RD
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Map Librarian
Map Library
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Serials Department
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Map Library
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Goldstream Publishing Inc.
Attn : Sean Simmons, President
PO BOX 182
Prince George, BC V2L 4S1
sean@mapjungle.com

Pusey Library
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Serials Division
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Approvisionnement et construction
Direction Environnement et services techniques
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855 Sainte-Catherine est, 3e étage
Montréal, QC H2L 4P5

Serials Section
Illinois State Library
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Springfield, IL 62701-1703 U.S.A.

Technical Services Department
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McMaster University Library
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Electronic Resources & Serials
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Map Room, Queen Elizabeth II Library
Memorial University of Newfoundland
St. John's, NL A1B 3Y1

National Library of Scotland, Serials Team
Causewayside Building
Upper Gray Street
Edinburgh, EH9 1SL Scotland, UK

Archives and Research Library
New Brunswick Museum
277 Douglas Avenue
Saint John, NB E2K 1E5

Map Division
New York Public Library
11 W 40th Street
New York, NY 10018 U.S.A.

Serials Department
Newberry Library
60 W. Walton Street
Chicago, IL 60610 U.S.A.

The Education Centre Library
Nipissing University/Canadore College
c/o Tom Power
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100 College Dr.
North Bay, ON P1B 8L7

Northwestern University Libraries
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NRCan Library
(Ottawa)-Earth Sciences
601 Booth Street
Room 350
Ottawa, ON K1A 0E8

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Continuation Acquisition Div
44766580
1858 Neil Avenue Mall
Columbus, OH 43210-1286 U.S.A.

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Princeton, NJ 08544-2002 U.S.A.

Periodicals
Provincial Resource Library
St. John's, NL A1B 3A3

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Kingston, ON K7L 5C4

Learning Resources Centre
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350 Victoria Street, Rm. L-563
Toronto, ON M5B 2K3

Periodicals Beatley/Science
Simmons College Library
300 Fenway
Boston, MA 02115-5820 U.S.A.

Morris Library Periodicals
Southern Illinois University
605 Agriculture Dr.
Carbondale, IL 62901 U.S.A.

State Library of Victoria, Serials Section
328 Swanston Street
Melbourne, Victoria 3000 Australia

State University of New York – Binghamton
Library Serials Section
Vestal Parkway East POB6012
Binghamton, NY 13902 U.S.A.

Syracuse University Library, Periodicals Division
Syracuse, NY 13244-2010 U.S.A.

Texas A & M University
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5000 Tamu
College Station, TX 77843-0001 U.S.A.

Toronto Reference Library, Periodicals Centre, Serials
789 Yonge St.
Toronto, ON M4W 2G8

Trent University
Bata Library, Serials Dept.
PO Box 4800
Peterborough, ON K9J 7B8

UCLA Maps & Govt Serials
11020 Kincross
Box 957230
Los Angeles, CA 90095-7230 U.S.A.

UNC Chapel Hill, E-Resources and Serials Management
Davis Library CB# 3938
Chapel Hill, NC 27514-8890 U.S.A.

Univ Autonoma de Madrid-Btca. Humanidades
Ciudad Univ de Cantoblanco
28049 Madrid, Spain

Université de Moncton
Bibliothèque Champlain, Service des Periodiques
18 Ave Antonine-Maillet
Moncton, NB E1A 3E9

Bibliothèques – ACQ (PER)
C.P. 6128 Succ. Centre-Ville
Montréal, QC H3C 3J7 Canada
acqperi@bib.umontreal.ca

Bibliotheque - Acquisitions
Université de Québec à Chicoutimi
555 Boulevarde de L'Université
Chicoutimi, QC G7H 2B1

Bibliothèque / Acquisitions
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C.P. 8889, Succ. Centre-ville
Montréal, QC H3C 3P3

Bibliothèque - Service des acquisitions
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300, allee des Ursulines
Rimouski , QC G5L 3A1

Bibliothèque
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C.P. 500, Trois-Rivières, QC G9A 5H7

Bibliographic Services - Serials
University of Alberta Library
5th Floor Cameron
Edmonton, AB T6G 2J8

University of British Columbia, Library Serials
PO Box 2119
Vancouver, BC V6B 3T5