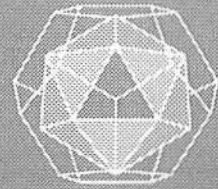
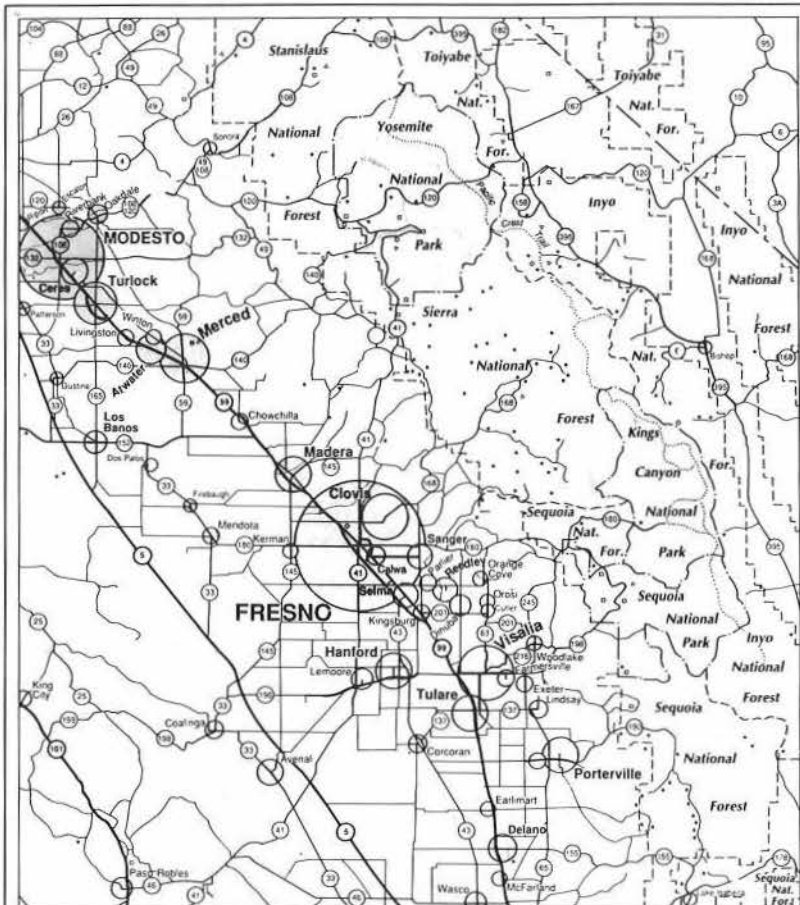


Cartouche



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

Number 24, Winter, 1996
Numéro 24, hiver, 1996



Population and Recreation Facilities in East Central California

SCALE 1:1 750 000

0 20 40 60 km

LEGEND

Population	National Forest Boundary	Controlled Access Highway
300,000	National Park Boundary	Divided Highway
175,000	State Boundary	Paved Highway
100,000	Campground (Government)	Paved Road
50,000	Point of Interest	River, Lake or Reservoir
20,000	Ski Area	Aqueduct or Canal
5,000	Trail	

Population data from Rand McNally Road Atlas 1991, originally compiled from the 1990 U.S. census

Designed and produced by B. Lochrie
Base map derived from Rand McNally Road Atlas 1991

This map entitled **Population and Recreation Facilities in East Central California** is the 1996 winner of the President's Prize Student Map Competition (Monochrome Maps, college or graduate). The map was drawn and submitted by Bruce Lochrie of Sir Sanford Fleming College.

*Prix du Président 1996 pour le concours de cartes présentées par des étudiants dans la catégorie Carte monochrome (étudiants dans des programmes gradués ou collégiaux): **Population and Recreation Facilities in East Central California**. La carte a été produite et soumise par Bruce Lochrie de College Universitaire de Sir Sanford Fleming.*

Cartouche is published quarterly by the Canadian Cartographic Association. Members are welcome to submit articles for publication. Articles and notices submitted for publication are subject to editorial approval. Please address your submissions to the editor. It is the policy of the editor to provide dual language copy for editorial content and journal mechanics. All other articles will appear in the language of submission. While every effort is made to ensure accuracy of content, the editor cannot be responsible for errors in compilation, or loss of any item submitted. Opinions expressed in the editorials, submitted articles, and letters are not necessarily those of the Canadian Cartographic Association. The Canadian Cartographic Association gratefully acknowledges the financial support given by the Social Sciences and Humanities Research Council of Canada.

Cartouche est publié trimestriellement par l'Association canadienne de cartographie. N'hésitez pas à soumettre des articles que vous désirez publier dans le bulletin. Les articles et annonces soumis pour parution sont sujets à l'approbation de la rédaction. Veuillez les adresser à l'éditeur. Selon la politique en vigueur, l'éditeur publié, en français et en anglais, l'éditorial ainsi que la description du processus de publication du bulletin. Les autres articles paraîtront dans la langue dans laquelle ils ont été écrits. Bien que beaucoup d'efforts soient déployés en vue d'éviter de tels problèmes, l'éditeur n'est pas tenu responsable des erreurs de compilation ou de la perte d'articles que leur seront soumis. Les opinions exprimées dans le cadre des editoriaux, des articles et des lettres publiées dans le bulletin ne reflètent pas nécessairement celles de l'Association canadienne de cartographie. L'Association canadienne de cartographie remercie vivement le Conseil de recherches en sciences humaines du Canada pour son apport financier.

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Deadline for next issue is:

February 15, 1997

La date limite pour la prochaine publication est:

15 février, 1997



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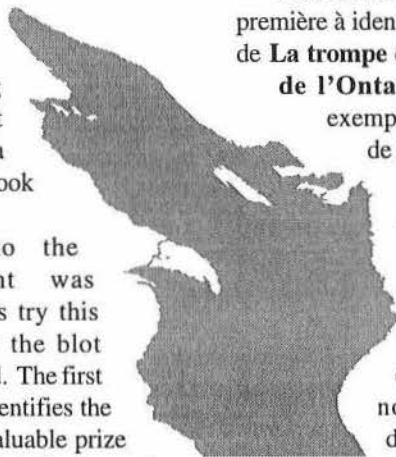
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ISSN 1183-2045

Rorschach's Map

Congratulations to Christine Earl who was the first of many to identify the trumpeting elephant as southwest Ontario. Christine wins a copy of Dava Sobel's book *Longitude*.

The response to the trumpeting elephant was overwhelming, so let's try this format again. Again the blot featured has been altered. The first person who correctly identifies the baying hound wins a valuable prize and will be acknowledged in the next issue of *Cartouche*. Please send your responses to the editor (address above). The identity of this blot will be revealed in the next issue.



Carte énigmatique

Félicitation à Christine Earl qui fut la première à identifier la forme énigmatique de **La trompe d'éléphant du Sud-Ouest de l'Ontario**. Christine gagne un exemplaire du livre *Longitude* de Dava Sobel.

Nous avons reçu un si grand nombre de réponse pour l'énigme de la trompe d'éléphant que nous conserverons ce type de format. Pour notre énigme d'aujourd'hui, la forme que nous vous proposons d'identifier a été altérée. La première personne à identifier la représentation d'un chien qui aboie se méritera un prix de valeur et le nom de celle-ci ainsi que la réponse sur l'entité représentée par l'énigme seront connus dans le prochain numéro de la revue *Cartouche*.

à moins que personne n'ait trouvé la solution.

Faites parvenir votre solution le plus tôt possible à l'adresse de l'éditeur mentionnée à la page 2.

What Qualifications, Cartographer?

Gary McManus
Memorial University of Newfoundland

Advances in personal computers and software have opened the way for many more people to have access to a variety of map making tools. These tools range from Geographical Information Systems to drawing applications. Technology has allowed those with little or no understanding of the discipline the ability to participate almost instantly. I know of cases where individuals are expected to produce maps, when all they know about cartography is that they have a GIS program and/or a software drawing package in their office. By way of analogy we could say that just because somebody has access to a word processor they should be expected to be a "writer."

I think this situation for cartography, is just part of an overall condition associated with the recent computer expansion. For example, besides being a cartographer, any of us with the "proper" software, can now become bookkeepers, publishers, typesetters, graphic artists, etc. Although these skills, like cartography, were learnable "pre-computer," they may have not attempted them. Perhaps they seemed too difficult or shrouded in mystery and therefore remained out of bounds; or perhaps hiring a specialist was just easier, or cheaper. Nevertheless, now many of us seem convinced. The computer and its software hold the answer. No doubt, when it comes to making maps, many tasks have been made easier, but no computer program will contain all the knowledge or have all the answers. When it comes to maps, I like to think that there is no difference in how to produce a map. With a computer though, you do not get any ink on your fingers.

Though the tools for map production have changed, the critical problem facing cartography is the general lack of knowledge about maps and how they work. More disturbing I find is that there may be a high

tolerance and acceptance for maps that are difficult to read. In fact some people seem to expect that maps are not supposed to be easy to read. I guess they believe maps, like *The Compact Edition of the Oxford English Dictionary*, should be read with a magnifying glass. I would attribute this to what Mark Monmonier in his book *Drawing the Line: Tales of Maps and Cartocontroversy*, describes as "... the enormous persuasiveness of maps, even bad ones." and "... the power of even poor maps to organize

*Technology has allowed
those with little or no
understanding of the
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instantly.*

and communicate information." I am afraid this is what cartographers have been up against for a long time.

So perhaps this bloom of these more "neophyte" cartographers can work to our advantage. I encourage anyone who wants to make a map to do so. If consulted, I gladly try to help everyone with her/his map projects. I hope that this will allow them to develop a better understanding of the how and why of map production so that they might gain an appreciation of what is involved. As for me the more people we have making maps the better. No doubt, in the short term the quality of maps will suffer. Ron Eastman is reported to once have said "Automated mapping systems allow someone who knows little about cartography to make a bad map quicker." I am sure we all have already seen many examples of this. However, in the long

term this new, cadre of cartographers will, out of the necessity of wanting to communicate with maps, be forced to understand what maps are all about. The more that individuals become involved in the cartographic process the more they will begin to understand that successful maps do not just happen accidentally. In time they will begin to realize that maps are carefully designed forms of graphic information. It will be through their attempts at cartographic communication and their understanding of the basic principles that will cause their own demands for higher quality.

In the last issue of *Cartouche*, Roger Wheat's article *The King is Dead Long Live The King* made a similar point: "The cartographer still produces a better product, either because she knows how properly to use the many options of a GIS or just as often, when not to use them." I must admit, I was so thrilled to see someone put this in writing that I highlighted the phrase "GIS juggernaut" and "... my best GIS students are cartographers" and posted it on my door, hoping to incite a riot. None happened but I am still working on it. As more become acquainted with cartography through GIS, hopefully things will change. Like Roger, I agree that the "King" lives on. Cartography is not going to go away. As long as people make maps, no matter how they make them, there will always be cartographers. Some of them just may not realize that yet. The more cartographers there are the better cartography will be. ☺

Quel diplôme, cartographe?

Gary McManus
Memorial University of Newfoundland

Les progrès parcourus dans le matériel informatique et les logiciels ont ouverts les portes à de nouveaux et nombreux usagers qui ont aujourd'hui accès à une panoplie d'outils pour réaliser des cartes. Des outils qui vont du SIG jusqu'aux applications de dessin. La technologie a permis à ceux qui avaient peu ou pas de connaissance dans le domaine de s'y intégrer sans trop de difficulté. Je connais des cas où des gens désirant produire des cartes ne connaissaient de la cartographie que le fait de posséder, au bureau, un SIG et/ou un logiciel de dessin. Par analogie on pourrait dire que parce que quelqu'un a accès à un traitement de texte on doit s'attendre qu'il soit un "écrivain".

Je pense que ce type de situation en cartographie, ne représente qu'une faible partie des nouvelles conditions qu'imposent les récents développements informatiques. Par exemple, en plus d'être cartographe, nous pouvons tous avec les logiciels appropriés devenir comptable, éditeur, typographe, graphiste, etc... Quoique les notions de cartographie étaient accessibles avant l'informatisation, elles auraient pu ne pas être touchées par le phénomène. Peut-être que ces notions semblaient trop difficiles à assimiler ou baignés d'un aura de mystère les rendant inaccessibles ou peut-être que finalement, l'engagement d'un spécialiste correspondait à la solution la plus simple et la moins onéreuse. Actuellement, plusieurs d'entre nous en sont fortement convaincu. L'ordinateur et les logiciels étant une réponse aux besoins en la matière, il ne fait aucun doute que lorsque l'on doit faire une carte, plusieurs tâches en sont facilitées par contre, aucun programme ne peut intégrer toutes les connaissances ou ne contient toutes les solutions. Lorsque vient le temps de faire des cartes, j'aime penser qu'il n'y a pas ou presque pas de différence sur la façon de les

produire avec l'ordinateur, hormis l'encre sur les doigts.

Quoique les outils pour produire une carte ont beaucoup changé, le problème majeur auquel doit faire face la cartographie est le manque généralisé de connaissance sur la conception des cartes et de leurs règles. Ce que je trouve le plus déroutant c'est la tolérance et l'acceptation pour des cartes qui sont difficiles à lire. En fait les gens semblent considérer comme normale cette difficulté de lecture. Je pense qu'ils regardent les cartes de la même façon qu'ils consultent le dictionnaire le *Petit Robert*, avec une loupe. J'attribuerais cela à ce que Mark Monmonnier décrit dans son livre *Drawing the Line : Tales of Maps and Cartocontroversy* comme "... l'énorme

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force persuasive des cartes incluant même les mauvaises représentations cartographiques." et "*le pouvoir même pour une carte de mauvaises qualité d'organiser et de communiquer de l'information.*" Je suis effrayé par cette perspective car c'est ce contre quoi les cartographes ont lutté pendant de nombreuses années.

Peut-être que le foisonnement de ces cartographes néophytes peut se retourner à notre avantage. J'encourage donc tout ceux qui désirent faire une carte de procéder. Si l'on me consulte, je serai heureux de les aider pour leurs projets de carte. J'espère que cela va ainsi permettre de développer une meilleure compréhension du comment et du

pourquoi d'un document cartographique et permettre de franchir un pas dans l'appréciation de ce qu'implique la réalisation d'un tel document. Pour moi, plus il y aura de gens qui feront des cartes, meilleures elles seront. Il ne fait aucun doute qu'à court terme, la qualité des cartes s'en ressentira. Ron Eastman a déjà relevé cette citation : "Les systèmes de cartographie automatique permettent à quiconque n'ayant qu'une connaissance minimale de la cartographie, de réaliser une mauvaise carte plus rapidement." Je suis convaincu que vous avez déjà vu des exemples de cela. Toutefois, à long terme, ce nouvel environnement de cartographes, en delà du besoin de communiquer avec les cartes, va ou devrait provoquer une meilleure compréhension de ce que représente une carte. Donc plus il y aura de gens impliqués dans le processus cartographique plus ils seront nombreux à mieux comprendre qu'une carte réussie n'est pas le fruit d'un hasard ou d'un accident. Avec le temps, les gens réaliseront que les cartes sont une représentation graphique fidèle de données, d'informations. Ce sera à travers leurs tentatives de communication cartographique et leur compréhension des principes de bases que leurs attentes provoquera une amélioration de la qualité des résultats.

Dans le dernier numéro de *Cartouche*, dans l'article de Roger Wheate, *The King is Dead Long Live the King*, celui-ci fait un rapport similaire en évoquant: "*Les cartographes produisent de meilleurs produits parce qu'ils utilisent plus adéquatement les différentes possibilités des SIG ou si l'on veut, ils savent plus quand il ne faut pas utiliser certaines fonctions.*" Je dois admettre que la lecture de ces lignes a créé chez moi une vive émotion au point d'en faire une photocopie et de mettre en évidence certaine phrase dont: "*Des SIG gigantesques*" et "*mes meilleurs étudiants*"

suite page 10

A Message From Your Vice-President

Brian Klinkenberg
University of British Columbia

An article in the November issue of *GIS EUROPE* by Robert Barr raises some interesting points which should be of interest to all cartographers. In the article, Robert discusses ten "common" assumptions concerning the future of GIS. Several of the assumptions would be of little surprise to anyone aware of current trends in computer hardware and software. For example, the cost of both is decreasing steadily, and complex environments requiring system administrators are quickly becoming things of the past.

However, some of the assumptions are harbingers of potential great changes, both positive and negative. On a positive note, he mentions the editorial in the October issue of *Byte* magazine which highlighted GIS as one of the few real growth areas left in software—GIS is now a major mainstream information technology. As such, we should consider any and all businesses as potential employers of cartographers.

However, two of the assumptions should cause concern for cartographers in particular, and for geographers in general. The two assumptions are, one, that maps will become much less important to or characteristic of GIS in the future, and, two, that employers will be increasingly concerned with finding employees with information technology skills rather than geographic skills. Robert states that employers will make the assumption that knowledge of cartography and spatial analysis can be picked up when needed.

As all of us are well aware, poor maps are a hallmark of many GIS projects. How many competent and otherwise informative analyses have been devalued because the information was improperly presented? How many incorrect decisions have been made as a result of inappropriate or even deceitful cartographic presentations? Without spatially displaying the data, how much

incorrect data will be considered okay for analyses, leading to wrong conclusions?

Can a computer scientist truly assimilate cartographic knowledge 'on-the-fly' with little or no formal training in the spatial arts? The knowledge of cartographers would appear to be at risk for being devalued. It may be that only after a court case in which the decision hinges on a cartographic product will cartographers be given the presence they deserve, and their expertise recognized.

Issues of scale, the modifiable areal unit problem, the correct way to manipulate and present spatial information—these issues and the many more that cartographers routinely grapple with will be ignored, if they are at all known, by the GIS analyst of the future. Unless, of course, we are out there constantly reminding employers and, more importantly, GIS vendors, that a map is more than just the sum of its points, lines and areas, and that the message can easily become muted

or misrepresented as a result of poor "cartographics." After all, given the amount of money, time and effort that goes into collecting spatial data and creating an accurate and comprehensive database, it is so easy to devalue the entire process by not displaying the data in the best possible manner, a well-designed and cartographically correct map!

One way the cartographic community can highlight the potential drawbacks of not hiring spatially-aware employees is to collect samples of poorly prepared maps, and to develop case studies where incorrect decisions resulted from inappropriate spatial analyses. We could create a web-based portfolio of both blatant and subtle examples, and use the site to advertise the need for cartographic insight in GIS employees. Let me know your thoughts on these issues, and if you know of any good 'bad' maps, please pass on the information. 🌐

Mercator's World

All cartophiliacs will want to be aware of this new magazine, that incorporates the previous *Map Collector*. **Mercator's World** is a superb glossy production that features high quality colour graphics. Issue 5 for example features the Hereford Mappa Mundi. The articles concentrate mostly on the history of cartography, but the early editions also include contemporary issues such as an article on map projections by John Snyder.

The first three issues of Volume 1 (1996) have now become collector's items and are only available from the distributors (#46 may also be in this category by the time you read this). Current issues should be available at fine newsagents (even in Prince George!) at \$8.95 Cdn. Each volume has 6 issues per year. Visit their web site at <http://www.mercatormag.com> for subscription information: circulation@mercatormag.com (North America); richardlawson@bibmap.demon.ac.uk for the rest of the world.

Roger Wheate (wheate@unbc.edu)

Book Reviewers Needed!

Janet Mersey
University of Guelph

I have received copies of the following books for review in *Cartographica*. If you are interested in writing a review of one of these books for publication, please contact me. Reviews should be completed within three months of receiving the book, and although there is no fixed length, 600 words can be considered a guideline. Reviews may be written in either French or English, and the reviewer may keep the book they review. First time reviewers are welcome! Contact:

Jan Mersey,
Book Review Editor for *Cartographica*,
Department of Geography,
University of Guelph, Guelph, Ontario,
Canada N1G 2W1
Fax: 519-837-2940;
E-mail: jmersey@uoguelph.ca.

Books available for review:

Multiple Perspectives: Research Reports on the University of Pittsburgh Social Cartography Project, 1993-1996 by Rolland G. Paulston, Martin Liebman and JoVictoria Nicholson-Goodman, 1996. Softcover, 226 pp.

Innovations in GIS 2: Selected Papers from the Second National Conference on GIS Research UK edited by Peter Fisher, 1995. Softcover, 257 pp.

Innovations in GIS 3: Selected Papers from the Third National Conference on GIS Research UK edited by David Parker, 1996. Softcover, 233 pp.

Understanding Maps by J.S. Keates, 1996. Softcover, 334 pp.

Cartographic Design: Theoretical and Practical Perspectives edited by Clifford Wood and C. Peter Keller, 1996. Hardcover, 304 pp.

Geographic Objects with Indeterminate Boundaries edited by Peter Burrough and Andrew Frank, 1996. Softcover, 345 pp.

Interactive Spatial Data Analysis by Trevor C. Bailey and Anthony C. Gatrell, 1995. Softcover (with disk), 413 pp.

GIS and Generalization: Methodology and Practice edited by Jean-Claude Muller, Jean-Philippe Lagrange and Robert Weibel, 1995. Softcover, 257 pp.

Spatial Reasoning for Effective GIS by Joseph K. Berry, 1995. Softcover, 208 pp.

Geographic Information Systems: Socioeconomic Applications by David Martin, 1996 (second edition). Softcover, 210 pp.

Cartography: Visualization of Spatial Data by M.J. Kraak and F.J. Ormeling, 1996. Softcover, 222 pp.

Interpretation of Airphotos and Remotely Sensed Imagery by Robert H. Arnold, 1996. Softcover, 250 pp.

Interpretation of Geological Structures Through Maps by Derek Powell. Essex: Longman Scientific and Technical, 1992. Softcover, 176 pp.

Practical Approaches to Applied Remote Sensing as Illustrated by the SAMOZ Project in Mozambique edited by L. Strömquist and R.Å. Larsson. UNGI Report Number 86, 1994. Softcover, 122 pp.

Landwirtschaft in Deutschland: Veränderungen der regionalen Agrarstruktur in Deutschland zwischen 1969 und 1992 by K.Eckart, and H-F.Wollkopf. Leipzig: Institut für Länderkunde, 1994. Softcover (text in German), 204 pp.

Map Projections: A Reference Manual by L.M. Bugayevskiy and John P. Snyder.

Bristol, PA: Taylor and Francis, 1995. Hardcover, 328 pp.

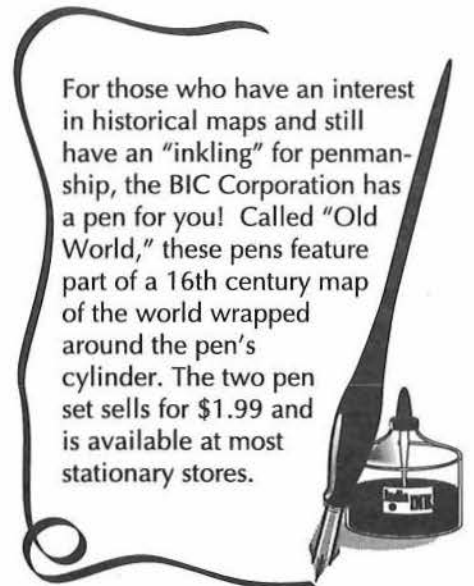
Environmental Information Management and Analysis: Ecosystem to Global Scale edited by W.K.Michener, J.W.Brunst, and S.G.Stafford. Bristol, PA: Taylor and Francis, 1994. Hardcover, 555 pp.

OS Mapas em Portugal: da tradição aos novos rumos da cartografia edited by Maria Helena Dias. Lisbon: Edicoes Cosmos, 1995. Softcover, 344 pp. In Portuguese.

Resource Management Information Systems: Process and Practice by Keith R. McCloy. Bristol, PA: Taylor and Francis, 1995. Softcover, 415 pp.

Thematic Cartography from Satellite Imagery: A Guidebook edited by J. Denègre. New York: Elsevier Science Inc., 1994. Hardcover, 269 pp. Complete text is in both French and English. ☉

For those who have an interest in historical maps and still have an "inkling" for penmanship, the BIC Corporation has a pen for you! Called "Old World," these pens feature part of a 16th century map of the world wrapped around the pen's cylinder. The two pen set sells for \$1.99 and is available at most stationary stores.



Data Translation

David Mercer
University of Western Ontario

Business Geographics is one specialized subset of GIS that has experienced much growth (Banting, 1996). For those not familiar with the term, it refers to the application of GIS and related technologies to business decision making. The people applying these techniques, however, have very little formal training in GIS or Cartography. Also, in many cases, the software employed to develop the map is usually limited in cartographic design capabilities. Many products of the business geographics field is ample proof of this fact. To quote Doug Banting, who has had opportunity to examine this material, *"Not only were garish colour combinations . . . seemingly the norm in the displays at the conference, but cut points on choropleth maps were arbitrarily defined, line widths were invariant, pie charts on choropleth backgrounds were epidemic, and projections unjustifiably distorted familiar shapes"* (Banting, 1996).

While many of these problems are obviously due to a lack of knowledge of cartography and cartographic design, some problems may also be a result of the limited capabilities of the GIS software they are using. A self-proclaimed GIS expert once told me that cartographers only make pretty pictures and that a GIS package generated 'real maps'. The specialty of GIS software lies in its valuable analysis tools, not high end graphics. If high quality maps that effectively communicate the geographic data are required as the final product, the data must move from the GIS to a graphics package such as those used by cartographers.

Three software packages, Adobe Illustrator, Macromedia Freehand, and CorelDRAW! dominate cartographic production. In a PC environment, translation of data between various software is simple. CorelDRAW!, for example, will accept files in many different formats. In the Mac world

however, the translation is not always as easy. Adobe Illustrator is limited in the number of file formats it will accept. In fact, it is much easier to find a package that will save the file in Illustrator format. The ability to move geographic data between software has improved with each successive software upgrade. Occasionally, software developers rely on a third party to generate the translators according to demand. These software links make it easier for cartographers to complete a quality map from a GIS project or projection package. Two software packages that can make this link are **MAPublisher** and **TreasureMapper**.

MAPublisher is not a stand alone piece of software, but a suite of additional plug-in filters designed to work within Adobe Illustrator and Macromedia Freehand. The plug-ins provide additional tools to allow the input of more file formats and make the drawing software more versatile. MAPublisher will accept input from Arc/Info ungenerate files, MapInfo mid/mif files, and will also accept USGS DLG files, with all attributes intact. Within Adobe Illustrator, MAPublisher enables some queries and data manipulation usually handled in a GIS. Included in these tools are filters that allow selection of objects by attribute, then using Illustrator's drawing tools modify the stroke or fill of the selected objects. MAPublisher can create legends with a specific filter that queries information in the database, and applies a specific symbol design to the data on the map. With the link established between legend and map, and with the symbol edited in the legend, the change will be applied to similar symbols across the entire map. The features and tools that MAPublisher adds are very good, but probably the greatest benefit lies in its ability to translate files for Adobe Illustrator.

TreasureMapper is more of a conversion package. TreasureMapper is a Macintosh

application that will convert data from 2D Microstation design files to Adobe Illustrator format or encapsulated postscript (EPS) format. This will not limit these files to Illustrator, since both Freehand and CorelDRAW! can read the vector postscript files generated for Adobe Illustrator. When the file has been converted and imported into the graphics package of your choice, the cartographer can apply the full range of drawing and editing tools available to create a high quality finished product.

This has only been a brief introduction to the software. If you would like to know more about these software tools, you may wish to visit their home pages on the world-wide-web for demos, reviews and further information.

MAPublisher:
World-Wide-Web: <http://www.avenza.com>
E-mail: info@avenza.com

TreasureMapper:
World-Wide-Web: <http://www.treasuremapper.com>
E-mail: TreasureMap@TreasureMapper.com

Reference:

Banting, D., *Analytical Cartography & GIS: Business Geographics and Cartography*, Cartouche; 1996; 22/23: 11-12. ☉



TECHNICAL TIP

BY DAVID MERCER



How to Make a Crayon-Like Stroke in FreeHand

Bob Sander-Cederlof
Macromedia, Digital Arts Group

Cartographers are often challenged to produce a special design or reproduce a specific effect in a symbol. This may not always be easy given the techniques of production currently used and may require a little imagination by the cartographer. The procedure described below may or may not find a place in your work, but may help you develop another line symbol or printing effect that may be more useful. This material was extracted from the Freehand-I listserver, a listserver mainly for users of Macromedia Freehand. This List, however, often contains tips and discussions of problems that are beneficial to users of other graphics software.

- David Mercer

If you are printing to a Postscript printer, I found a way to make lines that look like they were drawn with a crayon. I did it in FH7, but it should work in 5.5 as well. Use **Expand Stroke** on the line you want to look like a crayon, and then fill with a transparent texture. I like to use the mezzo textures. The only problem is that textures in FreeHand are not transparent. However, you can make them transparent using a trick in Olav Kvern's "Real World FreeHand." In the version 4 edition of his book it is on pages 486 and 487, "Making Textured Fills Transparent." His method is to use **ResEdit** to modify a postscript resource. I opted to create a UserPrep file instead. Using either approach, what you have to do is comment out 4 lines of Postscript in the **/texture definition**. Change the following:

```
/texture { gsave [0 0 0] vc filler grestore  
to this:  
/texture { %gsave % [0000] vc % filler % grestore
```

Now these are the steps to draw like a crayon:

1. Draw the line you want to look like a crayon.
2. Use **Xtras>Path Operations>Expand Stroke...** to change the line into a closed figure as wide as you want the crayon line. I set mine to 10.
3. Set the stroke to none, and the fill to **Textured>Light Mezzo**.
4. Set the color of the Texture.
5. Clone the path, using **Command =**
6. Inset the clone by using **Xtras>Path Operations>Inset Path...** I set mine to 2. This path overlays the wider one, but has the same textured fill. This will make the combination appear like a crayon line which is darker down the center.
7. Repeat steps 5 and 6 to make a still darker center. All you will see on the screen is a solid fill, but when you print on a Postscript printer with the **Transparent Texture UserPrep** selected, you will get the texture crayon-like line. I played with this using text converted to paths, and it makes a very pleasant effect. Using the **Roughen** tool (a Xtra that comes with FreeHand 7) makes it even more realistic.

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Data Liberated!

Doug Banting
Ryerson Polytechnic University

By now I trust that most *Cartouche* readers have become aware that Statistics Canada has "liberated" their data. While this agreement should be viewed as a forward step, its appearance does raise some questions. Under the **Data Liberation Initiative** (DLI) prices for Statistics Canada data have fallen (reportedly by 75%) and University libraries will become keepers of the data. (Aside: The WordPerfect Thesaurus provides the following as substitutes for keeper: *chaperon, guardian, sentry, entrepreneur* and *owner*!) Seeing how the Libraries and Statistics Canada actually interpret the relationship will be interesting, given that \$2 million will change hands. A package available from StatsCan outlines the DLI. This package includes descriptions of the program as a 5-year Pilot Project, a cooperative venture, a consortium, and a partnering effort -- their thesaurus must have had quite a workout as well.

The nature of the relationship is such that the university libraries will establish data centres to order (via FTP) StatsCan data files and to provide access for the university community of students, staff and faculty involved in noncommercial uses of the data. StatsCan will get 49 distributors and promoters of its products and the \$2 million; the university-based GIS community and others will get "free" access. How this arrangement will evolve probably depends on how successful it is. This depends on how success is measured. Like all government programs, the bottom line seems to be the bottom line. The project is likely vulnerable should it be less revenue-beneficial than prior arrangements. It may be up to us, as users of StatsCan data, to make sure we are promoting the "industry" or at least those corporate uses of the data that commercially justify data collection. I do not feel, however that this should be a prime focus of universities. Government-collected

data and products are public assets, supporting public interests both inside and outside government, and it is their responsibility to market them, as the *chaperon, guardian, sentry, entrepreneur* and *owner*. After the 5-year period (and therefore coincident with the 2001 census) the arrangement may be extended to other participants and may include data from other government departments. This cannot be good news to the Value-Added Resellers whose business has flourished under the deterrent of high data prices.

That liberation of the data promotes the industry of the GIS/geodemographics/geomatics is perhaps an understatement. I

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would like to see software vendors get in on the partnerships. Experience shows that sales of software are dramatically enhanced when useful data are bundled with the package. The "years spent compiling data," that most GIS applications seem to experience could be substantially reduced if software vendors and data distributors were more closely allied. How many promotional demonstrations and "starter packages" actually feature local or even Canadian data?

The concept of data liberation is an interesting one. "Free" access does not usually equate to \$2 million. By the way,

the thesaurus was of little help in avoiding the term "free" since it provided: *liberated, sovereign, unconstrained, etc.*, . . . which present food for thought, but imply more than the arrangement proposes. What is being provided is classic (Thesaurus: *typical, excellent, ancient, authoritative, exemplar*) StatsCan data. These are the non-confidential standard products such as geographic records (boundary and cartographic files: GEOREF, postal code conversion files, block-face data, street networks, place name master file), Public Use Microdata Files (*alias* PUMF's, including the Census, the General Social Survey, and the Survey of Labour and Income Dynamics and older files once the more recent ones have been released), and major offline databases (Census profiles, CANSIM, trade statistics, *etc.*). Free access to data records in a standard database format is not provided. I know this is a major source of frustration for some users of StatsCan data, but the access to so many high-demand products at a single on-campus facility seems more manageable than the arrangement it replaces unless you are a geodemographics consultant.

How the value of the data was established and what opportunities exist for universities to recoup their investment are not directly addressed in the information I have found. In general, pricing of government data is an extremely touchy issue. Public investment in data gathering services like StatsCan makes StatsCan the keeper, (*chaperon, guardian, sentry, entrepreneur, owner, . . . etc.*). Many data users question the entrepreneurial role asking why the public must pay twice. Indeed, the policy of ministries charging each other for data suggests the public may be paying a lot more often than twice.

It would seem that data prices could be either supply or demand-driven. If they were supply-driven, the basis for setting rates would be the recovery of costs. Which costs

are counted, of course, is a particularly contentious issue. There are real costs to providing data, especially now that so many government agencies are involved in outsourcing, but these must be discounted for the utility the Census has in setting government policy. There were real data costs before the digital era, yet pricing, sharing, copyright, and users' rights were less of an issue then. Costs can be kept to a minimum by avoiding or reducing infrastructure. If the price is demand-driven, the market is much smaller than its potential.

market and continue to foster/stimulate use of the data? Maybe this arrangement will do this. If so, both the libraries and StatsCan are to be congratulated on the spirit of the agreement. Those excluded from the agreement now have an opportunity to finance university research and collaborate in studies leading to contracting for the StatsCan data they need.

Based on a limited number of conversations and some literature (see the Journal of Academic Librarianship, Vol. 21 No 4, Special Issue of Geographic

Universities are not paying the commercial price, presumably because the services of educating and conducting research are as valuable to StatsCan as the revenue differential.

This is elitist and creates a role for government as entrepreneur. Is not the role of promoting social and economic goals (as embodied in an active GIS/geodemographics/geomatics industry) more in keeping with why we have government?

What currencies are considered acceptable in transactions is another issue in the exchange of data. In terms of public records, many of which arise from statutory requirements, keeping data up-to-date and centralized is a mandatory public sector service. To reduce real costs, redundant efforts should surely be minimized, justifying a centralized role in management of records. However, distributed users are in a superior position to verify the field accuracy of the data. The value of field updates should be at least as high as the value of the initial source data in any exchange arrangements. Universities are not paying the commercial price, presumably because the services of educating and conducting research are as valuable to StatsCan as the revenue differential. It is encouraging that these intangibles are being recognized in formal data pricing arrangements -- the universities are not customers.

How prices were determined remains interesting. Presumably, the effect of DLI in standardizing arrangements will be fairer and cheaper to administer. Would it be cheaper still to reduce unit prices more, expand the

Information Systems and Academic Libraries, 1995), I am encouraged that university libraries can manage their responsibilities under the DLI. Presumably they will be providing support for the data and prohibiting its abuse, just as they have for printed copies of Census publications. That GIS workstations will now have to be installed in these libraries, for instance to check boundary files for completeness, seems the only way to provide actual access to the data. However, will library staff now be expected to know -- e.g., details of attribute records available at the EA as opposed to CT levels, or that data may be rounded at very local levels to protect the confidentiality of Census respondents? Also, I am not at all clear where the funding for this service (and hardware/software) will come from -- dwindling library or users' budgets? Is it the library that will assume responsibility for non-disclosure agreements and monitoring? There will no doubt be a breaking-in period.

One outcome of the DLI that I look forward to is the effect it may have in liberating other data, and changing access arrangements. The DLI model for sharing data is but one of many potential partnership arrangements. Many municipalities and utilities have formed local consortia (e.g. in Metropolitan Toronto) and some include universities as well (e.g. in Indianapolis).

Rights to data can be shared, and options for sharing can range from view-only to full ownership, including data design and strategic management. At issue apart from the cash value issue is the governance/responsibility for data. Confidence in data and therefore its usefulness and marketability depend on standards and their enforcement. Quality-standard issues arise in all data sets, but it would seem that these would be minimized in data sets that are well used. Users who are highly demanding in terms of data quality are what data needs to ensure their accuracy, timeliness and completeness. Users with a customer-vendor relationship will have a different response to inevitable quality lapses than will full co-owners (equal partners). I am not advocating co-ownership of data-providers by users of their data but there are opportunities for data-provision agencies to be more responsive to users' needs. The current model of the DLI's partnership agreement involves libraries, but not yet the ultimate users.

The DLI is a significant forward step, with welcome qualities -- a drop in prices and accessibility improvements, but questions remain. Readers are advised to monitor when products are being released, to look for expanding opportunities to undertake collaborative research, to lobby for software/data vendor partnerships, and to anticipate similar arrangements with other data suppliers. ☉

de la page 4

en SIG sont des cartographes." J'ai affiché ce texte sur ma porte dans le but de provoquer une émeute qui ne s'est malheureusement pas concrétisée mais je ne désespère pas et je persiste. Comme plus de gens deviennent plus sensible à la cartographie via les SIG, j'ai bon espoir que les choses vont changer. Je suis d'accord avec Roger, le Roi continu de vivre, la cartographie ne va pas disparaître. Peut importe la qualité des cartes, aussi longtemps qu'il y aura des gens pour les réaliser, on peut être sûr qu'il y aura à proximité des cartographes. Plusieurs d'entre nous ne le réalisent pas encore. Plus il y aura de cartographe, plus ce sera bénéfique pour la cartographie. ☉

Pourquoi faire des cartes?

(ou je sais dessiner donc je suis cartographe!)

Michel Fournier
Cartologique

Nous vivons une époque où la technologie recule sans cesse ses limites et ce à une vitesse exponentielle. La cartographie n'échappe pas à cette effervescence: on est passé en quelques années, des balbutiements de la cartographie assistée par ordinateur sur de monstrueux appareils qui n'étaient accessibles qu'à une bande d'initiés à l'utilisation généralisée d'ordinateur de bureau qui peuvent faire autant sinon plus que leurs ancêtres. La démocratisation de la technologie a eu certes de grands avantages mais également certains inconvénients. Cette intrusion empirique non planifiée de l'informatisation qui au-delà des services immenses qu'elle rend à la société n'est pas sans heurt pour les utilisateurs. Quelles ont été les répercussions réelles sur le marché du travail, sur le plan humain, sur le processus de production et des résultats cartographiques?

Carte anonyme cherche un grand frère, de préférence cartographe (ou, Y-a-t'il un cartographe dans la salle?)

De la démocratisation des technologies sont apparues une panoplie de nouvelles applications toujours plus adaptées aux besoins des utilisateurs. Les géographes et cartographes utilisent ces nouveaux logiciels ou plutôt s'adaptent aux nouveaux logiciels et plateformes afin de répondre à la demande croissante de carte pour une multitude de besoins. Malgré la promiscuité entre la cartographie et la géographie et malgré leur formation universitaire, les géographes ne sont pas nécessairement des cartographes. Bien sûr, ils sont aptes à manipuler des banques de données, à faire des analyses spatiales mais côté conception et réalisation de carte, cela devient plus limité. Il y a de fortes chances que les concepts

cartographiques acquis durant la formation académique ne soient pas nécessairement intégrés.

La cartographie devient à la fois de plus en plus segmentée en tâches spécifiques et aussi le siège d'intégration de plusieurs champs tels la cartographie, la télédétection, SIG, GPS, etc. Mais aujourd'hui, à qui doit incomber le rôle de faire des cartes? La concurrence devient de plus en plus féroce. Les géographes et les informaticiens ont récupérés une bonne partie des SIG et un peu de GPS, les arpenteurs effectuent surtout du levé foncier et quelquefois du SIG et du GPS, les cartographes font à la fois de la carte fondamentale et thématique ainsi que du SIG et enfin, il y a les infographistes qui effectuent (beaucoup trop) de la carte thématique et bien sûr du graphisme (publicité, mise en page, etc.).

Les besoins de la population ont évolué avec le temps et dans l'espace au point de réduire l'importance du rôle du géographe voire même d'estomper son travail. Au-delà de l'enseignement de la géographie et à moins de spécialisation particulière, faute de débouchés réels, le géographe se rabat, dans certains cas, vers la cartographie ou encore pour les plus fougues vers la géomatique ou la télédétection.

Et les cartographes? ah! Ça existe? Eh oui! Mais qui donc sont-ils? Ces praticiens de la carte à la fois technicien, à la fois géographe sont des agents importants de synthèse d'informations qui traitent et analysent les données. Ils leur donnent un sens, leur insufflent vie sous la forme d'une carte accessible et compréhensible, tantôt instrument de communication, tantôt scientifique, et ce bien plus que ne saurait le faire une série de colonne de chiffres ou de fastidieuses analyses textuelles. Plus souvent qu'autrement on confond malheureusement le travail du cartographe avec celui des géographes, encore pis, avec celui

d'infographistes ou de dessinateurs de plans. D'ailleurs, où commence le travail de l'un, où se termine celui de l'autre? Signe des temps, évolution des sciences, comme quoi rien n'est acquis.

Carte à sens unique ou multidirectionnelle?

La cartographie c'est plus qu'un artifice, c'est l'objet du sens de l'orientation. La cartographie est une partie de l'essence humaine car elle représente l'un des besoins les plus essentiels de l'être humain, la nécessité de s'orienter pour se prévaloir des trois besoins fondamentaux usuels (se nourrir, se vêtir et se loger). Nous avons malheureusement trop tendance à sous-estimer son importance. Cela est particulièrement évident lorsque l'environnement nous est familier (quartier, ville, etc). Ce qui a priori ne devrait pas être différent des autres milieux géographiques qui nous sont plus ou moins connus tels que les grands centres urbains ou les zones désertiques. L'orientation sous-tend nécessairement toute une panoplie de concepts qui permettent notamment la gestion de l'espace géographique. Sans orientation ou de sans moyen pour s'orienter, cela peut devenir relativement contraignant pour subvenir à nos besoins essentiels. Nous nous créons inconsciemment un répertoire d'itinéraires et de repères que nous enregistrons dans notre cerveau sous la forme d'une carte mentale sécurisante et auxquelles l'on se réfère lorsque nous effectuons un trajet ou pour en peaufiner certains détails.

Mais toutes les cartes ne s'équivalent pas, soit à cause de l'échelle, soit à cause de l'exactitude de l'information ou encore à cause de la qualité et de la quantité d'information qu'on y retrouve. Une carte ça peut être facile ou complexe à consulter

pour l'utilisateur. Le concepteur a une lourde responsabilité quant à la bonne compréhension du message à véhiculer. C'est au cartographe qu'imcombera ce rôle de mettre de l'ordre dans l'information à consigner et d'imprégner une âme à la carte.

Les cartes seront tantôt objet de promotion, tantôt fondamentales, tantôt informatives, ou encore enjeux politiques. Diversité d'utilisation, diversité de concepteur (ou de producteur), diversité de résultats. On peut aisément comprendre que le cartographe doit passer par une gymnastique assez particulière pour aboutir à des résultats qui répondent d'une part aux attentes exprimées par le commanditaire et d'autre part qui reflètent bien la tendance exprimée par les données de base et encore, tout en étant compréhensible pour les utilisateurs.

La carte-image ou l'image carte de la société?

On n'a jamais autant utilisé les cartes que dans la dernière décennie. Les révolutions de l'informatique et de l'information nous font voir sous une nouvelle dimension des réalités quotidiennes. La vitesse de circulation de l'information est telle que l'on a l'impression de vivre dans un univers à la fois surréaliste et virtuel dont le temps et la distance sont des notions éclatées. La carte demeure l'un des derniers liens avec la réalité ce qui en fait l'outil par excellence pour suivre l'évolution d'un événement, pour en saisir l'ampleur. Les vendeurs de cartes sont littéralement pris d'assaut lors de crises politiques ou sociales telles que la guerre du Koweït ou le conflit serbo-croate en Yougoslavie. Il est évident que le mitraillage d'informations demande une continuelle mise-à-jour des cartes.

Paradoxalement, la cartographie semble relativement effacée dans la société, même si les cartes jouent quotidiennement un rôle de premier plan. Elles sont fondamentales ou thématiques et omniprésentes à la télévision, dans les journaux, dans le développement économiques, les transactions immobilières, etc. Cela ne signifie pas pour autant que malgré le nombre, qu'elles sont toujours d'à propos ou qu'elles rendent fidèlement le message à

communiquer. La majorité du temps elles servent essentiellement de support pour évoquer vaguement le lieu d'une action avec un minimum de détail planimétrique et un ou deux éléments toponymiques pour fin de repère.

Bien que la cartographie passe inaperçue pour l'ensemble de la population, c'est souvent par des occasions tangibles telles que des conflits armés ou des catastrophes que l'on peut en mesurer l'importance ou l'intérêt. En effet, lors de la signature du traité de paix Israélo-palestiniens on a pu observer un bref moment, lors d'un bulletin d'information télévisé, la signature de cartes montrant les nouvelles limites du territoire. Dans le cas des conflits du Koweït et de la Yougoslavie, on se rappellera aisément que la cartographie et la télédétection ont joué un rôle considérable. Le cas du Saguenay (région du Québec) frappé par un déluge subit au mois de juillet, aujourd'hui, on doit revoir la cartographie des zones inondables.

Plusieurs de ces cartes dressées par des spécialistes seront reprises par les journaux écrits et télévisés sous une forme caricaturale tellement simplistes qu'elles paraîtront insignifiantes voire même inutiles dans certains contextes. Bien que le traitement visuel d'un journal ou d'un téléjournal soit le domaine des infographistes, les cartes ne sont pas réellement mises en valeur et de surcroît, elles sont fréquemment rédigées en ne tenant pas compte de règles minimales. Il faut se méfier des miroirs aux alouettes qui n'ont de but que de rendre l'image plus attractive et attrayante, plus captive pour le lecteur ou le spectateur. En effet, dans bien des cas, la carte ne servira qu'à accrocher l'oeil afin d'attirer le lecteur qui désire obtenir de l'information sur un événement particulier. Malgré l'importance du tirage ou de l'auditoire et les contingences spatio-temporelles et les contraintes matérielles de ces médiums ainsi que la durée de l'intervention-carte, il demeure que l'utilisation de cartes doit supporter l'analyse et la critique.

Le salut par l'action

Les développements technologiques à eux seuls ne peuvent se substituer à la présence des cartographes qui demeurent

l'élément essentiel dans le processus cartographique. Leurs réflexions lors de la conception et l'application rigoureuse de règles sémiologiques et de concepts de base sont l'apanage de cette science.

Pour éviter des distorsions regrettables qui pourraient porter ombrage à la profession de cartographe, nous devons accroître notre visibilité, augmenter nos interventions au-delà du cadre universitaire, sur un maximum de plateforme. On pourrait rédiger un petit guide de sensibilisation à la cartographie et prévoir un mode de diffusion pour les secteurs où le risque d'incursion maladroite dans notre domaine est le plus élevé. Nous pourrions également tenter des incursions dans des institutions scolaires du primaire et du secondaire voire même des quotidiens pour sensibiliser les gens, selon le niveau et le cas, à l'importance du véhicule et du message qu'il transmet. L'objectif n'est pas nécessairement d'augmenter le nombre de praticiens mais bien de donner le goût des cartes, d'en rendre l'usage plus courant et accessible, d'améliorer la qualité des documents cartographiques et de permettre aux principaux acteurs du domaine de retrouver leurs places et que la cartographie connaisse un nouvel essor. ☁

Déménagement des collections dans l'édifice Gatineau

De novembre 1996 à février 1998, les Archives nationales du Canada déménageront certains de leurs employés, des laboratoires et des collections dans leurs nouvelles installations de préservation et d'entreposage à Gatineau (Québec). Certains services seront plus lents ou ne seront pas disponibles pour de courtes périodes de temps avant et pendant le déménagement, à partir de mai 1996. Tous les services au public continueront d'être offerts à partir des installations des Archives à Ottawa. Afin que vous puissiez planifier en conséquences, les employés des Archives nationales vous informeront de ces perturbations. Votre collaboration est appréciée.

Cartographica Report

Michael Coulson
University of Calgary

As of the date of writing, Volume 32 issue #4, has been with the printer for about one month. Volume 33 issue #1, is in page proof and the materials for issue #2, were sent off to the Manuscript Editor today. Issue #3, which is the Cartographic Education monograph, is coming together nicely and should reach me in early December.

In terms of contents, earlier columns have reported upon the contents for 32-4 and 33-1, so here I will limit myself to those papers available for 33-2. I have sent in six papers, and an assortment of reviews. Whether all appear in the one issue will depend upon final page counts. *Relative Size of Continents on World Sketch Maps*, by Tom Saarinen was

withdrawn from issue 32-4, as we were having problems with some of the maps. Since these were drawn freehand, in pencil, by children from various parts of the world, they were always problematic and may still be. However, there has been more time to try to obtain the best possible results and the paper will appear in 33-2. Other papers are, *Inland Journeys, Native Maps* by Barbara Belyea; *Calculating an Azimuth from One Location to Another: A Case Study in Determining the Qibla to Makkah* by Ghazy Almakky and John Snyder; *Designing 'Octopus' Bus Maps for Districts in a City, with the aid of Scale Distortion* by Alistair Morrison; *Automatic Generation of Animated Migration Maps* by William

Thompson and Stephen Lavin; *The Application of Geographic Information Systems by First Nations and Governments in Northern Canada* by Frank Duerden and Richard Kuhn. I think that you will find this a varied and stimulating issue. As always, my thanks go to the referees and members of the Editorial Advisory Board who give of their time and expertise to provide quality journal issues.

Unfortunately, our publication schedule will continue to be erratic until we can be both on schedule and can reserve printing dates ahead of time. The first is within reach and with a continuing flow of quality manuscripts we may also soon attain the second. Thank you for your continued patience. ☉



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Témoins de la vogue récente et des succès des principes de la qualité dans le monde des affaires, les clients ont commencé à exiger une qualité que l'on pouvait vérifier au préalable, et non après coup. L'ISO 9000 est un système qualité qui permet à vos clients de vérifier votre capacité d'exécuter les clauses d'un contrat. La reconnaissance de l'ISO 9000 comme condition préalable à des achats sans problèmes a fait de cette norme le fondement du commerce international des années 1990.

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La qualité en géomatique - Un guide pratique pour l'ISO 9000 — Inspiré de l'expérience de plusieurs entreprises canadiennes de géomatique qui ont mis sur pied leur propre système de gestion de la qualité ISO 9000, ce guide (offert gratuitement) a été produit précisément à l'intention des entreprises canadiennes de géomatique qui envisagent l'élaboration ou l'amélioration de leur système qualité.



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Canada

Canadian National Committee for Cartography Report

C. Peter Keller
University of Victoria

The planned meeting of the Canadian National Committee for Cartography in Toronto in conjunction with the annual meeting of the Canadian Cartographic Association, June 12-15, 1996 did not happen. An attempt will be made to hold the next meeting in 1997 in conjunction with the annual meeting of either the CIG in Ottawa or the CCA in St. Johns, Newfoundland.

ICA Stockholm Conference (June 22-28, 1997)

The deadline for submission of abstracts has passed. Those of you who have submitted an abstract should hear from the conference organization committee in the near future. In my last message I had requested that you mail a courtesy copy of your abstracts to the Chair of the Canadian National Committee to help coordinate Canada's participation in the Stockholm meeting. To those of you who did, thank you for your cooperation. To those of you who forgot - it is never too late and I would still love to hear from you (P. Keller, Geography, University of Victoria, Victoria, BC, V8W3P5 pkeller@office.geog.uvic.ca).

ICA 97 Map Exhibit

Claire Gosson informs me that the map exhibit committee has received quite a number of submissions for the Canadian map exhibit for Stockholm, and that planning is progressing on schedule. Thank you to Claire and her team for all the work and effort they are putting into this.

Children's Map Competition

Shelley Laskin has taken over the organization of Canada's participation in the ICA Children's Map Competition. Shelley can be reached at:

Attn: Shelley Laskin
Globe Graphics
664 Balloit Street
Toronto
Ontario M4S 1E7
(shelley@io.org)

A flyer announcing the competition details should be included in the next issues of the various associations' newsletters. Please encourage educators and parents to submit entries. Do you have young talent at home that wants to compete?

ICA 99 Meeting

Planning is progressing for Canada's hosting of the ICA meeting in Ottawa in 1999. Congratulations to Tony O'Connor and all the representatives from the various professional organizations interested in mapping for putting CAFICA on the map. For those of you new to CAFICA, it stands for an alliance of a number of professional organizations that jointly support the ICA'99 initiative. Members include the ACLS, ACMLA, CAG, CCA, CCLS, CHA, CIG, CRSS and CQ. Tony is the official head of CAFICA. At least two of the CAFICA members are planning to run academic programmes during the ICA'99 meeting. We should have an exciting programme.

Tony has stepped down as vice-chair of the ICA'99 Planning Committee in order not to wear too many hats, and in order to allow his family to see him on occasion. The

position of vice-chair now is occupied by Cliff Wood. Thank you Tony for a great job while you were vice-chair, and welcome Cliff.

Intergraph, Ellis, Norman Nicholson and Other Awards

A reminder to all educators and students. Don't forget all those awards out there that you can not win unless you enter. 🌐

Move of Archival Collections to Gatineau Building

From November 1996 until February 1998, the National Archives of Canada will be moving some of its staff, laboratories and collections to its new preservation and storage facility in Gatineau, Quebec. For this reason, services normally provided to researchers by the National Archives may be delayed or unavailable for short periods of time before and during the moves, starting May 1996. All services to the public will still be delivered from the Ottawa headquarters location. The National Archives' staff will inform you of any disruptions in services so you can plan your research accordingly. Your patience is appreciated.

Information:
Web site: <http://www.archives.ca>
Telephone: (613) 995-5138

Cartouche Available in Digital Form

Weldon Hiebert,
University of Winnipeg

Since becoming the editor of *Cartouche*, I have spent many hours with my eyes glued 20 cm from my computer screen laying out and viewing the newsletter. All this time in front of the computer has made me accustomed to the digital world and so it is hardly surprising that I look upon the printed copy with disdain. It is the membership's turn to confirm my cynicism.

Cartouche is now available in digital form and I invite the membership to take this opportunity to view it for yourselves. The newsletter is in Portable Document Format (.PDF extension) and can be read using Adobe Acrobat Reader (or any other equivalent software package). Members can receive the digital version of *Cartouche* by e-mailing me (address on page 2). Adobe Acrobat Reader can be downloaded free of charge from the Adobe Web Site (<http://www.adobe.com>) and is available for the Mac and PC (Windows and DOS).

It is my hope that a majority of CCA members will be receptive to the idea of a digital version of *Cartouche* and eventually forego the printed copy. Though it is unlikely that the entire membership can make this change, any converts will mean savings for the Association and allow a few more trees to remain standing.

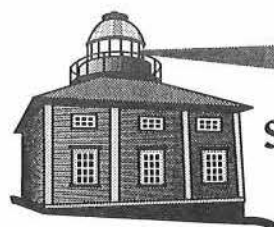
Cartouche sous forme numérique

Weldon Hiebert,
University of Winnipeg

Depuis que je suis l'éditeur de *Cartouche*, j'ai mis un grand nombre d'heure, collé à mon écran, à mettre en page et à examiner le bulletin. Tout ce temps passé devant mon ordinateur m'ont habitué au monde numérique si bien que maintenant, j'ai tendance à dédaigner le format papier. Mon cynisme est probablement dû aux changements observés chez nos membres.

Cartouche est maintenant disponible sous forme numérique, je vous invite à y jeter un oeil. Le document est un fichier PDF (Portable Document Format) et il est lisible avec le logiciel "Adobe Acrobat Reader" (ou un ensemble de logiciel équivalent). Les membres de l'association peuvent recevoir *Cartouche* sous forme numérique en me contactant par courrier électronique (voir adresse à la page 2). Le logiciel "Adobe Acrobat Reader" est téléchargeable gratuitement à partir du site électronique d'Adobe (<http://www.adobe.com>). Il est disponible en version Mac et Pc (DOS et Windows).

J'ai espoir qu'un grand nombre de membres l'ACC seront réceptifs à ce transfert technologique de *Cartouche* et éventuellement que vous renoncerez au format imprimé. Quoique cela semble improbable que tous les membres emboîtent le pas, ceux qui se convertiront à ce format, pourront se dire qu'ils ont contribué à épargner quelques arbres et à alléger les dépenses de l'association.



CCA/ACC 1997
St. John's, Newfoundland
August 14 to 18 août



Calendar / calendrier

February 17-20 février 1997

GIS '97

Vancouver, British Columbia

Tel/tél: (970) 223-4848

e-mail/courr. élect: event-info@gisworld.com

April 1-5 avril 1997

**American Association of Geographers
Annual Meeting**

Fort Worth, Texas USA

For information / pour renseignements:

Tel / tél: (202) 234-1450

Fax / téléc: (202) 234-2744

e-mail/courr. élect: gaia@aag.org

April 7-19 avril 1997

ACSM/ASPRS

Annual Convention and Exposition

Seattle, Washington USA

For information / pour renseignements:

Tel / tél: (301) 493-0200

Fax / téléc: (301) 493-8245

May 13-16 mai 1997

GPS/GIS '97

Annapolis, Maryland USA

For information / pour renseignements:

Tel / tél: (301) 320-0911

Fax / téléc: (301) 320-0922

May 19-21 mai 1997

Ottawa '97

Ottawa, Ontario

For information / pour renseignements:

Tel / tél: (613) 947-7649

Fax / téléc: (613) 947-7650

E-mail / Courr. élect: shelley@io.org

June 22-28 juin 1997

ICC '97

**18th International Cartographic
Conference / 17^e Conférence
cartographique internationale**

Stockholm, Sweden

For information / pour renseignements:

Tel / tél: 46 (26) 153 000

Fax / téléc: 46 (26) 653 160

August 14-18 août 1997

CCA / l'ACC

St. John's, Newfoundland

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