Cartouche

Newsletter of the Canadian Cartographic Association
Bulletin de l'Association canadienne de cartographie

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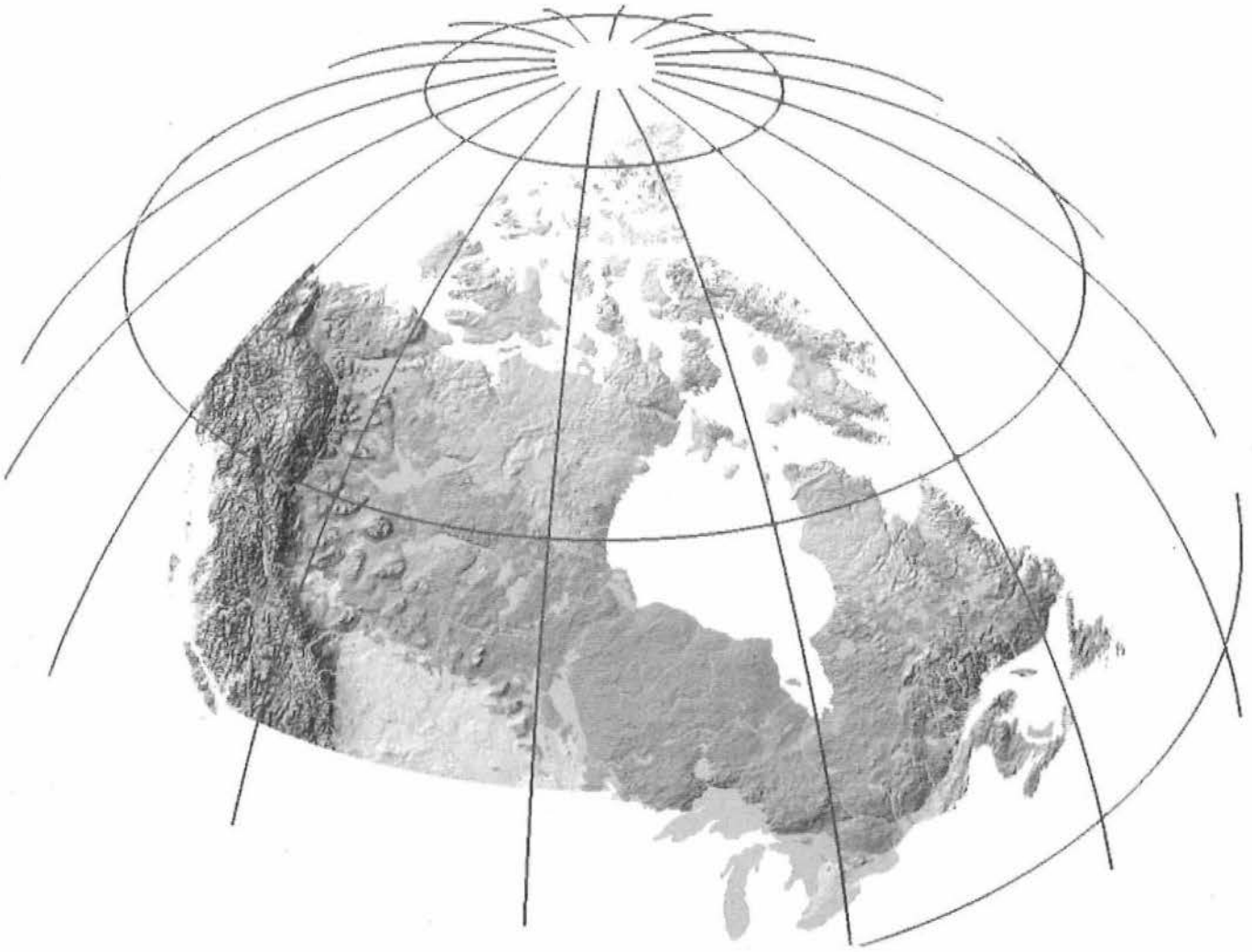

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Editor / *éditor:*
Gary E. McManus,
101-1550 W. 11th Avenue
Vancouver, BC CANADA V6J 2B6
Tel / *tél:* (604) 738-9296
E-mail / courr.élect:
gmcmanus@cartodesign.com

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Proposed Publishing Dates for 2004

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#56 (Winter)	Oct. 15	Nov. 15

ISSN 1183-2045

Inside this issue / *Sommaire....*

About the cover...

The map of Canada on the cover serves as an introduction to the story on page 6 about the Bank of Canada's new $100 banknote. The image printed here is a grey scale conversion of the original full colour version which was sent to the Bank of Canada by the *Atlas of Canada* geographers and cartographers to be incorporated into the design and production of the new banknote. I would also like to thank the Bank of Canada for allowing me to use an image of the $100 bank note which appears with the article supplied by Claire Gossen.

Editor's desktop...

By now I know you are all prepared and ready to head off to this years' Annual General Meeting and Conference in Lindsay, Ontario, at Fleming College's Geomatics Institute. The organizers have been working hard and I am sure it will be a great meeting. The centre pages (7-8) of this issue contain a summary of the planned events. Check it out. I unfortunately will not be able to attend the meeting this year but I do look forward to your sending me your impressions, photographs and comments about the meeting which I will publish in *Cartouche*.

I was delighted to receive not one but two letters to the editor for this issue. I think it is safe to say this may be a new record. I think it is absolutely wonderful. It gives me comfort to know that people are actually reading *Cartouche*. Sometimes it is very lonely out here since I usually don't get much feedback. But I like it. I even like negative feedback. Any feedback is better than none at all. I hope you all will read the comments from the readers on page 10 in the 'Mailbox' section. Please feel free to add your two cents as well.

Welcome New Members
Bienvenue aux nouveaux membres !

Scott Hayward ..... Halifax, NS
Dan Jacobson ..... Calgary, AB
Ian O'Connell ..... Victoria, BC
Ken Pawliw ..... Kanata, ON
Brian Port ..... Sidney, BC
Jeff Rush ..... Cambridge Bay, NU
Peter Schaub ..... Vancouver, BC
Darren Young ..... Edmonton, AB

Jean McKendry
University of Idaho

Managing Colour (Part II): Colour Profiles and Management Systems

Introduction

Cartouche Number 53 included Part I of "Managing Colour". Part I described some of the challenges and solutions to selecting and managing consistent colour schemes for thematic maps in an atlas series produced within a desktop environment (e.g., printed using a colour laserjet printer). In the course of working on the atlases and other design projects, I became aware that formal colour management tools were available, such as Apple's ColorSync or Microsoft's Image Color Management Technology (ICM). Since colour management is often important in a cartographic context, I thought it would be useful to learn more about colour management systems. Part II (this article) provides a general introduction to colour profiles and an industry-based colour management system.

Rationale for a Colour Management System

Managing colour is an increasingly important aspect of design, traditional printing, desktop printing, web-publishing, and video production. Various input devices (such as scanners and cameras), display devices (such as monitors and LCD projectors) and output devices (such as printers and printing presses) represent and produce colour differently. An obvious example is the difference between devices that produce colours using the additive primaries (red, green, blue) compared with devices that produce colours using the subtractive primaries (cyan, magenta, yellow). Even identical devices can produce inconsistent colour. Fraser (2001) suggests visiting an electronics store and looking at a wall of televisions. The televisions receive the same signal but produce different colours in response to this signal.

Cartographers, designers, printers, and other professionals in the business of producing colour products desire predictability and consistency. Many believe that a colour management system is needed, that is, a system that can take the values that represent a desired colour on one device and produce corresponding values for another device to achieve the same colour. For example, a system is needed that will take the RGB values for colours displayed on a computer monitor and produce CMYK values that will achieve those colours on a printing press. Achieving the same colours in a design project requires different values to express those colours throughout the project's workflow.

Specifying a Standard Colour Management System

The development of an architecture and specifications for a standard colour management system has been led by the International Colour Consortium (ICC). The ICC was formed in 1993 by Adobe Systems Inc.; Agfa-Gevaert N.V.; Apple Computer, Inc.; Eastman Kodak Company; FOGRA-Institute; Microsoft Corporation; Silicon Graphics, Inc.; and Sun Microsystems, Inc. ICC is an industry consortium, not a national or international standards group. Membership now includes over 70 companies and/or organizations (McDowell 2001).

ICC has developed a standard colour management system that is based on a (1) device-independent, reference colour space, (2) individual profiles that describe how specific devices produce

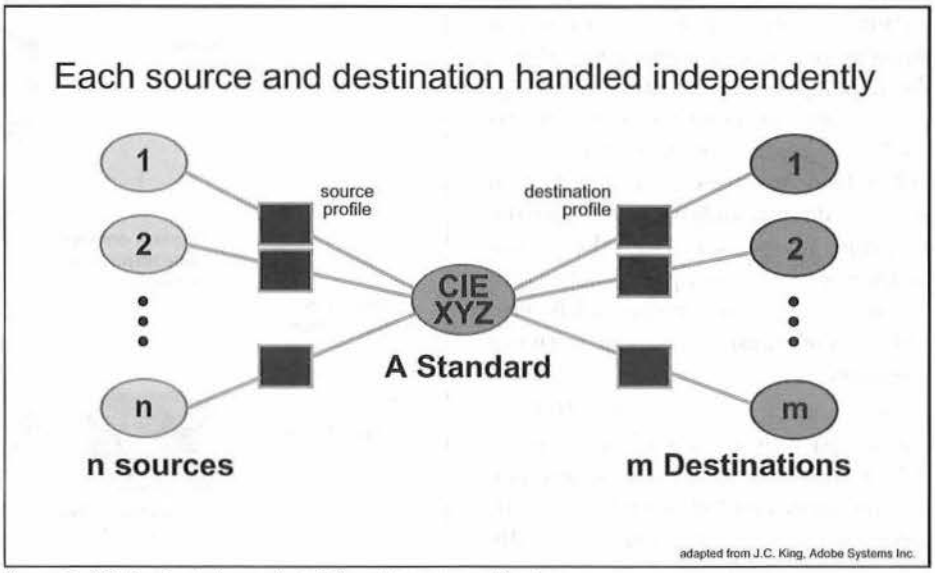


Figure 1. *ICC Device-Independent Colour Management System*

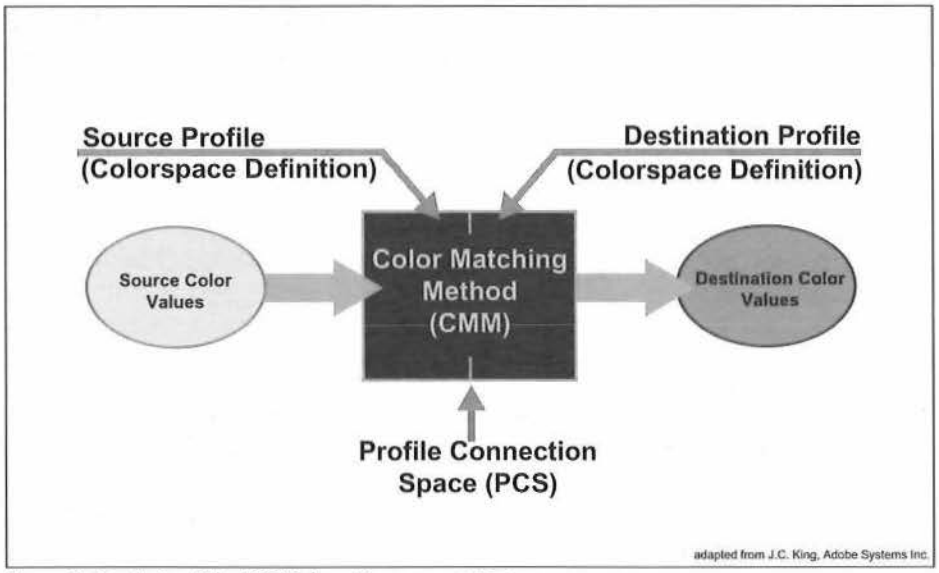


Figure 2. *Key Parts of the ICC-Colour Management System*

colour, and (3) a mechanism to relate different devices (through the reference colour space) to produce the "same" colour.

Figure 1 illustrates the ICC approach. Colour from N sources (or input devices) are converted to a common standard through specific profiles for those individual sources. A second conversion is done from the common standard to the destination sources (or output devices) through profiles for those sources. The output colour is then supposed to represent the best match for the input colour.

Holm (2002) uses a language analogy to explain a device-independent approach to colour management. Each input and output device "speaks" a different language or dialect. It's necessary to know the language of the existing text (e.g., French) and the language to which text must be translated (e.g., Russian). You can either have multiple dictionaries that translate directly only from one specific language to another. The other, more efficient option is to use paired dictionaries — one translates to a reference language and a second translates from the reference language.

ICC uses the CIE/XYZ and CIE/LAB colour space as the common standard. (CIE is the abbreviation for Commission Internationale de l'Éclairage]. These CIE colour spaces are expressed numerically and are experimentally derived using a "standard" observer, illuminant, and red, green and blue primaries. The CIE specification is a good representation of the colour matching capabilities of human vision and has a large gamut. This means that a wide range of colours can be specified in the CIE colourspace.

In the ICC colour management system, the CIE/XYZ or CIE/LAB colour space (as the common standard), is called the Profile Connection Space (or PCS). Color profiles are individual data files that describe how a specific device produces colour. The colour matching method (or CMM) is the "engine" that performs the transformations between devices (using the devices' colour profiles) through the PCS. The CMM is the responsibility of the computer's operating system (e.g., ColorSync in the Macintosh OS and Image Color Management in the Microsoft Windows OS). Figure 2 shows the key parts of and relationships in the ICC colour management system.

In the ICC colour management system, transformations between devices must also take into account variation in their colour gamut, or all of the possible colours which can be represented. For example, the RGB gamut of a typical monitor can include more saturated colours than the CMYK gamut of a printer. Input colours that cannot be produced in the output device need to be altered to colours that can be represented. The ICC standard provides for gamut-mapping through "rendering intents" or gamut mapping styles: perceptual (for pictures); saturated (for business graphics); relative colorimetric (for logos); absolute colorimetric (for strict conversions where the best possible match is important) (see King for further explanation).

Figure 3 shows an example of a colour-managed workflow. Images may be input from a scanner or camera with its colour profile (source colour) and converted to the working colourspace (such as standard RGB or sRGB) which has its own profile. Two-way transformations are completed

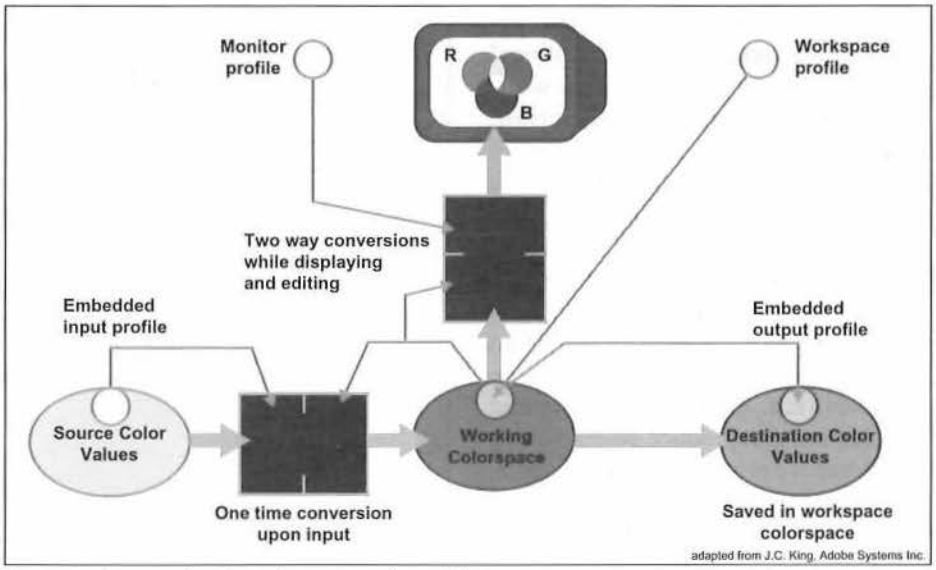


Figure 3. *An example of a colour-managed workflow.*

during editing and displaying between the working colourspace and the monitor colourspace. The monitor profile is supplied by the operating system and the working coulourspace profile is selected by the user. The final document is produced using a profile for the output device being use (e.g., printer).

Conclusion

As the ICC colour management system becomes more widely adopted (the ICC is only about a decade-old), cartographers who work with service bureaus, printing presses, web publishing, and other production sources will likely need to become familiar with this system. Many readers of Cartouche have probably entered this world already. I hope this general introduction is helpful to readers (like me) who are just beginning.

Sources

Author's note: most of the source information for this article originated through the ICC (International Color Consortium), a industry-based organization that has developed colour management standards, and its web site <www.color.org >. The purpose of this article is to provide a general synthesis of how colour management is designed to work. Critiques of standards and their application is not within the scope of the article.

Fraser, B. September 2001. Print publishing secrets. *MacWorld* [online version at www.macworld.com].

Holm, T. 2002. Colour management: theory and settion [sic] up your applications. A publication of Pixl Aps, Copenhagen, Denmark. [online PDF called <CMS_theory_setup_2_0.pdf> available at www.color.org/ info_profiles2.html].

King, J.C. no date. Why color management. [online PDF called <whycolormanagement.pdf> available at www.color.org/ info_profiles2.html].

King, J.C. slide presentation [online PDF called <slidepres1.pdf> available at www.color.org/ info_profiles2.html].

McDowell, D. November/December 2001. Color management: what's new from the ICC?. *ThePrePress Bulletin* [online PDF called <2001_11_color management.pdf> available at ww.color.orginfo_profiles2.html].

Reports On-line

Using Topographic LIDAR to Map Flood Risk from Storm-surge Events

Storm-surge flood risk mapping was a major objective of a recent Climate Change Action Fund project to evaluate coastal impacts of climate change and sea-level rise on Prince Edward Island. A paper published recently in the *Canadian Journal of Remote Sensing* documents critical issues in LIDAR data acquisition and processing, including the need for ground validation. It also demonstrates the utility of high resolution digital elevation models (DEMs) derived from LIDAR data for flood risk mapping. The paper is available at *http*://pubs.nrc-cnrc.gc.ca/cjrs/cjrs30/m03-053.pdf

Marine Cadastre Issues: Workshop Report

The "Report on the Outcomes of the UNB-FIG Meeting on Marine Cadastre Issues," held at the University of New Brunswick in Fredericton, New Brunswick on 15-16 September 2003 is available at *http://gge.unb.ca/Research/LandStudies/MarineCadastre/UNB-FIG-Report.pdf*. The aim of the meeting was to highlight conceptual, technical and institutional issues relating to marine cadastres.

A Geospatial Framework for the US Coastal Zone

A recent report from the National Academies' Committee on National Needs for Coastal Mapping and Charting concludes that a national project to collect real-time data on tides, topography and ocean depth along US shorelines should be started to provide more accurate information about the country's coastal zones, including improved maps and charts. The report is available at *http://www.nap.edu/books/0309091764/html/*

Calendar/ *calendrier*

June 8-10 juin, 2004
CCA 2004 ACC
Fleming College
Lindsay, ON
For information / *pour renseignements:*
www.geomaticsatfleming.ca/CCA2004

June 7-9 juin, 2004
GEOMATICS ATLANTIC 2004
Fredericton, NB
For information / *pour renseignements:*
www.geomaticsatlantic.com

June 20-23 juin, 2004
97th Annual Canadian Institute of Geomatics Conference
Ottawa, ON
For information / *pour renseignements:*
www.cig-acsg.ca/page.asp

August 9-12 août, 2004
ESRI International User Conference
San Diego, CA
For information / *pour renseignements: uc@esri.com* or 909-793-2853 ext. 1-1363

October 6-9 octobre, 2004
NACIS XXIV
Annual Meeting
Portland, ME
For information / *pour renseignements: www.nacis.org*

October 27-28 octobre, 2004
GEOMATICS 2004 GÉOMATQUE
Montréal, Québec
For information / *pour renseignements:*
www.geomatics2004.com
www.geomatique2004.com

September 9-12 septembre, 2004
British Cartographic Society 41st Annual Symposium
For information / *pour renseignements:*
www.cartography.org.uk/Pages/Latest/sympDurh.html

New $100 Bill Celebrates Mapping

After nearly 20 years, Canada's $100 banknote has had a facelift. Former Prime Minister Robert Borden still graces the front of the bill, but gone is the familiar Canada goose on the back. It's replaced by a new theme — "innovation and exploration" through mapping.

Marc Garneau, President of the Canadian Space Agency and a member of the blue-ribbon panel for banknote design, suggested that the design of the back of the banknote should celebrate the evolution of mapping in Canada. For more than one hundred years, Natural Resources Canada (NRCan) has been responsible for mapping Canada — a good reason for the Bank of Canada to recommend that NRCan contribute to the development and production of the new $100 banknote.

To illustrate Canada's proud history of cartography and cutting-edge mapping technology, *Atlas of Canada* 's geographers and cartographers developed a unique representation of Canada. The background map of Canada is surrounded by images of mapping methods. A historical map created by Champlain and an image of a birch bark canoe represents cartography's beginnings. The RADARSAT satellite and an NRCan ground station illustrate the new technologies of innovation and exploration.

Given the number of years that paper money stays in circulation, the $100 banknote will be a visible, enduring and well-traded testament to Canada's mapping history.

For more information, please visit *http://atlas.gc.ca/site/english/index.html.*

Le nouveau billet de 100 $ célèbre la cartographie

C'est au bout d'une vingtaine d'années que le billet de banque de 100 $ du Canada a eu ce remodelage. L'ancien Premier ministre Robert Borden orne toujours le recto du billet, mais la familière Bernache du Canada a disparu du verso. Elle est remplacée par un nouveau thème, « l'innovation et l'exploration », illustré par la cartographie.

Marc Garneau, président de l'Agence spatiale canadienne et membre du groupe d'experts sur la conception des billets de banque, a proposé que le verso du billet de 100 $ célèbre la cartographie au Canada. Depuis plus de cent ans, Ressources naturelles Canada (RNCan) est chargé de la cartographie du Canada, d'où la décision judicieuse de la Banque du Canada de recommander que RNCan contribue à l'élaboration et à la production du nouveau billet de banque de 100 $.

Afin d'illustrer la fière histoire de la cartographie et la technologie de pointe en cartographie du Canada, les cartographes et les géographes de *l'Atlas du Canada* ont élaboré une représentation particulière du Canada pour le nouveau billet de banque. La carte de fond du Canada est entourée d'images représentant les méthodes de cartographie. Une carte historique dessinée par Samuel de Champlain et un canot d'écorce représentent les débuts de la cartographie. Le satellite RADARSAT et une station au sol de RNCan illustrent les nouvelles technologies en matière d'innovation et d'exploration.

Comme les billets de banque restent en circulation pendant longtemps, le billet de 100 $ sera un testament visible, durable de l'histoire de la cartographie du Canada et qui fera l'objet de bien des échanges commerciaux.

Pour de plus amples renseignements, consulter le site *atlas.gc.ca/site/francais/index.html.*

No More Atlases for Children Please!

Paul Heersink
Ontario Ministry of Natural Resources
Chair, Cartographic Education IG

Probably one of the most difficult maps for any cartographer to produce is a map for children.

In contrast, maps for adults are easy to create. Once the intended audience and purpose for a map is determined, it is simple to decide the map's content and presentation. A driver who needs directions to her destination, for example, is generally interested in the location and type of roads and not much else. With this in mind, it is then easy to see what needs to be included (roads) and what doesn't (bedrock geology). But children don't drive, hike, etc.—so why do children use maps? Because they have to, because it is part of their school curriculum. A few might seek out and spend time with atlases—map nerds (like us) who read maps for pleasure. But these are the exception. The rule is that children look at maps only in the classroom. So why create an atlas for children?

I have a number of children's atlases at home. Some I like but most I don't. School atlases are generally sober, smaller versions of adult atlases. Commercially-oriented atlases seek to connect with their young readership by providing cartoon figures and cutesy guides that end up being more of a distraction than a help.

Or, they employ bold, almost garish colours to attract attention and even—in an attempt to be simple—use shapes that are so grossly generalized as to become inaccurate and unrecognizable.

"There is a patronizing air about much of what we make for children," wrote Denis Wood about children's atlases in that other esteemed publication of the CCA back in the Spring of 1987: "more crude, with thicker lines and brighter colors, but fewer maps and fewer names, as though the eyes of children were weaker than those of adult atlas readers." He goes on the suggest that it is not the details that children have difficulty with: "Kids can spend hours with the TV Guide, the almanac, the box cores on the sports page – small print and statistics of all kinds." Rather, Wood suggests, it's that so often atlases don't tell a story, just display one map after another with no connecting narrative thread. That's what loses children's interest, he argues.

Do maps need to tell a story to succeed with children? Perhaps. But there might be another, slightly different story connection: perhaps a map succeeds with children when it provides a context, a further explanation to an already-familiar story. How many adults have I heard or read of expressing appreciation for maps in books they read as children? Robert Louis Stephenson's *Treasure Island*; the map to Tolkien's Middle Earth ("Where is Frodo now?"); the map showing the route of the Bismarck in *The Sinking of the Bismarck* as it attempted to escape the ever-closing noose of the British Navy; in all of these examples, an interesting story was made clearer and more exciting with a map.

In most instances, the map offered in the book itself is enough for the young reader. And if it isn't, then the reader is likely to consult an adult atlas—not a children's—atlas for more information. Take Karen Hesse's *Stowaway* (Simon and Schuster: 2000). The map that accompanies the book provides a general indication of Captain Cook's travels but it is sometimes not detailed enough. Neither is a commercial children's atlas. The Canadian Oxford School Atlas, however, does provide the level of geographical detail required by this story of Cook's South Pacific voyages, a level which any adult atlas would achieve as a matter of course. But in either case, the incentive to consult a map didn't come from the school curriculum.

By all means, let us continue producing high-quality maps for children that they will use in the classroom. But let's not pretend that the 10-year-old down the street is going to save his allowance money to buy them.

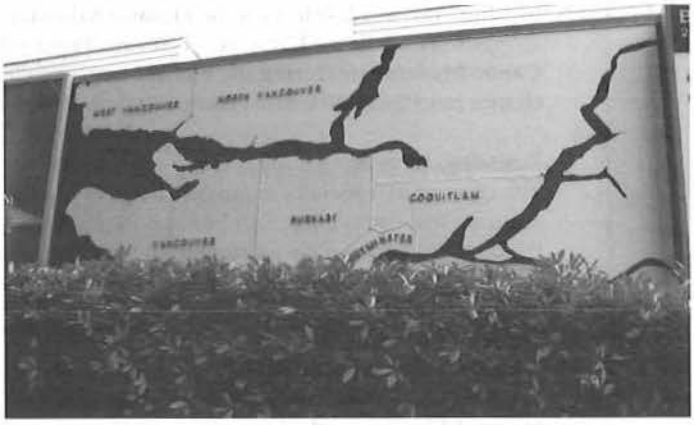
Membership Matters

Several weeks ago those of you on the email list will have received my message that a poster advertising the CCA and the benefits of membership in the Association had been produced and was available from the website. This had been pending for some time and finally it seemed most feasible to release a simple page-size layout in electronic form and solicit the help of the current membership in printing, distributing and posting it. We managed to prepare it just in time to catch university and college students before they had finished the winter semester and departed for summer activities, I hope. I should like to thank Anita Müller for her assistance on the poster and hope that many of you were able to access and print it. Now that we have this basic design, it will be possible to update it from time to time and re-post it. I feel that it is one method of giving the CCA some public exposure and attracting potential new members.

Many thanks to members who have been sending in their Membership Renewals for 2004. If this does not yet include you, or your students, or your work colleagues, or your pals, you can print out a membership form which you will find on the website *http://www.cca-acc.org* (sorry that individual pages on the website are not able to be bookmarked but please navigate to Membership). Please mail the completed form to our new secretary, Diana Hocking (please see address inside the back cover of *Cartouche*), to be sure that you remain on our mailing lists.

The Annual Conference looks very exciting and I anticipate with pleasure meeting many members in Lindsay. The CCA is on its own this year and although no doubt it will be a smaller meeting than the joint ones we have had in recent years, it will be an opportunity to meet new members and renew old acquaintances, and no one need be lost in the crowd. I encourage everyone to make the effort to attend. See you there!

Christine Earl, VP



Wall Map

The map pictured above is mounted on the side of a building near the intersection of Granville Street and West 11th Avenue in Vancouver, BC. It measures about 20 x 20 feet and appears to be constructed of fiberglass over plywood. The lower, or southern portion of the map which extends to include the whole Vancouver region has been obscured by bushes. The creator of this map and its reason for being is unknown at this time. Given the growing conditions in Vancouver eventually it will be totally covered by the bushes or more likely the building will be demolished and rebuilt.

Geomatics Institute
AT FLEMING

Canadian Cartographic Association (CCA) Conference /
Association Canadienne de Cartographie (ACC)

Geomatics—*A Cartographic Revolution*
Géomatiques—*Une Révolution Cartographique*

Tuesday, June 8 to Thursday, June 10, 2004
Du mardi, 8 juin au jeudi, 10 juin 2004
Lindsay, Ontario, Canada

The **2004 Canadian Cartographic Association (CCA) Conference** is fast approaching and we're planning a memorable series of presentations, tours, and events. As the deadline for program submissions has been extended to **May 1st**, our full schedule of presentations is still being determined. However, we can provide details about the general schedule:

Events and Activities

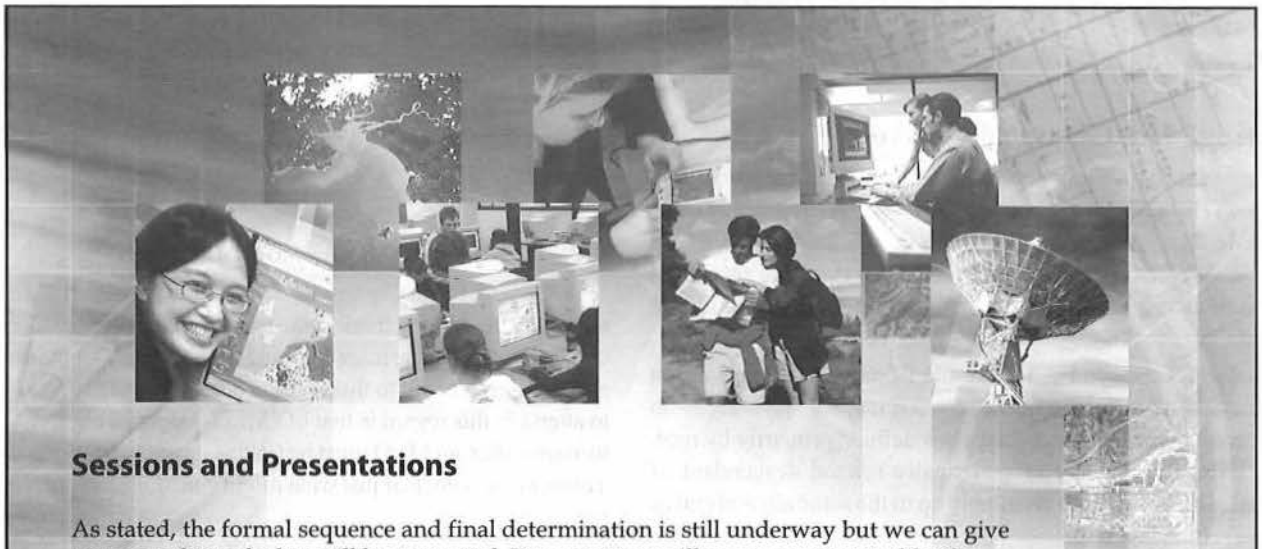
Monday, June 7:
For those arriving before the conference formally starts, we've planned a Peterborough outing. We'll travel by bus at 12:30 to visit the **Ontario Ministry of Natural Resources** geomatics, surveying and air photo lab, followed by a **Trent-Severn Waterway Liftlock** tour and a stop at the **Canadian Canoe Museum**, featuring the worlds' largest collection of canoes and kayaks. Attendees will have a chance to gather at the Frost campus's Auk Lodge during the evening.

Tuesday, June 8:
The conference officially begins on Tuesday morning and, following formal opening remarks, sessions will commence. Exhibits and map displays will be available for your viewing throughout the day and on the days following. In the evening, the **Keynote Address** will be delivered by **Dr. Roberta Bondar**, who became Canada's first woman in space in 1992.

Wednesday, June 9:
Sessions will occur throughout the day, and on display will be the maps of those honoured in this year's **CCA President's Prize Student Competition**. Other highlights include the CCA's **Annual General Meeting** and a late-afternoon **Orienteering and GPS** session. In the evening, entertainment will be provided by the **Kawartha Kavaliers** followed by a dinner, brief announcements, and presentations.

Thursday, June 10:
Sessions will occur throughout the day, and closing remarks will conclude the conference in late afternoon.

Specific schedule-related times are posted at:
www.geomaticsatfleming.ca/cca2004/ProgramDetails.htm



Sessions and Presentations

As stated, the formal sequence and final determination is still underway but we can give you some hint of what will be presented. Presentations will encompass topics like the following:

- **Creating Web Browser SVG Mapping for Health Planners and Geographers**
- **Geomatics and Cartographic Issues in Education**
- **Geographic Information Literacy**
- **The New *Cartographica***
- **Creating a Macromedia Flash Web-based Atlas of British Columbia**
- **Surface Maps for The Ontario Breeding Bird Atlas Project**
- **The GIS Overlay Narrative**
- **Intergraph Workshop**
- **Cartographic Design for Web GIS**
- **GIS and the Canadian Century Research Infrastructure Project**
- **GeoMedia Integration of GIS and Cartographic Outputs**
- **The Ontario Road Network**
- **Trends in Geomatics**

Registration and Other Information

If you haven't already done so, you may now register at
www.geomaticsatfleming.ca/cca2004/registration.htm
For other information, go to **www.geomaticsatfleming.ca/cca2004/index.htm**

or contact
The Geomatics Department, Fleming College
P.O. Box 8000, Lindsay, Ontario, Canada
K9V 5E6, Fax: 705 878-9318
Tim Wykes at twykes@flemingc.on.ca or 705 324-9144, ext. 3218

The Geomatics Institute at Fleming College is pleased to host the 2004 Canadian Cartographic Conference. The Geomatics Institute at Fleming delivers geomatics post-secondary education and customized training programs to people who want to experience success in this dynamic field. Fleming College's reputation for innovation and excellence in geomatics is built on the quality of our faculty, on our extensive applied research initiatives, and on our strong partnerships with industry and government.

hosted by the Geomatics Institute and Fleming College /
organisé par l'Institut de la géomatique du Collège Fleming

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"Layering" Not Genetically Linked

In response to my Comment (*Cartouche 53*) on his article *"An Origin with Dubious Motivation: "unlayering" the History of GIS"* (*Cartouche 52*), Andrew Millward has re-asserted his belief (in *Cartouche 53*) "that GIS may have an historical root in racism." I think this re-assertion of a nefarious origin for GIS deserves further comment.

His charge seems to be: 1. That the Roosevelt Administration used a method of correlating data between maps – "layering" – to the deliberate detriment of a social class defined primarily by race. 2. That GIS is a causally or genetically related descendant of "layering", and is therefore seemingly up to the same alleged evil as the Rooseveltian layering.

My initial critique was that "layering" as an idea and practice is ancient, and that it is nonsense to say it had a recent origin.

Millward's term "unlayering the history of GIS" implies, I suppose, that deconstruction is his technique. Without here critiquing the notorious non-objectivity of social constructivism, and without assessing deconstruction as its procedural method, it seems to me that about the best that deconstruction ever arrives at is the proposition that any advance in technology, science, or any other creative activity, can be put to good uses and bad. This is hardly news. The Bible's reference to beating swords into ploughshares (Isa. 2.4), and ploughshares into swords (Joel 3.10.) can be construed as deconstruction of the metal-working industry. In the *Iliad* the god Hephaestus turns up with a flame-thrower to dry up a river that has been giving trouble to his friends the Greeks; nice for the Greeks, bad for the Trojans: deconstruction of god-invented technology. And the Deconstructor, ideologically guided or otherwise informed, gets to be the moral authority who says what's good and what's bad. So "layering" can be put to good uses and bad. Millward apparently tells us the Rooseveltians went for the bad, and the badness gets passed on to GIS. It seems far- fetched, and GIS seems capable of being used for the good, but if systemic badness doesn't get passed on like a bad gene, what's the point of saying "that GIS may have an historical root in racism."?

But how does the bad gene' get passed on?

The term "layering" as used in GIS is a metaphor referring to the very complex workings of the software and hardware by which, among other things, correlations between sets of map data are obtained. It is the same kind of metaphor as "horsepower" as applied to tractors. Horsepower in a tractor does not imply that the tractor is a late model of a horse: GIS is much more than a late model of laying one map on another. There is a very big intellectual disconnect between physical layering and the devising of the hardware and software by which GIS works. Certainly the devisers did not have to know about the Rooseveltian layering. So where is the systemic 'genetic' connection between the bad Rooseveltian layering and the apparently bad GIS? How did the bad gene jump the disconnect?

To say that GIS has an historical root in racism seems to me to make about as much sense as saying that contemporary soldering of water-pipes, in so far as a blow torch is used, has its historical roots in a criminal intervention by an immortal blacksmith at the siege of Troy.

Gerald Fremlin

Geist Maps Speak to Audience

On Page 11 of *Cartouche* 53 is an article titled 'Map Porn', signed by the editor. I think I can detect a certain implicit denigration of the *Geist* magazine maps in the text, and I think that the underlying assumptions leading to this attitude bear examination. A key phrase to attend in this regard is that of "MLO (map like object)". One has to assume that an MLO must be (in this usage) something that is not a map, but it is unclear just what might constitute the criteria of non-map-icity.

Perhaps it would be better to begin by recapping what makes a map; obviously, a map carries some specific information framed in a spatial context to some audience. That context might be geographic (Canada, etcetera), temporal (timelines, etcetera), hierarchic (organizational charts, etcetera), conceptual (computer network maps, etcetera), or etcetera (etcetera). In every case however, a specific understanding (or argument) of the situation is forwarded to an audience. In other words, a map must be useful (needed), usable (understandable), and desirable (belied). This argument in reference to an audience is the central defining nature of cartographic practice. If the map fails in this endeavour, it fails as a map; if it prospers in this, it succeeds.

In this regard, the *Geist* maps succeed admirably. What, then, could prompt the editor to cast his aspersions of pornography?

I would identify the MLO phenomena as a symptom of the assumptions that are leading increasingly to the ghettoization of cartography on the margins of geomatics. This is the same sort of stuffy, fluffy thinking that gives rise and credence to the hijacking of map making by balderdash like 'GIS Visualization'; this places cartography above day to day concerns, where it can (and will) be safely ignored. I, for one, will not go gentle into that good night.

Cartography is body of informed practice; and cartographers can forward cogent cases for good mapping over the kind of trashy map smut that we do in fact so often see; but trying to identify a sub-map taxa (MLO) is not particularly helpful.

Ms. Edwards may well not make any claim to be a cartographer, but By the Lor' Jumpin' Blue Galvanized Lambert, being a cartographer is precisely what she is doing: she is making a map, a map that speaks to her audience. Her audience can use this graphic as a map (in a specific context, but no map is universally useful and usable), and her audience can believe is a valid presentation of the situation (regardless of the questionable mathematics underlying the projection). Thus, her map is useful, usable and believable: no map (and no cartographer) can ask (or accomplish) more.

Mark Denil

Director of Conservation Mapping GIS & Mapping Laboratory
Center for Applied Biodiversity Science Conservation International
m.denil@conservation.org

Un nouveau style de l'Atlas sera lancé le 20 avril, 2004

L'Atlas du Canada lance une nouvelle version de son site le 20 avril, 2004 et, grâce aux modifications apportées, cet atlas en ligne sera mieux que jamais. Vos sections préférées de l'Atlas, telles que les *Cartes interactives*, les *Jeux-questionnaires* et les *Faits sur le Canada*, sont encore présentes. Au cours de la dernière année, nous avons fait beaucoup de recherche sur l'opinion publique au sujet de notre produit et les améliorations apportées au site sont issues de ces recherches. Pendant la conception du nouveau site, nous avons mené des essais additionnels auprès de groupes d'utilisateurs afin de nous assurer que les changements répondaient à leurs attentes. Le site est dorénavant accessible aux utilisateurs qui utilisent des technologies d'assistance. Grâce à **l'aspect**, à la **convivialité** et à **l'organisation** améliorés, il est plus facile de naviguer sur le site et de trouver ce que vous cherchez. Une fois que vous aurez commencé à explorer l'**Atlas du Canada**, vous aurez de la difficulté à vous arrêter. Chaque carte offre une perspective particulière du Canada et de ses citoyens et citoyennes, et ce tout à fait gratuitement! Voici ce que vous trouverez :

- **Plus de 1 400 cartes thématiques, de référence et d'archive** plus facile à trouver au moyen d'un outil de navigation amélioré.
- L'outil **interactif de cartographie** vous permet d'interpréter les cartes rapidement, de lire des descriptions informatives des cartes, de faire un zoom avant ou arrière et d'imprimer les cartes facilement.
- Les **textes des cartes** ont été re-conçus et sont présentés sous un nouveau format qui est à la fois plus lisible et accessible.
- **Des cartes de référence** du Canada, des provinces et des territoires attrayants et faciles à imprimer.
- Vous voulez savoir où se trouve une ville ou un lac au Canada? La section **Recherche** vous montrera exactement où se trouvent les lieux recherchés et vous donnera de l'information additionnelle à leur sujet.
- **Les ressources éducatives** offrent des ressources utiles en classe.
- **La carte du jour**, une nouvelle caractéristique de la page d'accueil qui met en valeur une nouvelle carte à chaque jour.
- Le nouvel **outil de recherche** vous aidera à trouver exactement ce dont vous avez besoin.

Et ce n'est pas tout. Au cours des prochains mois, nous ajouterons de nouveaux articles tandis que d'autres seront modifiés et améliorés. Nous sommes déterminés à vous offrir les meilleures cartes en ligne et à jour disponibles dans Internet.

Nous vous invitons à nous faire-part de vos questions et de vos commentaires. Pour ce faire, veuillez aller à la section *Contactez-nous* en haut de la page.

New Look to the Atlas to be launched on April 20th, 2004

The Atlas of Canada is launching a new version of its site on April 20th, 2004, making this online atlas better than ever. You will still find all your favourite parts of the Atlas such as the *Interactive Maps*, *Quizzes* and *Facts About Canada*. During the last year, we have conducted a lot of public opinion research about our product and have made many improvements based on that research. While making this new site, we conducted additional user focus testing to make sure the changes work exactly as our users want them to. The site is now accessible for users using assistive technologies. A brand new **look and feel** and **organization** to our site will make it easier to navigate and find what you are looking for. Once you start exploring the **Atlas of Canada,** its tough to stop. Each map offers insight into Canada and its citizens, all for free! Here is what you will find:

- **Over 1400 thematic, reference and archive maps** that are easier to find using an improved navigational model.
- The interactive **mapping tool** lets you interpret maps quickly, read informative map descriptions, zoom in and out and print them easily.
- The **map text** has been redesigned into an entirely new format that is at once more readable and accessible.
- **Reference Maps** of Canada, the provinces and territories that are attractive and easy to print.
- Do you want to know where a city, town or lake is located in Canada? The **Search our Site** section will show you exactly where they are and provide additional information about them.
- **Learning Resources**, offering useful resources for the classroom.
- **Map of the Day,** a new home page feature highlighting a new map every day.
- The new **Search Tool** will help you find exactly what you need.

We are not finished with our improvements. Over the months ahead you will see new items added and some others changed and improved further. We are committed to providing you with the most up-to-date and best on-line atlas maps available on the Internet

We are always interested to receive your questions and comments; please go to: to the "Contact Us" section at the top of the page.

Call for
Student Mapping Submissions
for the CCA's
2004 President Prize Competition

Three categories:

1) **Communicating Canadian Issues:** This category provides student cartographers the means to communicate key spatial aspects of environmental, health, social or political issues within the Canadian context. Any geographical scale of inquiry within Canadian borders is acceptable.

2) **Visualization Project:** For this category, student cartographers are at liberty to use any visualization tool, computer, video, CD, etc. and to choose any subject for their project. It is an opportunity for students to experiment and use their creativity to portray any topic or place by using state of the art technologies.

3) **Imaginary Worlds:** The intent of this category is to allow student cartographers to liberate their creative spirit, without the typical constraints placed on design when mapping real phenomena in real environments. It is an opportunity for students to experiment with various mapping methodologies or design techniques for example, or to create a thought-provoking imaginary world of some sort.

Each category has two prizes of $100: one for submissions from undergraduate students and one for submissions from college or graduate students. The Competition is open to ALL students in post-secondary institutions. Membership in the CCA is not required.

The submission may be a single map, or a series of maps forming a mapsheet composite. In both cases, the submission must be coherent as a stand-alone piece on one page (maximum stock size is 11" x 17"). Its title should be meaningful, one that sets the context and sparks the reader's interest to examine the submission in greater detail.

All non-original artwork, photographs, data, or maps used in the work must be properly referenced on the submission.

For the visualization project a video, CD or computer program is appropriate. The project must stand by itself and should not require any special software for viewing.

All submissions should be delivered to:

Paul Heersink
Provincial Geomatics Service Centre
5th Floor, North Tower
300 Water Street
Peterborough, ON
K9J 8M5

and should be received no later than **30 May 2004**. Winners will be announced at the 2004 CCA Banquet on 9th June 2004.

For more information visit the CCA's webpage at http://www.geog.ubc.ca/cca/presidents_prize.html or e-mail Paul Heersink at paul.heersink@mnr.gov.on.ca.

Candidates to the 2004 CCA Executive

The CCA Nominating Committee is pleased to present the following slate of new officers for the 2004:

Vice-President
Rick Grey, Ontario Weather Newwork

Chair, Analytical Cartography and GIS
Andrew Millward, University of Waterloo

Chair, Map Use and Design
Sally Hermansen, University of British Columbia

Chair, History of Cartography
David H. Raymond, Center of Geogarphic Sciences

Nominations are now closed. Since all positions have only have one candidate they are all declared elected by acclamation.

In addition to the above selection, **Diana Hocking** has been appointed as Secretary to replace Diane Lacasse who stepped down because of health reasons.

Ute Dymon, Past President CCA
Kent Sate University
Email:udymon@kent.edu

Personal profiles supplied by the candidates follow:

Candidats au Comité exécutif de l'ACC 2004

Le Comité de nomination de l'ACC a le plaisir de soumettre la liste de candidats suivante aux élections au Comité exécutif de l'ACC 2004.

Vice-président:
Rick Grey, Ontario Weather Newwork

Président, Groupe d'intérêt sur l'Cartographié analytique et SIG:
Andrew Millward, University of Waterloo

Président, Groupe d'intérêt sur l'Conception et utilisation des cartes
Sally Hermansen, University of British Columbia

Président, Groupe d'intérêt sur l'Histoire de la cartographie:
David H. Raymond, Center of Geogarphic Sciences

L'appel pour les mises en candidature est maintenant terminé. Toutes trois positions ont seulement un canadiate et tout le canidates est élu par l'acclimatation.

De plus , Diane Hocking a été nominée au poste de Secrétaire pour remplacer Diane Lacasse.

Ute Dymon, Past President CCA
Kent Sate University
Email:udymon@kent.edu

Une courte biographie pour chacun des candidats suit.

Rick Grey - To paraphrase a former US president: "Let me make one thing perfectly clear - I am not a cartographer". I am a map nut. I hold a BSc (Env) and an MSc from the University of Guelph, where I got hooked on GIS in my second undergraduate year. I have a GIS Applications Specialist certificate from Sir Sandford Fleming College. I currently work for the Ontario Weather Network as a GIS Specialist and teach GIS at Ridgetown College, University of Guelph. I first joined the CCA in 1995. My primary interest in the CCA at this time is in building membership - to revitalize the association with new, and in particular, younger blood.

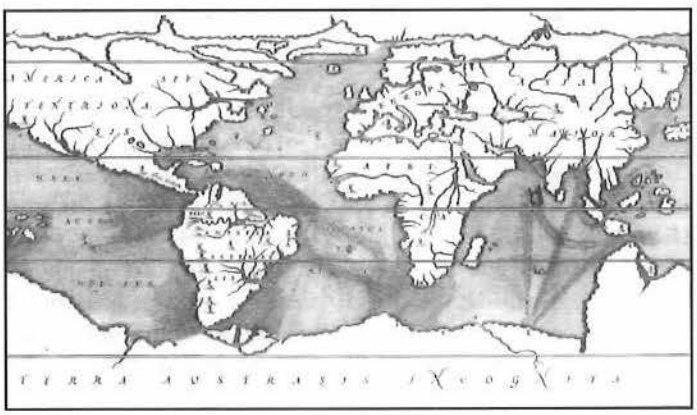
Andrew Millward - Most of you will be familiar with my contributions to the CCA as the current executive chair of the Map Use and Design special interest group. In this position I have pursued various interests in mapping techniques, and especially the motivating forces that contribute to cartographic work. Cartouche has printed some of my thoughts, which have been both factual and at times controversial. I would like to stay with the CCA executive and shift my focus to Analytical Cartography and GIS; a chair that is well suited to my current academic pursuits and expertise. I intend to continue my active involvement with the organization through lively participation at annual meetings and quarterly contributions to Cartouche.

Sally Hermansen - *Professional Affiliation:* Faculty (Instructor), UBC Department of Geography, teaching Cartography, GIS and Data Visualization courses. *Education:* M.A (1984) Cartography, Queen's University, Kingston Ontario. *CCA Affiliation:* Member since 1984. *Goals as IG Chair:* Throughout my long association with Cartography in academia, government, industry and now back in academia I have held fast to teaching and preaching the traditions of map design and map use which can and have become lost in our

increasingly digital spatial world of GIS and Internet map products. As Chair of this IG I would push for more cognitive, map user oriented research into the design and use of dynamic, flashing, Internet and GIS based maps and geographic 'visualization' products. In addition, I would like to solicit ideas for our organization to develop better links with industry look for ways to get our map design theories to industry – through workshops, Cartographic Design Posters, Visualization

Diana Hocking - new Secretary, appointed to complete Diane Lacasse's term, February 2004. B Sc (Geography, Southampton, U.K. with courses by F. J. Monkhouse, though not in cartography!), MSc (Cartography, under Peter Keller), University of Victoria. Lab instructor at University of Victoria between 1973 and 2003 (first doing cartography in 1979, with Roger Wheate lecturing), and lectured introductory cartography from 1992 to 1999. This was interspersed with additional learning and/or teaching at McGill (with Norman Drummond), University College, London, University of New South Wales, and Lund University, Sweden. Since retiring from the geography department in 2003, I theoretically have more time to spend with my grandchildren, and to enjoy orienteering, which combines my love of maps, fitness and the great outdoors, and which I continue to teach at University of Victoria.

David H. Raymond - I began work as a cartographer in the late 1970s at a regional mapping organization in Amherst Nova Scotia (MRMS), and then moved to the Centre of Geographic Sciences in 1985 as an instructor in the cartography program. Formal education in cartography and the mapping sciences began at COGS in Lawrencetown, the International Institute for Geo-InformationScience and Earth Observation (ITC) in Enschede, and finally the University of New Brunswick in Fredericton, receiving a masters degree in Geodesy and Geomatics Engineering. Throughout my career, I have been a student of cartographic history. My studies have been focused on early mapping of eastern Canada, and the use of digital library technology to support cartographic research. I would welcome the opportunity to serve as interest group chair of the CCA, and share my experiences with others.



CCA AWARDS

The Canadian Cartographic Association presents several awards each year to deserving members of the cartographic community which it serves. These awards are meant to recognize and encourage the achievements of outstanding individuals in the field.

- **President's Prize Student Map Competition**
($100 prizes in several categories)

- **Norman Nicholson Memorial Scholarship in Cartography**
($500 scholarship)
To recognize and encourage exceptional student achievement and ability in any aspect of cartography.

- **Awards of Distinction**
To acknowledge exceptional professional or scholarly contributions to the field of cartography or an exceptional contribution to the Association.

For information about eligibility and how to apply or nominate individuals for these awards, see the CCA web site: *www.cca-acc.org* or contact any member of the executive.

Prix de l'ACC

L'Association canadienne de cartographie présente, à chaque année, plusieurs prix à ses membres méritants. L'attribution de ces prix a pour but de reconnaître et d'encourager l'accomplissement exceptionnel d'individus dans le milieu cartographique.

- **Le prix du Président pour la compétition des étudiants**
(Des prix de $100 pour différentes catégories.)

- **Bourse Norman Nicholson** (Bourse de $500) Bourse attribuée afin de reconnaître et d'encourager un étudiant pour son accomplissement exceptionnel et ses capacités dans tous les aspects de la cartographie.

- **Prix de distinction** Prix pour reconnaître les contributions professionelles ou académiques exceptionnelles dans le domaine de la cartographie ou pour une contribution exceptionnelle à l'Association.

Pour de plus amples renseignements concernant l'éligibilité, comment postuler ou proposer un candidat pour ces prix, s'il vous plaît, veuillez visitez le site web de l'ACC à l'adresse URL suivante: *www.cca-acc.org*, ou veuillez contacter un membre du comité exécutif.

The Canadian Cartographic Association
L'Association canadienne de cartographie

www.cca-acc.org

CCA Mailing Address / Adresse pour l'ACC

Diana Hocking
Canadian Cartographic Association
Department of Geography
University of Victoria
P O Box 3050, Stn CSC
Victoria, BC, V8W 3P5

CCA Executive/ Exécutif de l'ACC:

President / *Président:*
Claire Gosson,
Geomatics Canada, NRCan
650 - 615 Booth Street
Ottawa, ON K1A 0E9
Phone/Tél: (work) (613) 992-4134
Fax/Téléc: (613) 943-8282
E-mail:Claire.Gosson@CCRS.NRCan.gc.ca

Vice-President / *vice-Président*:
Christine Earl
Dept. of Geography & Environmental Studies
Carleton University
1125 Colonel By Drve
Ottawa, ON K1Z 8K9
cearl@ccs.carleton.ca

Past-President / *Président-sortant:*
Ute Dymon,
Department of Geography
Kent State University
Kent, OH, USA, 44242-0001
Phone/Tél: (work) (330) 672-3226 ;
Fax/Téléc: (330) 672-4304;
E-mail/Courriel: udymon@kent.edu

Secretary / *secrétaire:*
Diana Hocking,
Canadian Cartographic Association
Department of Geography
University of Victoria
P O Box 3050, Stn CSC
Victoria, BC, V8W 3P5

Treasurer / *sortant:*
Charles Conway
Department of Geography
Memorial University of Newfoundland
St. John's, NF A1B 3X9
Phone/Tél: (709) 737-7912
Fax/Téléc: (709) 737-3119
E-mail/Courriel:cconway@morgan.ucs.mun.ca

Interest Group Chairs and Appointees/ *Présidents des groups d'Intérêt:*

Analytical Cartography and GIS / *Cartographié analytique et SIG:*
David Broscoe
Architecture/Civil Department
1385 Woodroffe Avenue
Algonquin College, Ottawa, ON, K2G 1V8
Phone/Tél:(613) 727-4723 ext.3350
Fax/Téléc:(613) 598-3300
E-mail/Courriel:broscod@algonquincollege.on.ca

Cartographic Education / *Éducation cartographique:*
Paul Heersink
Ontario Ministry of Natual Resources
300 Wate Street, 5th Floor
Peterbourgh, ON K9J 8M5
E-mail/Courriel: paperglyphs@sympatico.ca

Map Use and Design / *Conception et utilisation des cartes:*
Andrew Millward
Department of Geography,
University of Waterloo
200 University Ave., Waterloo ON N2L 3G1
Phone/Tél: (519) 885-1211 ext. 6755
E-mail/Courriel: aamillwa@fes.uwaterloo.ca

Map Production Technology/ Technologie de production cartographique:
Jean McKendry
CESU National Network Office
Main Interior Building
1849 C Street NW (3127)
Washington, DC 20240 USA
Email: jeanm@uidaho.edu

History of Cartography / *Histoire de la cartographie:*
Léa Selley
TELUS Geomatics
16A - 10020 - 100 Street
Edmonton, Alberta T5J 0N5
Phone/Tél: (780) 493-5252; Fax/Téléc: (780) 493-4569
E-mail: lea.selley@telus.com

Appointees/ *les personnes nommées*

Membership Cordinator / *Département des adhésions*
Clint Loveman
Environmental Systems Research Institute Inc.
380 New York Street,
Redlands, CA 92373-8100, USA.
Phone/Tél: 909-793-2853 (X 2562),
E-mail/Courriel: cloveman@esri.com

Cartographica Editor/ *Éditeur de Cartographica:*
Brian Klinkenberg
Department of Geography
University of British Columbia
Vancouver, BC, V6T 1Z2
Phone/Tél: (604) 822-2663
Fax/Téléc: (604) 822-6150
E-mail/Courriel: brian@geog.ubc.ca

CNC Chair/*Président CNC*
Janet Mersey
University of Guelph
Dept. of Geography,
Univ. of Guelph, Guelph, Ontario Canada N1G 2W1
Phone/Tél: (519) 824 -4120 Ext. 53528
Fax/Téléc: (519) 837- 2940
E-mail/Courriel: jmersey@uoguelph.ca

CCA Representative on the CNC/ *Délégué de l'ACC au Comité national canadien:*
Carolyn Weiss
Statistics Canada, Geography Divison
Ottawa, ON, K1A 0T6
Phone/Tél: (613) 951-3921 ; Fax/Téléc: (613) 951-0569
E-mail/Courriel: weiscar@statcan.ca

Student Representative
John Fowler
Deptartment of Geography
University of Victoria
Victoria, BC, V8W 3P5
E-mail/Courriel: jfowler@uvic.ca

The CCA was founded in 1975 to promote interest and education in maps and cartographic data, and to provide for the exchange of ideas and information, at the regional, national, and international levels, via meetings and publications. Membership in the Canadian Cartographic Association is open to all individuals, and public and private institutions which have an interest in maps and the aims and objectives of the Association. Membership is available in the following categories at the annual rates listed below ($CND):

Regular	$80
Student	$40
Institutional	$100
Corporate	$200
Family	$95
Retired	$40
Associate	$40

To cover mailing costs US residents please add $5 CDN and Overseas residents please add $10 CND to the applicable membership category.

Members receive the quarterly journal *Cartographica*, published by the University of Toronto Press and endorsed as the journal of the CCA; four issues of *Cartouche*, the CCA newsletter and the International Cartographic Association Newsletter. The Association also provides an annual conference to promote discourse and access to a range of expertise through the interest groups and regional contacts.

For further information about membership qualifications and benefits contact the membership coordinator or any executive member or visit www.cca-acc.org

L'ACC a été créé en 1975 pour promouvoir les intérêts et l'enseignement des cartes et de la cartographie ainsi que pour permettre l'échange d'idées, d'informations tant sur les plans régionaux que nationaux et ce via des bulletins et des conférences. L'adhésion à l'association est ouverte à tous les individus et institutions (privées et publiques) qui sont intéresés par les cartes et par les buts et objectifs de l'association. Vous pouvez adhérer dans les catégories suivantes selon les taux indiqués (cdn$) dans la liste ci-dessous:

Régulier	$80
Étudiant	$40
Institutionnel	$100
Société	$200
Famille	$95
à la retraite	$40
Associé	$40

Un montant de 5$ (cdn$) est ajouté pour couvrir les frais postaux aux membres américains (É-U) et de 10$ (cdn$) pour les membres outremers.

Les membres recoivent la monographie trimestrielle Cartographica, publiée par le University Toronto Press; 4 numéros du bulletin de nouvelle Cartouche et le bulletin de nouvelle de l'Association cartographique internationale (ACI). L'Association organise également une rencontre annuelle avec des conférences qui donne accès à l'expertise issue des groupes d'intérêts et des diverses régions du pays.

Pour plus d'information concernant l'adhésion et les bénéfices de l'association, contactez le coordonnateur des adhésions ou l'un des membres de l'exécutif ou encore, visitez notre site Internet *www.cca-acc.org*